

**TRANSPOSITION AND IMPLEMENTATION
OF ENVIRONMENTAL AND CLIMATE
CHANGE ACQUIS - CHAPTER 27: STATUS
AND PLANS**

Table of Contents:

Introduction.....	7
Section 1–Horizontal Sector.....	27
Section 2- Air Quality.....	48
Section 3- Waste Management.....	61
Section 4 – Water Management.....	85
Section 5 – Nature Protection	109
Section 6 – Industrial Pollution.....	134
Section 7 Chemicals Sector.....	168
Section 8 Noise.....	200
Section 9 Climate Change Sector.....	204
Section 10 Civil Protection.....	217
Annex1 Preliminary Implementation Plan for Urban Waste Water Treatment Directive.....	221
Annex 2 Preliminary Implementation Plan for the Integrated Regional Waste Management System	245

LIST OF ABBREVIATIONS

ABS	Accreditation body of Serbia
AP	Autonomous Province
APSFR	Areas of potential and significant flood risk
ASCI	Areas of special conservation interest
BAT	Best Available Techniques
BPR	Biocidal products
CA	Competent Authority
CAD	Civil Aviation Directorate
CAPEX	Capital expenditure
CBD	Convention on Biodiversity
CCD	Climate Change Division
CDM	Clean Development Mechanism
CGAP	Code of Good Agriculture Practice
CFCU	Central Finance and Contracting Unit
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
DIS	Decentralized Implementation System
DG ECHO	
EU	Directorate-General for Humanitarian Aid and Civil Protection
DPM	Department for Project Management
DSIP	Directive Specific Implementation Plans
DWD	Drinking Water Directive
EAS	National Environmental Approximation Strategy for the Republic of Serbia
EBRD	European Bank for Reconstruction and Development
EC	European Commission
EFD	Environmental Financing Direction
EIA	Environmental Impact Assessment
EISP	Environmental Infrastructure Support Project
ELD	Environmental Liability Directive
ENVAP	Environmental Accession Support Project
EQS	Environmental Quality Standards
ETS	Emission Trading System
EU	European Union
FRMP	Flood Risk Maps

GAP	Good Agriculture Practice
GDP	Gross Domestic Product
GHG	Greenhouse gases
GIS	Geographical Information System
GMO	Genetically modified organism
GWB	Groundwater Bodies
HCFC	Hydrochlorofluorocarbons
ICPDR	International Commission for the Protection of the Danube River
ICPN	Inter-Governmental Committee for implementation of the Nagoya Protocol
IED	Industrial Emissions Directive
IFI	International Financial Institutions
INSPIRE	Infrastructure for Spatial Information in the European Community
IPA	Instrument for Pre-Accession Assistance
IPPC	Integrated pollution prevention and control
IQ	Implementation Questionnaire
KfW	German Reconstruction Credit Institute
LoA	Letter of Access
LoW	Law on Waters
LCP	Large Combustion Plants
LEP	Law on Environmental Protection
LPIS	Land Parcel Identification System
LSG	Local self-government
MAEP	Ministry of Agriculture and Environmental Protection
MEDEP	Ministry of Energy, Development and Environmental Protection
MIFP	Multiannual Investment and Financing Plan
MoF	Ministry of Finance
MRV	Monitoring, reporting and verification
MS	Member State
MSW	Municipal solid waste
ND	Nitrate Directive
NEC	National emission ceilings
NEMH	National Emergency Management Headquarters
NEP	National Environmental Program
NERP	National Emission Reduction Plan
NGO	Non-governmental organizations

NIP	National Implementation Plan
NPAA	National Plan for the Adoption of the Acquis
NPV	Net present value
NSDI	National Spatial Data infrastructure
NSDS	National Sustainable Development Strategy
NVZ	Nitrate Vulnerable Zones
NWMS	National Waste Management Strategy
OG RS	Official Gazette of the Republic of Serbia
OPEX	Operating expenses
OSCE	Organization for Security and Cooperation in Europe
PCB/PCT	Polychlorinated biphenyls and polychlorinated terphenyls
PE	Population Equivalent
PE EPS	Public Enterprise Electric Power of Serbia
PFRA	Preliminary Flood Risk Assessment
PIC	Prior informed consent
PLAC	Policy and Legal Advice Centre
POPs	Persistent Organic Pollutants
PpP	Polluter Pays Principle
PPP	Public Private Partnership
PRTR	National Register of Pollution Sources
PUC	Public Utility Companies
PWMC	Public water management companies
RBMP	River Basin Management Plan
REC	Regional Environmental Centre
RGA	Republic Geodetic Authority
RHMS	Republic Hydrometeorological Service
RS	Republic of Serbia
RTSA	Road Traffic Safety Agency
RWM	Regional Waste Management
SBRA	Serbian Business Register Agency
SEA	Strategic Environmental Assessment
SEIO	Serbian European Integration Office
SIDA	Swedish International Development Cooperation Agency
SEM	Sector for Emergency Management
SEPA	Serbian Environmental Protection Agency

SME	Small and medium-sized enterprises
SNC	Second National Communication
TA	Technical Assistance
TOC	Table of Concordance
TPP	Thermal power plant
UNDP	United Nations Development Program
UNFCCC	United Nations Framework Convention on Climate Change
UNIDO	United Nation Industrial Development Organization
USAR	Urban Search and Rescue
UWWTD	Urban Wastewater Treatment Directive
VOC	Volatile Organic Compounds
WB	Water Bodies
WFD	Water Framework Directive
WML	Law on Waste Management
WTR	Wildlife Trade Regulations
WPPP	Water Pollution Protection Plan
WWTP	Wastewater treatment plant

Introduction

This document is developed as a result of the understanding reached between Serbia and the European Commission in accordance with the conclusions of Bilateral Screening (17-21st November 2014). Serbia committed to providing follow-up information on the status of its transposition and implementation plans for approximation to EU environmental *acquis*.

The European Commission defined the scope of information required in the letter of the Directorate-General Environment of 22nd December 2014. As the letter stated, the Commission appreciated the level of preparedness and knowledge of representatives of Serbia and understanding of the requirements to transpose the relevant legislation. However, in order to gain complete picture of state of play of approximation efforts in Serbia the Commission requires further information on implementation aspects. The purpose of this document is, therefore, to provide the most up-to-date information possible on Serbia's transposition and implementation plans. The document describes Serbia's understanding of the scale and complexity of the task in order to reach full compliance.

The document is developed within the framework of the Negotiation Group 27, consulted with AP Vojvodina, local self-governments, industry and civil sector, agreed within the Serbian negotiation structure, and adopted by the Government¹. As such it reflects Serbia's current understanding of the investments required, cost estimations related to them, and likely timescales for achieving full compliance with the environmental *acquis*. It is based on the best information available to date, and it follows the strategic direction defined under the National Environmental Approximation Strategy (NEAS) adopted on 13 October 2011 and, it is in accord with the Opening Statement of the Republic of Serbia (Opening Statement) made on 21 January 2014 at the Intergovernmental Conference on the Accession of the Republic of Serbia to the European Union.

NEAS is designed as flexible policy instrument and since 2011 Serbia has made significant progress in the development of legislation and planning documents. Serbia will achieve full compliance with the majority of Chapter 27 *acquis* before accession. For those directives for which full alignment cannot realistically be achieved by the date of the accession, Directive Specific Implementation Plans (DSIPs) will be the policy tool to implement the overall NEAS strategic direction.

Given the phase of the accession in which Serbia stands and open-ended nature of accession negotiations that alone present a challenge to the long-term planning, it should be emphasized that this document has the meaning and purpose that correlates to its function. It is the post-screening document designed to help proper assessment by the EU institutions of Serbia's capacity to advance to the further phase of accession. It indicates Serbia's vision on how it intends to overcome serious financial challenges stemming from implementation of the environmental legislation of the EU. .

Therefore, the Post-Screening Document defines the status and plans for the transposition and implementation of the EU *acquis* in Chapter 27. The document takes as a planning reference the Opening Statement in which Serbia declared its aim "to become fully prepared to take on the obligations of the EU membership by the end of 2018 in order to become the EU Member State at the beginning of the next EU budgetary period."² However, "affordability" of plans may depend upon the overall pace of the negotiation process as well. As a result, while general direction set in

¹ Note: At the time of this draft that process is still ongoing but will be complete in line with the agreed deadlines.

² Opening Statement of the Republic of Serbia, Recital 33.

the NEAS and in the Post-Screening Document will remain the specific implementation plans may evolve as circumstances change. Accordingly, requests for the specific adaptations to the *acquis*, including requests for the transitional periods will be defined after the EU Presidency invites Serbia to submit its Negotiating Position in accordance with the procedure defined by the Negotiating Framework.

The document has a following structure:

I National Policy and Institutional Framework: The strategic framework is explained, working hypothesis for the planning defined, and sources used for the development of the information are identified. A description of the overall allocation of responsibilities and the legal basis for actions to fulfill Chapter 27 requirements in Serbia are provided.

II Sector Status Overview and Approximation Plans: each sector is described presenting transposition situation and plans to complete transposition, institutional responsibilities, main actions and deadlines for implementation, summary of preliminary required implementation costs.

III Cost Assessment and Financing of Implementation: Preliminary estimation of the approach, deadlines and costs for implementation including investments related to the cost estimates and identification of financial sources to cover financial gaps for some of the heavy-investment directives. (Annex I and Annex II)

IV Latest Developments regarding transposition: Since Bi-lateral Screening in November 2014 further progress has been made in some areas of legislation. Intention here is not only to repeat the information presented during the bilateral screening but also to provide latest information regarding ongoing activities towards achieving full transposition.

I National Policy and Institutional Framework

The Republic of Serbia has in place the main planning documents governing the environmental policy. These documents guide the planning and implementation activity of this policy area. Policy documents, which are under development or planned to be developed are presented in sections regarding individual sectors.

Main documents guiding EU approximation process are:

- **National Environmental Approximation Strategy (NEAS)**

The Strategy was adopted in October 2011. The strategy builds on the National Programme for the EU Integration (NPI, now succeeded by the NPAA), the National Programme for Environmental Protection (NPEP) and the National Sustainable Development Strategy (NSDS).

The objectives of NEAS are twofold: firstly, to address the complexity of the challenge to apply EU environmental legislation in Serbia and secondly, to provide a sound basis for the accession negotiations on Chapter 27. It aims to address the challenges the approximation will pose to legislation (including the response to deficiencies in the current legislative process in Serbia), the extent of change that will be required in organizing and operating institutions responsible for environmental protection, and the approach to closing the economic gap between business as usual and full compliance with the *acquis*.

NEAS applies the standard planning hierarchy. It provides policy framework for two further levels of planning instruments: strategies for individual environmental sectors and Directive-Specific Implementation Plans. Both of these lower layers of planning provide more flexible and living documents available to the Ministry and Negotiating Group 27, which is why at this stage they are

not considered for formal approval by the Government. Thus, generic approach presented in the NEAS is tailored for and applied to specificities of the various environmental sub-sectors. At the level of operational planning the DSIPs will be defined. Therefore, on the basis of the cross-cutting approach presented in NEAS's Sectoral Approximation Strategies were developed for the following sectors: horizontal, air quality and climate change, industrial pollution and noise, waste management, water management, nature protection and forestry, chemicals and GMO. Furthermore, the Ministry is developing DSIPs and implementation plans for the following directives:

:

1	2008/50/EC AAQ	Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe	Implementation plan
2	2001/81/EC NEC	Directive 2001/81/EC of the European Parliament and of the Council of 23 October 2001 on national emission ceilings for certain atmospheric pollutants amended by Directive 2006/105/EC and Regulation (EC) 219/2009	Implementation plan
3	1999/32/EC Sulphur Content in Liquid Fuels 2012/33/EU	Council Directive 1999/32/EC of 26 April 1999 relating to a reduction in the sulphur content of certain liquid fuels and amending Directive 93/12/EEC, as amended by Regulations (EC) 1882/2003 and (EC) 219/2009 and Directives 2005/33/EC, 2009/30/EC and 2012/33/EU as regards the sulphur content of marine fuels	Implementation plan
4	94/63/EC Petrol Vapour Recovery Stage I	European Parliament and Council Directive 94/63/EC of 20 December 1994 on the control of volatile organic compound (VOC) emissions resulting from the storage of petrol and its distribution from terminals to service stations as amended by Regulations (EC) 1882/2003 and (EC) 1137/2008	DSIP
5	2009/126/EC Petrol Vapour Recovery Stage II	European Parliament and Council Directive 2009/126/EC of 21 October 2009 on Stage II petrol vapour recovery during refuelling of motor vehicles at service stations	DSIP
6	2008/98/EC Waste Framework	Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste (in force as of 12 December 2010)	DSIP
7	2006/66/EC Batteries	Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/EEC, as amended by Directive 2008/12/EC and Directive 2008/103/EC; Commission Decisions 2008/763/EC, 2009/603/EC,	Implementation plan

		2009/851/EC	
8	94/62/EC Packaging	European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste as amended by Regulations (EC) 1882/2003 and (EC) 219/2009 and Directives 2004/12/EC and 2005/20/EC	DSIP
9	2012/19/EU WEEE	Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE)	DSIP
10	1999/31/EC Landfill	Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste as amended by Regulations (EC) 1882/2003 and (EC) 1137/2008 Council Decision of 19 December 2002 establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 of and Annex II to the Directive 1999/31/EC	DSIP
11	2000/60/EC Water Framework	Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy as amended by Decision 2455/2001/EC and Directives 2008/32/EC, 2008/105/EC and 2009/31/EC	DSIP
12	91/271/EEC UWWT	Council Directive 91/271/EEC of 21 May 1991 concerning urban waste-water treatment as amended by Directive 98/15/EC and Regulation (EC) 1882/2003 and Regulation (EC) 1137/2008 <i>Commission Implementing Decision concerning formats for reporting on the national programmes for the implementation of Council Directive 91/271/EEC (notified under document C(2014) 4208, (2014/431/EU))</i>	DSIP
13	98/83/EC Drinking Water	Council Directive 98/83/EC of 3 November 1998 on the quality of water intended for human consumption as amended by Regulations (EC) 1882/2003 and (EC) 596/2009 Commission Decision 95/337/EC concerning questionnaires relating to directive in the water sector	DSIP (Implementation Plan)
14	91/676/EEC Nitrates	Council Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources as amended by Regulations (EC) 1882/2003 and (EC) 1137/2008	Implementation Plan
15	2010/75/EU	Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial	DSIP

	IED	emissions (integrated pollution prevention and control (Recast – transposition deadline 7 January 2013)	
17	2007/2/EC INSPIRE	Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE)	DSIP
18	2003/87/EC Emissions Trading	Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC as amended by Directive 2004/101/EC (in respect of Kyoto Protocol's project mechanism), 2008/101/EC (to include aviation activities), 2009/29/EC (to improve and extend) and by Regulation (EC) 219/2009	Implementation plan

• **National Program for the Adoption of the EU Acquis 2014-2018 (NPAA)**

NPAA was adopted in July 2014 and defines development and strategic goals, relevant policies, reforms and measures required for the realization of these goals.

NPAA succeeded the NPI which envisaged adoption of the National Environmental Approximation Strategy (NEAS). NPAA establishes a plan for transposition and implementation of the acquis and defines human and budget resources, and other funds required for the implementation of envisaged tasks.

The part related to environment (3.27) describes the current situation in terms of transposition and implementation of EU acquis. It also briefly describes the measures envisaged to be taken *per directive* by 2018.

Other documents guiding environmental policy include:

- National Sustainable Development Strategy (NSDS), 2008
- National Strategy of Sustainable Use of Natural Resources and Goods, 2011
- National Program of Environmental Protection (2010.) and Action Plan for the period 2015-2019 (proposal)
- Biodiversity Strategy of Republic of Serbia 2011- 2018 and its Action Plan, 2010
- National Waste Management Strategy for the period 2010-2019 (proposal of Amendment)
- Water Management Strategy of Republic of Serbia (draft) and Water Pollution Protection Plan (draft)
- Strategy for cleaner production of Republic of Serbia (2009)
- Strategy for implementation of Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, Aarhus Convention (2012)

The policy framework is being constantly strengthened by revising already approved strategies and plans but also developing new. In addition, horizontal planning documents will be developed during 2016 including:

- Action Plan for Administrative Capacities Development;
- Multiannual Investment and Financing Plan.

Action Plan for Administrative Capacities Development is particularly important in assessing institutional capacities and capabilities and planning of institutional development activities. Foreseen activities will include:

- Describing institutional competencies (transposition, implementation, monitoring, inspection, enforcement), structure and resources at national, regional, provincial and local level;
- Describing current vertical and horizontal institutional coordination for implementation of the environmental *acquis*;
- Identifying institutional gaps for implementation, monitoring, inspection, enforcement of transposed requirements;
- Proposing actions regarding establishment or extension of institutions where there relevant capacity is not available or proposing actions on how to strengthen capabilities of available institutional resources (according to *acquis* and institutions);
- Providing assessment of human and financial resources to implement proposed strengthening measures;

Development of the Multiannual Investment and Financing Plan (MIFP) will include:

- Timeframe for the implementation of requirements in each sector (such as water, waste, air, etc.);
- Identifying investment actions required to develop a new or to upgrade existing infrastructure complying with environmental requirements in each sector;
- Providing cost estimates of achieving the objectives (at the project level);
- Developing ranked list of infrastructure projects based on criteria for priority project selection;
- Identifying sources of financing and expected allocations by year;
- Proposing distribution of financial resources among sectors;
- Matching investment needs and available or potential financial resources;
- Proposing policy to close the financing gap, if any;
- Proposing terms of financing, co-financing requirements, maximum/minimum level of support;
- Establishing affordability criteria to “accept” investments;
- Establishing eligible project types and eligible beneficiaries;
- Proposing any other principles, proposals for rules and operating procedures to make MIFP operational.

Actions Plan for Administrative Capacities Development is expected for end of 2016 and Multiannual Investment and Financing Plan shall be prepared end of 2016, beginning of 2017 (support from IPA confirmed).

II Sector Status Overview and Approximation Plans

As previously identified, progress on transposition across the sector is relatively advanced. The process of developing the implementation policies, plans and capacity is ongoing.

Sections in this document provide information on the progress made in the transposition and implementation of EU requirements under each specific sector and are followed by annexes covering preliminary cost assessment and financing of implementation for some of the heavy investment directives in the field of waste and water:

Section 1 – Horizontal Sector

Section 2 - Air Quality Sector

Section 3 - Waste Management Sector

Section 4 – Water Protection Sector

Section 5 – Nature Protection Sector

Section 6 – Industrial Pollution Sector

Section 7 Chemicals Sector

Section 8 Climate Change Sector

Section 9 Civil protection

Annex1 Preliminary Implementation Plan for Urban Waste Water Treatment Directive

Annex 2 Preliminary Implementation Plan for the Integrated Regional Waste Management Systems

Annexes provide more detailed information regarding the implementation of the UWWTD and waste sector directives (Landfill Directive together with Waste Framework Directive and Packaging Waste Directive) because they are recognised as heaviest for public sector in terms of investment. With the benefit of the support from EU and bi-lateral donors Serbia has been able to recognise the scale and complexity of the challenge represented by the heavy directives to candidate countries and new member states. These challenges will have particular impacts not only on cost and financing but in terms of the time required and the implementation capacity at local and national level.

III Cost Assessment and Financing of Implementation

The Ministry of Agriculture and Environmental Protection (MAEP) is taking following steps in order to establish efficient system for environmental financing, which would allow implementation of transposed EU requirements into national legislation:

- Developing implementation plans in order to better understand actions to be taken and their implications;
- Assessment of implementation costs;
- Assessing potential financing sources and developing financing model;
- Developing additional financing instruments (Green Fund);
- Review and development of new economic instruments to provide incentives for compliance but also additional financial resources;

- Developing long pipeline of projects and preparing projects for financing;
- Establishing institutional system to manage environmental financing process.

3.1. Cost assessment and financing planning process

The process of environmental financing capacity development can be described as containing three phases:

- **First phase. Aggregated assessment:**

- Adoption of the National Environmental Approximation Strategy (2011) and development Sectoral Approximation Strategies (2011-2012);

- **Second phase. Methodology development:**

- Development of Directive Specific Implementation Plan (DSIP) for Landfill Directive (2014) and establishment of methodology on how to approach development of DSIPs for other heavy investment directives;

- Development of Environmental Financing Direction (2014-2015);

- **Third phase. Detailed assessment:**

- Development of draft Water Management Strategy (2014 - 2015) and draft Water Pollution Protection Plan;

- Development of DSIPs for Waste Framework Directive, Packaging Directive, WEEE Directive (during 2015 – 2016);

- Development of DSIPs for Urban Waste Water Treatment, Drinking Water, Nitrates directives (during 2015 – 2016);

- Development of DSIPs in air sector (2016 – 2017);

- Development of Multiannual Environmental Investment and Financing Plan (2016 - 2017).

Currently, besides National Environmental Approximation Strategy, draft Environmental Financing Direction (EFD) and two draft directive implementation plans are being considered in order to better assess implementation implications and manage investment process until next generation of planning documents is developed.

In cooperation with international development assistance programs, it is planned to increase public awareness regarding circular economy. An ongoing project in Serbia with an aim closely related to this issue is GIZ IMPACT.

3.2. Principles for managing environmental investment

While investment and financing planning is still in intensive development phase, available resources for environmental financing are being managed using following principles:

1. Concentrating resources on the most expensive sectors;
2. Meeting EU requirements at the lowest cost;
3. Public funds allocated for priority public infrastructure;
4. Cooperation in order to reduce costs;
5. Staged approach during implementation;

6. Sharing IPA II funds among priority infrastructure needs (70% for water and 30% for waste);
7. Reducing highest impacts on environment first;
8. Getting maximum environmental funds by co-financing;
9. Making investments affordable;
10. Long term planning to improve investment process;
11. Active participation in project preparation.

3.3. Cost estimates

According to the NEAS, greatest costs of approximation are related to three sectors – water, industrial pollution and waste.

Costs in respect of industrial pollution will be predominantly met by the private sector. Currently Directive Specific Implementation Plan for the Industrial Emissions Directive is being developed and expected to be finalised by September this year. The DSIP will provide updated cost assessment and potential implementation periods based on possibilities to mobilise required financing.

Most of public financing needs are related to waste (municipal solid waste management) and water (drinking water supply and waste water collection and treatment) -sectors.

During period after the NEAS adoption two main activities related to cost assessment were performed:

- Development of the draft Water Strategy and Water Pollution Protection Plan, which are expected to provide identification of agglomerations and upgrade assessment of implementation costs in water sector,
- Development of DSIP for the Landfill Directive.

As the new water sector documents are still in progress (adoption expected 2015), cost estimates for Drinking Water Directive provided by the NEAS are used. However, draft Water Pollution Protection Plan provides more developed information on cost estimate for the Urban Waste Water Treatment Directive, hence this figure is used for analysis at this stage.

Cost assessment provided in the draft DSIP for Landfill Directive is used for waste sector.

According to the referenced documents identified above, about 7.880 € mill is necessary to implement EU requirements of three selected directives (Table 1) in water sector³ and waste sector.

Table 1 Costs⁴ of implementation for selected Directives

Directive/reference	Undiscounted investment costs €million
Drinking water	2.000
UWWT/Draft Water Pollution Protection Plan	4.962
Landfill /DSIP	918
Total investment costs for three selected directives	7.880

³ Nitrates Directive implementation costs were excluded from this analysis, since they will be mostly covered from agricultural funds and private sources.

⁴ EFD evaluated all financial streams at their undiscounted values.

3.4. Sources and available financing

Available financing sources are accessed and classified in three categories - public funds, loans and private sector resources (Figure 1).

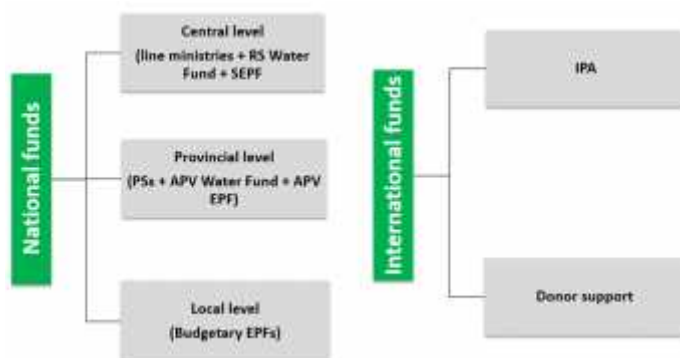


Figure 1. Public sources of financing 2010-2014

According to the analysis, approximately € 600 mill were available for environmental financing from public institutions at central and provincial level in period 2010-2014. It is estimated that additional €158 mill were available at local level in the same period. Environmental financing in this regard refers to financing of all environmental sectors, including water, throughout grants (direct project financing and transfers to province and LSGs for project financing), subsidies to public and private companies to perform environmental related activities, and IPA co-financing.

Particular attention in overall analysis of financing sources is being paid to revenue generated from environmental and water fees as potential source for reestablishment of the fund which is expected to become one of major sources for co-financing environmental activities. Therefore this issue is presented in more detail in this chapter.

Environmental fees collected at all levels of governance generated substantial cash-flow of about 350 €mill in mentioned period (Figure 2).

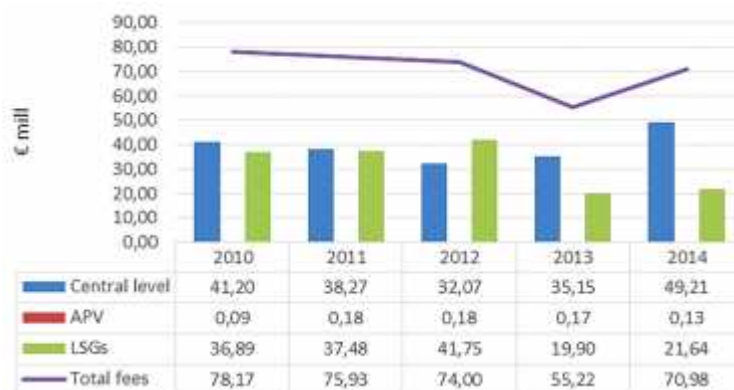


Figure 2. Distribution of environmental fees 2010-2014

As can be seen (Figure 2) overall capacity for environmental financing was substantially decreased in last few years following decrease in collection of environmental fees but then showing tendency to increase during 2014 mainly because improved enforcement from the MAEP side (Figure 3).

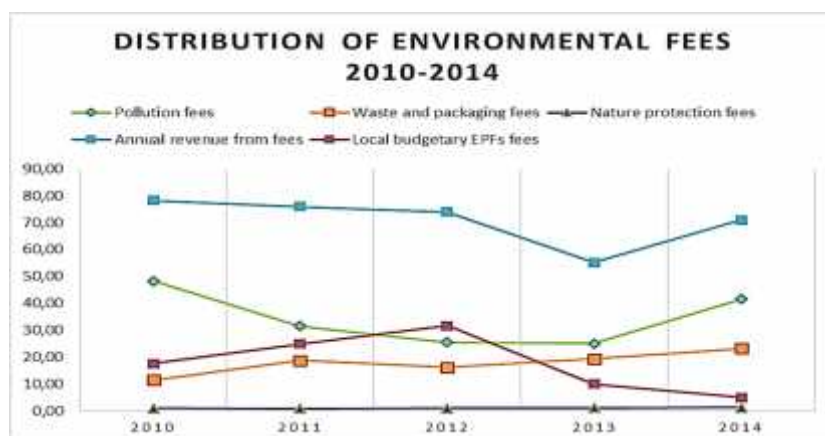


Figure 3. Total volumes of environmental fees collected at all levels of governance in € mill

In addition to general decrease in collection, fees collected at central level are not fully allocated to environmental financing (Table 2). Only about 10% of all collected fees are allocated for environmental investment.

Table 2. 2014 collected revenues from environmental fees vs actual allocation for financing (€ mill)

Environmental fees collected at central level ⁵	MAEP Budget for environmental sector ⁶	MAEP allocation for environmental project and subsidies ⁷	MAEP investments ⁸ in waste and water infrastructure	Investments share in environmental financing	Investments share from total fees
(1)	(2)	(3)	(4)	(5=4/3)	(6=4/1)
49	32	27	5	17%	10%

Revenues generated from water fees at central level are similar to levels of environmental fees (Table 3).

Table 3. 2014 collected revenues from water fees vs actual allocation for financing (€ mill)

Water fees collected at central level ⁹	WD/RS WF Budget ¹⁰	WD/RS WF allocation for water sector financing ¹¹	WD/RS WF investments ¹² in water infrastructure	Investments share in water sector financing	Investments share from total fees
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⁵Sources: MAEP and MF, Treasury Department: Figure given above represents fee generation by 31st December 2014.

⁶Source: Law on the Amendments to the Law on the Budget for 2014, OG RS No. 116/14; MAEP administrative costs and OPEX included.

⁷Source: Law on the Amendments to the Law on the Budget for 2014, OG RS No. 116/14; MAEP administrative costs and OPEX excluded.

⁸Project estimation based on data available. Investments financed by Water Directorate not included. Part of this amount consists of SEPFs projects which were passed to MAEPs competencies. However, there is no accurate data on volume of outstanding obligations for mentioned projects. A Working group within MAEP was formed to decide on this issue.

⁹Sources: MAEP and MF, Treasury Department: Figure given above represents fee generation by 31st December 2014.

¹⁰Source: Law on the Amendments to the Law on the Budget for 2014, OG RS No. 116/14; WD administrative costs and OPEX included.

¹¹Source: Law on the Amendments to the Law on the Budget for 2014, OG RS No. 116/14; WD administrative costs and OPEX excluded.

(1)	(2)	(3)	(4)	(5=4/3)	(6=4/1)
43	24	23	4	19%	9%

At provincial level, revenues generated from water fees on the territory of APV are allocated to APV Budgetary Fund, which further transfers 84% of those funds to finance Operational Programme of PWMC Vode Vojvodine. Distribution of revenues from water fees between central and provincial level is shown in *Figure 4* below.

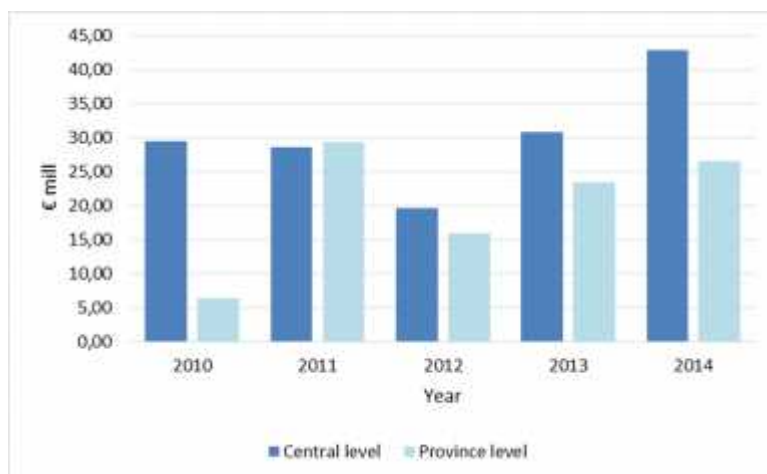


Figure 4. Water sector revenues central vs provincial level

Through local budgetary EPFs, local self-governments (LSGs) receive a proportion of pollution fees, but they are also entitled by the Law on Environmental Protection to collect specific environmental fees at local level.

In period 2010-2014, IPA and other donors allocated nearly €189 mill for Serbian environmental sector. In the same period, loans for environmental projects were approved at about €463 mill, but only €50 mill was actually contracted for waste and water infrastructure, while another €127 mill is waiting to be contracted for these two sectors (Table 4).

Table 4. Distribution of international assistance 2010-2014 (€ mill)¹³

2010-2014	EU IPA	Donor grants	Loans
Environmental sector	140.90	48.05	462.85
Waste investments	0.11	2.13	20.00
Water investments	62.14	27.44	157.00

In regard of private investments, there has been a development in four regions in waste sub-sector, where private sector has been involved into development of regional centres infrastructure. Belgrade and Niš are planning to enter PPPs for waste management in near future. In water sub-sector potential for private investment at this stage is limited.

¹² Project estimation based on data available. Projects listed in RS WF Annual Water Management Programme (OG RS Nos. 24/14, 76/14, 86/14, 129/14) for 2014 included.

¹³ www.wbif.eu/projects

www.evropa.gov.rs/Evropa/PublicSite/index.aspx

www.europa.rs/pomoc_EU_srbiji

3.5. Financing options

Several options are being considered based on impacts of policy choices for generation of resources to finance Chapter 27 commitments. Forecasts for future financing (2015-2041) were developed under EFD model, assuming as follows:

- All financial planning is divided in four financing periods, which correlate with EU programming periods, namely 2015-2020, 2021-2027, 2028-2034 and 2035-2041;
- National financing was estimated as variable, depending mostly on environmental financing policy chosen by RS Government;
- EU funds were foreseen to be one of the major environmental investment financing sources. Estimation of potential resources is based on experience of new Member States in particular taking Bulgaria's experience as a reference¹⁴. EU funds were assumed as constant (*Table 5*).

Table 5. Projection of EU funds 2015-2041 (€ mill)

EU funds	Financing period 1	Financing period 2	Financing period 3	Financing period 4	Total
	2015-2020	2021-2027	2028-2034	2035-2041	
Water and waste infrastructure	144	1.288	1.288	1.288	4.007

International donors support is estimated to be maintained at the same level as in previous period, until the accession and to diminish gradually after 2020 (*Table 6*).

Table 6. Projection of donors' support 2015-2041 (€ mill)

Bilateral/multilateral donors	Financing period 1	Financing period 2	Financing period 3	Financing period 4	Total € mill
	2015-2020	2021-2027	2028-2034	2035-2041	
Water and waste infrastructure	37	26	11	5	78

Three scenarios are being considered – Baseline scenario, Priority for investments and Environment for environment. Each of scenarios was developed for waste and water sub-sectors separately. IPA co-financing option 30/70 is further considered since this co-financing ratio provides financing flows which are closer to what is needed to cover approximation costs. All mentioned scenarios are related to infrastructure investments only, not covering administrative and OPEX costs. Also each financing source was forecasted taking into account euro inflation at 2% and real GDP growth rate at 1.5% in 2014.

Main assumptions under ***Baseline scenario***:

- Budgets are planned in accordance with instructions provided by Ministry of Finance and given budget limits, and do not correlate with collected amounts of environmental and water fees,
- Calculation was based on allocation of each institution for waste and water infrastructure in 2014 with no significant increase predicted,

¹⁴ Calculation based on per capita investment to water and waste sectors (period 2007 – 2013) and applied to Serbian situation using 2011 census.

- Investment rate remains at low level (mostly due to need for OPEX subsidization).

According to survey performed during development of EFD, investment rate of public institutions at central and provincial level is rather low (average investment rate is calculated at 18%). Distribution of funds at local level is not known. It is most likely that majority of currently available resources cover OPEX (in case of water sector), finance other projects that do not have capital effect and pay subsidies to public and private companies. Based on such assumptions, national resources for financing all environmental sub-sectors are estimated at € 881 mill (Table 7) for period 2015-2041. From that amount, € 572 mill is foreseen to be directed to waste and water investments.

Table 7 National financing sources under Baseline scenario (€ mill)

National financing sources under Baseline scenario	Financing period 1	Financing period 2	Financing period 3	Financing period 4	Total €mill
	2015-2020	2021-2027	2028-2034	2035-2041	
Available for environmental investments	131	192	245	312	881
Available for waste and water investments (3 directives)	85	135	162	190	572

Baseline scenario is not viable in long term neither for water nor for waste sector, since there will not be sufficient national funds to co-finance EU funds (

Table 8).

Table 8. Matching costs and financing under Baseline scenario (€ mill)

	Financing source	Funds 2015-2041
1	EU funds (70%)	4.007
2	National co-financing needed (30%)	1.717
3	National co-financing available	572
4=3-2	National co-financing GAP	-1.145
5	Other donors	77
6=1+3+5	TOTAL public financing waste and water investments	4.656
7	Financing demand for three selected directives ¹⁵	7.861
8=6-7	Financing GAP	-3.205

Main assumptions under ***Priority for investments scenario***:

- Available public resources are concentrated on investments,

¹⁵ Financing demand of €7861 million used for planning of financing is different from the total costs of €7880 million as indicated in the table 1 since part of financial resources for waste sector were committed before 2015. Therefore the total figure used for waste sector as demand for financing during period starting from year 2015 is €899 million (which differs from €918 million indicated in table 1).

- Budgets are planned in accordance with MFs instructions and given budget limits, and still do not correlate to full amount of collected amounts of environmental and water fees;
- Concentration of investment financing (MAEP, Water Funds and LSGs).

Under Priority for investments scenario, national financial resources available for entire environmental sector are projected at € 2.862 mill in period 2015-2041. From that amount, assuming simultaneous increase in volumes of available financing and investment rate in waste and water sector, about €1.663 mill are estimated to be directed to waste and water investments related to three selected directives (Table 9).

Table 9 National financing sources under Priority for investments scenario (€ mill)

National financing sources under Priority for investments scenario	Financing period 1	Financing period 2	Financing period 3	Financing period 4	Total € mill
	2015- 2020	2021- 2027	2028- 2034	2035- 2041	
Available for environmental investments	671	841	744	607	2.862
Available for waste and water investments (3 directives)	233	432	614	383	1.663

Taking policy decision to divert all available public financing to finance infrastructure investments, financing gap is substantially lower than in Baseline scenario

Table 10).

Table 10 Matching costs and financing under Priority for investments scenario (€ mill)

	Financing source	Funds 2014-2034
1	EU funds (70%)	4.007
2	National co-financing needed (30%)	1.717
3	National co-financing available	1.663
4=3-2	National co-financing GAP	-54
5	Other donors	77
6=1+3+5	TOTAL public financing waste and water investments	5.747
7	Financing demand for three selected directives	7.861
8=6-7	Financing GAP	-2.114

Main assumptions under *Environment for environment scenario*:

- All environmental and water fees are collected by GF and environmental investment financing is centralised,
- Budgets are planned in accordance to expected volumes of environmental and water fees,
- Environmental fees are legally defined more flexible and can be used to finance all identified priorities,

- Fee collection rate in 2014 estimated at 57%, gradual increase of collection rate up to 100% in 2023 when air fees are expected to decrease substantially due to deadline for compliance in industrial pollution and air sectors,
- Collection of waste fees is not planned after 2034, since it is expected that waste management system is fully established and targets are achieved,
- Collection of packaging fees is not planned after 2020, when compliance with packaging directive is foreseen,
- Collection of water and nature fees continues up to the end of programmes.

In period 2015-2041, volume of €4.474 mill is estimated to be generated from environmental and water fees, from which amount € 2.949 mill was estimated to be directed to waste and water investments (Table 11).

Table 11 National financing sources under Environment for environment scenario (€ mill)

National financing sources under Environment for environment scenario	Financing period 1	Financing period 2	Financing period 3	Financing period 4	Total € mill
	2015- 2020	2021- 2027	2028-2034	2035- 2041	
Available for environmental investments	1.076	1.370	1.153	875	4.474
Available for waste and water investments	328	912	935	774	2.949

Environment for environment scenario envisages accumulation of national funds at one place and concentration on investment related efforts, thus enabling better management and control of national funds. Even this scenario entails financing gap of about €828 mill (Table 12).

Table 12 Matching costs and financing under Environment for environment scenario (€ mill)

	Financing source	Funds 2014-2034
1	EU funds (70%)	4.007
2	National co-financing needed (30%)	1.717
3	National co-financing available	2.949
4=3-2	Remaining national funds after co-financing IPA	1.232
5	Other donors	77
6=1+3+5	TOTAL public financing waste and water investments	7.033
7	Financing demand waste and water investments	7.861
8=6-7	Financing GAP	-828

3.6. Developing instrument for national co-financing

Different co-financing options and their outcomes for each scenario developed are shown in Table 13. From this table it is obvious that only third scenario is closest to what is needed. Though, for this stage financing planning purposes only two groups of sources were emphasised (national grant financing and IPA), further efforts will be made planning resources from private sector (in particular for waste management) and using loans where affordability limits allow in order to accumulate required amounts and potentially, shorten implementation periods.

Table 13 Financing gap under various scenarios

Waste & water investments	Baseline	Priority for investments	Environment for environment
Financing GAP (€mill)	-3.205		
Financing GAP (€mill)		-2.114	
Financing GAP (€mill)			-828

Implementation of third scenario is very demanding and calls for careful reassessment of economic instruments used in Republic of Serbia, their revenue generating function as well as revenue management institutional system.

The Ministry planned intensive action for review of economic instruments. Revision of economic instruments system for waste management will start with implementation of the IPA 2014 project for waste sector and is oriented to review and propose economic instruments supporting source separation and recycling.

Review of economic instruments in waste sector will be followed with the development of economic instruments in environment sector (IPA 2015, focusing on sub-sectors Water, Air and Nature). This activity will include:

- Inventory of all economic instruments, description of their legal basis,
- Assessing incentive and revenue generating functions,
- Identification of gaps in using economic instruments to support policy decisions and transposed requirements,
- Proposing system of economic instruments including levels of fees/ charges, levying and collection procedures, etc.

Revenue from environmental economic instruments are considered as very important financing source for environmental projects directed for implementation of EU requirements and potentially may serve as main co-financing source for EU funds. As one of the conclusions from the screening for chapter 27, well-structured and functional economic instruments system with transparent revenue management is considered as a necessary condition to formulate negotiating position and for timely implementation of negotiated conditions.

The Ministry established a working group with a task to perform an analysis of present system, and suggest the models of financing. In that context, the group prepared the analytical material and drafts of legal acts for the establishment of the Green fund. The Ministry is also very actively negotiating with the Ministry of finance on this issue. The discussed model of Green fund is meant

to provide the stable source of funding for infrastructure projects, national participation and local co-financing of projects.

Draft Law on Amendments to the Law on Environmental Protection foresees the establishment of the Green Fund of the Republic of Serbia as a body within the Ministry of Agriculture and Environmental protection, in accordance with the Law on Environmental Protection, the Law on Ministries and the Law on State Administration.

During the process of developing the proposal for the financing model, some of the following factors have been taken into account:

- The experience of EU member countries, when it comes to pros and cons of sectoral approach for financing the environment, instead of project oriented;
- Examples of eco funds of EU member states that have eventually evolved to become the implementation agencies for infrastructure projects;
- The use of fund's assets collected by the "polluter pays" principle for the co-financing of infrastructure projects and the use of these assets to attract investments into environment from other sources of financing, namely pre-accession and later on structural EU funds, long term investment infrastructure loans, as well as potential sources of funding through PpP principle.

The Ministry expects to have an important and visible progress on the adoption of the financing model for environment by the end of 2015.

Actions for further institutional strengthening are planned for 2015 and 2016 (supported by IPA 2015) including:

- Development of the institutional set up to manage environmental financing (central, regional, local levels);
- Capacity building for efficient financial resources management in environmental sector at all levels of governance and, in particular, strengthening regional/local planning and implementation capacity;
- Support to capacity building (all levels) for absorption of funds from EU environmental community programmes LIFE and Copernicus.

3.7 Directive specific implementation planning

Two directive specific implementation plans (UWWTD and infrastructure development plan for combined needs of the Waste Framework, Packaging waste and Landfill directives) are provided to support cost assessment and financing planning presented in this chapter. They represent level of detail the Ministry is currently working when assessing costs and planning of financing in order to better assess potential transitional periods for these directives but also to prepare for development of next generation of DSIPs. As it was presented in the beginning of this chapter, DSIPs and Implementation Plans are being developed or are planned with secure IPA II support for all directives potential for transitional periods. Most of such plans will be developed during 2015 – 2016.

3.8 Conclusions and next steps

- Under assumptions regarding membership and availability of EU financial support if financing from other sources is not increased, water sector will probably require four financial periods (2015 – 2041) to cover main investment needs. EU requirements related investment into waste sector could be achieved during three financing periods (2015 – 2034);

- Length of implementation periods can be adjusted by changing allocations to finance environmental investment from national or EU funds, wider use of private sector potential and co-financing with loans;
- Cost assessment (on project level) shall continue in all sectors through development of Directive Specific Implementation Plans including identification of infrastructure needs, development of prioritised investment projects pipelines;
- Decisions has to be made on what shall be considered as approximation costs and what shall be considered as additional improvement of environmental infrastructure. Attribution of all needs to environmental approximation costs may result into unrealistically high costs and long implementation periods;
- Current environmental financing practices would not ensure long term financing needs and system has to be revised to ensure predictable, stable and sufficient financing stream;
- Cost recovery system shall be revised ensuring at least recovery of operational and maintenance costs in the initial period.

Next steps:

- Continue DSIPs and Multiannual Environmental Investment and Financing Plan development as planned;
- Develop required legal acts for establishment of Green Fund to manage revenue from economic instruments with medium to long term objective becoming Implementing Agency for EU funds;
- Boost the collection of environmental fees through:
 - a. Making legislation coherent with approximation targets;
 - b. Allocating responsibility for collection to the Green Fund.
- Initiate intensive project preparation using investment resources (National and International funds);
- Revise cost recovery system at least, in the initial stage, covering operational costs and enabling taking loans where affordability allows;
- Increase use of PPP mechanisms for attracting additional resources.

IV Latest developments in transposition:

Latest developments in transposition since the bilateral screening in November 2014:

a) Adopted on 10th of February 2015:

- **Law on Amendments to the Law on Chemicals** - introduces legal grounds for charging taxes for certain tasks defined by the Law. These taxes shall be the revenue to the budget of the Republic of Serbia. It also specifies duties of three different inspectorates (Environment, Trade and Health) to ensure conditions for effective supervision and control over the implementation of the Law on Chemicals;
- **Law on Amendments to the Law on Biocidal Products** - changes the competent authority for biocidal products management, which is now Ministry of Agriculture and Environmental Protection. It also introduces taxes instead of fees for carrying out administrative procedures

prescribed by the Law, in line with the legislation regulating the budget system. These taxes shall be the revenue to the budget of the Republic of Serbia. In addition, this law specifies duties of the inspectors from different inspectorates (Environment, Trade, Health) and introduces new inspectorate (Veterinary inspection), to ensure conditions for effective supervision and control over the implementation of the Law on Biocidal Product;

- **Law on Amendments to the Law on IPPC** - harmonizes the provisions relating to the beginning of operation of new facilities, that are required to obtain an integrated permit, with the Law on Planning and Construction ("Official Gazette of RS " No. 72 /09 , 81/ 09 and 24/ 11), in order to facilitate continuity in the operation of the plant. It also mentions the deadline for issuing IPPC permit for existing installations – by 31 December 2020 latest. It does not transpose the new Directive on Industrial Emissions (2010/75/EU).

b) Under final preparation:

- **Law on the Amendments to the Law on Environmental Protection** – it ensures alignment with the following requirements:

- Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EC;
- Council Recommendation 75/436 Euratom, ECSC, EEC – Polluter Pay Principle through the development of financing of environmental protection and establishment of Green Fund of the Republic of Serbia;
- CITES Convention.

The main part of this law is the new Chapter on financing of environmental protection. In order to facilitate the implementation of environmental requirements, the Republic of Serbia has joined the reform of environmental financing (2014/2015). Consequently, it is necessary to introduce an optimal model of environmental financing through the establishment of the **Green Fund of the Republic of Serbia**. The law will regulate:

- status, purpose and organization of the Fund;
- activities to be financed, revenues and manner of use of funds.

- **Law on the Amendments to the Law on Waste Management** – it ensures alignment with Waste Framework Directive 2008/98/EC. It establishes the system of strategic documents in waste sector (National Waste Management Strategy, National Waste Management Plan, Waste Prevention Programme) and guides implementation of transposed EU waste management requirements and national priorities.

- **Law on Amendments to the Law on Nature Protection** – it ensures the alignment with provisions of:

- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and Convention on Biodiversity (CBD) regarding various aspects relevant for regulating wildlife trade and possession and trade;
- Convention on Biological Diversity regarding: definitions, Nagoya Protocol, legal basis for adoption of the revised Biodiversity Strategy;
- Habitat Directive, Birds Directive, ZOO Directive, CITES Regulation and EU Wildlife Trade Regulations regarding: protection of natural habitats and of wild fauna and flora, appropriate assessment procedure, keeping of wild animals in zoos, dealing with the found specimens of the protected wild animal species, handling of confiscated specimens.

The governmental procedure for the above mentioned draft laws will be finished by the end of September 2015.

- **Law on Amendments to the Law on Water** - will provide transposition of certain provisions of EQS Directive and GW Directive. Draft Amendments to the Water Law (first round – 2015) also introduces new provisions related to UWWTD: definitions of agglomeration and sludge, designation of sensitive areas and obligation related to sludge management. The governmental procedure will be finished by the end of September 2015.

Section 1

HORIZONTAL SECTOR

1. Strategic Framework

- **Strategy for Implementing the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters - the Aarhus Convention** (Adopted December 2011)¹⁶

The Strategy aims to provide a process for feasible, effective, step-by-step implementation of Aarhus Convention requirements, but is also geared to accommodate conditions specific to the Republic of Serbia. The Strategy also provides implementation principles to be followed, which are linked to EU regulation.

The Strategy aims for Aarhus Convention implementation in the Republic of Serbia are: to provide an accurate status overview of those fields most relevant to implementation of the Convention provisions; to identify gaps and inconsistencies between the implementation system and the legislation in the Republic of Serbia; to propose actions for compliance with Aarhus Convention obligations, and to address existing gaps and inconsistencies with respect to institutional and legal norms in the Republic of Serbia; to provide basic conditions for further improvements and advanced best practices related both to the Aarhus Convention and other related conventions; to stimulate other policy actions, provide compliance and apply guiding principles along an advanced path towards sustainable development; to liaise and enhance the EU accession process; to provide a basis for implementation of monitoring mechanisms.

The report on the implementation of Aarhus Convention will be prepared and adopted in 2017. Based on this report, a revision of the Strategy may be envisaged.

- **Strategy for Establishment of Spatial Data Infrastructure in Republic of Serbia** for the period between 2010 and 2012. (Adopted 2010)¹⁷

Aim of the NSDI strategy is to establish an infrastructure which will provide support to good quality and stable environmental development, coupled with economic growth, through efficient services, fulfilling the needs and demands of the public and private sector, as well as citizens at large. The strategy presents a framework within which policies for wide use of geo-information can be developed, for avoiding duplication of efforts and reduction administrative expenses.

This strategy directs creation of NSDI in Serbia through following strategic areas: 1. Cooperation; 2. Spatial data and services; 3. Standardization; 4. Legal framework; 5. Geodetic reference system; 6. Financing; 7. Research, development and education.

- **Approximation Strategy for the Horizontal Sector**¹⁸

¹⁶It is available in electronic format at: <http://www.ekoregistar.sepa.gov.rs/en>

¹⁷ It is available in electronic format at:

http://www.rgz.gov.rs/web_preuzimanje_datotetka.asp?LanguageID=1&FileID=512

The strategy was developed under the Technical Assistance for Development of a national Environmental Approximation Strategy (EAS). This sector Strategy is subordinate to the NEAS and it provides more detailed analysis and planning within the sector. The strategy aims at sustainable development through an optimization of procedures and available administrative resources, based on lessons learned from past experience.

2. Transposition

1) Environmental Impact Assessment: Directive 2011/92/EU as amended by Dir. 2014/52/EC

Transposition Status

Directive 2011/92/EU is transposed to a large extent, through the following legal acts:

- Law on EIA (Official Gazette of the Republic of Serbia No.135/2004, 36/2009);
- Law on Environmental Protection (“Official Gazette of RS”, No. 135/2004, 36/2009 and 72/2009);
- Decree that prescribes list (I) of projects for which an impact assessment is mandatory and list (II) of projects for which an impact assessment may be required (Official Gazette of the Republic of Serbia No. 114/2008);
- Law on Ratification of the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention)- („Official Gazette of the Republic of Serbia“, No. 102 /07);
- Law on Ratification of the Aarhus Convention („Official Gazette of the Republic of Serbia“, No. 38/09)
- Law on Free Access to Information of Public Importance, („Official Gazette of the Republic of Serbia“, No. 120/04, 54/07, 104/09 and 36/10);
- Law on Planning and Construction ("OG of RS", No. 72/09, 132/14 and 145/14).

In 2005, the following areas have been regulated through by-laws („Official Gazette of the Republic of Serbia“, No. 69/05):

- Rulebook on public insight, presentation and public discussion about the study;
- Rulebook on the work of the expert commission in assessment of the study;
- Rulebook on the content of application for determining screening and on the content of application for determining scope of the EIA study;
- Rulebook on the content of the EIA study and on the content of appearance, manner of keeping public register regarding the act decisions about the EIA;
- Rulebook on manner of keeping public register regarding the act decisions about the EIA.

Directive 2011/92/EU is considered to be almost fully transposed. The only provisions that remain partially transposed are Article 7, Annex I and II of the Directive.

Amendments introduced by Dir. 2014/52 have not yet been transposed.

¹⁸It is available in electronic format at:

<http://www.misp-serbia.rs/wp-content/uploads/2012/06/NEAS-Sektorske-Strategije.zip>

Transposition plan

EU Requirements	National Requirements	Year
Article 7	The adoption of Law on Ratification of Amendments to the ESPOO Convention, Decision II/14 and Decision III/7	End of 2015
	The adoption of Law on Ratification of Multilateral agreement among countries of South Eastern Europe for implementation of the Convention on EIA in a transboundary context	End of 2016
Annex I	Adoption of the Decree on Amendments to the Decree that prescribes list (I) of projects for which an impact assessment is mandatory and list (II) of projects for which an impact assessment may be required.	End of 2015
Annex II (amendments introduced after 2008)	Adoption of the Decree on Amendments to the Decree that prescribes list (I) of projects for which an impact assessment is mandatory and list (II) of projects for which an impact assessment may be required.	End of 2015
Amendments introduced by Dir.2014/52	Adoption of the Law on Amendments to the Law on Environmental Impact Assessment.	2017 (Proposed deadline was 2018.)
	Adoption of the Amendments to the following bylaws : <ul style="list-style-type: none"> ○ Rulebook on the procedure of public access, presentation and public debate on the environmental impact assessment study ; ○ Rulebook on the work of the Technical commission in assessment of the environmental impact assessment study; ○ Rulebook on the content of application for determining screening and on the content of application for determining scope of the EIA study; ○ Rulebook on the content, layout and methods of managing a public register on conducted procedures and adopted decisions related to environmental impact assessment; ○ Rulebook on the content of the environmental impact assessment study. 	End of 2017

Responsible institution for preparing the both above mentioned draft laws is Ministry of Agriculture and Environment Protection.

Different possibilities to transpose and implement new art.2.3 are currently discussed between interested departments within the ministry. The outcome of these discussions and of the consultations with other stakeholders, both in terms of procedure and administrative structure, will be reflected in the amendments to the Law on Environmental Impact Assessment.

2) Strategic Environmental Assessment: Directive 2001/42/EC

Transposition Status

- The Directive is partially transposed by the following laws:
 - Law on Strategic Environmental Impact Assessment (“Official Gazette of RS”, No. 135/2004 and 88/2010);
 - Law on Environmental protection (“Official Gazette of RS”, No. 135/2004, 36/2009 and 72/2009);
 - Law on ratification of the SEA Protocol to the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention).

Transposition Plan

Short Term (2015-2016)

The working group will be formed in order to amend the Law on Strategic Environmental Impact Assessment in line with Directive 2001/42/EC in first half of 2016.

Mid Term (2017-2020)

Adoption of the Law on Amendments to the Law on Strategic Environmental Impact Assessment is envisaged for the first half of 2017. The amendments are as follows:

EU requirements	Planned activity
General Obligations, Art.4.3	Amendment
Environmental Report –Article 5.2	Amendment
Consultations – Article 6.5	Regulation – public participation procedure
Transboundary Consultations-Article 7	Amendment
Decision making – Article 8.	New Article
Information on the decision – Article	Amendment

9.1	
Monitoring – Article 10.	Amendment
Information, reporting and review- Article 12.(12.2)	Regulation- establishing the expert committee

- Adoption of the Rulebook on the work of the Technical Commission for Strategic Environmental Impact assessment Report by the end of 2017;
- Adoption of the Rulebook on the Procedure of Public Access, Presentation and Public Debate on the Strategic Environmental Impact Assessment Report by end of 2017.

3) Public Access to Environmental Information: Directive 2003/4/EC

Transposition Status

The Directive is partially transposed by the following laws and bylaws:

- Law on Environmental Protection (LEP) (“OG of RS”, No. 135/04,36/09, 72/09 and 43/11)
- Law on free access to information of public importance (“OG of RS”, No. 120/04, 54/07, 104/09 and 36/10)
- Law on general administrative procedure (O.G. Of SRJ 33/97 and 31/01)
- Law on Ratification of the Convention On Access To Information, Public Participation In Decision-Making And Access To Justice In Environmental Matters (OG of RS 38/09)
- Regulation on content and method of environmental protection information system management, methodology, structure, common bases, categories and levels of data collection and on the content of information the public is constantly and mandatory informed about (“OG of RS”, No. 112/09)

Transposition Plan

Short Term (2015-2016)

Full transposition will be done by adoption of the Law on amendments to the Law on Environmental Protection by end of 2016.

- The draft Law on amendments to the Law on Environmental Protection provides for both passive and active flow of information.
- **Passive flow** – Public authorities (which are defined according to art. 2 (2) from the directive) are required to make available environmental information held by or for them to any applicant at his request and without his having to state an interest. The environmental information shall be made available to an applicant as soon as possible or, at the latest, within the 15 days after the receipt by the public authority of the applicant’s request. This deadline can be prolonged (up to 2 months) if the volume and the complexity of the information is such that the 15 days period cannot be complied with. In certain cases, the public authority can refuse to answer the request. The new amendments ensure full alignment with the exceptions provided for by the directive.
- An applicant may file a complaint to the Commissioner for Information of Public Importance and Protection of personal data 15 days upon receipt of the public authority decision. The Commissioner is an autonomous state body, independent in fulfilling its authority. According to the Law on free access to information of public importance (LFAIPI) (O.G. of RS. 120/04,

54/07,104/09 and 36/10) filing a complaint to the Commissioner is free of charge. Proceedings before the Commissioner are governed by the provisions of the Law on General Administrative Proceedings pertaining to the appellate decisions of second-instance bodies, unless provided otherwise by this Law (Article 23). The Commissioner passes a decision without delay and within 30 days from the submission of the complaint at the latest, having first given the public authority, and where appropriate also the applicant, an opportunity to reply in writing.

- Administrative dispute may be instituted against a decision of the Commissioner before the Administrative Court. Administrative disputes regarding the exercise of the right to free access to information of public importance are resolved in expedited proceedings (Art. 27 of the Law on Free Access to Information of Public Importance). According to art.2 of the Law on Free Access to Information of Public Importance environmental information is considered information of public importance.

- **Active flow** – Public authorities take the necessary measures to organize the environmental information which is relevant to their functions and which is held by or for them with a view to its active and systematic dissemination to the public, in particular by means of computer telecommunication and/or electronic technology, where available.

4) Public participation: Directive 2003/35/EC

Transposition Status

- The Directive is partially transposed by the following laws:
 - Law on Ratification of the Aarhus Convention (“OG of RS”, No. 38/09);
 - Law on Environmental Protection (LEP) (“OG of RS”, No. 135/04, 36/09, 72/09);
 - Law on Environmental Impact Assessment (Official Gazette of the RS No.135/04, 36/09) (LEIA);
 - Law on Integrated Environmental Pollution Prevention and Control (“Official Gazette”, No. 135/2004).

Transposition Plan

Full transposition will be done by adoption of the following laws:

- Adoption of the Law on amendments to the Law on Environmental Protection by end of 2016;
- Adoption of the Law on Amendments to the Law on Environmental Impact Assessment by end of 2018;
- Adoption of the Law on amendments to the Law on Waters by end of 2018.

Short Term (2015-2016)

Adoption of the Law on amendments to the Law on Environmental Protection is envisaged by end of 2016.

Mid Term (2017-2020)

- Adoption of the Law on Amendments to the Law on Environmental Impact Assessment by end of 2018.
- Adoption of the Law on amendments to the Law on Waters by end of 2018.

5) Environmental liability: Directive 2004/35/EC

Transposition Status

The ELD Directive is in initial stage of transposition. Transposition was done through the following laws and bylaws:

- Law on Environmental Protection (LEP) (“OG of RS”, No. 135/04, 36/09, 72/09, 43/11);
- Law on Nature Protection (LNP) (“OG of RS”, No. 91/10);
- Law on waters (“OG of RS”, No. 33/10);
- Law on Integrated Environmental Pollution Prevention and Control (“OG of RS”, No. 135/04);
- Law on waste management (“OG of RS”, No. 36/09);
- The Rulebook on habitat types, the criteria for the selection of habitat types, on sensitive, endangered, rare and priority for protection habitat types and on the protection measures for their conservation (“OG of RS”, No. 35/10);
- Regulation on the program for systematic monitoring of the soil quality, indicators for evaluation of soil degradation and methodology for preparation of remediation program (“OG of RS”, No. 88/10);
- Decree on Placing Under Control Use and Circulation of Wild Flora and Fauna (“OG of RS”, No. 31/05, 45/05, 22/07 and 38/08);
- Rulebook on compensational measures (“OG of RS”, No. 20/10).

Transposition Plan

It is planned to transpose ELD requirements by a special Law on Environmental Liability with Regard to the Prevention and Remedying of Environmental Damage. The draft of the Law on Environmental Liability with Regard to the Prevention and Remedying of Environmental Damage and bylaws developed with support of PLAC project in June 2015, and will be reviewed by the end of the 2015. documents will be reviewed by the end. Full transposition of the Directive is scheduled for 2017.

Mid Term (2017-2020)

Adoption of the Law on Environmental Liability with Regard to the Prevention and Remedying of Environmental Damage.

6) Environmental Crime Directive: Directive 2008/99/EC

Transposition Status

Directive 2008/99/EC (Environmental crime) has been almost fully transposed through provisions in the Criminal Code (“Official Gazette of RS”, No. 85/05, 88/05-coor., 107/05-corr., 72/09, 111/09, 121/12, 104/13 and 108/14), Law on the Liability of legal entities for criminal offences (“Official Gazette of RS”, No 97/08) and Law on Nature Protection (Official Gazette of RS, no. 36/09, 88/10, 91/10). Regarding the amending procedure of the Criminal Code changes will be made in a line with *Environmental Crime Directive* and proposals of the PLAC expert. Further provisions will be considered to be amend: the wording of the definition “unlawful”; the collection, transport, recovery or disposal of waste, including the supervision of such operations and the aftercare of disposal sites, and including action taken as a dealer or a broker (waste management), which causes or is likely to cause death or serious injury to any person or substantial damage to the quality of air, the quality of soil or the quality of water, or to animals or plants; the shipment of waste; the operation of a plant in which a dangerous activity is carried out or in which dangerous substances or preparations are stored or used and which, outside the plant, causes or is likely to cause death or serious injury to any person or substantial damage to the quality of air, the quality of soil or the quality of water, or to animals or plants; the production, processing, handling, use, holding, storage, transport, import, export or disposal of nuclear materials or other hazardous radioactive substances which causes or is likely to cause death or serious injury to any person or substantial damage to the quality of air, the quality of soil or the quality of water, or to animals or plants; the production, processing, handling, use, holding, storage, transport, import, export or disposal of nuclear materials or other hazardous radioactive substances which causes or is likely to cause death or serious injury to any person or substantial damage to the quality of air, the quality of

soil or the quality of water, or to animals or plants; the killing, destruction, possession or taking of specimens of protected wild fauna or flora species, except for cases where the conduct concerns a negligible quantity of such specimens and has a negligible impact on the conservation status of the species; any conduct which causes the significant deterioration of a habitat within protected site; the production, importation, exportation, placing on the market or use of ozone-depleting substances.

Transposition Plan

Full transposition will be achieved by amendments to the Criminal Code.

Short Term (2015-2016)

The new working group will be formed in order to amend Criminal Code of the Republic of Serbia in line with Istanbul Convention and Directive 2008/99/EC in fourth quarter of 2015.

Mid Term (2017-2020)

Full transposition is expected to be at the beginning of 2018. The adoption of the amendments of the Criminal Code of the Republic of Serbia will create a basis for full implementation of Directive 2008/99/EC.

7) *INSPIRE Directive 2007/2/EC*

Transposition Status

The Law on State Survey and Cadaster provides the legal framework for the establishment of NSDI in Serbia, by partly transposition of the INSPIRE Directive 2007/2/EC. The Law defines establishing of NSDI through the following provisions: NSDI subjects (stakeholders), establishment, content, metadata, spatial datasets and services, The National Geoportal, constraints, NSDI bodies and competencies of the NSDI Council.

Transposition Plan

Full transposition of INSPIRE Directive will be achieved through the Law on NSDI, whose adoption is foreseen by the end of 2015. The initial version of the Law on NSDI is drafted as well as discussed on several sessions with stakeholders.

Short Term Priorities (2015-2016)

- Adoption of the Law on NSDI
- Drafting of NSDI Strategy for period up to 2020
- Identification and appointment of responsible a public authority(s) for the INSPIRE themes for Annex I and II
- Metadata harvesting for spatial data sets and services related to Annex I
- Upgrade of the technical infrastructure for free public access to spatial data sets via discovery and view services at the national level, as well as to ensure data and service sharing among public authorities without restriction and practical obstacles
- Set up infrastructure for monitoring and reporting to the Commission under the environmental *acquis* that need to comply with the requirements on implementation of the INSPIRE directive

Mid Term Priorities(2017-2020)

- NSDI business model development (financing model, pricing policy, coordination structure, spatial data sharing and distribution among stakeholders, licensing, cost-benefit analysis, spatial data and services supply for disaster risk management). In particular, the model should develop mechanisms to ensure availability of the reference data sets as open data to maximise wide reuse of geoinformation without restriction.
- Identification and appointment of responsible a public authority(s) for the INSPIRE themes for Annex III
- Inclusion of the INSPIRE Implementing Rules in the national legislation by adoption of by-law regulations
- Metadata harvesting for spatial data sets and services related to Annex II and III
- Development of the technical platform in line with the technical specification for implementation of the INSPIRE network services for discovery, view and download
- Linkage of national services to the EU INSPIRE geoportal in order to provide discovery of spatial data sets and services at the central access node on the European level
- Data harmonisation for Annex I spatial data sets in order to meet the INSPIRE specifications compliance
- Coordination of supply of spatial data sets and services at the cross-institutional level
- Monitoring and reporting to the Commission on implementation of the directive

Long Term (2020 and beyond)

- Enhancement of the technical platform in line with the technical specification for implementation of the INSPIRE network services for transformation and invoke
- Data harmonisation for Annex II and III spatial data sets in order to meet the INSPIRE specifications compliance
- Provision of sustainable terms for the continuous supply and update of metadata, spatial data sets and services for purpose of national authorities as well as EU Community institutions

Monitoring and reporting to the Commission on implementation of the directive

HORIZONTAL SECTOR		Transposition deadline					
EU act		2015	2016	2017	2018	2019	2020
Environmental Assessment: 2011/92/EU as amended by Dir.2014/52/EC	Impact Directive						
Strategic Assessment: 2001/42/EC	Environmental Directive						

Public Access to Environmental Information: Directive 2003/4/EC						
Public participation: Directive 2003/35/EC						
Environmental liability: Directive 2004/35/CE						
Environmental Crime Directive: 2008/99/EC						
INSPIRE Directive 2007/2/EC						

3. Implementation Activities and Institutional Responsibilities

1) Environmental Impact Assessment: Directive 2011/92/EU as amended by Dir.2014/52/EC

Structures for implementation of the EIA Directive are established at the national, autonomous province and local level.

The competent authorities responsible for implementation of EIA Directive are:

- MAEP - for projects for which development consent (i.e. construction permit) is under the responsibility of the Republic authority;
- Provincial authority - for projects for which development consent is under the responsibility of the authority of the autonomous province;
- Local self-government authority - for projects for which development consent is under the responsibility of the local self-government authority.

The EIA procedure is almost fully complied with requirements of Dir.2011/92/EC. The amendments introduced by Dir.2014/52/EC are not fully transposed yet.

The EIA procedure started to be applied in Republic of Serbia since 2004. The statistic with EIA cases from 2006 – 2013 was presented during bilateral meeting.

Several of the most important infrastructure projects for which EIA procedure is completed or in progress, for the period 2014-2015 are as follows:

- “The South Stream gas transmission pipeline project” - ended process;

- “Reconstruction and modernization of the railway Subotica-Cikerija-Ba almaš-Baja, Section Subotica-Hungarian border (Cikerija),”- in procedure
- “Reconstruction and modernization of the railway Subotica-Teretana (Hungarian border)”- in procedure;
- “Reconstruction and modernization of the railway Novi Sad-Subotica–Hungarian border”- in procedure;
- “Reconstruction and modernization of the railway Nis-Presevo-State border”—in procedure;
- “Plant for thermal treatment of medical and pharmaceutical waste in Smederevo” - in procedure.

In 2014, the Ministry of Agriculture and Environmental Protection co-financed the project „Think-Act-Impact“: The improvement of implementation of the EU Directive on Environmental Impact Assessment in Serbia, in particular bearing in mind the institutional mechanisms and public participation in the process. The project is implemented by the European Policy Centre together with Ecological Centre „Habitat“ and the association „Serbia in motion“, and supported financially by Royal Norwegian Embassy in Belgrade.

A workshop for local authorities was held in Belgrade 01- 04.06.2015. The workshop focused on the quality of the EIA study by analysing different case studies and presenting both good and bad examples.

Different options are currently considered regarding the development of a national EIA database that will also allow on-line access to information. Both donor support and other financial sources are taken into consideration.

