Environmental Permitting System in Bosnia and Herzegovina

From fragmented to integrated pollution prevention and control: comparative analysis of permitting systems and methods

Zenica
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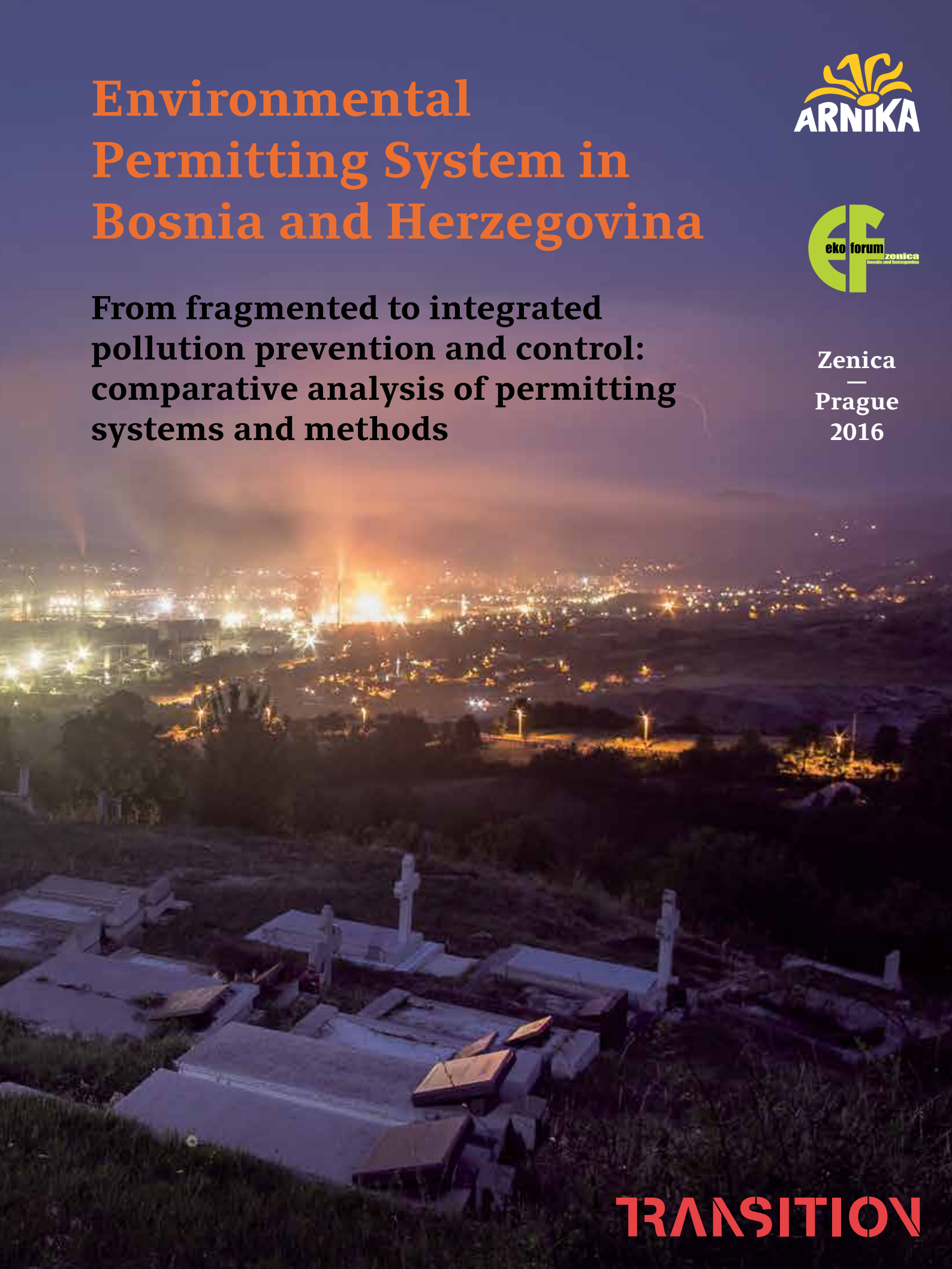
Prague
2016



TRANSITION

Environmental Permitting System in Bosnia and Herzegovina

From fragmented to integrated pollution prevention and control: comparative analysis of permitting systems and methods

Arnika – EKO forum Zenica
Prague (Czech Republic), Zenica (Bosnia and Herzegovina)
2016

TRANSITION

Contents

Disclaimer

This study was prepared with the support of the Ministry of Foreign Affairs of the Czech Republic within the framework of the Transition Promotion Programme – a financial assistance programme supporting democracy and human rights using the Czech Republic's experience with social transition and democratization. The views and opinions expressed in this study are solely those of its authors and in no way can be taken to reflect any official position and/or opinion of the Ministry of Foreign Affairs of the Czech Republic or the government of the Czech Republic.

The references made are to legislation valid and effective as of 2015 when the study was completed. They do not reflect any statutory changes adopted thereafter. Given the fact that laws and regulations at State and Entity level in Bosnia and Herzegovina are often duplicative and contradictory, the authors are unable to guarantee accuracy in this regard.

Environmental Permitting System in Bosnia and Herzegovina
From fragmented to integrated pollution prevention and control: comparative analysis of permitting systems and methods
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Background Information

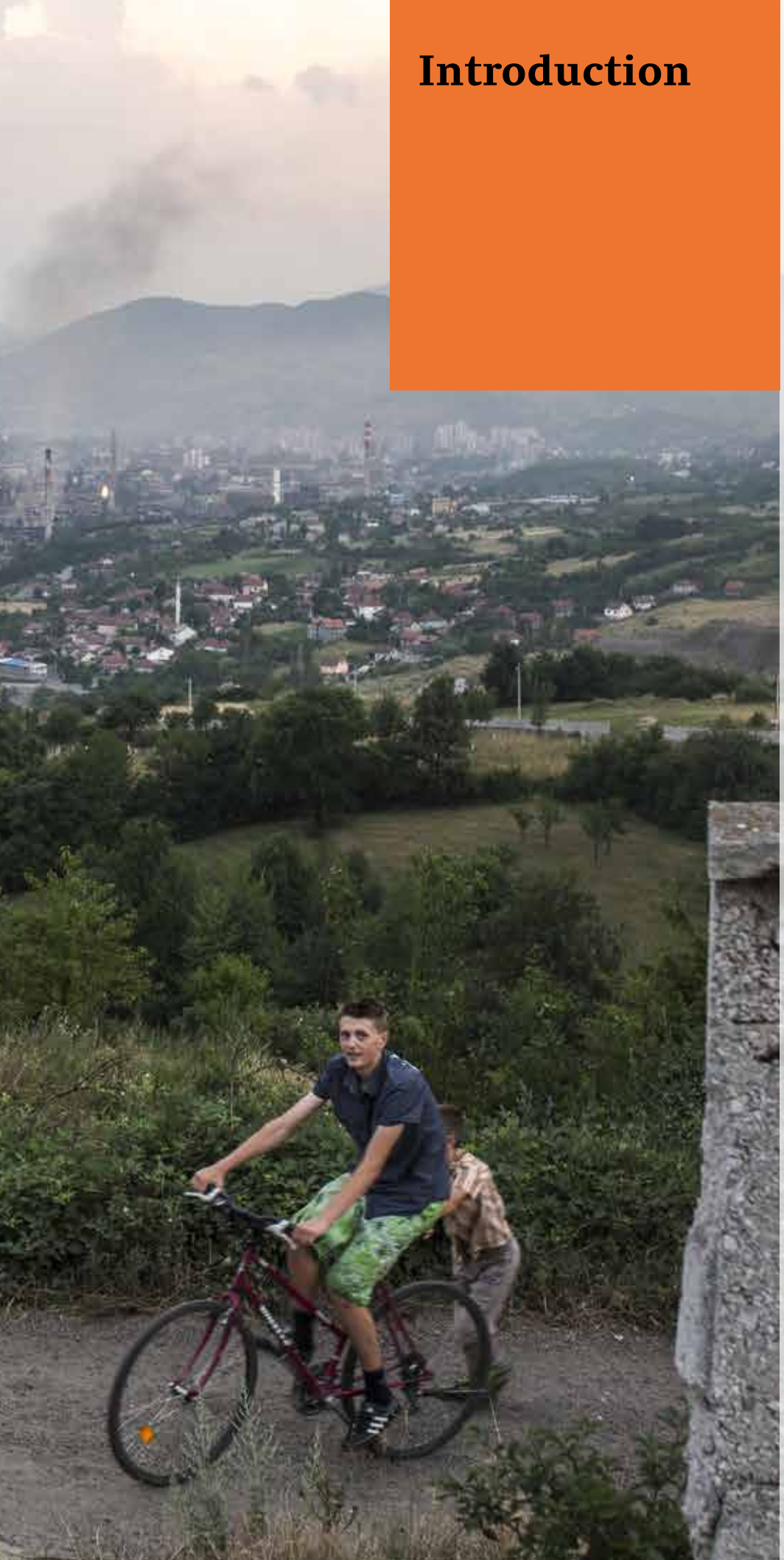
This study is intended primarily for Bosnia and Herzegovina (BiH) government (State and Entity) authorities, public officials, policymakers, and other state and non-state actors involved in the reform of the environmental permitting system. Its purpose is to highlight the main shortcomings of the current environmental permitting system, and serve as a practical guide for implementing an efficient and functional IPPC system, fully compliant with the EU environmental acquis. The Czech Republic, as a relatively new, yet already established EU Member State with mostly successful track record of implementing EU legislation that features a compliant IPPC system, is widely used as an example of best practices. As an alternative, references are also made to IPPC systems of greater developed EU Member States with Anglo-American legal tradition, such as Ireland, as well as other Balkan countries, such as Croatia, which despite having joined the EU very recently, has already developed a permitting system that is well ahead of that in BiH.

As one of the first studies focused specifically on the environmental permitting process in BiH, it is designed as a general overview of BiH's policy and practice in this field with the depth of research and analysis developed accordingly. In the series to follow, research that is more detailed may be undertaken and thorough analysis may be conducted on particular issues raised in this study. It is beyond the scope and purpose of this study to examine BiH's compliance with the entire EU environmental acquis. Insofar as regulatory compliance is discussed, the study focuses on compliance with the IPPC Directive, or more precisely, the Industrial Emissions Directive.

The research methodology for the purposes of this study was largely based on the review of relevant literature, international legal instruments, and European and national legislation. Regarding empirical data, statistics of the European Commission (Eurostat) and European Environment Agency (Central Data Repository of Eionet) were widely used as a reliable source of information. Given that the enacted laws and regulations are not available electronically in official gazettes, and so are relevant decisions of courts and administrative authorities, this study has been prepared in close cooperation with legal experts of Bosnian non-governmental organization, Eko forum Zenica,[1] whose mission is to prevent environmental pollution and involve the public in environment-related decision-making. Eko forum Zenica, as a partner well acquainted with local idiosyncrasies and functioning of relevant public institutions in the country, has been discussed in a number of procedural and practical matters to assure the study reflects an accurate representation of pollution prevention in BiH, and addresses realistic ways of aligning IPPC system compliance with the EU environmental acquis. Case studies to demonstrate the standard practice in BiH were, in addition to Eko forum Zenica (case study on ArcelorMittal), completed in cooperation with Bosnian non-governmental organizations Ekotim[2] (case study on Banovići), Center for Ecology and Energy[3] (case study on Tuzla), Association for Flora and Fauna Protection Lukavac,[4] and Forum for the Protection of the Environment Lukavac[5] (case study on Lukavac).

1 More on the organization is available under http://www.ekoforumzenica.ba.
2 More on the organization is available under http://ekotim.net/en/.
3 More on the organization is available under http://ekologija.ba/index.php?w=c&id=126.
4 More on the organization is available under https://hr-hr.facebook.com/uff.lukavac (organization does not maintain regular website).
5 More on the organization is available under https://www.facebook.com/spasimoLukavac/ (organization does not maintain regular website).

Introduction



Before the Bosnian war, Bosnia and Herzegovina (BiH) was an industrialised country featuring high environmental pollution, the residue of which is still evident today. Despite measures undertaken to minimize adverse impact of industry on the population and environment, and ongoing harmonization of national laws with the EU environmental acquis, the standards of pollution prevention and environmental protection and their enforcement in BiH are still significantly lagging behind those of their neighbours and EU Member States. In light of these circumstances and recent legislative developments, this study examines, in four sections, the policy and practice of the current environmental permitting system in BiH.

The first section outlines the main industries of BiH, their impact on the country's environment, and the level of BiH's industrial pollution compared to other countries in the region and EU Member States of a similar geographical size. It examines the country's industrial and environmental policies and the role of integrated prevention as a tool to reduce adverse industrial impacts. In this regard, it analyses the significance of the integrated pollution prevention and control (IPPC) system in the EU and how it has contributed to pollution prevention and protection of the environment.

The second section elaborates on the current environmental permitting system in BiH as implemented in the set of Laws on Environmental Protection. It analyses the entire environmental permitting process, from filing of an application to issuing of the permit, review of compliance with the permit conditions, and the system of remedies for non-compliance. Particular attention is paid to the involvement of the public in the process and safeguards of its procedural rights. To provide a perspective

on how far the current environmental permitting process is from becoming fully compliant with the EU-mandated IPPC process, the section compares and contrasts the environmental permitting process in BiH with the IPPC processes in several EU Member States, namely Czech Republic, Croatia, and Ireland.

The third section examines international, European, and national legal frameworks regulating industrial pollution and prevention in BiH. In particular, it focuses on relevant EU legislation in the field of IPPC and its transposition into national laws of BiH. In this aspect, it compares and contrasts the EU requirements with those of national legislation, points to the existing loopholes, and analyses how effective the current legislation is in fighting industrial pollution. The section also comments on legislation that is currently being prepared and suggests how to create an efficient IPPC system compliant with the EU framework.

To put the findings of the previous sections into a broader, country-specific perspective, and to demonstrate how the environmental permitting system in BiH practically works and where its major shortcomings are, the last section presents case studies on a lignite power plant in Banovići and thermal power plant in Tuzla, a tire recycling plant and soda factory in Lukavac, and ultimately, an ArcelorMittal steel factory in Zenica – arguably the biggest industrial polluter in BiH. The section also identifies some of the positive features of the IPPC systems' mechanisms implemented by large industrial enterprises in the Czech Republic, namely Třinecké železárny (steel factory), Kronospan Czech Republic (chipboard factory), and Spolana Neratovice (chlor-alkali chemical factory).

1. BiH's Industrial Pollution, Environmental Governance, and Policy

1.1. BiH's Industrial Pollution

During the socialist era, former Yugoslavia belonged to the most prosperous countries in the former Eastern bloc with Bosnia having served as an important centre of the chemical, heavy metals, and arms/defence industries.[6] Although factories that have not been closed following the civil war in the 1990s are operating at approximately 25% of their pre-war capacities,[7] these operations are still far from environmentally friendly. In fact, many factories that were polluting the environment during socialism such as the power plant in Tuzla or coal mine in Kakanj, still remain great polluters, albeit on a smaller scale than before.

As under socialist times, the most significant industries in BiH include the chemical and heavy metal industries along with a sizable energy industry, especially thermal power plants, coal mining, and processing. Food and beverage processing has also developed as an important sector of the BiH economy.[8] Although water and soil pollution has been reported,[9] BiH suffers the greatest degradation from air pollution. The main sources of air pollution are stationary, and include coal-power plants and (heavy and chemical) industry. Large thermal energy facilities (for example, Kakanj and Tuzla) emit considerable quantities of sulphur dioxide.[10]

The concentration of other pollutants, such as nitrogen oxides, lead, and heavy metals in the air, often exceeds the permitted limits, despite being much looser than in the EU. While the annual average limit of nitrogen dioxide, for example, permitted in the EU since 2010 is 40 g/m^3,[11] BiH allowed 52 g/m^3 in 2015. Hourly limits are even higher: the EU's threshold is 200 g/m^3, while Bosnian limits for nitrogen dioxide (in 2015) were 260 µg/m^3.[12] The emission limits for all air pollutants should be aligned with the EU limits by 2021.[13] Air pollution from hazardous substances released from factory chimneys constitutes one of the

6 ARCOTRASS – Consortium, Bosnia and Herzegovina Country Report (December 2006), page 27 [http://ec.europa.eu/agriculture/analysis/external/applicant/bosnia_herzegovina_en.pdf].

7 Hydro-Engineering Institute, Layman's report: Capacity building in integrated pollution prevention and control in Bosnia and Herzegovina (not dated), page 3 [http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=home.showFile&rep=file&fil=LIFE05_TCY_BIH_000102_LAYMAN.pdf].

8 ARCOTRASS – Consortium, Bosnia and Herzegovina Country Report (December 2006), page 27 [http://ec.europa.eu/agriculture/analysis/external/applicant/bosnia_herzegovina_en.pdf].

9 Soil and water pollution is mainly caused by inadequately secured industrial waste dumps that subsequently threaten water resources.

10 European Environmental Agency, Air Pollution-Why care? (Bosnia and Herzegovina) (March 2015) [http://www.eea.europa.eu/soer/countries/ba/air-pollution-why-care-bosnia].

11 The limits were introduced by 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.

12 European Commission, Air Quality Standards (November 2015) [http://ec.europa.eu/environment/air/quality/standards.htm].

13 Eko forum Zenica, Regulation on air quality of FBiH (1/12) (not dated) [http://www.ekoforumzenica.ba/dokumenti/pravilnik2012.php].

biggest problems, especially in Central Bosnia where deep valleys prevent the pollutants from dispersing, making the air pollution quite acute, especially in winter.[14]

Due to the economic recession of recent years, some industrial facilities in BiH have operated with excess capacity or have shuttered completely, which resulted in a decrease in harmful emissions to the atmosphere. On the other hand, pollution caused by local traffic has been increasing. As the reconstruction of railroads is still in the initial stage, most local, including freight, transportation utilizes a large number of old vehicles (the average car used in BiH was manufactured 17 years ago),[15] which burn low-quality fuel (leaded petrol is still thought to be used).[16] Burning low-quality coal, and occasionally, different kinds of waste (such as plastic) to generate household heating remains a significant source of air pollution in some regions of BiH, though to a lesser degree than industrial pollution.[17]

The environmental pollution in BiH is a consequence of inefficient exploitation of natural resources, operation of obsolete production facilities whose owners inadequately invest in advanced technologies, and economic development that is not based on sustainable development principles.[18] As the country is still recovering from the war and lacks the necessary capacities, including financial resources to make its industrial operations environmentally sustainable, the progress has been slow and stagnating. Perhaps the most fundamental hindrance to any progress in policy and practice (including environmental) lies in an overly decentralized political structure and an overly complicated institutional setup for a country as small as BiH.

14 Arnika, Bosnia and Herzegovina: Fight for Clean Air (not dated) [http://english.arnika.org/bosnia-and-herzegovina].

15 Faktor, Bosnian citizens drive the oldest cars in the Balkans ("Bh. građani voze najstarije automobile na Balkanu") (February 2015) [http://faktor.ba/bh-gradani-voze-najstarije-automobile-na-balkanu/].

16 European Environmental Agency, Air Pollution-Why care? (Bosnia and Herzegovina) (March 2015) [http://www.eea.europa.eu/soer/countries/ba/air-pollution-why-care-bosnia].