The following steps are foreseen to be taken to ensure full implementation:

Short Term (2015-2016)

- Training of representatives of judicial system regarding access to justice - 2015;
- “Training of trainers” is implemented within the project ECRAN, to be continued
- Training of civil servants at provincial and local level responsible for EIA procedure regarding the new amendments proposed to EIA Law (i.e. extended public participation, EIA in transboundary context, access to justice) - 2016;
- Training of experts in charge of elaboration of EIA reports within ECRAN project in order to improve quality of EIA reports - 2016
- Training of civil servants at provincial and local level responsible for issuing development consents regarding the new amendments proposed to EIA Law – 2016;
- Improve arrangements in providing and exchanging information and data between MAEP and authorities responsible for implementation of EIA Law on local, autonomous province and national level – 2015 – 2016.

Mid -Term (2017-2020)

- Training of civil servants at provincial and local level responsible for EIA procedure regarding the adopted amendment to EIA Law – 2017- 2019;
- Training of civil servants at provincial and local level responsible for issuing development consents regarding the adopted amendments to EIA Law – 2017 – 2019;
- Workshop on Member States experience regarding the quality of EIA reports – 2018;
- Training of representatives of judicial system regarding access to justice - 2017 - 2019.

Foreseen activities will be implemented by MAEP. Some activities will be implemented with support of OSCE, TAIEX and ECRAN project.

The administrative capacity needed for an effective implementation of the legislation is going to be assessed within IPA 2013 project "Further Implementation of Environmental Approximation Strategy". The project will prepare an Action Plan for Administrative Capacities Development at all levels. The project is planned to start in the beginning of 2016 and will have a 2 year period.

2) Strategic Environmental Assessment: Directive 2001/42/EC

Structures for implementation of the SEA Directive are established at the national, autonomous province and local level.

The competent authorities responsible for implementation are:

- Authorities responsible for plan and programme preparation and MAEP at national level;
- Autonomous province at regional level;
- Local self-government at local level.

The authority responsible for enforcement and control is MAEP.

The SEA procedure is largely in place. The procedure started to be applied in Republic of Serbia since 2004. The statistic with SEA cases from 2008 – 2014 was presented during bilateral meeting.

In 2015, „Guide for the implementation of the strategic environmental impact assessment in urban planning“ is published, funded and implemented by GIZ, with the support of the Ministry of Agriculture and Environmental Protection and the Ministry of Construction, Transport and Infrastructure.

The following steps are foreseen to be taken to ensure full implementation:

Short term activities plan:

- Consultations with authorities and organisations concerned and authorities responsible for implementation of SEA Law (environmental authorities and authorities responsible for development of plans/programmes) at national provincial and local level on the draft amendments to the SEA Law – 2016;
- Improve mechanism in providing and exchanging information and data between MAEP and authorities responsible for implementation of SEA Law on local, autonomous province and national level – 2015 - 2016;
- Training of authorities responsible for implementation SEA Law, on local, autonomous province and national level regarding the procedural steps provided for by the law- 2015 - 2016;
- Training of authorities and organizations concerned, on local, autonomous province and national level (which have interest in accordance with their responsibilities in decision-making process related to environmental protection) regarding the procedural steps provided for by the law – 2015 – 2016
- Training of authorities responsible for implementation of the SEA Law, on local, autonomous province and national level regarding the content of the environmental report – 2015 – 2016

Mid- term activities plan:

Training of authorities and organizations concerned, on local, autonomous province and national level regarding the content of the environmental report – 2017 – 2018

- Workshop on Member States experience regarding consultations, in transboundary context – 2017
- Presentation of the Regulation on public participation procedure in 5 Aarhus centers – 2017;

- Training of NGOs related to the detailed arrangements for the information and consultation of the public – 2017- 2018;
- Workshop on Member States experience on monitoring the significant environmental effects of the implementation of plans and programmes – 2018;
- Training of authorities in charge of monitoring on the local, autonomous province and national level on monitoring the significant environmental effects of the implementation of plans and programmes – 2018;
- Workshop on Member States experience related to measure concerning the quality of environmental reports – 2018;
- Capacity building of judicial authorities regarding access to justice related to SEA procedure – 2018;

Foreseen activities will be implemented by MAEP, with support from TAIEX.

3) *Public Access to Environmental Information: Directive 2003/4/EC*

Structures for implementation of this directive are in place.

The competent authorities responsible for implementation are:

- MAEP;
- Environmental Protection Agency;
- The Commissioner for Information of Public Importance and Personal Data Protection;
- National, regional and local authorities responsible for environmental protection;
- Aarhus centers

Working procedures regarding both the passive and active flows are in place.

In the 2010- 2012 period, four Aarhus centers (Novi Sad, Kragujevac, Subotica, Niš) were opened in the Republic of Serbia.

In accordance with the Strategy on Implementation of the Aarhus Convention, the Project to create the first National Meta-register for Environmental Information (Eco-register) was implemented in April 2012, available on the website of the Environmental Protection Agency (SEPA)¹⁹. The Project on improvement and update of Eco-register was implemented by the end of 2013.

SEPA is the institution responsible for establishing the National Register of Pollution Sources. PRTR register, as one of the subsystems of the National Register of Pollution Sources, is harmonised with PRTR Protocol and E-PRTR Regulation.

The following steps are foreseen to be taken to ensure full implementation:

Short term activities plan:

- Opening of the 5th Aarhus Centre in Prijepolje- 2015;
- Training of civil servants, judiciary and NGOs based on Guide on the Right of Access to Justice in Matters related to Environmental Protection in Administrative Procedures and Administrative Disputes (developed with support from OSCE) – 2015 - 2016;
- Capacity building of the environmental authorities regarding active flow – 2016;
- Capacity building of information officers in other public authorities regarding active flow – 2016;
- Update of Eco-register- annually.

¹⁹<http://www.ekoregistar.sepa.gov.rs>

Mid - term activities plan:

- Capacity building of the environmental authorities regarding passive flow – 2017-2018;
- Capacity building of information officers in other public authorities regarding passive flow – 2017-2018;
- Training for representatives of judicial system regarding access to justice on environmental information – 2017 – 2018;
- Update of Eco-register- annually
- Training of public authorities at national, provincial and local level on the development of electronic databases easily accessible to the public through public telecommunication networks - 2017-2020.

Foreseen activities will be implemented by MAEP with support of OSCE and Office of the Commissioner for Information of Public Importance.

4) Public participation: Directive 2003/35/EC

Structures for implementation of this directive are in place.

The competent authorities responsible for implementation are:

- MAEP:
 - Department for Waste Management is in charge for: Article 7(1) of Council Directive 75/442/EEC of 15 July 1975 on waste; Article 6 of Council Directive 91/157/EEC of 18 March 1991 on batteries and accumulators containing certain dangerous substances; Article 6(1) of Council Directive 91/689/EEC of 12 December 1991 on hazardous waste; Article 14 of Directive 94/62/EC of the European Parliament and of the Council of 20 December 1994 on packaging and packaging waste;
 - Department of Air Protection is in charge for Article 8(3) of Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management;
 - Directorate for Water is in charge for Article 5(1) of Council Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources.
- The Provincial public authorities and local – self-government authorities responsible for the preparation and modification or review of plans and programs developed at regional and local level;
- The Provincial public authorities and local – self-government authorities in charge of environmental protection;
- The Judicial Bodies – The Administrative Court of Serbia.

During 2011 and 2012 a number of training sessions and round tables were held in cooperation with the OSCE and the Regional Environmental Centre (REC) for representatives of the governmental institutions dealing with implementation of regulations in the field of environment, representatives of the judiciary and representatives of the civil sector. The purpose was to strengthen the capacity for implementation of the third pillar of the Aarhus Convention.

MAEP in cooperation with REC held a two-days training for judges and prosecutors on the third pillar of Aarhus Convention in January 2013.

In 2013 MAEP, with OSCE support, implemented the Project for elaboration of a Guide on the Right of Access to Justice in Matters related to Environmental Protection in Administrative Procedures and Administrative Disputes.

In 2014 MAEP, with OSCE support, implemented the Project for elaboration of the Manual – “Legal Instruments of Environmental Protection – Civil Law and Criminal Law Protection”.

The following steps are envisaged to be taken to ensure full implementation of this directive

Short term activities plan:

- Capacity building of environmental authorities at regional and local level – 2015 – 2016;
- Capacity building of authorities responsible for the preparation and modification or review of plans and programmes developed at national, regional and local level – 2015 – 2016;
- Information campaigns in cooperation with Aarhus Centre regarding the public participation procedure during preparation and modification or review of plans and programmes – 2015 - 2016.

Mid- term activities plan:

- Workshops for NGOs regarding the public participation procedure during preparation and modification or review of plans and programmes – 2017- 2018;
- Capacity building of environmental authorities at regional and local level – 2017 – 2018;
- Capacity building of authorities responsible for the preparation and modification or review of plans and programmes developed at national, regional and local level – 2017 – 2018;
- Information campaigns in cooperation with Aarhus Centre regarding the public participation procedure during preparation and modification or review of plans and programmes – 2017 - 2018.

Foreseen activities will be implemented by MAEP. Some activities will be implemented with support of Aarhus Centre.

5) Environmental liability: Directive 2004/35/CE

Proposed competent authorities for the implementation of the ELD are:

- MAEP and other public authorities at national level having environmental responsibilities;
- Environmental Protection Agency;
- Regional and Local Authorities responsible for Environmental Protection.

Short term activities plan envisages:

- Workshop on ELD requirements for operators – 4 workshops in 2015;
- Workshops on ELD requirements for NGOs - 2015;
- Presentation of the draft Law transposing ELD in 4 Aarhus centres – 2015;
- Workshop on ELD requirements for companies providing financial instruments – 2016;
- Study visit to a Member State regarding development of financial security instruments – 2016.

Mid- term activities plan envisages:

- Capacity building of environmental authorities at regional and local levels regarding requirements of Law transposing ELD – 2017 - 2020;
- Workshops regarding requirements of Law transposing ELD for NGOs – 2017 – 2020;
- Workshops regarding requirements of Law transposing ELD for economic operators – 2017 – 2020;
- Workshops for companies providing financial instruments regarding the development of financial security instruments – 2017 – 2020;
- Workshops on Member States experience regarding assessment of environmental damage– 2017
- Development of methodologies for assessment of environmental damage-2020

- Workshop on case studies related to the type of remedial measures (i.e. combination between primary, complementary and compensatory remediation) for damage to water, protected species and natural habitats-2018;
- Workshop on case studies related to the type of remedial measures (i.e. combination between primary, complementary and compensatory remediation) for land damage-2018
- Workshop on access to justice related to instances of environmental damage or an imminent threat of such damage – 2018-2019
- Workshop on Member States experience on assessing the imminent threat of damage – 2019
- Workshop on Member States experience related to establishing a causal link between the damage and the activities of individual Operators in cases of pollution of diffuse character - 2019

The foreseen activities will be implemented by MAEP. Some activities will be implemented with support of PLAC project and TAIEX.

6) *Environmental Crime Directive: Directive 2008/99/EC*

Working group for the amending of the Criminal Code, established in 2014, is responsible for ensuring full harmonization with requirements of this directive.

Criminal complaints for the environmental crimes may be submitted by any person or Inspection service to the competent Prosecutor's office.

The competent Public Prosecutor is entitled to prosecute environmental crimes, ex officio (i.e. the Prosecutor from the Basic Public Prosecutor's Office and Prosecutor from the Higher Public Prosecutor's Office).

The courts of general jurisdiction (Basic and High Courts in first instance and High Court and Appeal Court in second instance) conduct criminal proceedings.

Republic Inspection of Environmental Protection initiated workshops (through OSCE, IPA project) with the participation of prosecutors and judges dealing with court cases related to environment. The workshops were conducted in various districts with a view to raising awareness of the prosecutors and judges of the laws in the field of environmental protection. During these workshops inspectors were informed by prosecutors and judges about required data during the court proceedings and prosecutors and judges were informed by inspectors with different type of on site inspections. The co-operation will continue.

Environmental Inspection Department keeps register of submitted requests to initiate misdemeanour proceedings before misdemeanour courts and of requests to initiate economic offence proceedings before prosecution. The practice is such that Courts inform of the manner to resolve misdemeanour cases, and the Prosecution informs in case the Request has been rejected.

Short term priorities:

- Publication of the Handbook on "Legal instruments for protection of environment through civil and criminal law" – 2015;
- Trainings with representatives of the judicial system responsible for implementation of criminal law – 2 trainings in 2015;
- Membership in IMPEL network

Mid- term priorities:

- Capacity building for environmental authorities responsible for enforcement of environmental legislation – 2018;
- Workshop on MS experience regarding establishment of special departments within the courts of law dealing with environmental issues- 2018.

The foreseen activities will be implemented by MAEP with support of Ministry of Justice, OSCE and Judicial Academy.

Capacity building of representatives of judicial system is envisaged to continue even after the date of implementation.

7) INSPIRE Directive 2007/2/EC

Republic Geodetic Authority (RGA) was appointed as contact point with the Commission regarding this directive.

Coordination structure is defined by Law on State Survey and Cadastre, where the National Spatial Data infrastructure (NSDI) Council and the working groups have the following responsibilities:

- NSDI Council - steers the development of institutional and technical framework for establishing common geo-information infrastructure on the national level, through formulation of clear guidelines and means to achieve this goal;
- Working groups – have operational responsibility of implementation of thematic issues for specific components such as: technical infrastructure, standards, metadata and spatial data, cooperation among stakeholders, legal framework, financing models, research, education, etc.

The current members of the NSDI Council are representatives from Republic Geodetic Authority - RGA (chairman), Ministry of Construction, Transport and Infrastructure, Ministry of State Administration and Local Self-Government, Ministry of Defence, Ministry of Energy and Mining, MAEP, Ministry of Finance, Statistical Office and Republic Hydro-meteorological Service.

Members of the working groups are representatives of the ministries and others governmental authorities, local administration, public companies, provincial secretariats, research and education institutions as well private companies.

RGA proposed a metadata profile for NSDI purpose describing: data on metadata, dataset, responsible organisation, conformity, portray, classification, keywords, constrains and limitations, distribution, temporal update, reference system, location and quality.

The initial geoportal “GeoSrbija” [www.geosrbija.rs] had been launched on 27th November 2009 supported by the twinning project with Norway. Within the IGIS project (2010-2014), supported by France, the capacities were established for provision of wide range of geo-information.

The on-going IMPULS project (2014-2018), financed by SIDA, supports the INSPIRE implementation in the Western Balkan region through settings of the grounds for technical interoperability and dissemination of spatial data and services between public authorities both at national and at regional level.

The following activities on harmonisation of spatial data to the INSPIRE requirements are in progress:

Short term priorities:

- Data model for 3D Topographic data base for scale 1:20 000 is developed under the IGIS project – 2015 - 2016;
- Data model for cadastral system is under development for cadastral parcels, buildings, administrative unites and addresses for core classes according to the INSPIRE data specifications – 2015 - 2016;
- IPA II Action Document 2014 “Flood recovery and prevention” foresees development of flood risk and hazards maps for flood prone areas as well as upgrade of the water information system.
- Satisfactory feature of DTMs for flood risk mapping requires recording from the air based on laser technology LiDAR in order to produce DTM with high accuracy and resolution. LiDAR based DTMs allows their use for recording and assessment of damage, reconstruction and revitalization of existing road and railway network, evidence of existing and assessment of new landslides, recovery of open pits, flood and landslide prevention measures, etc.
- Implementing institutions of this component are Water Directorate, RGA, Military Geographical Institute, Public Water Management Company Srbijavode. Public Water Management Company “Vojvodina Vode, Republic Hydro-Meteorological Service of Serbia

Mid term priorities (2017 – 2020):

- Real Estate Management Project (2015-2020) is proposed to be financed with a loan from the World Bank. The project subcomponent B.2 “Support to the NSDI” envisages following activities:
 - NSDI business model development (financing model, pricing policy, spatial data sharing and distribution among stakeholders, licensing, cost-benefit analysis, spatial data and services access for emergency cases);
 - Development of a NSDI technical framework by upgrading network services for discovery, view, transformation, download and linking spatial data services in line with INSPIRE;
 - Data harmonization for themes under competence of RGA according to INSPIRE specifications.
- The foreseen activities will be implemented by RGA.
- Geo-information provided by RGA is also crucial to underpin implementation of cross-sector projects such as:

Project title	Period/Deadline	Responsible authority
Land Cover Map for NATURA 2000	2014-2016	Ministry of Agriculture and Environment
Land Parcel Identification System (LPIS) by provision of orthophoto, DTM, cadastral maps	2015-2019	Ministry of Agriculture and Environment, Directorate for Agrarian Payment
Land Cover map for agriculture in	2015	Provincial Secretariat

Vojvodina under HORIZON 2020 project		for Agriculture, Water Management and Forestry
Rural Land management project – registry of abandoned agricultural land	2013-2015	Ministry of Agriculture and Environment, Directorate for Agricultural land
Implementation of the National Disaster Risk Management Program by provision of spatial data and services for emergency case prevention and response	Action plan is under development and will cover period 2015-2017 with prediction for upcoming period	Government Office for Reconstruction and Flood Relief

HORIZONTAL SECTOR	PRE-ACCESSION PERIOD						TRANSITION PERIOD	
	2015	2016	2017	2018	2019	2020	2021	2022
Environmental Impact Assessment: Directive 2011/92/EU as amended by Dir.2014/52/EC								
Strategic Environmental Assessment: Directive 2001/42/EC								
Public Access to Environmental Information: Directive 2003/4/EC								
Public participation: Directive 2003/35/EC								
Environmental liability: Directive 2004/35/CE								
Environmental Crime Directive: Directive 2008/99/EC								
INSPIRE Directive 2007/2/EC								to 2024

3. List of Directives implementation of which are considered most problematic

INSPIRE Directive (Dir.2007/2/EC) deserves special attention due to the necessity to develop and put in place the required technical systems.

E. Implementation deadlines for all directives in the sector

	Directives	Implementation deadlines
1	Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment as amended by Directive 2014/52/EU	2018
2	Directive (2001/42/EC) on assessment of the effects of certain plans and programmes on the environment	2018
3	Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on Public Access to Environmental Information and repealing Council Directive 90/313/EEC	2018
4	Directive 2003/35/EC of the European Parliament and of the Council of 26 May 2003 providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation and access to justice Council Directives 85/337/EEC and 96/61/EC	2018
5	Directive 2004/35/CE of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage	2020
6	Directive 2008/99/EC of the European Parliament and of the Council of 19 November 2008 on the protection of the environment through Criminal Law	2018
7	Directive (2007/2/EC) of establishing an Infrastructure for Spatial Information in the European Community (INSPIRE)	2024

4. Cost/ Financing estimations - NEAS (incl. all disclaimers)+ revised strategic and planning documents+ information on revision of data (max.1 page)

According to the Approximation Strategy for the Horizontal Sector (Belgrade, April 2012, p. 16), from the economic and financial point of view, the Horizontal Sector does not imply a significant item. Costs will be incurred by the various administrations in the necessary development of their functions but their amount will be small compared to implementation costs and much of the

expense will be supported by technical assistance (TA) projects. The key issue is one of institutional design for efficiency in the functions and expertise required for approximation.

It is expected, that major costs in this subsector will be incurred for implementation of INSPIRE Directive in Serbia. Taking into account the results of INSPIRE Monitoring and Reporting activities presented in the member state reports for 2013²⁰, preliminary estimation of the full INSPIRE implementation in Serbia (estimation is based on the reported experience of member states with similar area, population and background information as Serbia) will require about 15 million euro:

- IT Infrastructure (hardware and core software components): 5 million euro;
- Metadata: 0.5 million euro;
- Harmonisation of data: 4.5 million euro;
- Network services: 3.5 million euro;
- Monitoring and reporting: 0.3 million euro;
- Coordination and horizontal measures: 1.2 million euro;

These costs are planned to be financed from national sources as well as bilateral and multilateral support. The INSPIRE implementation is cross-sectoral and multi-institutional. Based on such an approach, costs of implementations should be covered by state budget of implementation institutions, loans, donors and IPA projects. Some of these financial instruments are already used for on-going and upcoming projects (described above in the implementation section).

Total: 15 million euro.

²⁰ Available in electronic format at: <http://inspire.ec.europa.eu/index.cfm/pageid/182>

Section 2

AIR QUALITY

1. Strategic Framework

Air quality in the Republic of Serbia shall be managed in accordance with the strategic national documents that are relevant for this area:

- **National Program for Environmental Protection** – environmental planning and management provides and realizes the implementation through the Programme.
- **National Sustainable Development Strategy** as a main task in the field of air protection defines conservation and, where it is possible, improving air quality (particularly in urban areas and in the vicinity of large thermal power and industrial plants).
- **National Environmental Approximation Strategy (NEAS)** draws together, rationalises and expands upon previous planning for the transposition of EU legislation, the strengthening of implementation and enforcement arrangements and for the provision of the infrastructure that is necessary for Serbia, its municipalities, economic operators and citizens to be able to comply with their obligations.
- **Approximation Strategy for the air quality and climate change sector (EAS)** which is accompanying document to the NEAS in the field of environment gives a more detailed analysis and details of planning in the air quality and climate change sector.
- **National Program for Adoption of the EU Acquis (NPAA)** defines development and strategic goals, relevant policies, reforms and measures required for the realisation of these goals, establish a detailed plan for harmonization of legislation and defines human and budget resources, and other funds required for the implementation of envisaged tasks.

Planned strategic documents:

- **Draft Energy Strategy of the Republic of Serbia** for the period until 2025 with projections to 2030.
- **Air Protection Strategy** will be performed within the IPA 2014 project „Further implementation of the EAS supporting EU negotiation process (Activity: Development of the Directive Specific Implementation Plans (DSIPs))”. This project will start in 2015 and it is expected to be finished in 2018. Air Protection Strategy will be brought by the Government for a six years period.

2. Transposition

Transposition Status

Directive 2008/50/EC and Directive 2004/107/EC

Directive 2008/50/EC has been largely transposed into Serbian legislation: Law on Air Protection („Official Gazette of RS”, No. 36/09 and 10/13), Regulation on monitoring conditions and air quality requirements („Official Gazette of RS”, No. 11/10, 75/10 and 63/13), Rulebook on content of air quality plans („Official Gazette of RS”, No. 21/10) and Rulebook on short-term action plans („Official Gazette of RS”, No. 65/10). Provisions that have not been transposed are:

- a) Provisions that set obligations of EU member states towards the European Commission -Articles 6.5.2, 11.2, 19.2, 20.1 and 20.2 (providing of information), 21.2 (send lists), 22.4 (notification),

23.1 (communication of the plans), 25.2 (invitation), 27 (Information on ambient air quality) and 33 (Transposition).

b) Provisions that set obligations of Commission (Article 7.4, 20.3, 21.5, 24.4, 28 and 32) and obligation of Committee (Article 29).

c) The provisions that set transposition timelines (Article 31).

Also, wording of some national provisions should be strengthened to reflect the scope of the Directive's provisions and some of the transposed provisions need to be corrected.

The Regulation on monitoring conditions and air quality requirements ("Official Gazette of the RS", No 11/10, 75/10 and 63/13) stipulates limit values for sulphur dioxide, nitrogen dioxide, particulate matter (PM₁₀ PM_{2.5}), lead, benzene and carbon monoxide; also target values for particulate matter PM_{2.5} and ground-level ozone all in accordance with the values laid down in CAFE Directive. Limit values for some pollutants and for some averaging period that are not stipulated by the Directive (SO₂ annual value, NO₂ daily value, CO daily and annual value and Pb daily value) are kept from the previous Rulebook on Immission limit values, measuring methods, criteria for establishing measuring sites and data evidence ("Official Gazette of the RS", No 54/92, 30/99 and 19/06). Limit value for nitrogen dioxide for the averaging period one hour is kept from the previous Rulebook, because this value is stricter than the one stipulated by CAFE Directive. Beside limit and target values for PM_{2.5} Regulation also stipulates national exposure reduction target for particulate matter PM_{2.5} with reduction dynamics as laid down in CAFE Directive and the deadline for meeting exposure reduction target and exposure concentration obligation for particulate matter PM_{2.5}. Long-term objectives for ground-level ozone are also taken from CAFE Directive with no deadline being set for meeting those objectives.

Margins of tolerance are in accordance with those of the directive, with exemption of margin of tolerance for benzene (60% of the limit value).

Due to lack of reliable data on emissions and especially future plans on emission reductions, setting the dates by which air quality standards for some air pollutants should have been met was done in the way to enable to the Republic of Serbia the same period of time for achieving these values as the Member States had for transposition and implementation of CAFE Directives. Date by which limit value for benzene should be met is in compliance with the previous Rulebook.

Directive 2004/107/EC has been largely transposed into Serbian legislation: Law on Air Protection („Official Gazette of RS", No. 36/09 and 10/13) and Regulation on monitoring conditions and air quality standards („Official Gazette of RS", No. 11/10, 75/10 and 63/13). Provisions that have not been transposed are:

a) Provisions that set obligations of EU member states towards the European Commission - Articles 4.14 (providing of information), 5.1 and 5.2 (transmission of information and reporting) and 10 (Implementation).

b) Provisions that set obligations of Commission (Article 5.3, 5.4 and 8) and obligation of Committee (Article 6).

c) The provisions that set amendments necessary to adapt the provisions (Article 4.15).

Some provisions have to be improved, mostly in relation to establishing list of zones and agglomerations in which the levels of arsenic, cadmium, nickel, and benzo (a) pyrene are below the respective target values or where the target values are exceeded. Also, wording of some national provisions should be strengthened to reflect the scope of the Directive's provisions and some of the transposed provisions need to be corrected.

The Regulation on monitoring conditions and air quality requirements ("Official Gazette of the RS", no 11/10, 75/10 and 63/13) stipulates target values for arsenic, cadmium, nickel and benzo(a)pyrene, all in accordance with the values laid down in 4th Daughter Directive.

Transposition Plan

Mid – term priorities (2017 – 2020)

During 2017-2018 the activity of transposition of remaining provisions of CAFE and 4th Daughter Directive that set obligations of EU member states towards the European Commission will be done. Also, within this activity some national provisions will be strengthened in order to reflect the scope of provisions of the Directives and some of the transposed provisions will be corrected or improved.

Directive 2001/81/EC (NEC)

The following Articles of Directive: Art. 2 (Scope), Art. 3 (Definitions), Art. 5 (Interim environmental objectives), Art. 6 (National programmes), Art. 14 (Penalties), have been transposed through the Law on Air Protection ("Official Gazette of RS", No. 36/09 and 10/13) and Regulation on emission limit values of pollutants in the air ("Official Gazette of RS", No. 71/10 and 6/11-corr.).

The provisions laying down obligations on national emission ceilings, establishing emission inventories and projections, defining the methodologies for emission inventories and projections (Art. 4.1, Art. 4.2, Art. 7.1, Art. 7.2, and Annex III) as well as provisions that set obligations of EU member states towards the European Commission, are not transposed into national legislation.

Transposition Plan

Short – term priorities (2015 - 2016):

During this period, the focus will be on the transposition of the provisions related to preparation and annual update of emission inventories and projections and the methodology agreed under CLRTAP which are not yet transposed, with the aim to further improve the implementation system i.e. to set requirements for implementation. This will be done by adoption of bylaw that will integrate those provisions (Regulation on methodology for development of emission inventories, data verification and manner of data reporting in accordance with Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP)). The legal basis for adoption of this act is provided by the Law on Air Protection ("Official Gazette of RS", No. 36/09 and 10/13).

Mid – term priorities (2017 – 2020):

Legal Gap Analysis and development of transposition plan for remaining provisions will be supported by IPA 2014 project "Further implementation of Environmental Approximation Strategy supporting EU negotiation process". The plan is to complete these activities during the project period 2016-2018. Further harmonization of national legislation with directive's requirements will be achieved on the basis of these analyzes.

Full transposition will be accomplished through the Regulation on establishing of the national emission ceilings which is planned to be adopted by the end of 2018 and through the ratification of the Gothenburg protocol within CLRTAP. Ratification will follow the adoption of this Regulation.

Directive 1999/32/EC

Area of the sulphur content of certain liquid fuels, as well as other elements of the directive 98/70/EC are partially transposed in the legislation of the Republic of Serbia with the following acts: Law on Technique Demands for Products and Conformity Assessment (OJ RS 36/09); Rulebook on Technical and Other Requirements for liquid fuels of petroleum origin (OJ RS 123/12, 63/13, 75/13, 144/14); Energy Law (OJ RS 145/14); Law on Consumer Protection (OJ RS 73/10); Law on Ratification of the Protocol of 1997 on Amending the International Convention on the Prevention and Pollution from Ships, 1973, as amended by the Protocol of 1978 relating thereto refers, which is added to Annex 6 (Regulation of prevention of air pollution from ships) Convention (OJ RS 36/09); Law on Maritime Navigation (OJ RS 87/11, 104/13); Law on Consumer Protection (OJ RS 73/10); Law on Standardisation (OJ RS 36/09); Accreditation Act (OJ RS 73/10).

Foreseen steps for further transposition of the directive 1999/32/EC include:

- analysis of the current situation and preparation of proposals for changes in the relevant legislative;
- strengthening of the existing administrative and institutional capacity.

Short - term priorities (2015 - 2016):

- Revision of the Rulebook on technical and other requirements for liquid fuels of petroleum origin in order to adjust this Rulebook with the provisions of the Directive 1999/32/EC;
- Development of bylaw of the new Energy Law which will regulate the area of the monitoring of the fuel;

Mid - term priorities (2017 - 2020):

- Analysis of situation;
- Preparation of proposals for changes in the relevant legislative;
- Further adjustment relevant legislative framework with the provisions of the Directive 1999/32/EC.

VOC Petrol Directives (94/63/EC Stage I and 2009/126/EC Stage II)

Very high level of transposition has been achieved. Rulebook on technical measures and requirements in relation to allowed emission factors for volatile organic compounds resulting from the storage and transport of petrol ("Official Gazette of RS, No. 01/12, 25/12 and 48/12") (abbreviated as VOC Petrol Rulebook) transposes main requirements of the VOCs Petrol Directives.

VOC Petrol - Stage I

Chapters II, III, IV and V of the VOC Petrol Rulebook contain technical requirements for storage installations at terminals; loading and unloading equipment of mobile containers at terminals; mobile containers and loading into storage installation at service station. All Annexes of Directive are also transposed in VOC Petrol Rulebook (Annex 1, 2, 3 and 4). Deadline to achieve reduction of total annual loss of petrol, in each of the processes covered by regulation, depends only on the date when installation is put into operation, not on throughput. That means that all new installation, that are put in operation after 19 January 2012, have to be in compliance with the target reference values prior to starting of the operation. For existing installations, deadline to be in compliance with the target reference values is 2020.

Therefore, provisions from the directive that give different deadlines for different through put (3.2, 4.2, 5.2 and 6.2) have not been transposed, as well as provisions that set obligation of the member state towards Commission.

VOC Petrol - Stage II

Chapter VI of the VOC Petrol Rulebook prescribes minimum level of petrol vapour recovery, minimum requirements to be met by automatic control monitoring system, periodic checks and consumer information. In accordance with the Rulebook, any new service station and any existing service station at the time of reconstruction shall be equipped with a Stage II petrol vapour recovery system. Exception is given for any existing service station with a throughput in excess of 3000 m³/year which shall be equipped with a Stage II petrol vapour recovery system by no later than 1 January 2020.

VOC Petrol Rulebook prescribed that the capture efficiency of Stage II petrol vapour recovery system is equal to or greater than 85 %, but it is not required that efficiency is confirmed by the producer in accordance with relevant European technical standards.

Also, Rulebook prescribed more stringent tests for petrol vapour capture efficiency. Where an active system with an automatic monitoring system has been installed, petrol vapour capture efficiency is tested at least once every two years. Where a passive system has been installed, petrol vapour capture efficiency is tested once in three months.

Transposition plan - *VOC Petrol Directives (94/63/EC Stage I and 2009/126/EC Stage II)*

The remaining requirements of the obligation of the member state towards Commission and confirmation of the petrol vapour capture efficiency by the producer from VOC Petrol - Stage II will be transposed by the date of accession.

AIR SECTOR		Transposition deadline					
EU LEGISLATION	Already in place	2015	2016	2017	2018	2019	2020
Directive 2008/50/EC							
Directive 2004/107/EC							
Directive 2001/81/EC							
Directive 1999/32/EC							
Directive 1994/63/EC							
Directive 2009/126/EC							

3. Implementation and Institutional Responsibilities

Directive 2008/50/EC and Directive 2004/107/EC (Air quality directives)

Zones and agglomerations are established. There are 3 zones and 8 agglomerations in RS.

Air Quality monitoring is in place. State funded national AQ monitoring network consists of Automatic AQ system of 36 stations, operated by SEPA and sub network of urban stations in 21 towns in Serbia, operated by Public Health Institutes and Institute for Mining and Metallurgy Bor. Four Automatic Monitoring Stations of Public Health Institute Belgrade are also included in

national Automatic AQ Monitoring Network. The local networks of measurement stations and sites consists of additional measurement stations or sites for air quality monitoring at the level of autonomous province and local self-government units and it is funded from the budget of the AP or LSG units.

Increasing the number of sampling points for measurements of heavy metals and PAH is pending. Smooth operation and improvement of the national Automatic AQ Monitoring Network in accordance with the requirements of directives depends on securing the financing for the national Automatic AQ Monitoring Network in the state budget, or other sources. After securing the funding, activity of accreditation of AQ calibration laboratory/AQ network will start.

AQ assessment is done in accordance with the requirements from directives. Indicative measurements and AQ modeling are not used for the AQ assessment. Two models (EPA steady-state plume dispersion model AERMOD and PROKAS a Gaussian dispersion model) were purchased during the Twinning project Strengthening Administrative Capacities for Implementation of Air Quality Management System - IPA 2007 – SR 07 IB EN 01 and initial trainings have been performed, but significant progress is still needed. In order to improve AQ modeling for AQ assessment and AQ management, it is necessary to strengthen human capacities in the field of AQ modeling (at the moment there is only one employee in SEPA that performs these tasks). Additional EU assistance for use of AQ modeling will be needed (TAIEX, other available EU funded projects).

The first Air Quality Plan for agglomeration „Bor” („Official Gazette of the Municipality of Bor”, no. 7/2013) was adopted in 2013. AQ plans in other agglomerations with concentrations of pollutants above tolerant values are either under preparation or funding for the preparation has been secured.

Annual Report on the state of Air Quality in the Republic of Serbia is prepared and published by the SEPA and contains an overview of the results of monitoring and evaluation of the state of air quality in zones and agglomerations. All annual reports from previous years (2010-2013) National AQ Monitoring Network and hourly values (real time) from the National Automatic AQ Monitoring Network are available on the SEPA website. SEPA submit air quality data to the EEA since establishment of SEPA in 2004, and in the year 2014 SEPA reported for the first time using e-Reporting towards EIONET data for SO₂, NO₂, NO, NO_x, CO, PM₁₀ and ozone for 2013 calendar year, on Assessment Methods metadata (D) and Primary validated assessment data – measurements (E1).

Short term priorities (2015 - 2016):

- It is expected that three AQ plans will be adopted in 2015-2016 (for agglomerations Belgrade, Pan evo and Užice);
- Zones and agglomeration will be re-designated by the end of year 2016 (having in mind that some of established agglomerations are less than 250.000 inhabitants (e.g. Kosjeri 12.090 inhabitants));
- By the end of year 2016, the air quality monitoring system will be reassessed in a way that the minimum number of monitoring stations required per pollutant in each zone/agglomeration is set in accordance with requirements of Directives 2008/50/EC and 2004/107/EC.

Mid term (2017 - 2020):

- Development and adoption of remaining AQ plans by 2020;
- Development and adoption of Air Protection Strategy. Preparation of Air Protection Strategy will be performed within the IPA 2014 project „Further implementation of the EAS supporting EU negotiation process(Activity: Development of the Directive Specific Implementation Plans (DSIPs))”. This project will start in 2015 and it is expected to be finished in 2018;

- Development and adoption of Implementation Plan for Air Framework Directive. This activity will be supported by IPA 2014 project (2015-2018). It will also contain measures which are necessary to be taken in order to ensure compliance with air quality standards at the time of accession to the EU.

Foreseen activities will be implemented by authorities according to their competencies:

- Ministry of Agriculture and Environmental Protection is responsible for establishing of air quality monitoring network (Air Quality Control Programme in the national network), authorization for air quality measurements, delineation of zones and agglomerations, approval of air quality plans and short term action plans, co-operation with other countries and for enforcement of the Law on the Air Protection;
- Serbian Environmental Protection Agency (SEPA) is responsible for implementation of Directive's requirements related to the AQ monitoring, assessment of air quality, establishment, maintenance and operational functioning of AAQMN including QA/QC procedures of reference methods for AQ monitoring, co-ordination of quality assurance programmes, reporting on national level and reporting to the EEA;
- Accreditation body of Serbia (ABS) is responsible for ensuring the accuracy of measurements by accreditation of measurement methods;
- Provincial Secretariat for Urban Planning, Construction and Environmental Protection is responsible for AQ monitoring in local network and for providing information to the public and to the appropriate organizations, for preparation of AQ plans and short term action plans and for taking measures to attain the target values;
- Local self-government is responsible for AQ monitoring in local network and for providing information to the public and to the appropriate organizations, for preparation of AQ plans and short term action plans and for taking measures to attain the target values.

Directive 2001/81/EC (NEC)

The legal basis for adoption of the act on establishing national emission ceilings for the relevant pollutants is provided by the Law on Air Protection ("Official Gazette of RS", No. 36/09 and 10/13). There are currently no national emission ceilings (NEC) set for the relevant NECD pollutants.

The Republic of Serbia is party of the UN/ECE LRTAP Convention and EMEP protocol. Emission inventory for air pollutants under Directive 2001/81/EC has been established using the EMEP/EEA methodology of the European Environment Agency and the UNECE Convention on Long-range Transboundary Air Pollution. The emissions inventory is regularly updated since 2012. For reporting in 2015, SEPA updated the emission inventory for the period 1990-2013 using the new 2013 EMEP/EEA methodology. In addition, with support of UNDP project, SEPA developed national emission factors for coal as the most frequently used fuel in Serbia, for the period 1990-2014. Within the same project, SEPA established a mechanism for data collection from energy facilities with more than 50 MW for the period 2000-2014 for the purpose of the implementation of Tier 3 methodology. For transport sector, SEPA implemented the project named "Development of the Information System for application of the COPERT 4 model in calculating air pollutants and greenhouse gas emissions from road transport" which contributes in easier use of data from a vehicle database of the Ministry of Internal Affairs. In addition, IIR has also been developed and yearly updated since 2012. Also LPS data for 2011 has been reported in 2013. Application of new 2013 EMEP/EEA methodology enables improved data on actual emissions of NEC pollutants for obligatory year 2010 and onwards. The inventories of the Republic of Serbia are available at the CEIP website.

Draft implementation plan for NEC directive was prepared (with the assistance of the project "Technical Assistance for Development of a national Environmental Approximation Strategy - EuropeAid/127462/C/SER/RS"). The draft plan will require to be updated to take into account of changes occurred and changes expected to be on-going in closely related fields such as industrial pollution control, land spreading practice, etc.

Although the document "National action plan for the implementation and ratification of the 1999 Gothenburg protocol" has been developed during 2010 within the UNECE Project for Western Balkans countries, the 1999 Gothenburg protocol has not yet been ratified.

Short-term priorities (2015-2016):

- Determination of the methodology for development of emission inventories and projections in accordance with the requirements of Directive 2001/81/EC (through the Regulation on methodology for development of emission inventories, data verification and manner of data reporting in accordance with Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP)). The aim is to provide legal basis for better implementation of requirements i.e. to improve development of emission inventories and projections;
- Harmonization of reporting for CLRTAP and UNFCCC in order to use the same activity data for the same activities;
- Revision of the document "National action plan for the implementation and ratification of The 1999 Gothenburg protocol" developed during 2010 within the UNECE Project for Western Balkans countries will be carried out together with development of ratification plan for the Gothenburg protocol;

Mid-term priorities (2017-2020):

- Preparation of Implementation plan for the NEC directive (performed with assistance of IPA 2014 project "Further implementation of Environmental Approximation Strategy supporting EU negotiation process");
- Further improvement of the air emission inventory taking into account the recommendations given by the Centre on Emission Inventories and Projections/Task Force on Emission Inventories and Projections under the CLRTAP;
- Development of spatial emission mapping and projections for NEC gases according CLRTAP methodology;
- Elaboration of the Air Protection Strategy, along with the Action Plan to include the goals of UNECE Gothenburg protocol and to define long-term measures for the reduction of emissions for various sectors.
- Establishment of NECs and ratification of the 1999 Gothenburg protocol;
- Development of National programme for the progressive reduction of national emissions of the relevant pollutants to meet quantified reduction targets that have been negotiated with the Parties to the Gothenburg Protocol (within one year after setting NECs);

Long-term priorities (after 2020):

- Implementation of National programme for the progressive reduction of national emissions of the relevant NEC pollutants.

Foreseen activities will be implemented by authorities according to their competencies:

- Ministry of Agriculture and Environmental Protection - Air and Ozone Layer Protection Unit is responsible for the transposition and monitoring of the implementation of NEC Directive; for

establishing the NEC and ratification of the Gothenburg protocol; for preparation of National programme in cooperation with other relevant competent authorities;

- Serbian Environmental Protection Agency (SEPA) is competent authority for implementation of Directive's requirements related to maintaining the national emission inventories and projections and fulfilling the reporting obligations to CLRTAP;
- Competence for issuing IPPC integrated permits is divided between the Ministry of Agriculture and Environmental Protection – IPPC Department, Provincial Secretariat for Urban Planning, Construction and Environmental Protection, and local self-government authorities competent for environmental protection activities;
- Water Directorate, Agricultural Land Administration and Plant Protection Administration within the MAEP are responsible for adoption of legislation which set out the agricultural measures relevant for implementation of NEC;
- Environmental inspection as well as agricultural inspection at state, provincial and local level are responsible for the enforcement of the NEC related legislation;
- Other competent authorities for the implementation of the requirements of the directive are ministries responsible for the energy and transport, provincial authorities – Secretariat for Urbanism, Construction and Environmental Protection, Secretariat for Agriculture, Water Management and Forestry, and local self-governments.

Directive 1999/32/EC relating to a reduction in the sulphur content of certain liquid fuels and Directive 2012/33/EC on the sulphur content of marine fuels

In December 2014 new Energy Law (OJ RS, no. 145/14) has been adopted. This law provides the basis for the establishment of a monitoring system of the fuels and forming database of samples which will provide relevant information for reporting, as well as the basis for the placing on the market of fuel which has a higher sulphur content in the event of disruptions in energy supply, for a period not longer than six months, as prescribed in Directive 1999/32/EC.

Draft Energy Strategy of the Republic of Serbia for the period until 2025 with projections to 2030 has recognized security of supply with petroleum products whose quality meets the highest EU standards as one of the key strategic objectives in the field of oil. Until now, more than 500 million euros has been invested in the modernization of the refining capacity in order to produce "white" petroleum products (gasoline, diesel) in compliant with the highest EU standards. Bearing in mind that provisions of Directive 1999/32/EC are related to the quality of so called "black" products, ie heating oil, determination of the deadline for implementation of Directive 1999/32/EC in Serbia affects several important factors:

- Harmonization regulations in the areas of energy, environment and water transport in order to fully transpose Directive 1999/32/EC into national legislation;
- Implementation of a new investment cycle in the refinery capacities which will raise the quality level of "black" products.

In order to realize those activities, intensive cooperation is carried out with all relevant stakeholders. It also includes activities related to investment decision and the beginning of a new cycle of investment in refining capacity.

Short-term priorities (2015-2016):

- Development of bylaw of the new Energy Law which will regulate the area of the monitoring of the fuel
- Revision of the Rulebook on technical and other requirements for liquid fuels of petroleum origin in order to adjust this Rulebook with the provisions of the Directive 1999/32/EC

- Cooperation with relevant national authorities and other institutions, as well as with industry in order to prepare for the full implementation of directive.

Mid-term priorities:

- Analysis of situation with implementation of requirements;
- Development of the Implementation Plan (with support of the IPA 2014 project, during 2016-2018)
- Strengthening of institutional capacities.

Foreseen activities will be implemented by authorities according to their competencies:

- Ministry of Mining and Energy - responsible for issuing regulations which prescribe the quality of oil products;
- Ministry of Trade, Tourism and Telecommunication - responsible for quality control of goods which are distributed on the market of Republic of Serbia;
- Ministry of Agriculture and Environment - performs state administration work relating to the environmental protection;
- Ministry of Construction, Transport and Infrastructure - performs state administration work in the field of rail, road, waterborne and air transport as well as international affairs in the field of transport;
- Institute for Standardization - responsible for the adoption of standards.
- Serbia Accreditation body - performs work related to accreditation.

VOC Petrol Directives (94/63/EC Stage I and 2009/126/EC Stage II)

Implementation of both directives is in initial stage. Competent authorities have been identified. List of operators of the terminals and service stations needs to be completed. In accordance with Rulebook on technical measures and requirements in relation to allowed emission factors for volatile organic compounds resulting from the storage and transport of petrol ("Official Gazette of RS", No. 01/12, 25/12 and 48/12) operators are obliged to submit data on type and number of terminals for storage and loading of petrol and on service stations. As no data was submitted by the operators in due time, SEPA prepared electronic form (Excel) for the submission of the required data from the Rulebook and in 2015 has been started with collecting these data.

Planned implementation and enforcement activities are, as follows:

Short-term priorities (2015 - 2016):

- Completion of database on terminals, mobile containers and service stations, using available data sources (register of the Energy Agency, register of issued certificates of approval for vehicles carrying certain dangerous goods which includes tanks from the Authority for transport of dangerous goods), to be finalized by the end of 2015;
- Enforcement and inspection of the operators: Training of the environmental inspectors at national level is planned within Policy and Legal Advice Centre (PLAC) project, starting in 2015;
- Submission of the electronic format of the form from the Rulebook to the identified operators, in order to collect more precise technical information and to assess compliance with the requirements of the directives, to be finalized by the end of 2016;

Mid-term priorities (2017 - 2020):

- Collected data will be used to estimate the necessary investments in the process of preparation of Directive Specific Implementation Plans (DSIPs) for VOCs Petrol Directives with the assistance of IPA 2014 project “Further implementation of Environmental Approximation Strategy“, which will be developed 2016-2018;
- Enforcement and inspection of the operators: Training of the environmental inspectors has to be extended to cover inspection on the local level (in 2016/2017). Modalities are currently being discussed with the Standing Conference of Towns and Municipalities.

Long term priorities (2020 and beyond):

- Further plan for improving the implementation depends on preparation of DSIP for both VOC Petrol directives.

Foreseen activities will be implemented by authorities according to their competencies:

- Ministry of Agriculture and Environmental Protection (MAEP) is competent authority for implementation and enforcement (environmental inspection);
- SEPA - Department for National register is responsible for environmental information system maintaining and reporting;
- Energy Agency is responsible for maintaining a register of issued and revoked energy licenses for storage of oil derivatives and trade in motor fuels and other fuels at petrol stations;
- Ministry of Construction, Transportation and Infrastructure – Authority for transport of dangerous goods is responsible for maintaining the register of issued certificates of approval for vehicles transporting certain dangerous goods based on data it receives from designated bodies;
- Provincial Secretariat for Urban Planning, Construction and Environmental Protection is responsible for implementation and environmental inspection is responsible for enforcement on provincial level.
- Local self-government is responsible for implementation and environmental inspection is responsible for enforcement on local level.

AIR SECTOR	PRE-ACCESSION PERIOD						TRANSITION PERIOD		
	2015	2016	2017	2018	2019	2020	2021	2022	2023
Directive 2008/50/EC									
Directive 2004/107/EC									
Directive 2001/81/EC									*
Directive 1999/32/EC									
Directive 1994/63/EC									**
Directive 2009/126/EC									**

* Shall be determined by the Implementation plan for 2001/81/EC Directive which will be developed with the assistance of IPA 2014 project 2016-2018 "Further implementation of Environmental Approximation Strategy supporting EU negotiation process".

**After completing DSIP with more detailed costs estimation deadline for full implementation of VOC Petrol Directives will be known.

4. List of Directives Implementation which considers most demanding

VOC Petrol Directives (94/63/EC Stage I and 2009/126/EC Stage II) are considered as problematic due to the large investments required by operators to comply with the requirements of the both directives. Therefore DSIP will be prepared to assess costs of implementation and define implementation periods based on financing possibilities (support foreseen from IPA 2014).

5. Implementation deadline

EU legislation	Implementation deadline	Comments
Directive 2008/50/EC	By the date of accession *	
Directive 2004/107/EC	By the date of accession *	
Directive 2001/81/EC		Shall be determined by the Implementation plan which will be developed with the assistance of IPA 2014 project.
Directive 1999/32/EC		Depends on several important factors referred to in point 3.3.
VOC Petrol Directives (94/63/EC Stage I and 2009/126/EC Stage II)	**	Deadline will be revised after completing DSIP.

* In this document 2021. is assumed as a year of accession

** Related to implementation timetable National Environmental Approximation Strategy for the Republic of Serbia (NEAS) and Approximation Strategy for the sector of air quality and climate change (EAS) set the year 2023 as the deadline for achieving compliance with directives on volatile organic compounds (Directive 94/63/EC, Directive 1999/13/EC and Directive 2004/42/EC). Deadline for achieving compliance with directive 2009/126/EC (PVR Stage II) has not been taken account. After completing DSIP with more detailed costs estimation deadline for full implementation of VOC Petrol Directives will be revised accordingly.

6. Cost/ Financing Estimations

According to the National Environmental Approximation Strategy for Serbia (NEAS), the main costs imposed by the legislation in the air quality sector will be incurred, inter alia, by:

- Establishing and maintaining a network of air quality monitoring stations and associated quality assurance equipment, and reporting the monitoring results;
- Preparing emission inventories;
- Preparing plans and programmes to achieve compliance with ambient air quality limits;
- Compliance with emission limits and technical requirements under the directives, or by the implementation of plans and programmes designed to improve ambient air quality.

Taking into consideration above, investment costs are assessed as follows:

- Monitoring equipment - €12 million;
- Equipment required for making and maintaining the required inventories - €2 million;
- VOCs - €53 million (not taking into account Directive 2009/126/EC (PVR Stage II));
- Quality of Petrol - €188 million (more recent estimations provided costs in range of between 350 and €520 million);
- Other - €38 million.

The greatest costs arise in the Quality of Petrol and the Volatile Organic Compounds (VOC) Directives. Investment costs in relation to improving the Quality of Petrol include investment at the capacities of refineries in Serbia.

Costs for implementation of VOCs directives are predominantly borne by the operators of oil terminals, petrol stations and petrol transporters. Therefore costs for implementation of VOCs directives are being further refined by collecting data from operators. For example, preliminary data from one operator indicates costs that need to invest in order to meet the requirements of both Directives at around 6.5 million euro. This assessment includes 26 petrol service stations, 21 storage installations and 14 loading installations.

Estimations provided above should be taken as a rough assessment, having in mind that NEAS has been prepared based on the state of environmental infrastructure in Serbia in 2009/2010 as well as on extrapolation from the situation in other EU accession countries (Romania, Bulgaria). It is of crucial importance to perform new analysis of situation in Republic of Serbia regarding implementation of 2008/50/EC and 2004/107/EC Directives and Directive 1994/63/EC and 2009/126/EC in order to develop realistic implementation plans. This will be done by preparation of Directive Specific Implementation Plan (with support of IPA 2014).

Section 3

WASTE MANAGEMENT

1. Strategic documents

Serbia's strategic approach for the implementation of modern EU and Serbian standards for waste management is based on coordinated legislative, technical, institutional and administrative actions.

As described in the Waste Management Strategy (2010 and proposal of amendment in 2015) it is based on regional integrated waste management systems. Each regional system will be required to provide the services to contribute to compliance with the most demanding EU directives in this area including but not limited to the Waste Framework Directive, the Landfill Directive and the Packaging and Packaging Waste Directive.

This document will address actions across the range of Waste-related directives and the Preliminary Implementation Plan will go into further detail of how integrated waste management is planned to be implemented in Serbia.

The implementation of the requirements of the sector is guided by the following approved strategic documents:

- Waste Management Strategy for the period 2010-2019 (2010);
- National Program for Adoption of the Acquis 2014-2018 (July 2014);
- National Environmental Approximation Strategy (December 2011);
- Approximation Strategy on waste management 2012 (under NEAS process).
- National implementation plan on the Stockholm Convention

The following strategic documents are planned to be developed in the near future:

- Amendment of the National Waste Management Strategy for the period 2010-2019 (planned adoption during 2016);
- Strategy of sewage sludge management (by the end of 2016)
- National Plan for Healthcare Waste Management (in procedure for adoption by Government of Republic of Serbia, expected 2015);
- National Plan for Waste oil Management (in procedure for adoption by Government of Republic of Serbia, expected 2015);
- National Plan for Waste containing asbestos (in procedure for adoption by Government of Republic of Serbia, expected 2015);
- National Plan for Waste from batteries and accumulators (developed);
- National Plan for WEEE (Draft on Waste Management Plan for WEEE, according art 9 point 2, which is developed with assistance of Twinning Project "Strengthening Institutional Capacity in Hazardous Waste Management"- in 2010 - 2013 year);
- National Plan for waste from construction and demolition with hazardous components;
- Directive Specific Implementation plan for WEEE;
- Directive Specific Implementation plan for waste batteries;
- National Plan for the management of ELVs (expected 2015/2016 with support of Twinning Project (IPA 2013)).

2. Transposition

Waste Framework Directive 2008/98/EC

Transposition status

The Directive is largely transposed, mainly through the Law on Waste Management (hereinafter WML), Official Gazette, No 36/09 and 88/10). There are 29 implementing Regulations made under this Law.

Draft law amending the waste management law is prepared in 2013/2014. Public consultation has been completed. In 2015 draft Law has been revised and public consultation performed again. Draft version is prepared for sending in adoption procedure.

Detailed legal gap analyses were carried out during the period July to September 2014 by Ministry for Agriculture and Environmental Protection in cooperation with expert from the EU countries (with PLAC project support) for a number of the waste Directives, including the Waste Framework Directive. TOCs documenting gaps, instances incomplete or incorrect transposition were drawn up by MOAEP in close cooperation with expert from PLAC project.

Results of gap analyses are:

Fully transposed: Subject matter and scope, Extended producer responsibility, Disposal, Protection of human health and the environment, Costs, Principles of self-sufficiency and proximity, Control of hazardous waste, Labelling of hazardous waste, Hazardous waste produced by households, Waste management plans, Waste prevention programmes, Evaluation and review of plans and programmes, Inspections, Enforcement and penalties, Annex IV

Partially transposed: Exclusions from the scope, Definitions, Waste hierarchy, By-products, End-of-waste status, List of waste, Recovery, Re-use and recycling, Responsibility for waste management, Ban on the mixing of hazardous waste, Waste oils, Issue of permits, Registration, Public participation –(shall be in compliance by amendments of Law on environmental protection), Record keeping, Annex I , Annex II, Annex III)

Not transposed: Bio-waste, Cooperation between MS.

A limited number of additional gaps and instances of incomplete transposition were detected, along with a few cases of incorrect transposition. The requirements that have not yet been fully transposed relate to:

- some of the definitions setting out the scope of application of the Directive
- the application of the waste hierarchy
- targets for re-use and recycling
- element producer responsibility for waste management
- separate collection and treatment of bio-waste
- requiring high level of energy efficiency.

As part of the analysis, recommendations for amendment to the transposing legislation, proposed wording for new or revised provisions, to ensure full and effective transposition of the Waste

Framework Directive, were set forward. MOAEP have reflected these recommendations as additionally improvement of existing Draft of amendments LWM.

This analysis – similar to other analysis in the waste sector - thus went beyond the TOCs so far developed for Progress Monitoring purposes and documented that the Directive has largely been effectively transposed. It gives a clear qualitative assessment of status of transposition rather than a quantitative scouring of number of provisions transposed.

Transposition plan

Short Term priorities (2015-2016)

Most of the remaining provisions will be transposed with ongoing amendments to the Waste Management Law, anticipated adoption at latest by the end of 2016.

Mid-term priorities (2017-2020)

Full transposition will be achieved in 2018, as some parts of Directive will be transposed by secondary legislation (regarding recycling targets), as well as by amendments of Rulebook on Categories, Testing and Classification of Waste (“Official Gazette of RS, No 56/10”).

The exact mechanism for full transposition will be determined as part of the revision of the National Waste Management Strategy and the preparation of the Integrated Hazardous Waste Management Plan. Both these documents are in the process of being prepared. A number of implementing regulations will be required.

Packaging and Packaging Waste Directive 94/62/ C

Transposition status

Directive on Packaging and Packaging Waste is fully transposed.

Directive on the Landfill of Waste 99/31/ C

Transposition status

All articles of the Directive have been transposed. However, not all articles have been fully and/or correctly transposed.

Serbia has transposed the Landfill Directive through the Waste Management Law (“Official Gazette of RS”, No 36/09 and 88/10) and the Landfill Regulation (“Official Gazette of RS”, No 92/10).

They are supplemented by two Ministerial Orders. The Rulebook on categories, testing and classification of waste sets out the more detailed requirements for waste acceptance criteria (“Official Gazette of RS”, No 56/10). The Rulebook on application and content of a permit for storage, treatment and disposal is transposing some elements of the Directives requirements for landfill permit application, conditions and content (“Official Gazette RS”, No. 72/09).

Detailed legal gap analyses was carried out during the period July to September 2014 in cooperation with expert from the EU countries (with PLAC project support) for the Landfill Directive. TOCs documenting gaps, instances incomplete or incorrect transposition were drawn up by MOAEP in close cooperation with expert from PLAC project.

As part of the analysis, recommendations for amendment to the transposing legislation, proposed wording for new or revised provisions, to ensure full and effective transposition of the Landfill

Directive, were set forward. MOAEP have reflected these recommendations as additionally improvement of existing Draft of amendments WML.

Full (effective) transposition is planned through amendments of existing legislation, in particular: Law on Waste Management (hereinafter WML) (revision ongoing – 2016) and the Landfill Regulation. Adoption/full transposition is anticipated by 2018 at the latest.

Transposition plan

Short Term priorities (2015-2016)

The following articles of the Landfill directive will be transposed with ongoing amendments to the Waste Management Law, anticipated adopted at latest by the end of 2016, as foreseen in the NPAA: definitions, content of permit application, content of the permit, costing mechanism, control and monitoring procedures in the operational phase, closure and after-care procedures.

Mid-term priorities (2017-2020)

The following articles of the Landfill directive will be transposed by amendments to the Regulation of Waste Landfilling by 2018: definitions, underground storage, leachate, landfill gas, eluate, reduction of biodegradable waste going to landfills, wastes not to be accepted in a landfill, conditions of the permit, control and monitoring procedures in the operational phase, closure and after-care procedures.

The exact mechanism for full transposition will be determined as part of the revision of the National Waste Management Strategy

Art. 5. – Revision of the National Waste Management Strategy shall define targets for biodegradable waste, after that revision Law on Waste Management shall be performed.

It will be a matter of negotiation with the Commission to determine targets and dates.

Art. 14. – It will be a matter of negotiation with the Commission to determine adequate transitional period (the ultimate deadline) for Serbian closure and remediation of existing dumpsites/landfills and the building of new Directive compliant waste management centres (including compliant landfills).

The Batteries Directive 2006/66/

Transposition Status

Directive is partially transposed through the Rulebook on manners and Procedures of Used Batteries and Accumulators Management (OGRS 86/2010), the Law on Waste Management on permitting system and creating the possibility for inspections and enforcement and the Decree on products that after use became special waste streams, patterns of daily records of the quantity and type of produced and imported products and annual reports, manner and deadlines for submission of the annual report, the fee payers, criteria for calculation, the amount and method of compensation payment.

Transposition plan

Mid-term priorities (2017-2020)

The Rulebook on manners and Procedures of Used Batteries and Accumulators Management shall be amended to transpose fully the Directive. Also the Law on Waste Management shall be revised accordingly. Full transposition of the Directive is foreseen not the latest then 2018

The Directive on the Disposal of PCBs and PCTs 96/59/

Transposition Status

Directive has been largely transposed through the Law of Waste Management and Rulebook on management of the PCB containing equipment and waste.

Transposition plan

Short Term priorities (2015-2016)

Some remaining provision will be transposed by amendments of the Law on Waste Management (which is scheduled for 2016).

Mid-term priorities (2017-2020)

Remaining provision shall be transposed by amendments of the Rulebook on management of the PCB containing equipment and waste (which is scheduled for 2018).

Regulation (EC) No 850/2004 on persistent organic pollutants

Alignment status

Republic of Serbia has established legislative and institutional framework for POPs management. Present system of POPs chemicals and POPs waste management is almost fully harmonized to the EC-system. POPs-harmonized legislation has been in force since 2010. Republic of Serbia has taken over EC Regulation on POPs No 850/2004 with amendments (EU Regulation No 756/2010, 757/2010 and 519/2012 on amendments to the EC Regulation No 850/2004) into Serbian national legislation.

Alignment plan

Short term priorities(2015-2016)

(EU) Regulation No 1342/2014 amending EC Regulation on POPs No 850/2004 will be taken over into the Serbian national legislation until the end of 2015.

Mid-term priorities (2017-2020)

Republic of Serbia will continue process of harmonization national legislation. In line with further amending of the EC Regulation on POPs No 850/2004 in above mentioned period.

Shipment of waste - Regulation (EC) No 1013/2006 and Regulation (EC) No. 1418/2007

Alignment status

A majority of the Regulation's obligations have been implemented, due to the fact that the Republic of Serbia is a Party to the Basel Convention. National procedures, written in Law on Waste Management, and by-laws regarding shipment of waste were additionally aligned with Regulation 1013/2006/EC and other relevant EU acquis.

Alignment plan

Short term priorities (2015-2016)

According to the National Programme for Adoption of the Acquis (NPAA), most of the remaining provisions of this Regulation will be in alignment with ongoing amendments to the Waste Management Law, anticipated adoption at latest by 2016.

Mid-term priorities(2017-2020)

The additional analyses of legal framework will be performed in order to revise national legislation until 2017. Full alignment will be achieved in 2018, by revision of by-laws regarding trans-boundary movement of waste.

Directives 2011/65/ on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS II)

Transposition status

The old RoHS Directive 2002/95/EC has been transposed partially into national legislation, through the Law on Waste Management (Official Gazette of RS, No 36/09 and 88/10), Law on Technical Requirements for Products and Conformity Assessment (Official Gazette of RS, No 36/09) and the Rulebook on the list of electric and electronic products, measures of prohibition and restriction of use of electric and electronic equipment containing hazardous substances, methods and procedures of managing waste from electric and electronic products ("Official Gazette of the Republic of Serbia", No. 99/10).

Transposition plan for RoHS II

Mid-term priorities (2017-2020)

Transposition will be completed by:

- a. Review of the current Law on Waste Management and the Law on technical requirements for products and conformity assessment
- b. Adoption of the new Rulebook on the restriction of the use of certain hazardous substances in electrical and electronic equipment

Full transposition of the Directive is foreseen by 2018 the latest.

The Rulebook will stipulate that the enforcement and control authorities are the Environmental Inspection of the Ministry of Agriculture and Environmental Protection and the Trade Inspection of the Ministry of Trade, Tourism and Telecommunications (the market surveillance authority).

WEEE Directive 2012/19/

Transposition status

The old WEEE Directive has been largely transposed into national legislation, through the Law on Waste Management (Official Gazette of RS, No 36/09 and 88/10) and the Rulebook on the list of electric and electronic products, measures of prohibition and restriction of use of electric and

electronic equipment containing hazardous substances, methods and procedures of managing waste from electric and electronic products ("Official Gazette of RS", No. 99/10).

Transposition plan

Mid-term priorities (2017-2020)

Transposition will be completed by:

- a. Review of the current Law on Waste Management
- b. Revision of the current Rulebook on WEEE, or a new Rulebook.

The new Twinning Project on Hazardous Waste Management will assist in preparation of regulations to complete transposition of the WEEE Directive. Full transposition of the Directive is foreseen 2018 the latest.

The Directive on End-of-Life Vehicles (ELVs) 2000/53/EC

Transposition status

The Directive on ELVs has been largely transposed through the following Legal framework:

- Law on Waste Management ("O.G. of RS", no. 36/09 and 88/10) (hereinafter WML)
- Rulebook on the manner and procedure of end-of-life vehicle management ("O.G. of RS", no. 98/10)(hereinafter ELV Rulebook)
- Rulebook on the form of a daily record and annual waste report with the filling instructions ("O.G. of RS", no. 95/10)
- Regulation on product that becomes spatial waste streams, form the daily records of the quantity and type of produced and imported products and an annual report, the method and time limits for the submission of the annual report fee payers, the criteria for the calculation, the amount and method of calculation and payment of fees ("O.G. of RS", no. 54/10, 86/11, 15/12, 3/14, ../15) and other relevant legislative.

During the period July to September 2014, a detailed legal gap analysis was performed and supported by cooperation with expert from the EU countries (with PLAC project support) for the ELV Directive. Certain number of gaps was identified in TOCs pointing to the instances of incomplete or incorrect transposition.

Transposition plan

Short term priorities (2015-2016)

- Amendments of the WML (revision ongoing, foreseen for 2016 NPAA)

Mid-term priorities (2017-2020)

- Amendments to ELV Rulebook.

Full transposition is anticipated by 2018 at the latest.

Council Directive 86/278/EEC of June 1986 on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture

Transposition status:

The transposition of the Directive 86/278/EEC is in the initial stage. Certain provisions of the Directive are transposed into Article 15 and Annex 2, the Chapter III, Table 7 of the Regulation on emission limit values of pollutants in water and deadlines for achieving (2011), relating to the definition of sewage sludge and its use in agriculture.

Article 4 of the Regulation provides the limit values for concentrations of heavy metals in sewage sludge intended for the agricultural use. Regulations for permitted amounts of hazardous and harmful substances in soil and water for irrigation and methods of their analysis („Official Gazette of the Republic of Serbia“, No.23/94), issued pursuant to the Agriculture Land Commission Act of 1992 providing even stricter values than those given in the EU Directive which must not be exceeded even the treated sewage sludge is used. More stringent values have been established for chromium, arsenic, organic matter and the presence of pathogenic formations. Regulations of 1994 on permitted amounts of hazardous and harmful substances in soil and water for irrigation and methods of their analysis have been prescribed maximum permissible concentrations of hazardous and harmful substances. With amendments to the Law on Agriculture Land (public hearings are on-going) mentioned by-law will not be repealed or modified, so that remains in use and in the coming period also. Possible activities and condition necessary for the implementation of the Directive are still within the provisions of Articles 16 and 17 in the field of agriculture land protection of the Law on Agriculture Land regarding Article 80, paragraph 1, items 1), 2) and 3), determining that the minister responsible for agriculture shall determine the composition of the by-laws pertaining to the presence of permitted amounts of hazardous and harmful substances in soil and water for irrigation, the methods of their analysis, as well as the conditions which company must fulfill to perform these functions.

Article 8 of the provides the rules that must be followed when using sludge in agriculture. The treatment and using of sludge is an integral part of the treatment of wastewater.

Transposition plan

Mid-term priorities (2015-2016)

The full transposition of the Directive will be achieved. The amendments to the law and by-laws or the adoption of appropriate by-laws are expected by the end of 2018.

The Extracting Waste (Mining) Directive 2006/21/EC

Transposition status

The main principles and priorities identified in the Directive 2006/21/EC are partially transposed through the Law on mining and geological researches.

Transposition plan

The Law of mining and geological researches created the legal basis for the adoption of secondary legislation which will establish full compliance with the EU Directives, especially in relation to Management of mining waste. This by-laws will regulate the key questions as criteria and procedures for issuing permits for waste management, which is issued in accordance with the waste management plan and the supporting documentation, which defines: category, managing and reporting on mining waste, and regulate the process of giving the information about management of mining waste to the public.

Short term priorities (2015-2016)

- Relevant secondary legislation will be prepared and adopted in 2015/2016

WASTE MANAGEMENT	Transposition deadline					
	2015	2016	2017	2018	2019	2020
U Legislation						
Waste Framework Legislation 2008/98/ C						
Directive on Landfill on Waste 99/31/ C						
The Batteries Directive 2006/66/ C						
The Directive on Disposal of PCBs PCTs 96/59/ C						
Directive on 2011/65/EC electrical and Electronic Equipment end Restriction of Hazardous Waste						
Directive on Electrical and Electronic Waste 2012/19/ U						
The Directive on End-of-life Vehicles 2000/53/ C						
The Packaging and Packaging Waste Directive 94/62/ C (full transposition achieved 2010)						
The Extracting Waste (Mining) Directive 2006/21/						
The Regulation on Shipment of Waste 1013 /2006/ C						
The Regulation on POPs materials 850/2004/						
Directive 86/278/EEC						

3. Implementation activities and institutional responsibilities

Council Directive 2008/98/ C on waste, superseding and amending Framework 75/442/ C Directive, 2006/12/EC

Proposal of Amendment for National Waste Management Strategy for the period 2010-2019 is in the preparation phase (expected adoption during 2016). Further implementation of the Directive will be achieved taking following actions:

Short-term priorities:

- Adoption of Amendment for Waste Management Strategy and establishment of recycling targets (2016);
- Development of the Hazardous Waste Management Plan (IPA 2013 Twinning project: Improvement of hazardous waste management in the Republic of Serbia (Nov 2014 – Nov 2016))
- Establishment of requirements for source separation into dry and wet fractions;
- Development of DSIP for Waste Framework directive (2016, with support of IPA 2013 project);
- Development of set of economic instruments to support implementation of waste management targets and waste hierarchy (IPA 2014);
- Revision of waste management financing system to ensure cost recovery and sufficient resources for implementation of waste management plans (local and regional);
- Approval of Regional Waste Management Plans
- Development of additional implementing regulations.

Mid-term priorities (2017-2020):

- Development and Adoption of Waste Management Strategy for 10 year period;
- Development and Adoption of National Waste Management Plan;
- Development and Adoption of Waste Prevention Programme;
- Review of regional and local waste management plans (IPA 2014);
- Strengthening of inspection and enforcement capacities.
- Training of authorities and organizations responsible for implementation of Law on waste management on local, autonomous province and national level as well as business entities regarding legal meaning and application of the provisions of national legislation, particularly provisions transposing the Directive 2008/98

Long-term priorities (2020. and beyond):

- Establishment of network of installations for waste management (2032-2034);
- Implementation of separate collection and treatment of hazardous waste from households and industry
- Development of system to meet packaging waste recycling rate of minimum 55% and recovery of minimum 60% of packaging waste until 2025;
- Establishment of a system to achieve recycling rate of municipal waste of minimum 50% until 2030;
- Creation of a system for special waste streams management (waste tires, used batteries and accumulators, waste oils, waste vehicles, waste from electric and electronic devices) in order to meet 4 kg per capita separately collected waste from electric and electronic equipment from households by 2023 and minimum 45 % of batteries and accumulator by 2026.

MAEP is responsible for transposition and planning of implementation of the directive. Other institutions involved are the Serbian Environmental Protection Agency, competent Authority of the autonomous province, local self-government units, and professional waste testing organizations.

Packaging and Packaging Waste

Recycling and recovery targets have been transposed into the Serbian legislation, as shown in the Table 14 below (Decree on establishing a plan to reduce packaging waste for the period 2015 – 2019).

Table 14 Recycling and recovery targets under Serbian legislation general targets

		2015	2016	2017	2018	2019
Recovery	[%]	38,0	44,0	50,0	55,0	60,0
Recycling	[%]	31,0	36,0	42,0	48,0	55,0
Specific recycling targets						
		2015	2016	2017	2018	2019
Paper / cardboard	[%]	38,0	42,0	47,0	53,0	60,0
Plastic	[%]	14,0	17,0	19,0	21,0	22,5
Glass	[%]	19,0	25,0	31,0	37,0	43,0
Metal	[%]	23,0	29,0	34,0	39,0	44,0
Wood	[%]	11,0	12,0	13,0	14,0	15,0

Until 2019, it is expected that Serbia will achieve all targets besides those regarding metal and glass.

Till March 2014 six legal entities issued permits as operators for packaging waste (collective schemes) in accordance with Article 32 P&PW Law (Sekopak, Ekostarpak, Deltapak, Cenex, Tehnoekopak and Ekopak system). One company issued permits for self-compliance in packaging waste field. National targets for 2013 were established through the Plan on Reduction of Packaging Waste. Targets were respectively: Overall: 23% recovery, 19% recycling, Specific: paper/cardboard 23%, plastic 9%, glass 10%, metal 13.5%, wood 4.5%. All collective schemes targets for 2013 were achieved.

Presently, there is not sufficient recycling (at least for some waste type, e.g. glass) and recovery capacity in Serbia. Thus, producers are using intermediate storage facilities followed by export.

Short-term priorities (2015-2016):

- Adoption of Amendment for Waste Management Strategy and establishment of packaging waste recycling and recovery targets (2016);
- Establishment of requirements for source separation into dry and wet fractions. Dry fraction to include packaging waste;
- Development of DSIP for Packaging and Packaging Waste directive (2016, with support of IPA 2013 project).

Mid-term activities plan(2017-2020):

- Set up systems for the necessary return/collection and recycling/recovery of used packaging and packaging waste as identified in the national strategy;
- Improving information basis for packaging placed on the market, packaging waste produced, collected, recycled and recovered;
- Improving economic instruments to support achievement of targets;
- Strengthening inspection and enforcement capacities;
- Introducing source separation in 17th municipalities (IPA 2015);
- Organise public information campaign for source separation and recycling (IPA 2015);
- Achieving packaging waste recycling and recovery targets (2020).

Landfill Directive 1999/31/EC

The Landfill Directive is one of the directives that will require large financial investments ("heavy investment directives"). The implementation of the Landfill Directive is considered together with the implementation of other waste management requirements, in particular having in mind the targets set by the Waste Framework Directive and the Packaging and Packaging Waste Directive. The implementation of these directives affects the way how municipal waste is collected and treated, and the amounts of waste to be diverted for other treatment and to be disposed of in landfills. Currently about 18% of municipal waste could be placed into landfills complying with the Directive requirements.

Detailed plan for implementation of the integrated regional waste management systems presented separately. The Plan will be further developed during 2015 (SIDA support) and will contribute to the subsequent development of a number of Directive Specific Implementation Plans as well as the Institutional Development and Financing Planning.

Short-term activities plan:

- Adoption of Amendment for Waste Management Strategy and establishment of targets for biodegradable waste management and delivery into compliant landfills (2016);
- Improving economic instruments to support waste diversion from landfilling;
- Development of DSIP for Landfill directive (2016, with support of SIDA).

Mid-term activities plan:

- Develop a national strategy for the reduction of biodegradable waste going to landfill and incorporate the strategy into the national waste management plan;
- Implementation of regional infrastructure projects including establishment of compliant landfills in 3 regional landfills;
- Introducing source separation in 17th municipalities (IPA 2015);
- Strengthening inspection and enforcement capacities.
- Training of authorities and organizations responsible for implementation of regulation in this field on local, autonomous province and national level as well as business entities regarding legal meaning and application of the provisions of national legislation, particularly provisions transposing the Directive 1999/31

Long-term activities plan:

- Establishment of network of installations for waste management including compliant landfills (2032);

MAEP is the overall responsible competent authority for transposition and implementation of the Directive. The MAEP is also responsible for permitting of landfill. The Autonomous Province (AP) is responsible for permitting of landfills within its territories and Cities & Municipalities are responsible for permitting of landfills within its territories.

Council Directive 2012/19/EU on waste electrical and electronic equipment (WEEE)

The Directive on waste electrical and electronic equipment (WEEE) is one of the directives that will require large financial investments. The implementation of the WEEE Directive is considered together with the implementation of Waste Framework Directive, in particular having in mind the targets set by the Waste Framework Directive. Further detailing of implementation actions will be achieved through development of the Directive Specific Implementation Plan for Directive on Waste Electrical and Electronic Equipment.

This plan will define measures to be taken for implementation, their costs and financing mechanism and the deadline for full implementation of the Directive.

Short-term priorities (2015-2016):

- Development of the Directive Specific Implementation Plan for Directive on waste electrical and electronic equipment (WEEE) (support by EAS IPA 2013.)
- Organisation of public information campaign to support achievement of WEEE targets;

Mid-term priorities (2017-2020):

- Adoption National Plan for WEEE;
- Improving register for EEE placed on the market, WEEE produced, collected, recycled and recovered;
- Implementation of regional infrastructure projects including establishment of recycling yards to support WEEE collection in minimum 3 regional consolidated collection points/centres;
- Establish a collection network for all types of WEEE in order to cover all country territory, including legal, institutional, financial and technical issues in order to achieve collection targets set by the legal framework:
- Reaching the amount of WEEE collected separately from households, min. 2 kg/inh. of WEEE from households
- Introducing market based WEEE collection system, developing economic instruments system to support achievement of WEEE targets;
- Permission for WEEE treatment facilities shall be changed in order to introduce the obligation to achieve the minimum recovery targets;
- Organise public information campaign to support achievement of WEEE targets;
- Strengthening inspection and enforcement capacities.
- Training of authorities and organizations responsible for implementation of regulation in this field on local, autonomous province and national level as well as business entities regarding legal meaning and application of the provisions of national legislation, particularly provisions transposing the Directive 2012/19

Long-term priorities (2020 and beyond):

- Increase the amount of WEEE collected separately from households;
- Collect min. 4 kg/inh. of WEEE from households;

- Treatment of WEEE, according to the minimum requirements mentioned in Annex V of the Directive;
- Achieving WEEE recycling targets 2030

The Ministry of Agriculture and Environmental Protection is the overall responsible competent authority for transposition and implementation of the Directive. The MAEP is also responsible for permitting waste operators. The Autonomous Province (AP) is responsible for permitting waste operators its territories.

Council Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment

Directive 2011/65/EU will be implemented by 2018. The Ministry of Agriculture and Environmental Protection has the overall responsibility for transposition and implementation of the Directive.

Directive 2000/53/EC on end-of-life vehicles

The Directive is at initial stage of implementation. The Directive on ELV is one of the directives that will require large financial investments for private sector. The implementation of the Directive is considered together with the implementation of Waste Framework Directive, in particular having in mind the targets set by the Waste Framework Directive.

MAEP started to consult the relevant stakeholders, on strengthening implementation, e.g.:

- An ELV workshop, in Belgrade on 13/10/2014, with over 120 reps from national and local authorities & various economic operators, including producers and ELV treatment facilities.

From 2013 until May 2015, the authorities have issued a total of five licenses for the storage and treatment on end-of-life vehicles. Since 2009 until 2015 MOAEP issued around 500 permits, to collect and transport ELVs.

The development of a system for the environmentally sound management (collection, re-use, treatment and recovery) is at an early stage. A system of collection facilities has been set up, but it should be further developed. Also, national legislation does not provide that setting up the system is the responsibility of the producers. The system is totally driven by profitability.

The capacities of the Environmental Inspection should be significantly strengthened, to allow them to enforce the technical requirements of Annex I, which has been largely transposed into national legislation.

And the recovery efficiency will have to be increased to meet the targets.

The density of the collection network will have to be increased.

Further detailing of implementation actions will be achieved through development of the Directive National Plan on ELV during 2015/2016

This plan will define measures to be taken for implementation (regarding the reuse/recovery of components), establish mechanism for deregistration of end-of-life vehicles, their costs and financing mechanism and the deadline for full implementation of the Directive.

Short term priorities (2015-2016):

- Adoption of Amendment for Waste Management Strategy
- Draft National Plan for hazardous waste (including end-of-life vehicles) has been developed and it is planned to be finalized by 2016;
- Establishing the system of incentive instruments for re-use, recovery and recycling on end-of-life vehicles (Economic instruments);
- Strengthening of administrative capacity, especially the capacity of institutions and bodies in charge of planning, control and monitoring.

Mid-term activities plan (2017-2020):

- Adoption of the National Plan for hazardous waste (including end-of-life vehicles) by the Government of Republic of Serbia for the period of five years;
- Improving the system of collection to ensure that all ELVs are transferred to authorised treatment facilities.
- Training of authorities and organizations responsible for implementation of regulation in this field on local, autonomous province and national level as well as business entities regarding legal meaning and application of the provisions of national legislation, particularly provisions transposing the Directive

Long-term activities plan (2020 and beyond):

- Establishment of the adequate network of collection and authorised treatment facilities;
- Establishment of reuse & recovery rate of end-of-life vehicles of minimum 85% by an average weight per vehicle & year until and recovery & recycle rate minimum 80% by an average weight per vehicle & year, after 2024;
- Establishment of reuse & recovery rate of end-of-life vehicles of minimum 95% by an average weight per vehicle & year and recovery & recycle rate minimum 85% by an average weight per vehicle & year, after 2028;
- Improving monitoring and reporting procedures.

The MAEP is the overall responsible competent authority for transposition and planning implementation of the ELV Directive. The MAEP is also responsible for permitting of collecting, transporting, storage and treatment of end-of-life vehicles. The MAEP (Environmental Inspections) are responsible for supervise and control application of measures pertain to waste management.

Other institutions involved are the Serbian Environmental Protection Agency, competent Authority of the autonomous province, local self-government units, professional organizations of waste testing and Ministry of Interior, Ministry of Finance and Ministry of Economy.

Autonomous Province (AP) and Local self-Government units (LGs) are involved in implementation among other in permitting and enforcement of end-of-life vehicles requirements within their territories.

LGs- Cities & Municipalities are involved in the permitting process by issuing opinions and management of waste vehicles in its territory in cases when owner is not known responsible-at the request of the Ministry or AP give opinion in permitting procedures in compliance with Law and perform other activities prescribed by with Law (which mines to regulate the procedures of collection and delivery of vehicles to in if owner of ELV is unknown in compliance with decision

on the collection and submission procedures in this jurisdiction or following public call within its territories.

The Agency for Environmental Protection - SEPA (hereinafter referred to as: Agency) are responsible for reporting and information for:

- maintenance and updating of data base on waste management in environmental information system, exchange and making those data accessible electronically and
- collection and compilation of environmental data of waste management, in assumed international obligations

Entitles involved in waste management:

- Professional organization for waste testing and other legal entities authorized for sampling and characterization according to the volume of testing for which they have been accredit of waste (hereinafter referred to as: accredit laboratories)

Others involved CA:

Ministry of Interior (MI) are responsible for deregistration motor vehicles and road police

Ministry of Finance (MF) - Customs Administration are responsible for import and export of motor vehicles.

Council Directive 2006/66/EC on batteries and accumulators containing hazardous substances

The Directive on batteries and accumulators and waste batteries and accumulators is at initial stage of implementation. The implementation of the Directive is considered together with the implementation of Waste Framework Directive, in particular having in mind the targets set by the Waste Framework Directive.

Draft National Waste Management Plan for Batteries and Accumulators, which is developed with assistance of Twinning Project "Strengthening Institutional Capacity in Hazardous Waste Management"- in 2010 - 2013 year is planned to be adopted by 2016.

Further detailing of implementation actions will be achieved through development of the Directive Specific Implementation Plan for Directive on batteries and accumulators (support by EAS IPA 2013). This plan will define the deadline for full implementation of the Directive on batteries and accumulators and waste batteries and accumulators.

Short-term priorities (2015-2016):

Through the Twinning project Improvement of hazardous waste management in the Republic of Serbia-IHWMS SR 13 IB EN 02, a gap analysis will be performed, followed by recommendations to improve the national legal framework (inclusive of economic instruments tailored for Serbia). The link between both Directives could be done from the perspective of "producer responsibility" principle.

Mid-term priorities (2017-2020):

- Establish the registration system and procedures for producers/ importers of batteries and accumulators;
- Develop reporting system regarding placing batteries and accumulators on the market;
- Develop economic instruments to support implementation of requirements;

- Establish a system for the collection of spent batteries and accumulators;
- Strengthening inspection and enforcement capacities.

Long term priorities (2020 and beyond):

- Achieving batteries and accumulators targets (2026)

The Ministry of Agriculture and Environmental Protection is the overall responsible competent authority for transposition and implementation of the Directive. The MAEP is also responsible for permitting waste operators. The Autonomous Province (AP) is responsible for permitting waste operators on its territory.

European Parliament and Council Directive 2006/21/EC on the management of waste from the extractive industries, as well as relevant Commission Decisions developing the Directive, (2009/335/EC, 2009/337/EC, 2009/358/EC, 2009/359/EC and 2009/360/EC)

Implementation of the directive is in initial stage. Ministry of Mining and Energy is responsible for issuing relevant regulations relating to management of waste from the extractive industries, which shall determine requirements, criteria, procedure and methods of disposal, management and categorization of mining waste, as well as for reporting on mining waste.

With support of IPA 2013 Twinning project: “Making Cadaster of mining waste”, the registry will be filled with data from the land registry of mining waste and land registry of abandoned mines and mining facilities, and the methods and timeframe for commencement of implementation of this directive will be set out.

Short-term priorities (2015-2016):

- Identification of existing capacities of the Ministry as a body responsible for processing applications and issuing permits to operators
- Establishment of the process of giving the information to the public in the relevant secondary legislation;
- Identification, categorization and risk assessment of recorded mining waste on the environment (IPA 2013 Twinning);
- Inventory and the formation of the Cadastre of mining waste (IPA 2013 Twinning);
- Strengthening the capacity and awareness of waste management in the field of extractive industries to prevent or reduce harmful effects on the environment and risks of human health and the environment (IPA 2013 Twinning).

Mid-term priorities (2017-2020):

- Strengthening capacities for management of mining waste;
- Establishment of guidance for operators regarding requirements for management of mining waste, development of permit applications and waste management plans;
- Processing of applications and issuing of permits to operators;
- Establish monitoring procedures;
- Strengthening inspection and enforcement capacities.

Taking into account all obligations arising from the Directive 2006/21/EC, and that waste management systems and facilities, are mostly under the responsibility of private sector, it is foreseen that Directive will be fully implemented by end of the 2020.

Council Directive 96/59/EC of 16 September 1996 on the disposal of polychlorinated biphenyls and polychlorinated terphenyls (PCB/PCT) as amended by regulation (EC) 596/2009

Grounds for implementation of the Stockholm Convention have been prepared on the basis of the NIP which was adopted by the Government of the Republic of Serbia in 2009.

Republic of Serbia has finalized the project “Enable Activities for the Development of the NIP for the Stockholm Convention on Persistent Organic Pollutants (POPs)” in cooperation with UNEP and funded by GEF in which preliminary inventories of POPs (PCB) were made. On the basis of those inventories, implementation measures and related action plans have been developed in the original NIP, including measures needed for establishment of legal framework for PCB management in Serbia.

Project “Environmentally sound management and final disposal of PCBs” is approved by the GEF Council, and will be implemented in the period from March 2015 to March 2019. Project is consistent with national priorities and strategies for elimination of releases to the environment and for elimination of hazards for human beings, as defined in the National Implementation Plan for the Stockholm Convention of the Republic of Serbia (NIP).

Ministry of Agriculture and Environmental Protection, Organizational Units for Waste Management has issued one permit for the decontamination of PCBs in the mobile unit.

Ministry of Agriculture and Environmental Protection, Organizational Units for Waste Management is foreseen to become the MS CAs under PCB Regulation. The Serbian Environmental Protection Agency keeps a register on PCBs containing equipment in use. A person carrying out collection, decontamination or disposal of PCBs waste must hold a valid permit, must keep a record on collected, treated or disposed quantities and submit all data to the Serbian Environmental Protection Agency.

Cost estimate for the full implementation of Directive and implementation deadline will be provided through implementation of the project “Environmentally sound management and final disposal of PCBs” and it is possible that a transitional period for full implementation will be necessary. The exact date for a full implementation of Directive will be defined through the project “Environmentally sound management and final disposal of PCBs” and it is possible that will be necessary a transitional period.

Regulation (EC) No 850/2004 on persistent organic pollutants

Process of updating NIP is finalized in April 2015 through the UNIDO/GEF Project “Enabling activities to review and update the National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants (POPs)”. More information on realized project activities is available on the National POPs website (English version) within MoAEP internet presentation: <http://www.eko.minpolj.gov.rs/en/organization/departments/departments-of-planning-and-management-in-the-environment/division-for-chemical/pops-2/>.

As the main result of this project, the final draft revised and updated NIP was developed and adopted by UNIDO and the Project Steering Committee in broad consultation with all stakeholders which was updated with all new POPs including HBCDD. In the next short-term period, final draft of this document will be sent in the procedure of the adoption by the Serbian Government and submitted to the SC COP Republic of Serbia has established legislative and institutional framework for POPs management. Present system of POPs chemicals and POPs waste management is almost fully aligned with the EC requirements. POPs aligned legislation has been in force since 2010.

Central staffs have acquired knowledge and practical experience on POPs obligations during several years built through cooperation projects (financed under UNEP, Kemi, IPA and UNIDO).

Short term activities plan:

- EU) Regulation No 1342/2014 amending EC Regulation on POPs No 850/2004 will be taken over into the Serbian national legislation until the end of 2015.

Mid-term activities plan:

- Upgrade of laboratory facility for monitoring of new POPs. Upgrade of laboratory facility in the Serbian Environmental Protection Agency (SEPA) will be achieved until 2018 by IPA project “Establishment of an integrated environmental monitoring system for air and water quality” funding by EU.

Ministry in charge of Environment, Organizational Units for Waste and Chemicals Management are foreseen to become the MS CAs under POPs Regulation. CAs under POPs Regulation will be officially designated in POPs Implementing Act. Serbian Environmental Protection Agency (SEPA) within Ministry in charge of Environment is responsible for monitoring and reporting regarding POPs in environment.

Costs related to upgrade of laboratory facility for monitoring of new POPs will be supported by IPA project “Establishment of an integrated environmental monitoring system for air and water quality” (total grant 1.700.000 EUR).

Status

Council Directive 86/278/EEC of June 1986 on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture

Implementation status

The implementation of this Directive is in the initial stage. Preparation of the TOR for Strategy of sewage sludge management is ongoing. The Strategy will prescribe the year of the full implementation of the Sewage sludge Directive.

The institutions responsible for the implementation and monitoring of the soil are: The Ministry of Agriculture and Environmental Protection, Environmental Protection Agency, the services at local level (municipalities) in charge of agriculture, the public utilities for urban wastewater treatment and collecting sewage sludge, inspection at local and republic level.

The Republic of Serbia has established professional and advisory services under the Ministry of Agriculture and Environmental Protection in order to educate the farmers and other users (individual or legal entities) that can be the beneficiaries of treated sludge.

In the coming period, it is necessary to determine the additional costs for both the implementation of obligations and strengthening human resources in this field (budget, funds, projects).

Short-term priorities (2015-2016):

- Strategy of sewage sludge management will be developed by the end of the 2016
- Informing the public of the possibilities of use of the sewage sludge and the procedures in the field of environmental protection and agriculture land and production, where agriculture production is regulated by special regulations.

- Strengthening institutional capacities and the adoption of standard for the production, quality control and the use of sludge, as well as the surveillance of the implementation of the Directive and domestic legislation.
- The adoption of Good Agricultural Practice Code, regarding the use of sludge in agriculture.

Mid-term priorities (2017-2020):

- Development of the Study on the assessment of the situation on the possibilities of production, storage and using of sewage sludge on land at the territory of the Republic of Serbia.
- Adoption of spatial planning policy documentation, related to the construction of new processing facilities and landfills of sludge, according to feasibility study.
- Revision of sludge management plans at regional and local level.
regulations with the necessary documentation, regarding the annual report on the production and use of sludge.
- Strengthening of inspection and control and surveillance capacities.
- Development of plans for the use of sewage sludge in agriculture through studies or projects for the possible rehabilitation of land, biological reclamation of land or for the use in the field of renewable energy or building energy system for processing as biofuel.

Shipment of waste - Regulation (EC) No 1013/2006 and Regulation (EC) No. 1418/2007

Ministry of Agriculture and Environmental Protection is responsible for the supervision and control of shipments of waste within borders and trans-boundary movements of waste, issuing of permits for the trans-boundary waste movement and tracking the movement of hazardous and non-hazardous waste from the Republic of Serbia to other countries, as well as during the import and transit of waste at the territory of the Republic of Serbia. Issuing of approvals and permits for import, export and transit of waste across the territory of the Republic of Serbia is in accordance with the Basel Convention and corresponding regulations.

A majority of the Regulation's obligations have been implemented, due to the fact that the Republic of Serbia is a Party to the Basel Convention. National procedures for shipment of waste were additionally aligned with Regulation 1013/2006/EC and other relevant EU *acquis*.

WASTE SECTOR	PRE-ACCESSION PERIOD						TRANSITION PERIOD												
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2032	2034	
Waste Framework Directive 2008/98/EC																			
Landfill Directive 99/31/ C																			
Council Directive on batteries and accumulators 2006/66/																			

PCB Directive 96/59/ ²¹																		
Directive on Waste Electrical and Electronic Equipment (WEEE) 2012/19/																		
RoHS directive																		
Directive on End-of-life vehicles 2000/53/EC																		
Directive on Packaging and Packaging Waste 94/62/EC																		
Directive on the management of waste from the extractive industries 2006/21/EC																		
Regulation on Shipment of Waste 1013/2006/EC																		
POPs Regulation (EC) 850/2004																		
Directive 86/278/EEC																		

- **List of Directives Implementation which considers most demanding**

Considering large investment needs and also long time periods needed for organisational changes in order to implement requirements (achieve foreseen targets) following directives are considered as problematic and requiring further detailed planning:

1. Landfill Directive (draft DSIP developed 2014, support by SIDA)
2. Waste Framework Directive.
3. Directive on waste electrical and electronic equipment (WEEE).

²¹ Additionally assessed and if needed revised after implementing project “Environmentally sound management and final disposal of PCBs”

4. Directive on packaging and packaging waste.

All these directives are further investigated and Directive Specific Implementation Plans being prepared or will be developed during 2016 with the support of IPA project. Implementation of these directives is interrelated and in large degree depends on implementation of waste management infrastructure under establishment of regional waste management systems.

After development of DSIPs deadlines for full implementation of mentioned directives will be adjusted accordingly (Table 4).

Table 14 Preliminary estimation of implementation deadlines

EU legislation	Implementation deadline	Comments
Waste Framework Directive	2034	Subject to revise after DSIP development
Directive on Packaging and Packaging Waste	2020	Subject to revise after DSIP development
Directive on Landfill	2032	Subject to revise after DSIP development, Art. 5 and 14 will be a matter of negotiation with the Commission to determine dates.
Directive on Waste Electrical and Electronic Equipment (WEEE)	2030	Subject to revise after DSIP development
RoHs	2018	
Directive on End-of-life vehicles	2028	
Council Directive on batteries and accumulators	2026	Preliminary. Subject to revise after DSIP development
Directive on the management of waste from the extractive industries 2006/21/EC	End of 2020	

EU legislation	Implementation deadline	Comments
PCB/PCT Directive	End of 2020	Implementation year will be additionally assessed and if needed revised after implementing project “Environmentally sound management and final disposal of PCBs”
POPs Regulation (EC) No 850/2004	From the date of accession	Preparations will be completed until 2020 in order to be ready for implementation from the date of accession
Directive 86/278/EEC		Year for full implementation will be defined in Strategy for sewage sludge management
Regulation on Shipment of Waste (EC) No. 1013/2006	From the date of accession	Preparation for implementation of requirements will be completed 2018

5. Cost /Financing estimations

The largest part of investment costs is related to the development of infrastructure in order to implement the Waste Framework Directive, the Landfill Directive and the Directive on Packaging and Packaging waste. It is estimated that investment costs associated to implementation of these directives will amount to about 917.7 million euro, of which 19.2 million euro have already been committed prior to May, 2015.

It is expected that waste management systems and facilities, under the responsibility of the private sector (including industrial and commercial waste, packaging waste, end-of life vehicles, waste oils, WEEE, etc.), will almost completely be funded by said private sector from its own resources thus implementing the polluter pays and producer responsibility principles.

It is expected, that IPA and later Cohesion and other EU funds will contribute the largest part of the funds required for the infrastructure investments.

However, the largest obstacle to attaining full compliance within a reduced time-frame will be the very large operating expenses (OPEX) of the integrated waste management systems. These costs must be absorbed by households and industrial concerns which have a limited capacity (and willingness) that must be tapped in accordance with estimated affordability constraints.

Investments in the waste sector typically generate very high OPEX (defined as “OPEX heavy”) and thus the planned investments must be carried out in such a way as to not exceed affordability thresholds, else there is a risk of burdening consumers beyond their capacities.

Although RS is still at an early stage and the precise definition of transition periods for accession is still far in the horizon, the preliminary Implementation Plan has been developed in accordance with this principle, albeit in a general macro-econometric manner, as much of the specific regional data is not yet available and there will probably be some modifications to the Strategy and thus the Implementation Plans.

For more details on costs please see Annex 2 Preliminary Implementation Plan for the Integrated Waste Management Systems.

Section 4

WATER MANAGEMENT

1. Sectoral approach

Transposition of Water Framework Directive and Floods Directive are in advance stage and in initial phase for other directives. Full transposition of water directives is expected through further amendments of the Law on Water (draft Law on Water with first set of amendments is developed, adoption planned for 2015, second set of amendments of the Law on Water planned for 2017) and adoption of the relevant bylaws (until the end of 2018).

Current activities are related to further development of strategic and legislative framework in order to improve water management policies and support further compliance with the requirements of the relevant EU acquis. The Water Management Strategy in the RS is available in its draft form, as well as the Water Pollution Protection Plan. The Water Management Plan for the Danube River Basin on the territory of the Republic of Serbia is under development. An on-going activity is preparation of proposal for sensitive areas and vulnerable zones relevant for Urban Waste Water Directive and Nitrates Directive. Priority is also provided for implementation of Flood Directive included PFRA, as well as preparation of flood maps for a part of Serbia.

Directive Specific Implementation Plans (DSIPs) for Water Framework Directive, Drinking Water Directive, Urban Waste Water Treatment Directive and Nitrates Directive will be developed during 2015/2016 within National Environmental Approximation Strategy (NEAS) implementation project (IPA 2013). DSIPs and related supporting documents will be the basis for adjusting timetable of implementation in specific cases of heavy investment directives. Also, DSIPs will be the base for preparation of multiannual investment and financing plan and will support programming process for the period until 2020, and after the accession, during negotiated transitional periods.

Strengthening capacity of institutions in water sector is precondition for successful transposition and implementation of the directives and most of activities for assistance projects are concentrated on this issue.

Implementation costs in water sector are high and require detailed planning of financing from national and EU as well as other grant financing sources, assessment of needs, possibilities and affordability for loan financing to be provided by IFIs.

As it is currently assessed, due to high costs and availability of financing, part of the directives related to water sector will not be implemented by the end of 2020 and transitional periods will be needed. It is particularly related to large investment needs especially in implementation of UWWTD, the presence of arsenic in groundwater on the territory of Autonomous Province of Vojvodina and other problems for implementation of Drinking Water Directive, implementation of environmental quality standards as well as the time required for the implementation of water management plans (deadlines for reaching the limit values for certain industrial facilities). It is important to note that additional costs will occur due to implementation of other sector relevant directives, especially Floods directive. Although the costs for implementation of Floods directive are not currently assessed, the consequences of serious damages of water facilities and other infrastructure: (roads, bridges, etc, during the catastrophic floods in 2014), as well as changes of the concept of flood protection will affect the financial planning of the implementation of this Directive and other directives related to FD.

The most important precondition for implementation of Drinking directive and UWWTD is restructuring of public utilities in accordance with the requirements of both directives, improving

cost recovery and dynamic alignment / increasing of tariffs to finance operation of developed infrastructure. In cost recovery, affordability limits up to 4% shall be respected.

Furthermore, all activities planned as a part of the accession process to the EU require major reforms of the water sector, supported with appropriate financial resources. To ensure that this happens full political support is absolutely necessary as is full participation of all relevant institutions.

Present status and planned activities on all water directives are given bellow. Plans are divided into short-term (2015-2016), mid-term (2017-2020) and long-term (after 2020) activities.

The second cycle of RBMPs is planned to be completed in 2021 according to the WFD 6 years planning cycle. The process of preparing of RBMPs has not been linked to the EU accession process of the Republic of Serbia but for the planning cycle according to the WFD

2. Strategic framework

Implementation of requirements in the sector is guided by following approved strategic documents:

- National Environmental Approximation Strategy for the Republic of Serbia (NEAS, OG 80/11),
- Water Sector Approximation Strategy (2012).

Planned strategic documents:

- Water Management Strategy for the Territory of the Republic of Serbia (adoption planned for 2015),
- Water management plan for the Danube River Basin on the territory of the Republic of Serbia (under development, adoption planned for 2015)
- Water Pollution Protection Plan (adoption planned for 2015)
- DSIPs for WFD, DWD, UWWTD and ND (2016).

2. Transposition

Transposition of water related directives is in different stages. Full transposition of water directives is expected through further amendments of the Law on Water (draft Law on Water with first set of amendments is developed, adoption planned for 2015, second set of amendments of the Law on Water planned for 2017) and adoption of the relevant bylaws (until the end of 2018).

Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy with its amendments (Decision 2455/2001/EC and Directives 2008/32/EC, 2008/105/EC and 2009/31/EC) – EU WFD

Transposition status:

In 2014, the MAEP finalized detailed legal gap assessment analyses and assessment of compliance of applicable legal framework with requirements of this Directive, with assistance of PLAC project²², in the course of gap assessment process.

The directive has been partially transposed through the Law on Water (“Official Gazette RS” No. 30/10 and 93/12) - LoW, Decision on the Designation of Water District Boundaries (“Official Gazette RS” No. 75/10), Rulebook on Reference Conditions for the Types of Surface Waters (“Official Gazette RS” No. 67/11), Rulebook on the Designation of Surface Water and Groundwater Bodies (“Official Gazette RS” No. 96/10), Regulation on limit values of pollutants in

²²PLAC- Policy and Legal Advisory Center

surface waters, groundwaters and sediment and timelines for reaching of the values (“Official Gazette RS” no. 50/12) and Rulebook on parameters of Ecological and Chemical Status of Surface waters, and Quantitative and Chemical Status of Ground waters (“Official Gazette RS” No. 74/11), The Regulation on the Establishment of the Water Status Monitoring Programme (yearly – “Official Gazette RS” No. 100/12, “Official Gazette RS” No. 43/13 and “Official Gazette RS” No. 85/14).

Most of definitions are transpose, but Aquifer, Sub-basin, River Basin District, Good surface water chemical status, Good groundwater chemical status, Quantitative status, Pollutant, Environmental objectives, Environmental Quality Standards, Combined approach, Water services, Water use, Emission limit values and Emission controls, are not transposed.

Some of Articles are transposed, but due to the fact that annexes (except Annex IX and Annex X) are not transposed, transposition is partial.

Article 4 – Environmental objectives, Article 9 Recovery of costs for water services are not transposed and Article 10 the combined approach for point and diffuse sources are not transposed.

Transposition plan

Full transposition of EU WFD is expected through further amendments of the Law on Water and bylaws.

Short – term priorities (2015 - 2016):

After legal gap analysis was performed, LoW needs significant changes and/or amendments. First set of amendments is developed, and definitions Combined approach, Water services, Water intended for human consumption and Emission controls and Art. 3.1, Art 9.1 and Art 10.1 will be transposed.

Mid – term priorities (2017 – 2020):

The most of remaining provisions will be transposed by second set of amendments of the Law on Water planned for 2017) and adoption of the relevant bylaws (until the end of 2018).

Council Directive 2008/105/EC of the European Parliament and of the Council of 16 December 2008 on environmental quality standards in the field of water policy as amended by Directive 2013/39/EU

Transposition status:

Directive has been partially transposed through the Law on Water (OG RS, No. 30/10 & 93/12) and Regulation on limit values of priority and priority hazardous substances polluting surface water and deadlines for their achievement (OG RS, No. 24/14).

In 2014, the MAEP finalized detailed legal gap assessment analyses and assessment of compliance of applicable legal framework with requirements of this Directive, with assistance of PLAC project²³ in the course of gap assessment process in Water Quality Sector. This process resulted in precise assessment of transposition status and transposition gaps (in strict sense). EQS for water, as set out in Part A of Annex I (columns referring to Inland Surface Waters, since Other Surface Waters are not relevant for RS) are fully transposed in Regulation 24/14. Those EQS are as explained in Part B of Annex I which is almost fully transposed. Transboundary pollution is partially transposed, but derogations involving transboundary issues are almost fully transposed. Legal basis for the transposition of EQS for biota and provisions related to biota is lacking. Also,

²³PLAC- Policy and Legal Advisory Center

provisions relating to introduction of other matrices into surface water monitoring, long-term trend analyses, Inventory of emissions, discharges and losses, watch list as well as provisions regarding the content of water management plan and program of measures are not transposed.

Transposition plan

Short – term priorities (2015 - 2016):

After legal gap analysis was performed, draft of amendments on Law on Water has been prepared in order to fulfill some of detected gaps. Legal base for further transposition of the Directive, as well as some provisions of the Directive (provisions relating to biota EQS, long-term trend analyses and watch list) will be provided by Amendments on Law on Water in 2015.

Mid – term priorities (2017 – 2020):

The most of remaining provisions will be transposed by Amendments on Regulation on limit values of priority and priority hazardous substances polluting surface water and deadlines for their achievement (OG RS, No. 24/14) by the end of 2018. The full transposition of the Directive will be achieved in 2018.

Council Directive 2006/118/EC of the European Parliament and of the Council of 12 December 2006 on the protection of groundwater against pollution and deterioration

Transposition status:

The directive has been partially transposed through the Law on Water (Official Gazette RS No. 30/10 and 93/12), Regulation on limit values of pollutants in surface waters, groundwaters and sediment and timelines for reaching of the values (Official Gazette RS no. 50/12) and Rulebook on Parameters of Ecological and Chemical Status of Surface waters, and Quantitative and Chemical Status of Ground waters (Official Gazette RS No. 74/11).

In 2014, detailed legal gap assessment analyses and assessment of compliance of applicable legal framework with requirements of this Directive were carried out, with assistance of PLAC project²⁴, in the course of gap assessment process in Water Quality Sector. This process resulted in precise assessment of transposition status and transposition gaps (in strict sense).

Definitions are partially transposed except the definition: ‘input of pollutants into groundwater’ which is fully transposed. Criteria for assessing groundwater chemical status and procedure to assess the groundwater chemical status are partially transposed. Identification of significant and sustained upward trends and the definition of starting points for trend reversals and provision related to the program of measures are partially transposed. Measures to prevent or limit inputs of pollutants into groundwater are partially transposed. Annex I - Groundwater quality standards is partially transposed (EQS for nitrates and pesticides are fully transposed), but points 2 and 3 of the Annex are not transposed. Annex II - Threshold values for groundwater pollutants and indicators of pollution Part B is partially transposed, while Part A and Part C are not transposed. Annex III - Assessment of groundwater chemical status is not transposed. Annex IV - Identification and reversal of significant and sustained upward trends Part B (starting points for trend reversal) is partially transposed, and Part A (identification of significant and sustained upward trends) not transposed.

Main gaps that are detected: Legal bases for full transposition is not completely defined; procedure and deadlines for establishment of threshold value are not determined; the information that should be submitted to RBMP are not fully in line with the Directive, missing legal bases for the inventory

²⁴PLAC- Policy and Legal Advisory Center

of exemptions. After legal gap analysis was performed, draft of amendments on Law on Water has been prepared in order to fulfill some of detected gaps.

Transposition plan:

Short – term priorities (2015 - 2016):

Legal base for further transposition of the Directive, as well as some provisions of the Directive will be provided by Amendments on Law on Water in 2015.

Mid – term priorities (2017 – 2020):

The most of remaining provisions will be transposed by Amendments on the Law on Water by the end of 2017 and by Amendments on Regulation on limit values of pollutants in surface waters, groundwaters and sediment and timelines for reaching of the values (Official Gazette RS no. 50/12) and Rulebook on Parameters of Ecological and Chemical Status of Surface waters, and Quantitative and Chemical Status of Ground waters (Official Gazette RS No. 74/11) by the end of 2018. The full transposition of the Directive will be achieved in 2018.

Directive 2009/90/EC of 31 July 2009, laying down, pursuant to Directive 2000/60/EC of the European Parliament and of the Council, technical specifications for chemical analysis and monitoring of water status

The Directive 2009/90/EC of 31 July 2009 has been partially transposed through the Regulation on limit values of priority and priority hazardous substances polluting surface water and deadlines for their achievement (OG RS, No. 24/14).

Transposition plan:

Short – term priorities (2015 - 2016):

Legal base for further transposition of the Directive for chemical analysis and monitoring of water status for both surface and ground waters will be provided by Amendments on Law on Water in 2015.

Mid – term priorities (2017 – 2020):

Full transposition and implementation of Directive 2009/90/EC is expected in 2016/2017, through adoption of a bylaw on technical requirements and specifications for chemical analysis and monitoring of water status..

Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for Community action in the field of marine environmental policy – EU MS FD

Transposition status:

Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for Community action in the field of marine environmental policy – EU MS FD is not transposed into national legislation

Transposition plan:

Mid – term priorities (2017 – 2020):

Directive will be transposed by Amendments of the LoW by the end of 2017.

Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks – EU FD

The directive has been partially transposed through the Law on Water (Official Gazette RS No. 30/10 and 93/12), Regulation on establishment of the methodology for Flood risk assessment (Official Gazette RS no. 1/12). The following parts of the Directive have not been transposed into national law: definition on flash floods, PFRA deadline, regulation on flood mapping and deadline, specific objectives, coordination/ integration with RBMP and review cycle for PFRA, maps, CC impact and FRMP.

Full transposition of Flood Directive is expected through further amendments of the Law on Water and bylaws.

Transposition plan:

Short – term priorities (2015 - 2016):

After gap analysis was performed, LoW needs some changes. The most of remaining provisions will be transposed by Amendments on LoW and by “Regulation on the establishment of the methodology for preparation of flood hazard and flood risk maps”.

Mid – term priorities (2017 – 2020):

Remaining provisions will be transposed by Amendments by the end of 2017. The full transposition of the Directive will be achieved in 2018.

Directive 98/83/EC on the Quality of Water Intended for Human Consumption – EU Drinking Water Directive

Transposition status:

The applicable national regulations are partially or fully aligned with the Directive’s requirements. The following parts of the Directive have been transposed into national law: objectives, definitions, quality standards, point of compliance, monitoring, remedial action and restrictions in use, quality assurance of treatment, equipment and materials, exceptional circumstances and information and reporting.

The laws and by-laws that governing this area are following: Law on Food Safety (OG RS 41/09), Law on Water (OG RS 30/10 and 93/12), Law on Public Health (OG RS 107/05...), Law on Communal Activities (OG RS 88/11), Law on Health Safety of Items of General Use (OG RS 92/11), Rulebook on the hygienic safety of drinking water (OJ FRY 42/98 and 44/99), Rulebook on the Method of Sampling and Laboratory Methods for the Analysis of Drinking Water (OJ SFRY 33/87) etc.

Law on health safety of general use ("RS Official Gazette", no. 92/11), provides safety of crockery, cutlery, appliances, packaging and other materials that come into contact with food in accordance with the law governing food safety, including drinking water. Also, system of informing the public is established on the basis of the Law on Health Care ("OfficialGazette"no.107/05...)

During 2014th, in the course of gap assessment process in Water Quality Sector, assessment of legal gap and of compliance of applicable legal framework with requirements of the Directive was

analysed with assistance of PLAC project. This process resulted in precise assessment of transposition status and transposition gaps (in strict sense). In line with results of analytical process, following Directive's provisions have been fully transposed: exemptions, general obligations, derogations, review of annexes.

Transposition plan:

Short – term priorities (2015 - 2016) :

Draft of the Rulebook on health safety of drinking water has been prepared in 2014, and will be adopted after the entry into force of amendments to the existing Law on Food Safety, which will provide the legal basis for the Minister of Health to issue the Rulebook on health safety of drinking water.

The adoption of this Rulebook, which will ensure full transposition of this Directive, is foreseen by the end of 2015.

Directive 2006/7/EC concerning the management of bathing water quality – EU Bathing Water Directive

Transposition status:

There is no applicable legislation that prescribes in integrated manner the way of monitoring bathing water quality, management and public information. Monitoring of water that can be used for bathing is prescribed with:

- Regulation on water classification (OG SRS 5/68), where surface waters are classified in 4 classes, on the basis of indicators (parameters) and in accordance with limits of their values. Parameters from this Regulation are not harmonized with parameters from the Directive. Water which was classified as I and II can be used for bathing. According Regulation, „most probable number of coliform in 100 ml" is taken as indicator of bathing water quality.
- Regulation on limit values for pollutants in surface and ground waters and sediments, and the deadlines for their achievement (OG RS 50/12), determines surface water as class I, II and III which can be used for bathing. Parameters for estimation of water quality for bathing in Regulation are not harmonized with parameters from the Directive.

According this Regulation, as parameters for bathing water quality, monitored microbiological parameters are „fecal coliforms“, „total coliforms“, „intestinal enterococci“ and „aerobic heterotrophs (method Kohl)".

Article 67. Law on Water (OG RS 30/10 and 93/12) prescribes that local authority decide on the place and way of usage of bathing water.

According to the Law on Health Care (OG RS 107/05...) and Law on Free Access to Information of Public Importance (OG RS 120/04, 54/07, 104/09 and 36/10), information on the health safety of bathing waters are available annually and on a daily basis.

During 2014, in the course of gap assessment process in Water Quality Sector, the Ministry of Health finalized the assessment of legal gap and of compliance of applicable legal framework with requirements of the Directive with assistance of PLAC project. This process resulted in precise assessment of transposition status and transposition gaps (in strict sense). In line with results of analytical process, following Directive's provisions have been transposed, namely: general provisions (purpose and scope, definitions), quality and management of bathing water (monitoring, bathing water quality assessment, classification and quality status of bathing waters, bathing waters profile, management measures in exceptional circumstances, cyanobacterial risks and other

parameters, cooperation on transboundary waters) and exchange of information (public participation, information for the public and reports).

Transposition status:

Short – term priorities (2015 - 2016):

A draft of the Rulebook on the quality of bathing water is prepared to be adopted after the amendment of the Law on Water, no later than the end of 2015. This draft is fully aligned with the Directive and will provide its full transposition.

Council Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources as amended by Regulations (EC) 1882/2003 and (EC) 1137/2008 – EU ND

Transposition status:

Requirements of Directive have not been transposed into state regulations except some definitions (terms) in Law on Water (Official Gazette RS No. 30/10 and 93/12). The Directive is in initial phase.

Transposition plan:

Short – term priorities (2015 - 2016):

Draft of Amendments on Law on Water has been prepared in order transpose some of requirements of the Directive.

Mid – term priorities (2017 – 2020):

Establishing the legal basis for designate and designation the vulnerable zones for nitrates, remaining provisions of Directive will be transposed, including establishing the legal basis and adoption of Code of good agricultural practice. In designated vulnerable zones, in parallel, the inventory of farms and agricultural land will be established.

Council Directive 91/271/EEC of 21 May 1991 concerning urban waste water treatment, as amended by Commission Directive 98/15/EC, Regulation 1882/2003 and Regulation 1137/2008, Commission Implementing Decision concerning formats for reporting on the national programmes for the implementation of Council Directive 91/271/EEC (notified under document C(2014) 4208, (2014/431/EU))

Transposition status:

Directive is partially transposed into national legislation by the Law on Water OG (RS No. 30/2010, 93/2012), Regulation on emission limit values in waters and deadlines for their achievement (Official Gazette of RS, 67/2011, 48/2012) and Regulation on threshold values of pollutants in surface waters, groundwaters and sediment and deadlines for their achievement ("Official Gazette of RS", No.50/2012).

The second round of Amendments to the Law on Water (planned for 2017) will establish legal basis for transposition of Directive's provisions related to designation of sensitive areas, permitting procedure, reporting, as well as transposition of Annex I. Full transposition of Directive will be done by adoption of relevant new by-laws and amendments to the existing by-laws.

Transposition plan:

Short – term priorities (2015 - 2016):

Establishment of the legal basis for designation of sensitive areas in 2015 and development of Rulebook on methods and conditions for wastewater quantity measurement and quality testing, and the content of the measurement report (in preparation), by the end of 2015.

Mid – term priorities (2017 – 2020):

Development and adoption of relevant regulations (law/by-laws) for full transposition, by end of 2018 and development of legal basis for reforming Public Utility Companies by end of 2018;

Transposition table

WATERSECTOR	Transposition deadline					
	2015	2016	2017	2018	2019	2020
EU LEGISLATION						
2000/60/EC – EU WFD						
2008/105/EC – EU EQS						
2006/118/EC – EU GW						
2009/90/EC – EU MON						
2008/56/EC - EU MS FD						
2007/60/EC – EU FD						
98/83/EC – EU DRINKING WATER						
2006/7/EC – EU BATHING WATER						
91/676/EEC - EU ND						
91/271/EEC - EU UWWTD						

3. Implementation activities and institutional responsibilities

Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy with its amendments (Decision 2455/2001/EC and Directives 2008/32/EC, 2008/105/EC and 2009/31/EC) – EU WFD

Operational and surveillance monitoring started, but it complies only partially with WFD requirements, covers only part of WBs (85 surface WBs out of 493, and 31 out of 153 GWBs) and suffers from underfinancing. Preparation of Water management plan for the Danube River Basin on the territory of the Republic of Serbia according to LOW2010 is in final phase. Characterization report for the Danube River Basin on the territory of the Republic of Serbia was prepared in 2013, and it includes river basin characteristics, impact of human activities required under Article 5, and inventory of protected areas (present status). Preparation of RBM plans for water districts on the territory of the Republic of Serbia are in initial phase. Capacities of the Republic Directorate for Water, competent authority for WFD, is not sufficient, as well as capacities of public water management companies, institutions responsible for monitoring and other institutions responsible for transposition and implementation.

It is foreseen that implementation activities will be supported by IPA 2016 project (2016-2017). If IPA 2016 will not be approved, then new financial sources have to be looked for. Also, in that case, deadlines for short-term implementation activities have to be updated, accordingly. If the Project is approved, following short term implementation activities will be foreseen for implementation as follows:

Short-term priorities (2015-2016):

Development of DSIP for Water Framework Directive in order to define deadlines and steps for full implementation of requirements. It is planned to be prepared in period 2016 - 2017 by IPA 2013. Activities will also include questions related to articles 4.4 to 4.9 and issues related to interlinks to other directives (e.g. DWD, EQSD and GWD, high natural background values of arsenic in groundwater in the part of Vojvodina);

- Development of Water management plan for the Danube River Basin on the territory of the Republic of Serbia according to LoW during 2015. Although not in full compliance with EU FWD, it may be considered as 1st draft RBM plan, except for some protected areas;
- Preparation of draft water monitoring programme in accordance with WFD, GWD and EQSD. Working group was established in March 2015. Programme will be prepared during 2016. The document will include concept of monitoring programme until 2020 according to the directive requirements and annual operational programme.
- Preparation of following bylaws: Rulebook on setting criteria for the designation of protected areas on water areas and Rulebook on the content and method of keeping of registers of protected areas.
- Improvement of the cost recovery system in water sector will be carried out with support of Project "Support for Serbia EU accession process in the WSS sector – cost recovery of water services in Serbia" (World Bank). To this end, the following bylaws will be adopted: Decision on the establishment of a methodology for the calculation of the price of drinking water supply by means of a public water supply system, and the price of wastewater collection, evacuation and treatment by means of a public sewerage system; Decision on the setting on the reference price of water and Decision on the establishment of criteria for the setting of the reference price of water which will be base for adequate financial framework.
- Strengthening of capacity of the Republic Directorate for Water to manage transposition and implementation of the large and extensive body of EU water related legislation. Capacity building is needed also in other institutions responsible for water protection, e.g. environmental protection department within Ministry responsible for environment and Ministry of Health.
- If necessary (in case that IPA 2016 will not be approved) other additional financial sources have to be looked for. Also, deadlines for medium-term implementation activities have to be updated.
- If the Project is approved, following mid-term implementation activities are foreseen for implementation as follows:

Mid - term priorities (2017-2020):

- RBD analysis (in accordance with WFD Art. 5 and Annexes) within the 2nd cycle of RBM for the Danube River Basin on the territory of the Republic of Serbia;
- Establishment of the Register of protected areas in 2018, after adoption of 2 bylaws (planned for 2015), and proclamation of sensitive areas and vulnerable zones;

- Strengthening of capacity of public water management companies (2015-2020);
- Implementation of monitoring program in line with WFD (envisaged for IPA 2016 support). Establishment of full monitoring program for surface and groundwater bodies until 2020 (except for some protected areas which will be prolonged for 2022);
- Setting up water-pricing policy and implementation of cost recovery requirements (planned for 2019);
- Developing and applying reporting system by end of 2020.

Long-term priorities (2020 and beyond):

Preparation, publishing and public consultations on 2nd RBMP and Program of measures, as well as RBMP's for water districts (SPD) will be finished in 2021;

Establishment of full monitoring program including protected areas in 2022.

Council Directive 2008/105/EC of the European Parliament and of the Council of 16 December 2008 on environmental quality standards in the field of water policy as amended by Directive 2013/39/EU

Substances are divided into two groups: first group of 35 substances is already being monitored. Three substances (Hg, heptachlor and heptachlorepoxyd) from the second group are monitored but the methods do not have required limit of detection and quantification. Monitoring does not yet cover all surface WB due to budget restrictions.

It is foreseen that implementation activities will be supported by IPA 2016 project (2016-2017). If IPA 2016 will not be approved, then new financial sources have to be looked for. Also, in that case, deadlines for short-term implementation activities have to be updated, accordingly. If the Project is approved, following short term implementation activities will be foreseen for implementation:

Short-term priorities (2015-2016):

- Development of detailed steps and deadlines for full implementation of EQS directive (as part of DSIP for Water Framework Directive, during 2016 - 2017 with IPA 2013 support).
- Preparation of draft water monitoring programme in accordance with EQSD.

If necessary (in case that IPA 2016 will not be approved) other additional financial sources have to be looked for. Also, deadlines for medium-term implementation activities have to be updated. If the Project is approved, following mid-term implementation activities will be foreseen for implementation:

Mid-term priorities (2017-2020):

- Introduction of substances from the second group (24 substances) for monitoring gradually and latest by the end of 2018;
- Increase of staff and technical capacity of SEPA (laboratory equipment, methodologies, training of expert staff) to provide adequate monitoring planned for 2018 (in the frame of on-going IPA 12 project "Strengthen capacities in Nature Protection and Environmental Monitoring");
- Establishment of effective monitoring in line with WFD and EQSD requirements for full monitoring network by the end of 2020. This includes determination of presence and baseline level of listed hazardous substances (current chemical status of surface waters), development of a system for long-term trend analyses, development of methodology and taking steps towards the establishment of a unified data base for inventory of emissions, discharges and losses of priority and priority hazardous substances, developing and applying reporting system;

- Development of proposals for Program of Measures that will be included in the next planning cycle, regarding the substances from the list, shall be completed by end of 2021.

Long-term priorities (2020 and beyond):

- Compliance with ELVs for all industrial facilities by 2030²⁵.
- Full implementation by the end of 2033.

Council Directive 2006/118/EC of the European Parliament and of the Council of 12 December 2006 on the protection of groundwater against pollution and deterioration

Preliminary Risk assessment for GWB has been done. Chemical monitoring is carried out on 31 of 153 GWB and includes all substances listed in Annex II Part B except Trichloroethylene and Tetrachloroethylene. Existing data show high natural background level of arsenic in AP Vojvodina, in some areas larger than 50µg/l, which will not cause a failure of chemical status due to its natural origin, but it should be consider as a general issue with regard to DWD. Details will be worked out in DSIP for WFD.

It is foreseen that implementation activities (monitoring) will be supported by IPA 2016 project (2016-2017). If IPA 2016 will not be approved, then new financial sources have to be looked for. Also, in that case, deadlines for short-term implementation activities have to be updated, accordingly. If the Project is approved, following short term implementation activities will be foreseen for implementation:

Short-term priorities (2015-2016):

- Development of detailed steps and deadlines for full implementation of GWD (as part of DSIP for Water Framework Directive, during 2016 - 2017 with IPA 2013 support).
- Preparation of draft water monitoring programme in accordance with GWD (including revision of existing GW monitoring sites owned and/or managed by other entities, e.g. public utility companies, energy facilities, etc.)

Mid-term priorities (2017-2020):

- Achieving necessary funding levels for the establishment of GW monitoring in line with WFD until 2020 (except for some protected areas which will be prolonged for 2022);
- Assessment of GW bodies chemical status based on available data, also for the water bodies for which it is not yet done.
- Initial identification of significant and sustained upward trends and definition the starting point for reversing those trends if sufficiently long series of data for trends analyses are available.

Long-term priorities (2020 and beyond):

²⁵The existing national Regulation on emission limit values (67/2011 & 48/2012) anticipates that all industrial facilities that were functional before 21.09.2015 have transitional period to comply with ELVs. These periods follow the deadlines provided by Water Pollution Protection Plan and longest is by 2030. The precise deadlines will be defined in action plans developed by corresponding industries.

- Extension of monitoring network of protected areas for chemical status to include all existing GW bodies used for water supply, irrigation, etc. is planned for 2022
- Assessment of chemical status of all GW bodies
- Identification of all existing significant and sustained upward trends and definition the starting point for reversing those trends
- Establishment of measures to prevent or limit inputs of pollutants into groundwater

Directive 2009/90/EC of 31 July 2009, laying down, pursuant to Directive 2000/60/EC of the European Parliament and of the Council technical specifications for chemical analysis and monitoring of water status

The most of substances mentioned in Annexes of WFD and relevant water directives are monitored but used methods and existing equipment do not have required limit of detection and quantification. This gap will be overlapped by installation of the new equipment expected from on-going IPA 2012 project “Strengthen capacities in Nature Protection and Environmental Monitoring”.

Short-term priorities (2015-2016):

- Installation of the new equipment expected from on-going IPA 2012 project in 2015

Mid-term priorities (2017-2020):

- Full implementation of Directive 2009/90/EC is expected in 2017.

Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for Community action in the field of marine environmental policy – EU MS FD

Implementation in the initial phase. Serbia will implement EU MS FD through implementation of WFD and international cooperation in the Danube RB (ICPDR).

Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks – EU FD

1st Preliminary Flood Risk Assessment has been completed in 2012 but included only fluvial floods. No assessment of climate change impact was carried out. 99 APSFR have been defined. Preparation of flood hazard and flood risk maps is in progress. 27 of 99 APSFR are already mapped. Initial stage of preparation of FRMPs is in progress. Objectives and measures in relation to this directive are set in draft Water Management Strategy.

Implementation of the Directive will be achieved taking following actions:

Short-term priorities (2015-2016):

Development of the Catalogue of measures in 2016.

Mid-term priorities (2017-2020):

- Draft 1st FRM plan for the territory of the Republic of Serbia shall be prepared by 2017 using available maps (prepared during the first stage for 27 PRFA);

- 2nd PRFA (2018) will include all relevant types of floods and climate change assessment, also taking into account 2014 flood;
- Revision of maps prepared during the first stage and development of new Flood hazard and risk maps for the rest of APSFRs shall be completed by end of 2019. In case that IPA 2014-2020 will not be approved other additional financial sources have to be looked for;
- Collection and analysis of other data, including information on economic value, necessary for 2nd cycle of planning.

Long-term priorities (2020 and beyond):

FRMP in line with EU FD will be prepared in 2021.

Directive 98/83/EC on the Quality of Water Intended for Human Consumption – EU Drinking Water Directive

Drinking water quality is monitored on water supply systems of different scale, but on small scale systems (village WSS) is not regular. Monitoring is performed by licensed laboratories. 2009 - 2013 analyses (done according to existing legislation) show that only app. 50% of municipal water supply systems provide water with adequate physico-chemical and microbiological quality. Existing systems for water supply require reconstruction to reflect the capital maintenance backlog which has arisen over years. Greatest constraint for implementation of EU Drinking Water Directive is poor condition of infrastructure, as a consequence of the comparatively weak financial conditions of the Public Utility Companies, insufficient financing from the Local Self Government Units, state budget and other sources.

Implementation of the Directive will be achieved taking following actions:

Short-term priorities (2015-2016):

- Draft of the Rulebook on Health Safety of Drinking Water, fully aligned with the EU regulations, shall be adopted by the end of 2015. It will include provisions which provide the possibility of derogation of implementation of parameters values relating to the health safety of drinking water (e.g., arsenic in drinking water);
- Development of DSIP for Drinking Water Directive defining implementation costs, timetable and steps towards full implementation (planned for 2015–2017, with IPA 2013 support);
- Establishment of monitoring system in 2016.

Mid-term priorities (2017-2020):

- Development of legal basis for reforming Public Utility Companies by end of 2018;
- Reform of Public Utility Companies finishes by end of 2020;
- Improvement of cost recovery system by gradually increasing drinking water tariff in accordance with the principle of affordability by end of 2020.

Long-term priorities (2020 and beyond):

- Establishing an efficient municipal water supply system by implementation of infrastructure development programme. The capital investment needs are estimated from €1.3 billion (NEAS) to €2 billion (according to Draft Water Management Strategy). Full implementation is planned for 2034.

Directive 2006/7/EC concerning the management of bathing water quality – EU Bathing Water Directive

Bathing water monitoring is conducted locally at lakes and rivers during summer bathing season. Microbiological and chemical substances are investigated every 15 days during bathing season. Monitoring is performed by licensed laboratories.

Implementation of the Directive will be achieved taking following actions:

Short-term priorities (2015-2016):

- Adoption of Rulebook on quality of bathing water fully aligned with the EU requirements, by the end of 2015;
- First assessment during bathing season in 2016.

Mid - term priorities (2017-2020):

Complete classification of bathing waters by end of the 4th bathing season (2020).

Council Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources as amended by Regulations (EC) 1882/2003 and (EC) 1137/2008 – EU ND

Development of methodology for designation nitrate vulnerable zones and identification of agricultural land with significant contribution to N pollution, delineation of these zones and a catalogue of best agricultural practices for control of nitrates pollution in agriculture is on-going with the support of SIDA financed project. Code of good agricultural practice is in the process of updating. Monitoring network needed for detailed pressure and impact analysis of N pollution from agriculture and trophic status of surface waters is missing. Only a small % of aquifers from the monitored ones show concentration of nitrates in excess of 40 to 50 mg/l (data from the Draft Water Protection Plan).

An assessment on full compliance can only be informed by water quality and agricultural data and once the NVZ designation and action programme measures are in place.”– On going activity is preparation of the proposal for designation of vulnerable zones which will consider also an option of proclamation of whole territory of the Republic of Serbia as NVZ. The cost depends on the final decision, as well as further assessments and required steps.

Implementation of the Directive will be achieved taking following actions:

Short-term priorities (2015-2016):

- Assessment of monitoring information and identification of vulnerable zones for nitrates during 2015;
- Establishment of legal basis for designation of vulnerable zones for nitrates, shall be in place by 2015.
- Establishment of legal basis for implementation of Code of good agricultural practice (GAP) shall be in place by end of 2016.

Mid-term priorities (2017-2020):

- Designation of vulnerable zones for nitrates (NVZ) is planned for 2018;
- Assessment of monitoring programme against the needs for monitoring of vulnerable zones by end of 2018
- Adoption of Code of GAP is planned by end of 2018;
- Establishing the inventory of farms and of agricultural land in NVZ shall be completed by 2020;
- Preparation of plan for expanding monitoring network on surface and ground water bodies within the NVZ, if necessary, by end of 2019;
- Establishing system for reporting according to ND requirements by end of 2020.
- Development of Action Program for implementation of measures to protect NVZ is planned for 2020.
- Expanding the agricultural advisory services on local level in NVZ, if necessary, and intensifying training of farmers for effective implementation of CGAP in NVZ, planned for 2020.

Long-term priorities (2020 and beyond):

- Development of infrastructure for compliance with the directive requirements (estimated need is € 0.9 billion as capital investments for protection from water pollution from agricultural sources, NEAS, 2011).

Council Directive 91/271/EEC of 21 May 1991 concerning urban waste water treatment, as amended by Commission Directive 98/15/EC, Regulation 1882/2003 and Regulation 1137/2008, Commission Implementing Decision concerning formats for reporting on the national programmes for the implementation of Council Directive 91/271/EEC (notified under document C(2014) 4208, (2014/431/EU))

Current status related to technical (collecting systems, generated loads, wastewater treatment capacity, efficiency of treatment, emission, impact on waters, etc.) and financial measures is presented in draft strategic water management documents. Preliminary identification of agglomerations has been completed and presented in draft Water Protection Plan. 388 agglomerations have been defined, of which 315 are larger than 2000 PE, 73 are smaller than 2000 PE with sewerage systems, in addition to more than 4100 rural communities with population smaller than 2000 inhabitants. Average connection rate in settlements larger than 2000 PE is 54%. Number of existing wastewater treatment plants is around 44 out of which 32 WWTP are in operation and only 8 operate on design criteria. Less than 8% of the population receives adequate treatment.

It is foreseen that implementation activities will be supported by IPA 2015 project (2015-2017). If IPA 2015 will not be approved, then new financial sources have to be looked for. Also, in that case, deadlines for short-term implementation activities have to be updated, accordingly. If the Project is approved, following short term implementation activities are foreseen:

Short-term priorities (2015-2016):

- Assessment of existing data in order to define the approach to be taken regarding designation of sensitive areas, by the end of 2015;

- Establishment of the legal basis for designation of sensitive areas, 2015;
- Development of DSIP for UWWTD defining implementation costs, timetable and steps towards full implementation (planned for 2015–2017, with IPA 2013 support);
- Development of Rulebook on methods and conditions for wastewater quantity measurement and quality testing, and the content of the measurement report (in preparation), by the end of 2015.

Mid-term priorities (2017-2020):

- Designation of sensitive areas, by end of 2018;
- Development of legal basis for reforming Public Utility Companies by end of 2018;
- Reform of Public Utility Companies finishes by end of 2020;
- Improvement of current permitting procedure and license for water collection and treatment, by end of 2018;
- Strengthening of administrative and implementation capacity at national, regional and local level by end of 2020;
- Development and establishing the system for Reporting and databases for monitoring of waste water discharges and sludge disposal based on technical specifications within the WISE, by end of 2020;
- Establishing the system for applying Commission Decision (2014/431/EU), by end of 2020.

Long-term priorities (2020 and beyond):

Development of required infrastructure for implementation of directive requirements. Implementation is subdivided into implementation periods from 2015 to 2020 and other 3 periods (7 years) from 2021 to 2041. Prioritization of infrastructure development is based on UWWT Directive's requirements and on specific load on the recipient and size of agglomeration. Priority in agglomerations is given to new WWT plants if connection rate is more than 60%. If connection rate is less than 60%, priority is given for establishment of collection systems. Capital investment needs are estimated as €3.3 billion (NEAS, 2011) and as €4.9 billion (and Draft Water Management Strategy).

Full implementation is planned for 2041.

Institutional responsibilities for implementation of EU water sector requirements are presented in the Annex 1.

Implementation table:

WATER SECTOR	PRE- ACCESSION PERIOD	TRANSITION PERIOD						
		2021	2022	2027	2032	2033	2034	2041
EU LEGISLATIO N	2015-2020							
2000/60/EC – EU WFD								

WATER SECTOR	PRE-ACCESSION PERIOD	TRANSITION PERIOD						
		2021	2022	2027	2032	2033	2034	2041
EU LEGISLATION	2015-2020							
2008/105/EC – EU EQS								
2006/118/EC – EU GW								
2009/90/EC – EU MON	2017							
2008/56/EC - EU MS FD								
2007/60/EC – EU FD		*						
98/83/EC – EU DRINKING WATER								
2006/7/EC – EU BATHING WATER								
91/676/EEC - EU ND								
91/271/EEC - EU UWWTD								

*22.12.2021

4. List of Directives which considers most demanding for implementation

The most problematic directives for implementation are related to high costs and include:

- Water Framework Directive,
- Environmental quality standards Directive,
- Urban Waste Water Directive,
- Drinking Water Directive,
- Nitrates Directive.

Full implementation of EU water *acquis* is planned by 2041.

In addition to high costs, several other implementation obstacles include:

- Technical and financial capacities for implementation of EU water *acquis* are not sufficient, and are declining in the recent past;

- Institutional capacities are not sufficient. Capacity building and strengthening for planning, implementation, and management is essential and is a prerequisite especially for heavy investments directives;
- Responsibilities in water sector are divided among many different players, as presented in Annex 1. Integration is highly desirable, as proposed in draft Water Management Strategy;
- Due to high natural values of some substances in groundwater in some areas good chemical status will not be achieved. Also, good chemical status of surface waters in regard to some priority substances may not be achieved in EU planned time frame but further analyses will be done through DSIP for WFD to verify this more precisely;
- Of special importance is the need for including of Public Utility Companies coordination within the responsibilities of the ministry responsible for water sector. In this context, the water services related functions of PUCs should be separated from the currently common broader responsibilities that PUC have (cemeteries, solid waste management, etc.);
- Responsibility for monitoring is divided between 2 institutions. Financing of water monitoring has to be increased;
- Special problem exists with large publicly owned industrial enterprises (such as RTB Bor, Still Mill in Smederevo and similar) and historical pollution as well as the possible privatization processes²⁶ which will be treated separately within DSIP for WFD where specific deadlines for implementation will be defined.

5. Implementation deadlines for all directives in sector

EU legislation	Implementation deadline	Comments
Water Framework Directive	2041 (related to UWWTD implementation)	Implementation is considered when environmental objectives for surface, groundwater and protected areas are reached. DSIP for WFD will further clarify deadlines for full implementation
Environmental Quality Standards Directive	2033	DSIP for WFD will further clarify deadlines for full implementation
Ground Water Directive	2032	DSIP for WFD will further clarify deadlines for full implementation
Technical specifications for chemical analysis and monitoring of water status	2017	
Marine Strategy Directive	2020	
Floods Directive	2021 ²⁷	
Drinking Water Directive	2034	DSIP for EU Drinking Water Directive will define implementation costs, timetable and steps towards full implementation

²⁶In the process of privatization, RS is obliged to take over remediation of historical pollution

²⁷Adoption of FRMPs is planned for 2021

EU legislation	Implementation deadline	Comments
Bathing Water Directive	2020	
Nitrate Directive	2022 ²⁸	DSIP for Nitrates Directive will further clarify deadlines for full implementation
UWWT Directive	2041	DSIP for UWWTD will further clarify deadlines for full implementation

More detailed information regarding implementation dates is provided in the Annex 2.

6. Costs and financing estimations

Costs of approximation in water sector are mainly linked to implementation of three heavy investment directives, i.e. Urban wastewater directive, Drinking water directive and Nitrates directive. It is important to note that additional costs will occur due to implementation of other sector relevant directives, especially Floods directive. Costs for implementation of Floods directive are not currently assessed. It is expected that costs for implementation of UWWTD and DWD would be financed from public sources (national and international), water tariffs, loans and other sources, while implementation of Nitrates directive would be mostly financed from private sector and agriculture support funds. Capital costs (CAPEX) needed to fulfil requirements of the EU acquis in regard of three mentioned directives are presented in the Table 1 below. It should be noted that estimates for UWWTD and DWD are based on more detailed analysis carried out during 2014 and they are higher than previously estimated within NEAS.