17 Balkan Insight, Air Pollution is Choking Bosnia, Experts Warn (December 2015) [http://www.balkaninsight.com/en/article/air-pollution-reaching-alarming-levels-in-bosnia-experts-warn-11-30-2015].

18 Hydro-Engineering Institute, Layman's report: Capacity building in integrated pollution prevention and control in Bosnia and Herzegovina (not dated), page 3 [http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=home.showFile&rep=file&fil=LIFE05_TCY_BIH_000102_LAYMAN.pdf].

1.2. BiH's Environmental Governance

BiH's political structure was established by Dayton/Paris Peace Agreement (Dayton Accords) that put an end to the 1992-1995 Bosnian war. BiH's constitution (that forms Annex IV to the Dayton/Paris Peace Agreement) contains the fourfold system of governance at the State, Entity, District, and Cantonal level.[19]

The State level features a tripartite rotating Presidency, comprising a member of each of BiH's three main ethnic groups (Bosniaks, Serbs, and Croats), a Council of Ministers (executive branch), and a bicameral Parliamentary Assembly consisting of a House of Representatives (lower chamber) and a House of Peoples (upper chamber). The Entity level comprises two largely politically autonomous, self-governing entities: the Federation of Bosnia and Herzegovina (FBiH), and Republika Srpska (RS) with Brčko District, a multi-ethnic self-governing administrative unit in the northeast of the country that is formally a part of both Entities.[20]

19 United Nations Economic Commission for Europe, 2nd Environmental Performance Review, Bosnia and Herzegovina (2011), page 6. [http://www.unece.org/fileadmin/DAM/env/epr/epr_studies/bosnia_and_herzegovina%20II.pdf].

20 United Nations Economic Commission for Europe, 2nd Environmental Performance Review, Bosnia and Herzegovina (2011), page 6. [http://www.unece.org/fileadmin/DAM/env/epr/epr_studies/bosnia_and_herzegovina%20II.pdf].

Both Entities function as states within a state (BiH). Like the State of BiH, they have their own president (each also a vice-president), government (a Prime Minister and ministries), and parliament. FBiH is divided into 10 cantons, each with its own administrative government and relative autonomy on certain issues, such as education and healthcare.[21] RS has no cantons, only 63 municipalities, each with their own assemblies and administrative structures. What we witness in BiH is a complex, multi-tiered, and overlapping system of governance unmatched, to such an extent, to virtually any other country in the world (BiH has certainly the most complicated system of governance in Europe). The system produces dysfunctional institutions, which are unable to create uniform policies and legal framework void of contradictory legislation. The law enforcement power is also weak. As will be further illustrated, this also applies to environmental policies and constitutes the reason why the EU environmental acquis is, under the current system of governance, so difficult to transpose and the IPPC system such a challenge to establish.

According to the BiH constitution, jurisdiction in environmental matters is not given to the State of BiH, but is split between the Entities level (Brčko District) and the Cantons/Municipal level.[22] Through the Law on Ministries and other Bodies of Administration of BiH of 2003,[23] the State-level Ministry of Foreign Trade and Economic Relations was given the authority to create (environmental) policies, coordinate policymaking activities of entities and their institutions, and to report on the implementation of international treaties.[24] However, given the continuous efforts of the Entities to keep the powers of the state limited, this ministry retains formal, (but not actual) powers to formulate environmental policy and legislation.[25] To compensate for the lack of competence, and to improve the cooperation between the State, Entities, and Communal level concerning a range of environmental issues, the National Steering Committee for Environment and Sustainable Development was established at the State level in 2002. While it had a certain potential to better coordinate the work of environmental authorities on various levels of BiH's governance, it oddly also lacked a legal basis for its activities, which is the reason why it is not operational anymore.[26]

At the Entity level, environmental matters are unnecessarily dispersed among various ministries. In FBiH, there are currently three ministries with environmental (policy) agenda – Ministry of Spatial Planning, Ministry of Agriculture, Water Management and Forestry and Ministry of Environment and Tourism.[27] In 2006, following the blueprint of the State level, the Advisory Board for the Environment was created as an advisory and consultative body to the Federal Ministry of Environment and Tour-

21 United Nations Economic Commission for Europe, 2nd Environmental Performance Review, Bosnia and Herzegovina (2011), page 6. [http://www.unece.org/fileadmin/DAM/env/epr/epr_studies/bosnia_and_herzegovina%20II.pdf .

22 Article III 3 (a) of the Constitution states that "All governmental functions and powers not expressly assigned by the Constitution to the institutions of BiH shall be those of the Entities."; The situation is, in fact, even more complex with the constitution enabling to exercise jurisdiction over environmental issues either jointly or separately, while Cantons require certain degree of coordination by the FBiH; European Environment Agency, Bosnia and Herzegovina (April 2015) [http://www.eea.europa.eu/soer-2015/countries/bosnia-and-herzegovina].

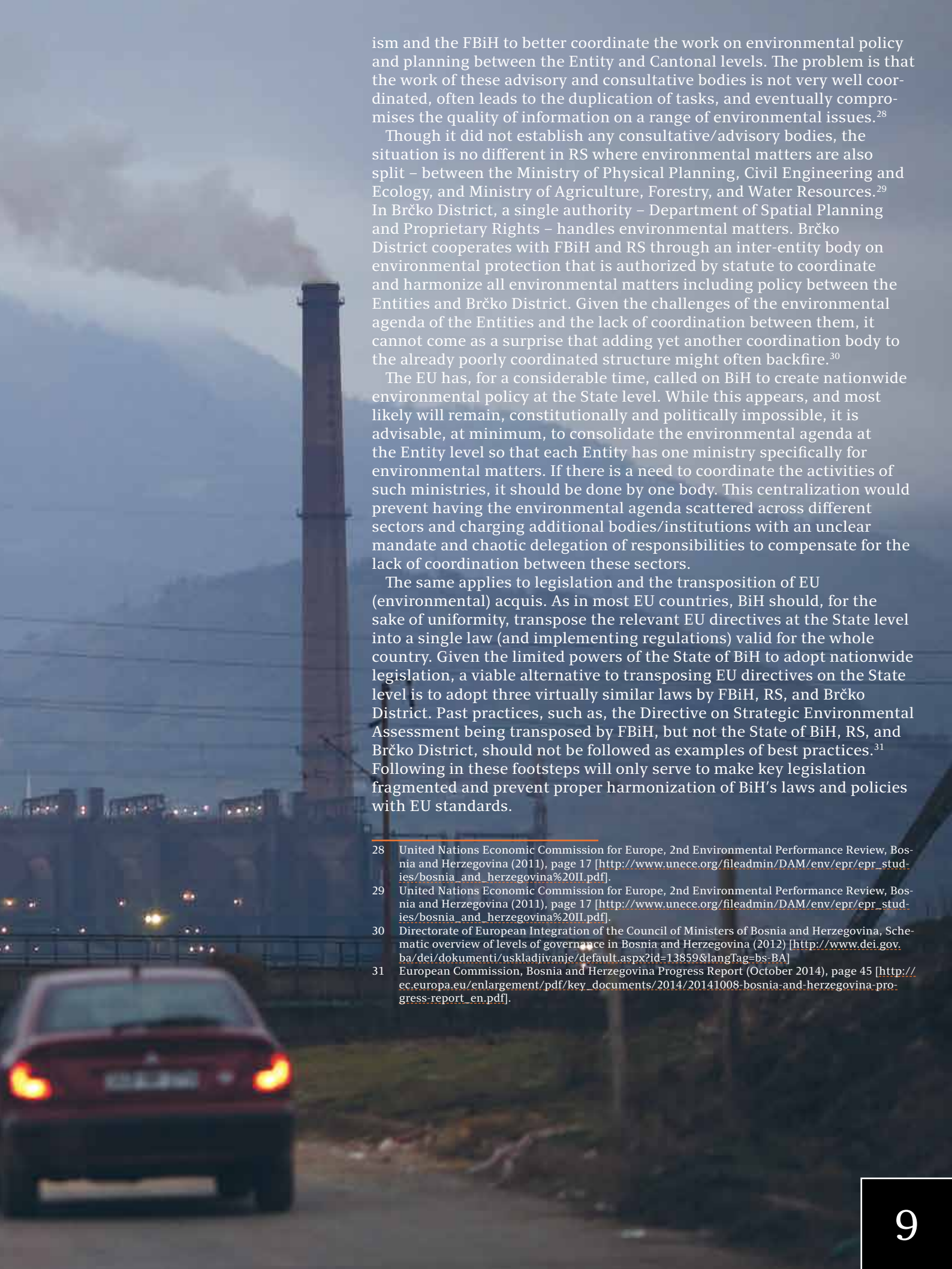
23 The Law on Ministries and other Bodies of Administration of BiH of 2003 (Official Gazette of BiH, No. 5/2003).

24 Ministry of Foreign Trade and Economic Relations, State of the Environment Report of Bosnia and Herzegovina (2012), page 38 [http://apps.unep.org/publications/pmtdocuments/-State_of_the_Environment_Report_for_Bosnia_and_Herzegovina-2012SoEReport_BosniaandHerzego.pdf .

25 United Nations Economic Commission for Europe, 2nd Environmental Performance Review, Bosnia and Herzegovina (2011), page 14 [http://www.unece.org/fileadmin/DAM/env/epr/epr_studies/bosnia_and_herzegovina%20II.pdf].

26 United Nations Economic Commission for Europe, 2nd Environmental Performance Review, Bosnia and Herzegovina (2011), page 15 [http://www.unece.org/fileadmin/DAM/env/epr/epr_studies/bosnia_and_herzegovina%20II.pdf].

27 United Nations Economic Commission for Europe, 2nd Environmental Performance Review, Bosnia and Herzegovina (2011), page 46 [http://www.unece.org/fileadmin/DAM/env/epr/epr_studies/bosnia_and_herzegovina%20II.pdf].



ism and the FBiH to better coordinate the work on environmental policy and planning between the Entity and Cantonal levels. The problem is that the work of these advisory and consultative bodies is not very well coordinated, often leads to the duplication of tasks, and eventually compromises the quality of information on a range of environmental issues.[28]

Though it did not establish any consultative/advisory bodies, the situation is no different in RS where environmental matters are also split – between the Ministry of Physical Planning, Civil Engineering and Ecology, and Ministry of Agriculture, Forestry, and Water Resources.[29] In Brčko District, a single authority – Department of Spatial Planning and Proprietary Rights – handles environmental matters. Brčko District cooperates with FBiH and RS through an inter-entity body on environmental protection that is authorized by statute to coordinate and harmonize all environmental matters including policy between the Entities and Brčko District. Given the challenges of the environmental agenda of the Entities and the lack of coordination between them, it cannot come as a surprise that adding yet another coordination body to the already poorly coordinated structure might often backfire.[30]

The EU has, for a considerable time, called on BiH to create nationwide environmental policy at the State level. While this appears, and most likely will remain, constitutionally and politically impossible, it is advisable, at minimum, to consolidate the environmental agenda at the Entity level so that each Entity has one ministry specifically for environmental matters. If there is a need to coordinate the activities of such ministries, it should be done by one body. This centralization would prevent having the environmental agenda scattered across different sectors and charging additional bodies/institutions with an unclear mandate and chaotic delegation of responsibilities to compensate for the lack of coordination between these sectors.

The same applies to legislation and the transposition of EU (environmental) acquis. As in most EU countries, BiH should, for the sake of uniformity, transpose the relevant EU directives at the State level into a single law (and implementing regulations) valid for the whole country. Given the limited powers of the State of BiH to adopt nationwide legislation, a viable alternative to transposing EU directives on the State level is to adopt three virtually similar laws by FBiH, RS, and Brčko District. Past practices, such as, the Directive on Strategic Environmental Assessment being transposed by FBiH, but not the State of BiH, RS, and Brčko District, should not be followed as examples of best practices.[31] Following in these footsteps will only serve to make key legislation fragmented and prevent proper harmonization of BiH's laws and policies with EU standards.

28 United Nations Economic Commission for Europe, 2nd Environmental Performance Review, Bosnia and Herzegovina (2011), page 17 [http://www.unece.org/fileadmin/DAM/env/epr/epr_studies/bosnia_and_herzegovina%20II.pdf].

29 United Nations Economic Commission for Europe, 2nd Environmental Performance Review, Bosnia and Herzegovina (2011), page 17 [http://www.unece.org/fileadmin/DAM/env/epr/epr_studies/bosnia_and_herzegovina%20II.pdf].

30 Directorate of European Integration of the Council of Ministers of Bosnia and Herzegovina, Schematic overview of levels of governance in Bosnia and Herzegovina (2012) [http://www.dei.gov.ba/dei/dokumenti/uskladjivanje/default.aspx?id=13859&langTag=bs-BA]

31 European Commission, Bosnia and Herzegovina Progress Report (October 2014), page 45 [http://ec.europa.eu/enlargement/pdf/key_documents/2014/20141008-bosnia-and-herzegovina-progress-report_en.pdf].

1.3. BiH's Environmental Policy

The fragmented environmental agenda and inefficient coordination between various sectors at the State and Entity level have prevented formulation of a coherent environmental policy framework and strategy for sustainable development. In the post-war period, environmental protection has not been a priority for political elites, and though insufficient, all efforts made have been due to the BiH's desire to join the EU.[32]

Although no nationwide, comprehensive (covering the pollution of air, water, and soil) environmental policy exists to date, recent adoption of the National Emission Reduction Plan of BiH (NERP) by the Council of Ministers (December 2015) could signify an important step towards reduction of industrial air pollution in the country. The plan, with an investment budget of BAM 640 million (approximately €320,000,000), calls for the reduction of harmful emissions (sulphur dioxide, azote oxides) in large combustion facilities to comport with the European levels by 2027.[33]

In 2003, the first National Environmental Action Plan for the period 2003-2008 containing aims and priorities for environmental monitoring, information management, and environmental training was adopted by the Entities. The Mid-Term Development Strategy for 2004-2007 inadequately addressed and ineffectively implemented environmental priorities. Despite references to the environment's role in poverty reduction, only 0.6 per cent of the official development assistance was used for environmental protection.[34]

In 2008, the European Council adopted the new European Partnership Agreement between the EU and BiH[35] that called for the adoption of a State-level Law on Environmental Protection and establishment of a State-level Environmental Agency. Currently, there are laws on environmental protection at the Entity level (as well as the Brčko District). There are also laws enacted at Entity level that regulate air pollution prevention, waste management, nature protection, and the environmental protection fund. Though a proposal has been drafted, enactment of a State-level environmental protection law has been pending since 2006.[36]

When the law is adopted, the European Commission will release further funds from the Community Assistance, Development and Stabilization (CARDS) programme and the Instrument for Pre-Accession Assistance (IPA) that have been established to assist BiH in fulfilling obligations related to EU integration. More importantly, however, the adoption of a nationwide law on environmental protection is mandatory in order to establish a comprehensive environmental framework and integrated system for the management of environmental protection.[37]

It would help to streamline the bodies and public administration in the field of environmental protection, thus removing (at least partially) the current fragmentation of the environmental agenda across virtually all administrative levels. Determining which body is responsible for a nationwide environmental policy and setting up a legal mandate for its activities would create a solid foundation for clearer, better coordinated policy priorities and help remove the current protracted, redundant legislative and administrative processes.

32 Ministry of Foreign Trade and Economic Relations, State of the Environment Report of Bosnia and Herzegovina (2012), page 206 [http://apps.unep.org/publications/pmtdocuments/-State_of_the_Environment_Report_for_Bosnia_and_Herzegovina-2012SoEReport_BosniaandHerzego.pdf].

33 Mladen Dragojlovic, BiH Council of Ministers adopts BiH NERP (2015) [http://www.balkaneu.com/bih-council-ministers-adopts-bih-nerp/].

34 Ministry of Foreign Trade and Economic Relations, State of the Environment Report of Bosnia and Herzegovina (2012), page 206 [http://apps.unep.org/publications/pmtdocuments/-State_of_the_Environment_Report_for_Bosnia_and_Herzegovina-2012SoEReport_BosniaandHerzego.pdf].

35 2008/211/EC: Council Decision of 18 February 2008 on the principles, priorities and conditions contained in the European Partnership with Bosnia and Herzegovina and repealing Decision 2006/55/EC.

36 Ministry of Foreign Trade and Economic Relations, State of the Environment Report of Bosnia and Herzegovina (2012), page 206 [http://apps.unep.org/publications/pmtdocuments/-State_of_the_Environment_Report_for_Bosnia_and_Herzegovina-2012SoEReport_BosniaandHerzego.pdf].

37 Energy Community, Bosnia and Herzegovina Country Report (2006), page 12 [https://www.energy-community.org/portal/page/portal/ENC_HOME/DOCS/55838/BOSNIA_AND_HERZEGOVINA_COUNTRY_REPORT_12.06.06.PDF].

2. Environmental Permitting Process in BiH and Selected EU Member States

2.1. Background on Environmental Permitting in the EU

The permitting system is an essential tool for regulating environmental pollution from industrial facilities in many countries worldwide. Permitting programmes were originally designed to separately address specific environmental media (water, air, soil) or concerns (smog, hazardous waste disposal, etc.). Under such a fragmented regime, a major facility's operation might be permitted, or otherwise regulated under different controls and even by different regulators. An increasing number of countries, most notably in the European Union, have been transforming their permitting regimes through a more integrated approach.[38]

The idea of integrated pollution prevention and control is not new in Europe. In fact, the European Commission has pursued the integrated approach since the early 1980s. There were four environmental action programmes of the European Commission issued between 1982 and 2010 that identified the need to shift from the traditional sector-by-sector approach and protect the environment through integrated pollution control and integration of environmental concerns into other policies, though they did not define the integrated approach.[39] The first directive that proposed concrete, cross-media-oriented measures and approaches was the EIA Directive.[40] While the EIA Directive did not use the term integrated pollution prevention or control, it was still based on a holistic rather than sector-by-sector approach to environmental protection. The first directive that defined integrated pollution prevention or control was the IPPC Directive.[41]

An integrated approach to environmental permitting is more than just a consolidation or a "stapling together" of single-media permits. It addresses each aspect of a facility's operation that has environmental impact and comprises pollution prevention, effects, and interactions of various environmental media, facility management systems, and long-term sustainability. While any permitting approach (integrated or media-specific) has its strengths and weaknesses, some of the most evident advantages of the integrated approach are hard to overlook.[42]

38 US Environmental Protection Agency, Office of Policy, Economics, & Innovation, National Center for Environmental Innovation, An In-depth Look at the United Kingdom Integrated Permitting System (July 2008), page 1 [http://www.epa.gov/osem/integrated/pdf/IntPermittingRpt.pdf].

39 Eberhard Bohne, The Quest for Environmental Regulatory Integration in the European Union, Kluwer Law International, page 26.

40 Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment. The directive was amended by directive 97/11/EC of 3 March 1997 and directive 2003/35/EC of 26 May 2003.

41 Council Directive 96/61/EC of 24 September 1996 concerning the integrated pollution prevention and control (IPPC). The codified version, following several amendments, was issued in the form of Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control that was later recast by Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control).

42 US Environmental Protection Agency, Office of Policy, Economics, & Innovation, National Center for Environmental Innovation, An In-depth Look at the United Kingdom Integrated Permitting System (July 2008), page 1 [http://www.epa.gov/osem/integrated/pdf/IntPermittingRpt.pdf].