Table 15 Water sub-sector CAPEX

Directive	Investment nominal	% of total	Full compliance
Urban wastewater	4,962	64%	2041
Drinking water	2,000	26%	2034
Nitrates	819	11%	
TOTAL INVESTMENT COSTS	7,781	100%	

In order to meet estimated levels of approximation costs in water sector, substantial efforts will be needed to mobilize all available funds. This includes, amongst other measures, complete reorganisation of national environmental/water financing at all levels of governance. Water fees should be revised, and their full potential should be directed to water investments. It is also anticipated that part of environmental fees will have to complement water fees to finance water sector investments. In addition, transformation of PUCs should be completed, thus enabling capacity for full cost recovery.

For more information on economic/financing details related to implementation of Urban waste water treatment directive, please see draft preliminary Implementation plan for UWWTD.

Annex 1: Current institutional responsibilities (summary information regarding institutional set - up for the sector)

²⁸ Adoption of Action Plan is planned for 2022

Directive		National level	Regional level	Local
EU WFD	<i>Policy and implementation</i>	<i>Responsible body</i> Ministry of Agriculture and Environmental Protection (MAEP) —Republic Directorate for Water		
		<i>Other responsible ministries</i> MAEP, Sector for Environmental Protection Ministry of Health Ministry of Construction, Transport and Infrastructure Ministry of Mining and Energy Ministry of Finance	Provincial Secretariat for Agriculture, Water Management and Forestry, Provincial Secretariat for Urban Planning, Construction and Environmental Protection	
	<i>River Basin Management</i>	Ministry of Agriculture and Environmental Protection (MAEP) —Republic Directorate for Water	PWMCs Srbijavode ,VodeVojvodine (pending amendment to the LOW in 2015)	
	<i>Monitoring</i>	Republic Hydromet Service of Serbia – RHMSS (water quantity) and SEPA (water quality)		
	<i>Enforcement</i>	Water Inspectorate Environmental Inspectorate Sanitary Inspectorate	Water Inspectorate Environmental Inspectorate Sanitary Inspectorate - transferred competences	
EU FD	<i>Policy and implementation (PFRA and FRMP for Serbia)</i>	<i>Responsible body</i> Ministry of Agriculture and Environmental Protection (MAEP) —Republic Directorate for Water		
		<i>Other responsible ministries</i> Ministry of Interior - Sector for Emergency Situations Ministry of Construction, Transport and Infrastructure Ministry of Mining and Energy Ministry of Finance	Provincial Secretariat for Agriculture, Water Management and Forestry, Provincial Secretariat for Urban Planning, Construction and Environmental Protection	
	<i>PFRA</i>	Ministry of Agriculture and Environmental Protection (MAEP) —Republic Directorate for Water		
	<i>Flood maps and Flood risk</i>		PWMCs Srbijavode ,VodeVojvodine	Local authorities

Directive		National level	Regional level	Local
	<i>Management plans for WD FRMP`s</i>	Ministry of Agriculture and Environmental Protection (MAEP) —Republic Directorate for Water	e and (pending amendment to the LOW in 2015)	for 2 nd order rivers
	<i>Monitoring</i>	RHMSS		
	<i>Enforcement</i>	Water Inspectorate	Water Inspectorate - transferred competences	
EU MS FD	<i>Policy and implementation</i>	<i>Responsible body</i> Ministry of Agriculture and Environmental Protection (MAEP) —Republic Directorate for Water		
EU Drinking Water & Bathing Water Directive	<i>Policy and implementation</i>	Ministry of Health		Utility companies Local authorities
	<i>Monitoring</i>	3 regional Public health institutes		20 local Public health institutes
	<i>Enforcement</i>	Sanitary Inspectorate	Sanitary Inspectorate - transferred competences	
EU ND	<i>Policy and implementation</i>	<i>Responsible body</i> Ministry of Agriculture and Environmental Protection (MAEP) —Republic Directorate for Water, Authority for agricultural land, Authority for agricultural payments	Provincial Secretariat for Agriculture, Water Management and Forestry, PWMCs Srbijavode, VodeVojvodine(pending amendment to the LOW in 2015)	Agricultural extension services (Advisory and professional)
	<i>Monitoring</i>	SEPA and RHMSS		
	<i>Enforcement</i>	Water, Agricultural soil, Animal husbandry and Phytosanitary inspectorates	Water, Agricultural soil, Animal husbandry and Phytosanitary inspectorates - transferred competences	
EU UWWTD	<i>Policy and implementation</i>	<i>Responsible body</i> Ministry of Agriculture and Environmental Protection (MAEP) —Republic Directorate for Water Ministry of finance,	Provincial Secretariat for Agriculture, Water Management and Forestry, Provincial Secretariat for urban planning, construction and environment	Municipalities, Public utilities – Water utility companies.
	<i>Monitoring</i>		PWMCs	PUCs,

Directive		National level	Regional level	Local
				Polluters
	<i>Enforcement</i>	Water Inspectorate, Environmental Inspectorate	Water Inspectorate, Environmental Inspectorate - transferred competences	Communal Police
EU EQSD	<i>Policy and implementation</i>	<i>Responsible body</i> Ministry of Agriculture and Environmental Protection (MAEP) – Sector for environmental protection	Provincial Secretariat for urban planning, construction and environment	
	<i>Monitoring</i>	SEPA		
	<i>Enforcement</i>	Water Inspectorate (EQS) and Environmental protection inspectorate (ELVs);	Water Inspectorate, Ecological inspectorate - transferred competences	
EU GWD	<i>Policy and implementation</i>	<i>Responsible body</i> Ministry of Agriculture and Environmental Protection (MAEP) – Sector for environmental protection	PWMCs Srbijavode ,VodeVojvodine (pending amendment to the LOW in 2015)	
	<i>Monitoring</i>	SEPA and HMSS	Water Inspectorate, Environmental inspectorate - transferred competences	
	<i>Enforcement</i>	Water Inspectorate (EQS) and Environmental protection inspectorate (ELVs);		

Annex 2: Implementation deadlines for all directives in the sector (table format)

Directive	Present status of implementation	Implementation of Directive		Comment
		Start	Full	
WFD	Partially implemented. Characterisation report for Danube River Basin prepared in 2013. RBMP to be adopted in 2015.	Partially 2015. RBM Plans in accordance with WFD will be published after full transposition is achieved. Planned for 2021.	Environmental objectives for surface, groundwater and protected areas reached. Planned for 2041 (related to UWWTD implementation).	DSIP for WFD will give schedule for full implementation.
EQS	In progress		2033	DSIP for WFD will give schedule for full implementation.
GWD	In progress		2032	DSIP for WFD will give schedule for full implementation.
MS FD	Not implemented.	2020, only within		

		ICPDR		
FD	Partially implemented.	FRM Plans in accordance with FD will be published after full transposition is achieved. Planned for 2021.	2021	
Drinking Water Directive	Not implemented	2015	2034	DSIP for EU Drinking Water Directive will define implementation costs, timetable and steps towards full implementation
Bathing Water Directive	Not implemented	2015	2020	
Nitrate Directive	Not implemented	2017	2022	DSIP for ND will define precise deadlines for full implementation.
UWWTD	In progress		2041	DSIP for UWWTD will define precise deadlines for full implementation.

Section 5

NATURE PROTECTION

1. Strategic framework

Planning activities in this sector are guided by following approved strategic documents:

- **National Environmental Protection Programme, Chapter on Nature and Biodiversity Protection (adopted in 2010)**

The chapter provides a framework for integrated protection of nature and biodiversity through definition and implementation of mid-term and continuous goals. It also envisages:

- harmonisation of national regulations with international and EU legislation,
- adoption of multi-annual plans for financing of nature protection and sustainable use of biodiversity,
- management of protected areas,
- improvement of the protection and sustainable use of wildlife,
- protection of migratory species,
- establishment of more intensive monitoring in nature.

The Action Plan for implementation of the NEPP for the period 2015 – 2019 is currently being developed.

- **National Strategy of Sustainable Use of Natural Resources and Goods**

Chapter 7 - Protected areas, biodiversity, geodiversity and landscape diversity

One of the main goals of protection and sustainable use of natural heritage is conservation and improvement of biological diversity. The overall goal of protection and conservation of biodiversity is to ensure preservation, improvement of the status and sustainable use of autochthonic populations and communities to the level that will enable long-lasting viability thereof.

The overall goal of protection, management and improvement of the status in protected areas is based on:

- the establishment of efficient protection of the existing protected areas,
- increase of total area under protection (in the period extending to 2020 covered by the plan, it is up to 12% of the whole territory of the Republic of Serbia),
- establishment of the national ecological network and identification of areas for the European Ecological Network NATURA 2000,
- the development of an efficient management system for the areas covered by the mentioned networks.

- **Biodiversity Strategy of the Republic of Serbia for the period 2011 – 2018**

The strategy envisages the integration of principles of protection and sustainable use of biological diversity into relevant sector plans, programmes and policies.

The action plan contains activities, key players and deadlines for implementation, as well as potential sources of funding for the implementation of the strategy.

The strategy is currently being revised, and the adoption thereof is expected in 2015.

- **Forestry Development Strategy of the Republic of Serbia (adopted in 2006)**

The strategy defines the status and development goals of the forestry sector, taking into consideration their sustainable use and improvement of status, as well as the overall functions of forests and their importance to society as a whole. It identifies measures to achieve the development goals by:

- establishing a balance of interests in relation to the forest;
 - creating a favorable climate for economic development taking into consideration the conservation of environmental value and the social functions of forests;
 - creating on optimal legal framework for forestry.
- **National Environmental Approximation Strategy and Approximation Strategy for the Nature Protection Sector**

The strategy was developed under the Technical Assistance for Development of a national Environmental Approximation Strategy (NEAS). This sector Strategy is subordinate to the NEAS and it provides more detailed analysis and planning within the sector.

2. Transposition

Habitats Directive: Directive 92/43/EEC as amended by Dir.97/62/EC, 2006/105/EC and Regulation (EC) 1882/2003

Transposition status

After the additional analyses made after the Bilateral Screening for the purposes of the Progress Monitoring Report it is defined that Article 8, can't be applicable to the Republic of Serbia until the EU membership date. The concept of ecological network in the Republic of Serbia has been harmonized with Natura 2000 and includes an extensive list of species and habitats i.e. ecologically important areas of international and national importance. Financing of these protection measures is defined by Decree on Ecological Network, ("Official Gazette of the Republic of Serbia", No. 102/2010, bearing in mind the commitments after with paragraph 6 of Article 8 of Directive. Remaining provisions are fully transposed in to the national legislation:

- The Law on Nature Protection (Official Gazette of RS, no. 36/09, 88/10, 91/10)
- The Decree on Ecological Network ("Official Gazette of RS", No 102/2010)
- The Rulebook on proclamation and protection strictly protected and protected wild species of plants, animals and fungi ("Official Gazette of RS", No 5/2010)
- The Rulebook on habitat types, the criteria for the selection of habitat types, sensitive, endangered, rare and priority for protection habitat types ("Official gazette of RS" no. 35/2010)
- The Rulebook on Compensatory measures ("Official Gazette of RS", No. 20/2010)
- The Rulebook on special technical-technological solutions which enable unobstructed and safe communication of wild animals ("Official Gazette of RS", No. 72/2010)
- The Rulebook on conditions of keeping, method of marking and registration of wild animals in the captivity ("Official Gazette of RS", No 86/2011)
- Special Decree on protection of single protected areas
- The Law on Game and Hunting ("Official Gazette of RS", No 18/2010)
- Regulation on proclamation of closed hunt season of protected wild animals ("Official Gazette of RS" No. 9/2012 and 97/2013)

- The Law on protection and sustainable use of fishing fauna ("Official Gazette of RS", No 36/9 and 32/13)
- The Ordinance on measures for protection fishing fund ("Official Gazette of RS", No 104/9 and 49/10)
- Law on Strategic Environmental Impact Assessment ("Official Gazette of RS", No.135/2004, 36/2009)
- Law on Environmental Impact Assessment ("Official Gazette of RS", No. 135/04, 88/10)

Transposition plan

Short term priorities (2015 – 2016.)

Amendment of the Law on the Nature Protection and Amendment of the Decree on Ecological Network will improve definition of obligation from EU Directive on habitats, regarding the concept of ecological network, concept on appropriate assessment and derogation.

Mid-term priorities (2017 - 2020)

The amendments to the Law on Nature Protection, Articles 8, 17 and 23 of the Habitats Directive will be fully transposed by 2020 (financing and reporting), and that will ensure the full transposition of the Habitats Directive.

Birds Directive: Directive 2009/147/EC

Transposition status

Directive is fully transposed since 2010 by:

- Law on Nature Protection OG RS No. 36/09, 88/10, 91/10,
- Law on Game and Hunting OG RS No.18/10,
- Regulation on proclamation and protection strictly protected and protected wild species of plants, animals and fungi OG RS No. 5/10 and 47/11 and 47/11,
- Regulation on Ecological Network OG RS No.102/10,
- Regulation on proclamation of protected game species by closed hunt season Official Gazette of RS No 9/12, 97/13,
- Regulation on transboundary traffic and trade of protected species (Official Gazette of RS No 99/09, 6/14),
- Special decrees on protection of single natural areas (Decree on protection of Special nature reserve (SNR) Obedska Bara Official Gazette of RS 59/94; and 81/2008;
- Decree on protection of SNR Ludasko jezero O.G.of RS 30/06,
- Regulation on proclamation of SNR "Carska Bara" - Official Gazette Of RS No.46/11).

According to Tables of Concordance of European Commission (the project "Monitoring transposition and implementation of EU environmental acquis"- Progress Monitoring Project), provisions 1.1, 4.3, 6.3 and 7.3 of EU Bird Directive are not the subject of scoring, the full transposition of specified shall be realized until 2020., respectively by the day of accession to European Union.

CITES Regulations: Regulation 338/97 and its subsequent amendments

Alignment Status

Alignment of national legal framework with EU Wildlife Trade Regulations EC 338/97 and EC 865/2006 is partial.

Alignment plan

Short – term priorities (2015 - 2016)

Revision and amendment of existing national nature protection related legislation in order to ensure that the provisions regulating CITES and wildlife trade in general, are aligned with the provisions of the EU Wildlife Trade Regulations.

Mid – term priorities (2017 – 2020)

Adoption of a separate law that will focus on the detailed implementation of CITES and EU Wildlife Trade Regulations (EU WTR) provisions, which will also ensure effective solutions for enforcement of these provisions and sanctioning of offences

Zoo Directive: Directive 1999/22/EC

Transposition status

The provisions of the Council Directive 1999/22/EC relating to the keeping of wild animals in zoos have partially been transposed into the national legislation.

Transposition plan

Short – term priorities (2015 - 2016)

Revision and amendment of existing national nature protection related legislation in order to ensure that the provisions regulating zoos, CITES and wildlife trade in general, are aligned with the provisions of the EU Zoo Directive.

Nagoya Protocol: Regulation 511/2014

Alignment Status

National legislation is not aligned with the provisions of the Regulations 511/2014.

Alignment plan

Short – term priorities (2015 - 2016)

The Law on Ratification Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (ABS) will be adopted by the end of 2015.

Mid – term priorities (2017 – 2020)

The provisions of the Regulation (EU) No 511/2014 of the European Parliament and of the Council on compliance measures for users from the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization in the Union will be implemented until 2017.

Leghold traps: Regulation 3254/91 prohibiting the use of leghold traps

Alignment status

Alignment of the national framework with the provisions of the Regulations on the use of leghold traps EEC 3254/91 and EC 35/97 is partial.

Alignment plan

Short – term priorities (2015 - 2016)

Revision and amendment of existing national nature protection related legislation in order to ensure that the provisions regulating use of Leg hold Traps are aligned with EU requirements.

Trade in seal products: Regulation 1007/2009

Alignment status

Alignment of the national framework with the provisions of the Seal products Regulation (737/2010/EC) is partial.

Alignment plan

Short – term priorities (2015 - 2016)

Revision and amendment of existing national nature protection related legislation in order to ensure that the provisions regulating trade in Seal Pups and Products are complied with

Seal Pups: Directive (83/129/EEC)

Transposition plan

Short – term priorities (2015 - 2016)

Revision and amendment of existing national nature protection related legislation in order to ensure that the provisions regulating trade in Seal Pups and Products are complied with.

FLEGT: Regulation 2173/2005 as amended by Regulation 657/2014 and Commission Regulation 1024/2008

Alignment status

• The provisions of FLEGT Regulation (2173/2005) have partially been into the national legislation:

- Law on Forests „Official gazette of the RS”, No. 30/2010, 88/2011,
- Law on Trade „Official gazette of the RS”, No. 53/2010 and 10/2013,
- Law on foreign trade „Official gazette of the RS”, No. 36/2009, 36/2011 i and 88/2011,
- Law on custom „Official gazette of the RS”, No. 62/2006 and 63/2006

- Law on Custom Tariffs „Official gazette of the RS”, No. 62/2005, 61/2007 and 5/2009.

Alignment Plan

Short - term priorities (2015-2016)

Revision of existing national nature related and other legislation (forestry, wood industry, trade and custom) is envisaged in order to ensure that the provisions of FLED Regulation are aligned with.

Mid - term priorities (2017-2020)

Adoption of separate sectorial laws with focus on the detailed implementation of FLEGT provisions is envisaged to ensure effective solutions for enforcement of these provisions and sanctioning of infringements.

Timber Regulation: Regulation 995/2010 (EUTR)

Alignment status

The provisions of the EUTR regulation (995/2010) have partially been transposed into the national legislation:

- Law on Forests „Official gazette of the RS”, No. 30/2010, 88/2011,
- Law on Trade „Official gazette of the RS”, No. 53/2010 and 10/2013,
- Law on foreign trade „Official gazette of the RS”, No. 36/2009, 36/2011 and 88/2011,
- Law on custom „Official gazette of the RS”, No. 62/2006 and 63/2006 and Law on Custom Tariffs „Official gazette of the RS”, No. 62/2005, 61/2007 and 5/2009.

Alignment Plan

Short - term priorities (2015-2016)

Revision of existing national nature related and other legislation (forestry, wood industry, trade and custom) is envisaged in order to ensure that the provisions of FLED Regulation are aligned with.

Mid- term priorities (2017-2020)

Adoption of separate sectorial laws with focus on the detailed implementation of FLEGT provisions is envisaged to ensure effective solutions for enforcement of these provisions and sanctioning of infringements.

NATURE SECTOR	PROTECTION	Transposition deadline					
EU LEGISLATION		2015	2016	2017	2018	2019	2020
Habitats Directive: 92/43/EEC as amended by Dir.97/62/EC, 2006/105/EC and Regulation (EC) 1882/2003	Directive						
Birds Directive: 2009/147/EC (In place since	Directive						

2010) ²⁹						
CITES Regulations: Regulation 338/97 and its subsequent amendments						
Zoo Directive: Directive 1999/22/EC						
Nagoya Protocol: Regulation 511/2014						
Leghold traps: Regulation 3254/91 prohibiting the use of leghold traps						
Trade in seal products: Regulation 1007/2009						
Seal Pups Directive (83/129/EEC)						
FLEGT: Regulation 2173/2005 as amended by Regulation 657/2014 and Commission Regulation 1024/2008						
Timber Regulation: Regulation 995/2010						

3. Implementation activities and institutional responsibilities

Habitats Directive: Directive 92/43/EEC as amended by Dir.97/62/EC, 2006/105/EC and Regulation (EC) 1882/2003

Structures for implementation of the Habitats Directive are established at the national, autonomous province and local level. The competent authorities responsible for implementation of Habitats Directive are:

- **At the national level:**
 - Ministry of Agriculture and Environmental Protection
 - Agency for Environmental Protection
 - Republic Geodetic Authority
 - Institute for Nature Conservation of Serbia
- **At the regional level:**
 - Provincial Secretariat for Urban Planning, Construction and Environmental Protection
 - Provincial Institute for Nature Conservation
- **At the local level:**
 - City and municipalities
- **Managers of protected areas can be:**

²⁹Directive is fully transposed into the national legislation.

- Public enterprises established at all levels (national, regional, and local)
- Technical/expert institutions
- Civil society organizations

A system of protection and conservation of habitat types, species of flora and fauna and their habitats of importance for the community has been established within the national legislation and almost fully complies with Art.1, 2, 6, 9, 12, 13, 14, 15 and 22 of the Habitat Directive and such is implemented through protection measures, sustainable use, monitoring and surveillance. Annex II and V of the Directive are not-fully implemented and they are referred to species that are in a controlled use in accordance with the protection measures and management in the field of hunting and fishing.

Draft Action plans have been prepared for the conservation of large carnivores in accordance with the EU Habitats Directive and the Bern Convention for the brown bear (*Ursus arctos*), wolf (*Canis lupus*) and Eurasian lynx (*lynx lynx*), in order to preserve population of these species and its habitats.

The Decree on ecological network sets forth the ecological network of the Republic of Serbia, including environmentally significant areas of international (EMERALD and NATURA 2000) and national importance. According to this regulation, management and protection measures of environmentally protected areas are carried out in order to:

- Preserve the biological and landscape diversity, priority habitat types or types of habitats of specific importance for conservation,
- Restore and improve degraded habitats and
- Preserve the certain species of international and national importance.
- Toward further identification of ecologically significant areas, a draft list of reference types within the Annex II of the Habitats Directive in order to preserve species or their habitats has been prepared. The identification and establishment of European Ecological Network Natura 2000 according to Art.4 of the Habitat Directive is ongoing. The sites will be fully identified by the date of accession, when potentially pSCIs and SPAs will be officially nominated

Procedure for assessing the acceptability in accordance with Article 6 of the Habitats Directive is partially transposed based on procedure established by the Law on Strategic Environmental Impact Assessment and the Law on Environmental Impact Assessment, which is in accordance with the requirements of the Institute for Nature Conservation of Serbia and Provincial Institute for Nature Conservation.

Nature protection report will be part of EIA study or SEA report.

- At the same time, the procedures of public consultation in the screening stage of the strategic impact assessment and environmental impact assessment were defined. A draft Decree on appropriate assessment has been prepared and that will ensure the fully implementation of Article 6 of the EU Habitats Directive.
- The draft decree provides for:
 - a more detailed definition on integration of the AA within the SEA and EIA procedure;
 - content of study, deadlines and manner of conducting the procedure for assessing the acceptability ,
 - the manner of informing the public.

Art.12 of the Law on Nature Protection and the Rulebook on Compensatory Measures and their implementation ensured the implementation of art.6 para.4 of the Habitats Directive, on the basis of which the European Commission will be informed of the compensatory measures concerning the ecologically significant area of Natura 2000.

System of authorisations for any derogation (Art. 16) is implemented in Serbia based on the Law on Nature Protection, Article 75-79, which is in accordance with Article 16 of the Habitats Directive for the species listed in Annexes II, IV and VI of the Habitats Directive.

If it is determined that the protected wild species are endangered mainly because of use, the Minister may prohibit or limit the use of the particular species, having previously obtained the opinion of the Institute.

(Article 78) The Ministry issues a scientific research and educational purposes permit in order to do research of protected and strictly protected wild species, having previously obtained the opinion of the Institute.

The removal of wild species and/or their parts and derivatives of the paragraph 1 of Article for scientific research purposes shall be made on the basis of permits issued by the Ministry, in accordance with Article 94 of this Law.

(Article 79) The use of certain means for capturing and killing of wild animals, which endanger or interfere with their populations and/or habitats, have an impact on their well-being and can cause their disappearance at a local level is prohibited.

For habitat types listed in Annex I of the Habitats Directive authorisation of derogations are enabled with the implementation of Articles 9., 10., and 12 of the Law on Nature Protection and Rulebook on compensatory measures.

Implementation of several projects enabled collection of data related to habitat types and species. Two pilot projects were focused on management of ecologically important areas Natura 2000 and on strengthening the administrative capacities for the establishment of Natura 2000. The projects are:

- EU CARDS project for South-East Europe “Development of Emerald Network in the Republic of Serbia” – 2005 – 2008. This project facilitated:
 - identification of areas of special conservation interest (ASCIs) based on the Bern Convention and EU Habitat and Birds Directive. Identification was performed based on Natura 2000 criteria and software NATURA 2000 was used for the database;
 - two bio-geographical seminars focused on data analysis;
 - identification of 69 Annex I habitat types, as well as 143 species listed in Annex II of the Habitat Directive.
- The Standing Committee of the Bern Convention adopted in 2011 a list of 61 areas designated as candidate or potential areas for Emerald Network (T-PVS/PA (2011) 06)
- EU project “IPA 2007- Strengthening capacities for the protected areas in Serbia” (Twinning Project SR 2007/IB/EN-02). The following activities have been carried out:
 - Support in further harmonisation of EU Habitat and Birds Directive and national legislation
 - Strengthen the administrative capacity of all relevant sectors at national and regional level;
 - Development of two pilot plans for managing Natura 2000 ecologically significant areas;
 - The preliminary list of SPAs was drawn up based on Bird Life Criteria;

- Organizational unit for Natura 2000 within the Ministry responsible for environmental protection was established.
- “Inventory of wetland areas in Serbia” – the project identified all wetlands in Serbia, including potential habitats for the selection of Ramsar sites, as well as significant wetlands at national and regional level.
- Pilot project – mapping of forest habitat types in Vojvodina (GIS format) in compliance with EUNIS classification of habitat types.
- IGIS project (IGIS Project – Infoterra Geo-Information Solution 2011-2013) which included:
 - establishment of capacity for providing wide range of geospatial information by using modern technologies for data collection;
 - processing and dissemination of spatial data for the purposes of state institutions and other users.
 - The mapping of habitat according to Annex I EUNIS classification of the Habitats Directive has also been performed.
- The project „*Serbian plants listed in European and international policy instruments*” was implemented by March 2015, as one of the projects within the regional „*Transnational Cooperation for Sustainable Nature Conservation – Selected Balkan States on their Way to Europe*“. The aim of the project was to prepare a book which presents the current knowledge about plant species in Serbia. The book also provides an overview of all plant species of international importance that grow in Serbia, with an emphasis on species listed in the Habitats Directive, Bern Convention (showing 20 species), CITES, the EU Regulation on the protection of wild fauna and flora and the regulation of their trade. The results of the project are very important for future activities related to the identification of Natura 2000 sites.

Short - term priorities (2015-2016):

The project "*Establishment of an ecological network in the Republic of Serbia, the identification and mapping of habitat types in Serbia - the collection and evaluation of existing data, research, establishment of GIS*" (2015-2020) assists MAEP co-financed from the budget of the Republic of Serbia following activities:

- Preparing the manual for the identification of habitat types, habitats and species;
- Mapping of habitat types for identification of SCI;
- Identifying criteria for selection of ecologically important areas and ecological corridors;
- Establishing criteria for the selection of Natura 2000 sites (SPA and SCI).

The EU Project IPA 2012 – “*Capacity Building for the Implementation of 'Acquis' standards in the field of nature protection - Establishment of Natura 2000 sites including the equipment and software for Serbia (2015-2016)*” foresees support for MAEP on following activities:

- The field research in three pilot areas for mapping habitat types, designation areas and identified reference species;
- Identified potential Natura 2000 sites in line with the requirements of the Habitats and Birds Directives;
- The basic guidelines for the management of potential Natura 2000 sites designated within the ecological network of the Republic of Serbia;
- drafting instructions for conducting the appropriate assessment at the national, regional and local level;
- improving communication among all relevant sectorial authorities

- and raising public awareness of Natura 2000.

The project "*Development of the Red Book of Plants, Animals and Fungi in the Republic of Serbia*" (2015-2017) supports MAEP in carrying out:

- collection and digitalization of literature data on the distribution and abundance of species (GIS, UTM Map) - development of a database;
- additional field research;
- data processing and vulnerability assessment by taxons

The project "*Development of a detailed implementation plan (Directive Specific Implementation Plan for EU Birds and Habitats Directives)*" implemented by the United Nations Development Program (UNDP) for EU Habitats and Birds Directives during January - June 2015 assists MAEP in developing a detailed plan for implementation of these directives, including deadlines, monitoring plan and financial needs, which is the roadmap for the full implementation of the EU Habitats Directive and the EU Birds Directive.

Mid - term priorities (2017-2020):

The project "*Establishment of an ecological network in the Republic of Serbia, the identification and mapping of habitat types in Serbia - the collection and evaluation of existing data, research, establishment of GIS*" (2015-2020) will continue assisting MAEP in performing following activities:

- Collecting and evaluating scientific data based on previous project results
- Collecting new scientific data for identification and designation new pSCI
- Integration into the existing information system of the Institute for Nature Conservation of Serbia as a part of the Ecological Network of the Republic of Serbia
- Preparation of a preliminary list of pSCIs (with a standard form and cartographic inputs) for nomination
- establishing the methodology and manual for monitoring of certain habitat types and species.

The project "*Development of the Red Book of Plants, Animals and Fungi in the Republic of Serbia*" (2015-2017) will continue supporting MAEP in carrying out:

- development of the red book;
- defining the content and scope of red book;
- Strengthening capacities for the establishment and development of ecologically significant areas Natura 2000 will be provided by creating the capacity building programme for target groups, as well as the campaign to raise awareness and understanding of Natura 2000 by the general public in collaboration with civil society

Birds Directive: Directive 2009/147/EC

Structures for implementation of the Birds Directive are established at the national, autonomous province and local level. The competent authorities responsible for implementation of Birds Directive are:

At the national level:

- Ministry of Agriculture and Environmental Protection,
- Institute for Nature Conservation of Serbia,

- Environmental Protection Agency – in charge with monitoring together with Institute for Nature Conservation of Serbia;
- Inspection for Environmental Protection and Inspection for Hunting (forestry and hunting) – in charge with control and enforcement.

- At the regional level:

- Provincial Secretariat for Urban Planning, Construction and Environmental Protection,
- Provincial Institute for Nature Protection – it also supports Environmental Protection Agency with monitoring activities.
- Managers of protected areas
- Civil sector (NGO that cooperates with national institutes for nature protection and other scientific institutes.

The Use, destruction, and execution of other activities that could endanger strictly protected plant, animal and fungi species and their habitats are prohibited.

Pursuant to that, the following is prohibited: destruction of specimens of plant and fungi species and the development forms thereof by picking, collecting, cutting, or uprooting or digging in all stages of the biological cycle, and to endanger or destroy their habitats; keeping and trading in strictly protected plant and fungi species growing in the wild and the development forms thereof; capturing, keeping and/or killing strictly protected animal species in all stages of the biological cycle, damage or destroy the development forms thereof, eggs, nests and litters, as well as the area of their breeding sites and resting places and to endanger or destroy their habitats; disturbing these species, particularly during the period of breeding, rearing, hibernation and migration; cutting off migratory routes; hiding, keeping, breeding, trading, export, transport and offering for sale or exchange or in any other way acquiring or publicly exposing animal species including all their derivatives and development forms.

These rules are detailed implemented into the following legal acts:

- Regulation on proclamation and protection of strictly protected and protected wild species of plants, animals and fungi (OG RS No. 5/10 and 47/11)
- Regulation on transboundary traffic and trade of protected species (OG of RS No 99/09, 6/14)
- Law on Game and Hunting (OG RS No 18/10)
- Regulation on proclamation of protected game species by closed hunt season (Off Gazette No 9/12).

The authorisation system for exemptions (derogations) has been regulated by art.75 Law on Nature Protection and is fully/in compliance with directive requirements (art 9). The competent authorities issue permits for allowed actions in case of justified public interest and provided that there is no other satisfactory solution and the exemption is not damaging the survival of the populations of strictly protected wild species in favourable status of their conservation in the natural habitat. According to specified, the Ministry may allow activities for the following purposes:

- research and education, population management, repopulation and re-introduction and for the breeding operations in *in-situ* and *ex-situ* conditions;
- preventing serious damage to crops, livestock, forests, fisheries and water and other forms of property;

- public health and public safety interest, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment;
- For the purpose of collecting parent units for reproduction, breeding of their offspring for commercial purposes in registered breeding and cultivation facilities under the condition that part of the units is returned to the natural habitats.

The Ministry, with the prior opinion of the Institutes for nature conservation and the ministry responsible for agriculture, forestry and water management, shall issue the permit for activities mentioned above. The permit application contains name of the species, reasons, purpose and aim of the use, i.e. performance of activities, elaborate/study on manner, place, time, useful or harmful consequences and other proofs and relevant facts of importance for the specific case. The permit is compulsory and final. No complaint against the decision is allowed, but administrative dispute before the competent court of law may be instituted against it. Inspection is responsible for control and supervision.

The types of catching or killing (which transpose Art 8 of Directive), as well as using of certain means for capturing and killing of wild animals that endanger or disturb their populations and/or habitats, affect their welfare, and that can cause their local disappearance are prohibited.

The use of following means are prohibited: traps; adhesives; chemical means like attractants; live animals used as decoys in hunting of birds and game; crossbows, bows, arrows and/or other weapon with strings, that can fling an arrow or other projectile by pulling the string or some other elastic; bird hunting with nets; lethal or stunning electrical devices; luminous devices; mirrors and other dazzling devices; sound transmitters (tape recorders, cassette recorders, audio recorders and players etc.) that emit sound of calling, crying or responding; devices for illuminating targets; sighting devices for night shooting comprising an electronic image magnifier or image converter; explosives; poisons or anaesthetic baits; automatic weapons; aircrafts; motor-driven vehicles in motion used to hunt animals; other devices specified by other law and ratified international agreements.

The above-mentioned can be used exceptionally and restrictively for scientific and research purposes, such as: reintroduction programme, parenting, monitoring of species, relocation of animals, implementation of protection and conservation programs, and other cases in accordance with special law on the basis of the permit issued by the Ministry, with the prior opinion of other competent authorities. No complaint against this decision is allowed, but administrative dispute before the competent court of law may be instituted against it. Permit is final in procedure, but administrative dispute (against it) could be instituted to Administrative Court in Belgrade

At the same time, an inspection system is in place. The competence is divided between:

- inspection for environmental protection (15 – 11 persons at republic level and 4 persons at provincial level) in the sphere of control of protected natural goods (such as protected areas, protected species and mobile protected natural goods) and
- inspection for forestry and hunting (35 persons at republic level and 10 persons at provincial level) responsible for supervising and control of implementation of the laws and bylaws in the sphere of forestry and hunting.

The national legislation in the field of nature conservation and hunting³⁰ provides for measures which ensure that the hunting of species listed in Annex 2 of Directive does not jeopardize the efforts to conserve these species in their distribution.

According to the Regulation on proclamation of protected game species by closed hunt season (Off Gazette No 9/12) the following measures are undertaken:

- monitoring of the game hunting as well as factors of their endangerment,
- monitoring, and reducing the negative consequences of impact on game and its habitats,
- achieving the optimal number of population of these species in accordance with the program for development of hunting area defined by the ministry in charge of hunting, nurseries and nurseries for special purpose,
- reintroduction of these species, that is husbandry in conditions outside the natural habitat,
- monitoring of migratory protected (closed season) game species, their habitats and areas important for the species' development cycle,
- reintroduction in accidental situations,
- biotechnical measures,
- establishment of new sites,
- supporting scientific research and educational activities.

There is an initiative (CSO, Institute for Nature Conservation of Serbia and Provincial Institute for Nature Conservation) for strict protection of *Coturnix coturnix* and *Streptopelia turtur*, two species that are still a game species. Monitoring and use planning in this area have to be improved.

Institutes for Nature Conservation, as professional organizations for nature protection (according to art.48, par.2 of Law on Nature Protection, responsible for taking care of species) are also cooperating with Directorate for Forestry (Sector for hunting) in creation of legislative acts in the sphere of hunting.

Currently, MAEP carries out consultation with the hunting sector in order to consider proposals for changes in protection status (i.e. more stringent measure for protection against hunting) for turtle doves *Streptopelia turtur*, quail *Coturnix coturnix*, grey heron *Ardea cinerea*, great cormorant *Phalacrocorax carbo* and northern goshawk *Accipiter gentilis*. The proposals made by bird protection NGOs, professional institutions, Provincial Secretariat for Nature Protection and Institute for Nature Protection of the Republic of Serbia, as well as recommendations of the EC experts are considered.

The amendments of the Rulebook on proclamation of protected game species protected in closed hunting season are adopted and Rulebook on proclamation and protection of strictly protected and protected wild species of plants, animals and fungi will be amended accordingly.

³⁰Art. 48 of the Law on Nature Protection ("OG ofRS", No.36/09, 88/10 and 91/10), Art. 48-51, 55 of the Law on Game and Hunting ("OG ofRS", No. 18/10), Art. 2 and 6 of the Rulebook on the Proclamation and Protection of Strictly Protected and Protected Wild Species of Plants, Animals and Fungi ("OG ofRS", No. 5/10 and 47/11), the Rulebook on the Proclamation of Protected Game Species in Closed Hunting Season ("OG of RS", No. 9/12 and 97/13))

In terms of implementation, the existing data on migratory birds status that are the subject of hunting and data on number of hunted units, will be analysed in upcoming period in order to provide scientific basis for changes of legislation in the sphere of hunting.

The measures prescribed in the above mentioned Regulation on proclamation of protected game species by closed hunt season (Off Gazette No 9/12) fully observe the provisions of Article 7 of the Directive.

During IPA 2007 Twinning Project *Strengthening Administrative Capacities for Protected Areas in Serbia (NATURA 2000)* following activities have been carried out:

- an assessment in terms of presence of birds listed in Annex 1 and migratory species regularly occurring in the national territory;
- a preliminary list has been composed for Annex 1 (88) and for migratory species (46); a preliminary list of SPAs has been drawn up based on available data, and 43 areas were selected based on IBA areas. These sites fulfill some of criteria for designation as SPA, but due to lack of systematic research and assessment it was not clear if all criteria are fulfilled.

Considering that this was a pilot project, the SPA list has not been completed, so the preliminary list is not official.

There are 42 IBA areas in Serbia approved by the Bird Life International:

- 5 areas were recognized as important for birds at national level, and
- 37 potential SPA areas were selected during IPA twinning 2007.

National Monograph on Important Bird's Areas in Serbia was published in 2009.

The competent authorities responsible for implementation have already undertaken the following measure:

- establishment of protected areas for birds;
- inclusion of IBA areas into ecological network;
- identification of those habitats which are important for conservation, but are not part of a protected area system or ecological network and the implementation of their protection through the mechanism of nature protection conditions
- cooperation with protected areas managers and other users of protected areas for protection of important habitats;
- establishment of feeding points for birds;
- placement of artificial nests for owls and other bird species;
- campaigns against killing and poisoning of birds;
- protection of nests of big predator species;
- protection of Annex 1 bird habitats and migratory species (e.g.: revitalisation of wetland habitats of special importance for birds, encouraging cattle breeding in certain protected areas, hiring of managers for conservation of species and habitats).

Short – term priorities (2015 - 2016):

- finalization of list of SPAs by:
 - applying all criteria for recognition as SPAs to the preliminary list- 2016;
 - identifying new areas that fulfill all require criteria for recognition as SPAs – 2016;

- the first phase of consultation has been finalized regarding the changes in protection status for turtle doves *Streptopelia turtur*, quail *Coturnix coturnix*, grey heron *Ardea cinerea*, great cormorant *Phalacrocorax carbo* and northern goshawk *Accipiter gentilis* – it will continue - 2015;
- Proposals for changes in protection status for some bird species for turtle doves *Streptopelia turtur*, quail and *Coturnix coturnix* (i.e. more stringent measure for protection against hunting) have been considered, amendments to the Rulebook on proclamation of protected game species protected in closed hunting season have been adopted and Rulebook on proclamation and protection of strictly protected and protected wild species of plants, animals and fungi as result of the above-mentioned consultations, will be amended accordingly (the procedure has been started) - 2015;
- finalization of the list for Annex 1 and for migratory species - 2016

The project "Establishment of an ecological network in the Republic of Serbia, the identification and mapping of habitat types in Serbia - the collection and evaluation of existing data, research and establishment of GIS" (2015-2020) is also assisting MAEP in implementing Birds Directive.

The EU Project IPA 2012 – "Capacity Building for the Implementation of 'Acquis' standards in the field of nature protection - Establishment of Natura 2000 sites including the equipment and software for Serbia (2015-2016)" foresees support for MAEP for implementing Birds Directive as well.

The Directive Specific Implementation Plan will be developed within the UNDP project mentioned above. It will include measures with specific deadlines, monitoring plan and it will address financial needs.

Mid- term priorities (2017-2020):

- establishment of measures ensuring that the bird populations are appropriately maintained, within and outside the SPAs – 2017;
- further and systematic implementation of special measures for the conservation of Annex 1 habitat types and the migratory species regularly occurring in our territory – 2017;
- adoption of guidelines for managing preliminary SPAs – 2018;
- establishment of an information system for reporting to the European Commission – 2019.

Foreseen activities will be implemented by MAEP.

CITES Regulations: Regulation 338/97 and its subsequent amendments

Structures for implementation of this Regulation are established at the national level and at the level of the autonomous province.

The competent authorities responsible for implementation of Regulation are:

- MAEP (Group for CITES implementation) – responsible for all tasks of the Management Authority for CITES which involve and are not limited to permit issuance, legislation development, capacity building, reporting, coordination of other bodies with regard to wildlife trade regulation implementation;

- MAEP (Environmental inspection) – responsible for control of legality of possession, breeding and internal trade in specimens of protected species, as well as providing assistance to other enforcement agencies at the border in controlling transboundary wildlife trade when required. At the provincial level, the environmental inspection has only competences for controlling possession, breeding and internal trade.
- Customs Authority – responsible for control of transboundary movement and trade in specimens of protected species at borders;
- Border Police Directorate – responsible for control of people and vehicles;
- Ministry of Interior - responsible for prevention of illegal activities which constitute criminal acts according to the Penal Code, which currently include the following activities: illegal transboundary movement and trade, smuggling, injuring or killing of protected species);
- Institute for Nature Conservation of Serbia and Provincial Institute for Nature Conservation are the two main authorised scientific/expert organisations, carrying out the tasks of the CITES Scientific Authorities. Apart from these two institutions, the Natural History Museum in Belgrade, Faculty of Biology of the Belgrade University and Institute for biological research – IBISS are also consulted.

- The Group for CITES implementation and the Environmental inspection of MEAP, in cooperation with authorised scientific/expert organisations (e.g. Institute for Nature Protection of Serbia, Natural History Museum) provide expertise and logistical support to enforcement authorities at border crossing points.
- The control of internal trade is a considerable challenge for the Republic of Serbia due to large number of entities that should be controlled and disproportional capacity of human resources with few people in competent enforcement services.
- According to the legislation in force, failing to observe national regulations related to CITES and EUTWR is sanctioned as an infringement or commercial offence, while more serious violations are sanctioned as criminal offences.
- During 2014 the IPA project SR/12/IB/EN/01 TWL “*Strengthening the capacities of authorities responsible for CITES and wildlife trade regulations enforcement in Serbia*” has been carried out. The project focused on:
 - strengthening the capacity of competent enforcement authorities; awareness raising regarding CITES and prevention of illegal trade for judiciary, prosecutors and other bodies and institutions relevant for the implementation of CITES.
- The Ministry has established formal cooperation with two zoological gardens for emergency accommodation, care and acceptance of confiscated animals. Currently, there is a lack of capacity, both in terms of infrastructure and human and financial resources, regarding proper accommodation of confiscated or seized live specimens of wild animals.
- The following steps are foreseen to be taken to ensure full implementation:

Short – term priorities (2015 - 2016):

- periodic training for enforcement and other relevant bodies in order to improve efficiency in implementing CITES and national wildlife trade regulations;
- strengthening official cooperation with zoological gardens in Serbia and abroad for ensuring efficient placement and care for seized and confiscated specimens;

- adoption of memoranda of understanding between MAEP and the Ministry of Finance - Customs Administration, and between MAEP and the Ministry of Interior for effective enforcement of relevant legislation;

Mid- term priorities (2017-2020):

- establishment of an annual CITES training programme for all enforcement authorities and other relevant bodies in order to ensure efficient implementation of CITES and relevant national legislation;
- construction of necessary infrastructure for immediate placement of live specimens of wild animals which are seized or confiscated;
- active measures to ensure greater cooperation and involvement of police in investigating and combating wildlife crime;
- establishment of a fully electronic system for issuance and record keeping of permits and certificates.

Foreseen activities will be implemented by MAEP and the competent enforcement authorities.

Zoo Directive: Directive 1999/22/EC

- Structures for implementation of this Regulation are established at the national level and at the level of the autonomous province.

The competent authorities responsible for implementation of Regulation are:

- MAEP – responsible for welfare of live animals kept in captivity and during the transport;
- Environmental inspectorate – responsible for controlling the possession of wild animals in captivity, including keeping conditions;
- Veterinary inspectorate – responsible for controlling the health and welfare of animals.
- Adoption of necessary legislation changes is a precondition to ensure full implementation of the Zoo Directive provisions. Consequently, the amendments to Law on Nature Protection are envisaged in the short term. These amendments refer to licensing of zoological gardens, as well as adequate sanctioning for violation of regulations.
- The following steps are foreseen to be taken to ensure full implementation:

Short – term priorities (2015 - 2016):

- capacity building for competent authorities for controlling zoos;
- control of the conditions of all existing zoos in the country;
- issuance of conditional licenses for existing zoos with specific deadlines for fulfilling them, in cases where zoos do not fully comply with the national standards;

Mid- term priorities (2017-2020):

- regular inspections of zoos;
- closure of zoos that do not comply with the standards prescribed by the national legislation.

Foreseen activities will be implemented by MAEP.

Nagoya Protocol: Regulation 511/2014

The Republic of Serbia signed Nagoya Protocol on 26 September 2011 on the margins of 66th Session of the United Nations General Assembly, and it participates in the work of Inter-Governmental Committee for implementation of the Nagoya Protocol (ICPN). The Protocol is envisaged to be ratified by the end of 2015.

The competent authority responsible for implementation of Regulation is MAEP. Full implementation is envisaged to be completed by end of 2020.

Short – term priorities (2015 - 2016):

Public consultation process and awareness raising of the importance of genetic resources and traditional knowledge associated with genetic resources, and related access and benefit-sharing issues

Mid- term priorities (2017-2020):

Adoption of amendments of the Law on Nature Protection – 2017 setting up the rules for the compliance measures, mandatory under the Nagoya Protocol within the EU; The Republic of Serbia will consider whether it wants to provide legal solutions establishing the national mechanism of access to genetic resources or not. This mechanism is not prescribed through EU ABS Regulation but is included in the Nagoya Protocol. Pursuant to goals contained in the Nagoya Protocol, a clear and transparent legally binding framework is needed, which will determine how the researchers and companies using genetic resources and traditional knowledge related to genetic resources will gain access to these resources. Foreseen activities will be implemented by MAEP.

Leghold traps: Regulation 3254/91 prohibiting the use of leghold traps

- Structures for implementation of this Regulation are established at the national level.
- The competent authorities responsible for implementation of Regulation are:
 - Ministry of Finance (Customs Directorate) - responsible for the control of transboundary movement and trade of goods;
 - Border Police Directorate – responsible for control of people and vehicles;
 - Environmental inspectorate at national and provincial level – responsible for controlling the sustainable use and activities that affect protected species;
 - Forestry and hunting inspectorate – responsible for controlling hunting activities.
 - Ministry of Interior - responsible for prevention of illegal activities which constitute criminal acts according to the Penal Code, which currently include the following activities: illegal transboundary movement and trade, smuggling, injuring or killing of protected species).
- The following steps are foreseen to be taken to ensure full implementation:

Short – term priorities (2015 - 2016):

- Capacity building for the enforcement authorities with regard to leghold traps and control of import of fur and pelts of wild animal species.

Mid- term priorities (2017-2020):

- Enhancement of cooperation of relevant enforcement authorities through trainings and coordination of activities
- Foreseen activities will be implemented by MAEP.

Trade in seal products: Regulation 1007/2009

- Structures for implementation of this Regulation are partially established at the national level.
- The competent authorities responsible for implementation of Regulation are:
 - Ministry of Finance (Customs Directorate) is responsible for the control of transboundary movement and trade of goods;
 - Border Police Directorate – responsible for control of people and vehicles;
 - Environmental inspectorate at national and provincial level
 - Ministry of Interior - responsible for prevention of illegal activities which constitute criminal acts according to the Penal Code, which currently include the following activities: illegal transboundary movement and trade, smuggling, injuring or killing of protected species).

Short – term priorities (2015 - 2016):

Capacity building for the enforcement authorities with regard to import and trade controls for seal products.

Mid- term priorities (2017-2020):

- Enhancement of cooperation of relevant enforcement authorities through trainings and coordination of activities.

Foreseen activities will be implemented by MAEP.

Seal pups and products: Directive 83/129/EEC and its subsequent amendments

- Structures for implementation of this Regulation are partially established at the national level.
- The competent authorities responsible for implementation of this Directive are:
 - Ministry of Finance (Customs Directorate) is responsible for the control of transboundary movement and trade of goods;
 - Border Police Directorate – responsible for control of people and vehicles;
 - Environmental inspectorate at national and provincial level
 - Ministry of Interior - responsible for prevention of illegal activities which constitute criminal acts according to the Penal Code, which currently include the following activities: illegal transboundary movement and trade of protected species, illegal trade,).

Short – term priorities (2015 - 2016):

Capacity building for the enforcement authorities with regard to import and trade controls for seal products.

Mid- term priorities (2017-2020):

- Enhancement of cooperation of relevant enforcement authorities through trainings and coordination of activities
- Foreseen activities will be implemented by MAEP.

FLEGT: Regulation 2173/2005 as amended by Regulation 657/2014 and Commission Regulation 1024/2008**Short – term priorities (2015 - 2016):**

- Include/incorporate all relevant authorities (Ministry of Finance- Sector for Custom, Ministry of Trade, Tourism and Telecommunications-Sector for Market Inspection, Ministry of Economy-Wood Industry Sector, together with Ministry of Agriculture and Environmental Protection - Directorate of Forests) into FLEGT systems requirements. Identification of competent authority for the FLEGT with respectable responsibilities and obligations among mentioned institutions.
- Identification of all relevant authorities with competences in this area;
- Establishment of clear division of responsibilities regarding implementation of this regulation

Mid- term priorities (2017-2020):

- Define and prescribe all penalties foreseen for imposed provisions of the Regulation, that can be comparable to all other related legislation/convention (e.g. CITES) on national and wider levels. Penalties need to include seizure or confiscation of timber shipments and disposal of the confiscated timber need to be done in the national legislation.
- Identification of responsible national institution(s).
- Drawing up specific provisions concerning physical checks on FLEGT licensed shipments and relevant procedures.
- Nomination of expert who will assist in the identification of tree species
- Establishment of adequate cooperation between the inspection authority and customs.

Timber Regulation: Regulation 995/2010 (EUTR)**Short – term priorities (2015 - 2016):**

Identified all relevant authorities important for implementation of EUTR with shared responsibilities and obligations among institutions.

- Identification of all relevant authorities with competences in this area;
- Establishment of clear division of responsibilities regarding implementation of this regulation
- Identification of all relevant authorities with competences in this area;
- Establishment of clear division of responsibilities regarding implementation of this regulation

Mid- term priorities (2017-2020):

- Introduction of *due diligence* system in timber industry, between operators and wood traders, where necessary;
- Establishment of an inspection system for operators;
- Harmonize the existing penalties in sector legislation with the one provided for by the Regulation;
- Introduction of new penalties according to art.19 of Regulation;
- Setting up procedures, if necessary, for marking trees and transporting wood;
- Establishing a monitoring system.

NATURE PROTECTIONAIR SECTOR	PRE-ACCESSION PERIOD						TRANSITION PERIOD	
	2015	2016	2017	2018	2019	2020	2021	2022
Habitats Directive: Directive 92/43/EEC as amended by Dir.97/62/EC, 2006/105/EC and Regulation (EC) 1882/2003								
Birds Directive: Directive 2009/147/EC (In place since 2010)								
CITES Regulations: Regulation 338/97 and its subsequent amendments								
Zoo Directive: Directive 1999/22/EC								
Nagoya Protocol: Regulation 511/2014								
Leghold traps: Regulation 3254/91 prohibiting the use of leghold traps								
Trade in seal products: Regulation 1007/2009								

Seal pups and products: Directive 83/129/EEC and its subsequent amendments								
FLEGT: Regulation 2173/2005 as amended by Regulation 657/2014 and Commission Regulation 1024/2008								
Timber Regulation: Regulation 995/2010								

4. List of directives which are considered as the most (demanding) problematic for implementation

- Regulation 2173/2005 (FLEGT), and Regulation 995/2010 (Timber Regulation), because of identification of different sectors, with taking over defined activities and responsibilities.
- In accordance with the requests of Habitat and Bird Directives, establishment of NATURA 2000 is planned to be completed until 2020.
- The process of implementation of these two Directives related to the establishment of NATURA 2000 and other relevant provisions requires very active inter - institutional cooperation as well as the cooperation with regional and local level. Also, SEA and EIA procedures on appropriate assessments requires the cooperation with investors, owners and land users as main target groups for management of potential Natura 2000 sites. It is necessary to cooperate and agree with above mentioned stakeholders on each relevant issue related to the management of potential Natura 2000 sites, and find common solution in best interest of all stakeholders.
- **UTWR (Council Regulation (EC) No 338/97 CITES, Commission Regulation (EC) No 865/2006, Commission Implementing Regulation (EU) No 792/2012), as well as Council Directive 1999/22/EC ZOO** will be a great challenge for implementation because of inadequate administrative, human and infrastructural capacities for full and consistent application of provisions contained in the above listed regulations. In order to ensure efficient implementation of the above listed regulations, it is necessary to increase number of qualified staff as soon as possible to do the work of the CITES managing authority because of various obligations and large number of entities subject to regulation of transboundary trade, possessing and internal trade in specimens of protected species, parts and derivatives thereof. Current capacities of the inspection services are not adequate for the efficient enforcement, especially the one related to the control within the Republic of Serbia, and it is necessary to take the enforcement model from the EU countries, such as Italy, Portugal or Spain, where a part of enforcement is carried out by a special environmental service within the Ministry of Interior, which has significantly more operational staff.

In order to ensure basic application of EUWTR and ZOO Directive, it is necessary to provide proper infrastructure for urgent rescuing of live specimens that have been confiscated or seized as a result of sanctions imposed for violation of national regulations, EUWTR and CITES Convention. Competent institutions quite commonly find themselves in serious trouble when they have to act pursuant to law, or to fulfill obligations from international agreement (CITES) and seize, consequently take care of seized specimens of protected wild species, but they have no appropriate space, means and human resources to take care of the given specimens upon the seizure or confiscation.

7. Implementation deadlines for all directives in sector

	EU regulation	Deadlines for full implementation
1	Habitats Directive: Directive 92/43/EEC as amended by Dir.97/62/EC, 2006/105/EC and Regulation (EC) 1882/2003	2020
2	Birds Directive: Directive 2009/147/EC (In place since 2010)	2020
3	CITES Regulations: Regulation 338/97 and its subsequent amendments	2020
4	Zoo Directive: Directive 1999/22/EC	2018
5	Nagoya Protocol: Regulation 511/2014	2020
6	Leghold traps: Regulation 3254/91 prohibiting the use of leghold traps	2018
7	Trade in seal products: Regulation 1007/2009	2018
8	Seal pups and products: Directive 83/129/EEC and its subsequent amendments	2018
9	FLEGT: Regulation 2173/2005 as amended by Regulation 657/2014 and Commission Regulation 1024/2008	2020
10	Timber Regulation: Regulation 995/2010	2020

8. Costs/ financing estimations

Sub-Chapter 5.5 of the NEAS, Nature Protection, contains a chart with overall approximation costs with NPV of 5%, and it has been estimated that NPV (net present value) of approximation costs related to nature protection amounts to 139 million euro, which is 1.3% of total costs (in the area of environmental protection).

One of the mid-term priorities related to financing of nature protection is construction of necessary infrastructure for accommodation of live specimens of animals which are confiscated or seized in the procedure prescribed by international treaty (CITES Convention), EU regulations (EU WTR)

and national legislation. These could be facilities that are part of the existing zoos which have a possibility to construct new rescue facilities, or these newly built rescue centres. The estimated amount ranges between 500.000 and 2.000.000 Euro.

Estimated costs for care (care, cure, analysis, transport, return to the wild, etc.) for live wild animals which are confiscated or seized, amount to 150.000 Euro annually.

Other costs related to nature protection include:

- establishing of necessary institutional infrastructure at all levels,
- provision of enough professionally trained employees,
- costs for establishing and maintenance of Natura 2000 network, including projects focused on recovery, management plans, compensation to land owners, purchase of sites, equipment for management and maintenance of areas, etc. These costs are estimated as unit costs per hectare (66 Euro/ha).

Section 6

INDUSTRIAL POLLUTION

1. Strategic framework

Implementation of requirements in the sub-sector is guided by following approved strategic documents:

- National Programme for the Adoption of the European Union *Acquis Communautaire* (July 2014);
- National Environmental Approximation Strategy of the Republic of Serbia (October 2011);
- Approximation Strategies for Industrial Pollution and Noise Sector (April 2012);
- National Waste Management Strategy for the period 2010-2019 (2010, Proposal of amendments to the Strategy)
- Approximation Strategy for Waste Sector;
- Approximation strategies for air quality and climate change (April 2012);
- National Strategy of Protection and Rescuing in Emergencies (2011);
- Strategy of Protection against Fire for the period 2012 – 2017 (2012);
- Sector Strategy for Chemical and GMO.

Planned strategic documents:

- Energy Development Strategy till 2025 with projections till 2030.

2. Transposition

1. *Industrial Emissions Directive 2010/75/EU – IED*

Legal Gap analysis of existing Serbian legislation in comparison with IED requirements was done by the Ministry with the support of the ongoing IPA 2011 Project – "Law enforcement in the field of industrial pollution control, prevention of chemical accidents and establishment of the EMAS system in Serbia" in 2014.

Chapter II (IPPC)

Transposition status

The IED (2010/75/EU) is not fully transposed yet. Some parts of this directive are transposed through transposition of the IPPC Directive 1996/61/EC through the Law on integrated pollution prevention and control (2004, further IPPC Law) and by-laws, which follow this law. The IPPC Law transposes the 1996/61/EC IPPC Directive including definitions, obligation to hold a permit, granting of a permit, permit application procedure, permit conditions, changes by operators to installations, access to information and public participation in the permit procedure and other issues stipulated in the Directive related to the Annex I activities.

Full transposition of the 2010/75/EU (IED) in the Republic of Serbia for the IPPC part will be achieved by 2018 through:

Transposition Plan

Mid-term (2017-2020)

-Amending the IPPC Law in order to fulfill the requirements from IED-IPPC part (2018)

Chapter III (LCP)

Transposition status

There is a legislative framework established for topic covered by the Chapter III of IED, based on advanced transposition of previous directive LCP (2001/80/EC).

Serbian Regulation on emission limit values of pollutants into the air (“Official Gazette of RS”, No. 71/10 and 6/11-corr.) partially transposes provisions of LCP directive(2001/80/EC).

Results of legal gap analysis show that some definitions are completely transposed. Some provisions have to be improved, mostly in relation to other definitions, aggregation rules, emission limit values, flexibility provisions (desulphurisation rate, transitional national plan, limited life time derogation, small isolated system, district heating plants), geological storage of carbon dioxide and technical provisions set out in Annex V. Also, wording of some national provisions should be strengthened to reflect the scope of the Directive’s provisions and some of the transposed provisions need to be corrected.

EU membership is a key strategic orientation for Republic of Serbia. The Republic of Serbia is also obliged to fulfill obligations under the signed and ratified international agreements.

Transposition plan provides for two-step transposition of Chapter III of IED into national legislation, as follows:

- LCP directive and Decision on implementation of LCP directive will be transposed into national legislation in 2015 through new Regulation on emission limit values of pollutants into the air from combustion plants;
- Chapter III of IED and any relevant Decision on implementation of IED will be transposed into national legislation by July of 2017 through amendments of the Regulation on emission limit values of pollutants into the air from combustion plants.
- For the Chapter III, two Decisions of the Ministerial Council of the European Energy Community: Decision D/2013/05/MC-EnC on the implementation of LCP directive and Decision D/2013/06/MC-EnC on the implementation of Chapter III, Annex V and Article 72(3)-(4) of Directive on industrial emissions are taken into consideration.

Short-term priorities (2015-2016):

- Adoption of the Regulation on emission limit values of pollutants into the air from combustion plants by the end of 2015;

Mid-term priorities (2017-2020):

- Adoption of the amendments of the Regulation on emission limit values of air pollutants from combustion plants which will fully transpose the provisions of Chapter III of the IED is planned for 2017;
- Transposition of remaining provisions including in respect to provisions on public access to information planned for 2018.

Chapter IV– (Waste (co-) incineration)

Transposition status

Chapter IV of Directive on industrial emissions (IED) related to Special provision for waste (co-) incineration plants in Republic of Serbia are almost completely in compliance with the legal framework and respective requirements of European Union.

Legislative framework that transposes these provisions and provides basis for implementation of IED is defined in Law on Waste Management (“Official Gazette of RS” No. 36/09 and 88/10) and

within Governmental Order on types of waste subject to thermal treatment, conditions and criteria for determination of location, technical and technological conditions for projecting, construction, equipping and work of the thermal waste treatment plants and handling of combustion residues (“Official Gazette of RS”, No. 102/10 and 50/12-corr.) - hereinafter referred to as by-law on the thermal treatment of waste.

Results of Legal gap analysis of the existing national legislation with specific provisions for waste (co-) incineration plants show the main requirements that have not yet been fully transposed, are measures related to the thermal treatment (Art. 4.2. points (a)-(c)) which is guarantee:

- to that plant is designed, equipped & operated account the categories of waste to be incinerated or co-incinerated
- generated heat during incineration & co-incineration process is recovered as far as practicable, e.g., through combined heat & power, generating of process steam or district heating)
- residues disposal which cannot be prevented, reduced or recycled.

In order to achieve full compliance in the case of (co-) incineration of waste only minor changes of legislation in force is necessary. These amendments will include: definition of biomass (Art. 3.31.), definition of waste (Art. 3.37.), definition of hazardous waste (Art. 3.38.), definition of mixed municipal waste (Art. 3.39.), scope of the rules (Art. 42.1. and Art. 42.2.), emission limit values (Art. 46.2.), definition of sampling points (Art. 48.3.), substantial change (Art. 54.) and Technical provision set out in Annex VI of IED especially regarding Part 4 on determination of air emission limit values for the co-incineration plants and Part 6 on monitoring of emissions.

Short Term priorities (2015-2016)

The remaining of measures related to the thermal treatment (Art. 4.2. points (a)-(c)) will be transposed with ongoing amendments to the Waste Management Law, anticipated adopted at latest by 2016.

Mid term priorities (2017-2020)

However full transposition will only be achieved in 2018, as some parts of Directive will be transposed by secondary legislation (regarding minor changes on definition, emission limit values, substantial change and Technical provision set out in Annex VI), as well as by amendments of the Waste Management Law and by-law on the thermal treatment of waste.

The exact mechanism for full transposition will be determined as part of the revision of the National Waste Management Strategy Waste Management Strategy for the period 2010-2019 with a program for approaching the EU (2010) which are in the process of being prepared.

Chapter V (VOC)

Transposition status

Chapter V of IED on installations and activities using organic solvents has not been transposed into the national legislation. National Regulation on the list of industrial installations and activities controlling emission of volatile organic compounds, emission values of volatile organic compounds during the certain consumption of solvents and total allowed emission, and emission reduction scheme (“Official Gazette of RS” No. 100/2011)) (further as abbreviation: VOC Regulation) transposes provisions of the Directive 1999/13/EC on VOC installations.

Results of Legal gap analysis of the existing national legislation with specific provisions on installations using organic solvents of the Industrial Emissions Directive 2010/75/EU, show that almost all definitions are completely transposed and that some provisions have to be improved, mostly in relation to monitoring requirements, substantial change to existing installation and public

access to information. Also, wording of some national provisions should be strengthened to reflect the scope of the Directive's provisions and some of the transposed provisions need to be corrected.

According to **transposition plan** December 2016 is defined as timeframe for transposition of Chapter V of IED through the Amendments to the VOC Regulation.

Short-term priorities (2015-2016):

- Amendments to the VOC Regulation transposing most of remaining provisions planned for the end of 2016.

Mid-term priorities (2017-2020) :

- Transposition of remaining provisions including in respect to provisions on public access to information planned for 2018.

Chapter VI (TiO₂)

Transposition status

Titanium-dioxide is not produced in the Republic of Serbia and there are no facilities for producing titanium dioxide. Legal assessment indicated some gaps in relation to transposition of articles 67 – 70. Amendments to the Regulations on the procedure for the management of waste from Titanium dioxide measures of surveillance and environmental monitoring will be completed after the adoption of the amendments to the Law on Waste Management.

Transposition plan

Short-term priorities (2015-2016):

- Amendments to the Law on Waste management including requirements on:
 - prohibition of the disposal into any water body of titanium dioxide waste, either as solid waste, as liquors arising from the filtration phase, waste from installations applying the chloride process, filtration salts, sludge and liquid waste arising from the treatment of waste containing titanium dioxide, where the content is exceeding the limits set out in Article 67;
 - ensuring that emissions from installations into water or into air do not exceed the emission limit values set out in Part 1 of Annex VIII and Part 2 of Annex VIII, but also ensure that emissions of acid droplets into ambient air from installations are prevented;
 - Ensure compliance with Article 70 on monitoring of emissions.
- Amendments to the Ordinance on management of waste from titanium-dioxide, surveillance and monitoring of environment on the site (Official Gazette of RS No. 1/2012) following the adoption of the amendments to the Law on Waste management planned for December 2016.

Mid-term priorities (2017-2020):

- Amendments to the Regulation on emission limit values of pollutants in the air (Official Gazette of RS No. 71/2010 and 6/2011) (provided that the provisions on prevention and control of emissions into air laid down in Article 69 and Part 2 of Annex VIII will be regulated in the air protection legislation)planned for July 2017.

3. SEVESO III

Transposition status

Transposition of Seveso III Directive (Council Directive 2012/18/EU of 4 July 2012 on the control of major-accident hazards involving dangerous substances amending and subsequently repealing Council Directive 96/82/EC) into the legislation of the Republic of Serbia is in its initial phase.

Full transposition of Seveso III Directive will be achieved by 2018.

Transposition plan includes:

Short-term priorities (2015-2016):

- Drafting of the Law on the control of major-accident hazards involving dangerous substances;
- Development of Rulebooks transposing relevant annexes.

Mid-term priorities (2017-2020):

- Amending the Law on Emergencies;
- Amending the Law on Planning and Construction.

Directive 2004/42, Voc Paint Directive

Transposition status

The Law on Chemicals (“Official Gazette of Republic of Serbia”, number 36/09, 88/10, 92/11, 93/12 and 25/15) and Rulebook on Bans and Restrictions of Production, Placing on the Market and Use of Chemicals (“Official Gazette of the RS“ number 90/13 and 25/15) establish a legal base for transposition of Directive 2004/42/CE and 2010/79/EU. Provisions prescribed by this Directive are transposed in the Law on Chemicals and Rulebook on Bans and Restrictions of Production, Placing on the Market and Use of Chemicals, except the provisions which prescribed only for EU member states (e.g. reporting to the Commission).

Transposition plan

The remaining provisions will be transposed in Amendments of Rulebook on Bans and Restrictions of Production, Placing on the Market and Use of Chemicals which will be adopted by 2018.

4. Regulation (EC) No 1221/2009 on the voluntary participation by organizations in a Environmental eco-management and audit scheme (EMAS)

Alignment Plan

It is planned, that the national legislation will be aligned with provisions of Regulation (EC) No 1221/2009 on the voluntary participation by organizations in a Environmental eco-management and audit scheme (EMAS) by the end of 2015.

Short-term priorities (2015-2016):

- Amendments to the Law of Environmental protection as bases for EMAS GLOBAL and EMAS THIRD COUNTRY REGISTRATION finalized and waiting for adoption;
- EMAS Rulebook that sets the rule for Ministry to issue a legal compliance confirmation in the process of EMAS GLOBAL and EMAS THIRD COUNTRY REGISTRATION finalized and waiting for adoption of amendments of the Law of Environmental protection;
- EMAS User guide as a guiding document for organizations who wish to be EMAS registered finalized and waiting for adoption of Amendments of the Law of Environmental protection.

5. Regulation (EC) No 66/2010 of the European Parliament and of the Council of 25 November 2009 on the EU Ecolabel

Alignment Status

National Ecolabel system in place based on Regulation (EC) No 1980/2000.

It is planned that the national legislation will be aligned with the provisions of the Regulation (EC) No 66/2010 by the end of 2015.

Alignment Plan

Short-term priorities (2015-2016):

- New „Rulebook on detailed conditions and procedure for obtaining rights to use the ecological label, elements, design and the manners of use of ecological label for products and services”, based on Regulation (EC) No 66/2010 of 25 November 2009 on the EU Ecolabel in the process of drafting and will be finalized by the end of July 2015;
- List of 26 Criteria as an annex of “Rulebook on detailed conditions and procedure for obtaining rights to use the ecological label, elements, design and the manners of use of ecological label for products and services”, based on criteria for eco-labelling and marking product groups in “EU FLOWER” in the process of drafting and will be finalized by the end of July 2015. (26 criteria that as an annex will be the amended part of “Rulebook on detailed conditions and procedure for obtaining rights to use the ecological label, elements, design and the manners of use of ecological label for products and services” are translated and administratively and legally redacted within IPA 2011³¹. At the time the ToP for this project was written, there were only 26 product groups).

Mid-term priorities (2017-2020):

- List of 35 criteria for current existing product groups, as well as new product groups to be adopted until then (according to the list of EU criteria).
- Systematic monitoring and inclusion criteria as an annex of National Ecolabel Rulebook, as well as withdrawal of forfeited criteria and revisions according to the list of EU criteria, and monitoring of all amendments to Regulation (EC) 66/2010.

6. Regulation (EC) No 1102/2008 on the banning of exports of metallic mercury and certain mercury compounds and mixtures and the safe storage of metallic mercury (Metallic Mercury Regulation)

Alignment Status

National legislation in part which relates to ban of export of mercury is almost aligned with Regulation (EC) No 1102/2008, except Article 1, point 3 of the Regulation and provisions prescribed only for EU member states (e.g. reporting to the Commission). This legislation has been in force since 2010. Full alignment in this part is foreseen for the end of 2015.

National legislation in part which relates to safe storage is in initial phase. Complete harmonization in part which relates to safe storage is expected to be until the end 2018.

³¹ Law Enforcement in the Field of Industrial Pollution Control, Prevention of Chemical Accidents and Establishing the EMAS system

Alignment Plan

Short-term priorities (2015-2016):

- Amendment to the Rulebook on Import and Export of Certain Hazardous Chemicals (“Official Gazette of the RS” No. 89/10, 15/13 and 114/14) is foreseen for the 4th quarter of 2015. This amendment is for the purpose of harmonization with Article 1, point 3 of the Regulation.

Amendments to the Regulation are continuously followed and implemented.

Short-term priorities (2015-2016):

- Amendment to the Rulebook on Import and Export of Certain Hazardous Chemicals (“Official Gazette of the RS” No. 89/10, 15/13 and 114/14) for the 4th quarter of 2015. This amendment is for the purpose of harmonization with Article 1, point 3 of the Regulation.

Amendments to the Regulation are continuously followed and implemented.

7. Council Directive 1987/217/EEC of 19 March 1987 on the prevention and reduction of environmental pollution by asbestos (OJ L 85, 28.3.1987, p. 40)

Transposition Status

Directive 1987/217/EEC has been largely transposed through the Law of Waste Management (OG No. 36/09 and 88/10) and related secondary legislation, chemicals legislation, legislation related to save and legislation on information system and reporting

Article 3.1.8(2) of the Rulebook (OG No. 75/10) stipulates only manufacturing but not industrial finishing which will be corrected by amending the Rulebook.

Directive 87/217 (Art. 2(4)) stipulates *activities other than the use of asbestos*. The use of asbestos is defined in Art. 2(3) of the Directive 87/217/EEC.

Article 3.1(4) of the Rulebook, by which working with products containing asbestos is defined, will be changed in a way that the Article 3.1(4) shall refer to item 8 of Article 3.1 instead of referring to item 3 by which surface hardening is defined and not use of the asbestos. This way incorrect reference will be corrected and full alignment with the provisions 2(3) and 2(4) of the Directive will be achieved.

Definition of waste defined in Law on Waste Management (OG No. 36/09 and 88/10) is not in line with the definition of waste from the Directive 2008/98/EC. Through amendments of Law on Waste Management definition from Waste Framework Directive will be transposed. Art. 3(2) of the Rulebook (OG No. 75/10) will transpose the definition of waste set by Article 3(1) of the Waste Framework Directive by referring to amended of Law on Waste Management.

The Law on Chemicals, (“Official Gazette of Republic of Serbia”, number 36/09, 88/10, 92/11, 93/12 and 25/15) and Rulebook on Bans and Restrictions of Production, Placing on the Market and Use of Chemicals, Annex 1 Part 1 Item 6(1) (“Official Gazette of the RS“ number 90/13 and 25/15) establish a legal base for harmonization with provisions of Annex XVII, entry 6. regarding asbestos fibers and of products containing these fibers (Regulation (EC) 552/2009 and Regulation (EC) 126/2013).

Transposition Plan

Short-term priorities (2015-2016):

-Law on Amendments on Law on Waste Management

Mid-term priorities (2017-2020):

- Revision of Rulebook on Management of waste containing asbestos
- Government order on the landfill of waste ("Official Herald of RS", No.92/2010) Art. 13.part7 Annex 2 item 1.2(3) (reviewed).

IPC SECTOR EU LEGISLATION	Transposition deadline					
	2015	2016	2017	2018	2019	2020
IED Directive 2010/75						
Chapter II						
Chapter III						
Chapter IV						
Chapter V						
Chapter VI						
Council Directive 2012/18/EU of 4 July 2012 on the control of major-accident hazards involving dangerous substances amending and subsequently repealing Council Directive 96/82/EC						
2004/42/CE VOC PAINTS						
Regulation (EC) No 66/2010						
Regulation (EC) No 1221/2009						
Directive on Asbestos						

3. Implementation Activities and Institutional Responsibilities***1. Industrial Emissions Directive 2010/75/EU - IED******Chapter II (IPPC)***

Based on current plans, and new Law on amendments to the IPPC law, the Republic of Serbia will be issuing integrated permits for the operators subject to integrated permitting by 31 December 2020. The condition needed to meet this deadline implies staffing at all levels for those services dealing with issuance of integrated permits. At this moment, the challenge is lack of capacities for

issuance of integrated permits at local level. There are local self-government units which forward their applications to the Ministry for further processing based on entrusted activities.

As a part of IPA 2011,³² Directive Specific Implementation Plans (DSIP) will be developed during 2015, including a part related to IPPC. These activities will be carried out according to the proposed methodology within the mentioned project. The plans pertaining to IPPC will be drafted according to industrial sectors. Preparatory activities related to these plans have started through collection of data needed for development of the plans. Methodology stipulates collection of data from operators related to: status analysis, description of EU requirements, gap analysis, measures to overcome shortcomings, cost assessment related to implementation of measures, time schedule, information about the production and data about export to the EU market, monitoring, transboundary impact of the establishment operation, etc. It has been planned to finalise draft plans by September 2015. Development of these plans will define deadlines for full implementation of the EU Directive 2010/75/EU for the area of integrated pollution prevention and control.

Requirements of the directive will be achieved by number of measures including:

Short-term priorities (2015-2016):

- Drafting of Directive Specific Implementation Plans for industrial emissions

Mid-term priorities (2017-2020):

- Continuation of issuance of integrated permits;

Long-term priorities (2020- and beyond):

- Adjustment of operation in installations requiring transitional periods

Competences for issuance of integrated permits is divided between the Ministry of Agriculture and Environmental Protection, Provincial Secretariat for Urban Development, Construction and Environmental Protection and local self-government units, all in compliance with provisions of the Law on Planning and Construction which defines who issues construction permit for the development of the subject installation.

Inspectorates at all levels are responsible for the control and inspection of IPPC installations, and Environmental Protection Agency collects data for the National Register of Polluters and issues environmental performance reports.

Competences for issuance of water permits, that have to be submitted with the application for integrated permit, are divided between the Republic Water Directorate, which is a part of the Ministry, Provincial Secretariat for Agriculture, Water management and Forestry and Secretariat for the Economy – Sector for Water Management of the City of Belgrade.

Chapter III (LCP)

Development of the Directive Specific Implementation Plan (DSIP) for Chapter III of IED will be developed by Ministry of Agriculture and Environmental Protection by the end of 2015, with assistance of the above mentioned IPA 2011 Project.

Regulation on emission limit values of pollutants into the air from combustion plants, inter alia, will provide legal basis for the development of the National Plan for the Reduction of Emissions from the Existing Combustion Plants (National Emission Reduction Plan – NERP) and application of “opt-out” mechanism.

³²“Law Enforcement in the Field of Industrial Pollution Control, Prevention of Chemical Accidents and Establishing of EMAS in the Republic of Serbia”,

Republic of Serbia is currently in the process of implementation of the LCP directive. For this directive, flexibility provisions will be implemented to achieve compliance, such as NERP, and „opt-out”, in accordance with Decision D/2013/05/MC-EnC on the implementation of LCP directive.

According to obligations resulting from the Energy Community Treaty, deadline for the submission of NERP to the Energy Community Secretariat is the end of 2015. The deadline for the submission of the list of LCPs envisaged for “opt-out” mechanism is the end of 2015.

Based on the decision of the Ministerial Council of the Energy Community from October 2013, the parties are obligated to transpose provisions of Chapter III of the Industrial Emissions Directive by 2018, which is at the same time the deadline for implementation of Chapter III of the Industrial Emissions Directive for the new LCPs.

Although the provisions of the Energy Community Treaty pertain only to “network energy”, the plan of the Republic of Serbia is to prescribe the obligation to apply Chapter III of the Industrial Emissions Directive for all large combustion plants in compliance with relevant definitions contained therein.

Based on the decision of the Ministerial Council of the Energy Community from October 2013, and on the grounds of the proposal made by the European Commission, the Ministerial Council will adopt the decision that will determine deadlines for implementation of IED Chapter III for the existing plants by the end of 2015.

Energy sector, in terms of definition of large combustion plants, comprises thermal power plants, district heating plants and combustion plants within the Oil Industry of Serbia. Out of a total of 46 existing large combustion plants³³ (cut-off date for existing/new LCPs according to the Ministerial Council Decision is 1 July 1992), the energy sector includes 96% or 44 to 46 of them. The remaining large combustion plants belong to the industry.

The greatest number of large combustion plants in energy sector belongs to thermal power plants within the Public Enterprise Electric Power Industry of Serbia.

The sector planning document developed for the energy sector for the period 2015-2017 envisages that three denitrification projects will be funded through IPA 2016 and IPA 2017, with PE EPS as end user. There are two ongoing desulfurization projects financed from bilateral assistance as well as a project concerning the reduction of particle emissions, financed from IPA 2012, also on TPP blocks of PE EPS.

The Energy Community document “Study on Modernisation of LCPs” contains financial estimations for the achievement of compliance of LCPs within the PE EPS with the provisions of the EU Directive 2001/80/EC IED – approximately 640 million Euros, and with the provisions contained in **Chapter III of the Industrial Emissions Directive 2010/75/EU – approximately 710 million Euros.**

Serbia is aware that the EU accession process is separate from the obligations from the Energy Community (EnC) Treaty, nevertheless the Ministerial Decisions under the EnC Treaty introduced the obligations of the transposition and implementation of the Chapter III of Industrial Emission Directive bearing in mind the fact that through the ratification of the EnC Treaty by the Serbian Parliament in 2006, the Treaty and the subsequent Ministerial Decisions became the part of the

³³There are current activities aimed at determination of final number of all large combustion plants in the Republic of Serbia (existing and new large combustion plants)

Serbian national legislation. Deadlines for the implementation of the Chapter III of the IED as defined by the Ministerial Decisions were defined for all contracting parties respecting their national circumstances. Final goal of the Ministerial Decisions is to reach the emission limit levels for LCP sector as defined by the Chapter III of IED.

More details about financial means needed for compliance of the Republic of Serbia with IED, investment plans and possible sources of financing, will be known when strategic documents of PE EPS are prepared, and Directive Specific Implementation Plan³⁴ (DSIP) which completion is planned by the end of 2015.

Finalization of DSIPs will also provide more concrete data, based on which Serbia will formulate its position for the IED implementation deadlines on plant-by-plant bases.

Bearing in mind that the Industrial Emissions Directive allows Member States the use of certain flexible mechanisms (Transitional Action Plan, limited working time of LCT, etc.), to form the final attitude of the Republic of Serbia on implementing deadlines for each plant individually, it is necessary to know the attitude of the EC towards the Republic of Serbia will be able to use these mechanisms, taking into account the time limits do not apply to the Republic of Serbia, in accordance with the provisions of the directive, concerning the fact that the potential date of accession to the EU is 2021 (e.g. TNP is used during the period from 2016-2020 and the limited life time derogation from 2016 to 2023).

Ministry of Agriculture and Environmental Protection is competent for transposition and implementation of legislation in the field of industrial pollution, while Ministry of Mining and Energy is responsible for the activities under the Energy Community Treaty that relates among other to the implementation of LCP and part of IED provisions.

Inspectorates at all levels (state, provincial and local level) are responsible for the control and supervision of LCP plants. Environmental Protection Agency is responsible for the inventory of emissions, environmental information system and reporting.

The ministry responsible for energy-related matters in the Republic of Serbia has already established a Working Group for environmental protection and climate change within the energy sector (since 2013 to the present day). Members of the WG are representatives of the ministry responsible for environmental protection, ministry responsible for energy, Environmental Protection Agency and relevant operators of LCPs (electricity generation, heating plants, oil industry). The activities of the Working Group include the analysis of impact of both national and EU regulations in the area of environmental protection and climate change to operation of energy sector. In addition, activities of the Working Group are focused on preparation of these regulations and implementation thereof.

Implementation dates will be the subject of EU accession negotiations.

Chapter IV– (Waste (co-) incineration)

Implementation of the Chapter IV of IED is in initial stage of implementation.

Operating permitting system for Chapter IV of Directive on industrial emissions (IED) related to Special provision for waste (co-) incineration plants in Republic of Serbia are established on 2010. From 2010 until May 2015, the competent authorities MAEP and APV, with the aim of utilization of the thermal energy released six licenses:

³⁴Drafting of DSIP for IED is planned as continuation of activities within IPA 2011 “Law Enforcement in the Field of Industrial Pollution Control (IPPC), Prevention of Chemical Accidents (Seveso) and establishing of EMAS System in the Republic of Serbia”

In order to obtain cement clinker, issued a total of four licenses for the storage and the thermal treatment of waste, theco-incineration of waste tires, waste oils and SRF– Solid Recovered Fuel / RDF– Refuse Derived Fuel to the cement factory Lafarge Serbia from Beocina and co-incineration of waste-tires and SRF– Solid Recovered Fuel / RDF– Refuse Derived Fuel to the cement factory Holcim Serbia from Popovac.

Also, the authorities have issued two permits for the thermal treatment of waste to the incineration of waste edible oil sand fats to the Agro-industrial conglomerate "BackaTopola" ad BackaTopola and incineration of waste wood-waste chipboard, Billets waste from chipboard and unusable wooden pallets companies for production and marketing network "Forma Ideale" Ltd. Kragujevac.

Inspection supervision has been established on the basis of provisions under Chapter XII SUPERVISION (Art. 83-86), to be carried out by inspectors who protect the environment within the scope determined by law. In accordance with the division of power in the Republic of Serbia, reporting is carried out by the Agency for Environmental Protection. It is particularly important to note that since 2009 data have been entered in the register of permits issued by all relevant authorities who keep a national register of issued waste management permits for public access (which is available on the website of the agency, www.sepa.gov.rs).

Further implementation of the directive requirements will be implemented through following actions:

Short-term priorities (2015-2016):

- drafting of Directive Specific Implementation Plans for Waste (co-) incineration plants
- Revision of the National Waste Management Strategy with the Action Plan for implementation which refers to waste incineration and adoption of the National Plan for Specific Waste Streams;
- Determined list of plants for plants (co-) incineration with a nominal capacity not exceeding two tonnes waste per hour
- Conducting a public awareness campaign (regarding re-use of waste as alternative fuel or alternative raw materials);

Mid-term priorities (2017-2020):

- Training of environmental inspection on regional and local level by the end of 2017.
- Encouraging the use of waste as alternative fuel in accordance with waste hierarchy (in cement kilns, steel mills, thermal power and heating plants);
- Development of municipal waste management infrastructure and encouraging the use of municipal waste as alternative fuel for energy recovery (heating and electricity) in most populated cities in Serbia (Belgrade and Novi Sad);
- Forming an efficient economic instruments

Long-term priorities (2020- and beyond):

- Further plans for the improvement of implementation depend on the analysis of situation that are subject to the Regulation, and on identification of compliance scope, which should be determined during the preparation of the Directive Specific Implementation Plan for IED
- Conducting public awareness campaigns
- Determination of locations for the construction of (co-) incineration plants;
- Professional training for staff in order to establish (co-) incineration plants;

Ministry of Agriculture and Environmental Protection is responsible for issuance of permits for waste incineration.

Autonomous Province has been entrusted the issuance of permits for incineration of waste for all activities in its territory and for all establishments that obtained construction permit from the competent authority of the AP.

Local self-government units are involved in the issuance of the mentioned permits by giving opinions to the submitted documentation in the permitting process.

Environmental Protection Agency is responsible for maintenance of register of issued permits.

Professional organisations for waste testing and other legal entities accredited for waste testing (i.e. accredited laboratories).

The Ministry supervises the work of the Agency, Autonomous Province, local self-government units and authorised legal entities. Enforcement activities are carried out by the environmental inspection.

Chapter V (VOC)

Directive 1999/13/EC, or more precisely, Chapter 5 of the Industrial Emissions Directive is at the beginning stage of implementation. Pursuant to Article 4, paragraph 2 of the Industrial Emissions Directive, an alternative option was taken to maintain the register of installations using organic solvents, so permits will not be issued for VOC installations which are not IPPC establishments. The Regulation on the list of industrial installations and activities controlling emission of volatile organic compounds, emission values of volatile organic compounds during the certain consumption of solvents and total allowed emission, and emission reduction scheme ("Official Gazette RS", No 100/11) prescribes a form for data submission for registration purposes, with the obligation of operators to submit these data by June 2013. Only one installation fulfilled this requirement. Due to poor response from operators plans were defined for the improvement of implementation of this Regulation. As a part of IPA 2011 project³⁵, statistical codes were determined for economic activities (NACE) within which organic solvents can be used, which were used to search the Serbian Business Register Agency (SBRA) database. About 50 business codes were identified that can potentially be equivalent to those activities in which control of organic solvents emission is carried out pursuant to the Regulation. A list of 80 volatile organic compounds was made, with 200 articles containing VOCs, together with their tariff codes, based on which a request was sent to Customs Administration and data was obtained about import of certain organic solvents and articles containing organic solvents in 2013. All collected data was used to enable the Environmental Protection Agency to start to send questionnaires to operators in electronic and hard forms. More than 5700 letters (questionnaires) have been sent to companies and entrepreneur registered for 34 identified business activities that consistent with the activities from the Regulation, such as: coating of vehicles, plastic and wooden surfaces, textile and fabric; dry cleaning; footwear manufacture; manufacturing of coating preparations, varnishes, inks and adhesives; manufacturing of pharmaceutical products; printing; rubber conversion; surface cleaning; vegetable oil and animal fat extraction and vegetable oil refining activities; vehicle refinishing; winding wire coating; wood impregnation and wood and plastic lamination. In addition, 264 letters were sent to importers who were treated as potential users of organic solvents and products that contain organic solvents, and they were required to send a list of end users if they are distributors. Submission of responses to the sent questionnaires was expected by the end of April. By 30th April, the Agency has received about 150 filled forms by operators who submitted information on their production process and consumption of solvents. Analysis of responses will enable to establish the list of installations.

³⁵“Law Enforcement in the Field of Industrial Pollution Control, Prevention of Chemical Accidents and Establishing of EMAS in the Republic of Serbia”

Further implementation of the directive requirements will be implemented through following actions:

Short-term priorities (2015-2016):

- Development of a comprehensive list of installations that are subject to the Regulation, as well as collection of relevant technical data about those installations and assessment of compliance with the Directive. This is an ongoing activity and is implemented within the project “Law Enforcement in the Field of Industrial Pollution Control, Prevention of Chemical Accidents and Establishing of EMAS in the Republic of Serbia”;
- Use of collected data as a basis for development of the Directive Specific Implementation Plan for IED;
- Improvement of inspection supervision of operators in order to ensure enforcement of the existing regulation. Training for republic environmental inspectors is planned with the support of PLAC project in the course of 2015.

Mid-term priorities (2017-2020):

- Training of environmental inspection on local level by the end of 2017. Modalities for the extension of trainings to local level are being developed in cooperation with the Standing Conference of Towns and Municipalities.

Long-term priorities (2020- and beyond):

- Further plans for the improvement of implementation depend on the analysis of situation in installations that are subject to the Regulation, and on identification of compliance scope, which should be determined during the preparation of the Directive Specific Implementation Plan for IED.

Ministry of Agriculture and Environmental Protection (MAEP) is competent authority for transposition and implementation. MAEP inspection is competent for the enforcement.

Serbian Environmental Protection Agency is responsible for the inventory of emissions, environmental information system maintaining and reporting.

Provincial Secretariat for Urban Planning, Construction and Environmental Protection – environmental inspection is responsible for the control of installations and enforcement of legislation at the provincial level.

Local self-government – environmental inspection is responsible for the control of installations and enforcement of legislation at the local level.

Chapter VI (TiO₂)

Titanium-dioxide is not produced in the Republic of Serbia,

2. SEVESO III

Seveso II Directive has been implemented in Serbia for certain period of time. So far, there have been 99 establishments identified in the Republic of Serbia, out of which 54 establishments belong to lower tier, and 45 belong to upper tier Seveso establishments. Operators of all lower tier establishments have developed Accident Prevention Policy. Operators of 43 upper tier establishments have submitted Safety Reports and Emergency Plans to the Ministry, one complex has been prohibited for further operation because the operator failed to submit documents and for one establishment the operator has been ordered to prepare and submit the documents in accordance with the law. So far, 41 Safety Reports have been subject to public insight, public presentation and debate, evaluation of 35 Safety Reports and Emergency Plans have been completed, eight approvals have been issued, and competent authority has required amendments for the remaining ones, due to

the lacks in terms of data and has required supplementing of the documents. Pursuant to the Law on Emergencies, External Emergency Plans make integral part of the Plan for the Protection and Rescuing in Emergencies. There are ongoing activities related to the collection of data and drafting of the Plans of the Protection and Rescuing in Emergencies at the level of local self-governments, , as well as activities related to drafting of the National Risk Assessment.

Further implementation of the directive requirements will be implemented through following actions:

Short-term priorities (2015-2016):

- Continuation of the implementation of the legislation from this area,
- Provision of coordinated inclusion of all competent authorities into the transposition, then into the implementation process as well (authorities responsible for environmental protection, emergencies, spatial planning and construction).

Mid-term priorities (2017-2020):

- Revision of identified establishments and updating of the existing registers;
- Revision of the existing or drafting of new documentation pursuant to the Directive and validation thereof;
- Revision or drafting of new external emergency plans;
- Ensuring that goals for the prevention of major accidents and limitation of their consequences for human health and environment must be taken into account in the process of land use planning (verification of MGSII needed);
- Continual raising of knowledge of all stakeholders.

Long-term priorities (2020- and beyond):

- Implementation of the reporting obligation to EC.

Institutional framework:

- The Ministry of Agriculture and Environmental Protection is responsible for the prevention of major chemical accidents and inspection control.
- Within the Ministry of Interior, Sector for Emergencies, there are organisational units at LSG level –departments and services for emergencies.
- Local self-government units are responsible for preparation of external emergency plans at the territories of their jurisdiction, which are an integral part of the Plans of Protection and Rescue in Emergency Situations. Plan of Protection and Rescue in Emergency Situations is prepared by competent authority in LSG in cooperation with the competent service, and the plan is adopted by executive authority of LSG.

3. 2004/42/EC VOC PAINTS

National legislation in part which relates to limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products is harmonized with Directive (EC) No 2004/42, except provisions which require EU membership.

The provisions on the limitations of the maximum concentration of VOC compounds applied in two phases: Phase I - June 1, 2012 and Phase II - December 1, 2013.

Future plans regarding implementation:

- Continuous follow up, harmonization and implementation of the amendments to the Directive (EC) No 2004/42;
- Improving communication with all relevant stakeholders (Chamber of Commerce and Industry of Serbia, producers of paints and varnishes, Institute for standardization of Serbia, Accreditation Body of Serbia);
- Preparation for fulfillment of the obligation prescribed for Member State Competent Authorities by the Directive (EC) No 2004/42;
- Monitoring programme for the purpose of verifying compliance with this Directive will be developed until 2020.
- Development a draft legal act implementing Directive (EC) No 2004/42 is planned until 2020.

Ministry of Agriculture and Environmental Protection is the competent authority for the implementation of this Regulation with Department for Chemical as the central administration and competent inspection authorities.

Implementation of the Directive requires additional funding from the Budget of the Republic of Serbia for needs inspection supervision (administrative costs).

Additional information regarding implementation of the Directive is provided in the annex 3.

4. Regulation (EC) No 1221/2009 on the voluntary participation by organizations in a Community eco-management and audit scheme (EMAS)

Draft amendments of the Law on Environmental Protection (Official Gazette of RS, 135/04, 36/09), which waits to be adopted, has defined legal framework for implementation of the EC Regulations 1221/2009, 1893/2006, 196/2006 and EC Decision 2011/832/EU 2006/193/EC and 2015/801/EU.

“The rulebook on the contents and form of application for issuance of certificate on data for which official records are maintained in the area of environmental protection for the inclusion into the EMAS system, documentation that is submitted with the application, contents and form of the certificate and contents, manner of maintenance and layout of the records” The Rulebook will be developed based on the EC Decision 2011/832/EU. Deadline for alignment of provisions of the Regulation with the national legislation is the end of 2015.

Guidelines for the inclusion of organisations into the EMAS register through mechanisms “EMAS GLOBAL” and “THIRD COUNTRY REGISTRATION” will be developed based on the EC Decision 2013/131/EU. Deadline for transposition of provisions of the Regulation into the national legislation is the end of 2015.

Implementation of these documents will enable organisations from Serbia to become EMAS registered through mechanism “EMAS GLOBAL” and “THIRD COUNTRY REGISTRATION”. In the registration process, the Ministry responsible for environmental protection will be issuing certificates on data for which official records are maintained in the area of environmental protection (issued permits, approvals, consents, findings of the competent environmental inspectorate, etc.), in order to include the organisations that applied into the EMAS system. Deadline for transposition of provisions of the Regulation into the national legislation is the end of 2015.

The certificate, which in this case is published by the Serbian Ministry responsible for the environmental protection to companies operating at the territory of the Republic of Serbia under the laws of the Republic of Serbia, shall be issued only at the request of these companies in order to

help foreign verifier in the verification process. The verifier may decide whether this certificate to take into consideration or some other, independent verification of compliance with legal requirements will be conducted in the area of environmental protection company that has applied. Therefore, it is intended that the Serbian Ministry help in the process of EMAS registration, if deemed appropriate by the verifier, with no intention of trying to interfere or influence on the process of registration.

The Ministry will not carry out additional verification or further recognition of certificates issued by EMAS.

5. Regulation (EC) No 66/2010 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 25 November 2009 on the EU Ecolabel

Framework for the Commission Regulation (EC) no 66/2010 is provided by the Law on Environmental Protection (Official Gazette of RS, 135/04, 36/09).

The environmental labelling system has been established through the National Eco Label, and is conducted based on the Rulebook on closer conditions and procedure for obtainment of right to use eco label, elements, layout and manner of use of ecological label for products, processes and services, which was drafted based on the Regulation 1980/2000, but it also should be harmonised with Regulation 66/2010. On this occasion, the word “processes” shall be exempt of the title of this Rulebook, since it is not the subject to eco-labelling Full application, i.e. issuance of the “EU Flower” will be possible once Serbia becomes the EU member state. Deadline for transposition of provisions of the Regulation (EC) No. 66/2010 into the national legislation is the end of 2015. Implementation starts from the beginning of 2016.

So far, we have 11 products which were granted the right to use National Eco Label:

7 products from the wooden floor covering group that were tested according to the criteria set out in Decision (EC) 2010/18/EC

2 products from the hard coverings group that were tested according to the criteria set out in Decision (EC) 2009/607/EC

1 product from the textile product products group that was tested according to the criteria set out in Decision (EC) 2009/567/EC

1 product from the hard coverings group that was tested according to the criteria set out in Decision (EC) 2009/607/EC

6. Regulation (EC) No 1102/2008 on the banning of exports of metallic mercury and certain mercury compounds and mixtures and the safe storage of metallic mercury (Metallic Mercury Regulation)

The Republic of Serbia has signed the Minamata Convention on 9th October 2014. The Republic of Serbia is committed to ratification and early implementation of the Minamata Convention as soon as possible, and in line with this commitment, the Ministry of Agriculture and Environmental Protection in cooperation with UN agencies started preparation of the Project proposal named “Development of Minamata Convention on Mercury Initial Assessment in the Republic of Serbia”. Planned duration of this project is 2 years and decision regarding date of ratification of the Minamata Convention in the Republic of Serbia will be defined according to the conclusions from the National MIA report after finalization of this project.

Implementation Plan

id-term priorities (2017-2020)

Republic of Serbia will be able to take implementing measures that ensure that the storage of mercury takes effectively place in an environmentally-sound manner after realization of the Project above mentioned, which is planned to be implemented with UNDP in next two years. Project document is in the procedure of approval by GEF and it is expected that this project will start during last quarter of 2015. Detail assessment of the storage conditions of mercury will be developed within this project and it will be included in the National Mercury Profile. On the basis of this assessment, Republic of Serbia will consider and take implementing measures needed for ensure environmentally sound storage of mercury.

Regarding Mercury waste, in the Republic of Serbia, in May 2015 started Twinning project: „Improvement of hazardous waste management in the RS“. Some of the activities, through the project, will be development of Integrated hazardous waste management plan for Republic of Serbia, and recommendations for solving the problem of final disposal of mercury waste, issued by the experts working on the project.

Development a draft legal act implementing Regulation (EU) No 1102/2008 is planned until 2020.

Ministry of Agriculture and Environmental Protection is the competent authority for the implementation of this Regulation (Department for Waste Management for safe storage and Department for Chemical as the central administration responsible for export ban).

Ministry as Competent Authority, Customs Authority, inspection, and industry are involved in implementation of Regulation (EU) No 1102/2008 in part which relates to export ban of metallic mercury. Customs Authority performs export and import control of chemicals and articles which export and import is banned.

Ministry of Agriculture and Environmental Protection, Serbian Environmental Protection Agency (SEPA) and Inspection on Republic and Provincial level are involved in implementation of Regulation (EU) No 1102/2008 in the part for safe storage.

Additional information regarding implementation of the Regulation is provided in the annex 1.

- Republic inspectors registered all locations in the Republic of Serbia, where there is waste containing mercury and its compounds. Submitted data are only for the location "Petrohemija" from Pan evo, which has waste contaminated with mercury, and it is stored in several locations within their production area.
- Further activities regarding administrative capacities :
- Competence building of the Competent Authority – important step is participation in the meetings (Regional meetings, workshops for ratification of Minamata convention etc.) and building support through different projects;
- Improving communication with all relevant stakeholders (Customs Authority, inspection, industry...);

7. Council Directive 1987/217/EEC of 19 March 1987 on the prevention and reduction of environmental pollution by asbestos (OJ L 85, 28.3.1987, p. 40)

As a part of the project “Strengthening Capacities for Hazardous Waste Management”, MAEP prepared Draft National Plans for management of waste oils, used batteries and accumulators, electric and electronic waste and asbestos-containing waste.

The Rulebook on bans and restrictions of production, placement on the market and use of chemicals (Official Gazette of RS, no 90/2013) has prohibited production of asbestos-containing products.

Two companies hold permits for disposal of asbestos-containing waste on four locations):

Disposal of asbestos is possible on sites in Lapovo, Kikinda as well Leskovac and Jagodina. (hazardous waste – index number 170605* / 170601*) duly packed in compliance with legal requirements (in packaging of impermeable material, on pallets, stretched and labelled) –200 Eur / ton.

ADR transport of hazardous waste (hazardous waste – index number 170605* / 170601*) – 1 Eur / passed km (length of transport includes two ways – coming + return) from the taking over point to the closest landfill (Kikinda or Lapovo). It must be taken into account that framework weight of the truck loaded with subject waste is approximately 20 t.

Disposal of asbestos performs the following prices:

Cement boards - EUR 200 / t –

Azbestan fibers in sacks - 270 euros / t

Prices are without transportation and other services to prepare material for transport and disposal.

Several presentations and round tables have been held in Serbian Chamber of Commerce as a part of the Twinning Project *Hazardous Waste Management*, in order to support the National Plan for Asbestos-Containing Waste Management.

Further implementation of the directive requirements will be implemented through following actions;;

Short-term priorities (2015-2017):

-Revision of the Waste Management Strategy;

- Twinning project *Improvement of hazardous waste management - “IHWMS” in the Republic of Serbia* further strengthening regarding the asbestos management is planned. Hazardous Waste Management Integrated Plan and National Plan for Construction and Demolition Waste Management will be prepared through project.

-National Plan for Waste containing asbestos (in procedure for adoption by Government of Republic of Serbia, expected 2015)

-The implementation of the campaign to develop public awareness about the proper method of removal of asbestos-containing products as well as the disposal of asbestos

Mid-term:2018-2019

- The implementation of a unified scheme for separate collection of waste containing asbestos
- Implementation of the system for separate collection of waste; containing asbestos

-existence of a sufficient number of landfills that deal disposal of waste asbestos, or adequate technical equipment and trained staff provided

Ministry of Agriculture and Environmental Protection, Autonomous Province, Inspectorate, SEPA, Ministry of Labour, Employment, Veteran and Social Affairs (Directorate for Occupational Health and Safety), Ministry of Health, Ministry of Construction and Traffic.

Additional information regarding implementation of the Directive is provided in the annex 2.

IPC SECTOR	PRE-ACCESSION PERIOD						TRANSITION PERIOD	
	2015	2016	2017	2018	2019	2020	2021	
2010/75/EU - IED								
Chapter II								
Chapter III								
Chapter IV								
Chapter V								
Chapter VI ³⁶								
Seveso III								
VOC Paints								
Regulation (EC) No 1102/2008-part which relates to ban of export								
Regulation (EC) No 66/2010								
Regulation (EC) No 1221/2009								
Asbestos								

*According to NEAS 2023 was defined as deadline for implementation of a group of directives on volatile organic compounds.

5. List of Directives which implementation considers most demanding

Directive 2010/75/EU will be categorised as a challenging directive for implementation.

Full implementation of IED will require significant financial investments from operators. Taking into account economic situation in the country and of operators, implementation of measures will require longer implementation periods.

The existing IPPC installations will need a range of reconstructions to harmonise their operation with the provisions of the Directive, i.e. with best available techniques (BAT).

Chapter III of the Industrial Emissions Directive will require heavy investments in order to achieve compliance of large combustion plants with the prescribed emission limit values.

Chapter VOC-IED will require funds that operators have to provide in order to fulfill the prescribed requirements and achieve compliance with emission limit values prescribed for installations using organic solvents.

³⁶Not applicable

Drafting of Directive Specific Implementation Plans has started within the IPA 2011 project. Data is being collected for that purpose at the moment, and it is stipulated that the first draft is completed by the end of 2015.

The majority of IPPC installations belong to private sector, which means that data about deadlines for full implementation must be sent to competent authorities by these operators. State-owned installations are mainly those in energy sector. The manner of financing and the availability of financial resources for these sectors will directly influence time period for implementation of this directive. Chapter III of the Industrial Emissions Directive will require heavy investments in order to achieve compliance of large combustion installations with the prescribed emission limit values.

6. Implementation deadlines

EU legislation	Implementation deadline	Comments
Industrial Emissions Directive		Deadline will be revised after development of DSIP for IED
SEVESO Directives	2020	Preliminary
VOC PAINTS Directive	2020.	
EMAS Regulation	Date of accession	
Ecolabel Regulation	Date of accession	
Mercury Regulation	Date of accession	
Asbestos directive	2020	Preliminary

5. Cost/ financing estimation

Cost assessment of for implementation of IPPC, LCP, VOC and other directives has been provided when developing National Environmental Approximation Strategy. It was assessed, that total costs might reach up to about €1,5 billion.

Cost assessment will be updated when developing DSIP for Industrial Emissions Directive. The DSIP shall be available by the end of 2015.

ANNEX 1.

Metallic Mercury Regulation-overview

Overview of total number of installations in the chlorine-alkali production and the cleaning of natural gas sectors and number of installations performing non-ferrous mining and smelting operations

In the Republic of Serbia there are two mercury cell chlorine alkali plants-“HIP-Petrohemija a.d. Pan evo“-“Electrolysis” and “Chemical Industry Župa ad Kruševac”. Data regarding mercury from these two chlorine alkali plants for 2013 and 2014 are shown in table in annex (Information on individual mercury cell chlorine alkali plants for 2013 and 2014 and Information regarding any closure of individual plants or their conversion to non-mercury technology).

According to data available up to date from the Ministry of Mining and Energy, as well as from the companies, in the Republic of Serbia there are no installations in which metallic mercury is gained from the cleaning of natural gas or from non-ferrous mining and smelting operations.

Import and export of metallic mercury

Overview of total quantity of metallic mercury imported and exported

Year	Quantity of metallic mercury imported (kg)
2010	400,0
2011	/
2012	1,0
2013	1,25

Rulebook on Restrictions and Bans of Production, Placing on the Market and Use of Chemicals (“Official Gazette of the RS“ 90/2013 and 25/15) in Annex I, Part 1, under entry 18, 18a and 62 regulates prohibition of production, placing on the market and use of metallic mercury and mercury compounds with certain derogations.

18.	Mercury compounds	<p>Shall not be placed on the market, or used, as substances or in mixtures where the substance or mixture is intended for use:</p> <p>a) to prevent the fouling by micro-organisms, plants or animals of:</p> <ul style="list-style-type: none"> - the hulls of boats, - cages, floats, nets and any other appliances or equipment used for fish or shellfish farming, - any totally or partly submerged appliances or equipment <p>b) in the preservation of wood;</p> <p>c) in the impregnation of heavy-duty industrial textiles and yarn intended for their manufacture;</p> <p>d) in the treatment of industrial waters, irrespective of their use.</p>
18a.	<p>Mercury</p> <p>CAS No. 7439-97-6</p> <p>ES No. 231-106-7</p>	<p>1. Shall not be placed on the market for general use:</p> <p>a) in fever thermometers;</p> <p>b) in other measuring devices intended for sale to the general public (such as manometers, barometers, sphygmomanometers, thermometers other than fever thermometers).</p> <p>2. Restrictions in Point 1 shall apply as of 5th July 2011 for measuring devices placed on the market for the first time.</p>

		<p>Measuring devices referred to in Point 1 used as medical devices shall continue to be used until it reaches the end of its service life given in act in which competent authority allows placing on the market of medical devices, elapses.</p> <p>3. The restriction in Point 1 shall not apply to measuring devices that were in use before 5th July 2011.</p> <p>5. The following mercury-containing measuring devices intended for industrial and professional uses shall not be placed on the market after 1 October 2018:</p> <ul style="list-style-type: none"> a) barometers; b) hygrometers; c) manometers; d) sphygmomanometers; e) strain gauges to be used with plethysmographs; f) tensiometers; g) thermometers and other non-electrical thermometric applications. The restrictions in Point 5. shall also apply to measuring devices under points (a) to (g) which are placed on the market empty if intended to be filled with mercury. <p>6. The restriction in Point 5 shall not apply to:</p> <ul style="list-style-type: none"> a) sphygmomanometers to be used: <ul style="list-style-type: none"> - in epidemiological studies which are ongoing on 1 October 2018; - as reference standards in clinical validation studies of mercury-free sphygmomanometers; b) thermometers exclusively intended to perform tests according to standards that require the use of mercury thermometers until 1 October 2020; c) mercury triple point cells which are used for the calibration of platinum resistance thermometers. <p>7. The following mercury-using measuring devices intended for professional and industrial uses shall not be placed on the market after 1 October 2018:</p> <ul style="list-style-type: none"> a) mercury pycnometers; b) mercury metering devices for determination of the softening point. <p>8. The restrictions in Point 5 and 7 shall not apply to:</p> <ul style="list-style-type: none"> a) measuring devices more than 50 years old on 3 October 2007; b) measuring devices which are to be displayed in public exhibitions for cultural and historical purposes.
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62.	<p>a) Phenylmercuric acetate EC No. 200-532-5 CAS No. 62-38-4</p> <p>b) Phenylmercury propionate EC No: 203-094-3 CAS No: 103-27-5</p> <p>c) Phenylmercury 2-ethylhexanoate EC No: 236-326-7 CAS No: 13302-00-6</p> <p>(d) Phenylmercury octanoate EC No: - CAS No: 13864-38-5</p> <p>(e) Phenylmercury neodecanoate EC No: 247-783-7 CAS No: 26545-49-3</p>	<p>1. Shall not be manufactured, placed on the market or used as substances or in mixtures after 10 October 2017 if the concentration of mercury in the mixtures is equal to or greater than 0,01 % by weight.</p> <p>2. Articles or any parts thereof containing one or more of these substances shall not be placed on the market after 10 October 2017 if the concentration of mercury in the articles or any part thereof is equal to or greater than 0,01 % by weight.</p>
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Rulebook on Import and Export of Certain Hazardous Chemicals ("Official Gazette of the RS" No. 89/10, 15/13 and 114/14) regulates export ban of mercury. National legislation which relates to export ban of mercury is in force since 2010.

Description of chemicals/article(s) subject to export ban	Additional details, where relevant (e.g. name of chemical, EC No, CAS No, etc.)	
	CAS number	Tariff heading of the Custom Tariff
Cosmetic soaps containing mercury		3401 11 00 00 3401 19 00 00 3401 20 10 00 3401 20 90 00 3401 30 00 00
Metallic mercury and mixtures of metallic mercury with other substances, including alloys of	7439-97-6	2805 40 10 00 2805 40 90 00

mercury, with a mercury concentration of at least 95 % weight by weight		2843 90 10 00 2853 00 90 00
Mercury compounds except compounds exported for research and development, medical or analysis purposes	Mercury (I) chloride (Hg ₂ Cl ₂ , CAS No 10112-91-1), Mercury (II) oxide (HgO, CAS No 21908-53-2);	2852 10 00 11
Cinnabarore, except when exported for research and development, medical or analysis purposes		2617 90 00 00

Information on individual mercury cell chlorine alkali plants for 2013 and 2014:

Mercury Cell Chlorine Alkali Plant		Mercury Cell Chlorine Capacity	Purchases / Sales ³⁷	Consumption / Use	Mercury Currently at the Plant [exclude wastes]	Emission to Air	Emission to Water	Emission to Soil	Solid Waste
Name, Contact Information and year		1000t ³⁸	kg Hg	Kg Hg	t	kg Hg	kg Hg	kg Hg	t Hg
HIP-Petrohemija a.d. Pančevo "Electrolysis"	2013	Capacity (max) Final product : -18000 t HCl -6200 t NaOH (100%) -1600 t NaOCl Chlorine	/	Consumption 730 kg/year Use in process 21 t	21	0	4,69	/	2,500 t/year (sludge contaminated with Hg) Total amount of sludge = 60,500 t

³⁷Indicate as (-) if sold

³⁸In thousands of metric tons of chlorine capacity

		is intermediate product Capacity (max) 6500 t							
	2014			Chlor- alkali producti on was stopped at August 4 th 2014	16 t in 6 cells and 483 kg at the warehou se	0	below the prescri bed limit values	/	5284 t (sludge contami nated with Hg at the landfill in the compan y) 62,4 t (sludge contami nated with Hg at the warehou se)
Chemical Industry “Župa” sc „Electrolytic products – KCl “		Design ed capacity 4000t (produce d only 4 t chlorine)	/	/	12,4	/	/	/	No official data availabl e

Information regarding any closure of individual plants or their conversion to non-mercury technology (2013):

Mercury Cell Chlor Alkali Plant	Mercury Cell Chlorine Capacity ³⁹	Plant Closure or Conversion to Non- Mercury Technology? (Please Provide Details and the Date)			Estimated Quantities of Elemental Mercury from Decommissioning
Name and Contact Information	1000t	Realised	In Progress	Planned	t
HIP-Petrohemija a.d. Pan evo- In Restructuring “Electrolysis”	Capacity (max) Final product 18000 t HCl 6200 t NaOH (100%) 1600 t NaOCL Chlorine is intermediate product Capacity (max) 6500 t	/	/	/	21
Chemical Industry “Župa” sc in restructuring „Electrolytic products – KCl “	Designed capacity 4000t	/	/	/	/

³⁹In the case of already closed or converted plant, please provide capacity in the respective year.

ANNEX 2.

List – Treatment of asbestos

Operator	Municipality	Index number	Description	Treatment
JUGO-IMPEX	Niš-Crveni Krst	06 07 01*	wastes containing asbestos from electrolysis	yes
YUNIRISK	Belgrade-Stari Grad	06 07 01*	wastes containing asbestos from electrolysis	yes
JUGO-IMPEX	Niš-Crveni Krst	06 13 04*	wastes from asbestos processing	yes
MODEKOL O	Belgrade-New Belgrade	06 13 04*	wastes from asbestos processing	yes
YUNIRISK	Belgrade-Stari Grad	06 13 04*	wastes from asbestos processing	yes
MODEKOL O	Belgrade-New Belgrade	10 13 09*	wastes from asbestos-cement manufacture containing asbestos	yes
YUNIRISK	Belgrade-Stari Grad	10 13 09*	wastes from asbestos-cement manufacture containing asbestos	yes
INDOT-UB	Ub	10 13 10	wastes from asbestos-cement manufacture other than those mentioned in 10 13 09	yes
KEMIS	Valjevo	10 13 10	wastes from asbestos-cement manufacture other than those mentioned in 10 13 10	yes
MODEKOL O	Belgrade-New Belgrade	10 13 10	wastes from asbestos-cement manufacture other than those mentioned in 10 13 11	yes
YUNIRISK	Belgrade-Stari Grad	10 13 10	wastes from asbestos-cement manufacture other than those mentioned in 10 13 12	yes
A.S.A. EKO	Belgrade-Voždovac	15 01 11*	metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers	yes
ARHIFARM	Belgrade-ukarica	15 01 11*	metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers	yes
BREM GROUP	Belgrade-Vračar	15 01 11*	metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers	yes
CLEANING SYSTEM S	Šabac	15 01 11*	metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers	yes

ECOLOGY ACTION	Kikinda	15 01 11*	metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers	yes
EZO GRUPA	Belgrade-Savski Venac	15 01 11*	metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers	yes
JUGO-IMPEX	Niš-Crveni Krst	15 01 11*	metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers	yes
SET RECIKLAŽA	Belgrade-Palilula	15 01 11*	metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers	yes
YUNIRISK	Belgrade-Stari Grad	15 01 11*	metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers	yes
JUGO-IMPEX	Niš-Crveni Krst	16 01 11*	brake pads containing asbestos	yes
FARMAKOM MB ŠABAC-FACTORY OF ACCUMULATORS SOMBOR	Sombor	16 01 11*	brake pads containing asbestos	yes
SET RECIKLAŽA	Belgrade-Palilula	16 01 11*	brake pads containing asbestos	yes
YUNIRISK	Belgrade-Stari Grad	16 01 11*	brake pads containing asbestos	yes
ECOLOGY ACTION	Kikinda	16 02 12*	discarded equipment containing free asbestos	yes
ECOTEQ	Belgrade-Savski Venac	16 02 12*	discarded equipment containing free asbestos	yes
JUGO-IMPEX	Niš-Crveni Krst	16 02 12*	discarded equipment containing free asbestos	yes
JUGO-IMPEX E.E.R.	Niš-Crveni Krst	16 02 12*	discarded equipment containing free asbestos	yes
KEMIS	Valjevo	16 02 12*	discarded equipment containing free asbestos	yes

FARMAKO M MB ŠABAC- FACTORY OF ACCUMUL ATORS SOMBOR	Sombor	16 02 12*	discarded equipment containing free asbestos	yes
SET RECIKLAŽ A	Belgrade- Palilula	16 02 12*	discarded equipment containing free asbestos	yes
JUGO- IMPEX	Niš-Crveni Krst	17 06 01*	insulation materials containing asbestos	yes
SET RECIKLAŽ A	Belgrade- Palilula	17 06 01*	insulation materials containing asbestos	yes
YUNIRISK	Belgrade-Stari Grad	17 06 01*	insulation materials containing asbestos	yes
KONCERN FARMAKO M MB ŠABAC- FACTORY OF ACCUMUL ATORS SOMBOR	Sombor	17 06 05*	construction materials containing asbestos	yes
SET RECIKLAŽ A	Belgrade- Palilula	17 06 05*	construction materials containing asbestos	yes
YUNIRISK	Belgrade-Stari Grad	17 06 05*	construction materials containing asbestos	yes

Annex 3

Volatile Organic Compounds in paints Directive. - Overview of the monitoring programme (inspectors, samplings etc.) established to check compliance with the VOC limit values and labelling requirements and associated costs.

Article 82 of the Law on Chemicals establishes a legal ground for implementation of monitoring programme envisaged by this Directive.

System for collecting data on of volatile organic compounds (VOC) content for the purpose of data monitoring is in place through the Integrated Chemicals Registry.

According to the Law on Chemicals Integrated Chemicals Registry shall be a data base on chemicals, biocidal products and plant protection products placed on the market of the Republic of Serbia. It consists of Chemicals Registry, Biocidal Products Registry and Plant Protection Products Registry. For Biocidal Products Registry data shall be provided by Division for Biocidal Products Risk Management, and for Plant Protection Products registry by the competent authority in charge for PPPs.

Data about chemicals placed on the Serbian market are submitted for the purpose of entering the data on chemicals into the Chemicals registry by the industry (importers, producers and downstream users). Legal entities which submit data must fill in the application form which consists of general data about company and form with data about chemical which is called Chemical Dossier (content of the Chemical Dossier is prescribed by the Annex 4 of the Rulebook on Chemicals Registry). Beside data on chemical such as trade name, quantity, origin, intended use of chemical, labelling, composition, when paints and varnishes are reported into the Registry, for certain coatings (paints, varnishes and coatings for vehicle repair), the Dossier contains data about content of volatile organic compounds.

Part of Annex 4 - Rulebook on Chemicals Registry

6. Content of the Volatile organic compounds (g/l)										
6.1. Subcategory of the mixture used as coatings for external use (buildings, their equipment and building parts) with decorative, functional and protective role						6.2. Subcategory of the mixture used as coatings for road vehicles or their parts when repairing, conserving or decoration outside the production plants				
a	b	c	d	e	f	a	b	c	d	e
g	h	i	j	k	l	Total content of volatile organic compounds (g/l)				

Subcategory of the coatings is determined in accordance with the legislation, which regulates bans and restrictions of production, placing on the market and use of chemicals. By receiving data on VOC content the Chemicals registry data base provides support for national monitoring programme in accordance with Directive 2004/42/EC.

Monitoring programme for the purpose of verifying compliance with this Directive will be conducted through the available data from Integrated Chemicals Registry including also data from inspection supervision.

Legal bases

According to the Article 89 of the Law on chemicals, environmental inspectors, sanitary and trade inspectors (hereinafter: inspectors) may perform sampling and preliminary control of the content of the chemical and article for the purpose of establishing whether the conditions for placing on the market or use of the chemical and the article have been met.

Costs of sampling and testing of chemical and article shall be borne by legal entity or natural person or entrepreneur from whom the sample was taken, if it is established in the final procedure that it does not correspond to the prescribed properties. If sample corresponds to the prescribed properties, costs of sampling and testing of chemical and article shall be paid from the resources envisaged by the financial plan of the Ministry in charge of environmental protection.

During inspection of paint and varnish the inspector checks:

1. The application of provisions related to bans and restrictions on the use and placing on the market of chemicals (limitations of the total VOC content) and other bans and restrictions related to the paints and varnishes (Annex XVII REACH);
2. The application of the provisions of the Rulebook on the classification, packaging, labelling and advertising of chemicals and certain products (General Information, VOC content, labelling paints which containing: DEGBE, lead, CMR substances, isocyanates, epoxy constituents).
3. The application of the provisions of the Rulebook on content of the safety data sheet
4. The application of the provisions of the Law on Biocidal Products

Limitations of the total VOC content

- Whether the coating that is the subject of surveillance is subject to the provisions on limitation of VOC content;
- Whether subcategory of coatings is adequately defined;
- Is the total VOC content appropriately determined;
- Whether the VOC content is in accordance with the limitations of the total VOC content;
- Whether the label on the coating placed on the market contains all prescribed information about the VOC content.

In Serbia, currently, there are no laboratories accredited for experimental determination of VOC content, in accordance with prescribed methods.

A laboratory that has been accredited by the prescribed method was shut down 2 years ago.

The inspection is based checking provided laboratory test result on VOC content or based on a calculation of the VOC contents according to complete composition of the coating.

REQUIREMENTS FOR LABELING OF PAINTS AND VARNISHES

Label or packaging for coatings (paints and varnishes), beside mandatory data laid down by the rulebook on classification, packaging labelling and advertising of chemicals, also contains the following mandatory information: subcategory of coating (paints and varnishes), i.e. symbol of subcategory written in Cyrillic or Latin script in alphabetical order; maximum allowed VOC content for that particular subcategory and total VOC content.

In the autumn 2014 inspection campaign related to paint and varnishes started, and it is ongoing. During this campaign, until the end of 2014 the following number of inspections:

Number product inspected	Number of companies	Number of importers	Number of manufacturers
10	10	3	7

PAINTS AND VARNISHES IN REPUBLIC OF SERBIA – OVERVIEW FROM INTEGRATED CHEMICALS REGISTRY

Number of manufacturers	Number of paints and varnishes placed on the market	Total quantity of manufactured paints and varnishes (t)	Quantity of paints and varnishes placed on the market of the Republic of Serbia (t)	Quantity of exported paints and varnishes (t)
48	2340	158.291,64	112.001,64	46.290,00

Paints and varnishes types	Number of products	Quantity Placed on the market (t)	Manufac. for placing on the market of the Republic of Serbia (t)	Manufacture for exporting (t)	Total manufac. (t)	Import for own use (t)	Import for placing on the market (t)	Total import (t)
Water based paints and varnishes	4192	193118,31	107324,00	41677,31	149001,31	276,02	5510,68	5786,70
Solvent based paints and varnishes	6375	22373,06	16215,98	7501,52	23717,50	993,88	4755,77	5749,64
Paints and varnishes ready to use	474	1246,37	501,5	41,415	542,92	198,10	545,88	744,87

	Manufacturers	Importers
Number of SB coatings checked	31	129
Percentage of SB coatings not complying with Phase I VOC limits %	0,1	20
	Manufacturers	Importers
Number of WB coatings checked	5	63
Percentage of WB coatings not complying with Phase I VOC limits %	0	11

Section 7

CHEMICALS

1. Strategic and Institutional Framework

Implementation of requirements in the sub-sector is guided by following approved strategic documents:

- National Plan for the Adoption of the *Acquis* (NPAA 2014-2018);
- National Programme for Environmental Protection (2010 – 2019);
- National Environmental Approximation Strategy for the Republic of Serbia (EAS);
- European Commission Serbia Progress Report for 2014.

Planned strategic documents:

- CA for REACH, CLP, BPR and PIC Development Plan (during 2015/2016)

Ministry of Agriculture and Environmental Protection (MAEP) is competent for the Chemicals subsector. Current institutional set up comprises Department for Chemicals as Competent Authority (CA) responsible for performing tasks arising from national legislation on chemicals and biocidal products. Control of compliance with the legislation on chemicals and biocidal products and inspection supervision are conducted by the Ministry in charge of environmental protection through the environmental inspectors, Ministry in charge of health through sanitary inspectors and Ministry in charge of trade through trade inspectors.

Compliance control over most of the provisions of the national legislation on chemicals and biocidal products is under the jurisdiction of the environmental inspectors. Sanitary inspection is responsible for inspection of compliance with the legislation on bans and restrictions in chemicals and products intended for general use. Trade inspection is responsible for control of national provision regarding conditions for keeping of hazardous chemicals in retail.

Animal welfare, including enforcement and inspection, is under the jurisdiction of MAEP's Veterinary Directorate.

Furthermore, National Poison Control Centre established by the Law on Protection of Health provides treatments and advice in the case of poisoning on state level and keeps record on poisoning incidents and accidents; it will be appointed as the body responsible for receiving information relating to emergency health response in line with CLP in due time before accession.

2. Transposition

Transposition status:

EC legislation on chemicals which is subject of this document comprises regulations, thus transposition is not required. The only exception is Directive 2010/63/EU on animal experiments.

Due diligence was made to align national legislation with the *Acquis* in the chemicals subsector. National legislation aligned with the regulations was adopted aiming to ensure protection of human health and the environment and also to prepare both, administrative structures and private sector for entry into the common market. In accordance with the principle of direct applicability of EU Regulations, alignment with Regulations is considered as a temporary measure.

Alignment with the regulations has been achieved largely while still partly, having in mind that there are provisions which require membership status in order to be implemented.

Detailed description of the level of alignment is given below.

Classification, labelling and packaging of substances and mixtures (Regulation 1272/2008)

Legal basis

References of the publication of acts *transposing* the Regulation requirements into the national legislation:

- Law on Chemicals (“Official Gazette of Republic of Serbia”, No 36/09, 88/10, 92/11, 93/12 and 25/15);
- Rulebook on classification, packaging, labelling and advertising of the chemical and certain article in accordance with Globally Harmonised System for Classification and Labelling of the UN (“Official Gazette of Republic of Serbia”, No 64/10, 26/11 and 105/13);
- Rulebook on the List of classified substances (“Official Gazette of Republic of Serbia”, No 48/14);

Please be advised that the List of classified substances (“Official Gazette of Republic of Serbia”, No 82/10) entered into force in 2010. The List was amended in order to provide for changes given in 2nd and 3rd ATP to CLP and published as a consolidated version in the form of the new (above stated) Rulebook on the List of classified substances; this was done due to the legal procedural reasons and in order to facilitate the usage of the act.

Date of entry into application

The Law on Chemicals entered into force and into application in May 2009; the List of classified substances entered into force and into application in 2010. The Rulebook on classification in accordance with GHS entered into force in 2010, but date of entry into application of the Rulebook on classification in accordance with GHS was 1st October 2011 for substances and 1st June 2015 for mixtures. However the rulebook could be applied on mixtures prior the above stated date.

Note: As stated above, alignment has been achieved largely and the most of the CLP Regulation provisions and all of its annexes are incorporated into the national legislation. Still, provisions that cannot be implemented in a non-EU country have not been prescribed into national legislation. Therefore in national legislation there is no obligation for manufacturers and importers to notify classification and labelling of substances that they place on the market into the C&L inventory, procedure for harmonization of classification and labelling of substances is not envisaged and the list of harmonized classifications and labelling (Annex VI of the Regulation) is directly taken over into the national legislation; reporting regarding enforcement activities to ECHA is not envisaged also and decision upon a request for use of an alternative chemical name shall be given by the Serbian authority and not ECHA (please note that there has not been any request for use of an alternative chemical name so far).

Also, the date of entry into application of the rules for substances differed from the datum stipulated in the CLP Regulation, but for the mixtures is the same as in the EU.

Finally there is a difference with regard to appointment of bodies responsible for receiving information relating to emergency health response (Article 45 of the CLP Regulation). According to the Law on chemicals the ministry in charge for the environment shall provide information on chemicals and their properties which are at its disposal to the national Centre for Poison Control. No obligation is put on importers and downstream users placing mixtures on the market to provide data to the Poison Control Centre and the Centre is not officially designated as body responsible for receiving the information from the importers and downstream users.

Ref: Law on chemicals, Art.83, paragraph 3;

Please be advised that with this regard we are following developments concerning the harmonization of information and format of data to be provided to the Poison Control Centres in order to be informed accordingly and in time. The status of an observer at the CARACAL meetings that we have been granted since last July serves invaluable among others for this purpose.

Serbia is going to draft and adopt the CLP implementing Act by which the National Poison Control Centre will be appointed as the body responsible for receiving the information relating to emergency health response as it is stipulated in the CLP Regulation.

There was no particular problem in the alignment process. Currently, national legislation is in line with the CLP Regulation and its 1st ATP, 2nd ATP and 3rd ATP. Changes of national legislation are foreseen in order to align it with the remaining ATPs. Alignments with the 4th and 5th ATP and Corrigendum to the Annex VI of CLP are under preparation and corresponding amendments to the national legislation should be published until the end of 2015.

REACH (Regulation 1907/2006)

Legal basis

References of the publication of acts transposing the Regulation into the national legislation:

- Law on Chemicals (“Official Gazette of Republic of Serbia”, No 36/09, 88/10, 92/11, 93/12 and 25/15);
- Rulebook on manner of conduction of chemicals safety assessment and content of chemicals safety report (“Official Gazette of the RS”, number 37/11);
- Rulebook on criteria for identification of substances such as PBT and vPvB (“Official Gazette of the RS”, number 23/10);
- Rulebook on content of Safety Data Sheet (“Official Gazette of the RS”, number 100/11)
- List of Substances of Very High Concern (“Official Gazette of the RS”, number 94/13);
- Rulebook on Bans and Restrictions of Production, Placing on the Market and Use of Chemicals (“Official Gazette of the RS“ number 90/13 and 25/13);
- Rulebook on Methods for Testing of Chemicals’ Hazardous Properties (“Official Gazette of the RS”, No 117/13).

Please be advised that the above stated Rulebook on Bans and Restrictions and the List of SVHC are published as a whole and not as amendments to the existing ones for the procedural reasons and in order to facilitate the usage of the acts. The first List of Substances of Very High Concern (“Official Gazette of Republic of Serbia”, No 31/11 and 28/12) entered into force in 2011; the first Rulebook on Bans and Restrictions of Production, Placing on the Market and Use of Chemicals (“Official Gazette of Republic of Serbia”, No 89/10, 71/11, 90/11 and 56/12) entered into force in 2010. Also, the first Rulebook on Content of Safety Data Sheet (“Official Gazette of the RS”, number 81/10) entered into force in 2010.

Note: Correlation Table 1 stating which parts of the REACH Regulation are incorporated in the corresponding national legislative act is provided as an Annex 1 at the end of this section of the post screening document.

Date of entry into application:

The Law on Chemicals entered into force and into application in May 2009.

Rulebook on manner of conduction of chemicals safety assessment and content of chemicals safety report entered into application in June 2011.

Rulebook on criteria for identification of substances such as PBT and vPvB entered into application in April 2010.

List of Substances of Very High Concern entered into application October 2013;

Note: the repealed List of Substances of Very High Concern (“Official Gazette of Republic of Serbia”, No 31/11 and 28/12) entered into application in May 2011;

Rulebook on content of Safety Data Sheet (“Official Gazette of the RS”, number 100/11) entered into application in January 2013.

Note: the repealed Rulebook on Content of Safety Data Sheet (“Official Gazette of the RS”, number 81/10) entered into application in November 2010;

Rulebook on Bans and Restrictions of Production, Placing on the Market and Use of Chemicals entered into application in October 2013;

Note: the repealed Rulebook on Bans and Restrictions of Production, Placing on the Market and Use of Chemicals (“Official Gazette of Republic of Serbia”, No 89/10, 71/11, 90/11 and 56/12) entered into application in December 2010.

Note:As it is stated above many of the provisions of REACH Regulation and its annexes are incorporated into the national legislation. However, provisions that are too membership dependent to be incorporated into Serbian legislation during the time of pre-accession have not taken over (e.g. provisions imposing obligations on manufacturers or importers to register substances (REACH Title I, REACH-Annexes); obligations placed on manufacturers and importers of substances at an individual annual tonnage level of 10 tonnes or more to perform a chemical safety assessment and provide a chemicals safety report (REACH Title 1 / Annex I); obligations to present the exposure scenario and to identify, apply and recommend the appropriate risk management measures to adequately control the risks (REACH Title 1); rights of users in the supply chain to make their use identified and demands on actors in the supply chain to communicate data on use and exposures in order to make uses subject to chemical safety assessment, risk management recommendations and the further relevant information to be presented by safety data sheets (REACH Title V); obligation on a downstream user, under certain conditions, to perform a chemical safety assessment (REACH Annex XII); obligations to comply with authorisation rules and decisions (REACH Title VII)).

Please be advised that we acknowledge that REACH is composed and designed for the EU single market and not just one country. Supply chains are more complete in the EU, risk communication could engage, exposure scenarios could cover and risk management measures could address the numerous users of chemical substances and mixtures at the whole EEA market; chemical safety assessment costs could effectively be distributed and shared by industry within the whole EEA etc. However, we have managed to transpose the components of REACH that we found necessary to have in place before we enter the EU and to fully place the responsibilities on industry. In addition as the EU accession country we continue to have a pro-active approach also to the completely EC-based elements.

Obligation for registration as established in REACH is not prescribed and also there is no obligation on enterprises to provide Chemical Safety Report (CSR) and/or exposure scenario. However, the Law on chemicals prescribes the obligation to draft the Safety Data Sheet (SDS) in accordance with CSR and to provide exposure scenarios in annex of it if the CSR has been prepared; the prescribed layout and content of the CSR are in line with the corresponding REACH requirements.

Ref: Law on chemicals, Art. 24 – 26; Rulebook on manner of conduction of chemicals safety assessment and content of chemicals safety report.

Finally, the provisions on authorization have not been transposed. However, aiming to make our industry well aware of the future obligations with regard to substances of very high concern in due time before accession, the EC decisions on the substances to become subject to authorization demands are taken over in the form of the List of substances of very high concern and the Candidate List of substances of very high concern.

Ref: Law on chemicals, Art.43 and Art.27

There have been no particular problems with regard to the alignment process. The main challenges comprise determination of date by which the provisions incorporated in to national legislation shall become mandatory (e.g. with regard to bans and restriction). Lot of dialogues with industry were held in order to fine tune those deadlines taking care of the effects of the requirements and responsibilities to be imposed on the industry on their businesses and the progress of the alignment of the national legislation with the EU acquis. Therefore the deadlines prescribed in the national legislation are postponed in comparison to the deadlines provided in REACH (i.e. REACH Annex XVII).

Foreseen changes to the national legislation are in relation to its alignment with the further amendments to the components of the REACH that have been incorporated. The changes will be introduced sequentially. Currently, amendments of the national legislation which will provide for alignment with Regulation (EU) No 317/2014 and Regulation (EU) No 317/2014 are under preparation.

Additionally, national legislation on SDS will be amended in line with the Commission Regulation (EU) 2015/830 by which Annex II to REACH has been replaced.

POPs (Regulation (EC) No 850/2004 on persistent organic pollutants)

Note: *POPs (Regulation (EC) No 850/2004 on persistent organic pollutants) is given also in Section 3, Waste Management and in Section 7, Chemicals.*

Legal basis

Republic of Serbia has established legislative and institutional framework for POPs management. Present system of POPs chemicals and POPs waste management is almost fully harmonised to the EU system. POPs-harmonised legislation has been in force since 2010. Republic of Serbia has taken over EC Regulation on POPs No 850/2004 with amendments (EU Regulation No 756/2010, 757/2010 and 519/2012 on amendments to the EC Regulation No 850/2004) into national legislation through the legal acts listed into the Tables 1a and 1b in the Annex 2 of this document.

Short term priorities (2015-2016) :

(EU) Regulation No 1342/2014 amending EC Regulation on POPs No 850/2004 will be taken over into the national legislation through amending the Rulebook on List of POPs, Manner and Procedure for POPs Waste Management and Maximum Permissible POPs Concentrations Related to Disposal of POPs Containing of Contaminated Waste until the end of 2015.

Note: Correlation Table explaining which parts of the POPs Regulation are incorporated in the corresponding national legislative act is provided as an Annex 2 and given at the end of this section of the post screening document.

Export/Import of Chemicals (Regulation (EU) No 649/2012 on export and import of hazardous chemicals)

Legal basis

With the adoption of the Law on Ratification of the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (“Official Gazette of the RS-International Agreements” No 38/09), this convention became part of the legal system of the Republic of Serbia.

Law on Chemicals (“Official Gazette of the RS” No 36/09, 88/10, 92/11, 93/12 and 25/15), Article 51-57 and Rulebook On Import and Export of Certain Hazardous Chemicals (“Official Gazette of the RS” No. 89/10, 15/13 and 114/14) represent the regulatory mechanism for conducting the provisions of the Rotterdam Convention and the national provisions aligned with provisions of the Regulation (EU) 649/2012.

National legislation has been harmonised with Regulation EU concerning export and import of hazardous chemicals since 2009, except provisions prescribed only for EU members (e.g. reporting to the Commission). Additionally, amendments to the PIC Regulation are continuously followed and implemented. Next amendment of the Rulebook On Import and Export of Certain Hazardous Chemicals is foreseen 4th quarter of 2015.

Biocidal Products (Regulation EU 528/2012)

Legal basis

Current legislation on biocidal products is aligned with the provisions of the Biocidal Products Directive (Directive 98/8/EC, hereafter: BPD) as far as practically possible for a non-EU country. General principles and rules of the BPD managed on the national level have been transposed into the Law on Biocidal Products (“Official Gazette of the RS” No. 36/09, 88/10, 92/11 and 25/15). As regards the procedures managed at the EU level, the final Commission’s decisions are directly taken over into the national legislation.

According to the Law on Biocidal Products (hereafter: Law), a biocidal product shall be placed on the market if manufacturer or importer has been granted authorisation for placing on the market. The main prerequisite that has to be fulfilled is that active substance contained in the biocidal product is approved for the relevant product-type and any conditions specified for the active substance are met.

For the purpose of issuing national authorisation, applicant shall submit to the MAEP application for authorisation and technical dossier for biocidal product satisfying the requirements set out in Annex II, III and IV to the BPD. In addition, the Law lays down procedure for recognition of an EU authorisation. Summary of the technical dossier and verified copy of an act by which the competent authority of the EU Member State authorises placing on the market of the biocidal product, with certified translation into Serbian, shall be presented along with the application. On the basis of the Dossier, the MAEP carries out the assessment in line with Annex VI to the BPD and authorises the biocidal product if the conditions for granting an authorization set out by the Law are met.

The main derogation from the BPD relates to the procedure setting out rules for approval of an active substance which may be used in biocidal product. According to the Law, approved active substances, including specifications and conditions set out for them as well as existing active substances for which the decision on non-inclusion has been made shall be taken over from EU and published in the “Official Gazette of the Republic of Serbia”. In addition, existing active substances which are being examined under the Review Programme (Regulation (EU) No 1062/2014) can be

also used in biocidal products to be placed on the market under the national transitional procedure envisaged by the Law.