In United States of America, a country lacking an integrated permitting system, but featuring separated, yet well-established permitting processes for air, water, waste, and other environmental concerns, there has been interest in the adoption of alternative permitting strategies for decades. To assess the functionality of the (European) integrated permitting system, in particular that of the UK, the US Environmental Protection Agency (EPA) conducted research and interviews with the Environment Agency for England and Wales for a 2008 published report, in which it evaluates the UK environmental permitting system as flexible and fluid.[43]

The main potential advantages of the integrated approach are:

1. Better overall solution. Permitting pollution to a single environmental medium may have a spillover effect to other environmental media (e.g., decreasing air pollution through standards established in an air permit could increase environmental pollution to water). Reviewing the facility's operations comprehensively may help identify better ways of controlling the overall environmental impact of production processes than examining each single environmental media separately.
2. Efficiency. By consolidating multiple permits and overlapping permitting processes into a single permit and process, an integrated permitting system may reduce administrative costs, for both regulatory agencies and regulated facilities.
3. Pollution prevention. Integrated facility assessment is more likely to promote pollution prevention than simply imposing "end-of-pipe" controls.
4. Sustainability. Since integrated permits address operational aspects such as natural resource use, generation and recovery of waste, and habitat impact, they may promote long-term sustainability.
5. Public participation. By providing stakeholders with a broad, facility-wide assessment of environmental impacts, the integrated permitting may make public participation easier (no need to participate in several separate and time-consuming permitting processes), more meaningful, and foster dialogue among industry and other stakeholders.[44]

43 The report is accessible at the website of the US Environmental Protection Agency under http://www.epa.gov/osem/integrated/pdf/IntPermittingRpt.pdf.

44 US Environmental Protection Agency, Office of Policy, Economics, & Innovation, National Center for Environmental Innovation, An In-depth Look at the United Kingdom Integrated Permitting System (July 2008), page 3 and 4 [http://www.epa.gov/osem/integrated/pdf/IntPermittingRpt.pdf].

2.2. Environmental Permitting Process in BiH

The environmental permitting process in BiH is governed by a series of acts and its most relevant matters of procedure are contained in the Laws on Environmental Protection of FBiH and RS.[45] These are not State-level, but Entity-level laws. Since both Laws on Environmental Protection are virtually identical, unless stated otherwise, references made to the regulation contained in the Law on Environmental Protection apply to both FBiH and RS.

Unlike the IPPC process, the current environmental permitting process in BiH is disintegrated, which means that separate environmental permits are issued for air, water, and soil pollutants. Such a procedure is not cost efficient and increases the administrative burden for both the authority and the applicants. The process is also time-consuming and its intricacies are confusing

45 Law on Environmental Protection (Official Gazette of FBiH, No. 33/03, 38/09), Law on Environmental Protection of Republika Srpska (Official Gazette of Republika Srpska, No. 135/04, 36/09, 72/09), Law on Environmental Protection of Brčko District (Official Gazette of Brčko District, No. 24/04, 1/05, 19/07, 9/09).

for all participants. Which facilities require an environmental permit is determined based on an Entity-level (FBiH) regulation that defines the criteria and thresholds for permitting at the Entity and Cantonal level.[46] The pollutants' thresholds are set particularly low, which means that virtually all facilities, and even those that may have very negligible environmental impact, require environmental permits. In addition, Cantonal authorities may issue environmental permits for facilities where the pollution limits fall even below these thresholds.[47]

The environmental permits are issued by the authorities at Entity (and Cantonal) level. In FBiH, the Federal Ministry for the Environment and Tourism issues the permits. Cantonal-level ministries (i.e., Ministry of Spatial Planning, Transport, and Environmental Protection) may issue environmental permits where a respective facility is not subject to environmental impact assessment. In RS, the Ministry for Spatial Planning, Civil Engineering, and Environment issues the permits.[48]

The comparative analysis of different EU Member States will show that this centralised approach is quite unusual. In many EU Member States, the environmental permits are issued by regional authorities (bureaus) or specialized environmental agencies, rather than ministries acting as central government authorities that formulate and implement specific policies.

There is a reason to decentralize the agenda of issuing environmental (integrated) permits to regional authorities. Applicants (industrial/agricultural facilities) are usually located in the regions that may be far away from the seats of ministries. Given their regional proximity, the regional authorities are better acquainted with particular issues that concern the operation of an industrial facility and the degree of pollution it generates, thus, better suited to set adequate conditions for their operation in environmental permits. To conduct the environmental permitting process on a local level allows for a more rapid response by applicants and authorities when issues arise. Finally, yet importantly, the decentralization of issuing environmental permits to regional authorities would relieve the ministries of additional agenda.

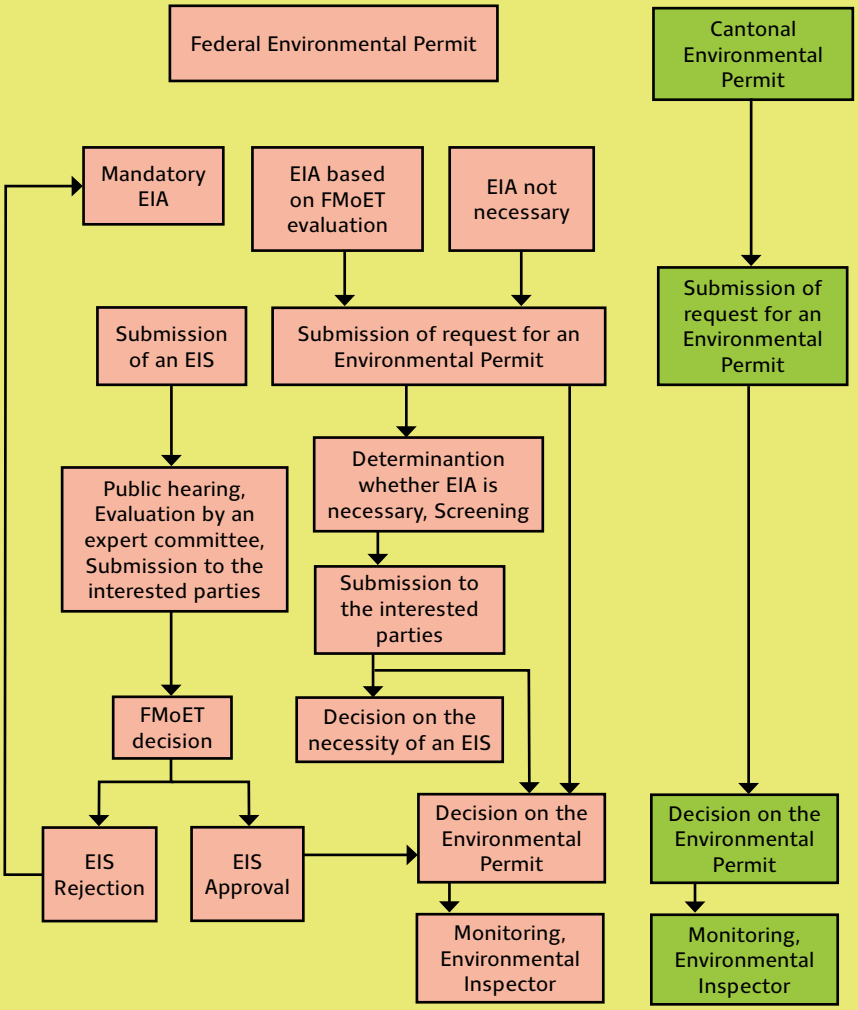
Regarding the competence to issue environmental permits, it is also essential to consider to which extent existing authorities (ministries) have expert capacity to assess the highly technical matters necessary for issuing environmental permits. An example from the Czech Republic shows that a specialized expert body (CENIA – Czech Environmental Information Agency) is an effective mechanism for providing expert opinions, which ensures technical accuracy of environmental permits and transfers the burden of providing technical expertise from permitting authorities to specialized bodies (or agencies).

Once filed, the competent ministry has 120 days to act on the application containing the requirements pursuant to Article 54a of the Law on Environmental Protection (of FBiH). If the environmental impact assessment (EIA) is required, the deadline decreases to two months. Although the deadlines may seem lengthy as the procedure often involves a review of voluminous documentation, decision on potentially complex environmental issues, and the participation of the public, the deadlines can be considered reasonable, if followed. Frequently, the ministries decide without regard to these deadlines and prolong the proceeding, which curtails the procedural rights of the participants (including the public). Between 2007 and 2010, this was at issue for ArcelorMittal in Zenica, where environmental permits were issued with the delay of 12 to 24 months.[49]

Determining the grounds on which the ministries set the emission values for a particular facility also remains problematic. According to the European legal framework, emission limit values, and the equivalent parameters and technical measures in environmental permits, shall be based on the best available techniques (BAT). BAT constitutes a framework indicator reflecting the most efficient and advanced stage of development of particular

46 Rules for plants and installations for which the environmental impact assessment is mandatory, and for plants that can be built and operated only with the environmental permit (Official Gazette of FBiH, No. 19/04).
47 Data obtained from lawyers of NGO Eko forum Zenica in BiH.
48 United Nations Economic Commission for Europe, 2nd Environmental Performance Review, Bosnia and Herzegovina (2011), page 28 [http://www.unece.org/fileadmin/DAM/env/epr/epr_studies/bosnia_and_herzegovina%20II.pdf].
49 Data obtained from lawyers of NGO Eko forum Zenica in BiH.

Table 1: Environmental Permitting Process in BiH



Source: United Nations Economic Commission for Europe, 2015

technology, activities, and their method of operation, which indicate their practical suitability for preventing or reducing emissions and its impact on the environment.[50]

It is important to realize that BAT constitutes a case-specific framework that is determined by the level of technical equipment, particular to the achieved level of emissions to air, water, soil, the amount of waste produced, materials and energy efficiency, environmental management tools, and the operator's economic opportunities when reaching regional environmental standards.[51] Though BAT for a given industrial sector are described in BAT reference documents (BREFs),[52] BREFs do not reflect local conditions and are non-binding. To reflect local conditions and accurately determine the level of emissions, countries need to set their own framework in deciding on BAT for a particular facility.

Currently, BiH has adopted BAT only for the food industry,[53] but lacks BAT for any other sectors, especially those that might pose more significant environmental threats, including the chemical industry (or metallurgy), which are much more widespread in BiH. To fill this loophole, the authorities use BREFs. However, since BREFs are too general, and designed to serve as a reference document, rather than a basis for setting binding conditions for operation, there is likelihood that the permits will contain arbitrary conditions for operation and unreasonable emissions limit values. Moreover, BiH has not translated BREFs to the national language.

The Laws on Environmental Protection enable the public to participate and raise possible objections during the environmental permitting process. In practice, however, this right is heavily curtailed. The comments and suggestions in many cases go completely ignored, as during the procedure to issue environmental

50 The exact definition of BAT is contained in Article 15 (2) of the IPPC Directive.
51 Emission reduction plans, waste management plans, and conditions of operation ensuing from the documentation and the EIA, etc. also need to be taken into account in deciding on emission limits.
52 BREFs as defined in Article 3(11) of the Industrial Emissions Directive.
53 See the website of the Ministry of Environment and Tourism of FBiH under http://www.fmoit.gov.ba/ba/page/46/bat.

permits for ArcelorMittal in 2009.[54] In other cases, while inclined to provide information at the beginning, the authorities later withheld cooperation.[55] Civil society organizations have tried to access environmental permits and information on the environmental permitting process by virtue of the Freedom of Information Act,[56] under which public authorities have an obligation to disclose information in their possession. The success of such requests has been minor; while the authorities occasionally respond, they often do not enclose any permit or related information. Even when they do, the submission is often incomplete.[57]

The environmental impact assessment (EIA) process that constitutes a part of the environmental permitting process is also quite opaque. While basic provisions related to EIA are contained in the Entity-level Laws on Environmental Protection, competent Entity-level ministries of environment may issue decrees that determine which facilities require EIA.[58]

Although public consultations on EIA are mandatory by law, it is common that they are either not held at all, or when held, the comments and suggestions garnered are disregarded. During EIA public debate in the ArcelorMittal case, objections were raised that EIA includes no proper survey on the factory's operations and environmental impacts. EIA was issued, nonetheless, without any justifications for the reasons of dismissal that the law does not even require.[59]

Environmental permits in BiH are issued for a period of five years. Inspectors of competent ministries oversee adherence to the permits' conditions. However, the sanctions that can be imposed, ranging from BAM 1,000 to BAM 10,000[60] (approximately €500 to €5,000), are very symbolic and do not motivate the operators to comply with the permit conditions. Regarding the publication of permits and other information, an equivalent of the integrated pollution register, as required by European legislation, does not exist in BiH. The current pollutant registers (separate registers exist for FBiH and RS) are not publicly available databases; merely closed databases maintained by the Ministry of Environment and Tourism (in FBiH) and Hydrometeorology Institute (in RS) where data is available upon request, but where very few operators ever submit any information.[61]

Evidently, the current environmental permitting process in BiH is a fragmented procedure that lacks a clear, efficient, and enforceable regulatory framework that prevents arbitrary decision-making, and safeguards the rights of relevant stakeholders. Safeguarding the right of the public to participate in the environmental permitting process and access to environment-related information is a major challenge. Although measures (including remedial) formally exist to enable access to environment-related information and the environmental permitting process, the enforcement is weak. Any remediation leads to the same negative result as the request for information itself – inaction of the authorities.

Setting up the conditions for industrial operation often has an immediate impact on the environment of a large number of people. Thus, acquainting the public with such an operation, and enabling it to raise any comments

54 Arnika, Eko forum Zenica, Environmental Democracy in BiH – Limping Along: Alternative Report on the Implementation of the Aarhus Convention in Bosnia and Herzegovina (2015), page 60 [http://english.arnika.org/e-shop/publications/environmental-democracy-in-bih-limping-along].

55 Most recently, this has been the case in the environmental permitting process involving BOF (blow oxygen furnace) division of ArcelorMittal Zenica where a Bosnian environmental NGO Eko forum Zenica submitted comments, all of which have been disregarded.

56 Freedom of Information Act (Official Gazette of Bosnia and Herzegovina, No. 28/2000).

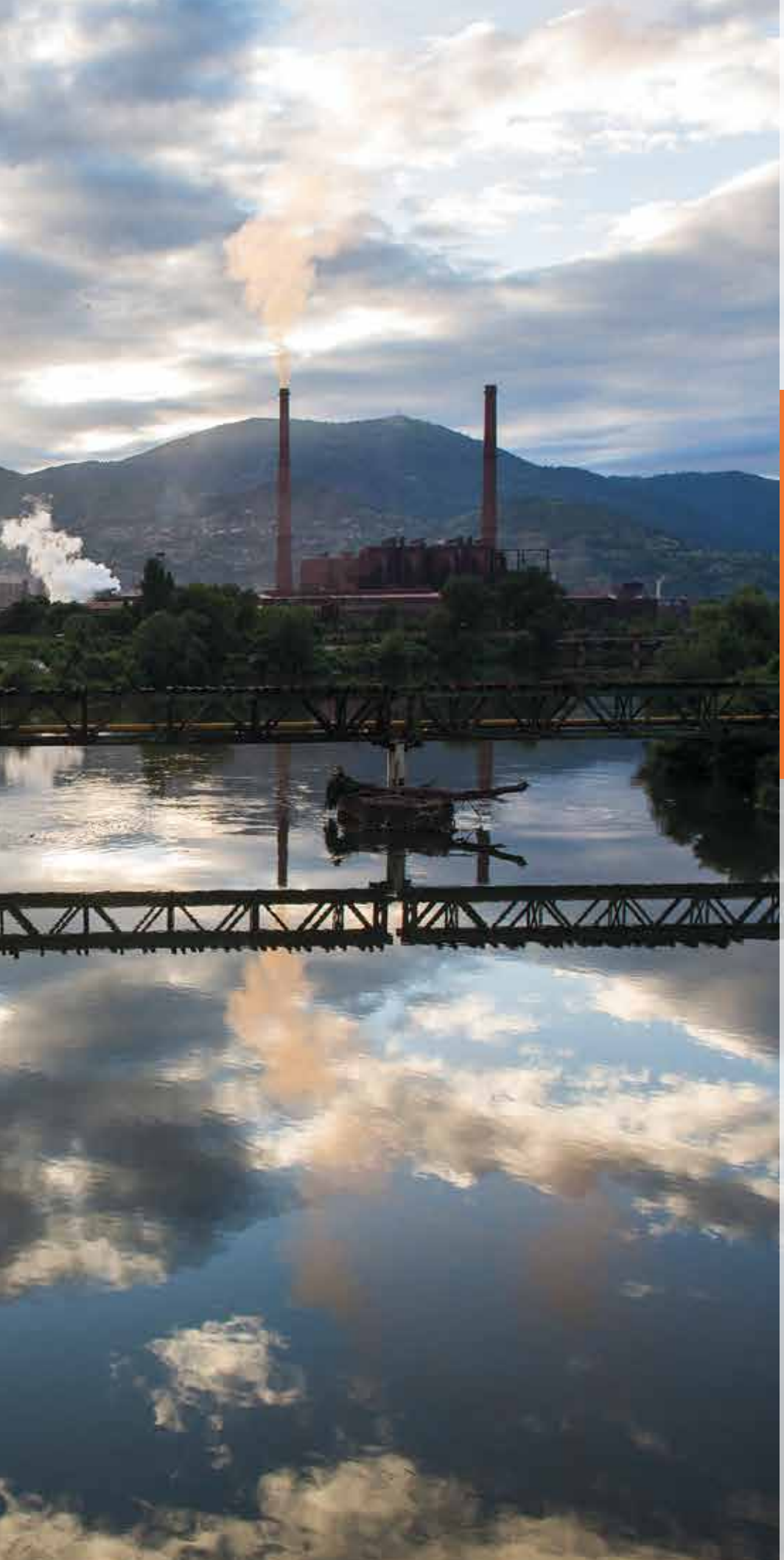
57 Arnika, Eko forum Zenica, Environmental Democracy in BiH – Limping Along: Alternative Report on the Implementation of the Aarhus Convention in Bosnia and Herzegovina (2015), page 54, 59, and 89 [http://english.arnika.org/e-shop/publications/environmental-democracy-in-bih-limping-along].

58 Arnika, Eko forum Zenica, Environmental Democracy in BiH – Limping Along: Alternative Report on the Implementation of the Aarhus Convention in Bosnia and Herzegovina (2015), page 51 [http://english.arnika.org/e-shop/publications/environmental-democracy-in-bih-limping-along].

59 Arnika, Eko forum Zenica, Environmental Democracy in BiH – Limping Along: Alternative Report on the Implementation of the Aarhus Convention in Bosnia and Herzegovina (2015), page 54 [http://english.arnika.org/e-shop/publications/environmental-democracy-in-bih-limping-along].

60 Article 116 of the Law on Environmental Protection.

61 The current Bosnian version of the "European Pollutant Release and Transfer Register" (PRTR) with a restricted access is available under http://prtr.fmoit.gov.ba/login.aspx?ReturnUrl=%2f.



and/or objections they may have, is key in fulfilling the purpose of the environmental permitting process. Withholding this information might backfire against the authorities themselves as the civil society organizations representing the public can point to a number of relevant issues concerning respective operations that the authorities might not otherwise consider in their decisions.

2.3. Environmental Permitting Process in the Czech Republic

The IPPC process in the Czech Republic is governed by the Act on Integrated Pollution Prevention and Control (IPPC Act)[62] that transposes the Industrial Emissions Directive.[63] The following state and regional administration bodies participate in fulfilling obligations of the IPPC Act:

1. Ministry of Industry and Trade – formulates industrial and energy policy in the context of the EU single market and operates the IPPC portal,[64]

62 Act No. 76/2002 Coll., on Integrated Pollution Prevention and Control, on the Integrated Pollution Register and on amendment to some laws, as amended.