Since the Law came into force in 2009, the CA for biocidal products management has been carrying out national transitional procedure for placing biocidal products on the market, i.e. inclusion of biocidal product into the Temporary List for the submission of technical dossier. In line with this procedure, as already mentioned, biocidal products containing not only approved active substances but also existing active substances which are being examined under the Review Programme can be placed on the market. The Temporary List of biocidal products contains, among others, deadline for submission of application for authorisation and dossier for the biocidal product for the purpose of granting an authorisation. Please be advised that this deadline does not follow the timeline set out in the Commission's Inclusion Directives or Implementing Regulations. Duty holders are granted additional period to apply for authorisation.

Reference to the acts transposing the BPD into the national legislation:

- Law on Biocidal Products ("Official Gazette of the RS" No. 36/09, 88/10, 92/11 and 25/15); entered into force in 2009;
- Rulebook on scope and content of technical dossier for biocidal products, i.e. low-risk biocidal products("Official Gazette of the RS", No. 97/10); entered into force in 2010;
- Common principles for the evaluation of the biocidal product on the basis of technical dossier("Official Gazette of the RS", No. 28/11); entered into force 2011;
- Rulebook on biocidal products types ("Official Gazette of the RS", No 23/10); entered into force in 2010;
- Rulebook on specific requirements for packaging, labelling and advertising of biocidal product ("Official Gazette of the RS", No 59/10 and 26/11); entered into force in 2010;
- Lists of active substances in biocidal products ("Official Gazette of the RS", No 72/2014); first publication in 2010; last amendments published in 2014 and are in line with Commission Implementing Regulation (EU) No 438/2014 as well as Commission Implementing Decision 2014/227/EU.

Please be advised that Lists amending the Lists of active substances in biocidal products are in the procedure for publication. These lists incorporate active substances, including specific conditions for placing on the market and use of biocidal products containing such active substances, approved by the Commissions Implementing Regulations No: 2015/292, 2015/405, 2015/417, 2015/406, 2015/416, 2015/407, 2015/419, 1090/2014 as well as 1091/2014.

Serbia understands that the EU legal framework regulating biocidal products has been changed recently and that the BPD is repealed by the Biocidal Products Regulation (hereafter: BPR). In order to remove obstacles to trade in biocidal products, facilitate implementation and enforcement of the BPR upon accession and ensure that industry is well acquainted with the respective responsibilities and obligations upon accession, rules and procedures as referred to in the BPR will be introduced into the national legislation by the new Law on Biocidal Products. Adoption of the new Law is envisaged by the end of 2016.

Having in mind that the BPR is directly applicable in MSs, due diligence will be made to align national legislation with the provisions of the BPR and prescribe procedures, data requirements and obligations that will bring us closer to the BPR and which are feasible and economically justified to implement at the national level in the pre-accession period. Similar concepts and procedures to those regulating use of active substances in biocidal product as well as placing on the market and

use of biocidal product under the current Law will be established by the new Law on Biocidal Products.

We understand that instruments envisaged by the BPR to facilitate the functioning of the authorisation and mutual recognition procedures, e.g. Register for Biocidal Products (R4BP) or mandatory data sharing are restricted to the EU MSs. Hence, CA cannot carry out authorisation of biocidal products or recognition of EU authorisation as referred to in the BPR since the scientific documentation submitted in connection with such applications is available through the R4BP. In that regard, data requirements that should be submitted in support of an authorisation of a biocidal product as well as recognition of EU authorisation at the national level will be carefully examined and prescribed by the new Law on Biocidal Products so that those procedures can be applied and implemented in practice.

In addition, procedures which will ensure implementation of Article 95 of the BPR in the pre-accession period will be carefully considered and introduced by the new Law on Biocidal Products. For example, compliance of biocidal products containing existing active substances with the requirements of Article 95 could be achieved by establishing an obligation that such biocidal products shall be placed on the market if either substance supplier or product supplier is included in the Article 95 list. The same obligation should be envisaged for biocidal products containing approved active substances unless either substance supplier or product supplier is already included in the Article 95 list. In addition, a procedure which will ensure that alternative suppliers will in due time before accession prepare a submission to European Chemicals Agency (ECHA) to be included in the Article 95 list might also be set out by the new Law.

However, having in mind that Serbian alternative suppliers cannot directly make submission to ECHA under Article 95 and cannot benefit from instruments envisaged by the BPR to facilitate joining the level playing field (e.g. data sharing negotiations and compensation) in the pre-accession period, transitional arrangements concerning implementation of Article 95 should be considered and agreed.

Please be advised that according the current Law and in line with the national transitional procedure, i.e. inclusion of biocidal product into the Temporary List, biocidal product can be placed on the market only if it contains either active substance which is approved or active substance which is included in the Review Programme, or combination thereof. In case a non-approval decision for the active substance has been adopted at the EU level, a period of grace shall be granted for the placing on the market and use of existing stocks in line with the Law. In order to ensure that only compliant biocidal products will continue to be placed on the market, similar procedures to those already established and implemented under the current Law will be envisaged by the new Law on Biocidal Products.

In addition, control of compliance with the Law is regularly carried out by the enforcement authorities in accordance with annual work-plans. In particular, supervision over the implementation of the provisions regulating placing on the market of biocidal products is responsibility of environmental inspectors. Number of duties and mandate to issue injunctions for non-compliance are set out in the Law on Biocidal Products. Necessary arrangements for the monitoring and official controls to be carried out in order to enforce compliance shall be established by the new law on Biocidal Products.

With regard to the treated articles, procedures which will ensure that treated articles can be placed on the market only if active substances contained in the biocidal product that it was treated with or incorporates are approved or included in Annex I, or are under examination in the Review Programme, will be introduced by the new Law on Biocidal Products. In addition, obligations relating to the labelling of treated articles as referred to in the BPR shall also be set out by the new

law. In case a non-approval decision for one of the active substances has been adopted at the EU level, a period of grace will be envisaged for the placing on the market of such treated article.

Please be advised that one of the activities carried out within the project “Chemicals risk management in Serbia” which MAEP implements in cooperation with the Swedish Chemicals Agency (KemI) was in relation to the development of new legislative framework aligned with the BPR. With that regard, advisory missions of KemI experts were organised where provisions of the BPR which are feasible and reasonable to introduce into national legislation in the pre-accession period were considered and discussed.

In addition, within the framework of future IPA 2013 Twinning Project “Further development of chemicals and biocidal products management in the Republic of Serbia” (2015-2017) which will be implemented with support from Slovenian-Austrian consortium, rules and procedures of the BPR and their feasibility to be implemented at the national level in the pre-accession period will be further considered and elaborated. As a result of this activity, recommendations for alignment of the national legislation on biocidal products with the provisions of the BPR will be developed and used as a base for the drafting of the new Law on Biocidal Products.

Animal used for scientific purposes (Directive 2010/63/EU)

Legal basis

Legal base for transposition of Directive 2010/63/EU on animal welfare is in place. Majority of the provisions have been transposed, however there are certain provisions remaining (Ref: Law on Animal Welfare ("Official Gazette of RS" No 41/09) and the Rulebook on requirements for registration in Register of experiments on animals and content and manner of keeping the Register, training program on welfare of experimental animals, form of request for conduction of experiment on animals, care, handling and the methods of killing of experimental animals, and content and manner of record on keeping, breeding, trade and experiments conducted on animals ("Official Gazette of RS" No 39/10)). Revision of national legislation is necessary so to ensure that all the relevant provisions are transposed correctly and concisely.

Veterinary Directorate has made a plan for further transposition activities; as a short-term priority, amendments of the Law on Animal Welfare are envisaged in 2015. First Draft of the amendments of the Law is already prepared. Amended Law will provide legal base for full transposition. Remaining provisions will be transposed in the new Rulebook on experimental animal welfare. The rulebook will be drafted and published by 2018 (Ref: National Plan for the Adoption of the EU *Acquis*). Publishing of the new Rulebook will mark the full transposition.

Note: Transposition status – Annex 3 given at the end of this section t

Table 1: Transposition deadlines

CHEMICALS SECTOR	Transposition deadline					
EU LEGISLATION	2015	2016	2017	2018	2019	2020
Regulation (EU) No 528/2012 BIOCIDAL PRODUCTS	Not applicable					
Regulation (EC) No 1907/2006 REACH	Not applicable					

Regulation (EC) No 1272/2008 CLP	Not applicable					
Regulation (EU) No 649/2012 HAZARDOUS CHEMICALS EXPORT AND IMPORT	Not applicable					
POPs (Regulation (EC) No 850/2004 on persistent organic pollutants)	Not applicable					
Directive 2010/63/EU ANIMAL EXPERIMENTS						

3. Implementation Activities and Institutional Responsibilities

Implementation activities

Implementation arrangements for national legislation are in place. The bulk of duties and obligations is prescribed in the Law on chemicals and the Law on biocidal products; corresponding implementing legislation prescribing further details is prepared and in force. Department for chemicals formed within MAEP is responsible for functions as defined in the both Laws. Administrative structure of the Department for Chemicals is designed to fit the national legislative set up for chemicals management. Department consists of four organizational units with total of 21 employees. However, at present there are 13 employees engaged.

Unit established within the Sector for inspection over environmental protection, Department for Major Chemical Accidents, Chemicals and Biocidal Products is responsible for inspection duties and control of compliance with the national legislation on chemicals and biocidal products.

Having in mind Member State CA' tasks established by EC Regulations which Serbian CA for REACH, CLP, BPR and PIC will have to perform after the accession, strengthening of administrative capacity will continue during the pre-accession period. This is in particularly important in terms of technical posts covering relevant soft skills, especially in the field of risk assessment, as it is concluded in the Serbia Progress Report for 2014.

Classification, labelling and packaging of substances and mixtures (Regulation 1272/2008)

The CLP methodology of hazard assessment and communication is introduced under the Law on chemicals making manufacturers, importers and downstream users placing chemicals on the Serbian market obliged to apply it. CLP aligned rulebook is in force since 2010. Harmonized classification and labelling in line with the CLP Annex VI has been implemented also.

Serbian rulebooks and guidelines repeat the detailed content of individual CLP-provisions. Central staffs have acquired knowledge and practical experience on classification and labelling during several years. Capacities of core staffs and inspectors have been further underpinned by the cooperation with Austria/Slovenia and Sweden; central staff received also support from the European Chemicals Agency (ECHA) through the workshop on CLP Regulation and CLP related activities as well as through the workshop on IUCLID organized within the ECHA's IPA project supporting the candidate and potential candidate countries.

Ref: Serbian-Swedish cooperation project “Chemicals Risk Management in Serbia” 2007-2014; Serbian-Austrian twinning project IPA 2008 “Strengthening Administrative Capacities for the Implementation of a Chemicals Management System” 2010-2012.

Ref: ECHA’s IPA project “Preparatory measures for the participation of candidate countries and potential candidates in and their cooperation with the European Chemicals Agency (ECHA).

With regard to up to date experience on applying the legislation we would like to highlight the following:

- The classification and labelling of the most used substances (an important share of the commercially existing substances on the market) are given by the mandatory List of classified substances; classification of hazardous substances and mixtures that does not follow from a mandatory classification shall be based on available data and data primarily obtained by routes other than new testing, except for the physical chemical properties; testing on animals should be the last resort. Data on the intrinsic properties of substances and mixtures to be used for the aim of classification may stem from different sources and labs from anywhere in the world supported by the OECD-systems for data generation (OECD guidelines, GLP), built on mutual acceptance of such test data between countries. These requirements are implemented in Serbia under chemicals legislation to the same extent as they are implemented in the EU as envisaged by EC chemicals legislation (CLP, REACH etc); Qualified and/or certified (ISO 17025) laboratories for determining physico-chemical properties of chemicals exist in Serbia. Laboratory capacities are prescribed by the Rulebook on methods for testing of chemicals which is aligned with the Regulation No 440/2008 laying down test methods pursuant to REACH.

Ref: Rulebook on Methods for Testing of Chemicals’ Hazardous Properties (“Official Gazette of the RS”, No 117/13);

- Data are supposed to be obtained by industry within industry, by the help of consultants, through the sharing of data within the supply chains, by means of exchange through the trade with data and by other means that companies find most easy and suitable;
- Adequate knowledge on chemicals and classification is available and will be continuously improved. Since 2009, numerous educations and trainings have improved base for CLP-harmonised rules within the core administration. The core administration staffs benefit from the guidance, FAQs and other information on CLP provided on the ECHA’s website, as well as on the DG Environment and DG GROWTH. There is also access to a broader cluster of scientific expertise (dealing with aspects of toxicology, ecotoxicology etc.).
- Classification and labelling inventory that is built up according to CLP Regulation by the notifications sent to ECHA serves already under the present Serbian chemicals management system as a source of information to industry. Serbian manufacturers and importers are encouraged to consult this inventory when deciding on classification of chemicals they place on the market.

Ref: Article 16, Rulebook on classification, packaging, labelling and advertising of the chemical and certain article in accordance with Globally Harmonised System for Classification and Labelling of the UN;

- Arrangements have been implemented to ensure implementation of national legislation as well as the CLP Regulation after accession by chemicals industry sector. A number of seminars with industry participation were organized during the recent years to ensure that chemicals industry in Serbia becomes informed about its roles and obligations regarding the classification and labelling of chemicals. A system of certified chemicals advisors ensures that industry has access to knowledge for the purpose of classification and labelling of chemicals.

Ref: Law on chemicals; Rulebook on Chemicals Adviser (Official Gazette No 13/11, 28/11 and 47/12).

- Guidance for industry on classification, labelling and packaging in Serbian is provided by the competent authority in terms of guidelines and instructions prepared and made available via the Internet and by means of leaflets, posters etc. Recently, CLP Stakeholder Day was organized in order to remind industry about the mandatory application of the CLP aligned requirements on mixtures. More than 200 industry representatives took part and participated actively by raising relevant questions and asking for further clarifications.
- National helpdesk has been established since 2010 to ensure assistance to enterprises, especially to SMEs, with regard to the requirements of the national legislation as well as with the REACH and CLP (e.g. for importers). This helpdesk is foreseen to become the member of the ECHA helpdesk network once Serbia is the EU member. Its staffs already take part in Help Net activities with the capacity of an observer.

REACH (Regulation 1907/2006)

National REACH-harmonised legislation promulgated from the Law on chemicals is in force since 2010 and/or 2011. Serbian rulebooks and guidelines repeat the detailed content of individual REACH provisions (with the exception of the provisions which were not incorporated, please refer to page 172, 173 and 174). Central staffs have acquired knowledge and practical experience on REACH harmonized rules during several years. Capacities of central core staffs and inspectors have been further underpinned by the cooperation with Austria/Slovenia and Sweden; central staff received also support from the European Chemicals Agency (ECHA) through the workshops and trainings provided within the ECHA's IPA project supporting the candidate and potential candidate countries.

Ref: Serbian-Swedish cooperation project "Chemicals Risk Management in Serbia" 2007-2014; Serbian-Austrian twinning project IPA 2008 "Strengthening Administrative Capacities for the Implementation of a Chemicals Management System" 2010-2012.

Ref: ECHA's IPA project "Preparatory measures for the participation of candidate countries and potential candidates in and their cooperation with the European Chemicals Agency (ECHA)".

With regard to up to date experience on applying the legislation we would like to highlight the following:

- Adequate knowledge on chemicals is available and will be continuously improved. Numerous educations and trainings since 2009 have laid a base for REACH-harmonised rules within the core administration. The core administration staffs benefit from the guidance, FAQs and other information on REACH provided on the ECHA's website as well as on the DG Environment and DG GROWTH web sites. There is also access to a broader cluster of scientific expertise. Participation in the meetings (CARACAL, Help Net meetings) is also recognized as capacity building.
- Data on legal entities and chemicals placed on the Serbian market are collected via the function of Chemicals Registry.
- In line with its importance, communication within the supply chain has been implemented. Legal entities placing chemicals on the market provide SDS together with the chemical and the form and content are in line with REACH, Annex II. Duty to communicate information on substances in articles (REACH, Art. 33) is implemented also.

- Arrangements have been implemented to ensure implementation of national legislation as well as the REACH Regulation after accession by chemicals industry sector. A number of seminars with industry participation were organized during the 2010-2012 time period to ensure that chemicals industry in Serbia becomes informed about its roles and its obligations under REACH. The Helpdesk function also prepared guidelines on REACH, Guidance on Safety Data Sheet, Guidance on implementation of bans and restrictions regarding asbestos, national FAQs etc. System of certified chemicals advisors has been established in order to ensure that industry has access to knowledge for the purpose of fulfilling the requirements imposed by the legislation.

Ref: Law on chemicals; Rulebook on Chemicals Adviser (Official Gazette No 13/11, 28/11 and 47/12)

- Within the framework of the IPA 2008 Guidance on application of REACH requirements for exporters, Guidance for substance identification and a brochure on export of products containing SVHC were prepared.

Ref: Serbian-Austrian twinning project IPA 2008 “Strengthening Administrative Capacities for the Implementation of a Chemicals Management System”.

- Operators are well aware of the List of SVHC. So far they are obliged to report data on the chemicals they place on the market including SVHC on their own or in a mixture, annually. From 2015 they are obliged to notify further information for the SVHC to the Chemicals Registry. Industry’s capacity to implement rules on authorisation including preparation of relevant application will be built further for instance through the work of Serbian Chamber of Commerce with which MAEP has signed memorandum of understanding and SVHC are already put on the agenda.

- Cooperation and permanent dialogue with industry is established. At the beginning it was for the purpose of determining the deadlines for entry into application of bans and restriction while the last activities were focused on SVHC. We may mention cooperativeness of the Association of the Cement Industry of Serbia with regard to restriction of the content of the Chromium (VI) as the example of good practice.

- National helpdesk established by the Law on Chemicals provides help to manufacturers and importers and in particular SMEs and micro enterprises to fulfil their obligations prescribed by the national REACH-harmonised legislation and navigates interested parties through the REACH Regulation (e.g. to support exporters). National helpdesk is foreseen to become the member of the HelpNet once Serbia is the EU member. Its staffs already take part in HelpNet activities with the capacity of an observer.

- Communication to the public (art. 123 REACH)- Informative materials were prepared as one of Help Desk’s activities. Official web site of the competent authority contains information regarding household chemicals (detergents, biocidal products, etc.), dangerous chemicals in products (phthalates, BPA, SVHC, asbestos, etc.). Importance of cooperation with Consumers Organizations has been recognized and Seminar “Safe with chemicals” was held and also active participation on the Consumer rights fair. Help Desk’s web page on MAEP web site will have content dedicated to consumers soon, since it has been updated currently.

- Active cooperation with the civil sector with regard to chemicals and product safety is established. NGOs are among the main partners when it comes to dissemination of information about chemicals to the public. (e.g. ongoing Project: “Capacity Building and Strategic Partnerships for Chemicals Safety in the Republic of Serbia”; one component is strengthening cooperation between organisations of civil society, authorities, scientific community, healthcare specialists,

trade unions, and other stakeholders in Serbia with aim to improve consumer protection and product safety by providing knowledge about chemicals in products).

- Awareness raising event „Living with hazardous chemicals: Fiction or Reality of Everyday Life?“ featuring a documentary film „THE SUBMISSION“ (directed by Stefan Jarl) was held in order to inform NGOs and other interested parties about the effects of chemicals to the human health and environment. The mentioned film investigates the chemicals people are exposed to in their daily lives, such as chemicals in plastic (phthalates), textile, furniture and other products used for improvement of products by making them flame retardant or surfactants (PBDE and fluorosurfactants – PFOS, PFOA). Swedish film is available with Serbian subtitles.

POPs (Regulation (EC) No 850/2004 on persistent organic pollutants)

Grounds for implementation of the Stockholm Convention have been prepared on the basis of the NIP which was adopted by the Government of the Republic of Serbia in 2009. During the 2009 – 2015 time period, Serbia established institutional framework for POPs management and started implementation of the national POPs-harmonized legislation according to the activities defined in the action plans of the original NIP.

Last April the NIP was updated through the UNIDO/GEF Project “Enabling activities to review and update the National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants (POPs)”. More information on the project activities is available on the National POPs website (English version), link from the MAEP Internet presentation:

<http://www.eko.minpolj.gov.rs/en/organization/departments/departments-of-planning-and-management-in-the-environment/division-for-chemical/pops-2/>.

Institutional responsibilities

Ministry of Agriculture and Environmental Protection (MAEP) is CA responsible for implementation of Stockholm Convention (the SC) and POPs harmonized national legislation. Department for Chemicals of the MAEP is responsible for the implementation of the Stockholm Convention on POPs (prohibitions or restrictions of produce, placing on the market and use of POPs chemicals). Department for Waste Management of the MAEP is responsible for implementation of provisions of the SC related to POPs waste management. Serbian Environmental Protection Agency (SEPA) is responsible for monitoring and reporting of POPs in environment. Plan Protection Directorate, MAEP is responsible for implementation of provisions of the SC related to POPs pesticides in plant protection products.

Responsibilities for inspection and control over the implementation of the national legislation on POPs (as chemicals) management are laid on the Environmental Inspection (MAEP) and Sanitary Inspection (Ministry of Health). Environmental inspectors are in charge for inspection and control over the implementation of the legislation on the POPs waste management.

Short term priorities:

- Further capacity building will be achieved through the IPA project „Improvement of hazardous waste management in the Republic of Serbia – IHWMS”

Mid-term priorities:

- Upgrade of laboratory facility for monitoring of new POPs. Upgrade of laboratory facility in the Serbian Environmental Protection Agency (SEPA) will be achieved until 2018 by IPA project “Establishment of an integrated environmental monitoring system for air and water quality”.

Biocidal products (Regulation (EU) 528/2012)

Since the Law on Biocidal Products came into force in 2009, the CA for biocidal products management has been carrying out national transitional procedure, i.e. inclusion of biocidal product into the Temporary List for the submission of technical dossier, based on which biocidal products containing not only approved active substances but also existing active substances which are being examined under the Review Programme Regulation (Commission delegated Regulation (EU) No 1062/2014) can be placed on the market.

The Temporary List of biocidal products contains, among others, deadline for submission of application for authorisation and dossier for the biocidal product. Important point to mention is that this deadline does not follow the timeline set out in the Commission Inclusion Directives or Implementing Regulations. Duty holders are granted additional period to apply for authorisation.

So far no application for authorisation of biocidal products as well as recognition of EU authorisation has been submitted to the MAEP.

Through the implementation of the national legislation regulating biocidal product score administration has been constantly building up its competence. Participation in the CA meetings for the implementation of the BPR, Coordination Group meetings as well as Help Net meetings is also recognised as capacity building. In addition, documents and guidance provided on the ECHA's and CIRCA BC's website as well as on the DG Santé website have contributed to better understanding of the EU legislation and significantly improved core administration's knowledge.

Capacities of the core administration and inspectors have been further underpinned by the cooperation with Austria-Slovenia as well as Sweden through the implementation of the capacity building projects. In addition, central staff received also support from ECHA through different workshops and Stakeholder's day organized within ECHA's IPA project for candidate countries and potential candidates.

Ref: Serbian-Swedish cooperation project "Chemicals Risk Management in Serbia" 2007-2014;

Ref: Serbian-Austrian twinning project IPA 2008 "Strengthening Administrative Capacities for the Implementation of a Chemicals Management System" 2010-2012;

Ref: ECHA's IPA project "Preparatory measures for the participation of candidate countries and potential candidates in and their cooperation with the European Chemicals Agency (ECHA)".

In addition, cooperation and permanent dialog with Serbian Chamber of Commerce have been established. A number of seminars were organized during the 2010-2012 time period to ensure that biocidal products industry is informed about its roles and obligations under the national legislation on biocidal products as well as EU legislation. Among others, one day workshop on *EU biocidal product legislation in practice* was organized where the speakers were representatives of the EU industry and industry associations dealing with biocidal products. Recently, the MAEP in cooperation with the Serbian Chamber of Commerce and within the frame of Serbian-Swedish project organised one day workshop for legal entities placing biocidal product on the market in order to inform them about their future responsibilities and obligations under the BPR in the pre-accession period as well as upon accession. More than 100 industry representatives took part in the event.

Speaking about implementation activities in real terms, we may refer to the following:

- Only BPs complying with the requirements of the Law on Biocidal Products are placed on the market;
- There is register of biocidal products placed on the market as well as of active substances contained in;

- There is information on number of legal entities placing biocidal products on the market that will have to comply with the requirements of the BPR, especially with Article 95 obligation;
- Representative of Serbia takes part in the CA meetings as well as Coordination Group meetings with the capacity of an observer;
- National helpdesk to provide advice to applicants, especially SMEs and any other stakeholder to comply with the requirements of the national chemicals and biocidal products legislation has been established and is operational since 2010. The staff takes part in the HelpNet activities with the capacity of an observer;
- Website to navigate SMEs and other stakeholders in the national legislation is operational since 2010;
- Manual of Decision in Serbian and guide to support industry placing on the market of biocidal products under the national transitional procedure were developed.

Export/Import of Chemicals (Regulation (EU) No 649/2012 on export and import of hazardous chemicals)

Notification procedure and prior informed consent (PIC) procedure for import and export are established and have been conducted since 2009, which is in accordance with requirements of the Rotterdam Convention and PIC Regulation.

Regarding activities related to the control of exports, for the purpose of efficient work of Customs Authorities, Decision on determining the goods subject to the presentation of certain documents when imported, exported or transiting ("Official Gazette of the RS" No. 32/15) is adopted and it is updated every year. List of chemicals and articles whose import and export is banned is in Annex 7 and the list of acts based on which chemicals are imported and exported is specified in point 11 of this Decision.

Seminar for custom authorities for introduction to the legislation regarding exports and imports of certain hazardous chemicals was conducted in 2011. In previous years, seminars for inspection were organized to introduce the provisions of the acts regarding import and export of certain hazardous chemicals.

Environmental inspection has, in annual plan, activities regarding the inspection compliance control of the provisions of the Rulebook on Import and Export of Certain Hazardous Chemicals. Also, there is a plan to develop and strengthening cooperation with Customs Authority in order to ensure the implementation of this Regulation.

Ref: Serbian-Swedish cooperation project "Chemicals Risk Management in Serbia" 2007-2015; Serbian-Austrian twinning project IPA 2008 "Strengthening Administrative Capacities for the Implementation of a Chemicals Management System" 2010-2012.

Ref: ECHA's IPA project "Preparatory measures for the participation of candidate countries and potential candidates in and their cooperation with the European Chemicals Agency (ECHA)".

Institutional responsibilities

Ministry of Agriculture and Environmental Protection is the national authority designated to carry out the administrative procedures (notification and PIC procedure) and for the aims of the Rotterdam Convention. DNA has been working for six years.

Ministry as Competent Authority, Customs Authority, inspection, Plant Protection Directorate (as authority competent for plant protection products) and industry are involved in implementation of PIC Regulation. Ministry is responsible for conduction of the procedure prescribed by Regulation

(in cooperation with Plant Protection Directorate when plant protection products are issue). The Ministry issues the acknowledgement to the exporter that the PIC procedure has been conducted. Acknowledgement contains response given by the designated national authority of the importing country. Exporter is obliged to comply with that response. Customs Authority performs export and import control of chemicals and articles which export and import is banned and examines whether the notification procedure and/or PIC procedure has been conducted. Inspectors control if exporters fulfil their obligations according to the Law on Chemicals. Exporters and importers are responsible for submitting data on conducted export and import which are prescribed by the Law on Chemicals to the Ministry.

Regarding administrative capacities, 1 person with shared responsibilities is envisaged for PIC Regulation (administrative procedures).

ENFORCEMENT

MAEP, enforcement organizational unit for chemicals and biocidal products has 6 environmental inspectors. All the inspectors have background in chemistry and/or chem. engineering. In some cases they are supported by the colleagues who work in unit for supervision and control of Seveso facilities and who are trained for inspection of chemicals also. All of them are engaged as both office and field staff. Please be advised that those inspectors are competent and responsible for supervision of compliance with the Law on chemicals, Law on Biocidal products and all the legislation promulgated thereof. Lot of efforts were put in enforcement capacity building activities e.g. inspectors have received trainings, took part in workshops where case studies were discussed within the international cooperation projects; a few Pilot inspections were performed with participation of inspectors from the EU MSs

In order to re-assign clear responsibilities for chemicals inspection Law on amendments to the Law on chemicals has been adopted and entered into force on 14th of March 2015. According to these amendments chemicals compliance control is conducted by the Ministry in charge of environmental protection through the environmental inspectors, Ministry in charge of health through sanitary inspectors and Ministry in charge of trade through trade inspectors.

Sanitary inspector control ban and restrictions of chemicals (Annex XVII of REACH) in general use products. Trade inspectors only control issues regarding keeping of dangerous chemicals in retail. Other issues regarding chemicals compliance control are jurisdiction of environmental inspection. These three inspections collaborate with each other i.e. mutually inform on undertaken measures, exchange information, provide immediate assistance and undertake joint measures and activities relevant to conduction of supervision. It is envisaged that these three Ministries, by the Agreement, establish the Joint Body for carrying out tasks of compliance control, pursuant to legislation governing state administration.

There is also division of responsibilities in Laws on amendments to the Law on biocidal products. There are four inspections in charge of compliance control of biocidal products.

Sanitary inspection conducts inspection of the use of biocidal products at professional users who use biocidal products for performing the registered activity, as well as in the areas, facilities and activities that are under sanitary supervision, except over the use of biocidal products in facilities that provide veterinary activities in accordance with special regulations.

Veterinary inspection conducts inspection supervision over the use of biocidal products at professional users who use biocidal products for registered veterinary activities, as well as in the areas, facilities and activities that are under veterinary supervision.

The trade inspection conducts inspection of the fulfilment of conditions for holding dangerous biocidal products in the retail.

Environmental inspection conducts inspection of all other provision of Law on Biocidal Products such as placing of biocidal products on the market, classification, packaging, labelling and advertising of a biocidal product, Safety Data Sheet, etc.

Work plans are developed according to assessment of quantities of import and manufacturing of chemicals. Usually, work plan contains two major campaigns such as detergents, paint, certain restriction etc. Also, annual plan contains certain controls conducted during the whole year, such as CLP, SDS, placing of biocidal product on market etc.

These controls are focused on the placing on the market of chemicals and biocidal products. Manufacture/production in general is not covered by the Law on Chemicals and Law on Biocidal products.

In daily work, environmental inspectors control different provisions of Law on Chemicals but in almost every control one of the mandatory controls is control of classification and labelling, as well as Safety Data Sheet.

Since the inspection control of chemicals in Serbia is still “young”, quantities of import and manufacturing of chemicals are main input for inspection. Adequate classification and labelling is priority at this moment, which is the first step that provides information necessary for safe use of chemicals.

Also, one of factors for choosing companies for inspection is if chemicals placed on the market by that company are intended for general public i.e. there is significant risk of exposure during use of chemicals.

Finally, inspection control is conducted upon notifications on actions contrary to the provisions of Law submitted by legal or physical persons whether these notification are anonymous or not.

Measures ordered by the inspector during inspection supervision shall be in the form of the Ruling.

After inspection supervision inspectors control how the ordered measures are performed.

The Administrative inspection within the Ministry of Public Administration and Local Self-government is responsible for control of work of the public servants and, therefore, inspectors.

New Law on inspection adopted in 2015, would provide transparency and uniform approach in the treatment of companies (Law on inspection supervision “Official Gazette“, No. 36/2015).

Animals used for scientific purposes (Directive 2010/63/EU)

Veterinary Directorate as CA for the welfare of experimental animals comprises Department for Animal Health, Welfare and Traceability with Group for Animal Welfare within it.

Procedures for issuing of an Approval for conduction of experiment on animals, registration of all users, breeders and suppliers as well as for keeping the Register on experiments on animals have been established and implemented.

In addition, the bodies envisaged by the Directive 2010/63 have been established:

- Ethical Commission for the Protection of Experimental Animals within every scientific organisation and other legal person that conduct the experiments (Animal Welfare Body, Art. 26 and 27);
- Ethical Council for Welfare of Experimental Animals as Special Working Group (National Committee for protection of animals, Article 49).

Inspection over compliance is carried out on the basis of risk analysis, by random sampling and upon the notification on actions contrary to the provisions of the Law on Animal Welfare ("Official Gazette of RS" No 41/09)

Note: Further details on keeping the Register and issuing the approval of experiment can be found in Annex 3 to this document.

4. Further actions

Further actions/measures are needed in order to become fully prepared for implementation of all the Acquis in the Chemicals subsector. Strategy which should ensure such preparedness is briefly described below.

- **Institutional/administrative structure to perform all MS tasks envisaged by the chemicals acquis in place, in due time before accession;**

Current administrative capacity of MAEP Department for Chemicals which is foreseen to become CA for REACH, CLP, BPR and PIC (hereinafter CA) will be reassessed, redeployed and increased in order to mirror the extent of the Acquis on chemicals. The CA Development Plan will be drafted during 2015/2016 time period and cover issues such as relevant capacity area and tasks at present (e.g. list of expertise, technical skills etc.), available staff (man/year), resources required on accession (man/year) with reference to MS obligation and further employment timeline. The Plan will build on current capacities and provide for maximal use of existing staff due to the possible financial constraints. Due care will be taken to ensure that sufficient number of adequately trained staff is in place to perform all tasks placed on the MS CA, including duty to cooperate with the Commission and ECHA effectively.

Gaps with regard to competences and skills of CA staff will be prevailed over during the pre-accession period. Certain activities are already decided within twinning project IPA 2013 SR13 IB EN 03 "Further development of chemicals and biocides products management".

Participation in the relevant Competent Authority Meetings with the capacity of an observer will further strengthen competences and skills required for effective participation with full capacity after the accession.

Funds for developing of the Plan are provided by SIDA through the "Chemicals risk management" project. Several human resources training activities will be funded by IPA through the above mentioned project. Resources needed for further employment will be provided by state budget.

- **Involvement of scientific cluster**

MAEP (i.e. Department for Chemicals) will remain CA for REACH, CLP, PIC, BPR, POPs (Department for Chemicals and Department for Waste Management with shared responsibilities). CA will be supported by scientific sector, i.e. executive tasks such as substance evaluation, assessment of different parts of biocidal products dossier etc. will be devolved to public institution(s) as it is the case in some of the EU MSs. From the present perspective the following institutions which have pool of experts including (eco)toxicologists are considered as potential partners: National Poison Control Centre, Centre for toxicological risk assessment established within the Faculty of Pharmacy, Belgrade University, Department for biology and ecology, Faculty of Sciences, Novi Sad University, Institute for Biocides etc. Representatives of the above mentioned institutions took part in the introductory trainings on regulatory risk assessment performed under the IPA 2008 and will be further supported in terms of additional trainings. Initial activities for engagement of scientific sector have started; however, terms of cooperation have to be decided first aiming to ensure avoidance of conflict of interests.

Different models of cooperation will be considered in medium term in order to identify the best option for Serbia. Legal base as well as legal arrangements for engagement of scientific sector in technical work will be established in due time to ensure that functioning arrangements are in place by the accession.

Certain activities in that regard have been already initiated. Recently, one day meeting with representatives of academia sector was organised within the frame of Serbian-Swedish cooperation project with the aim to further strengthen mutual cooperation and discuss the possibilities and conditions under which Scientific sector can provide expert services to the MAEP to carry out obligations conferred on it by the BPR. It was agreed that academia sector will determine specific areas of competence it needs to strengthen in order to be able to support the MAEP under the BPR. This issue will be further discussed during the autumn this year.

- **Development of supporting instruments (biocides)**

At present, the costs of the procedures associated with the Law on biocidal products are recovered from legal entities placing biocidal products on the market. Those fees are the revenue of the state budget. Development of sustainable model for financing of biocidal products management is planned under the IPA SR13 IB EN 03 “Further development of chemicals and biocides products management”. Suitable national fees, taking into account harmonized structure of fees for BPR including specific needs of SMEs, will be identified.

Legislative act establishing fees for services that CA provide with respect to procedures under BPR will be prepared and adopted in due time before accession.

- **Switch in legislative basis**

Since alignment with Regulations is a temporary measure, repealing of national legislation that *transposes* EU Regulations is a part of implementation strategy and will be prepared thoroughly. Any requirement that goes beyond the Acquis will be re-considered for its compliance with the Acquis as well as for its cost effectiveness and subsequently repealed.

Legislation which will provide for all of the arrangements to be decided by the MS (e.g. establishing Competent Authority, Helpdesk, enforcement arrangements etc) and thus enable implementation of each of Regulations (REACH, CLP, PIC, BPR,) will be prepared in due time before accession. This legislation will enter into force before accession but will be applicable from the day of accession.

Funds and expert advice for drafting of the above stated legislation are provided by SIDA through the “Chemicals risk management” project.

- **Raising awareness and readiness of private sector**

Private sector will be supported further in order to join level playing field. Companies and in particular SMEs will be assisted to understand their roles and duties in a way that will make them not only able to comply with it, but also to make strategic choices regarding the sustainability of their portfolio. This would be achieved by enhanced communication and different means of information and knowledge dissemination (informative seminars, workshops etc). Standing dialogue and practice of Stakeholder Days will be established. Beside the chemicals companies, targets groups will be industry associations as well as consulting sector which are expected to support the industry.

Table 2: Further activities

CHEMICALS SECTOR	PRE-ACCESSION PERIOD						TRANSITION PERIOD	
	2015	2016	2017	2018	2019	2020	2021	2022
Training of human resources								
Inventory and thorough review of current in house competences								
Analytical comparison of findings of the review and tasks imposed on the CA by EC legislation								
Plan for Further Development of CA developed								
Action Plan prepared including further employment time-line								
Execution of Action Plan								
Arrangements with Scientific sector to support the CA in place								
Switch in legislative basis								
Institutional/administrative structure in place								
Raising awareness of private sector								
Transitional arrangements for implementation of specific provisions of REACH and BPR								
Legal base for full transposition of legislation on animal								

welfare in place								
Full transposition of Directive 2010/63/EU								
Sustainable system in animal welfare field fully established (institutional and administrative capacity)								

4. List of EU Regulations which considers most demanding for implementation

Serbia understands that REACH and BPR Regulations are ‘internal market’ as well as health and environmental rules and that every extended deadline for implementation will create market distortions. However, by the 2020 (tentative date of Serbia’s accession), all transitional measures set out in REACH and BPR will have expired and Serbian industry needs transitional arrangements which should facilitate joining the level playing field.

Legislation aligned with the parts of REACH already imposes obligations on our industry. In addition, industry will be informed and supported to understand further obligations arising from the accession and advised to start with the preparations in due time. Anyhow, even if companies start to prepare for new rules in due time before accession they cannot benefit from instruments envisaged facilitating industry integration into the system and data sharing. Provisions of REACH and BPR establishing rules for data sharing are applicable only to MSs (e.g. join SIEF, access data on active substances in biocidal products etc.) thus kind of transitional arrangements are necessary to offset such disadvantages. Furthermore, according to REACH, Article 29 (3), each SIEF shall be operational until 1 June 2018 and the tentative day of potential accession of Serbia is well behind that datum.

Besides, in order to carry out authorization procedure under BPR, CA has to have access to R4BP. Such prerequisite cannot be fulfilled during the pre-accession period. Secondly, the prescribed procedures can last up to three years; certain time is needed by CA to issue an authorization. Even after obtaining access to R4BP it should not be expected to have authorized biocidal products on the single day of the accession.

In brief, transitional arrangements are needed for REACH provisions establishing rules on registration and authorization and BPR provisions establishing rules on authorization, treated articles and access to the active substance dossier.

Serbia is going to ensure full implementation of most of REACH and BPR and for certain articles propose to consider transitional arrangements. For the purpose of the post-screening document, those articles have been identified preliminary and given in the table below. Please be advised that this information is indicative only, actual request for transitional arrangements will be part of Negotiation Position for Chapter 27.

5. Implementation Deadline

The tentative deadlines for full implementation for each of legislative acts in the Chemicals subsector are indicated in the table below. The year 2021 is provisionally considered as the year of accession.

Time required by Serbia to achieve full compliance with the Acquis was estimated with due care, however all the information given should primarily serve as indication.

Table 3: Implementation deadlines

EU legislation	Implementation deadline	Comment
Regulation (EU) No 528/2012 BIOCIDAL PRODUCTS	2020 except for certain provisions for which transitional arrangements need to be agreed	(e.g. Art. 17, 94, 95)
Regulation (EC) No 1907/2006 REACH	2020 except for certain provisions for which transitional arrangements need to be agreed	(e.g. Art. 6, 7, 17, 18, 26)
Regulation (EC) No 1272/2008 CLP	2020	
Regulation (EU) No 649/2012 HAZARDOUS CHEMICALS EXPORT AND IMPORT	2020	
Directive 2010/63/EU ANIMAL EXPERIMENTS	2020	

6. Cost /Financing Estimation

In the Chemicals subsector the focus of the financing burden will be on industry. Compliance with in particular REACH and BPR imposes substantial costs (e.g. the cost of drawing up a registration dossier can be high) and includes:

- study costs: any cost that was required for performing an existing study in the case of data sharing (data which could be obtained on the basis of data sharing and subsequent costs) or less likely, costs required for performing a new testing study, whether relating to preparing the necessary specifications, contracting with a laboratory or monitoring its performance (CAPEX);
- any cost of creating, managing and updating the data set fulfilling the information requirements imposed by the relevant regulation (REACH, CLP, BPR, PIC), including the cost related to the generation of information from non-testing studies (Administrative costs).

Serbia possesses data on current number of legal entities placing chemicals and biocidal products on the market as well as data on the number of chemicals and biocidal products placed on the market. Those data may be used to make rough assessment of size of the potential investments needed, however with potential risk of overestimation. Uncertainty of such estimation would be high due to the fact that each legal entity is expected to reassess present supply chain vs. potential costs in order to redefine its own portfolio. In addition, according to the experience from other countries, it is likely that some of the enterprises/entrepreneurs will close their business.

Finally, data sharing options and further issues which trigger the total cost such as number of existing and potential registrants for the same substance would influence the size of the investment. Similarly, under BPR the LoA is estimated to be significant in cost with range of several thousands

to several tens of thousands EUR. However, in case of a small number of data sharers the cost of the LoA may be much higher, reaching several hundred thousand EUR. Therefore, we would rather make this estimation in the later stage of the negotiation process, if appropriate. For this purpose, assessment of REACH (BPR) impact on Serbian chemicals industry and whole economy will be prepared.

Requirements from the state budget are being limited to improvement of administrative set up in terms of further employment and investments in IT. Those costs of implementation are administrative in general; however a distinction has been made between recurrent costs and the one-off costs associated with implementing strategy.

One-off costs include costs such as for establishing IT infrastructure in order to have a secure connection to ECHA IT system and for the exchange of data between MSs, costs for establishing measures to ensure the confidentiality of these data, co-financing of specific projects, trainings, awareness campaigns etc. Serbia will seek to get this expenditure at least partly funded by donor aid and different grant funds aiming to minimise the needed intervention from the state budget.

Recurrent costs include salaries and other staff related costs (travel remittance and per diems), maintenance and operating cost of systems such as IT infrastructure, inspection expenditures and other administrative costs. It is expected that part of the costs will be covered through economic instruments where envisaged by the relevant Acquis (e.g. fees under BPR). Specific model for financing of biocidal products management is planned under IPA SR13 IB EN 03 “Further development of chemicals and biocides products management”. However, there will be a need for additional financing from the state budget in order to cover total approximation costs.

Existing financing estimations provided in NEAS have been well thought-out for the purpose of drafting of the post screening information; the figures provided in the strategy would have needed to be adapted in order to cover just the Chemicals’ subsector acquis as well as to provide for adjustments regarding the institutional changes which happened in the meantime (i.e. abolishment of the Serbian Chemicals Agency in 2012). For the purposes of the post screening document it is preliminary assumed that number of additional Human Resources needed is 25, however more precise data will be available after the CA development plan is prepared.

Training costs have been estimated at a total of up to 5 million over a 6 year period. Projects, studies and other technical support (international donor and IPA funds) are estimated at around of 5 million EUR for the whole pre-accession period.

Annex 1

Table 1 Correlation between national legislative act and parts of the REACH Regulation transposed into it

National legislative act	REACH	Amendments No.
Rulebook on Bans and Restrictions of Production, Placing on the Market and Use of Chemicals (Official Gazette of RS, number 90/13 and 25/15)	Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles;	EC No552/2009, EC No276/2010, EC No 207/2011, EC No 366/2011, EC No 494/2011, EC No 109/2012, EC No 412/2012, EC No 835/2012, EC No 836/2012 EC No 848/2012 EC No 847/2012 and EC No 126/2013
List of Substances of Very High Concern (Official Gazette of RS, number 94/13)	Annex XIV - List of substances subject to authorisation	EC No 143/2011, EC No 125/2012 and EC No 348/2013
Rulebook on content of Safety Data Sheet (Official Gazette of RS, number 100/11)	Annex II - Requirements for the compilation of safety data sheets	EC No 453/2010
Rulebook on manner of conduction of chemicals safety assessment and content of chemicals safety report (Official Gazette of RS, number 37/11)	Annex I - General provisions for assessing substances and preparing chemical safety reports	EC No 252/2011
Rulebook on criteria for identification of substances such as PBT and vPvB (Official Gazette of RS, number 23/10)	Annex XIII - criteria for the identification of persistent, bioaccumulative and toxic substances, and very persistent and very bioaccumulative substances	
Rulebook on test methods for evaluation of Dangerous Properties of Chemicals (Official Gazette of RS, number 117/13)	Regulation No 440/2008	EC No. 761/2009

Annex 2

Table 1a. - List of POPs harmonized national legislation

National legal acts	POPs Regulation 850/2004
<ul style="list-style-type: none"> • Law on Chemicals (Official Gazette of RS, number 36/09, 88/10, 92/11, 93/12 and 25/15) • Rulebook on Bans and Restrictions of Production, Placing on the Market and Use of Chemicals (Official Gazette of RS, number 90/13 and 25/15) – Art. 8 and 9; Annex II – List of POPs substances subject to bans and restrictions 	<p>in Convention:</p> <ul style="list-style-type: none"> • Annex I, Part A • Annex II, Part A
<ul style="list-style-type: none"> • Law on Ratification of the Protocol to the 1979 Convention on Long-range Transboundary Air Pollution on Persistent Organic Pollutants (Official Gazette of RS – International Agreements, number 1/12) • Law on Air Protection (Official Gazette of RS, number 36/09 and 10/13) • Law on Integrated Pollution Prevention and Control (Official Gazette of RS, number 135/04 25/15) • Law on Waters (Official Gazette of RS, number 30/10 93/12) <p>and related sublegal acts adopted on the basis abovementioned laws</p>	<p>in Protocol:</p> <ul style="list-style-type: none"> • Annex I, Parts A and B • Annex II, Parts A and B • Annex III
<ul style="list-style-type: none"> • Law on Waste Management (Official Gazette of RS, number 36/2009 88/2010) • Rulebook on List of POPs, Manner and Procedure for POPs Waste Management and Maximum Permissible POPs Concentrations Related to Disposal of POPs Containing of Contaminated Waste (Official Gazette of RS, number 65/11) 	<ul style="list-style-type: none"> • Annex IV • Annex V

Table 2b - Correlation between national legislative act and parts of the POPs Regulation transposed into it

National legislative act	POPs Regulation 850/2004	Amendments No.
Rulebook on List of POPs,	•	Commission Regulation (EU)

Manner and Procedure for POPs Waste Management and Maximum Permissible POPs Concentrations Related to Disposal of POPs Containing of Contaminated Waste (Official Gazette of RS, number 65/11)	Annexes IV and V	No 756/2010
Rulebook on Bans and Restrictions of Production, Placing on the Market and Use of Chemicals (Official Gazette of RS, No. 90/13 and 25/15) – Art. 8 and 9; Annex II – List of POPs substances subject to bans and restrictions	Annexes I	Commission Regulation (EU) No 757/2010
		Commission Regulation (EU) No 519/2012

Annex 3

Transposition Status - Directive 2010/63/EU

- General provisions, including principles of replacement, reduction and refinement (3R) (Article 5, 41 of the Law on Animal Welfare ("Official Gazette of RS" No 41/09 and the Article 2, 21 of the Rulebook ("Official Gazette of RS" No 39/10)),

- Provisions related to the purposes of the procedures (Article 38, 42 of the Law on Animal Welfare ("Official Gazette of RS" No 41/09), killing of experimental animals (Article 40 of the Law on Animal Welfare ("Official Gazette of RS" No 41/09 and the Article 36 of the Rulebook ("Official Gazette of RS" No 39/10).),

Provisions on the use of certain animals in the procedures (Article 37 of the Law on Animal Welfare ("Official Gazette of RS" No 41/09) and the Article 19, 20 of the Rulebook ("Official Gazette of RS" No 39/10).),

- Provisions related to obligatory registrations of users, breeders and suppliers (Article 33 of the Law on Animal Welfare ("Official Gazette of RS" No 41/09 and the Article 3, 17 of the Rulebook ("Official Gazette of RS" No 39/10).). The system of registration is already applied. Veterinary Directorate as an competent authority keeping this record.

- Provisions related to the requirements for installations and equipment (Article 33, 40 of the Law on Animal Welfare ("Official Gazette of RS" No 41/09 and the Articles 4-15, Annex 1, 2 of the Rulebook ("Official Gazette of RS" No 39/10).),

- Provisions related to care of animals (Article 40, of the Law on Animal Welfare ("Official Gazette of RS" No 41/09 and the Article 21-37 of the Rulebook ("Official Gazette of RS" No 39/10).),

Provisions related to the competence of personnel (Article 33, 35, 36 of the Law on Animal Welfare ("Official Gazette of RS" No 41/09 and the Article 16 and Annex 3 of the Rulebook ("Official Gazette of RS" No 39/10).),

- Provisions related to the designated veterinarian (Article 35 of the Law on Animal Welfare ("Official Gazette of RS" No 41/09),

- Provisions related to the national committee for the protection of animals used for scientific purposes (Articles 48-50 of the Law on Animal Welfare ("Official Gazette of RS" No 41/09), provisions related to the obligatory record keeping (Article 43 of the Law on Animal Welfare ("Official Gazette of RS" No 41/09 and the Article 38, 39 and Annex 6, 7 of the Rulebook ("Official Gazette of RS" No 39/10).). In line with that, Special Working Group – Ethical Council for Welfare of Experimental Animals has been established by the Decree (No 119-01-124/2005- 09/18, 23th September 2009). Member of Ethical Council must not be the member of Ethical Commission for protection of experimental animal welfare at the same time.

- Provisions related to the animal welfare body (Article 51, 52 of the Law on Animal Welfare ("Official Gazette of RS" No 41/09). According to the Article 51, of the Law on Animal Welfare ("Official Gazette of RS" No 41/09), every scientific organizations and other legal persons that conducting experiments on animals are obliged to establish an Ethical Commission for the Welfare of Experimental Animal within their organization or together with other scientific and research organization and legal persons who conduct experiments on animals. Every registered user already established the above mentioned body.

- Provisions related to the approval of experiments (Article 34 of the Law on Animal Welfare ("Official Gazette of RS" No 41/09 and the Article 18 and Annex 4 of the Rulebook ("Official Gazette of RS" No 39/10).). According to the Article 34, of the Law on Animal Welfare ("Official Gazette of RS" No 41/09), experiment on animals shall be performed on the basis of Decreed on

approval for conduction of experiment on animals, issued by the Minister on the basis of the expert opinion of Ethical Commission for the Protection of Experimental Animals. Decree on approval for conduction of specific, invasive experiments on animals, shall be issued on the basis of professional opinion of Ethical Council for Welfare of Experimental Animals. Veterinary Directorate already issues the above mentioned approvals.

- Provisions related to the anesthesia and analgesia (Article 39 of the Law on Animal Welfare ("Official Gazette of RS" No 41/09 and the Article 21, 22 of the Rulebook ("Official Gazette of RS" No 39/10).),

- Choice of methods, (Article 41 of the Law on Animal Welfare ("Official Gazette of RS" No 41/09 and Article 21, 22 of the Rulebook ("Official Gazette of RS" No 39/10).),

- Provisions related to the alternative approaches (Article 41 of the Law on Animal Welfare ("Official Gazette of RS" No 41/09).

- Provisions related to the mechanism to collect statistical information According to the Article 43, of the Law on Animal Welfare ("Official Gazette of RS" No 41/09) persons conducting the experiments, as well as the persons involved in keeping, breeding and supplying of experimental animals are obliged to maintain a statistical record on keeping, breeding, trade and experiments conducted on animals. The above mentioned data shall contain information about the number and species of animals, the purpose of experiment and the classification of severity and invasion of the experiment. Those data must be submitted to the Ministry, and shall be available to the public. Article 38 and 39 and the Annex 6 and 7 of the Rulebook ("Official Gazette of RS" No 39/10) prescribe the form, content and the manner of keeping the records. Veterinary Directorate already started with the collection and statistical procession of the received data. Our obligation to send the information to the European Commission will fulfilled at the date of the accession.

- Provisions related to the inspection system According to the Article 76 of the Law on Animal Welfare ("Official Gazette of RS" No 41/09), Veterinary Directorate, Ministry of Agriculture and Environmental Protection carry out the enforcement of this Law through veterinary inspectors, who carry out inspections of breeders, suppliers, users and their establishments. Inspection of the implementation of this Law shall be carried out on the basis of risk analyses, random selection of control sites, and information about acts contrary to the provisions of Law.

Register on experiments on animals

According to the Article 33 of the Law on Animal Welfare ("Official Gazette of RS" No 41/09) all users, suppliers and breeders must be registered in Register of experiments on animals kept by the Ministry, if they fulfilled conditions related to establishments where experimental animals are kept, equipment and training on welfare of experimental animals. The provision related to the authorization and registration is also in Article 20 of the Directive 2010/63/EU which prescribed that all breeders, suppliers and users must be authorized and registered.

According to the Article 40, of the Law on Animal Welfare ("Official Gazette of RS" No 41/09) an adequate accommodation, nursing and care must be provided for animals before, during and after the experiment. Also, Rulebook ("Official Gazette of RS" No 39/10) regulates in details the requirements which must be fulfilled in user establishment, accommodation of animals (accommodation space, ventilation system, temperature, humidity, lightening, alarm system), requirements which must be fulfilled in laboratories, service rooms, requirements which must be fulfilled in breeding and supplying establishments. This Rule book also regulates the manner of care and handling the experimental animals during keeping, breeding, using in experiment (feeding, watering, adequate litter, animal health and welfare control, identification of animals, handling the animals during their catching, transport, handling of animals after their dispatch, isolation and

acclimatisation of animals, grouping the animals, handling the animals after experiment and manner of killing in humane manner).

According to the Article 33, of the Law on Animal Welfare ("Official Gazette of RS" No 41/09), experiments on animals shall only be conducted by users who are registered in Register on experiments on animals kept by the Ministry, if they fulfilled conditions related to establishments where experimental animals are kept, equipment and training on welfare of experimental animals. Besides users, also breeders and suppliers must be registered in the above mention Register. Registration or deletion from the Register on experiments on animals shall be performed on the basis of the Decree issued by the Veterinary Directorate, Ministry of Agriculture and Environmental Protection.

The registration is conducting upon the request, that persons conducting the experiments and the persons involved in keeping, breeding and trade of experimental animals submit to the Veterinary Directorate. Then, veterinary inspector performs the control and check of user, breeder of supplier establishments, and fulfilling the checklist. According to the fulfilled checklist and the inspection report, Veterinary Directorate performs the registration of the above mentioned persons. Until now, we already registered 18 institutions conducting the experiments. The Register on experimental animals is kept in electronic form, and is publicly available on the official website of the Veterinary Directorate.

The content of the Register on experiments on animals are prescribed by Article 33, of the Law on Animal Welfare ("Official Gazette of RS" No 41/09), and the Article 17, of the Rulebook ("Official Gazette of RS" No 39/10), and must contain:

- 1) registration number;
- 2) name and address of legal or natural person who performs the experiment;
- 3) name and address of legal person or entrepreneur or name and address of natural person who is engaged in keeping, breeding and turnover experimental animals.
- 4) name of the persons responsible for protection of experimental animal welfare
- 5) name of the person responsible for protection of animal health
- 6) number, kind and category of experimental animals used in the procedures, or bred for be used in the procedures
- 7) kind of experiment for which the animals are intended
- 8) kind and category of experiments, conducted in the user establishment
- 9) the fact that the natural or legal persons conducting the experiments are also involved in keeping, breeding and trade of experimental animals.

According to the Article 35, of the Law on Animal Welfare ("Official Gazette of RS" No 41/09), users are obliged to take responsible care of experimental animal, and assigned the person responsible for the protection experimental animal welfare which must have completed postgraduate academic studies - master in the field of veterinary science (Doctor of Veterinary Medicine) or completion of basic studies lasting at least five years in the field of veterinary science and who is trained for the welfare of experimental animals.

Besides those requirements related to installation, accommodation and care, also the users, breeders and suppliers must be trained. Training program is prescribed by the Annex 3 of the Rulebook ("Official Gazette of RS" No 39/10).

Project evaluation and approval of experiments on animals

Project evaluation is done independently, by Veterinary Directorate, Ministry of agriculture, which is the competent authority and has a final decision.

According to the Article 34, of the Law on Animal Welfare ("Official Gazette of RS" No 41/09), experiment on animals shall be performed on the basis of Decree on approval for conduction of experiment on animals, issued by the Minister on the basis of the expert opinion of Ethical Commission for the Protection of Experimental Animals. Decree on approval for conduction of specific, invasive experiments on animals, shall be issued on the basis of professional opinion of Ethical Council for Welfare of Experimental Animals.

Persons conducting the experiment must submit to the Veterinary Directorate, the request for the Decree on approval for conduction of experiment. The request must contain:

- 1) description of the research field, that is written clearly to understand the purpose of research;
- 2) advantages and importance of conducting the experiment, potential dangers and inconvenience for experimental animals as well as the difficulty level and invasion category of the experiments;
- 3) detailed description of the material and methods;
- 4) evidence of the existence of alternative experimental methods and the reasons why they are not implemented;
- 5) total number and species of animals per the experiment phases;
- 6) types and doses of anesthetics and analgesics, which will be used;
- 7) description of the expected reaction of animals;
- 8) description of the potential negative effects of the experiment on animals, the severity and duration of such effects, the methods that will be undertaken to alleviate or prevent the negative effects;
- 9) the method of killing of experimental animal, if performed at the end of the experiment;
- 10) name of the person responsible for welfare of experimental animals and their professional qualifications;
- 11) names of the persons who will participate in conduction of the experiment.

The detailed form of request for conduction of experiment on animals is prescribed by the Article 18 and Annex 4 of the Rulebook ("Official Gazette of RS" No 39/10).

The form of the Request must contain following data:

Part 1: Details of the activities

- name of the experiment,
- key words,
- Name of the persons conducting the experiments (responsible persons and other persons)
- Name of the person responsible for protection of welfare of animals
- Planed duration of the experiment
- Information is this is a new experiment or not. (If it is not new experiment they must write the name of previous experiment, No of the previously issued Decree on approval, name of the person responsible for that previous experiment)
- Purpose of the experiments

- Category of invasiveness of the experiment (AtoF)
- No and kind of animals that will be used in the experiment
- Is the use of animals are legally forbidden
- Accommodation of animals
- Name of the persons responsible for the care of animals on the daily basis
- The manner of accommodation of animals during the experiment
- The manner of surveillance of animal health and welfare during the day, and weekend
- The purpose of use of animals (must be described)
- Description of the design of the experiment on common language, understandable to the laymen
- Is there any alternative methods
- Indicate the 5 references of foreign authors, that published results of the similar research
- Algorithm of the experiment
- The purpose of the experiment
- The field of research
- Kind of animals
- Category of research
- classification of the severity of procedures
- does the experiment damage physique and function of the organism
- Is the application of anesthetics required (if yes, indicate which one)
- Is the application of analgesics required (if yes, indicate which one)
- Observation of animal recovery
- Influence of the experiments on animals
- If the animals must be killed at the end of experiments, indicate the manner of killing
- Does the experiments represent the risk for the person/persons who conducting the experiment
- The manner of disposal of animal carcasses
- The manner of disposal of other materials

According to all those received data, Veterinary Directorate make a assessment of the experiment, and upon the opinion of the Ethical Commission, or in the case of invasive and specific experiments, also upon the Ethical Council, Veterinary Directorate issuing Decree on approval or Decree on rejection of the experiment.

Decree on approval for conduction of the experiment shall be issued within 30 days of the date of submission of the request. That Decree is final and administrative lawsuit can start up against it. In the case of an incomplete or incorrect application, the competent authority shall, as quickly as possible, inform the applicant of the need to supply any additional documentation and of any possible effects on the running of the applicable time period, in accordance to the Law on General Administrative Procedures ("Official Journal of SRJ", No 33/97 and 31/2001 and "Official Gazette of RS", No 30/2010).

Section 8

NOISE

1. Strategic Framework

Implementation of the requirements of the Directive 2002/49/EC relating to the assessment and management of environmental noise is guided by the following strategic documents:

- National Environmental Approximation Strategy for the Republic of Serbia – NEAS (O.G. RS 80/11) has been adopted in October 2011. Strategy establishes a framework for the whole range of transposition and implementation procedures required within European Union's environmental legislation, including Environmental Noise Directive 2002/49/EC (END),
- Approximation Strategy for the Industrial pollution and Noise Sector (2011) is compliant with the NEAS document. Strategy includes details and detailed analysis of the IPPC and Noise sectors. It is a basis for noise management through strategic noise mapping and action plans for the protection against noise. The document is dealing with short term and mid-term goals, with the changes and amendments of the law and secondary legislation,
- National Programme for the Adoption of the *acquis* (NPAA) from 2014 envisages full transposition of the END directive, with the adoption of the Law on amendments to the Law on Environmental Noise Protection in 2016. New Law will be a result of the analysis of transposition performed with the support of ENVAP and PLAC projects. The purpose of amendments to the Law is to ensure more efficient implementation of the legislation. After the adoption of the law, the next step is to revise secondary legislation. NPAA determines priorities for the period 2014-2018, which includes strategic noise mapping and drawing up action plans in two rounds,
- National Environmental Program (NEP) (O.G. RS 12/10) of the Republic of Serbia was adopted in 2010 making assessment of the environmental status. It sets the targets and criteria for environmental protection for the period 2010-2019. This document also deals with the impact on the environment (as a whole, by sectors or by spatial units) with priority best technical, economic and other measures for preventing, and controlling pollution, as well as subjects of protection, and deadlines. This program also includes the protection against noise, short-term, continuous and long-term goals from 2015-2019.

2. Transposition

Transposition Status

Directive 2002/49/EC has been partially transposed by the Law on Environmental Noise Protection (Official Gazette of the Republic of Serbia no 36/2009, 88/2010), Regulation on Noise indicators, limit values, assessment methods for indicators of noise, annoyance and harmful effects from noise in the environment (Official Gazette of the Republic of Serbia, No. 75/2010), Rulebook on the Methodology for action plans development (Official Gazette of Republic of Serbia No. 72/2010) and Rulebook on the methods of development and contents of the strategic noise maps and the manner of their presentation to the public (Official Gazette of the RS, No. 80/2010).

Transposition Plan

Short term priorities (2015-2016)

The Law on Amendments to the Law on Environmental Noise Protection will be adopted in 2016. It will take into account revision of Annex II of the Directive 2002/49/EC. Planned amendments to the Law on Noise Protection will be introduced with the aim to fully transpose and efficiently implement the sector legislation and should include changes in competencies, new assessment methods for the noise indicators from the Annex II of the Directive, reporting mechanism, as well as introduce the polluter pays principle and define deadlines for fulfilment of the requirements.

Mid- term priorities (2017-2020)

- Secondary legislation in line with the new Law shall be adopted until 2018.

NOISE SECTOR	Transposition deadline					
EU act	2015	2016	2017	2018	2019	2020
Directive 2002/49/EC relating to the assessment and management of environmental noise						

3. Implementation Activities and Institutional Responsibilities

Major revision of the institutional responsibilities is envisaged following recommendations provided during the screening process. On the bilateral screening November 2014, it was recommended to revise legislation. Most important was to designate competent authorities and to set new deadlines to be as in the member states, to enable comparison of data and to introduce polluter pays principle. This way LSGs would be responsible for strategic noise maps for the agglomerations, while PE "Serbian Railways" would be responsible for railway noise mapping, PE "Roads of Serbia" would be responsible for road mapping, and Airport "Nikola Tesla" for strategic noise maps of the airport. All these recommendations are expected to be incorporated into the revised Law until 2016.

Currently, institutional responsibilities have 3 levels: state, province and local.

In the Ministry of Agriculture and Environmental Protection, following sectors work on noise protection:

- Division for Harmonization of Legislation in the field of Environmental Protection - works on harmonization with the EU environmental noise legislation in the area of noise protection, as well as with national legislation,
- Sector for Planning and Management, Section for the protection against noise, vibrations and non-ionizing radiation works on the implementation of the legislation in the field of environmental noise protection, and sets expert basis for legislation in the noise protection
- Inspection Sector for Environmental Protection, works on control and supervision in the field of noise,
- Serbian Environmental Protection Agency (SEPA), Sector for the state of the Environment, Group for non-ionizing radiation and noise, works on information system data.

At the provincial level, Provincial Secretariat for Urban Planning, Construction and Environmental Protection is, among else, dealing with noise protection issues.

At the local level bigger cities have established City Secretariats which are dealing with environmental protection (including Noise protection issues). In smaller local self-government units (LSG), usually one person works on noise protection issues (among other duties). In addition, the following public enterprises are competent for the implementation of noise protection legislation: PE "Serbian Railways", PE "Roads of Serbia", and Airport "Nikola Tesla".

3.1 Main Implementation Activities in the Sector

Main implementation activities are related to Strategic noise mapping and development of action plans.

It is foreseen that implementation activities will be supported by IPA 2015 project (2016-2018).

Mid-term activities plan (2017-2020):

Activities planned to start during 2016 and continue during 2017 and 2018 (supported by IPA 2015 project):

- **Development of noise maps:**

- Definition of boundaries of agglomeration for which the maps would be provided;
- Definition of road sections to be mapped;
- Definition of railway sections to be mapped;
- Collection of necessary input data for development of strategic noise maps, including necessary measurements;
- Creating models to be used for strategic noise mapping;
- Data processing and strategic noise maps development for selected cities, roads, railways and airports according to the Environmental Noise Directive;
- Presenting Strategic noise maps to the public;
- Training relevant stakeholders on strategic noise mapping

- **Development of Actions plans:**

- Deciding where action plans should be prepared, depending on the results of strategic noise maps;
- Identification of stakeholders and establishment of Working groups for each action plan to be drafted;
- Identification of measures to be included into the plan;
- Assessing costs of proposed measures;
- Establishing institutional responsibilities for implementation of measures;
- Development of draft version of action plans;
- Public consultation of draft plans;
- Adoption of the action plans;
- Presentation of Action plans to the public;
- Training relevant stakeholders on action planning.
- Training on strategic noise mapping, action plans drawing up and reporting mechanism,
- Use of the experience of the member states

Long-term activities plan (2020 and beyond):

- Establishment of reporting mechanism.

NOISE SECTOR	PRE-ACCESSION PERIOD						TRANSITION PERIOD	
	2015	2016	2017	2018	2019	2020	2021	2022
Directive 2002/49/EC relating to the assessment and management of environmental noise								

3.2 Implementation Deadlines

Strategic noise maps and action plans have to be ready before the date of accession to EU.

4. Cost /Financing Estimations

Several documents estimated costs of implementation of the Directive. Figures are different, depending on the assumptions how to calculate costs.

According to the Approximation Strategy for the Industrial pollution and Noise sector (2011), the investment costs of achieving goals of the Directive, amounted to 17.6 million EUR. In the National Environmental Program (2010) costs for Noise sector were estimated to 18.6 million EUR. These preliminary calculations were made for mapping and action plans prepared in two rounds.

On the Bilateral Screening it was recommended to draft first two rounds of strategic noise maps together, in one round. Accordingly, recommendation was to draw up first two rounds of action plans together, in one round.

Preliminary cost assessment, based on unit costs from experience of the Member States and from the expert from EC can be calculated, as follows:

Figures for noise mapping are: for the agglomerations they range from 0.25 – 1.0 EUR per inhabitant. The population of 5 agglomerations (Belgrade, Novi Sad, Nis, Kragujevac and Subotica) is 2.443.862. For 944 km of the major roads the estimated cost is 600.000 EUR and for the airports 10.000-15.000 EUR (if any data exist, since there are no data, it is more expensive). For both strategic noise mapping and drawing up of action plans, the preliminary overall amount is 4.200.000 EUR.

It is envisaged that the financing of mapping and action plan development activities will be supported by IPA 2015 project (3.000.000 EUR).

The rest of necessary costs will be covered through other sources.

Section 9

CLIMATE CHANGE

1. Strategic framework

Implementation of requirements in the sub-sector is guided by following *strategic documents*:

1) *Approved*

- **National Sustainable Development Strategy** for the period 2008-2017 – approved in 2008
- **National strategy for inclusion of the Republic of Serbia in the Clean Development Mechanism of the Kyoto Protocol for waste management, agriculture and forestry sectors** (National CDM Strategy) - 2010
- **First National Communication** (First Report of the RS to the United Nations Framework Convention on Climate Change) - 2010
- **NEAS (National Environmental Approximation Strategy for the Republic of Serbia) and EAS for air quality and climate change sector** (Environmental Approximation Strategy) - 2011
- **NPAA (National Program for Adoption of the EU Acquis)** defines objectives of the HPMP project – 2013
- **HPMP (HCFC phase out management plan)** is prepared in 2010 with the aim to reduce consumption of HCFCs for 35% by 2020. Main activities in the HPMP are update of the legislation, enforcement activities and technology transfer to non-ODS technologies.

2) *Planned:*

- **First Biennial update report (FBUR) to the UN Framework Convention on Climate Change (UNFCCC)** - 2015
- **Second National Communication (SNC)** - 2016.
- **Climate Change Strategy and its Action Plan (IPA 2014)** – 2018

2. Transposition

Transposition status:

EU Monitoring Mechanism - Regulation 525/2013 (MMR)

Transposition of Regulation 525/2013 starts with support of IPA 2013 Twinning project: “Establishment of a mechanism for implementation of MMR”. Project’s implementation started in May 2015.

EU Emissions Trading System (EU ETS) - Directive 2009/29/ C

Transposition of EU ETS directive has started in 2013. Draft Law and sub-laws that includes MRV aspects of the EU ETS directives (including the M&R and A&V regulations and following guidelines, templates and other documents of the EC in field of MRV) are prepared and in internal consultation process.

Fuel Quality - directive 98/70/EC

Fuel quality area, as well as other elements of the directive 98/70/EC are partially transposed in the legislation of the Republic of Serbia with the following acts: Law on Technique Demands for Products and Conformity Assessment (OJ RS 36/09); Rulebook on Technical and Other Requirements for Products and Conformity Assessment (OJ RS 123/12, 63/13, 75/13, 144/2014); Energy Law (OJ RS 145/14); National Action Plan for Renewable Energy Sources (OJ RS 53/13);

Law on Consumer Protection (OJ RS 73/10); Law on Standardisation (OJ RS 36/09); Accreditation Act (OJ RS 73/10).

Foreseen steps for further transposition of the directive 98/70/EC include:

- Analysis of the current situation and preparation of proposals for changes in the relevant legislative and institutional framework;
- Strengthening of the existing administrative and institutional capacity.

Ozone-Layer Protection and Fluorinated Gases

F-gases

New Regulation on fluorinated greenhouse gasses management, as well as on conditions for license issuance to import and export of such gasses („Official Gazette”, No. 120/13) was adopted by the end of 2013 and it introduced some of the requirements of Regulation 842/2006/EC, Regulation 1493/2007/EC, Regulation 1494/2007/EC, Regulation 1497/2007/EC, Regulation 1516/2007/EC and Directive 2006/40/EC in national legal system.

Relevant articles of the Regulation contain provisions in relation to the list of the fluorinated greenhouse gases together with their global warming potentials, licensing procedure for the fluorinated greenhouse gases and air-conditioning machines (compact and split systems) containing or relying on those gases; management of fluorinated greenhouse gases and products and/or equipment containing or relying on such gases; recovery, recycling, reclamation or thermal treatment, use and final disposal; placing of fluorinated greenhouse gases on the market; labelling of products and/or equipment containing those gases; reporting obligations, requirements for leakage checking for stationary refrigeration, air conditioning and heat pump equipment and fire protection systems, handling with the air conditioning systems in motor vehicles containing those gases, as well as conditions to be met by legal entities or entrepreneurs involved in production, installation, maintenance or servicing, recovery, recycling and reclamation, control of use, placing on the market, final disposal and phase out of products and/or equipment containing or relying on fluorinated greenhouse gases.

Ozone Depleting Substances

Based on the Law on Amendments to Law on Air Protection („Official Gazette”, No. 10/13) the new Regulation on ozone depleting substances management, as well as on conditions for licence issuance to import and export of such substances („Official Gazette”, No. 114/13) was adopted by the end of 2013. This Regulation introduced some of the requirements of Regulations 1005/2009/EC and 744/2010/EC.

In the drafting process of Serbian ODS regulation, Regulation 1005/2009/EC amended by Regulation 744/2010 has been partially transposed and adjusted to the situation in Serbia. There is no production of ODSs in Serbia and therefore all bans are import bans, not placing on the market or use bans.

Import of HCFC substances is allowed (Serbia follows phase out schedule of the Montreal Protocol) but for all other substances there is a general ban (including methyl bromide for QPS uses (Quarantine and Preshipment Uses)). Almost all provisions regarding feedstock, process agents and essential lab and analytical uses are transposed, although Serbia does not have reported any of those uses.

There are provisions on halons for critical uses, list of critical uses, labelling of cylinders and registering of all users.

Only halons from registered halon banks can be used. Deadline to ban non-critical uses is set to 31.12.2020. Deadline for banning critical uses has not been set yet (detailed analysis of uses of halons and installed quantities and needs is still missing).

There is a chapter of the Serbian Regulation dealing with licensing system for substances and products and equipment – which partially transpose provisions of the Chapter 5, modified to fit the Serbian situation – license is issued by the Ministry, not the Commission. Only certain products and equipment are subject to the licensing procedure. Exports of both substances and equipment are subject to licence issuance.

Articles related to emission control and leak checks are fully transposed. There is also obligatory reporting, but only for operators and other legal entities that fall under the scope of this Regulation. There are provisions related to inspection, control and penalties, which are in conformity to the Serbian legislation in this area.

Articles related to exempted production, industrial rationalisation and actions to be undertaken by the Commission or the Committee or that are obligation of the member states towards Commission have not been transposed because those articles either do not apply or are not transferable into Serbian regulation.

CO2 emissions from cars and vans

Regulations requirements have not yet been aligned with the national legislation. The system for collecting monitoring data as well as system for communicating the monitoring data to manufacturers and their designated importers or representatives in the country (in accordance with the requirements of the Regulation (EC) No 443/2009 and Regulation (EU) No 510/2011) hasn't been established yet. Road Traffic Safety Agency is currently finishing the software (data base) for Certificates of Conformity data. According to Article 2. of the Rulebook on the Classification of Motor Vehicles and Trailers, and Technical Conditions for Vehicles in Road Traffic („The Official Gazette of the Republic of Serbia”, . 40/12, 102/12, 19/13, 41/13, 102/14 and 41/15), the Republic of Serbia will allow registration and entry into service of new vehicles of category L, M, N, O, T and R only if they are accompanied by a valid certificate of conformity.

Carbon Capture and Storage

The main principles and priorities identified in the Directive 2009/31/EC are partially transposed through the Law on mining and geological researches.

The Law of mining and geological researches created the legal basis for the adoption of secondary legislation which will establish full compliance with the EU Directives relating to geological researches pertaining to separation of favourable geological formations and structures, as well as depleted deposits of mineral raw materials for storing of CO₂.

2.Transposition plan:

EU Monitoring Mechanism - Regulation 525/2013 (MMR)

Short - term priorities (2015 - 2016):

Transposition of Regulation 525/2013 will start with support of IPA 2013 Twinning project: “Establishment of a mechanism for implementation of MMR”. Project’s implementation started in May 2015. Drafting of the relevant legislation will start in 2016 and it is planned to be completed up to 2018.

EU Emissions Trading System (EU ETS) - Directive 2009/29/ C

Short term priorities (2015 - 2016):

MRV Law should be adopted by the Government and Parliament and sub-laws by the Government. It is planned that legislation will be in place (transposed) not later than the end 2016. Analysis and consultations on possibilities to reflect provisions related to EU ETS trading into Draft Law and sub-laws are on-going - proposal for transitional measures will be finalized until the end of September 2015.

EU ETS (Emissions Trading System) Aviation Activities

Mid - term priorities (2017 - 2020):

Details in regard to way and deadlines for transposition and implementation will be known after ICAO conference 2016

Fuel Quality

Short - term priorities (2015 - 2016):

- Revision of the Rulebook on technical and other requirements for liquid fuels of petroleum origin in order to adjust this Rulebook with the provisions of the Directive 98/70/ EC;
- Development of bylaw of the new Energy Law which will regulate the area of the monitoring of the fuel;
- Development of bylaw of the new Energy Law which will regulate the area of the biofuels.

Mid - term priorities (2017 - 2020):

- Analysis of situation with transposition of requirements;
- Preparation of proposals for changes in the relevant legislative and institutional framework;
- Further adjustment relevant legislative acts with the provisions of the Directive 98/70/EC.

Ozone-Layer Protection and Fluorinated Gases

Short – term priorities (2015 - 2016):

Detailed analysis of the requirements of the new Regulation 517/2014/EC and the current situation in the Republic of Serbia in connection with the fulfilment of these requirements should be done in this period.

New Regulation on certification of personnel performing certain activities related to controlled substances and certain fluorinated greenhouse gases is under preparation. There are some issues with identifying and appointing certification bodies that are delaying this process and that need to be solved prior to adoption of this regulation. This Regulation will extend requirements for personnel in refrigeration and fire protection sector stipulated by the F-gas certification legislation to ODSs as well. Draft regulation envisages 4 categories of personnel certificates for stationary equipment and certificates for personnel operating in the MAC sector.

Effort Sharing Decision - Decision 406/2009/EC

Short term priorities (2015 - 2016):

Transposition of relevant provisions of the Decision 406/2009 will start with support of IPA 2013 Twinning project: “Establishment of a mechanism for implementation of MMR”. Project’s implementation started in May 2015. Relevant legislation should be drafted during the period 2016 – 2018.

CO2 emissions from cars and vans

Short - term priorities (2015 - 2016):

The first analysis of transposition and alignment possibilities will be done in upcoming period (first half of 2015) by the Road Traffic Safety Agency with support of PLAC (Policy & Legal Advice Centre) project or TAIEX, in order to identify and include other institutions with competences and responsibilities in this field and to make an assessment of transposition plan.

Mid - term priorities (2017 - 2020):

Transposition and institutional set-up activities should be completed, and relevant legislation should enter into force till the end of 2018.

Carbon Capture and Storage

Short term priorities (2015-2016):

The Ministry of Mining and Energy will start with the preparation of secondary legislation (by - laws) in order start with the transposition. These by-laws will regulate the key questions as conditions, criteria, procedure and manner of issuing permits and other specific conditions relating to the conduct geological research relating to the allocation of favourable geological formations and structures as well as exhausted mineral deposits for CO2.

Mid – term priorities (2017 - 2020):

This Directive will be transposed in 2018 by the adoption of relevant secondary legislation.

Transposition plan – all legal acts

CLIMATE SECTOR	Transposition deadline					
EU LEGISLATION	2015	2016	2017	2018	2019	2020
Regulation 525/2013						
Directive 2009/29/ C						

Decision 406/2009/EC						
Regulation 443/2009						
Regulation 510/2011						
Directive 2009/31/EC						
Regulation 1005/2009/EC						
Regulation 517/2014/EC						
Directive 98/70/EC						

3. Implementation activities and institutional responsibilities

EU Monitoring Mechanism - Regulation 525/2013 (MMR)

SEPA is finalizing GHG inventories for the period 1990 – 2013, in order to start its preparation on yearly basis, while CCD regularly submits reports (NatComm and BUR) to the UNFCCC that includes certain provisions of MMR.

Ministry of Agriculture and Environmental Protection (MAEP) is the UNFCCC focal point, therefore responsible for reporting to the UNFCCC (through national communications and biennial update reports). Serbian Environmental Protection Agency (SEPA) is responsible for preparation and maintaining of the GHG inventories.

Short – term priorities (2015 - 2016):

Foreseen steps for establishment of legal and institutional framework for implementation of the Regulation 525/2013 and Decision 406/2009/EC include:

- Analysis of the current situation and preparation of proposals for changes in the relevant legislative and institutional framework, drafting legislation;
- Cost-benefit analysis of proposed actions;
- Strengthening of the existing administrative and institutional capacity.

Foreseen activities will be supported by IPA 2013 Twinning project: "Establishment of a mechanism for the implementation of MMR" which started in mid May 2015. The project duration is two years.

Mid-term priorities (2017 - 2020):

It is planned that implementation of MMR should start not later than 2019.

Clear and detailed institutional structure for implementation of MMR will be established (in 2017) and reflected in legislation (not later than 2018).

EU Emissions Trading System (EU ETS) - Directive 2009/29/ C

Preparation for implementation activities (training of stationary installations) are supported by IPA 2012 Twinning project: "Establishment of the monitoring, reporting and verification system necessary for the effective implementation of the EU ETS" (duration 2013-2015). List of

installations necessary for the implementation of this Directive is prepared. Institutional structure for implementation of MRV aspects of the EU ETS directive is established in September 2014 (the Government adopted "Report on establishment of institutional structure for the implementation of monitoring, reporting and verification (MRV) for the implementation of ETS") and it is reflected in a draft law. Climate Change Division (CCD) is Competent Authority (CA), Serbian Environmental Protection Agency (SEPA) and Civil Aviation Directorate (CAD) is providing technical support. Division for sustainable development and climate change in energy sector/Ministry of Mining and Energy provides support to the operators in the energy sector. Department for prevention and control/MAEP will provide inspection on request. Accreditation Body of Serbia (ABS) will be responsible for the accreditation of EU ETS verifiers.

Short – term priorities (2015 - 2016):

Implementation of MRV ETS aspects will start in 2017. In the context of preparation for implementation capacity building activities for implementation of MRV obligations (Governmental institutions, installations and verifiers) more precisely for preparation (by installations) and evaluation (by CCD, SPA, CAD) of certain number of monitoring plan are on-going during 2015.

EU ETS (Emissions Trading System) Aviation Activities

Following steps for implementation are being taken:

- Institutional structure for implementation of MRV aspects of the EU ETS directive is established and it is reflected in a draft law (the Government adopted "Report on establishment of institutional structure for the implementation of monitoring, reporting and verification (MRV) for the implementation of ETS" - September 2014).
- Details in regard to date of implementation and scope that will be implemented as well as its incorporation into sub-laws will be known after ICAO conference 2016.

Activities up to now were supported by IPA 2012 Twinning project: "Establishment of the monitoring, reporting and verification system necessary for the effective implementation of the EU ETS" (2013-2015).

Currently CA for Air Serbia (previously JAT Airways) is Germany, DEHSt.

Air Serbia (previously Jat Airways) fulfils implementing requirements of Directive 2008/101/EC. It decided to use "Stop the clock" and return a portion of the free EUAAs that had previously been credited to the airline's registry account.

Short – term priorities (2015 - 2016):

Regarding AE Report 2013: As there is EU Regulation about extend the "stop the clock", for the period 2013-2016, Air Serbia will submit allowances, corresponding to verified 2013 emissions by 30 April 2015 instead of 30 April 2014, and verified 2013 emissions for those flights will be reported by 31 March 2015 instead of 31 March 2014.

Fuel Quality

Mid-term priorities (2017 - 2020):

With the realization of the project IPA2014 (2016-2018) an implementation plan will be prepared, on the basis of appropriate assessments.

Ministry of Mining and Energy is responsible for issuing regulations which prescribe the quality of oil products. Ministry of Trade, Tourism and Telecommunication is responsible for quality control of goods which are distributed on the market of Republic of Serbia. Ministry of Agriculture and Environment performs state administration work relating to the environmental protection. Ministry of Construction, Transport and Infrastructure performs state administration work in the field of rail, road, waterborne and air transport as well as international affairs in the field of transport. Institute for Standardization is responsible for the adoption of standards. Serbia Accreditation body performs work related to accreditation.

Ozone-Layer Protection and Fluorinated Gases

Serbia is fully in compliance with provisions and requirements of the Montreal Protocol applicable to Article 5 countries and partially in compliance with EU regulation on **ozone depleting substances**. There is a ban on production of ozone depleting substances in Serbia. Only hydrochlorofluorocarbons (HCFCs) are allowed for import and are mostly used in refrigeration manufacturing and servicing sector.

In 2015 Serbia will implement the second control measure of HCFCs phase-out schedule, 10% reduction from the baseline. Allowed import quota for the year 2015 is set to 7,53 ODP tonnes and allocated to 9 registered importers. Efficient licensing and quota system ensure compliance with established quotas and MP provisions.

Reduction of consumption is achieved through projects funded from the Multilateral Fund for the implementation of the Montreal Protocol, with UNIDO as an implementing agency.

HCFC consumption in Serbia is relatively small (7,53 ODP tonnes) and used predominantly in refrigeration service sector. . With all preparatory steps that are and will be undertaken under HPMP for Serbia, the Montreal Protocol phase out schedule for A5 countries will be followed until 2020. An accelerated phase out strategy for further reduction of consumption of ODSs will be considered in preparation of the Stage II of HPMP in 2018.

Management of **f-gases** in Serbia at this moment follows the structure of the ODS management, with both groups of substances being used mostly as refrigerants. In order to collect more data on imports, licensing system for ODSs has been extended to cover substances and mixtures of f-gases, as well as certain products containing or relying on f-gases. Main focus at this moment is to collect information on uses of f-gases and to improve containment measures, including the end of life of equipment containing both ODS and f-gases.

Training and certification system that is planned to cover both ODS and f-gases will be based on corresponding EU legislation in the area of f-gas management.

Significant progress has been achieved in promoting propane as replacement for both ODS and f-gas refrigerants. New Law on Energy, adopted in December 2014, excludes importers of refrigerant grade propane from obligation to obtain energy license, making the import of propane as refrigerant practically possible.

Certification and training regime has not been introduced yet and the main implementation activities are establishing training and certification scheme for the servicing technicians and enforcement of the reporting obligation. Some activities on establishing the system for training of refrigeration technicians have already been finalized (establishing and equipping the training centres, preparation of the training programme and training materials, supplying of 100 sets of equipment for servicing of the big, small and AC units in motor vehicles). Training of trainers in servicing sector has been already done (National training of 23 trainers from 4 vocational schools and training and certification of 12 refrigeration experts for F-gases).

Short term priorities (2015 – 2016):

- Introduction of training and certification scheme, to include both certification legislation in 2015 and training of technician in 2015/2016;
- Timely implementation of the HPMP - finalization of technology transfer component in 2016 (remaining consumption of ODS will be only in servicing sector);
- Introduction of the import quota for equipment containing ODS in 2016;
- Training of the environmental inspection to improve enforcement of ODS and F-gas legislation- record keeping and reporting of the users of the equipment in 2016.

Mid – term priorities (2017 - 2020):

- Preparation of National survey of the alternatives for ODS including HFC- on the 74th Executive Committee Meeting, held in Montreal in May 2015, the funds for project ODS alternatives survey have been approved for Republic of Serbia;
- It is planned to continue with the trainings for environmental inspection in order to improve the enforcement of ODS and F-gas legislation, specifically with the trainings for inspection of servicing sector and also for the customs officers;
- It is planned to continue with the trainings of service technicians.

National Ozone Unit/MAEP (Air and Ozone Layer Protection unit) is responsible for: introduction of control measures, licensing and quota system, data collection, reporting, project implementation and regional and international cooperation (focal point for Vienna Convention and Montreal Protocol). Environmental inspection/MAEP is responsible for inspection of importers/exporters as well as inspection of operators of the equipment (planned). Customs Administration has responsibility for Border control of imports/exports and Prevention of illegal trade. SEPA Department for National register is responsible for collecting data for the national inventory of F-gases emissions.

Effort Sharing Decision - Decision 406/2009/EC

With support of IPA 2013 Twinning project: “Establishment of a mechanism for implementation of MMR” methods and timeframe for commencement of implementation of this Decision will be set out. Foreseen steps for establishment of legal and institutional framework for implementation of Decision 406/2009/EC include:

- Analysis of the current situation and preparation of proposals for changes in the relevant legislative and institutional framework;
- Cost-benefit analysis of proposed actions;
- Strengthening of the existing administrative and institutional capacity.

The possibility of reducing GHG emissions in the sectors covered by the Decision, as well as specific actions, needs and responsibilities for achievement of these possibilities will be determined through the Climate Change Strategy and its Action Plan (IPA 2014).

Mid - term priorities (2017 - 2020):

- Clear and detailed institutional structure for implementation of ESD will be established under the framework of MMR (in 2017) and reflected in legislation not later than 2018.

- Relevant legislation should enter into force not later than 2018 and implementation of requirements in regard to monitoring and reporting not later than 2019.
- The possibility of reducing GHG emissions in the sectors covered by the Decision will be determined in 2018.

CO2 emissions from cars and vans

Short – term priorities (2015 – 2016):

Full implementation of collecting monitoring data will be done till the end of 2015 and it would be a necessary prerequisite for establishing of system for collecting and monitoring data according to all EU regulations in the domain of CO₂ emissions from cars and vans.

The Road Traffic Safety Agency (RTSA) is determined as the competent authority (in general). There are other institutions with competences and responsibilities in this field – Ministry of Interior, Ministry of Agriculture and Environmental Protection (MAEP), Ministry of Construction, Transport and Infrastructure.

Mid – Term priorities (2017 - 2020):

- Relevant legislation should enter into force till the end of 2018.
- Strengthening of the existing administrative and institutional capacity.

Carbon Capture and Storage

Mid – term priorities (2017 - 2020):

With support of IPA 2017 Twinning project: “Mapping suitable geological formations in Serbia for carbon capture and geological storage (2017)” (proposed in Sector planning documents for IPA projects 2015-2017), the methods and timeframe for commencement of implementation of this directive will be set out. Relevant legislation should enter into force not later than 2018.

Taking into account all obligations arising from the inclusion of storage geospace in the scope of Directive 2003/87 / EC, it will require a longer period for implementation of Directive

Ministry of Mining and Energy is responsible for issuing relevant regulations relating to geological researches pertaining to separation of favourable geological formations and structures, as well as depleted deposits of mineral raw materials for storing of CO₂.

Implementation plan – all legal acts

CLIMATE SECTOR	PRE-ACCESSION PERIOD						TRANSITION PERIOD	
	2015	2016	2017	2018	2019	2020	2021	2022
Regulation 525/2013								
Directive 2009/29/ C								
Decision 406/2009/EC								
Regulation 443/2009								
Regulation 510/2011								
Directive 2009/31/EC								
Regulation 1005/2009/EC								
Regulation 517/2014/EC								
Directive 98/70/EC								

5. List of directives which are considered the most demanding for implementation

EU ETS directive - Provisions related to trading for the both installations and avio operators.

6. Implementation deadlines

All provided deadlines belong to medium term period, with exception of Regulation 1005/2009/EC and Regulation 443/200/EC that is by the date of accession.

EU legislation	Implementation deadline		Comments
Regulation 525/2013	Not later than 2019.		Legislation should enter into force not later than 2018
Directive 2009/29/ C	MRV	Not later than 2017	MRV Legislation should entered into force not later than 2017
	Trading aspects	N/A	Will be known until September 2015
Directive 2008/101/ C	Will be known after 2016 ICAO conference		Air Serbia already monitor and report its emissions to German, DEHSt
Regulation 1005/2009/EC	⁴⁰ By the date of accession		
Regulation 517/2014/EC	By the date of accession		
Decision 406/2009/EC	Not later than 2019.		Will be achieved under the framework

⁴⁰Determined date of Accession to the EU is 1, January 2021.

		of MMR (in 2017) and reflected in legislation not later than 2018. The possibility of GHG reduction will be determined through the Climate Change Strategy and its Action Plan in 2018
Regulation 443/2009	End of 2018	
Regulation 510/2011	End of 2018	

7. Costs/ financing estimations

For MMR will be known not later than 2018. For MRV of EU ETS under the IPA project administrative costs are assessed (operator cost excluded), as follows:

Institution	Estimated number of additional man-days	Estimated number of additional full time job equivalent	Comments
MAE/Climate change division	380	2	Estimation does not include time need for the establishment of NIMs (80 man-days), a one-shot exercise necessary for free allocation Total administrative cost is estimated at 8,510 EUR per year (excluding overhead costs)
SEPA	624	3	Total administrative cost is estimated at 10,201 EUR per year ⁴¹ (excluding overhead costs)
CAD	42	< 1	Total administrative cost is estimated at 20,584 EUR per year (excluding overhead costs)
MAE/Department for prevention and control	225	1	Involvement of environmental inspectors may be higher when starting the system, but should decrease over time. Total administrative cost is estimated at 5,038 EUR per year (excluding overhead costs)

⁴¹ Please note that costs do not include development of an IT supporting tool which is estimated at 13,945 EUR per year

ATS	70	< 1	Total administrative cost is estimated at 23,240 EUR per year
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The cost for auctioning and national administration of the EU registry has been estimated at 53,844 EUR per year (excluding overhead costs). However, the split of this amount will depend on the institutional organisation chosen. Moreover the needs for the trading aspects of the EU ETS will be known in September 2015.

Costs of implementation of ODS and f-gas regulation are to be borne by private sector mostly. Phase-out of ODS, both in public and private sector, is assisted by projects financed from the Multilateral Fund (MLF) for the implementation of the Montreal protocol. HPMP has been approved in 2010, aiming to achieve 35% reduction from the baseline by 2020. Total amount of the ODS to be phased out is 2,94 ODP tonnes of HCFC-22. Total approved amount is 973.260 USD, with 2/3 allocated to refrigeration manufacturing sector and 1/3 to refrigeration servicing sector. Costs of any accelerated phase out of ODS will be considered in the preparation of Stage II HPMP in 2018, that is also to be funded from the MLF.

In total 377 895 EUR (in origin: 400.000 USD) has been spent so far for establishing of training and certification scheme and supply of the sets of equipment for the servicing of the refrigeration equipment. Additional 94 473 EUR (in origin: 100.000 USD) planned for initial training of refrigeration technicians, both funded from the MLF projects.

Having in mind that f-gas regulation has only recently been adopted in the EU, costs for full implementation have not been estimated yet. First step would be the preparation of the National survey on alternatives to ODS, including the HFC, which would give the overview of uses of these substances as well as basis for phase-down cost estimations. This project will be also funded from the MLF (funds approved: 70.000 USD).

Further assistance using available EU accession funds will be needed in strengthening administrative capacities for implementation of the F-gas regulation, understanding its provisions and detailed cost assessment.

Total administrative cost for a new employee for the job of transposition and implementation of relevant *acquis* (Regulation (EC) No 443/2009, Regulation (EU) No 510/2011) is estimated at the level of 13.960,00 euros per year and expected to be financed through the budget.

Section 10

CIVIL PROTECTION

1. Strategic Framework

The Mission of the Sector for Emergency Management of the Ministry of Interior is to build, maintain and improve the ability of the whole nation to help prevent the risks and to respond to the challenges and mitigate the consequences of various disasters that may hit our region. Its scope of action is based on The Law on Emergency Situations, (Official Gazette of the RS 111/09, 92/11, 93/12) The National Strategy for protection and Rescue in Emergency Situations (Official Gazette of the RS 86/11), The Hyogo Framework for Action 2005 – 2015, and Sendai Framework for disaster risk reduction 2015-2030. The activities since 2009 included institutional capacity building and strengthening of its position at the national and international level in order to be more efficient in the field of protection and rescue.

The strongest progress in the field of disaster management Serbia has been achieved by adoption of the Law on Emergency Management in 2009 that consolidated all protection and rescue activities and lead to the adoption of the National Strategy for protection and rescue in emergency situations. The purpose of the strategy is to protect the life, health and property of citizens, environment and cultural heritage. This document defines the mechanisms for prevention, preparedness, coordination and guidance program to reduce disasters caused by natural disasters and technological accidents, disaster response and protection, and elimination of consequences. Also, in accordance with the priorities of the Hyogo Framework for Action, in December 2010, Regulation on the establishment of Emergency Management Headquarters was adopted. Bearing in mind that the National Emergency Management Headquarters (NEMH) is a permanent body, with the extension of jurisdiction, in January 2013, NEMH has been declared into national platform for disaster risk reduction in accordance with the UN recommendations.

Republic of Serbia has adopted Regulation on the methodology for the development of Risk assessment and Protection and rescue plans in emergency situations (Official Gazette of RS, 96/2012), provides guidelines for development of these documents. Development of the National Risk Assessment has started (including risk maps for earthquakes, floods, storm winds, hail). Upon adoption of the National Risk assessment of the Republic of Serbia by the Government of RS development of the National Plan for the Protection and Rescue was launched because the Serbian government has recognized the need to improve the system of prevention, protection and response in the event of a disaster or emergency situation, through the establishment of an integrated system of protection and rescue.

After recent emergency events Serbia's preparedness and capability for disaster response has proved to be successful but needs to be improved and better equipped. The emergency situation that was declared due to flooding in May 2014 showed that it is necessary to make certain amendments to the Law on emergency situations because some deficiencies were noticed and we want to remove them in order to improve and ensure higher level of functioning of our protection and rescue system. For that purpose changes and amendments were sent for the review to the relevant ministries and international subjects such as UNDP Serbia, UNISDR, the OSCE, the EU Civil Protection Mechanism and the EU Delegation in Serbia we expect opinion and suggestions for the amendments from the relevant bodies of the EU, UN, and OSCE.

According to the Law on Emergency Situations, protection and rescue system shall be financed from: Budget of the Republic of Serbia, budgets of autonomous provincial units and budgets of local self-governments; Budget fund for emergency situations; Other sources specified in this and other laws.

The Budget fund for emergency situations is established to ensure additional resources for financing the preparation, implementation and development of programmes, projects and other activities related to reducing risks, management and response in emergency situations in accordance with separate regulations.

The purpose of the National Strategy for disaster risk reduction and protection and rescue in emergency situations is to protect life, health and property of citizens, the environment and cultural heritage of Serbia. The National Strategy defines and determines the national coordinating mechanisms and program guidelines for reducing disasters caused by natural hazards and the risks of accidents, protection, response and recovery.

2. Implementation Activities and Institutional Responsibilities

Institutional responsibilities (summery information regarding institutional set - up for the sector)

In the Republic of Serbia the national authority in charge of protection and rescue of the population and material resources as well as for the emergency management is the Sector for Emergency Management (SEM) of the Ministry of Interior. It consists of Department for Preventive Protection, Department for Risk Management, Department for Fire and Rescue Units, Department for Civil Protection, National Training Center for Emergency Situations, and 27 county departments throughout Serbia.

SEM's main tasks (at the national level) are: protection of lives and properties in the event of natural or man-made disasters; work in the field of emergency prevention and prompt first response in the event of emergencies (natural disasters – earthquakes, floods, storms, heavy rainfall, electric discharges, hailstorms, atmospheric disasters, drought, rock and snow avalanches, accumulations of ice on flowing water, landslides; man-made disasters – fires, explosions, severe damage, traffic accidents, accidents in mines and tunnels, severe damage and accidents that occur in electricity power plants, oil and gas power plants, and facilities where radioactive substances are kept and used i.e. nuclear power plants, and in telecommunication and information systems; hazards for human life and health and the environment due to the effects of hazardous materials, epidemics of contagious diseases, epidemics of contagious diseases for livestock, pests and other vegetable diseases, and similar large scale phenomena that can endanger human life and health and the environment or that can cause extensive damage).

In accordance with the Law on Emergency Situations, the Sector coordinates the activities of all state institutions involved in emergency and disaster management.

As from the 01/24/2013 the National Emergency Management Headquarters is declared as the National Platform for Disaster Risk Reduction in the United Nations system. This started the work on defining the tasks of the stakeholders. A national strategy of protection and rescue was adopted with defined mechanisms for coordination and programming guidelines for risk reduction, protection and recovery elimination from natural and other disasters. Five strategic areas were defined with clearly defined goals within each of them.

Environmental and disaster risk management policy are integrated into development plans at the national, sub-national and local level(through existing public policies, mechanisms for coordination of activities in terms of disaster risk reduction at different levels, budgetary allocations, etc.). Each

local self-government unit within its budget is planning funds for emergency situations and this is done in accordance with local possibilities for financing the defined tasks.

Emergency management headquarters at all levels of the organization monitor the activities of local self-government units and participate in the development of the budget, but also in preventative measures of protection and rescue in order to reduce the consequences of disasters. The development of risk assessment that has started is followed by the development of protection and rescue plans where all activities, measures and procedures should be defined.

Every year an Annual Action Plan is made for the National Emergency Management Headquarters – National Platform for Disaster Risk Reduction and it defines themes that are discussed in these sessions. Developing of this Action plan involves all ministries, special organizations and associations, with defined preventive and operational mitigation and recovery measures and recognized problems and proposals for a more efficient implementation of protection and rescue measures and disaster risk reduction policy. These sessions end with conclusions that define the responsibilities of all entities in the system of protection and rescue.

It is important to emphasize that all recognized stakeholders engaged in monitoring of specific risks are obliged to exchange information relevant to development of risk assessment both on local and national level. For example the flood data is provided by the Ministry of agriculture and environmental protection –Directorate for Water; earthquake data is provided by the Seismological Survey of Serbia Bureau, and data concerning drought, storm winds, hail, snow blizzards, rainfall, snow drifts and glaze ice is provided by the Republic Hydro meteorological Service, etc.

There is an Early warning system for all the main hazards that represent threat to the population such as snow drifts, glaze ice, flood waves. Early warnings are sent to all local self-government units and to the national level. Early warning proved to be quite effective because with timely early warning all stakeholders can undertake disaster risk reduction activities on their territory.

Two main instances in emergency management are 1. Headquarters for Emergency Management are political, operational and professional bodies formed for the coordination and management of protection and rescue operations in emergency situations on the national and local level (province, district, city, municipality).

2. On the other hand, Sector for Emergency management of the Ministry of Interior of the Republic of Serbia is the coordinating body in the event of emergencies at the national level and provides technical and operational support to the NEMH.

Administrative and operational capacities number 4.500 people (including professional Fire rescue units as first responders). Currently, Specialized Civil Protection units (additional forces) are planned to reach some 11.000 members.

Fire and Rescue units (First response units) number 3.213 members (specialized USAR team and Specialized Flood response team). Their operational capacities include (159 operational units with 3.213 firefighters rescue in total, 716 fire and rescue vehicles (80% of them are older than 20 years), 148 boats of various sizes and types with or without engine, 500 pumps of smaller capacity (mostly from 1000 to 1600 l/min), 1 high capacity pump (7000 l/min), 6 search and rescue dogs, 7 Specialized Medium Urban search and Rescue (MUSAR) teams, 7 Specialized Flood Rescue teams.

Additional forces include: Ministry of Interior, General Police Directorate (Police, Gendarmerie, Special Units, Helicopter Unit), Ministry of Defence / Serbian Army, Red Cross of Serbia, Mountain Rescue Service of Serbia, Divers, Local Civil protection general units, Companies, Associations, Volunteers.

In accordance with the Law on Emergency Situations, on the local level, the Commander of the Municipal Emergency Management HQ is the Mayor and the head of HQ is the Head of the

territorial Department for Emergency Management of SEM. The Law on Emergency Situations decentralizes protection and rescue activities so that local government units are responsible for the planning and organization of civil protection and for the first response in emergency situations. In order to improve capabilities and capacities of the management of the Municipal HQ, there have been organized trainings, seminars and exercises. In accordance with the Law on Emergency Situations, on the local level, the Commander of the Municipal Emergency Management HQ is the Mayor and the head of HQ is the Head of the territorial Department for Emergency Management of SEM. The Law on Emergency Situations decentralizes protection and rescue activities so that local government units are responsible for the planning and organization of civil protection and for the first response in emergency situations. In order to improve capabilities and capacities of the management of the Municipal HQ, there have been organized trainings, seminars and exercises.

Trainings of emergency management headquarters are planned and performed at the national and local level in order to increase the local coping capacities. Emergency management headquarters are expert-operational authorities for management of protection and rescue operations and also act as an authority that monitors the situation and is responsible for planning recovery and mitigation measures and activities. For this purpose protection and rescue structures are established alongside with undergoing planned trainings (for commissioners and civil protection units) and qualified entities in the territories of local governments that have tasks within a single system of protection and rescue. So far all the commanders of emergency management headquarters have passed through training where they were introduced to their responsibilities regarding tasks of protection and rescue and disaster risk reduction.

By practicing trainings for the commanders of emergency management headquarters at local level, the competence and emergency management standards were increased. There is also a regular practicing of the command-simulation exercises where real situation scenario strengthens teamwork and improves mutual coordination between emergency management headquarters at all levels.

Brief overview of main implementation activities in the sector

The Republic of Serbia is very active in IPA Civil Protection Cooperation Programme with the candidate countries and potential candidates - Phase II (IPA CP Cooperation Programme II / November 2013 – November 2015) which is a continuation of the IPA Civil Protection Cooperation Programme I which ended in May 2013 and in which Serbia also actively participated. IPA CP Cooperation Programme II aims to reduce the vulnerability to natural and man-made disasters at national and regional levels through increasing the ability of the Beneficiaries to effectively cooperate with the Union (EU) Civil Protection Mechanism and relevant institutions and increasing the capability of the Beneficiaries to further develop effective national civil protection and disaster response systems and collaborate regionally. Serbia is also included in IPA Programme Floods prevention, preparedness and response (November 2014 – November 2016) also managed by DG ECHO.

On the **16 April 2015** Serbia and the EU Directorate-General for Humanitarian Aid and Civil Protection (**ECHO**) signed an agreement clearing the way for the official membership of Serbia in the EU Civil Protection Mechanism. After the internal procedures and national ratification were completed on the 26 May 2015 Serbia became **the 32nd participating state in the Mechanism**.

The EU Civil Protection Mechanism offers a wide range of cooperation opportunities to Serbia such as European monitoring tools and early warning systems, joint trainings and exercises, exchange of experts, disaster prevention and preparedness projects, direct communication among the civil protection authorities of the members during emergency response, information exchange and best practices, coordinated EU relief operations and transport co-funding.

ANNEX 1

PRELIMINARY IMPLEMENTATION PLAN

FOR URBAN WASTE WATER TREATMENT DIRECTIVE

Table of Contents

1	Strategic planning	223
2	Existing situation	223
	Agglomerations	223
	Water supply and waste water collection and treatment	224
	Assessment of the situation	226
3	Goals and assumptions	227
	Sensitive areas	227
	Connection targets	227
4	Actions to achieve compliance and priorities	228
	Priorities for protection of water bodies	228
	Implementation of projects in agglomerations	229
	Priority projects for 2015 - 2020	229
5	Costs	230
6	Implementation timetable	230
7	Financing mechanism	231
8	Institutional responsibilities	232
	General	232
	Investment projects management	233
	Annex A. Water sector projects financing during period until 2020.	235
	Annex B. Estimates for individual agglomerations prioritized by discharge load to receiving body dilution capacity	237

1 Strategic planning

The Implementation of the Urban Waste Water Directive in the Republic of Serbia has been guided by the National Environmental Approximation Strategy and the Water Management Master Plan of the Republic of Serbia.

Further planning efforts have been made by developing of the Water Management Strategy and Water Pollution Protection Plan (WPPP, to be adopted in 2015). These documents are currently in draft form and will be considered by the Government during 2015. When adopted, the Water Management Strategy for the territory of the Republic of Serbia will establish priorities for the water sector and a first Government approved estimate of funds and funding resources. The Water Pollution Protection Plan will set priorities to reach compliance with the Directive's requirements and related timelines. The Plan will also provide identification of agglomerations, assessment on current status related to collecting systems, population connected, characteristics of urban waste water and existing waste water treatment plants, etc.

The most significant development since the adoption of the NEAS has been the mapping of agglomerations and the completion of a full list of identified and budgeted projects for all said agglomerations.

This preliminary Implementation Plan is based on the above-mentioned documents and will be further refined when developing the DSIP for Urban Waste Water Treatment Directive through implementation of an IPA financed project (2015 – 2017). This project will further develop the list of investment projects and will refine the prioritization, the cost figures and the affordability constraints that determine the implementation timing and that on a preliminary basis are presented in this document. The DSIP will also propose further prioritisation and financing mechanisms for this most expensive to implement EU requirement.

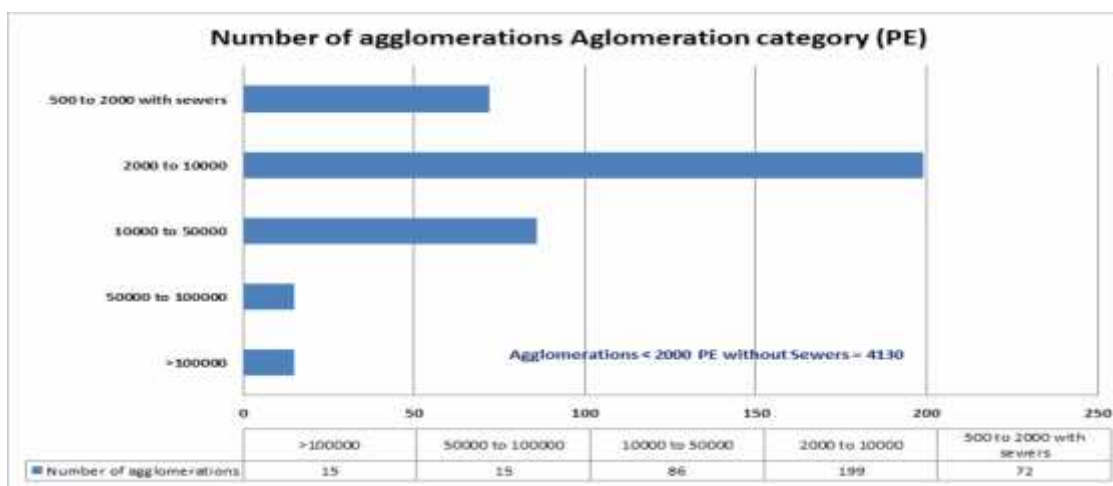
2 Existing situation

Agglomerations

The Draft Water Pollution Protection Plan contains specific data for each agglomeration: number of agglomerations, number of settlements, number of inhabitants and number connected to the public sewer/WWTPs, recipient, needed investments and priority ranking.

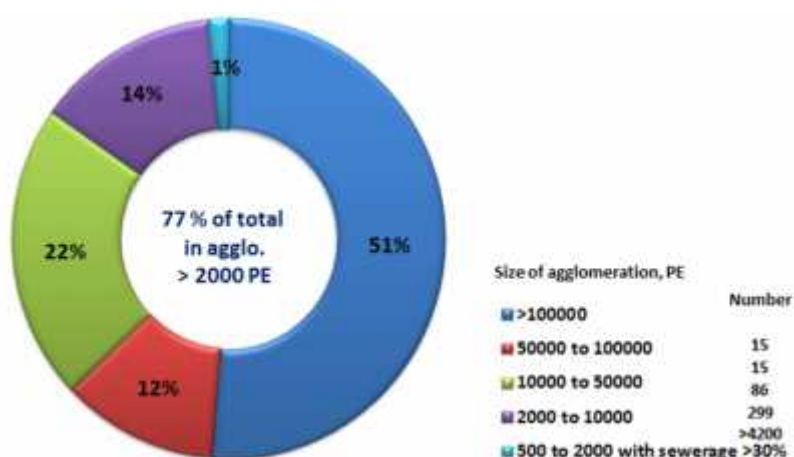
The Water Protection Plan has evaluated a total of 4,867 settlements of which 450 have more than 2000 inhabitants according to the census in 2011. They are grouped within 388 agglomerations. Agglomerations are identified and grouped into categories (Figure 1) on the basis of PE load considering the number of inhabitants, institutional and industrial loads. Number of agglomerations and actual delineation will be further specified by the IPA financed project during 2015 – 2017.

Figure 1 Agglomerations according to categories



About 77% of the population of Serbia lives in agglomerations with more than 2000 inhabitants (Figure 2).

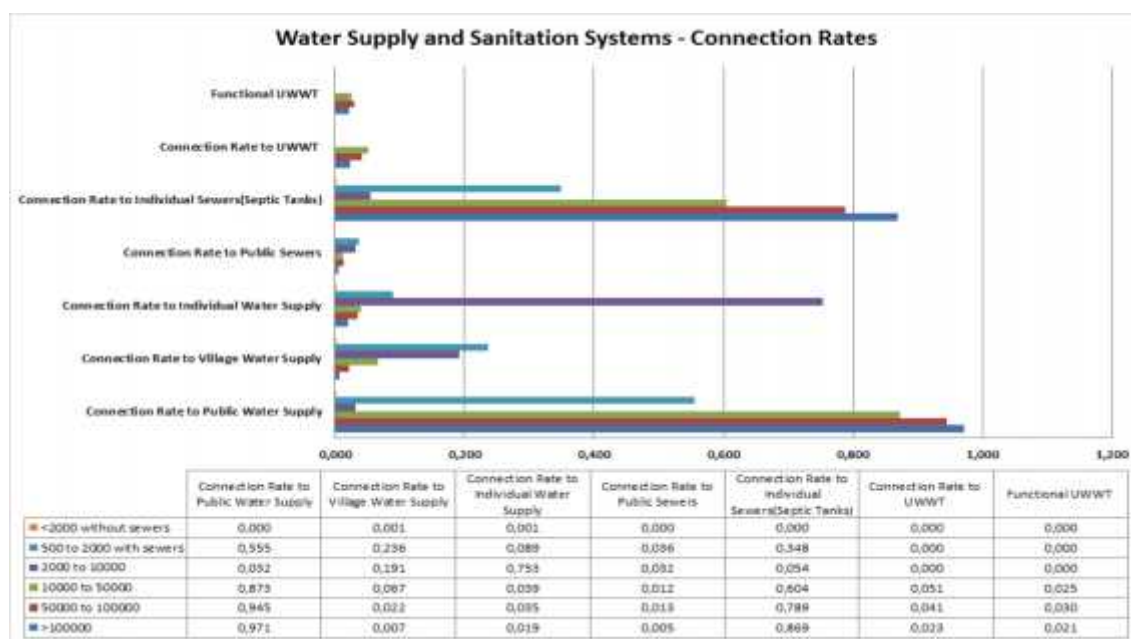
Figure 2 Distribution of population by category of agglomeration



Water supply and waste water collection and treatment

The Water supply system is reasonably well developed. A total of 81% of the population has access to public water supply. The percentage is lower in central Serbia (71%). In certain parts of the country (e.g. parts of Vojvodina and the Velika Morava Valley), water quality is not satisfactory, while other parts (e.g. Šumadija, southern Serbia and part of Banat) have both water quality and water quantity issues. The proportion of non-revenue water (losses, illegal consumption, etc.) is high. Less water is being abstracted as compared to the past, due to a low level of industrial production and industries generally use their own water sources. Records of industrial water consumption are incomplete and insufficiently precise. Water supply services are better developed than sanitation services.

Figure 3 Water supply and sanitation connection rates



According to the draft Water Pollution Protection Plan, about 55% of the overall population has access to public sanitation. Almost 75% of the population lives in settlements larger than 2000 inhabitants, in which the average connection rate to sewers is 72%, with about 27% connected to septic tanks. In settlements with less than 2000 inhabitants, the connection rate to sewers is less than 5% on average. There are more than 44 urban WWTPs (32 are operational, of which relatively few operate to design criteria, while the remainder are non-compliant. Less than 8% of the population receives effective wastewater treatment. (Figure 3).

Existing, operational plants service about 480,000 inhabitants, out of which about 280 000 receive appropriate treatment. The share of industrial wastewater in urban areas has declined, and is estimated at less than 20% of total wastewater for smaller communities and up to 60% in some of the larger communities (it was about 45% on average in the 1980's). In most cases there are no facilities for pre-treating industrial wastewater prior to discharge into public sewers.

About 29 % of the total pollution load originates from industry and institutions and the remaining 71% from the population via sanitation systems ()

Figure 4 and Figure 5)

Figure 4 Distribution of loads

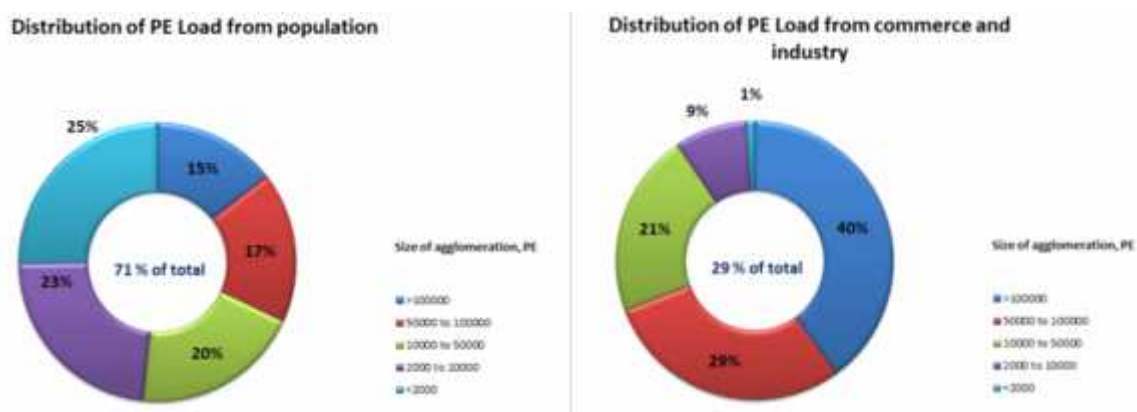
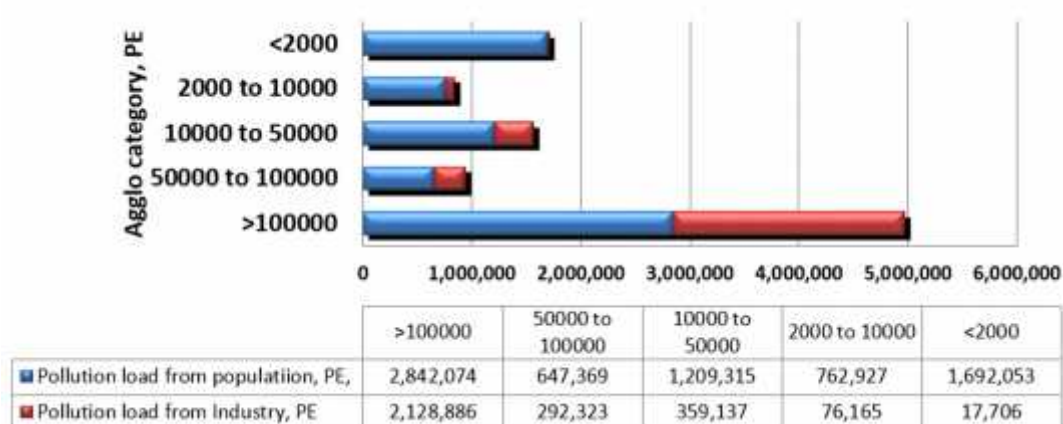


Figure 5 Distribution of loads



Assessment of the situation

The main conclusions regarding the existing situation can be summarized as follows:

- Many of the water bodies do not meet the requirements of current legislation and water quality standards. The problem is much more serious in the Morava River basin than anywhere else. The River Danube is still in good or moderate status despite absence of WWTPs in the settlements discharging waste water into the Danube River, including Belgrade and Novi Sad. The Danube leaves Serbia with overall better water quality than it enters Serbia⁴².
- Of the 493 surface water bodies on rivers only 102 surface water bodies are monitored and of the 153 ground water bodies only 64 are monitored. Monitoring does not cover all the parameters specified in the legislation. Only some of the monitored water bodies' parameters violate the standards and not all the time.
- Non-compliance is mostly attributed to the absence of WWT from settlements and industry.
- Water bodies under the highest pressure are bodies in the Morava River Basin and some Canals in Vojvodina⁴³,

⁴² Source: Draft Water Pollution Protection Plan

⁴³ Source: Draft Water Pollution Protection Plan

- Industrial pollution is dominant for the Danube River downstream of Belgrade, and for the Velika Morava River, upstream from the Resava River,
- Infrastructure for sewage collection and especially for waste water treatment is not sufficient and requires significant development.

3 Goals and assumptions

Sensitive areas

In accordance with Convention on the Protection of the Danube River (ratified on January 30th 2003 by The Federal Republic of Yugoslavia), Law on the Convention on Cooperation for the Protection and Sustainable Use of the Danube River ("Official Gazette of Serbia and Montenegro, International Agreements", no. 4/2003) and Declaration on the Enhancement of Cooperation ICPDR (signed by the Republic of Serbia in Bucharest, February 23rd 2007), Republic of Serbia as a member of the International Commission for the Protection of the Danube River(ICPDR) accepts the obligation to fulfill the conditions stipulated in the above-mentioned documents.

It means that the Republic of Serbia should consider the application of the foregoing conditions and adopt the legal basis for the determination of sensitive areas. The most likely approach would be to declare the entire territory of Serbia (92% of the territory lies within the Danube river basin) a sensitive area due to eutrophication of the Danube Delta and shall apply in this entire area more advanced treatment with nitrogen and phosphorus removal in all agglomerations larger than 10.000 PE. This approach has been assumed in the draft Water Pollution Protection Plan.

Some activities related to the identification of sensitive areas are initiated with the assistance of the ENVAP II project: "Designation of sensitive areas and vulnerable zones according to the EU Nitrates Directive and Urban Wastewater Treatment Directive" as part of bilateral cooperation between Serbia and Sweden. The Project (second phase) will include proposals of principles for designation of sensitive areas and relevant catchments including GIS maps showing different alternatives, documentation of selected methodology and final mapping (October 2015 - December 2015).

For current assessment it is assumed that all the territory of Serbia is considered as sensitive area. Therefore in identifying infrastructure needs, tertiary treatment is assumed in all cases for agglomerations above 10 000 PE.

Connection targets

Current connection rate to waste water treatment is about 11% while about 7.6% actually receive adequate treatment. For planning purposes it is assumed that close to 99% connection rate for agglomerations above 2000 PE will be achieved by 2041 and close to 99% of agglomerations with more than 2000 PE will receive adequate treatment by 2041.

4 Actions to achieve compliance and priorities

In order to achieve compliance a number of actions are foreseen. In accordance with the draft National Water Management Strategy an enabling environment is to be created to support the achievement of the overall strategic goal of good status for all water bodies and adequate and good water services in support of overall development through:

- Establishment of legal, institutional, financial capacities (e.g. establishment of a Water fund, establishment of water services investment and implementation capacity through new regional structures, etc.,)
- Significant and appropriate increase of the capacity of state and other institutions in charge of water management
- Increase of water sector financial base and establishing an appropriate tariff policy in order to implement the cost recovery principle and support to private sector investment
- Significant increase in the capacity of professional and research institutions and their substantial involvement in water policy development, etc.

The above activities and reforms (needed costs are estimated to about €416 million) are necessary preconditions for the implementation of all other activities aimed to achieve compliance, including:

- Strengthening existing and creating new capacities for project identification, planning, development and implementation, including (but not limited to):
 - Improving strategic planning in the water sector including investment planning;
 - Development of capacities at national/regional level for project identification, preparation, implementation, evaluation and monitoring;
 - Establishing adequate capacities for development of project documentation;
 - Establishing capacities for inspection and
 - Enforcement of water sector requirements.
- Infrastructure development:
 - Prioritization of infrastructure development projects based on:
 - specific load on the recipient
 - size of agglomeration and the implementation periods
 - Phased implementation of lacking infrastructure
 - Wastewater collection systems (extension of existing systems, construction of new systems, refurbishment and reconstruction of existing systems)
 - Wastewater treatment in accordance with requirements of the UWWT Directive in all agglomerations with more than 2000 PE.
 - Storm water collection and treatment systems (the extent of this problem is largely underestimated and further studies are needed to define activities and needed infrastructure).

Priorities for protection of water bodies

Priority for development of waste water collection and treatment infrastructure shall be provided complying with following criteria⁴⁴:

⁴⁴ Criteria are provided in the Water Protection Plan and coincide with criteria for priority setting provided in the Water Management Strategy

- First level of the prioritization for WWTPs is based on specific load of the recipient and on existing % of population connected to sewage networks. Higher priority has higher specific load. This approach is used to classify agglomerations into 4 planning and implementation periods;
- For each planning period a second level of prioritization is implemented giving higher priority to agglomerations with higher PE load i.e. larger agglomerations first;
- For agglomerations with more than 2000 PE, priority should be given to sewer construction if the sewer connection rate is less than 60%, otherwise priority is to be given to the construction of WWTPs;
- Priority should be given to new WWT plants in the first 2 planning periods, thereafter reconstruction and expansion should be considered.

Implementation of projects in agglomerations

Implementation of investment projects in agglomerations is subdivided into four implementation periods from 2015 to 2020 and 2021 to 2041, with a duration of 7 years each⁴⁵. Projects are listed in accordance with the prioritization criteria mentioned above. In each implementation period priority will be given to larger agglomerations first.

Priority projects for 2015 - 2020

Several wastewater collection and treatment projects are at various stages of project preparation and construction. The range of capacities of the WWTP projects planned within this period is between 1,000 PE (Bela Crkva), up to approximately 450,000 PE (Novi Sad), with the majority comprising medium-sized WWTPs ranging from 80,000 to 100,000 PE (Užice, Vranje, Kruševac, Šabac, Leskovac, Kraljevo, Raška, Zrenjanin, Vrbas/Kula, etc.). Additionally, a number of KfW-financed wastewater collection and treatment projects (in medium-sized agglomerations) have been earmarked for implementation in this period.

Eight projects are under construction at present (Leskovac network extension and Phase 1 WWTP, Šabac Phase 1 WWTP, Subotica main collectors, Vrbas/Kula Phase 1 WWTP, Bela Crkva WWTP, Užice collectors and Phase 1 WWTP, Vranje collectors and Phase 1 WWTP, and Kruševac collectors and Phase 1 WWTP). Additionally, seven projects are currently at varying levels of project preparation (Wastewater collection systems and Phase 1 WWTPs for Raška, Brus, Blace, Kraljevo, Zrenjanin, Raška, Loznica and Novi Sad). From available feasibility studies and other technical documentation it is estimated that around 229 million euro will be distributed towards financing of the abovementioned projects, by 2020.

For more detailed information please see *Annex A* to this document.

⁴⁵ This coincides with EU budget planning and corresponding financing periods.

5 Costs

It is assessed that in total about 4.962 million euro⁴⁶ in nominal terms shall be invested to meet UWWTD requirements for 315 agglomerations over 2.000 PE. This cost estimation is based on provision that all agglomerations over 10.000 PE will implement tertiary treatment. The costs are expected to reach their peak in the third financing period (2028-2034) when it is expected that capacity for project implementation and financing will be fully developed. Costs for agglomerations less than 2.000 PE are not included in above-mentioned figure, but it is estimated that additional 141 million euro will be needed in the period after 2041 to fully implement all corresponding requirements.

Investment Costs are sequenced in four financing periods, as mentioned before. Full compliance is expected in 2041. The indicative distribution of investment costs over the time period 2015-2041 is presented in Table1 .

Table 1 Summary costs estimated over period 2015 to 2041 (euro mill)

Financing period 2015-2041	2015-2020	2021-2027	2028-2034	2035-2041	Total 2015-2041
Estimated Investment costs	374.88	1,143.49	2,404.97	1,038.92	4,962.26

For the full table detailing each agglomeration and period, consult Annex B.

6 Implementation timetable

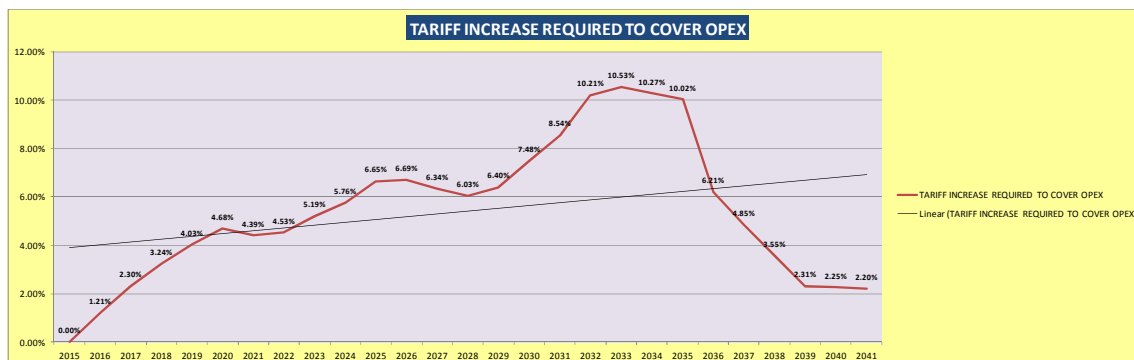
Implementation at agglomeration level is planned taking into account the considerations previously mentioned. Detailed investment planning, including refined prioritization and the affordability constraints regarding Cost Recovery, will be developed further in the Directive Specific Implementation Plans and in the feasibility studies of individual projects at agglomeration's level.

For the purposes of assessing the impact on tariffs of the investment plan, an inter-annual distribution of investments and their corresponding O&M costs has been carried out. This analysis shows that the current investment plan will stretch the capacity of Households to the maximum.

Under Scenario 1, Opex has been estimated in accordance with RS domestic engineering estimates that are somewhat higher than international benchmarks. This is in part justified by the need to absorb backlog in maintenance of existing very deteriorated networks. Under this Scenario the necessary Tariff increases during the period will need to be between 5 and 10% each year of the approximation effort. This will stress limited affordability to a very high degree.

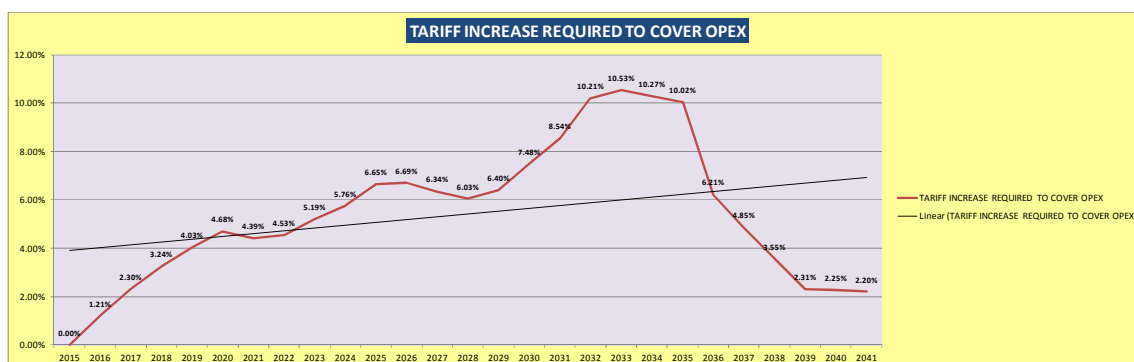
⁴⁶ Cost estimations derive from draft Water Pollution Protection Plan, whereas fixed costs (as described in chapter 4) represent a share of 8%, costs linked to project preparation about 12%, while investments themselves account to 80% of total costs.

Figure 6. Impact of Opex on Tariffs under Domestic Opex Scenario



Under Scenario 2, Opex has been calculated more in line with International Benchmarks. The results are a requirement for Tariff increases somewhat lower, between 4 and 7%, still a very taxing effort.

Figure 7. Impact of Opex on Tariffs under International Benchmarks



The evident conclusion of this preliminary analysis is that reaching full compliance will require a lengthy period and that the present preliminary implementation plan presented, whilst sustainable (with some further re-distribution inter-annually of investments) will stress affordability of Households to a very high level. RS cannot at present contemplate an earlier full compliance date.

Even though justification of Transition Periods is not required at this stage, the Implementation Plan presented has thus been broadly checked for sustainability and thus conforms a valid base for future definition and refinement.

7 Financing mechanism

It is foreseen, that wastewater infrastructure development and operation in Serbia will be financed from the following sources:

- 1) Operation and maintenance cost (OPEX) from waste management tariffs (cost recovery mechanism);
- 2) Investment costs from:

- National public sources (RS budget, National Water Fund of Serbia, Provincial Water Fund, Local Self Government budgets and funds),
- EU funds,
- Other grant support from Donors,
- Loans,
- Other sources.

Table 2: Summary of the financing plan (euro mill)

	NOMINAL € MILLION	%	NPV AT 4%
TOTAL OPEX	4 627,58	48%	
COST RECOVERY FROM WATER TARIFFS	4 627,58	100%	2 116,86
TOTAL INVESTMENT COSTS	4 962,26	52%	2 717,16
EU GRANTS AND OTHER DONORS	2 649,13	53%	
NATIONAL CONTRIBUTION	2 313,13	47%	
TOTAL INVESTMENTS AND OPERATING COSTS	9 589,83	100%	4 834,02

All operational and maintenance costs will be covered through cost recovery mechanism.

The bulk of the finance for the investment component is expected to be from EU and other donors grants (53% of total investment costs). Remaining needs will be met from national sources as described above. The actual shares for various national financing sources are in the process of establishment together with development of corresponding financing mechanisms.

RS is well aware that to mobilize such high volumes, institutional strengthening will have to take place so as to smoothly transform the elevated number of projects into implemented realities. Over 2015-2017 a preliminary planning tool will be prepared to gradually improve the capacity for multi-annual programming.

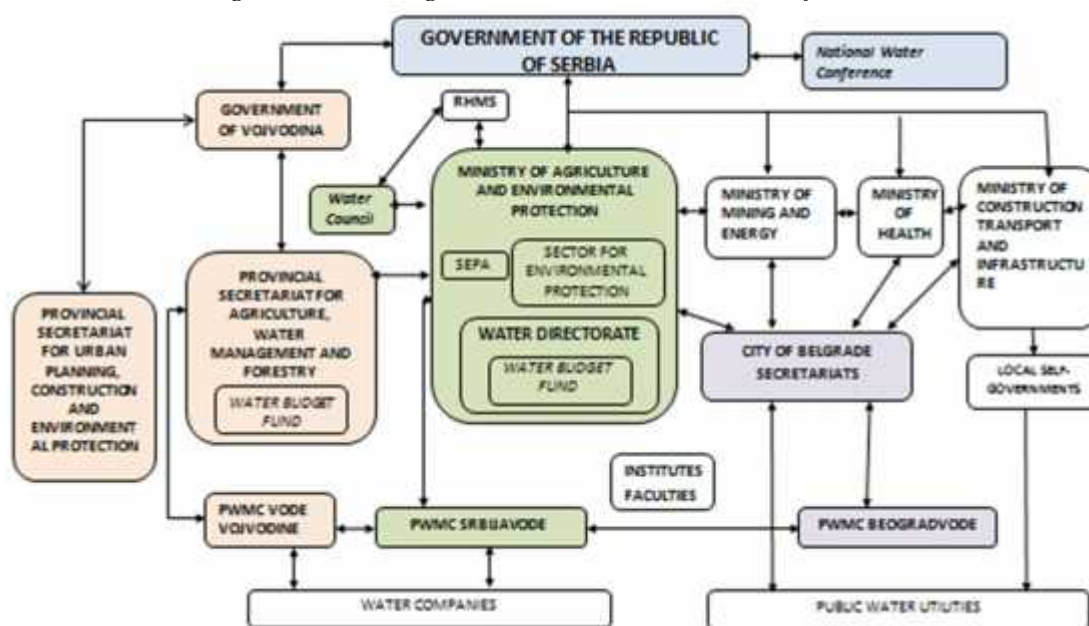
8. Institutional responsibilities

General

The primary responsibility for water management resides with the Serbian Government, which performs this function via the Ministry of Agriculture and Environmental Protection, provincial secretariats, public water management companies, local self-governments and public utility companies. Only their concerted efforts can ensure effective functioning and development of the water sector.

Apart from the parent ministry, water sector affairs are also handled by the Ministry of Finance, Ministry of Public Administration and Local Self-Government, Ministry of Mining and Energy and the Ministry of Construction, Transportation and Infrastructure (Figure). According to the draft Water Management Strategy, such division of responsibilities, along with insufficient inter sectorial coordination and cooperation, does not ensure efficient and prudent water management, from planning, funding and construction of infrastructure.

Figure 8: Water management in Serbia - current institutional framework



Investment projects management

Several MoAEP organizational units (Water Directorate, Department for Project Management, and Department for Water Protection) are involved in project planning. The Water Directorate and the Department for Water Protection are responsible for policy design, together with other competent authorities. The IPA Unit/DPM has a more operative role in project preparation and management. The Serbian Integration Office (SEIO) is performing the role of coordinator of programming of international assistance and EU funds.

In case of investment projects financed from pre-accession assistance, as from the IPA 2013 programming year, competencies for planning of water investments and their financing at central level are defined under the Decentralized Implementation System of EU funded projects (DIS), accredited in 2014. Overall coordination and programming of EU and donors assistance is done by the Serbian European Integration Office, and for the sector Environment and Climate Change IPA Unit in the relevant ministry (MAEP). MAEP/IPA Unit is responsible for the programming, project application preparation, project documentation development, and managing of approved projects for the environment sector. Technical implementation of approved projects is the responsibility of the IPA Unit and the End Beneficiary. In the case of infrastructure, this is the local self-government. Financial implementation, contracting, financing and supervision are the responsibility of the Ministry of Finance (CFCU and National Fund). The national co-financing also has to be provided by the relevant Ministry and End Beneficiary, and managed in line with DIS procedures.

In case of water sector projects financed from loans, local self-governments are cooperating directly with IFIs in project development and implementation activities.

To be able to address all relevant issues in regard of planning and implementation in water sector it is important to adopt the Water Management Strategy and the Water Pollution Protection Plan. After these draft documents are adopted, they will conform the basis for planning and development of Directive Specific Implementation Plans of heavy investment Directives in the water sub-sector.

These documents will also provide the background to address current shortcomings in the institutional set-up for managing the process of implementing investments in the water sector. Such strategic framework is a pre-condition for establishment of an efficient institutional system able to generate strategic decisions and ensure adequate capacities for infrastructure project development and implementation.

Annex A. Water sector projects financing during period until 2020.