63 Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control).

64 Ministry of Industry and Trade, Competence of the Ministry (2014) [http://www.mpo.cz/dokument1926.html].

2. Ministry of the Environment – formulates environmental policy in the areas of air, water, and soil protection.[65] (The Ministry of the Environment issues environmental permits only for facilities with significant, negative cross-border impact),[66]
3. Ministry of Agriculture – formulates agricultural policy in relation to IPPC,[67]
4. Czech Environmental Inspectorate – performs control and compliance activities with the IPPC Act, and imposes sanctions,[68]
5. CENIA (Czech Environmental Information Agency) – issues expert opinions for authorities issuing IPPC permits,[69]
6. Regional authorities[70] – issue the IPPC permits.[71]

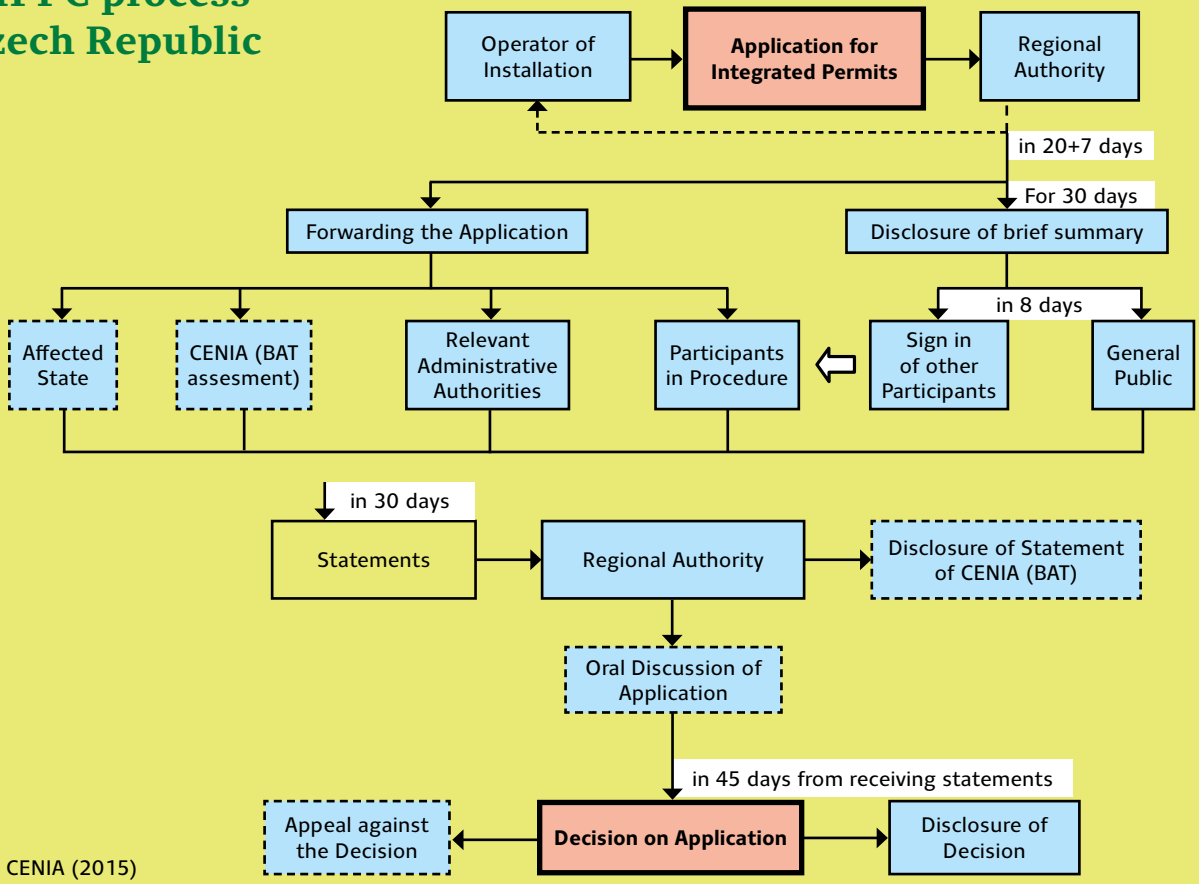
Unlike in BiH, the integrated permits are issued at the regional level, while the IPPC related policy is formulated at the state (ministerial) level. It is also evident that, though several ministries are involved in the IPPC process, their competence is clearly defined and does not overlap.

In the Czech Republic, as well as other EU Member States that implemented the IPPC Directive/Industrial Emissions Directive (and related processes), only industrial and agricultural operations – energy industry, production and processing of metals, mineral industry, chemical industry, waste management, and other operations, such as livestock farming – exceeding the threshold values stated therein require the integrated permit.[72] Other operators, not exceeding the threshold values, can file for the integrated permit on a voluntary basis. The intention is not to license all industrial and agricultural activities, but only those with a high pollution potential. Such an operator initiates the IPPC process by filing an application for the integrated permit to the relevant regional authority.[73]

The application needs to contain all the statutory requirements[74] and its model version is for facilitating purposes included in the legislation implementing the IPPC Act.[75] Once the regional authority receives the application, it assesses its completeness within 20 days following receipt. In the event an incomplete application is received, the regional authority requests that it be corrected and sets a suitable deadline for it (usually between one week and 30 days). The IPPC process is suspended until the application is corrected.[76]

65 Ministry of Environment, History and Competence of the Ministry (2015) [http://www.mzp.cz/cz/ministerstvo].
66 Ministry of Environment, IPPC – Integrated Prevention and Pollution Limitation (not dated) [http://www.mzp.cz/ippc].
67 Ministry of Agriculture, About the Ministry of Agriculture (2015) [http://eagri.cz/public/web/en/mze/ministry/].
68 Czech Environmental Inspectorate, Overview of the activities of the Czech Environmental Inspectorate and competencies in individual segments of environment (2015) [http://www.cizp.cz/O-nas/Pusobnosti]
69 CENIA (Czech Environmental Information Agency), Integrated Prevention Department (2012) [http://www1.cenia.cz/www/oddeleni-integrovane-prevence].
70 The Czech Republic consists of 13 regions and one capital (Prague) with the status of a region. Each region has a regional authority (bureau) exercising state administration in matters entrusted by special regulation.
71 Ministry of Industry and Trade, State administration authorities (2009) [http://www.ippc.cz/obsah/kontakty-a-odkazy/organy-statni-spravy/#praha].
72 The list of industrial and agricultural operations requiring the IPPC permit is stated in Annex 1 to the IPPC Act and mirrors the list included in Annex 1 of the IPPC Directive.
73 See Article 3 of the IPPC Act.
74 The requirements of the integrated permit application are included in Article 4 of the IPPC Act. It is quite a complex application that, in addition to the identification of an applicant and industrial or agricultural facility, needs to contain quite a detailed description of the operation, processes, and technology used, emission sources, measures to monitor emissions and prevent waste, suggest the binding conditions of operation, and be accompanied by relevant submission documents (e.g., zoning permits, relevant administrative decisions, etc.). If the facility uses, produces, or discharges dangerous substances that may pollute soil or water, applicant needs to submit a basic report (in Czech „základní zpráva") according to Article 4a of the IPPC Act prepared by a competent person for the approval of the regional authority. The report helps to determine the degree of soil or water contamination to facilitate a reasoned comparison with the conditions when the operation of a facility is fully completed.
75 The Decree No. 288/2013 Coll., which establishes model application for integrated permit, is an implementing legislation to the IPPC Act.
76 See Article 3 of the IPPC Act.

Table 2: IPPC process in the Czech Republic



Source: Jan Kolář, CENIA (2015)

If the application is assessed as complete, the regional authority sends it within seven days for comments to relevant administrative authorities and participants of the IPPC process.[77] On its official notice board,[78] the relevant regional authority also publishes, for the period of 30 days, a brief summary of data on the application as well as information when and where the application can be copied and notes and excerpts taken therefrom. Anyone (i.e., not only participants to the procedure) can submit comments to the application within this deadline. In case of any industrial or agricultural operation that might have a cross-border effect, the relevant regional authority also sends the application to the neighbouring state.[79]

The participants and administrative authorities, to which the relevant regional authority sent the application, may comment on it within 30 days of receipt. The relevant regional authority decides on the application within 45 days of the receipt of comments from all stakeholders.[80]

In the Czech Republic, oral hearing is an optional part of the IPPC process that is mostly conducted by way of exchange of written submissions and documentation. Under the IPPC Act, oral hearing is only mandatory if the participant to the procedure requests the oral hearing in its comments to the application.[81] This is not at all unusual. Most administrative proceedings, unlike court proceedings, are conducted without scheduling oral hearing. In its own initiative, the regional authority usually resorts to oral hearing in exceptionally complex cases that require many clarifications and where it is more efficient to hear all the comments from all relevant stakeholders all at once and in person.

To assess the application, the regional authority may, in addition to its own expertise, rely on the expertise of the so-called *"competent person"* (in Czech, *"odborně způsobilá osoba"*)[82] and request an expert opinion on the

77 Pursuant to Article 7 of the IPPC Act, the participants are always the facility operator and owner (if not an operator), district and region where the facility is or should be situated, and civil society organizations representing public interest.

78 In addition to regular notice board, all public authorities are also obliged to maintain an electronic notice board (usually a section of their website) – widely used by civil society organizations as an information source.

79 See Article 8 of the IPPC Act.

80 See Article 13 of the IPPC Act.

81 See Article 12 of the IPPC Act.; In the most cases, civil society organizations are those participants of the IPPC process that request public hearing.

82 A *competent person* (in Czech "odborně způsobilá osoba") is a legal entity or natural person with relevant expertise in the fields within the scope of the IPPC Act (e.g., application of BAT, emission limits, environmental legislation, etc.).

application of BAT (best available techniques), or in exceptionally complex cases, on the entire application. Competent persons are authorized to provide expert opinions by the Ministry of Environment and included in the list of competent persons maintained by the Ministry. Should a competent person be needed, the regional authority can either contact a company on the list of competent persons maintained by the Ministry of Environment, or more commonly, contact CENIA (Czech Environmental Information Agency), the only competent person providing expert opinions to state authorities free of charge.

A key aspect of the IPPC process is to determine, based on BAT, binding conditions of operation and emission limits for a given industry. In determining BAT, the regional authority takes into consideration aspects stated in Annex No. 3 to the IPPC Act. The regional authority compares concrete and suggested technology, production, and manufacturing processes with BAT, in particular, in terms of emission of pollutants into the atmosphere.[83] Determining BAT is an intellectual process of the regional authority (respective officer). While a lawgiver provides the regional authority with the basis to determine BAT, set emissions limits, and decide on the integrated permit, the regional authority needs to consider the facts of each case individually to be able to set reasonable conditions for its operation.

Every decision of the regional authority on the integrated permit application can be appealed within 15 days following its delivery. Once the decision comes into legal effect, it is published on the official notice board (and the Internet) for 30 days.[84] The conditions set in the permit for particular industrial and agricultural operation are binding. Under the IPPC Act, the operator must submit an annual report to the regional authority detailing how it fulfils the conditions set out in the integrated permit.[85] At least every eight years, the regional authority reviews whether circumstances have not changed that may lead to the change of the binding conditions of the integrated permit.[86] If, during those eights years, the production and technologies used for it improve and develop in such a way so as to make the operation more environmentally friendly, the regional authority usually resorts to setting stricter conditions of operation in order to motivate the facility to invest in new technologies with less impact on the environment.

If the operator does not comply with the conditions of the integrated permit, the regional authority or inspection authority usually begins imposing remedial measures on the operator before resorting to fines. The fines are not in any way symbolic. Depending on the degree of breach of the IPPC Act and the conditions of the integrated permit, the fine can range from CZK 2,000,000 to CZK 10,000,000 (approximately €70,000 to €350,000), and may be imposed repeatedly, thereby being potentially liquidating for the operator.[87]

The inspection authority (the Czech Environmental Inspectorate) checks not only compliance with the conditions of the integrated permit, but also overall compliance with the IPPC Act. For every calendar year, the inspection authority prepares a control plan for facilities falling under the IPPC Act based on which it prepares the plan of standard controls. The time between individual controls is determined on the basis of systematic evaluation of risks that the given facilities pose to the environment and ranges between one (highest risk) and three years (lower risks).[88]

83 See Article 14 of the IPPC Act.
84 See Article 13 of the IPPC Act.
85 See Article 16a of the IPPC Act.
86 See Article 18 of the IPPC Act.
87 See Article 37 of the IPPC Act.
88 See Article 20b of the IPPC Act.

There are currently around 1,708 facilities subject to the control of the inspection authority (or more precisely, its regional branches).[89] The fact that the inspection authority occasionally conducts extraordinary controls (e.g., in case of accident or complaint from the public) and repeated controls on spot (e.g., in case of serious breach of the conditions of the integrated permit) evidences the demands placed on the bureau in terms of frequency and extent of the controls.[90] Aggregate data for 2014–2015 suggests around 600 controls were conducted.[91]

The Ministry of the Environment operates the IPPC information system – a nationwide information system that is a part of the uniform information system on environment and enables the public free-of-charge and unrestricted access to information pursuant to the IPPC Act. The publicly accessible database allows searching for operators, the issued integrated permits, evaluation of BAT, information on pending IPPC processes, etc.[92] The system also serves as a functional archive of the published documents related to integrated permitting, in general, and the IPPC process, in particular.[93] The Ministry has authorized the Czech Environmental Agency to operate the Integrated Pollution Register[94] as a publicly accessible database where operators report the generated pollution that exceeds the set limits. The failure to report, or reporting of false information, can result in fines up to CZK 500,000 (approximately €25,000).[95]

In the Czech Republic, most large industrial and agricultural facilities have gone through the IPPC process. Though bureaucratic and heavy on paperwork, the IPPC process in the Czech Republic is a functional procedure governed by well-structured regulation (IPPC Act) with clear rights and obligations of relevant stakeholders, guaranteed safeguards of participants' procedural rights, and a well-established enforcement mechanism.

Although the majority of the IPPC Directive (or more precisely Industrial Emissions Directive) has been successfully implemented in the Czech legal order, we would like to point out two practical issues that have arisen in the course of the implementation, which may have potentially jeopardized the participation of the public in the IPPC process: the definition of the *"public concerned"* (*„dotčená veřejnost"*) and restriction of access to information on the basis of *"protected information."* These issues can serve as an example of lessons learnt for BiH and issues to pay attention to when implementing the IPPC Directive (and the Industrial Emissions Directive). It needs to be noted that these examples reflect legal status as of 2015 when the study was drafted, and given the legislative changes, they may no longer be topical.

The IPPC Act distinguishes two forms of public participation:

1. The right of the general (broad) public, i.e to comment on the submitted integrated permit application pursuant to Article 8 (2) of the IPPC Act, and
2. "Full-fledged" participation in the IPPC process pursuant to Article 7 (1) and (2) of the IPPC Act, including the right appeal and to initiate review before administrative courts.

89 Antonín Kroupa, Data from the control activities of the Czech Environmental Inspectorate, November 2015 [http://www.ippc.cz/dokumenty/DF0640/prezentace/data-z-kontrolni-cinnosti-cizp].
90 See Article 20b of the IPPC Act.
91 Czech Environmental Inspectorate, Annual Report 2014 (2014) [http://www.cizp.cz/files/=4623/vyrocni%20zprava.pdf]; Czech Environmental Inspectorate, Annual Report 2015 (2015) [http://www.cizp.cz/files/=5305/Vyrocni%20zprava%20%C4%8CI%C5%BDP%202015_final.pdf].
92 The database is available at www.mzp.cz/ippc.
93 Ministry of Environment, IPPC – Integrated Prevention and Pollution Limitation (not dated) [http://www.mzp.cz/ippc].
94 The Integrated Pollution Register is available at www.irz.cz.
95 Article 5 of the Act No. 25/2008 Coll., on the Integrated Environmental Pollution Register and the Integrated System of Compliance with Reporting Duty in Environmental Areas, and on amendments to other acts.

In addition to participants in the IPPC process pursuant to Article 7 (1), the IPPC Act, in light of the subsidiarity principle, extends in Article 7 (2) the scope of participants to a person who may be a participant pursuant to special legal regulations. Whereas, according to the decision of the Supreme Administrative Court,[96] the Rules of Administrative Procedure do not constitute special legal regulation to the IPPC Act.

Practically, this means that even if the requirements of Article 27 (2) of the Rules of Administrative Procedure[97] are fulfilled, such a person does not become a participant to the IPPC process. The Industrial Emissions Directive can serve as one of the guidelines for the interpretation of the above stated IPPC Act. Pursuant to Article 24 (1) and Annex I of the Industrial Emissions Directive, Member States shall ensure that the public concerned are given early and effective opportunities to participate in the IPPC process. Pursuant to Article 3 (17) of the Industrial Emissions Directive, the *"public concerned"* means the public affected, or likely to be affected by, or having an interest in the taking of a decision on the granting, or the updating of the integrated permit, or of permit conditions.

Member States shall ensure that, in accordance with the relevant national legal system, members of the *"public concerned"* have access to a review procedure before a court of law, or another independent and impartial body established by law to challenge the substantive or procedural legality of decisions, acts, or omissions in the IPPC process.[98] However, in the Czech legal order, these rights are guaranteed only to the participants of the procedure, not members of the public.

The enumeration of the participants in Article 7 (1) of the IPPC Act does not conform to the Industrial Emissions Directive's definition of the *"public concerned."* Members of the public may comment on the procedure, but their status and procedural rights are weaker than those of the participants (the application is not sent to them, they do not participate in oral hearings, etc.).

To ensure conformity with the Industrial Emissions Directive, the authorities need to correctly interpret Article 7 (2) of the IPPC Act that extends the scope of participants to those that could become participants under special legal regulations. The IPPC Act refers to a number of laws and regulations with the key provision to apply being Article 27 (2) of the Rules of Administrative Procedure that grants the participant status also to persons whose rights may be directly affected by the decision.

The determination of persons, which the administrative authority will treat as participants, is always the matter of the authority's judgment. In exercising such a judgment, the administrative authority needs to consider not only the Directive's requirements, but also the fact that, for the status of participant, a mere possibility is sufficient, i.e., reasoned assumption that the rights and obligations of a certain person will be directly affected by granting or changing the integrated permit. In individual cases, an array of rights (ownership, health protection, privacy, etc.) and a large number of people may be affected, which is also indicated by the nature of facilities falling under the integrated permit that usually have a sizable impact on the location.

This example shows how important it is to implement the Industrial Emissions Directive (and any EU directive for that matter) comprehensively. For the sake of safeguarding participants' rights, it would be much more suitable if the IPPC Act transposed the definition of the "*public concerned,*" and provided for ensuing substantial and procedural rights, rather than filling this loophole through interpretation that might be too restrictive and narrow the scope of potential participants.

Another issue that the Czech Republic has encountered while implementing the Industrial Emissions Directive relates to so-called

96 Decision of the Supreme Administrative Court, file no. 1 As 43/2011 – 53.
97 Article 27 (2) of the Rules of Administrative Procedure states that the participants may also be other concerned persons if they may be directly affected in their rights or obligations by the decision.
98 See Article 25 (1) of the Industrial Emissions Directive.