Municipality	Financing source	Available budget	Total for period up to 2020	Status
I Allocation up to 2015				
Leskovac collection system and WWTP	MISP IPA 2010	9.8	22.3	Construction
	National co-financing	4.0		
	ORIO	8.5		
Raška WWTP	IPA 2013	6.0	7.2	Project preparation
	National co-financing	1.2		
Šabac WWTP	MISP IPA 2008	8.6	8.6	Construction
Subotica WWTP reconstruction/extension CARDS 2004	EUD	5.1	18.1	Construction
	EBRD	9.0		
	City of Subotica	3.0		
	Government of Italy	0.6		
	Vode Vojvodine	0.5		
Vrbas/Kula WWTP MISP IPA	EUD	12.3	30.2	Construction
	Norway	1.3		
	Holland	1.2		
	MoAEP	2.3		
	Vrbas Municipality	5.7		
	APV Water Fund	4.4		
	NIP	3.1		
MEGLIP: Užice, Vranje, Kruševac collection systems and WWTPs	IPA 2011	13.8	59.8	Construction
	KfW loan	46.0		
Bela Crkva (Krušica) collection system and WWTP	Czech	0.6	1.2	Construction
	AP Vojvodina	0.1		
	Bela Crkva	0.1		

	EISP/Sida	0.5		
Total ongoing projects			147.4	
II New allocation for period 2015-2020				
Kraljevo WWTP	PPF5, IPA 2017 (SPD)	30.0	30.0	Project preparation
Brus-Blace WWTP	PPF4, IPA 2016 (SPD)	11.7	11.7	Project preparation
Loznica WWTP	PPF2 IPA 2008	4.9	4.9	Project preparation
	IPA 2018/2020			
Zrenjanin WWTP	MISP IPA 2010	6.3	6.3	Project preparation
	IPA 2018/2020			
a ak WWTP	MISP IPA 2008	6.9	6.9	Project preparation
	IPA 2018/2020			
Novi Sad collection system and WWTP	WBIF	21.4	21.4	Project preparation (PFS in progress)
Total new allocation			81.2	
Total sum			228.5	

Annex B. Estimates for individual agglomerations prioritized by discharge load to receiving body dilution capacity

PLANNING PERIOD	NAME OF AGGLOMERATION	P.EQ.	POPULATION 2011	POPULATION CATEGORY	COSTS EXPRESSED IN EUROS MILLION 2015 NOMINAL			
					PREPARATION COSTS	SEWAGE NETWORK	TREATMENT FACILITIES	TOTAL INVESTMENTS
2015-2041	ALL > 2.000 P.E.	8,332,311	5,475,401	ALL > 2.000 P.E.	582,44	1,553,51	3,408,74	4,962,26
2015-2020	Kraljevo	131,157	85,324	50000 do 100000	7,98	14,35	45,26	59,61
2015-2020	Leskovac	126,629	82,623	50000 do 100000	7,26	9,35	43,55	52,90
2015-2020	Čačak	122,083	79,904	50000 do 100000	6,87	7,42	42,16	49,58
2015-2020	Šabac	102,940	68,363	50000 do 100000	6,76	13,09	37,72	50,82
2015-2020	Užice	90,463	60,751	50000 do 100000	5,34	4,75	33,39	38,14
2015-2020	Vranje	81,301	55,109	50000 do 100000	4,95	2,33	34,45	36,78
2015-2020	Loznica	51,510	36,366	10000 do 50000	4,86	14,10	25,66	39,76
2015-2020	Vrbas	32,610	24,019	10000 do 50000	3,29	6,78	20,97	27,75
2015-2020	Raška	13,219	10,640	10000 do 50000	1,35	0,75	10,21	10,96
2015-2020	Blace	5,946	5,210	2000 do 10000	0,38	0,28	3,89	4,16
2015-2020	Brus	5,869	5,150	2000 do 10000	0,41	0,54	3,88	4,42
2021-2027	Niš	381,521	227,625	>100000	16,21	15,57	100,67	116,24
2021-2027	Kruševac	124,718	81,481	50000 do 100000	6,91	6,87	42,78	49,65
2021-2027	Novi Pazar	118,102	77,516	50000 do 100000	7,11	10,98	41,52	52,49
2021-2027	Požarevac	67,366	46,427	10000 do 50000	5,32	11,44	30,87	42,31
2021-2027	Pirot	62,357	43,272	10000 do 50000	4,15	2,93	28,23	31,17
2021-2027	Zaječar	61,836	42,943	10000 do 50000	4,75	8,59	28,68	37,27
2021-2027	Bor	48,062	34,147	10000 do 50000	3,24	0,97	22,97	23,94
2021-2027	Prokuplje	37,416	27,205	10000 do 50000	3,04	1,96	22,69	24,65
2021-2027	Aleksinac	35,645	26,035	10000 do 50000	3,55	7,59	22,49	30,08
2021-2027	Knjaževac	23,951	18,170	10000 do 50000	2,18	1,59	16,15	17,74
2021-2027	Kula	23,394	17,788	10000 do 50000	2,84	7,93	16,56	24,49
2021-2027	Požega	23,391	17,786	10000 do 50000	2,44	4,32	16,16	20,48
2021-2027	Ivanjica	19,439	15,051	10000 do 50000	1,99	2,57	13,89	16,46
2021-2027	Srbobran	18,374	14,306	10000 do 50000	3,03	12,65	14,43	27,08
2021-2027	Kuršumlija	16,803	13,200	10000 do 50000	1,71	1,62	12,35	13,97
2021-2027	Odžaci	16,557	13,026	10000 do 50000	2,34	7,51	12,86	20,37
2021-2027	Novi Bečej	16,104	12,705	10000 do 50000	2,40	8,40	12,71	21,11
2021-2027	Kovačica	13,931	11,153	10000 do 50000	2,51	10,76	11,73	22,49
2021-2027	Lebane	13,255	10,666	10000 do 50000	1,50	2,05	10,38	12,43
2021-2027	Tutin	12,893	10,404	10000 do 50000	1,38	1,20	10,07	11,27
2021-2027	Arilje	12,744	10,296	10000 do 50000	1,44	1,87	10,06	11,92
2021-2027	Petrovac na Mlavi	11,201	9,171	2000 do 10000	1,58	3,35	10,72	14,07

2021-2027	Crvenka	10,970	9,001	2000 do 10000	1,89	6,29	10,88	17,17
2021-2027	Vladičin Han	10,861	8,921	2000 do 10000	1,28	0,85	10,21	11,06
2021-2027	Kljajićevo	10,250	8,470	2000 do 10000	2,04	8,26	10,58	18,85
2021-2027	Aleksandrovac	10,065	8,333	2000 do 10000	1,14	0,20	9,56	9,76
2021-2027	Banatski Karlovac	9,704	8,065	2000 do 10000	0,66	1,68	5,31	6,99
2021-2027	Sokobanja	9,591	7,981	2000 do 10000	0,57	0,94	5,18	6,11
2021-2027	Sivac	9,475	7,895	2000 do 10000	1,29	7,54	5,86	13,39
2021-2027	Majdanpek	9,198	7,688	2000 do 10000	0,46	0,10	4,93	5,02
2021-2027	Svrljig	9,016	7,552	2000 do 10000	0,49	0,37	4,88	5,25
2021-2027	Bajmok	8,832	7,414	2000 do 10000	1,22	7,09	5,54	12,63
2021-2027	Kačarevo	8,413	7,099	2000 do 10000	1,20	6,80	5,78	12,57
2021-2027	Veliki Crljeni	8,119	6,877	2000 do 10000	1,08	5,82	5,54	11,36
2021-2027	Banatsko Novo Selo	7,866	6,685	2000 do 10000	1,14	6,41	5,48	11,89
2021-2027	Rumenka	7,617	6,496	2000 do 10000	1,11	6,23	5,35	11,58
2021-2027	Omoljica	7,372	6,309	2000 do 10000	1,08	6,06	5,21	11,27
2021-2027	Čičevac	7,268	6,230	2000 do 10000	1,03	5,63	5,12	10,75
2021-2027	Ub	7,218	6,192	2000 do 10000	0,47	0,60	4,54	5,14
2021-2027	Dolovo	7,158	6,146	2000 do 10000	1,05	5,91	5,10	11,00
2021-2027	Jabuka	6,983	6,012	2000 do 10000	1,03	5,78	5,00	10,78
2021-2027	Osečina	6,957	5,992	2000 do 10000	0,86	4,26	4,82	9,08
2021-2027	Melenci	6,944	5,982	2000 do 10000	1,00	5,54	4,95	10,50
2021-2027	Obrovac	6,450	5,601	2000 do 10000	0,93	5,10	4,67	9,77
2021-2027	Padina	6,361	5,532	2000 do 10000	0,96	5,34	4,65	9,98
2021-2027	Babušnica	6,276	5,466	2000 do 10000	0,42	0,50	4,07	4,57
2021-2027	Bačko Gradište	5,818	5,110	2000 do 10000	0,89	4,95	4,34	9,28
2021-2027	Kisač	5,794	5,091	2000 do 10000	0,88	4,93	4,32	9,25
2021-2027	Bojnik	5,519	4,876	2000 do 10000	0,63	2,74	3,94	6,68
2021-2027	Bezdan	5,198	4,623	2000 do 10000	0,81	4,49	3,97	8,47
2021-2027	Ruski Krstur	5,089	4,537	2000 do 10000	0,80	4,41	3,91	8,32
2021-2027	Opovo	5,073	4,524	2000 do 10000	0,70	3,51	3,80	7,31
2021-2027	Sonta	4,830	4,331	2000 do 10000	0,76	4,22	3,75	7,97
2021-2027	Kucura	4,815	4,319	2000 do 10000	0,76	4,21	3,74	7,95
2021-2027	Vranić	4,707	4,233	2000 do 10000	0,73	4,02	3,67	7,69
2021-2027	Koceljeva	4,643	4,182	2000 do 10000	0,45	1,44	3,35	4,79
2021-2027	Prigrevica	4,436	4,016	2000 do 10000	0,71	3,93	3,51	7,44
2021-2027	Pukovo	4,248	3,865	2000 do 10000	0,69	3,79	3,40	7,18
2021-2027	Kučevo	4,186	3,815	2000 do 10000	0,33	0,60	3,01	3,61
2021-2027	Gajdobra	4,165	3,798	2000 do 10000	0,66	3,55	3,33	6,87
2021-2027	Trgovište	3,947	3,622	2000 do 10000	0,40	1,34	2,97	4,31
2021-2027	Bačko Dobro Polje	3,849	3,542	2000 do 10000	0,63	3,49	3,15	6,63
2021-2027	Bački Monoštor	3,779	3,485	2000 do 10000	0,62	3,43	3,10	6,54
2021-2027	Ratkovo	3,688	3,411	2000 do 10000	0,61	3,37	3,05	6,41
2021-2027	Žitorađa	3,638	3,370	2000 do 10000	0,32	0,77	2,73	3,50
2021-2027	Pivnice	3,598	3,337	2000 do 10000	0,60	3,30	2,99	6,28
2021-2027	Zlot	3,552	3,299	2000 do 10000	0,59	3,26	2,96	6,22
2021-2027	Kumane	3,534	3,284	2000 do 10000	0,59	3,25	2,95	6,19

2021-2027	Stapar	3,531	3,282	2000 do 10000	0,59	3,25	2,94	6,19
2021-2027	Uljma	3,515	3,269	2000 do 10000	0,59	3,23	2,93	6,17
2021-2027	Srpski Miletić	3,237	3,039	2000 do 10000	0,55	3,02	2,75	5,77
2021-2027	Savino Selo	3,137	2,956	2000 do 10000	0,54	2,94	2,69	5,63
2021-2027	Klenje	3,111	2,935	2000 do 10000	0,53	2,92	2,67	5,59
2021-2027	Stepojevac	3,063	2,895	2000 do 10000	0,53	2,88	2,64	5,52
2021-2027	Lazarevo	3,043	2,878	2000 do 10000	0,47	2,39	2,57	4,96
2021-2027	Bački Brestovac	2,972	2,819	2000 do 10000	0,52	2,81	2,58	5,39
2021-2027	Rusko Selo	2,965	2,813	2000 do 10000	0,51	2,81	2,57	5,38
2021-2027	Vinarce	2,866	2,730	2000 do 10000	0,50	2,73	2,51	5,24
2021-2027	Klek	2,837	2,706	2000 do 10000	0,50	2,71	2,49	5,20
2021-2027	Brestovac	2,818	2,690	2000 do 10000	0,61	3,79	2,59	6,38
2021-2027	Lipnički Šor	2,738	2,622	2000 do 10000	0,48	2,63	2,42	5,05
2021-2027	Bosilegrad	2,736	2,621	2000 do 10000	0,24	0,42	2,18	2,60
2021-2027	Žagubica	2,681	2,574	2000 do 10000	0,40	1,89	2,30	4,20
2021-2027	Dereonje	2,578	2,487	2000 do 10000	0,46	2,51	2,31	4,81
2021-2027	Silbaš	2,555	2,467	2000 do 10000	0,46	2,49	2,29	4,78
2021-2027	Veliki Šiljegovac	2,455	2,382	2000 do 10000	0,44	2,41	2,22	4,63
2021-2027	Bački Gračac	2,342	2,286	2000 do 10000	0,43	2,32	2,14	4,46
2021-2027	Pavliš	2,237	2,195	2000 do 10000	0,41	2,23	2,07	4,30
2021-2027	Čenej	2,142	2,113	2000 do 10000	0,40	2,16	2,00	4,16
2028-2034	Beograd	2499,393	1299,887	>100000	78,00	165,10	433,54	598,64
2028-2034	Novi Sad	509,506	297,280	>100000	21,40	30,08	126,80	156,88
2028-2034	Kragujevac	241,906	149,630	>100000	11,66	13,00	71,24	84,24
2028-2034	Subotica	171,553	109,130	>100000	11,83	36,04	57,62	93,66
2028-2034	Pančevo	127,838	83,345	50000 do 100000	8,11	16,70	44,67	61,37
2028-2034	Smederevo	117,354	77,067	50000 do 100000	7,65	16,07	41,88	57,95
2028-2034	Zrenjanin	115,879	76,180	50000 do 100000	6,31	4,48	40,22	44,70
2028-2034	Valjevo	100,611	66,948	50000 do 100000	6,48	11,46	36,91	48,37
2028-2034	Sremska Mitrovica	76,501	52,133	50000 do 100000	6,21	15,74	34,37	50,11
2028-2034	Obrenovac	75,943	51,786	50000 do 100000	6,80	21,34	34,81	56,15
2028-2034	Sombor	68,882	47,378	10000 do 50000	5,66	13,85	31,65	45,50
2028-2034	Kikinda	53,927	37,915	10000 do 50000	4,17	6,74	25,71	32,45
2028-2034	Mladenovac	53,504	37,644	10000 do 50000	4,97	14,20	26,38	40,58
2028-2034	Vršac	49,876	35,316	10000 do 50000	3,55	2,90	23,84	26,74
2028-2034	Arandelovac	47,529	33,803	10000 do 50000	3,73	5,62	23,29	28,91
2028-2034	Ruma	41,383	29,809	10000 do 50000	3,47	3,81	24,70	28,50
2028-2034	Lazarevac	39,526	28,593	10000 do 50000	3,55	5,54	24,05	29,59
2028-2034	Surčin	38,963	28,223	10000 do 50000	5,77	25,95	26,04	51,99
2028-2034	Paraćin	37,081	26,984	10000 do 50000	3,57	7,01	23,09	30,10
2028-2034	Gornji Milanovac	36,029	26,289	10000 do 50000	3,11	3,36	22,20	25,56
2028-2034	Smederevska Palanka	35,115	25,684	10000 do 50000	3,25	5,08	21,97	27,04
2028-2034	Temerin	34,608	25,348	10000 do 50000	5,29	23,96	23,81	47,77
2028-2034	Bečej	32,195	23,742	10000 do 50000	3,81	11,79	21,33	33,12
2028-2034	Čuprija	25,857	19,471	10000 do 50000	2,30	1,61	17,11	18,72
2028-2034	Vrnjačka Banja	25,535	19,252	10000 do 50000	2,81	6,36	17,47	23,83

2028-2034	Senta	24,709	18,688	10000 do 50000	2,44	3,53	16,74	20,27
2028-2034	Prijepolje	22,881	17,435	10000 do 50000	2,04	0,96	15,53	16,48
2028-2034	Priboj	22,414	17,114	10000 do 50000	2,18	2,53	15,46	17,98
2028-2034	Velika Plana	20,908	16,073	10000 do 50000	2,25	4,05	14,84	18,89
2028-2034	Ada	19,901	15,373	10000 do 50000	3,17	13,03	15,29	28,33
2028-2034	Trstenik	19,770	15,282	10000 do 50000	1,94	1,93	14,00	15,93
2028-2034	Bačka Topola	18,746	14,567	10000 do 50000	2,78	10,12	14,35	24,48
2028-2034	Bajina Bašta	18,596	14,462	10000 do 50000	1,96	2,80	13,46	16,26
2028-2034	Žabalj	18,298	14,253	10000 do 50000	3,13	13,64	14,50	28,14
2028-2034	Sjenica	18,022	14,059	10000 do 50000	1,82	1,90	13,05	14,95
2028-2034	Preševo	17,123	13,426	2000 do 10000	1,59	0,36	12,39	12,75
2028-2034	Mali Idoš	15,150	12,026	10000 do 50000	2,68	11,48	12,51	23,99
2028-2034	Svilajnac	13,713	10,996	10000 do 50000	1,61	2,71	10,72	13,43
2028-2034	Kanjiža	12,068	9,805	2000 do 10000	1,54	2,30	11,21	13,52
2028-2034	Bujanovac	10,982	9,010	2000 do 10000	1,36	1,51	10,36	11,87
2028-2034	Nova Varoš	10,690	8,795	2000 do 10000	1,21	0,36	10,03	10,39
2028-2034	Dimitrovgrad	9,996	8,282	2000 do 10000	0,55	0,59	5,30	5,89
2028-2034	Bela Palanka	9,809	8,143	2000 do 10000	0,57	0,87	5,26	6,13
2028-2034	Čurug	9,565	7,962	2000 do 10000	1,30	7,60	5,90	13,50
2028-2034	Lapovo	9,398	7,837	2000 do 10000	1,15	6,28	5,69	11,97
2028-2034	Lozovik	9,360	7,809	2000 do 10000	1,30	7,65	5,82	13,47
2028-2034	Majur	8,323	7,031	2000 do 10000	1,06	5,50	5,59	11,09
2028-2034	Čelarevo	8,061	6,833	2000 do 10000	0,61	1,50	5,03	6,54
2028-2034	Osipaonica	7,804	6,638	2000 do 10000	1,15	6,56	5,47	12,03
2028-2034	Topola (varošica)	7,550	6,445	2000 do 10000	0,69	2,48	4,90	7,39
2028-2034	Čajetina	7,173	6,157	2000 do 10000	0,47	0,62	4,52	5,14
2028-2034	Novo Mилошеvo	6,993	6,019	2000 do 10000	0,84	3,99	4,81	8,80
2028-2034	Batočina	6,714	5,805	2000 do 10000	0,68	2,69	4,53	7,22
2028-2034	Horgoš	6,586	5,706	2000 do 10000	0,77	3,55	4,56	8,11
2028-2034	Ribare	6,473	5,619	2000 do 10000	0,77	3,60	4,51	8,11
2028-2034	Kosjerić	6,456	5,606	2000 do 10000	0,60	2,03	4,33	6,36
2028-2034	Vranjska Banja	6,121	5,346	2000 do 10000	0,48	1,09	4,06	5,15
2028-2034	Umčari	5,937	5,203	2000 do 10000	0,64	2,60	4,14	6,74
2028-2034	Banja Koviljača	5,821	5,112	2000 do 10000	0,53	1,65	3,98	5,62
2028-2034	Kusadak	5,532	4,886	2000 do 10000	0,85	4,74	4,17	8,91
2028-2034	Lučani	5,480	4,845	2000 do 10000	0,50	1,53	3,79	5,32
2028-2034	Badovinci	5,444	4,817	2000 do 10000	0,84	4,67	4,12	8,79
2028-2034	Stara Moravica	5,335	4,731	2000 do 10000	1,04	6,52	4,27	10,78
2028-2034	Obrež	4,940	4,419	2000 do 10000	0,76	4,11	3,80	7,91
2028-2034	Mali Zvornik	4,924	4,406	2000 do 10000	0,36	0,51	3,39	3,91
2028-2034	Krupanj	4,898	4,385	2000 do 10000	0,37	0,62	3,39	4,01
2028-2034	Crepaja	4,871	4,364	2000 do 10000	0,77	4,25	3,78	8,03
2028-2034	Lešnica	4,759	4,275	2000 do 10000	0,75	4,17	3,71	7,88
2028-2034	Despotovac	4,627	4,169	2000 do 10000	0,35	0,56	3,24	3,80
2028-2034	Azanja	4,433	4,014	2000 do 10000	0,70	3,84	3,50	7,34
2028-2034	Ljubovija	4,309	3,914	2000 do 10000	0,33	0,51	3,07	3,58
2028-2034	Krnjevo	4,139	3,777	2000 do 10000	0,67	3,71	3,33	7,04

2028-2034	Vučje	3,722	3,438	2000 do 10000	0,42	1,64	2,87	4,51
2028-2034	Selevac	3,682	3,406	2000 do 10000	0,61	3,36	3,04	6,40
2028-2034	Boljevac	3,593	3,333	2000 do 10000	0,60	3,29	2,98	6,28
2028-2034	Grdelica	3,424	3,194	2000 do 10000	0,28	0,48	2,58	3,06
2028-2034	Čenta	3,250	3,050	2000 do 10000	0,55	3,03	2,76	5,79
2028-2034	Glogonj	3,204	3,012	2000 do 10000	0,55	2,99	2,73	5,73
2028-2034	Ralja	3,109	2,933	2000 do 10000	0,49	2,48	2,62	5,10
2028-2034	Markovac	3,087	2,915	2000 do 10000	0,53	2,90	2,65	5,56
2028-2034	Medvedja (medvedja)	3,021	2,860	2000 do 10000	0,27	0,54	2,36	2,89
2028-2034	Malošiste	2,991	2,835	2000 do 10000	0,52	2,83	2,59	5,42
2028-2034	Mrčajevci	2,910	2,767	2000 do 10000	0,51	2,77	2,54	5,30
2028-2034	Guča	2,891	2,751	2000 do 10000	0,21	0,05	2,23	2,28
2028-2034	Sveštica	2,885	2,746	2000 do 10000	0,30	0,88	2,31	3,19
2028-2034	Staro Selo	2,866	2,730	2000 do 10000	0,50	2,73	2,51	5,24
2028-2034	Velika Krsna	2,823	2,694	2000 do 10000	0,49	2,69	2,48	5,17
2028-2034	Darosava	2,823	2,694	2000 do 10000	0,42	2,00	2,40	4,40
2028-2034	Mihajlovac	2,778	2,656	2000 do 10000	0,49	2,66	2,45	5,11
2028-2034	Ropočevo	2,745	2,628	2000 do 10000	0,40	1,84	2,34	4,17
2028-2034	Rača	2,715	2,603	2000 do 10000	0,21	0,18	2,14	2,32
2028-2034	Pećinci	2,690	2,582	2000 do 10000	0,26	0,67	2,17	2,84
2028-2034	Sefkerin	2,619	2,522	2000 do 10000	0,47	2,54	2,34	4,88
2028-2034	Maglić	2,577	2,486	2000 do 10000	0,26	0,68	2,11	2,79
2028-2034	Jaša Tomić	2,445	2,374	2000 do 10000	0,39	1,90	2,16	4,06
2028-2034	Velika Drenova	2,432	2,363	2000 do 10000	0,44	2,36	2,20	4,56
2028-2034	Kušiljevo	2,413	2,346	2000 do 10000	0,44	2,37	2,19	4,57
2028-2034	Medveđa (Zapadna morava)	2,324	2,270	2000 do 10000	0,42	2,26	2,13	4,39
2028-2034	Knić	2,219	2,180	2000 do 10000	0,35	1,73	2,00	3,73
2028-2034	Meljak	2,209	2,171	2000 do 10000	0,41	2,21	2,05	4,26
2028-2034	Varvarin	2,206	2,169	2000 do 10000	0,20	0,37	1,85	2,21
2028-2034	Veliko Orašje	2,139	2,111	2000 do 10000	0,40	2,16	2,00	4,15
2028-2034	Sečanj	2,134	2,106	2000 do 10000	0,37	1,95	1,97	3,92
2028-2034	Uzdin	2,043	2,027	2000 do 10000	0,38	2,08	1,93	4,01
2035-2041	Jagodina	60,105	41,847	10000 do 50000	4,40	6,17	27,81	33,98
2035-2041	Bačka Palanka	38,824	28,132	10000 do 50000	3,14	2,15	23,36	25,50
2035-2041	Indija	35,628	26,024	10000 do 50000	3,34	5,65	22,27	27,92
2035-2041	Stara Pazova	24,583	18,602	10000 do 50000	3,49	13,12	17,74	30,86
2035-2041	Apatin	22,567	17,219	10000 do 50000	2,16	2,17	15,50	17,67
2035-2041	Nova Pazova	22,401	17,105	10000 do 50000	3,02	10,10	16,28	26,38
2035-2041	Negotin	21,960	16,801	10000 do 50000	2,15	2,52	15,22	17,74
2035-2041	Vlasotince	20,633	15,882	10000 do 50000	1,88	0,83	14,34	15,16
2035-2041	Kovin	20,040	15,470	10000 do 50000	2,34	5,37	14,52	19,89
2035-2041	Novi Banovci	19,935	15,397	10000 do 50000	2,97	11,19	15,11	26,30
2035-2041	Šid	19,198	14,883	10000 do 50000	1,82	1,16	13,61	14,77
2035-2041	Kač	14,749	11,740	10000 do 50000	2,97	14,40	12,60	27,00
2035-2041	Bački Petrovac	14,296	11,415	10000 do 50000	2,31	8,74	11,72	20,46
2035-2041	Surdulica	14,177	11,330	10000 do 50000	1,44	0,90	10,79	11,69

2035-2041	Ripanj	13,841	11,088	10000 do 50000	2,47	10,51	11,65	22,15
2035-2041	Ugrinovci	13,451	10,807	10000 do 50000	2,42	10,24	11,39	21,64
2035-2041	Kladovo	12,075	9,810	2000 do 10000	1,44	1,41	11,12	12,54
2035-2041	Kostolac	11,745	9,569	2000 do 10000	1,46	1,87	10,94	12,81
2035-2041	Bogatić	11,497	9,388	2000 do 10000	2,24	9,12	11,56	20,68
2035-2041	Padinska Skela	11,299	9,243	2000 do 10000	1,46	2,15	10,66	12,81
2035-2041	Barajevo	11,077	9,080	2000 do 10000	1,95	6,80	11,01	17,82
2035-2041	Vrčin	11,042	9,054	2000 do 10000	2,19	8,99	11,23	20,21
2035-2041	Bela Crkva	10,998	9,022	2000 do 10000	1,27	0,66	10,28	10,95
2035-2041	Sremski karlovci	10,629	8,750	2000 do 10000	1,29	1,15	10,07	11,23
2035-2041	Grocka	10,212	8,442	2000 do 10000	1,39	2,39	9,91	12,30
2035-2041	Lajkovac	10,190	8,426	2000 do 10000	1,57	4,02	10,07	14,10
2035-2041	Bač	10,142	8,390	2000 do 10000	1,75	5,69	10,22	15,91
2035-2041	Dobanovci	9,852	8,175	2000 do 10000	1,34	7,80	6,04	13,83
2035-2041	Beška	9,778	8,120	2000 do 10000	1,35	7,94	6,02	13,96
2035-2041	Beočin	9,380	7,824	2000 do 10000	0,60	1,30	5,13	6,43
2035-2041	Zmajev	8,326	7,033	2000 do 10000	1,21	6,93	5,75	12,68
2035-2041	Novi Kneževac	7,859	6,680	2000 do 10000	1,10	6,09	5,45	11,54
2035-2041	Čantavir	7,741	6,590	2000 do 10000	1,12	6,32	5,42	11,74
2035-2041	Bačko Petrovo Selo	7,370	6,308	2000 do 10000	1,08	6,06	5,21	11,27
2035-2041	Veliko Gradište	6,740	5,825	2000 do 10000	0,54	1,40	4,40	5,80
2035-2041	Gaj	6,738	5,823	2000 do 10000	1,02	5,80	4,88	10,68
2035-2041	Bavanište	6,731	5,818	2000 do 10000	1,00	5,60	4,86	10,46
2035-2041	Kovilj	6,176	5,389	2000 do 10000	0,93	5,21	4,54	9,75
2035-2041	Titel	6,054	5,294	2000 do 10000	0,80	4,09	4,36	8,45
2035-2041	Mokrin	6,023	5,270	2000 do 10000	0,91	5,09	4,46	9,55
2035-2041	Žitište	5,926	5,194	2000 do 10000	0,92	5,21	4,42	9,62
2035-2041	Vojka	5,362	4,752	2000 do 10000	0,83	4,61	4,07	8,68
2035-2041	Golubinci	5,324	4,722	2000 do 10000	0,83	4,58	4,05	8,63
2035-2041	Irig	4,925	4,407	2000 do 10000	0,62	2,92	3,66	6,58
2035-2041	Šajkaš	4,884	4,374	2000 do 10000	0,77	4,26	3,79	8,05
2035-2041	Ečka	4,839	4,338	2000 do 10000	0,73	3,90	3,72	7,62
2035-2041	Boljevci	4,533	4,094	2000 do 10000	0,72	4,00	3,57	7,57
2035-2041	Čoka	4,450	4,028	2000 do 10000	0,41	1,18	3,22	4,40
2035-2041	Erdevik	4,416	4,000	2000 do 10000	0,57	2,68	3,36	6,04
2035-2041	Stanišić	4,399	3,987	2000 do 10000	0,71	3,90	3,49	7,39
2035-2041	Bukovac	4,336	3,936	2000 do 10000	0,31	0,28	3,06	3,34
2035-2041	Prnjavor	4,330	3,931	2000 do 10000	0,70	3,85	3,45	7,30
2035-2041	Vladimirovac	4,213	3,837	2000 do 10000	0,68	3,76	3,38	7,14
2035-2041	Plandište	4,197	3,824	2000 do 10000	0,58	2,85	3,27	6,12
2035-2041	Gospodinci	4,062	3,715	2000 do 10000	0,66	3,65	3,28	6,93
2035-2041	Srpska Crnja	4,025	3,685	2000 do 10000	0,66	3,62	3,26	6,88
2035-2041	Budisava	3,989	3,656	2000 do 10000	0,65	3,59	3,24	6,83
2035-2041	Velika Moštanica	3,786	3,491	2000 do 10000	0,63	3,44	3,11	6,55
2035-2041	Perlez	3,654	3,383	2000 do 10000	0,61	3,34	3,02	6,36
2035-2041	Aradac	3,596	3,335	2000 do 10000	0,60	3,29	2,99	6,28

2035-2041	Begeč	3,583	3,325	2000 do 10000	0,60	3,29	2,98	6,26
2035-2041	Banatski Brestovac	3,492	3,250	2000 do 10000	0,59	3,22	2,92	6,14
2035-2041	Ljig	3,463	3,226	2000 do 10000	0,27	0,39	2,59	2,98
2035-2041	Mionica	3,418	3,189	2000 do 10000	0,42	1,76	2,72	4,47
2035-2041	Bašaid	3,338	3,123	2000 do 10000	0,57	3,10	2,82	5,92
2035-2041	Vrdnik	3,292	3,085	2000 do 10000	0,38	1,47	2,61	4,08
2035-2041	Martinci	3,274	3,070	2000 do 10000	0,56	3,05	2,78	5,83
2035-2041	Šimanovci	3,255	3,054	2000 do 10000	0,49	2,46	2,70	5,17
2035-2041	Hrtkovci	3,233	3,036	2000 do 10000	0,55	3,02	2,75	5,77
2035-2041	Begaljica	3,216	3,022	2000 do 10000	0,55	3,00	2,74	5,74
2035-2041	Novi Slankamen	3,175	2,988	2000 do 10000	0,54	2,97	2,71	5,68
2035-2041	Kuzmin	3,168	2,982	2000 do 10000	0,53	2,84	2,69	5,53
2035-2041	Belegiš	3,156	2,972	2000 do 10000	0,54	2,96	2,70	5,66
2035-2041	Klenak	3,125	2,946	2000 do 10000	0,54	2,93	2,68	5,61
2035-2041	Sirig	3,116	2,939	2000 do 10000	0,54	2,93	2,67	5,60
2035-2041	Novi Karlovci	3,017	2,856	2000 do 10000	0,52	2,85	2,61	5,46
2035-2041	Vajska	2,990	2,834	2000 do 10000	0,52	2,83	2,59	5,42
2035-2041	Čerević	2,950	2,800	2000 do 10000	0,32	1,03	2,37	3,40
2035-2041	Putinci	2,884	2,745	2000 do 10000	0,50	2,75	2,52	5,26
2035-2041	Elemir	2,871	2,734	2000 do 10000	0,68	4,34	2,69	7,03
2035-2041	Ovča	2,870	2,733	2000 do 10000	0,50	2,73	2,51	5,24
2035-2041	Umka	2,821	2,692	2000 do 10000	0,73	4,88	2,72	7,60
2035-2041	Mladenovo	2,805	2,679	2000 do 10000	0,49	2,68	2,46	5,15
2035-2041	Mramorak	2,786	2,663	2000 do 10000	0,49	2,67	2,45	5,12
2035-2041	Mošorin	2,674	2,568	2000 do 10000	0,47	2,58	2,37	4,96
2035-2041	Banatsko Veliko Selo	2,608	2,512	2000 do 10000	0,46	2,53	2,33	4,86
2035-2041	Platičevo	2,527	2,444	2000 do 10000	0,45	2,47	2,27	4,74
2035-2041	Krčedin	2,511	2,430	2000 do 10000	0,45	2,45	2,26	4,71
2035-2041	Donji Milanovac	2,489	2,411	2000 do 10000	0,23	0,46	2,03	2,49
2035-2041	Korenita	2,485	2,408	2000 do 10000	0,45	2,43	2,24	4,68
2035-2041	Novi Žednik	2,454	2,381	2000 do 10000	0,44	2,41	2,22	4,63
2035-2041	Padej	2,448	2,376	2000 do 10000	0,44	2,40	2,22	4,62
2035-2041	Ostojićevo	2,387	2,324	2000 do 10000	0,43	2,35	2,18	4,53
2035-2041	Donji Tavankut	2,384	2,322	2000 do 10000	0,43	2,35	2,17	4,53
2035-2041	Bajša	2,355	2,297	2000 do 10000	0,43	2,33	2,15	4,48
2035-2041	Zaklopača	2,355	2,297	2000 do 10000	0,43	2,33	2,15	4,48
2035-2041	Lipolist	2,267	2,221	2000 do 10000	0,42	2,26	2,09	4,35
2035-2041	Radalj	2,255	2,211	2000 do 10000	0,41	2,25	2,08	4,33
2035-2041	Aleksandrovo	2,161	2,130	2000 do 10000	0,40	2,17	2,02	4,19
2035-2041	Maradik	2,121	2,095	2000 do 10000	0,39	2,14	1,99	4,13
2035-2041	Banatsko Karađorđevo	2,116	2,091	2000 do 10000	0,39	2,14	1,98	4,12
2035-2041	Tekija	2,077	2,057	2000 do 10000	0,29	1,20	1,86	3,06
2035-2041	Provo	2,059	2,041	2000 do 10000	0,39	2,09	1,94	4,03
2035-2041	Jarak	2,056	2,039	2000 do 10000	0,38	2,09	1,94	4,03
2035-2041	Štitar	2,054	2,037	2000 do 10000	0,38	2,09	1,94	4,03

2035-2041	Drenovac	2,048	2,032	2000 do 10000	0,38	2,06	1,93	3,99
2035-2041	Bačina	2,037	2,022	2000 do 10000	0,38	2,07	1,93	4,00
2035-2041	Stepanovićevo	2,036	2,021	2000 do 10000	0,38	2,07	1,92	4,00
2035-2041	Ridica	2,024	2,011	2000 do 10000	0,38	2,06	1,92	3,98
2035-2041	Rudna glava	2,023	2,010	2000 do 10000	0,38	2,06	1,92	3,98
2035-2041	Nadalj	2,021	2,008	2000 do 10000	0,38	2,06	1,91	3,97

ANNEX 2

PRELIMINARY IMPLEMENTATION PLAN

FOR THE INTEGRATED REGIONAL WASTE MANAGEMENT SYSTEMS

Table of Contents

1. Approach.....	247
2. Reference year.....	247
3. Inventory of landfills and dumpsites.....	247
4. Plan for closure of non-compliant landfills.....	248
5. Plan for reduction of biodegradable waste.....	249
6. Plan for establishment of waste management infrastructure.....	251
7. Plan for recycling.....	252
8. Special waste streams.....	252
9. Costs and financing of establishment of RWMS.....	253
9.1. Cost assessment.....	253
9.2. Financing of infrastructure development.....	253
9.3 Sustainability of the Investment Plan.....	254
10. Plan for landfilling of waste into compliant landfills.....	258

1. Approach

The following plan provides a summary of the main targets, assumptions and investment factors affecting the implementation of the Integrated Regional Waste Management Systems as defined in the National Waste Management Strategy. It is an early version in the planning process to provide an indication of the approach being take to implement the strategic objectives on the ground. It will be developed further as the real costs, obstacles and time requirements become clearer.

2. Reference year

First EUROSTAT quality data available for waste generation in Serbia comes from 2008, when the specific Study commissioned by the MAEP⁴⁷.

Results obtained in the Study, showed that in 2008, Serbia generated 2,374,375 tons of MSW, which corresponds to 0.87 kg/cap/day (318 kg/cap/year) and is similar to the most of new Member States. Average national morphological composition of waste is shown in the Figure .

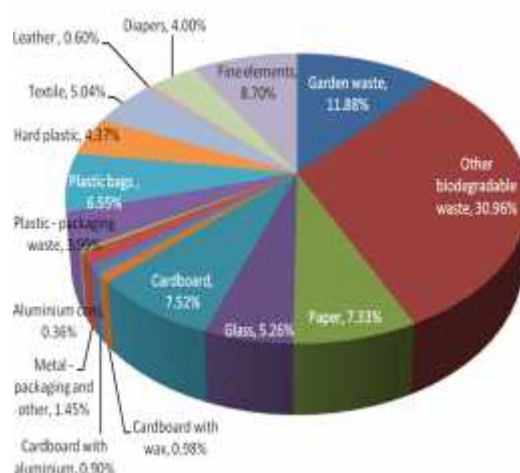


Figure 1. Morphological composition of municipal waste in Serbia - 2008

It is assumed, that **2008** will be considered as the **reference year** for the purpose of the Directive on Landfill of Waste.

3. Inventory of landfills and dumpsites

There are 3582⁴⁸ landfills and dumpsites which have to be considered when implementing the Directive requirements. Small dumpsites account for the largest share (92%) of all landfills and dumpsites in the country with only 8% of total volume of deposited waste. 182 large landfills and dumpsites with the capacity over 10 000 m³ contain 93.5% of the total deposited waste quantity.

⁴⁷ Report on Municipal Solid Waste Information (Bojan Batinić of the Faculty of Technical Sciences, Novi Sad for Ministry of Agriculture and Environmental Protection and the Environmental Infrastructure Support Programme, June 2014)

⁴⁸ Methane emissions from landfills in Serbia and potential mitigation strategies: Case Study, WASTE MANAGEMENT & RESEARCH, (2012)

This latter group together with remaining municipal landfills in the category below 10 000 m³ make total volume of about 95% of all landfilled municipal waste and present the main target group for further assessment.

4. Plan for closure of non-compliant landfills

With the exception of new sanitary landfills, no other existing landfills and dumpsites comply with the Directive requirements. A preliminary assessment suggests that upgrading of existing sites to meet EU requirements is not a cost-efficient solution. Therefore, it is foreseen to establish modern regional waste management systems and to discontinue operations of all non-compliant sites using several technical solutions for landfill covering or waste removal. The ultimate decision on which technical approach will be from the specific feasibility studies but planning has been done based on a risk assessment of all major landfills.

According to the Methodology for the Preliminary Assessment and Quantification of the Potential Environmental Risks from Landfills⁴⁹ by estimating all 12 factors for each specific landfill, each site is assigned to low risk, medium risk and high risk.

The Table below provides a summary of the risk assessment results for 214 estimated landfills (it includes all municipal landfills as well as dumpsites larger than 10,000 m³).

Table 1 *Ranking of landfills according to the risk potentially posed to the environment*

	High risk	Medium risk	Low risk	Total
Landfills and main dumpsites	141	71	2	214

Possible recultivation options include:

- A. Waste loading and removal to landfills to be closed with installing an appropriate cover;
- B. Installing a simple soil cover;
- C. Installing a soil cover and water impermeable layer without a gas drainage layer;
- D. Installing a soil cover and water impermeable layer, including a gas drainage layer.

Different technical solutions shall be applied to each of the group ensuring high level of environmental protection (Table 15).

Table 15 *Recommended recultivation options*

Risk	Small risk	Medium risk	High risk
Size in m ³			
< 1,000	A	A	A

⁴⁹ Methodology was developed by the University of Novi Sad, Department for Environmental Engineering in MOPRORK and UPIOV project financed by the Ministry of Environment and GIZ).

<1,001 < 10,000	B	B	C
<10,001 < 100,000	C	C	C
> 100,000	D	D	D

5. Plan for reduction of biodegradable waste

In 2008, 67.5% of total municipal waste in Serbia was biodegradable⁵⁰. This corresponds to 1,602,525 tons of generated BMW in mentioned year or 214 kg per capita (Table 3).

Table 3 Generation of biodegradable waste in reference year

Year	Total MSW (t/year)	Different sources of biodegradable municipal solid waste (t/year)				Total BMW (t/year)
		Households biodegradable (garden and food)	Paper & Cardboard	Other (Textiles, wood, leather, fine fraction etc.)-	Green waste (parks and public areas)	
2008	2,374,375	1,024,543	355,586	151,165	71,231	1,602,525

Preliminary dates for compliance with the biodegradable targets are foreseen in the draft revised National Waste Management Strategy⁵¹ and includes following deadlines (Table 4):

- Reduction of biodegradable waste disposed of on the landfills to 75% until 2022,
- Reduction of biodegradable waste disposed of on the landfills to 50% until 2026,
- Reduction of biodegradable waste disposed of on the landfills to 35% until 2030.

⁵⁰ Report on Municipal Solid Waste Information (Bojan Batinić of the Faculty of Technical Sciences, Novi Sad for Ministry of Agriculture and Environmental Protection and the Environmental Infrastructure Support Programme, June 2014)

⁵¹ Draft Strategy under discussion, expected approval 2015. Final dates will be defined after assessing all technical and financial capabilities.

Table 4 Amount of biodegradable municipal waste in the Republic of Serbia in period 2014-2030

Year	Total MSW (t/year)	Different sources of biodegradable municipal solid waste (t/year)				Total BMW (t/year)
		Households biodegradable (garden and food)	Paper & Cardboard	Other (Textiles, wood, leather, fine fraction etc.)-	Green waste (parks and public areas)	
2008.*potential reference year	2,374,375	1,024,543	355,586	151,165	71,231	1,602,525
2014.	2,448,566	1,193,779	212,404	203,379	73,457	1,683,019
2015.	2,468,363	1,189,739	216,334	205,487	74,051	1,685,611
2016.	2,498,382	1,190,351	221,200	208,439	74,951	1,694,942
2017.	2,530,283	1,191,521	226,281	211,540	75,909	1,705,251
2018.	2,566,067	1,194,153	231,763	214,959	76,982	1,717,857
2019.	2,603,892	1,197,342	237,486	218,539	78,117	1,731,483
2020.	2,644,308	1,201,308	243,504	222,328	79,329	1,746,469
2021.	2,682,116	1,203,683	249,340	225,885	80,463	1,759,371
2022.	2,721,803	1,206,503	255,406	229,586	81,654	1,773,150
2023.	2,763,469	1,209,790	261,716	233,440	82,904	1,787,849
2024.	2,807,218	1,213,561	268,282	237,452	84,217	1,803,511
2025.	2,853,162	1,217,838	275,118	241,631	85,595	1,820,181
2026.	2,901,416	1,222,640	282,240	245,984	87,042	1,837,907
2027.	2,952,104	1,227,991	289,663	250,522	88,563	1,856,739
2028.	3,005,355	1,233,911	297,405	255,252	90,161	1,876,729
2029.	3,061,308	1,240,424	305,484	260,185	91,839	1,897,931
2030.	3,120,105	1,247,553	313,917	265,330	93,603	1,920,403

In 2022, BMW going to landfills must be reduced to 75 % of the total amount of BMW generated in 2008 - approximately 400,000 tons shall be diverted.

- **Strategy:**
 - 50% green waste (parks and public areas) – 40,000 tons
 - 30% paper and cardboard – approx. 77,000 tons
 - 15% wood, textile, ... - approx. 34,000 tons
 - 25% of household biodegradable – approx. 300,000 tons
- Total diverted 451,000 tons.

This could be achieved with treatment of biodegradable waste in the biggest regions (Waste To Energy through Combined Heat and Power (CHP) in Belgrade, and MBT to produce RDF/SRF for co-incineration in existing facilities for Novi Sad or Nis) plus composting facilities in a few smaller regions, for example in Sremska Mitrovica, Pan evo, In ija, Užice.

In 2026, BMW going to landfills must be reduced to 50 % of the total amount of BMW generated in 2008 - approximately 800,000 tons shall be diverted.

- **Strategy:**
 - 50% green waste (parks and public areas) – approx. 44,000 tons
 - 40% paper and cardboard – 113,000 tons
 - 30% wood, textile, ... - approx. 74,000 tons
 - 50% of household biodegradable – approx. 600,000 tons
- Total diverted 831,000 tons.

This could be achieved with treatment of biodegradable waste in previous plus remaining the biggest regions, plus composting in Smederevo, Nova Varoš, Pirot, Valjevo and Zrenjanin.

In 2030, BMW going to landfills must be reduced to 35 % of the total amount of BMW generated in 2008 - approximately 1 million tons shall be diverted.

- **Strategy:**
 - 80% green waste (parks and public areas) – approx. 75,000 tons
 - 60% paper and cardboard – approx. 188,000 tons
 - 50% wood, textile, ... - approx. 132,000 tons
 - 60% of household biodegradable – approx. 623,000 tons
- Total diverted 1.018 million tons.

This could be achieved with extending the treatment of biodegradable waste (composting) in addition to the previous regions to include Vršac, Petrovac, Zaječar, Prokuplje, Kraljevo, Kruševac and Kragujevac.

6. Plan for establishment of waste management infrastructure

The system of waste management in the Republic of Serbia is being revised with a view to replacing a large number of old non-compliant landfills with regional systems for waste management. The system components will facilitate separate collection and recycling, reduction of landfilled biodegradable waste, increase efficiency of waste management processes and only residual waste will be directed for safe disposal.

The implementation of the Landfill Directive is considered together with the implementation of other waste management requirements, in particular having in mind the targets set by the Waste Framework Directive and the Packaging and Packaging Waste Directive (Table 165). The implementation of these directives affects the way how municipal waste is collected and treated, and, in the end, the amounts of waste to be diverted for other treatment and to be disposed of in landfills.

Table 16 Infrastructure planned for municipal waste management

	High density urban Region – Belgrade	Regions with large conurbations – Novi Sad, Niš, Kragujevac	Other Regions
First Phase Partial Compliance	<ul style="list-style-type: none"> • 100% collection coverage • Separate collection of recyclables – paper, plastic, glass, metal • Secondary separation of recyclables – sorting plant • Household waste reception / recycling yards (bulky waste, WEEE, hazardous) • Fully engineered sanitary landfill with compaction • Composting of separately collected bio-waste (at least from parks and gardens) • Closure of existing landfills 		
Second Phase Full Compliance	Waste to Energy: Combined Heat and Power (District Heating)	MBT for Solid Recovered Fuel for co-incineration in existing facilities Or Separately collect Biodegradable Waste for Aerobic composting Anaerobic digestion	Very limited range of technologies are affordable and viable Focus should be on Phase 1 elements and low costs solutions such as home composting
Third Phase Closure	Closure of all old landfills and dumpsites selecting appropriate recultivation options		

7. Plan for recycling

Implementation of the Waste Framework Directive (WFD) recycling targets is based on source separation at household level combined with clean materials recovery facilities, as part of the systems described above. Serbia is planning to achieve up to 50% recycling (557,233 tons) of the total municipal waste by 2030.

At present household level recycling has not truly started in Serbia with pilot projects in 2015. The high proportion of biodegradable waste, particularly in rural and suburban areas of Serbia is considered to be an additional challenge to meeting recycling targets. It is recognised that source separation behaviour contributes not only to recycling targets but is also necessary for meeting the later, more demanding levels of biodegradable waste diversion at an affordable cost.

Mechanical and Biological Treatment (MBT) in various configurations are considered but for the major urban areas and only following established household separation.

8. Special waste streams

Recycling yards / amenity sites will be introduced into each municipality as part of the regional systems. They will contribute towards raising the standards of management of special waste streams. To date one has been constructed as part of Šabac transfer station, more will be complete by the end of 2015. Facilities are planned at these sites for biodegradable waste, batteries, WEEE, packaging waste and other recyclables management.

9. Costs and financing of establishment of RWMS

9.1. Cost assessment

Preliminary costs for establishment of the RWMS⁵² comprises cost assessment of all infrastructure elements (as described above in Table 5) and funds needed for the development of documentation.

Current assessment provides that about 918 million euro is required to implement all elements of the new infrastructure and to solve problems related to pollution from old landfills and dumpsites. Major costs – about 271million euro (30%) — are related to closure (both phases) of non-compliant landfills. The next most expensive elements are MBT/Incineration facilities with 178 million euro (19%) and the establishment of new landfills –145 million euro (16%).

9.2 Financing of infrastructure development

For planning of financing from 2015 onwards figure of 899 million euro is used, as financing for the construction of infrastructure under phases 1 and 2 for Subotica region was committed in previous period (prior to 2015). Investment costs are sequenced over three planning periods.

Public and private financial resources are planned as main financing sources for the implementation of the RWMS. It is intended that public sources will be used for financing of investment costs only, while operational and maintenance costs shall be covered through the cost recovery mechanisms.

It is foreseen, that the Implementation Plan for compliance in the waste sub-sector in Serbia will be financed from the following sources:

1. OPEX from cost recovery;
2. Investment costs (CAPEX) from:
 - National public sources (RS budget – central level, APV, LSGs budgets and funds),
 - EU funds,
 - Other grant support from Donors,
 - Private sector,
 - Loans⁵³,
 - Other sources.

On the basis of the present experience and expectations on increased grants after accession⁵⁴, the following indicative financing plan is made for achieving full compliance (Table 6).

⁵² Engineering costs have been estimated for creating the needed infrastructure to provide a fully compliant SWM service in each of the defined Waste Regions.

⁵³When affordability allows.

⁵⁴ The estimation of EU funds is based on comparative experience of new EU Member States.

Table 6. Summary of the expected contributions by source (euro mill)

	NOMINAL € MILLION	%	NPV AT 4%
TOTAL OPEX	2 443	73%	1 415
COST RECOVERY FROM TARIFFS	2 443	100%	
TOTAL INVESTMENT COSTS	899	27%	642
PRIVATE SECTOR	211	24%	
PUBLIC SECTOR	687	76%	
TOTAL INVESTMENTS AND OPERATING COSTS	3 342	100%	2 058
PUBLIC SECTOR	687	100%	
EU GRANTS AND OTHER DONORS	394	57%	
NATIONAL CONTRIBUTION	293	43%	

Operational and maintenance costs, which makes approximately 73% of the total costs, will be covered through cost recovery from increases in user tariffs. Investment part, which is assessed to be about 27% of total costs, expected to be shared between private sector (24%) and public sector (76%).

The bulk of the finance from public sources for the investment component is expected to be from EU grants (57%). RS is well aware that to mobilize such high volumes, institutional strengthening will have to take place so as to smoothly transform the elevated number of projects into implemented realities. Over 2015-2017 a preliminary planning tool will be prepared to gradually improve the capacity for multi-annual programming.

Public-private partnership mechanisms are encouraged where possible and feasible. Currently 4 RWMS are under such mechanism and at least two (Belgrade and Nis) are currently considered. Such approach allows reducing the need for public resources and potentially speeds up development of required infrastructure, as long as the affordability constraints are not stressed excessively.

Preliminary investment schedule for establishment of required infrastructure and relation to delivery of waste management targets is presented in the Table . This is a ‘snapshot’ of a working table that makes simple assumptions on the contribution of each component of a regional system towards the three main compliance targets for investment planning purposes. Figures are shown for commitment dates rather than disbursement. As projects are planned, mature, financed and implemented then their effect on meeting the targets is tracked. Projects are likely to change in composition and time but the overall contribution to meeting agreed dates remains fixed.

9.3 Sustainability of the Investment Plan

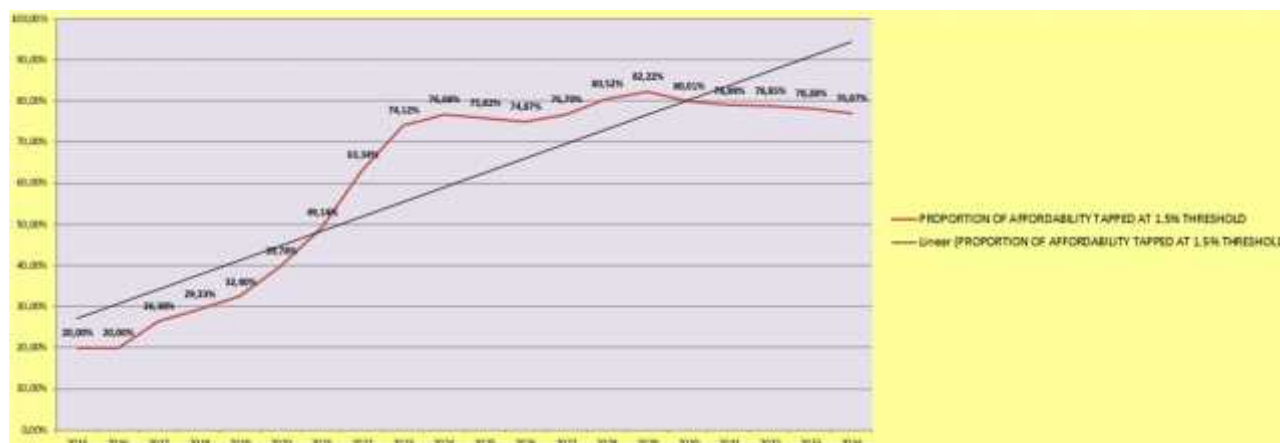
For the purposes of assessing the impact on affordability of the investment plan, an inter-annual distribution of investments and their corresponding OPEX costs has been carried out. This analysis shows that the current investment plan will intensively increase the burden on households, thus stretching their capacity to a very high degree.

The multi-annual OPEX costs have been estimated in accordance with observed international benchmarks applied to the investment flow. This figure shall be estimated with more precision in the future upon development of the NEAS and related DSIPs. At present it represents an intermediary measure meant to relate magnitudes at a general, macroeconomic level.

The proportion of maximum affordability of households necessary to absorb OPEX in waste sub-sector is defined as 1.5% of average household income⁵⁵. Analysis shows a need for intensive increase in tariffs for utility services from a presently estimated level of 20% (low cost, but non-compliant service) to a peak in excess of 82% in 2029.

The sharp increase from 2017 to the peak in 2029 is also an indicator of the likely stress this plan will imply. These figures will need to be estimated in the DSIPs - and prior to full definition of transition periods - at the level of each waste region as there will be individual variations that in some cases may require a softer individual approach. The overall impact on affordability is shown below in Figure 2.

Figure 2 Impact of Opex on Maximum Affordability



The evident conclusions of this preliminary analysis are as follows:

- Preliminary Implementation Plan is sustainable (with some further inter-annual re-distribution of investments), but will stress affordability of households to a very high level.
- Reaching full compliance will require a lengthy period and RS cannot at present contemplate an earlier full compliance date.

⁵⁵ As foreseen in the National Environmental Approximation Strategy (2011)

Table 7 Example of planning of investment into RWMS infrastructure

		Actual Compliance																				
EUR 000s		1 st	1 st & 2 nd	3 rd																		
-	Including Preparation	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
COMMITMENT Dates																						
Sremska Mitrovica				7.173										15.942								
Pan evo				11.293										6.448								
In ija									20.368					19.948								
Užice				16.734										8.109								
Pirot				5.450										3.035								
Kikinda										10.276					14.026							
Lapovo										10.122					4.163							
Jagodina										7.623					6.189							
Leskovac										11.918					4.427							
Subotica		19.223												24.611								
Valjevo				22.462										8.070								
Zrenjanin					14.228									6.577								
Nova Varoš										12.252				1.203								
Vranje						18.927									2.624							
Beograd							228.259								11.235							
Novi Sad									40.734						22.086							
Niš						23.760				13.161					3.445							
Sombor								17.807								17.326						
Vršac								13.861								9.188						

Zaječar										26.965								15.027					
Smederevo										16.979									19.128				
Kragujevac											18.950								7.021				
Kraljevo												18.191							5.183				
Kruševac												18.741							3.830				
Petrovac													14.545				2.165						
Prokuplje													12.208					5.055					
Loznica														13.046				6.409					

Annual Investment	000 EUR	19.223		63.111	14.228	42.687	228.259	31.668	157.237	32.111	36.932	26.753	13.046	93.943	68.196	28.679	11.464	15.027	35.161			
Cumulative Investment	000 EUR	19.223	19.223	82.334	96.561	139.249	367.508	399.176	556.413	588.524	625.456	652.209	665.255	759.198	827.394	856.073	867.538	882.564	917.725	917.725	917.725	917.725
Percentage of Programme	Committed	2,1%	2,1%	9,0%	10,5%	15,2%	40,0%	43,5%	60,6%	64,1%	68,2%	71,1%	72,5%	82,7%	90,2%	93,3%	94,5%	96,2%	100,0%	100,0%	100,0%	100,0%
Issue	Target	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Landfill Compliance	100%	17,3%	17,3%	20,3%	20,2%	20,2%	20,1%	20,1%	24,3%	26,4%	32,4%	45,2%	50,3%	72,7%	78,1%	90,9%	97,1%	100,0%	100,0%	100,0%	100,0%	100,0%
Material Recovery	More than 50%	2,9%	2,9%	4,9%	4,9%	4,9%	4,9%	4,9%	11,7%	12,9%	16,4%	35,0%	36,9%	49,0%	51,6%	54,8%	56,5%	57,2%	57,2%	57,2%	57,2%	57,2%
Biodegradable to Landfill	Less than 35%	99,5%	99,5%	98,6%	98,7%	98,7%	98,7%	98,7%	95,1%	94,5%	92,9%	67,9%	66,9%	56,4%	52,7%	51,0%	50,1%	49,6%	49,6%	49,6%	49,6%	49,6%

10 Plan for landfilling of waste into compliant landfills

The investment plan allows assessing establishment of regional systems and timetable for waste potentially delivered into compliant landfills. It suggests that capacity for landfilling of all municipal waste in compliant landfills may be achieved by 2030 if all conditions for financing into infrastructure development will be fulfilled (table 7, row Landfill Compliance).

Landfill closing (recultivation) is expected to be completed before 2034.

Amendment to the Preliminary Implementation Plan for the Integrated Regional Waste Management Systems

Introduction

For planning of infrastructure development in waste sector and support the Implementation Plan, the Ministry of Agriculture and Environmental Protection has developed Investment Planning Tool (IPT) to guide allocation of financial resources for priority investment projects, providing highest impacts on achieving waste management targets.

The main purpose of the IPT is:

- To produce a realistic investment plan based on projections of:
 - Investment Cost: by year
 - Project Preparation, financing and implementation needs: by year
- To plan investment in order to achieve National Waste Management Strategy targets in particular what levels of compliance will be achieved for:
 - Article 14 Landfill Directive (Sanitary Landfill)
 - Article 11 Waste Framework Directive (Material Recovery: Paper ...)
 - Article 5 Landfill Directive (Diversion of Biodegradable Waste).

The ITP provides support for planning:

- What the infrastructure in each region will be,
- When the investments shall be made,
- What the investment costs will be (year-by-year).

As the next step the Ministry of Agriculture and Environmental Protection is planning to extend financing planning possibilities of the IPT.

Information

The IPT is based on following:

- Data:
 - Population (municipal and waste management region),
 - Waste generation (per person, per annum) from WMS,
 - Waste composition (paper, metal, glass, plastic, bio, other) from NWMS,
 - Unit costs of waste management equipment and facilities from existing technical documents or estimates.
- Assumptions:
 - Level of compliance achieved by an investment,

- Cost functions (if no direct cost estimates available),
- Changes in population, waste generation and composition,
- Investment schedule.
- Geographical Basis:
 - Waste Management Regions defined in the NWMS,
 - Municipalities.

Investment components

Investment components are decided for each waste management region and split into several phases.

Phase 1 can include all or some of the following:

1. Landfill – Sanitary (i.e. fully compliant).
2. Transfer Station (as and where needed).
3. Collection System (upgrade of trucks and bins).
4. Simple Closure (fencing, security, preventing continued use).
5. Recycling sites (at least one in each municipality to receive bulky, garden ...).
6. Source Separation (two bin system – dry recyclables in one bin, other in another).
7. Secondary Separation (sorting of dry recyclables into marketable fractions).
8. Green Waste Composting (composting of parks and gardens plus RC green waste).

Phase 2 can include all or some of the following:

9. Bio-waste Collection (third bin for separate collection of kitchen and garden waste).
10. In-Building Composting (composting of separately collected under 9.).
11. MBT with RDF (mechanical and biological treatment of waste and production of RDF/SRF).
12. Waste to Energy (incineration with energy recovery).

Phase 3 is limited to:

13. Full Remediation (full remediation of old landfills including water and air pollution reduction).

Examples of such planning (according to phases and infrastructure components) is presented in Figure 1 (number of infrastructure components) and Figure 2 (costs of planned infrastructure components).

The summary plan

As a result of planning decisions (regarding structure of regions, components, timing for investment, etc.) the IPT provides:

- The investment per year in each region and the total for all regions,
- The phase of implementation – by colour,
- The progress in implementation in terms of money (proportion of total spend),
- Compliance estimates
- Article 14 Landfill Directive (Sanitary Landfill)
- Article 11 Waste Framework Directive (Material Recovery: Paper ...)
- Article 5 Landfill Directive (Diversion of Biodegradable Waste)

Example of summary plan is provided in Table No 7.

Ministry of Agriculture and Environmental Protection

Figure 1. Planning of infrastructure components in waste management regions. Composition of infrastructure for each region.

		Landfill	Transfer Station	Collection System	Simple Closure	Recycling sites	Source Separation	Secondary Separation	Green Waste Composting	Bio-waste Collection	In-Building Composting	MBT with RDF	Waste to Energy	Full Remediation
Phase 1	000 EUR	€ 145 050	€ 40 179	€ 64 025	€ 35 290	€ 49 969	€ 54 394	€ 2 300	€ 5 535					€ -
Phase 2	000 EUR									€ -	€ -	€ 29 520	€ 148 500	€ -
Phase 3	000 EUR													€ 235 953
TOTAL	000 EUR	€ 145 050	€ 40 179	€ 64 025	€ 35 290	€ 49 969	€ 54 394	€ 2 300	€ 5 535	€ -	€ -	€ 29 520	€ 148 500	€ 235 953
Proportion	%	18%	5%	8%	4%	6%	7%	0%	1%			4%	18%	29%
TOTAL FUTURE NEED: THIS TABLE SPECIFIES THE FINAL INFRASTRUCTURE THAT WILL EXIST IN EACH REGION AFTER THE IMPLEMENTATION PROGRAMME IS COMPLETE														
1	Sremska Mitrovica	#DIV/0!	1	34	2	2	1	1	1					54
2	Pančevo	#DIV/0!	1	24	2	2	1	1	1					13
3	Indija	#DIV/0!	1	52	6	7	1	1	1					108
4	Užice	#DIV/0!	1	72	8	9	1	1	1					161
5	Pirot	#DIV/0!	1	24	4	4	1	1	1					23
6	Kikinda	#DIV/0!	1	32	5	6	1	1	1					34
7	Lapovo	#DIV/0!	1	20	2	7	1	1	1					158
8	Jagodina	#DIV/0!	1	44	5	5	1	1	1					174
9	Leskovac	#DIV/0!	1	50	7	6	1	1	1					187
10	Subotica	#DIV/0!	1	54	7	5	1	1	1					58
11	Valjevo	#DIV/0!	1	78	9	5	1	1	1					208
12	Zrenjanin	#DIV/0!	1	36	5	4	1	1	1					77
13	Nova Varoš	#DIV/0!	1	22	3	4	1	1	1					57
14	Vranje	#DIV/0!	1	36	6	7	1	1	1					130
15	Beograd	#DIV/0!	2	246	3	4	1	1	1				1	130
16	Novi Sad	#DIV/0!	1	100	8	8	1	1	1			1		74
17	Niš	#DIV/0!	1	72	6	4	1	1	1					171
18	Sombor	#DIV/0!	1	44	5	6	1	1	1				1	50
19	Vršac	#DIV/0!	1	22	4	4	1	1	1					71
20	Zaječar	#DIV/0!	1	48	7	7	1	1	1					460
21	Smederevo	#DIV/0!	1	26	2	3	1	1	1					90
22	Kragujevac	#DIV/0!	1	52	5	5	1	1	1					193
23	Kraljevo	#DIV/0!	1	56	4	5	1	1	1					114
24	Kruševac	#DIV/0!	1	48	7	7	1	1	1					201
25	Petrovac	#DIV/0!	1	44	7	7	1	1	1					275
26	Prokuplje	#DIV/0!	1	20	3	4	1	1	1					47
27	Loznica	#DIV/0!	1	28	3	4	1	1	1					110

Ministry of Agriculture and Environmental Protection

Figure 2. Planning of infrastructure components in waste management regions. Costs of components according regions.

Without Preparatory Costs Preparatory Costs are estimated in Rows 101 et seq. -				Landfill	Transfer Station	Collection System	Simple Closure	Recycling sites	Source Separation	Secondary Separation	Green Waste Composting	Bio-waste Collection	In-Building Composting	MBT with RDF	Waste to Energy	Full Remediation
Ref	Region	Waste T p.a.	Population	Per item € 6 750 000	Per item € 681 000	Per item € 80 000	Per item € 10 000	Per item € 369 000	Individual lookup in MunNeed	Cost Function UnitCosts	Per Item € 205 000	Per person € 6,67	Cost Function UnitCosts	Cost Function UnitCosts	Cost Function UnitCosts	Individual Lookup in MunNeed
1	Sremska Mitrovica	-	-			1 200 000	560 000	738 000	1 700 372	2 300 000	205 000					14 899 358
2	Pančevo	-	-	6 750 000		640 000	150 000	738 000	940 264		205 000					6 026 400
3	Indija	-	-	6 750 000	2 043 000	2 000 000	1 140 000	2 583 000	2 208 626		205 000					18 642 960
4	Užice	-	-		5 448 000	2 080 000	1 690 000	3 321 000	2 895 128		205 000					7 578 137
5	Pirot	-	-		681 000	800 000	270 000	1 476 000	796 954		205 000					2 836 776
6	Kikinda	-	-		2 043 000	1 440 000	590 000	2 214 000	1 637 855		205 000					13 107 990
7	Lapovo	-	-		2 043 000	1 440 000	2 410 000	2 583 000	0		205 000					3 890 983
8	Jagodina	-	-		681 000	800 000	980 000	1 107 000	1 203 489		205 000					5 784 262
9	Leskovac	-	-		2 043 000	1 440 000	1 660 000	2 214 000	1 649 532		205 000					4 137 688
10	Subotica	-	-	6 750 000	2 724 000	1 760 000	650 000	1 107 000	2 219 224		205 000					23 000 740
11	Valjevo	-	-	6 750 000	2 043 000	2 480 000	2 170 000	1 845 000	2 995 306		205 000					7 542 134
12	Zrenjanin	-	-	6 750 000		1 040 000	620 000	1 476 000	1 429 960		205 000					6 146 800
13	Nova Varoš	-	-	6 000 000	681 000	640 000	600 000	1 476 000	843 038		205 000					1 124 129
14	Vranje	-	-	6 750 000	2 724 000	1 280 000	1 630 000	2 583 000	1 170 396		205 000					2 452 067
15	Beograd	-	-	20 000 000	2 043 000	23 500 000	1 000 000	1 400 000	11 500 000		205 000				148 500 000	10 500 000
16	Novi Sad	-	-	7 500 000	1 362 000	2 560 000	820 000	2 952 000	4 145 285		205 000					20 641 540
17	Niš	-	-	5 800 000	2 724 000	5 805 000	1 720 000	1 591 000	1 085 000		205 000					3 220 000
18	Sombor	-	-	6 750 000	2 043 000	1 760 000	550 000	1 476 000	2 022 523		205 000					16 192 710
19	Vršac	-	-	6 000 000	2 043 000	640 000	750 000	1 476 000	801 948		205 000					8 586 738
20	Zaječar	-	-	6 750 000	4 767 000	1 920 000	4 720 000	2 583 000	2 140 900		205 000					14 043 610
21	Smederevo	-	-	6 750 000	681 000	1 440 000	2 320 000	1 107 000	1 864 736		205 000					17 876 211
22	Kragujevac	-	-	7 500 000		1 440 000	1 980 000	1 845 000	2 185 161		205 000					6 561 488
23	Kraljevo	-	-	6 750 000	681 000	1 440 000	1 180 000	1 845 000	2 115 650		205 000					4 843 743
24	Kruševac	-	-	6 750 000		1 760 000	2 080 000	2 583 000	2 017 646		205 000					3 579 185
25	Petrovac	-	-	6 000 000		960 000	1 420 000	2 583 000	809 880		205 000					2 023 414
26	Prokuplje	-	-	6 000 000	681 000	800 000	500 000	1 591 000	766 083		205 000					4 724 429
27	Loznica	-	-	6 000 000		960 000	1 130 000	1 476 000	1 248 794		205 000					5 989 949
TOTAL				€ 145 050 000	€ 40 179 000	€ 64 025 000	€ 35 290 000	€ 49 969 000	€ 54 393 751	€ 2 300 000	€ 5 535 000	€ -	€ -	€ 29 520 000	€ 148 500 000	€ 235 953 441