"protected data." The possibility to acquaint oneself with the submission documents relevant for the decision is a prerequisite to an effective participation in the IPPC process. For the sake of protecting certain public interests (typically business secrets), however, such a requirement may remain unfulfilled, often in contravention of the law. The reason might be an incorrect application of the protection of public interest pursuant to Article 8 (4) of the IPPC Act by the administrative authority. Pursuant to Article 8 (4) of the IPPC Act, the authority shall ensure the protection of business secrets, personal data, and other data protected pursuant to special laws and regulations.

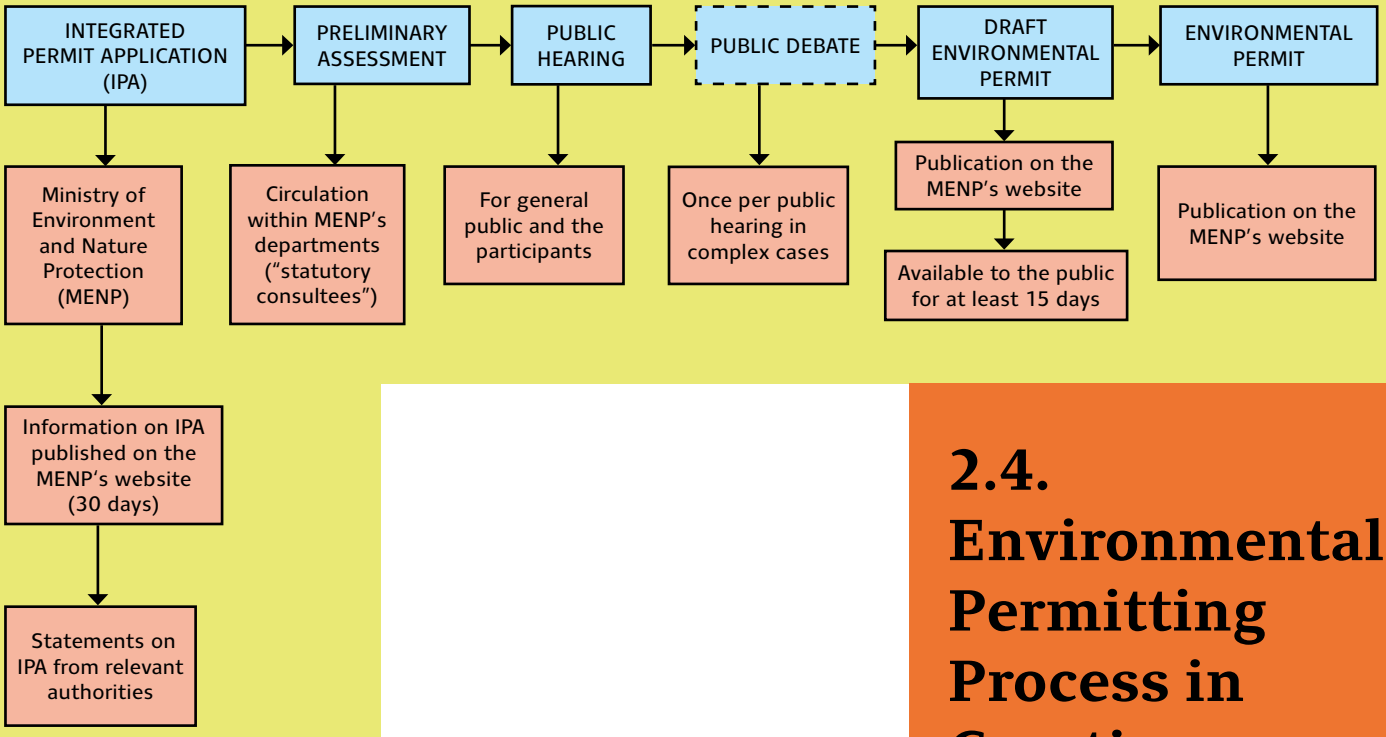
The operators often justify their request to protect the data by the existence of business secrets. The authority, however, is obliged to actively ascertain whether the information marked as confidential really fulfils the confidentiality criteria set by law. The situation when the administrative authority does not examine the conditions of confidential information, and considers any fact from the integrated permit application in reference to Article 8 (4) of the IPPC Act as confidential, is unacceptable.

Another issue relates to the possible application of data protection under Article 8 (4) of the IPPC Act, the question of its possible application to participants of the IPPC process and potential conflicts with the constitutionally enshrined right of the participant to consult the file and comment on the documents of an administrative decision. The IPPC Act does not explicitly deal with the process of consulting the file by participants and it is necessary to consult, in this regard, the provisions of Article 38 of the Rules of Administrative Procedure.

This provision states that the participant's right to consult a file can only be restricted in connection with the protection of clearly set public interests. These interests include the protection of classified information within the meaning of the Act No. 412/2005 Coll., on classified information and security eligibility or possibly data protection, which are subject to the legally imposed or recognized confidentiality duty. Even in such a case, the administrative authority should carefully consider whether the interests of the protection of such public interest is, in a particular case, stronger than the above rights as guaranteed by the Charter of Fundamental Rights and Freedoms.

Moreover, even if the information contained in the file is formally subject to the protection under Article 38 (6) of the Rules of Administrative Procedure, the participant's right to consult a file cannot be restricted when it comes to information used as evidence in the proceedings. Opinions may differ as to whether to interpret the provision of Article 8 (4) of the IPPC Act in relation to the participants of the IPPC process narrowly, i.e. within the scope of Article 38 (6) of the Rules of Administrative Procedure, or broadly. Exhaustive formulation of the reasons for which it is possible to restrict the participants' access to the information in the file, and also the application of the general principles of public administration as a service to the public, procedural equality of participants, and the principle of effective public participation in decision-making (as ensues from Article 27 et seq. of the Preamble of the IPPC Directive), might be in favour of a more restrictive approach. As this is quite a complex legal-theoretical issue, there might be an equal number of opinions favouring more lenient approach.

Table 3: IPPC process in Croatia



2.4. Environmental Permitting Process in Croatia

With a population of 4.3 million and landmass of close to 57,000 km^2, Croatia is demographically very similar to Bosnia. While its service-based economy is reliant on tourism, industry, agriculture, forestry, and fishing have accounted for almost 30 percent of GDP over the past few years.[99] Since 2013, Croatia has been a EU Member State and has been gradually implementing EU environmental acquis in its legal system. Since the first environmental performance review of Croatia carried out by the UN Economic Commission for Europe (UNECE) in 1999, Croatia has progressed significantly in strengthening the existing, and adopting new, environmental legislation in various sectors such as air quality or waste management.[100] At the same time, it has been quite slow in implementing this legislation, especially in these sectors.[101]

Though some need an update, Croatia has quite a record of accomplishment in preparing and implementing national environmental protection and strategy plans, which enables it to uniformly address challenges related to environmental protection and strategy for sustainable development for the whole country. While there is still room for strengthening institutional mechanisms, organizational structures, and scope of work, the environmental agenda is not as chaotically fragmented

99 United Nations Economic Commission for Europe, Environmental Performance Reviews, Croatia (2014), page 1 [https://www.unece.org/fileadmin/DAM/env/epr/epr_studies/ECE_CEP_172_En.pdf].

100 United Nations Economic Commission for Europe, Environmental Performance Reviews, Croatia (2014), page xviii [https://www.unece.org/fileadmin/DAM/env/epr/epr_studies/ECE_CEP_172_En.pdf].

101 United Nations Economic Commission for Europe, Environmental Performance Reviews, Croatia (2014), page 14 [https://www.unece.org/fileadmin/DAM/env/epr/epr_studies/ECE_CEP_172_En.pdf].

as in BiH. The Ministry of Environment and Nature Protection is responsible for formulating environmental policy and other tasks related to protection and conservation of the environment and institutions, such as the Croatian Environment Agency or the Environmental Protection and Energy Efficiency Fund, which provide, under the Ministry's competence, additional oversight of environmental policy and information.[102]

Croatian industry's compliance with IPPC requirements and emission limits has required significant financial investments over time. For this purpose, agreements have shifted the financial costs for favorable loans to Croatian industries between the Ministry of Economy and the Croatian Bank for Reconstruction and Development.[103] Transitional periods for reducing emissions of certain facilities (large combustion plants) were granted until 2020.[104]

The environmental permitting process in Croatia is governed by a set of laws, of which the most relevant are: the Environmental Protection Act,[105] Environmental Permit Regulation,[106] and the Regulation on Limit Values for Pollutant Emissions from Stationary Sources into Air.[107] Croatia has transposed the Industrial Emissions Directive into its own legislation by the Air Protection Act[108] and Regulation on Limit Values for Pollutant Emissions from Stationary Sources into Air.[109] The 2007 Environmental Protection Act,[110] the 2008 EIA Regulation,[111] and the 2008 Regulation on the Procedure for Establishing Integrated Environmental Protection Requirements[112] transposed the IPPC Directive.[113]

Subject to the environmental protection requirements are new installations, reconstruction of existing installations, and existing installations that fall under activities set out in annex to the Regulation on the Procedure for Establishing Integrated Environmental Protection Requirements. Like the Czech Republic, Croatia does not license all industrial and agricultural facilities, only those with significant environmental impact exceeding thresholds stated in the Industrial Emissions Directive/IPPC Directive (as implemented in the above mentioned regulations).

Similar to BiH, the environmental permits are issued by ministries, in particular, the Ministry of Environment and Nature Protection (MENP). The process, briefly, comprises the following steps. The application for environmental permit is submitted to MENP, which makes a preliminary assessment of it and circulates it within its various departments as "statutory consultees" for a review; it publishes the submitted requests for obtaining the environmental permit, changes and/or additions thereto on its website for at least 30 days. Under Croatian legislation, the public (not only participants to the procedure) may participate at a public hearing/

102 United Nations Economic Commission for Europe, Environmental Performance Reviews, Croatia (2014), page xviii [https://www.unece.org/fileadmin/DAM/env/epr/epr_studies/ECE_CEP_172_En.pdf].
103 United Nations Economic Commission for Europe, Environmental Performance Reviews, Croatia (2014), page 34 [https://www.unece.org/fileadmin/DAM/env/epr/epr_studies/ECE_CEP_172_En.pdf].
104 European Commission, Commission Decision of 19.9.2014 on the notification by the Republic Croatia of a transitional national plan in Article 32 of Directive 2010/75/EU on industrial emissions (2014), page 5 [https://circabc.europa.eu/sd/a/b3c164d6-9099-4382-9675-80e846667ffe/Croatia%20TNP%20-%20Commission%20Decision%2019-09-2014%20(EN%20version).pdf].
105 Environmental Protection Act (Official Gazette 80/13, 78/15).
106 Environmental Permit Regulation (Official Gazette 8/14).
107 Regulation on limit values for pollutant emissions from stationary sources into air (Official Gazette 117/12, 90/14).
108 Air Protection Act (Official Gazette 130/11, 47/14).
109 Official Gazette 117/12, 90/14; Ministry of Environmental and Nature Protection, Implementation plan for transferring EU legislation in the field of climate change (2014), page 21 [http://www.loc-see.eu/uploads/documents/plans/Implementation%20Plan_Croatia.pdf].
110 Environmental Protection Act (Official Gazette 110/07).
111 EIA Regulation (Official Gazette 64/08).
112 Regulation on the procedure for establishing integrated environmental protection requirements (Official Gazette 114/08).
113 United Nations Economic Commission for Europe, Environmental Performance Reviews, Croatia (2014), page 33 [https://www.unece.org/fileadmin/DAM/env/epr/epr_studies/ECE_CEP_172_En.pdf].

debate concerning the environmental permit and raise concerns about environmental impacts of a facility and/or objections to its operation.[114]

The draft permit is made available to the public for at least 15 days after publication on the MENP's website during which the public may submit comments on the draft. Before issuance of the environmental permit, MENP may, if necessary, carry out additional consultations with the competent authorities and/or the operator. The final environmental permits are published on the MENP's website and are valid for five years.[115]

In 2009, Croatia established the Environmental Pollution Register (EPR). In 2012, the Croatian National Portal of the EPR,[116] a publicly accessible portal established to fulfill international obligations under the Law on Ratification of the Protocol on Pollutant Release and Transfer Register (PRTR) related to the Convention on Access to Information, Public Participation in Decision-making, and Access to Justice in Environmental Matters (Aarhus Convention)[117] was released. The portal provides access to information on the release and transfer of pollutants and waste in order to allow public participation in decision-making on the environment, thus contributing to the reduction of pollution to air, water, sea, and soil.[118]

114 United Nations Economic Commission for Europe, Environmental Performance Reviews, Croatia (2014), page 39 [https://www.unece.org/fileadmin/DAM/env/epr/epr_studies/ECE_CEP_172_En.pdf].
115 United Nations Economic Commission for Europe, Environmental Performance Reviews, Croatia (2014), page 39 [https://www.unece.org/fileadmin/DAM/env/epr/epr_studies/ECE_CEP_172_En.pdf].
116 The portal is available under hnproo.azo.hr.
117 Official Gazette 4/08.
118 European Environment Agency, Croatia (2015) [http://www.eea.europa.eu/soer-2015/countries/croatia].

As in the Czech Republic, industrial operators must carry out environmental self-monitoring and report the aggregated pollutants' data to the EPR. Exceeding the emission limits is required to be reported to local authorities and the MENP's directorate for inspection affairs (sector for environmental inspection).[119] In February 2013, it was included by the Secretariat of the Aarhus Convention in the PRTR.net global portal on the release and transfer register of pollutants around the world.[120]

The Croatian system of inspections largely follows Recommendation 2001/331/EC providing minimum criteria for environmental inspections, which was transposed into the 2007 Environmental Protection Act. The conduct of environmental inspections is delegated to the MENP's Directorate for Inspection Affairs.[121] The inspection authority carries out routine and surprise visits, as well as thematic visits and site visits that follow complaints or requests from other authorities. In cases of non-compliance, the inspection authority usually imposes corrective measures and fines. The fines are high enough to motivate the operator to make its facility environmentally compliant.[122]

As evident, Croatia has made much more progress in developing the IPPC process than Bosnia. Compared to the IPPC system in the Czech Republic, further efforts would be beneficial in several areas. The Croatian IPPC process is thought to be too lengthy and suffers from complex application and lack of clarity for stakeholders. Guidance is missing on how to prepare integrated permit applications, determine permit conditions, or assess best available techniques (BAT) and use BAT reference documents (BREF), which may lead to inconsistent applications and interpretation problems in implementing and enforcing permit conditions. Similarly, statutory consultees who review permit applications would need clear instructions to deal with IPPC applications given the differences with the previous media-based approach to environmental permitting. Overall, the process, including the communication with statutory consultees and participants, could be shortened.[123]

Despite the prevailing room for improvement, Croatia has created particularly solid foundations of the IPPC system embedded in legislation that has transposed both the IPPC and the Industrial Emissions Directive and made significant efforts to ensure, in practice, that the IPPC system is results-oriented, transparent, and participative.[124] Unlike in Bosnia, the Croatian public does not need to initiate protests to induce authorities to take action on environmental matters. Public participation in environmental decision-making procedures is safeguarded and authorities give concerns of environmental impact of particular industrial operations due consideration.

119 United Nations Economic Commission for Europe, Environmental Performance Reviews, Croatia (2014), page 42 [https://www.unece.org/fileadmin/DAM/env/epr/epr_studies/ECE_CEP_172_En.pdf].

120 European Environment Agency, Croatia (2015) [http://www.eea.europa.eu/soer-2015/countries/croatia].

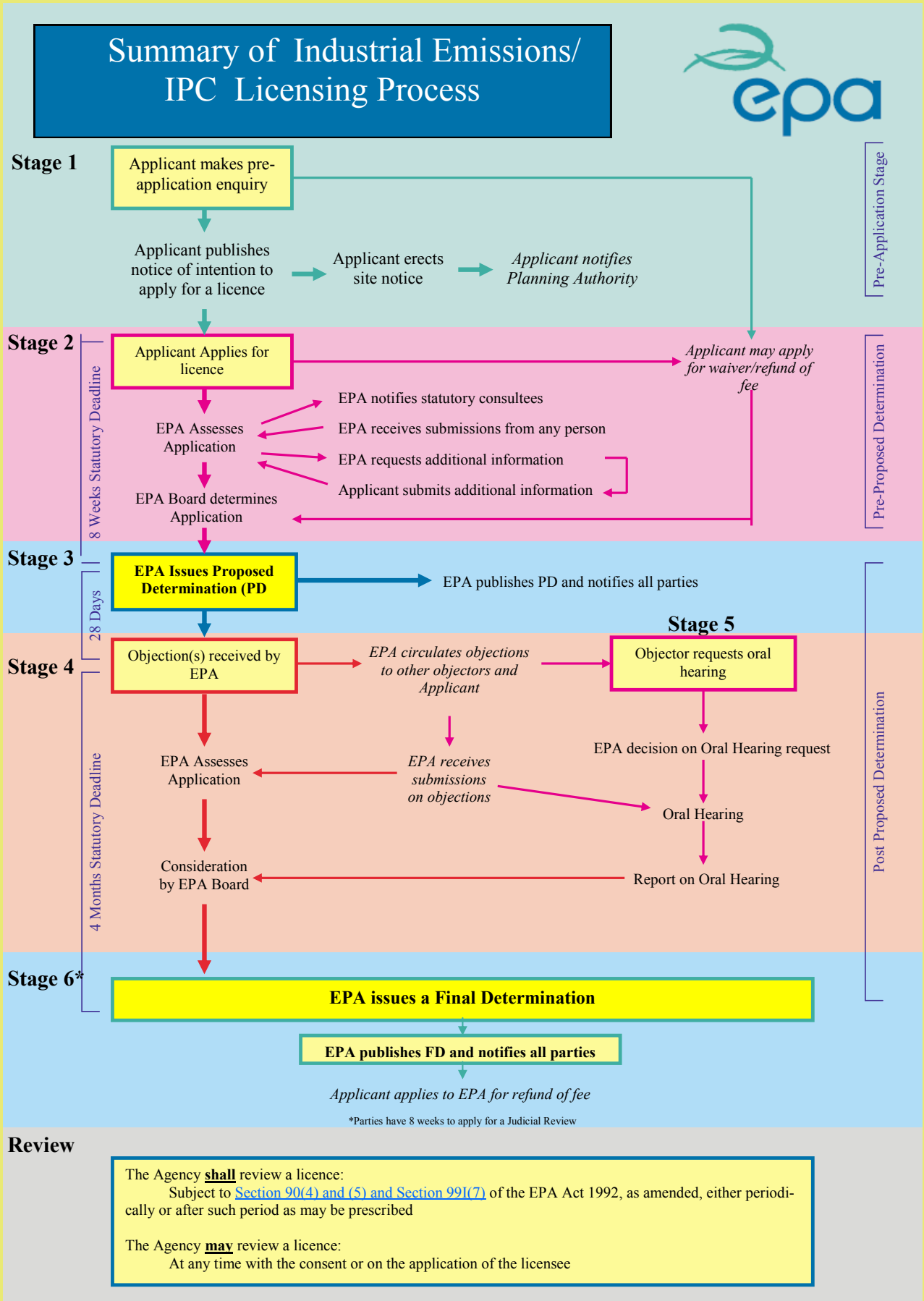
121 United Nations Economic Commission for Europe, Environmental Performance Reviews, Croatia (2014), page 31 [https://www.unece.org/fileadmin/DAM/env/epr/epr_studies/ECE_CEP_172_En.pdf].

122 United Nations Economic Commission for Europe, Environmental Performance Reviews, Croatia (2014), page 31 and 43 [https://www.unece.org/fileadmin/DAM/env/epr/epr_studies/ECE_CEP_172_En.pdf].

123 United Nations Economic Commission for Europe, Environmental Performance Reviews, Croatia (2014), page 39 [https://www.unece.org/fileadmin/DAM/env/epr/epr_studies/ECE_CEP_172_En.pdf].

124 United Nations Economic Commission for Europe, Environmental Performance Reviews, Croatia (2014), page 47 [https://www.unece.org/fileadmin/DAM/env/epr/epr_studies/ECE_CEP_172_En.pdf].

Table 4: IPPC process in Ireland



Source: Environmental Protection Agency, 2015

2.5. Environmental Permitting Process in Ireland

Originally an agricultural then service-based, knowledge economy with focus on high-tech industries, Ireland has not developed a heavy industrial base like Bosnia. Nonetheless, Ireland is a good example of a country with an Anglo-Saxon legal culture, and similar geographical size to Bosnia, which presents another alternative to regulating the IPPC process. In Ireland, the integrated permits are issued and the procedure conducted by an independent public body – Environmental Protection Agency – established under Ireland's Environmental Protection Agency Act. Although the agency's responsibilities, in addition to environmental licensing and enforcement of environmental law, comprise activities to support policy development (such as environmental planning, analysing and reporting, environmental research development, strategic environmental assessment, and waste management), the Environmental Protection Agency (EPA) is not a policymaker.[125]

As with all countries that have adopted the European IPPC directives, Ireland also licenses only specified industrial and agricultural facilities with high pollution potential that are listed in the first schedule to the EPA Act of 1992 (as amended). The IPPC

125 More information on the Environmental Protection Agency is available at www.epa.ie.

process is governed by a series of legal regulations, the most relevant of which are the EPA (Industrial Emissions) (Licensing) Regulations[126] and the EPA Act of 1992 (as amended). It comprises three stages: the pre-application stage, pre-proposed determination stage, and post-proposed determination stage. Before filing an application, the applicant must publish a notice in a local newspaper, post a notice on the site indicating that it proposes to apply for a license, and notify the planning authority. The contents of the notice are outlined in the EPA (Industrial Emissions) (Licensing) Regulations, 2013 (S.I. No. 137 of 2013). As in the Czech Republic, the Irish Environmental Protection Agency also provides a special application form available online for easy licensure filing.[127]

Once EPA receives the application, it has eight weeks to assess it before making the so-called "proposed determination," in which it indicates how it will determine and decide on the application. During the assessment period, the EPA may request additional information and receive supplemental submission to the application. It also publishes a newspaper notice indicating how the EPA proposes to determine the application and makes the proposed determination available for public inspection on this website. Within 28 days of the proposed determination issuance, anyone (not only participants to the procedure) can make an objection to the proposed determination.[128]

Like the Czech Republic, oral hearing is an optional part of the IPPC process and the EPA has to conduct it if an objector requests so in valid objection. In arriving at a decision, the EPA considers the application and all objections, submissions received, and where an oral hearing has been held, the report and recommendation of the persons who conducted the hearing. The decision is made available for inspection on the EPA website and published in a local newspaper.[129]

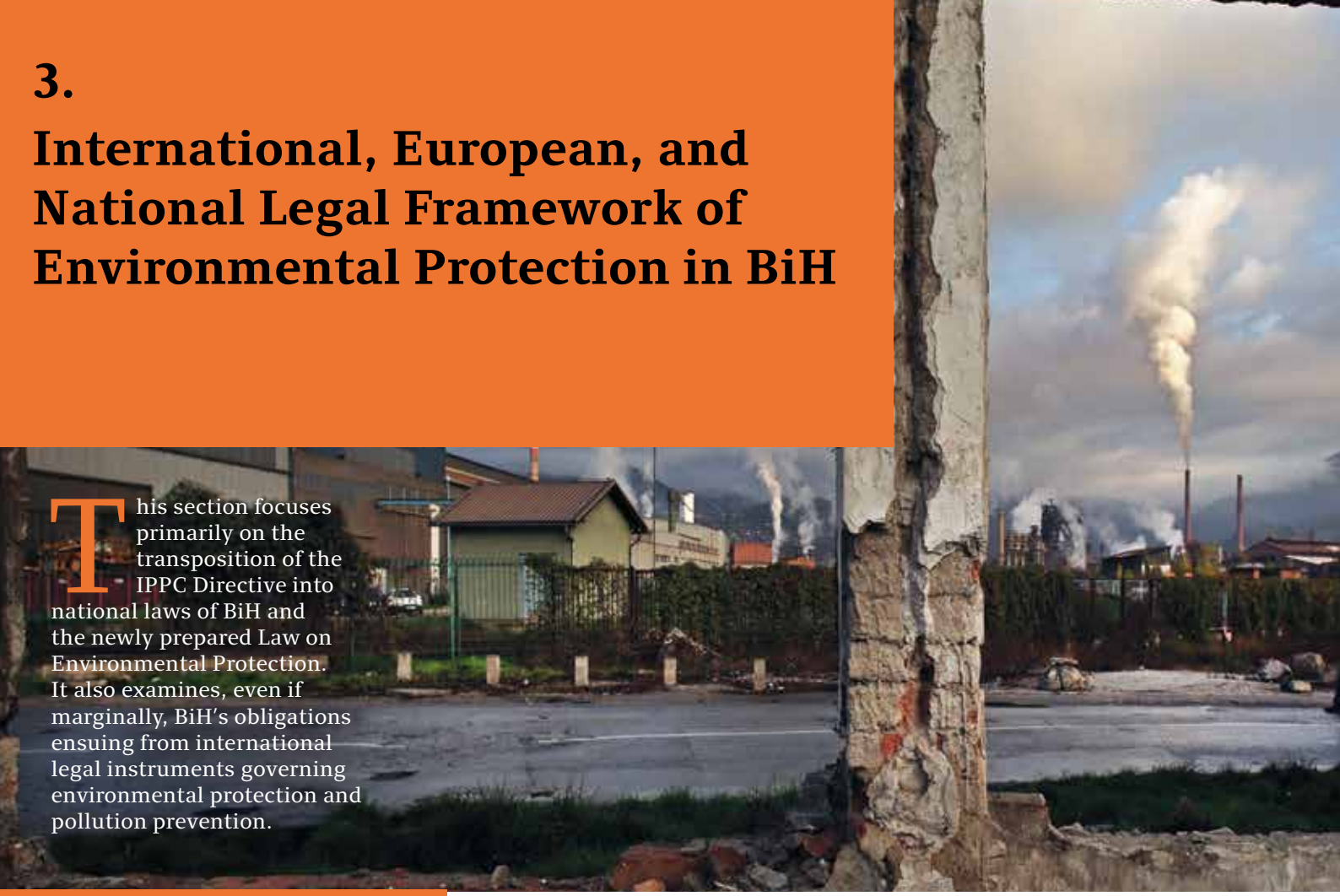
Any person who feels that a decision of the EPA has violated his/her rights may apply to the High Court for a judicial review of the decision. It is not so much concerned with the decision itself and whether it was right, but with whether the law has been correctly applied and whether the correct procedures were followed. It is not an appeals process. The court will not substitute its opinion for that of the public authority, but may compel the public authority to act, prohibit it from taking unlawful decision, or set the decision aside.[130]

The EPA maintains a publicly accessible database of all licensed facilities.[131] There are currently over 800 licensed facilities subject to inspection and monitoring. According to the environmental inspection plan, the EPA (or more precisely, its regional offices) carries out routine inspections of the facilities' compliance with the license conditions. In addition, the inspectors may carry out surprise inspections in case of accidents or serious non-compliance. Through the Licence Enforcement Access Portal (LEAP), available in EPA's regional offices, the public can gain access to enforcement-related correspondence and inspection activities for all licensed sites.[132]

Of the countries analysed in this study, Ireland is unique in that it established a specialized independent public agency to handle the entire IPPC agenda, from issuing integrated permits to enforcing their conditions. The country can also serve as an example of using local newspapers and the Internet to make IPPC-related decisions and correspondence available to the public. In terms of regulation governing the IPPC process, the Anglo-Saxon legal tradition leaves significant room for interpretation and reliance on case law.

126 The EPA (Industrial Emissions) (Licensing) Regulations, 2013 (S.I. No. 137 of 2013).
127 The industrial emissions license application forms are available under http://www.epa.ie/pubs/forms/lic/industrial%20emissions/#.VrMxOsArInU.
128 Environmental Protection Agency, Industrial Emissions Licensing Process Explained (2016) [http://www.epa.ie/licensing/industrialemissionslicensing/licensingprocessexplained/#.VsRKzcArInU].
129 Environmental Protection Agency, Industrial Emissions Licensing Process Explained (2016) [http://www.epa.ie/licensing/industrialemissionslicensing/licensingprocessexplained/#.VsRKzcArInU].
130 Environmental Protection Agency, Industrial Emissions Licensing Process Explained (2016) [http://www.epa.ie/licensing/industrialemissionslicensing/licensingprocessexplained/#.VsRKzcArInU].
131 The database is available via the EPA website www.epa.ie.
132 Environmental Protection Agency, Environmental Inspection Plan (Inspection Plan for Industrial Emissions Directive, Integrated Pollution Control, and Waste License Installations) (September 2014), page 2 [http://www.epa.ie/pubs/reports/enforcement/iedinspectionplan/Environmental%20Inspection%20Plan.pdf].

3.
International, European, and National Legal Framework of Environmental Protection in BiH



This section focuses primarily on the transposition of the IPPC Directive into national laws of BiH and the newly prepared Law on Environmental Protection. It also examines, even if marginally, BiH's obligations ensuing from international legal instruments governing environmental protection and pollution prevention.

3.1.
BiH and Aarhus Convention

In 2008, BiH acceded to the Aarhus Convention[133] that became a part of the BiH's legal system, making BiH obliged to implement its provisions. The Aarhus Convention establishes the following rights of the public (individuals and their associations) with regard to the environment:

1. The right of everyone to access environmental information that is held by public authorities,[134]
2. The right to participate in environmental decision-making,[135]
3. The right to review procedures to challenge public decisions that have been made irrespective the two aforementioned rights or environmental law in general.[136]

The principles and obligations ensuing from the Aarhus Convention are reflected in a number of EU legal instruments and the national law of BiH. Of the EU legal instruments, the most important is the Industrial Emissions Directive, which sets out the IPPC process and specifies requirements for access to information and public participation. The Industrial Emissions Directive is yet to be transposed into the BiH legislation. At the national level, the Laws on Freedom of Access to Information adopted in the State of BiH[137] and in FBiH and RS in 2001 (Brčko District uses the State-level act) govern disclosure of information held by governmental bodies.[138]

Even though the Aarhus Convention is well transposed to the BiH's legal system, its practical application and enforcement is largely

133 Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters adopted in 1998 in the Danish city of Aarhus.
134 See Article 4 of the Aarhus Convention.
135 See Articles 6-8 of the Aarhus Convention.
136 See Articles 9 of the Aarhus Convention.
137 The Law on Freedom of Access to Information (Official Gazette No. 28/00, 45/07, 102/09, 62/11).
138 The Institution of Human Rights – Ombudsman of Bosnia and Herzegovina, Freedom of Access to Information (2015) [http://www.ombudsmen.gov.ba/Default.aspx?id=32&lang=EN].

inadequate. A major obstacle in this regard lies in the complex governance system and administrative structures (as described in section 1). In practice, the three-pillars of the Aarhus Convention (outlined above) are often breached. The majority of public requests for information are ignored or inadequately addressed, and when the response is provided, it does not happen within the statutory deadline. Undermining public participation by omitting public discussion in relevant decision-making is not a rarity, and access to justice is often deterred by relatively high court fees and lengthy (court) proceedings.[139]

In the case of "Medna" hydroelectric power plant, for example, the authorities refused to provide information concerning a concession agreement on the grounds of trade secret. After a lawsuit had been filed, the Ministry of Industry, Energy, and Mining of Republika Srpska disclosed the requested information, thereby enabling the Centre for Environment of Banja Luka to actively participate in decision-making procedures concerning construction and environmental permits.[140] In a number of other cases, such as that of a soda factory in Lukavac, protesters demanded, unsuccessfully, that authorities take action and provide relevant information.[141]

139 Arnika, EKO forum Zenica, Environmental Democracy in BiH – Limping Along: Alternative Report on the Implementation of the Aarhus Convention in Bosnia and Herzegovina (2015), page 33 [http://english.arnika.org/e-shop/publications/environmental-democracy-in-bih-limping-along].

140 Arnika, EKO forum Zenica, Environmental Democracy in BiH – Limping Along: Alternative Report on the Implementation of the Aarhus Convention in Bosnia and Herzegovina (2015), page 37 [http://english.arnika.org/e-shop/publications/environmental-democracy-in-bih-limping-along].

141 Recent and detailed account of the implementation of the Aarhus Convention can be found in the report "Environmental Democracy in BiH- Limping Along: Alternative Report on the Implementation of the Aarhus Convention in Bosnia and Herzegovina" prepared in collaboration of the environmental NGOs – Arnika (CZ) and EKO forum Zenica (BiH) and available at http://english.arnika.org/e-shop/publications/environmental-democracy-in-bih-limping-along.

3.2. BiH and the IPPC Directive

BiH is a potential candidate for EU membership. In June 2008, the Stabilisation and Association Agreement (SAA) between BiH and the EU was signed (in force since 1 June 2015) and BiH has since participated in the Stabilisation and Association Process. Because of the obligations ensuing from BiH's status as a potential candidate for EU membership, BiH needs to harmonize its legislation, including legal framework for the environment, with the EU legal framework. Currently, the directive that lays down rules on integrated prevention and control of pollution arising from industrial activities is the Industrial Emissions Directive that recast, among others, the IPPC Directive. Both of these directives introduce the IPPC process that does not exist in BiH. BiH has implemented some requirements of the IPPC Directive in the current Law on Environmental Protection of FBiH[142] and is working towards implementing the requirements of the Industrial Emissions Directive in the new (Entity-level) draft law on environmental protection (not yet enacted).

The extent to which the principles and requirements of the IPPC Directive are reflected in the Law on Environmental Protection of FBiH is included in the following table:

142 Law on Environmental Protection, Official Gazette of FBiH, No. 33/03.

IPPC Directive requirement	Transposition in BiH	Note
Integrated prevention and control of pollution arising from the activities listed in Annex I	Not transposed	The environmental permitting process is not integrated. Separate permits are issued for pollution of air, water, soil, and even for activities that extend beyond those listed in the IPPC Directive.
No new installations may operate without an integrated permit.	Not transposed	New installations require a permit, but not an integrated one, and the law requires a permit even for installations that do not fall under the IPPC Directive.
Contents of the permit application	Transposed	
Existing installations must operate in accordance with the IPPC Directive .	Not transposed	Existing installations, if permits are issued for them, operate in accordance with the law and conditions not compliant with the IPPC Directive.
The conditions of the permit shall be determined and the installation operated through the application of the best available techniques.	Transposed, but not fully applied in practice	The law contains a definition of the best available techniques as a basis for setting the emission values and conditions for the operation of the installation. However, BAT has not been developed for any other than the food industry.
Substantial changes in the operation require a permit.	Not transposed correctly	The law states that substantial changes in BAT require a permit review, but remains silent on obligations of both the operator and the competent authority if substantial changes in the operation occur.
Access to information and public participation	Not fully transposed	The law vaguely transposes the procedure for the purposes of public participation set out in Annex V to the Directive; how and where the information on particular stages of the permitting procedure is accessible is not always clear.
Access to justice	Transposed restrictively	The IPPC Directive requires that anyone is enabled to challenge the legality of decisions, acts, or omissions subject to the public participation provisions of the IPPC Directive; the law, however, restricts this right to the participants to the procedure only.[1]
Exchange of information	Not transposed	No current obligation to send the Commission the limit values by specific category of activities set in the IPPC Directive (Annex I), and BAT derived therefrom, exists.

1 The wording of the law is unfortunate. While it allows the public concerned to initiate a review of the legality of decisions, acts, or omissions, it also states that the members of the public concerned can do so only if they already participated in the first instance procedure, thus, giving this right only to participants of the procedure. In practice, even entities that do not constitute participants to the procedure file for a review and their submissions are accepted, though, the truth remains that the submissions may not be addressed or the review conducted duly and timely.

3.3. BiH and the Industrial Emissions (IE) Directive

The Industrial Emissions Directive has merged the IPPC Directive, and six other directives, into a single directive to clarify the interaction between these legal instruments and streamline many of its provisions. While the Industrial Emissions Directive is based on virtually the same principles as the IPPC Directive, it adds to it in the following ways. Since a low portion of permits reflecting the implementation of best available techniques (BAT) as indicated in relevant BAT reference documents (BREFs) have been identified across EU Member States, the Industrial Emissions Directive places greater emphasis on BAT conclusions derived from the BREFs for setting of permit conditions. These BAT conclusions should be adopted as implementing acts with legal effect, thus, it is expected that the implementation of BAT will be more clearly reflected in IPPC permits.[143]

As BAT is a dynamic concept that evolves over time, the permits need to be updated in order to foster ongoing environmental improvement in the industry. The Industrial Emissions Directive describes detailed rules on the review of permits and provides for the compulsory reconsideration of permits within four years of publication of decisions on BAT conclusions. The Industrial Emissions Directive further clarifies the legal status of BREFs and the role of various actors in the information exchange, which should ensure a high-quality outcome to the process and enhance the use of BAT conclusions in the implementation of the Directive. Compliance monitoring provisions have been further developed, a move that aims to adopt a risk-based approach to inspections and includes minimum frequencies for site visits.[144]

Regarding access to information and public participation, the Industrial Emissions Directive increases citizens' rights regarding access to information and, in particular, the need to make those decisions, which involve a deviation from BAT conclusions in the IPPC process or the use of the Internet to guarantee these rights, publicly available.[145]

While a EU-funded project is currently underway in BiH to implement the Industrial Emissions Directive, no law has been enacted that transposes this directive. The draft law shows that BiH has been trying to implement the IPPC Directive (and the Industrial Emissions Directive) into an act (Law on Environmental Protection of FBiH) that defines basic concepts and principles, sets out a method of environmental protection, and the role of state and regional administration. It is a framework act that can only be used in conjunction with other, more specialized, legislation. From a conceptual, structural, and systematic point of view, it is not the most fortunate solution to integrate specific procedural (IPPC permit) rules into a regulation that sets a framework for an array of other legislation related to environmental matters.

In jurisdictions where the IPPC process is well established and the IPPC Directive, or more precisely, the Industrial Emissions Directive well transposed, we can see that the core of the IPPC permit process is regulated in a separate act (e.g., the IPPC Act in the Czech Republic or EPA Act of 1992 in Ireland). As this solution has proved suitable over time, BiH should take this example and propose a singular piece of legislation that will deal specifically with the IPPC process, while maintaining the Law on Environmental Protection as a separate framework law. Given certain cultural similarities and the fact that BiH's law follows a civil law tradition, the IPPC Act of the Czech Republic and the IPPC process regulated therein could be taken as an example of a well-structured law and a functional IPPC process.

143 European Commission, Report from the Commission to the Council and the European Parliament: Report from the Commission on the implementation of Directive 2008/1/EC concerning integrated pollution prevention and control and Directive 1999/13/EC on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations (October 2015), page 4.

144 European Commission, Report from the Commission to the Council and the European Parliament: Report from the Commission on the implementation of Directive 2008/1/EC concerning integrated pollution prevention and control and Directive 1999/13/EC on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations (October 2015), page 5.

145 European Commission, Report from the Commission to the Council and the European Parliament: Report from the Commission on the implementation of Directive 2008/1/EC concerning integrated pollution prevention and control, and Directive 1999/13/EC on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations (October 2015), page 6.

3.4. "Tips and Tricks" on Drafting Suitable IPPC Law

The current Law on Environmental Protection (of FBiH) regulates an environmental permitting process that does not reflect the integrated approach to the protection of the environment required by relevant EU directives. While amendments have been made to the law to make it gradually compliant with the EU regulation, the (non-compliant) foundations of the law remain the same. Experience of many countries, including the Czech Republic[146] shows that "cutting and pasting" new provisions to the regulation that is built around different foundations and philosophy than the desired regulation often backfires, and it needs to be rewritten from scratch to achieve the desired purposes.

To avoid fragmentation between different Entities, BiH should adopt one law at the State level governing the IPPC process for the whole country. Given the significant political resistance to adopting any law and/or policy at State level, an advisable alternative is to adopt separate, yet harmonized laws at the Entity level, i.e., three laws governing the IPPC permit process in FBiH, RS, and Brčko District.

In preparing any legislation, it is necessary to make sure that it conforms to international legal instruments binding upon BiH (including relevant EU legislation) and national law. In particular, it needs to comply with laws and regulations of higher legal force, relevant case law (such as that of courts that unify country's legislation),[147] and become an organic part of the entire legal order. The law should have a clear organizational structure, be drafted unambiguously and understandably, and be logically divided into parts, chapters and/or other relevant sections.[148]

From the beginning, it is important to clearly define the scope of the act. The IPPC Act of the Czech Republic can serve as an example law where in the introductory purpose and subject clause the obligations of operators of installations, procedures for granting an integrated permit, establishment of an integrated pollution register, the manner of collecting information on emissions and transfers of substances registered in the register and the provision of data therefrom, competences of the public administration bodies, the system of exchange of information on BAT, and sanctions for breach of obligations should be stated. It should also define important terms such as "installation," "emission limit," "best available technique," etc. that will be used throughout the law. Indeed, most of these definitions (adjusted where necessary) can be adopted from the IPPC/Industrial Emissions Directive.[149]

In the following sections, the law would lay down the IPPC process. Since the IPPC process relates only to selected installations that exceed certain threshold limits, these installations and thresholds need to be specified. Again, perhaps the easiest solution is to adopt Annex I of the Industrial Emissions Directive where the installations and thresholds are specified and include it as an annex to the law. The Industrial Emissions Directive requires the integrated permit applications meet certain mandatory requirements. The law could either attach the model application in an annex or, similar to the Czech legislation, adopt an implementing regulation that will contain the model application.

It is crucial to adequately define the participants to the procedure and their corresponding rights. In drafting the respective provisions, the lawgiver in BiH needs to take into consideration that the Industrial Emissions Directive requires that the public concerned (i.e., anyone affected or potentially affected by the operation), and not only participants, have access to the procedure and judicial review before

146 A notable example is a socialist Act No. 40/1964 Coll., Civil Code that went through countless amendments before it was replaced by modern Act No. 89/2012 Coll., Civil Code.

147 In the Czech Republic, the legislation needs to conform to the case law of the Constitutional Court that unifies and interprets legislation.

148 In the Czech Republic, legislative rules of the government, adopted as a government resolution (it is not an act), unify the procedure of ministries and other central government authorities in adopting legal regulations and contain requirements as to the contents and form of the legal regulations.

149 See Article 2 of the IPPC Act.

the courts. In this regard, it is also important to realize that the IPPC process is an administrative procedure governed by additional special laws, such as the rules of administrative procedure,[150] which may grant participants procedural rights. Thus, the lawgiver needs to make sure that the law governing the IPPC process does not prevent a person, who would be a participant under such special laws, to exercise the rights of a participant in the IPPC process. In the Czech Republic, the intricacies of transposing the Industrial Emissions Directive, so as not to curtail the rights of the public to participate in the IPPC process, are outlined in section 2.3 of this study.

To enable participation, the public must remain informed throughout the IPPC process, not only about the participants' submissions, but also about the steps taken by the authorities in the IPPC process. Information needing to be communicated to the public is stated in Annex IV of the Industrial Emissions Directive. The Industrial Emissions Directive does not prescribe how the authority should communicate relevant information to the public, thus leaving the decision to the Member States.

Publication on authorities' notice boards and websites has proved cost-efficient in many Member States. Ireland, specifically, serves as an excellent example for BiH in terms of using a website to make IPPC-related documentation publicly available. Regional newspaper and obligatory notices on the site also proved to be a suitable and inexpensive means of informing local residents of the upcoming application and IPPC process. Since BiH's ministries currently issue the environmental permits, a part of respective ministries' website would need an additional tab reserved for announcements related to the IPPC process. If, in the future, the IPPC agenda was assigned to regional authorities, their websites could be redesigned accordingly.

150 Official Gazette of FBiH No. 2/98 and 48/99.

As regards setting of the binding conditions for the operation and determining the emission limits, the law needs to tackle BAT, BAT conclusions, and BREFs. While all three concepts should be defined in the law, it is neither necessary, nor suitable that all their texts are included therein. Regarding BAT, the law can implement (in the form of annex) the criteria for determining BAT as set out in Annex III of the Industrial Emissions Directive. BAT reference documents (BREFs) and BAT conclusions will be used to determine BAT. BREFs are European Commission documents that provide an overview of which technique and technology is, in a given field, on the level of BAT. As a living document, periodically updated, it would not be practical to include it in a law because any change in BREF would then require legislative amendment.

In order to make the implementation of BAT more clearly reflected in the integrated permits, the Industrial Emissions Directive places greater emphasis on BAT conclusions that are prepared to every BREF and constitutes an excerpt of the most significant parameters from the entire BREF. The BAT conclusions are approved by the European Commission, published in the Official Journal, and are binding upon Member States. Again, similarly as BREFs, it would be impractical to include the BAT conclusions in the new law. The Industrial Emissions Directive requires that they be used as references in setting up the conditions of a facility's operation. Drafting high-quality legislation is as important as applying it correctly. Setting up the conditions of operation and applying BAT and other reference documents is a complex task that requires analytical skills, sound judgment, and a reasoned approach; to achieve that, many Member States organize periodic trainings and draft manuals on the application of BAT.

Regarding changes, reviews, and updates of the integrated permits and their conditions, the Industrial Emissions Directive does not require every change to be reported and obtain a permit, thus, the law needs to define *substantial change* (by adopting the Industrial Emissions Directive's definitions) and regulate the change/review process. The law needs to reflect that every four years the respective authority reviews the integrated permit conditions from its own initiative and to reflect respective BAT conclusion changes.

Drafting a law represents a daunting and complex task and it is beyond the scope of this study to elaborate on every possible provision. The above-mentioned analysis cannot be exhaustive and represents an overview of the most important points to consider.

4. Case Studies: Lessons Learnt in the Czech Republic and BiH

4.1. Case study 1: the Czech Republic – Kronospan, Spolana Neratovice, and Třinecké železárny

Some of the benefits of the IPPC system and its mechanisms are best exemplified by the experience of large industrial enterprises. For this purpose, we have selected three facilities in the Czech Republic: Kronospan Czech Republic (chipboard factory), Spolana Neratovice (chlor-alkali chemical factory), and Třinecké železárny (steel factory) as examples of the significance of public participation in environmental decision-making processes and establishing and maintaining the integrated pollution register.

In 1994, Kronospan, one of the world's biggest manufacturers of wood-based products, bought a factory at the outskirts of the central Bohemian city of Jihlava in the Czech Republic where it resumed the production of chipboards. In 2005, Kronospan launched a new production line of glued chipboard OSBs (oriented strand boards) that generated dust and chemical mixtures with a high concentration of cancerous formaldehyde.[151]

The law, effective in the Czech Republic,[152] requires companies to report substances that pollute water, air, and soil to the integrated pollution register available on the Internet as a publicly accessible database. In the case of Kronospan, the records revealed that the factory produced 474 tons of airborne dust and 22 tons of toxic formaldehyde annually, which made it the biggest formaldehyde polluter in the Czech Republic. This revelation triggered public outcry.[153]

Despite a new law enacted in 2006, which set more restrictive limits for industry dust emissions, the regional authority that issues environmental permits (in Czech: "krajský úřad") allowed the factory to exceed the stricter limits with impunity for another two years. A petition denouncing such leniency generated thousands of signatures. The public also joined in the environmental impact assessment (EIA) process, preceding the issuance of the permit to extend production, demanding Kronospan to use advanced technologies to mitigate pollution from what research showed to be the dirtiest chipboard production in the European Union.[154]

In 2007, the Ministry of the Environment approved the extension of the production. However, it turned out that the building authority, which conducted the proceedings to extend the operation, did not implement the conditions set by the Ministry of the Environment in the EIA process into the building permit. Again, the public intervened by participating in the proceedings and supported the implementation of those conditions in the building permit. The factory

151 Arnika, Jihlava – Kronospan hardboard factory (not dated) [http://english.arnika.org/hotspots-map/hot-spots/item/233-kronospan-hardboard-factory].
152 Act No. 76/2002 Coll. on Integrated Pollution Prevention and Control, on the Integrated Pollution Register and on amendment to some laws, as amended.
153 Arnika, Jihlava – Kronospan hardboard factory (not dated) [http://english.arnika.org/hotspots-map/hot-spots/item/233-kronospan-hardboard-factory].
154 Arnika, Jihlava – Kronospan hardboard factory (not dated) [http://english.arnika.org/hotspots-map/hot-spots/item/233-kronospan-hardboard-factory].

has since begun replacing old technologies with those that do not use formaldehyde.[155]

The Kronospan case demonstrates the significance of the Integrated Pollution Register being publicly accessible, thereby informing the public about pollution to air, water, and soil, and potentially, transfers of waste for processing and disposal. Without the register, the public would not have known that Kronospan's formaldehyde emissions levels were too high and would have had no basis to intervene. The example also shows that civic participation in the processes, leading to permitting of the factory operation, can help to set more accurate parameters for operation that better protect the environment, but might otherwise be overlooked.

Spolana Neratovice is currently the largest chemical factory producing sodium hydroxide, chlorine, and related products in the Czech Republic. Spolana Neratovice also produced pesticides and herbicides, including a component of poison gas "Agent Orange" used by the American army in Vietnam for large-scale forest defoliation. Accidents related to chlorine leakages have not been a rarity. In 2000, 188 kilograms of chlorine leaked into the air, resulting in Spolana Neratovice offering financial compensation to avoid a lawsuit.[156] There have been subsequent hydrochloride, sulphur dioxide, and chlorine leakages, some of which related to the 2002 floods that leached toxic substances from Spolana Neratovice's industrial park.[157]

For decades, the chlorine production at Spolana Neratovice has been based on an obsolete method of amalgam electrolysis accompanied by repeated disposal of toxic mercury to the Elbe River.[158] The Spolana Neratovice-generated pollution had a spillover effect to neighbouring Germany. For example, the city of Hamburg on the Elbe River had to spend, on average, €70,000,000 annually for decontamination of heavy metal river sediments caused by pollution from Czech factories.[159] Similar to Kronospan, the data from the Integrated Pollution Register enabled pollution tracking at the factory, public notification, and corporate accountability.

The Czech environmental NGO, Arnika,[160] joined in the IPPC process (implemented in the Czech Republic since 2002) to promote environmentally-friendly membrane technology (recommended as the best available technique by the EU) that allows mercury-free and asbestos-free production. CENIA (Czech Environmental Information Agency), that usually provides expert opinions on integrated permits, recommended that Spolana Neratovice be allowed to use amalgam electrolysis until 2015. In reference to EU regulations requiring environmentally friendly operations, Arnika suggested the permit exception extend only to 2009.161

The regional authority eventually ruled that Spolana Neratovice needs to replace its technology by the end of 2014, and ordered it to request an integrated permit for the new membrane technology installation and

155 Arnika, Jihlava – Kronospan hardboard factory (not dated) [http://english.arnika.org/hotspots-map/hotspots/item/233-kronospan-hardboard-factory]; Paclík, Jaroslav (IDNES), Jihlava's Kronospan inspected by authorities. They want to tackle the dust in the vicinity of the company ("Jihlavský Kronospan posuzují úřady. Chtějí řešit prach v okolí firmy") (December 2015) [http://jihlava.idnes.cz/kronospan-opet-nejvetsim-znecistovatelem-ovzdusi-na-vysocine-pv9-/jihlava-zpravy.aspx-?c=A131010_1986523_jihlava-zpravy_mv, http://www.jihlava.cz/kronospan-lisy-produkujici-formaldehyd-uz-neexistuji/d-467921].

156 Arnika, Neratovice – Chlorine Factory – The Evil Neighbour (not dated) [http://english.arnika.org/hotspots-map/hotspots/neratovice-%E2%80%93-chlor-alkali-and-pvc-plant-spolana].

157 Greenpeace, Greenpeace took samples of mercury pollution in Spolana Neratovice, Czech Republic (2002) [http://archiv.greenpeace.cz/release/en/020506en.htm].

158 Greenpeace, Greenpeace took samples of mercury pollution in Spolana Neratovice, Czech Republic (2002) [http://archiv.greenpeace.cz/release/en/020506en.htm]

159 Arnika, The Integrated Pollution Register shows the largest sources of river pollution ("Integrovaný registr ukazuje na největší zdroje znečištěné vodních toků") (November 2011) [http://arnika.org/integrovany-registr-ukazuje-na-nejvetsi-zdroje-znecisteni-vodnich-toku].

160 More information on this organization can be found at www.arnika.org.

161 Arnika, Neratovice – Chlorine Factory – The Evil Neighbour (not dated) [http://english.arnika.org/hotspots-map/hotspots/neratovice-%E2%80%93-chlor-alkali-and-pvc-plant-spolana].

Třinecké železárny. Photo © Martin Bartkovský

annually publish a clear overview of the amount of waste (including wastewater) containing mercury. Following the change of Spolana Neratovice's ownership, it requested the extension of the amalgam electrolysis replacement until the end of 2020. Arnika's intervention contributed to denial of that request, and Spolana Neratovice was ordered to switch from amalgam electrolysis to membrane technology by 2017.[162]

The IPPC process, which requires re-examination of factory technologies to eliminate out-dated facilities, also forces industrial enterprises to replace the polluting and dangerous production technologies with more progressive and environmentally friendly ones – without the need to close down the factory. As the replacement of the production technology is a costly investment, industrial enterprises usually attempt to prolong the replacement deadline. Intervention of the public in the course of the IPPC process, i.e., lobbying for the opposite goal – a speedier technology upgrade – can help to arrive at a reasonable compromise in determining a technology upgrade timetable. As with Kronospan, valuable data on Spolana Neratovice's emissions was provided by the Integrated Pollution Register.

Třinecké Železárny is an integrated steel company and one of the biggest industrial establishments in the Czech Republic, producing 2.5 million tons of steel per year and employing around 14,000 people, including subsidiaries. It operates in the northeast of the Czech Republic, which has some of the worst air quality in the country due to the concentration of heavy industry and meteorological conditions. The major pollutant the factory generates is dust. Since 1996, it has invested around €200,000,000 in environmental protection. The factory has been implementing 19 projects worth €100,000,000 to reduce dust emissions by one third by the end of 2015.[163]

Třinecké Železárny monitors releases of pollutants to air and water and their transfer to waste and wastewater, including hazardous waste. Since 2004, Třinecké Železárny has reported substances that exceed the reporting limit in the Integrated Pollutant Register. The reporting system is simple and user friendly. By 31 March every year, relevant data for the previous year is entered into a standardized online form and sent electronically via the information system operated by the Czech Ministry of the Environment.[164]

To implement the reporting obligation to the Integrated Pollution Register within its organization, Třinecké Železárny has appointed employees responsible for the identification of pollutants to report. It has integrated the inter-factory monitoring plan, and it has introduced internal control regulation, which sets out reporting-related responsibilities. Although a large, profit-driven factory, Třinecké Železárny is committed to environmental protection and considers emissions reduction one of its main environmental goals.[165]

Třinecké Železárny acknowledges that the introduction of the Integrated Pollution Register has brought about increased administration and costs related to monitoring and reporting, but it has also highlighted some positives. According to Třinecké Železárny, the register serves as a useful tool for reducing negative environmental impact, provides better overview of pollution generation, and provides the opportunity to compare the degree of pollution with other factories in the Czech Republic.

162 Spolana, Prolonged permission for electrolysis plant in Spolana (not dated) [http://www.spolana.cz/CZ/Aktuality/Documents/Spolana%20TZ%20IPPC%20EN.pdf].

163 Třinecké železárny, History (not dated) [http://www.trz.cz/web/trzsteel.nsf/link/history_en]; [http://www.trz.cz/web/trzocel.nsf/link/msg4387715C2ADC5A73C1257F1B0035F14F].

164 Klimša, Radim, Třinecké železárny (November 2014), Třinecké železárny a.s. Integrated Pollution Register, PowerPoint presentation delivered in Astana, Kazakhstan.

165 Prague Daily Monitor, Třinecké železárny's employee's wages to grow 4% (December 2015) [http://praguemonitor.com/2015/12/30/t%C5%99ineck%C3%A9-%C5%BEelez%C3%A1rnys-employees-wages-grow-4].

4.2.
Case study 2:
BiH – Tuzla, Lukavac, and Banovići

Built between 1959 and 1978, Tuzla thermal power plant is, with the capacity of 715 MW, the biggest coal power plant in BiH. The towns of Tuzla and Lukavac are dependent on its electricity and heating. Despite consuming 3 to 4 million tons of lignite annually, it is not equipped with desulphurization filters, thus, annually releasing excessive amounts of sulphur dioxide (around 50,000 tons) into the atmosphere. In 2013, Elektroprivreda, a state-owned company that owns and operates the power plant, reconstructed block unit 6 and replaced electrical filters, which was supposed to reduce emissions of dust particles and prolong the factory's service life for 15 years. In the same year, the company announced the plan to reconstruct a new production unit. However, no plans have been announced to invest in facilities that would make the operation more environmentally friendly. Around 5,000 people signed a petition, and a protest was organized in front of the power plant, objecting to the expansion of the facility at the expense of greater environmental protection.[166]

By cantonal law, the energy company was obliged to pay 150,000 BAM every month since 2002 as a compensation payment for its power plant emissions, but the company has failed to comply. In 2006, the case ended up before a court that, in 2009, ordered the power plant to pay the total debt of BAM 7 million (approximately €3,600,000 million). The situation did not find resolution by 2014, so the courts reordered the power plant to pay its emissions-related debts, by then amounting to BAM 14 million (approximately €7,000,000). These circumstances triggered a review of the environmental payments system and became one of the major reasons for the parliament adopting a new law on compensation fees.167 On a policy level, the public initiative resulted in a review of the system of pollution payments and adoption of new compensation fee laws. The Tuzla power plant (as well as other similar facilities) illustrates BiH's shortcomings of the environmental permitting system and enforcement thereof.

Although the power plant exceeds the permitted limits and has no desulfurization facility, it qualified for receiving the environmental permit as an operation harmless to the environment. What we witness in BiH are environmental licenses that are not effective licenses. The government sets out their requirements flexibly and arbitrarily, which, under the current system, is nothing unusual, especially for operations of strategic importance and high revenue stream.[168]

166 Environmental Justice Atlas, Thermal Power Plant Tuzla, Bosnia and Herzegovina (not dated) [https://ejatlas.org/conflict/thermal-power-plant-tuzla-bosnia-and-herzegovina].

167 Arnika, EKO forum Zenica, Environmental Democracy in BiH – Limping Along: Alternative Report on the Implementation of the Aarhus Convention in Bosnia and Herzegovina, page 66, 2015 [http://english.arnika.org/e-shop/publications/environmental-democracy-in-bih-limping-along].

168 Arnika, EKO forum Zenica, Environmental Democracy in BiH – Limping Along: Alternative Report on the Implementation of the Aarhus Convention in Bosnia and Herzegovina, page 66-67, 2015 [http://english.arnika.org/e-shop/publications/environmental-democracy-in-bih-limping-along].

The authorities argue that ordering the desulfurization of the power plant would most likely force the operation to shutter due to the cost. However, since the desulfurization would require over BAM 100,000,000 in investments and, in 2013 alone, Tuzla made a profit of BAM 37,000,000, the investment would find a positive return in about three years. Therefore, it is clear that this argument cannot stand.[169]

Tuzla thermal power plant
Photo © Ondřej Vlk

Rubber factory Lukavac
Photo © Emir Avdić

Lukavac is a small town in central Bosnia that hosts a coke plant, a cement plant, and a soda factory dating back to the Austro-Hungarian Empire, which counts as one of the worst pollutants in the region. The 50,000 inhabitants of Lukavac, however, were not fully aware of the extent of the pollution until relatively recently (2014) because the city did not have any air pollution monitoring stations. The only available data sources were reports from the cantonal Ministry of Spatial Planning and Environmental Protection, but the information was not publicly accessible. In 2010, around 3,000 people protested in front of the factory demanding access to accurate information on the state of surrounding environment and pollution levels. Fearing negative publicity (at the time of protests, the company was already privatized by Şişecam, a Turkish-owned corporation), the company started investing in advanced production technologies and environmental protection facilities. Though the quality of air has improved, the side effects of soda production, such as a large tailing pond created near the production premises, are yet to be tackled.[170]

At the beginning of 2014, the firm ARTE Recycling of Lukavac, opened a factory in that town to recycle used tires. Due to the irritant emissions caused by burning rubber, inhabitants brought the matter to the attention of authorities. Citing different arguments, municipal, cantonal, and federal (FBiH) inspections initially blamed lack of competence to intervene. The federal inspection eventually admitted that the plant operated without a permit, and that the law had been breached. Following publication in mass media and public intervention, the authorities closed down the plant. Subsequently, ARTE submitted a request for issuance of environmental permits, but as of March 2016, none had been issued, and the factory remains closed. [171]

In 2015, Energy Solution, a company from Tuzla, submitted a request for an environmental permit for the same operation as ARTE. The Federal Ministry of Environment and Tourism (FMoIT) announced the initiation of an administrative procedure on its website stating that the public can access relevant documentation at the FMoIT and submit comments within 15 days. The documents submitted did not clearly describe the environmental impacts of the operation. While documents appear to support a permit for pyrolysis, there were suspicions that it is a smokescreen for another tire burning facility. [172]

Non-governmental organization Forum for Protection of the Environment Lukavac demanded prolongation of the deadline and a public hearing, but faced accusations of an alleged procedural obstructionism. Referring to the Federal Act on Air Protection (of FBiH), which prohibits placing new industries in areas with air pollution exceeding permitted limits, the

169 Arnika, EKO forum Zenica, Environmental Democracy in BiH – Limping Along: Alternative Report on the Implementation of the Aarhus Convention in Bosnia and Herzegovina, page 66-67, 2015 [http://english.arnika.org/e-shop/publications/environmental-democracy-in-bih-limping-along].

170 Arnika, EKO forum Zenica, Environmental Democracy in BiH – Limping Along: Alternative Report on the Implementation of the Aarhus Convention in Bosnia and Herzegovina, page 44, 2015 [http://english.arnika.org/e-shop/publications/environmental-democracy-in-bih-limping-along].

171 Sodalive, Environmental bomb in Lukavac: This is how the rubber recycling plant looks like – without environmental permit ("Ekološka bomba u Lukavcu: Ovako izgleda fabrika za reciklažu guma bez okolinske dozvole") (not dated): [http://www.sodalive.ba/crnahronika/ekoloska-bomba-u-lukavcu-ovako-izgleda-fabrika-za-reciklazu-guma-bez-okolinske-dozvole-foto/)].

172 Sodalive, Environmental bomb in Lukavac: This is how the rubber recycling plant looks like – without environmental permit ("Ekološka bomba u Lukavcu: Ovako izgleda fabrika za reciklažu guma bez okolinske dozvole") (not dated): [http://www.sodalive.ba/crnahronika/ekoloska-bomba-u-lukavcu-ovako-izgleda-fabrika-za-reciklazu-guma-bez-okolinske-dozvole-foto/)].

Municipality Council, at the instigation of the NGO, passed a resolution calling upon the Ministry to cease permitting projects harmful to the environment.[173]

Following these developments, the FMoIT organized a project presentation, for which it circulated an invitation just 18 hours before the meeting. Though, by law, a public hearing must be announced at least 15 days in advance. The FMoIT still wanted to declare the presentation a public hearing, which resulted in a boycott of the meeting. Shortly thereafter, the FMoIT issued an environmental permit for tire recycling. Litigation is currently under way, initiated by the Municipality Council and civil society organizations, for violation of the law. Issuance of the zoning permit for the construction of the pyrolysis plant is suspended. [174]

The example of Lucavac (as well as Tuzla) shows that, if a functional environmental permitting system were in place, civil society would less likely have to push through initiatives to advance the production technology to reduce the pollution and make particular operations more environmentally friendly. It would be the authorities (granting the environmental permit) that could order the facility to update its technology and monitor compliance with the set conditions. Lucavac also shows the importance of having clearly defined subject matter and regional jurisdiction so that it is indisputable which authority should be involved in the environmental permitting process, in which matters, and where that (inspection) authority should intervene in the case of breach of environmental permit conditions and/or relevant legislation.

In June 2014, Parliament of FBiH declared two new power plant projects – a 7th block of Tuzla Power Plant and a new plant in Banovići – as "projects in public interest," for which the state guarantees loans, and approved their further implementation.[175] After an environmental impact assessment (EIA) had been conducted and environmental permits had been issued for Banovići power plant, the NGO Ekotim discovered that the environmental permit set no emission limits. One of the reasons for the flawed environmental permits was a low-quality EIA study that did not contain accurate information relevant for a particular facility rife with errors indicating that most of it was cut and pasted from a different EIA study. Although the Federal Ministry of Environment and Tourism acknowledged that mistakes had been made, the new permit contained another error – the emission limits were calculated for the 300 MW capacity instead of 790 MW installed capacity of the power plant boiler, thus, set too leniently.

As the Ministry did not allow appeals, Ekotim filed lawsuit in the Cantonal Court in Sarajevo to annul the unlawful decision. The verdict, delivered in March 2015, annulled the decision setting the emission limits whereby all environmental permits issued for the power plant were cancelled for lack of compliance with the law.176 The entire project has to be reviewed again and new permits issued.

The Banovići example points to the problematic issue of environmental impact assessment (EIA) studies that often contain erroneous and misleading information, which then impacts the environmental permits and heavily prolongs the environmental permitting process when the data needs to be corrected. It also points to a dysfunctional appelate mechanism within the environmental permitting process and the arbitrary decisionmaking of ministries regarding any challenge to their decisions. Functional environmental permitting processes allow certain errors of procedure to be remedied within the (administrative) process itself rather than by separate court proceedings that strike down decisions issued in previous processes. The role of courts in environmental permitting processes is not to replace the authorities issuing environmental permits (such as in the case of Banovići), but to serve as safeguards against unlawful decisions or procedures conducted by public authorities.

173 Information provided by EKO forum Zenica and partner organizations.

174 Sodalive, See how and why the presentation of environmental impact study of rubber recycling plant of Energy Solution was interrupted ("Pogledajte kako je i zašto prekinuta "prezentacija Studije uticaja na okoliš postrojenja za reciklažu gume, investitora Energy solution") (not dated): [http://www.sodalive.ba/izdvojeno/pogledajte-kako-je-i-zasto-prekinuta-prezentacija-studije-uticaja-na-okolis-postrojenja-za-reciklazu-gume-investitora-energy-solution/].

175 Bankwatch Network, Banovići lignite power plant, Bosnia and Herzegovina (not dated) [http://bankwatch.org/our-work/projects/banovici-lignite-power-plant-bosnia-and-herzegovina].

176 Akta, The court confirms: Ekotim is right, unlawful decision on Banovići power plant is annulled ("Sud potvrdio: Ekotim u pravu, poništeno loše rješenje za TE Banovići") (April 2015): [http://www.akta.ba/bs/Vijest/vijesti/sud-potvrdio-ekotim-u-pravu-ponisteno-lose-rjesenje-za-te-banovici/51066].

4.3.
Case study 3:
BiH – ArcelorMittal

ArcelorMittal
Photo © Benjamin Selimovic

ArcelorMittal Zenica (formerly Željezara Zenica) is one of the biggest steel mills in southeast Europe. Before the Bosnian war, it was a huge plant with 22,500 employees. In 1999, a Kuwaiti enterprise bought a share in Željezara Zenica, while, in 2004, Mittal Steel Company bought a 51% shareholding from the BiH government and then, in 2005, the remaining 49% from a Kuwaiti investment agency. A provision of the deal was to heavily invest in the plant and equipment to raise the production in Zenica from 200,000 to more than 2,000,000 tonnes of steel over a period of 10 years.[177]

In 2008, ArcelorMittal restarted the integrated steel production that shuttered during the war. Analysis of the air quality conducted shortly thereafter, at several locations in the town of Zenica, revealed levels of sulphur dioxide and other particulates exponentially higher than permitted.[178] One of the main reasons why the pollution situation is particularly acute in the area is due to the geographical and climatic conditions. The steelworks and the town of Zenica are located in a deep valley where the particles get concentrated, and during temperature inversions, multiply. Indeed, the levels of pollution reached in Zenica would not be acceptable in most of Europe. In 2008, SO_2 concentrations were higher than 125 ug/m^3 for 91 days in the town despite EU regulations that allow exceeding the threshold up to three days per year.[179]

Confusing legislation, and the lack of adequate environmental permitting process, has caused the following problems and challenges. Under federal (FBiH) legislation, the plant is regarded as an "old facility," not requiring an environmental impact assessment, and can operate while the process of obtaining environmental permits is underway (this concerned a total of 13 environmental permits for different production divisions).

While the obligation was to obtain the permits by 2008, the Federal Ministry of the Environment and Tourism (FMoIT) prolonged the deadline until 2011. A number of confusing steps have occurred in the process. Awaiting a full permit, "temporary permits," valid for five years, had been initially issued for ArcelorMittal. This process also involved lengthy exchanges between the FMoIT and ArcelorMittal on the Environmental Action Plan that ArcelorMittal had to prepare as a part of the European Bank for Reconstruction and Development loan requirement. A series of anti-pollution protests were organized, the largest of which, with around 10,000 people, took place in 2012. However, apart from installation of

177 Miskun, Alena, et al, In the wake of ArcelorMittal: the global steel giant's local impacts (May 2008), page 31.
178 According to the analysis legal levels were exceeded in the matter of one or two weeks of production.
179 Miskun, Alena, et al, In the wake of ArcelorMittal: the global steel giant's local impacts (May 2008), page 32.

ArcelorMittal
Photo © Emir Caplja

screens in the city to show the data from the air monitoring stations, the authorities remained quite inactive.[180]

In 2014, 5 out of 9 environmental permits of ArcelorMittal expired and only a couple of its operational facilities (blast oxygen furnace – BOF and electric arc furnace – EAF) applied for a renewal. The process of renewal was lengthy and, gradually, all other permits expired, so the plant operated without any valid permit until the end of November 2015. The FMoIT failed to issue new permits in due course and the several-month operation of Arcelor's facilities without permits was not fined.[181]

In January 2015, the FMoIT received an application for a renewal of an environmental permit of the EAF and BOF. Public hearing was organized in February to make it seem the participation of civil society organizations in the process is ensured due to a broad list of comments. However, after the draft permit was issued at the end of May, it turned out that none of the comments raised by civil society organizations were adopted. Shortly thereafter, the Minister of Environment and Tourism resigned, thus leaving the relevant documents unsigned. In September 2015, criminal charges were brought against state officials (for environmental pollution) and company representatives (for negligent performance of duties).

180 Arnika, EKO forum Zenica, Environmental Democracy in BiH – Limping Along: Alternative Report on the Implementation of the Aarhus Convention in Bosnia and Herzegovina, page 60-61, 2015 [http://english.arnika.org/e-shop/publications/environmental-democracy-in-bih-limping-along].

181 Arnika, EKO forum Zenica, Environmental Democracy in BiH – Limping Along: Alternative Report on the Implementation of the Aarhus Convention in Bosnia and Herzegovina, page 61, 2015 [http://english.arnika.org/e-shop/publications/environmental-democracy-in-bih-limping-along].

Protests against industrial pollution in Zenica
Photo © Eco forum

However, after a new Minister had taken office, the environmental permitting process accelerated. The permit for BOF and EAF was issued in November 2015, but under conditions that disregarded comments raised by civil society organizations under the former minister. Similar to Banovići, a lawsuit was filed to challenge the lawfulness of the permit. Currently, ArcelorMittal operates with one valid permit (issued for BOF and EAF), while the remaining eight permits are expired.

Of all the case studies presented, ArcelorMittal best illustrates the urgent need of comprehensive legislation to govern a functional environmental permitting process and reliable institutions to implement it. The lack thereof is currently compensated by the combination of private lawsuits of pollution victims, criminal charges against state officials, and protests to induce authorities to take action, but it is obvious that such situation is, in the end, unsustainable. Similarly, active participation in environmental decision-making procedures cannot be effective if authorities do not give concerns of environmental impact of particular industrial operations due consideration. Although it is understandable that authorities weigh the economic impacts of licensing industrial activities, they should not override environmental impacts if the operation remains unlicensed.

Conclusion

The study has shown that even though attempts have been made in BiH, in policy and practice, to establish a functional IPPC system that complies with international and EU obligations, there is still a long way to go. BiH suffers greatly from an overly decentralized political structure and a multi-tiered, overlapping system of governance that produces dysfunctional institutions unable to create uniform policies and legal frameworks, void of contradictory legislation, or ensure efficient enforcement of law.

At the institutional level, BiH would benefit from delegating jurisdiction in environmental matters to the State of BiH. While this appears, and most likely will remain constitutionally and politically impossible, it is advisable to consolidate the environmental agenda at the Entity level so that each Entity has one ministry specifically for environmental matters. If needed, one body should coordinate the activities of such ministries. This would prevent having the environmental agenda scattered across different sectors and filling the lack of coordination between them by additional bodies/institutions with unclear mandates and chaotic delegation of responsibilities.

At the policy level, BiH would benefit from a nationwide environmental action plan that would set the country's priorities in the field of environmental protection and strategy for sustainable development as well as the state level law on environmental protection that would establish its comprehensive legal framework. In terms of legislation and transposition of EU (environmental) acquis, for the sake of uniformity, it is advisable to transpose relevant EU directives at the State level into a single law (and implementing regulations) valid for the whole country. Given the limited powers of the State of BiH to adopt nationwide legislation, a viable alternative to transposing EU directives at the State level is to adopt three virtually similar laws by FBiH, RS, and Brčko District.


ZABRANJEN ULAZAK
U MEZARJE (HAREM)
I IZVOĐENJE BILO
KAKVIH RADOVA BEZ
ZNANJA I ODOBRENJA
DŽEMATSKOG ODBORA

From a conceptual, structural, and systematic point of view, it is not the most effective solution to integrate specific procedural (integrated permitting) rules into a regulation (Law on Environmental Protection) that sets a framework for an array of other legislation related to environmental matters. In jurisdictions where the IPPC process is well established and the IPPC Directive (or more precisely, the Industrial Emissions Directive) well transposed, we can see that the core of the IPPC process is regulated in a separate act (e.g., the IPPC Act in the Czech Republic or EPA Act of 1992 in Ireland). As this solution has proved suitable over time, BiH should take this example and propose one piece of legislation (for the State of BiH or one for each Entity) that will deal specifically with the IPPC process, while maintaining the Law on Environmental Protection as a separate framework law.

In general, environmental permitting serves as an essential tool for regulating environmental pollution from industrial facilities in many countries. The idea of integrated pollution prevention and control is not new in Europe. In fact, the European Commission has pursued the integrated approach since the early 1980s. Integrated permitting has numerous advantages over the traditional single-media approach. It may prevent a spillover effect from one environmental medium to another (e. g., air to water). It may further reduce administrative costs for regulatory agencies and regulated facilities. Since integrated permits address operational aspects such as natural resource use, generation and recovery waste, and habitat impact, they may promote long-term sustainability. The integrated approach facilitates public participation in environmental decision-making. By providing stakeholders with a broad, facility-wide assessment of environmental impacts, the integrated permitting may make public participation more meaningful, foster dialogue among industry and other stakeholders, and better prevent discrepancies that can lead to conflicts.

The current environmental permitting process in BiH is a fragmented procedure that lacks a clear, functional, and enforceable regulatory framework that would prevent arbitrary decision-making and safeguard the rights of relevant stakeholders. The BiH's environmental permitting process is disintegrated with separate environmental permits issued for air, water, and soil pollutants. Since the pollutants' thresholds are set particularly low, virtually all facilities, and even those that may have very negligible environmental impact, require environmental permits.

Though suitable statutory deadlines formally exist, authorities do not respect them – delays of 12 to 24 months (e. g., permits for ArcelorMittal in Zenica) are typical. While BiH has adopted BAT for the food industry, it lacks BAT for any other sector that might pose a more significant environmental threat such as the chemical or heavy metal industries, which are more widespread in BiH. In addition, no guidance on determining BAT and permit conditions really exists, which causes many permits to contain quite arbitrary conditions for operation and unreasonable emissions limit values.

However, a complete disrespect for public participation in the environmental permitting process is perhaps the most significant obstacle. Common practice is that if the public is allowed to participate in the process, the comments and suggestions raised, no matter their relevance, are frequently ignored without any factual justification. Requests for information on environmental matters held by public authorities are no different. While the authorities occasionally respond, they often do not enclose any environmental permit and related information, and if they do, the submission is incomplete. Although measures (including remedial) to access environment-related information, in general, and the environmental permitting process, in particular, formally exist, their enforcement is weak; any remedial measures lead to the same result as the request for information itself – the inaction of authorities.

Case studies of Tuzla and Lukavac show that if a functional environmental permitting system were in place, protests and other civil society initiatives would be much less frequent as facilitating advancement of the pollution-reducing technology designed to make particular operations more environmental would be done by the licensing authorities, which could order the facility to update its technology and monitor whether it complies with the set conditions. Lukavac also shows the importance of a clearly defined subject matter and regional jurisdiction to avoid the (inspection) authorities unjustifiably claiming lack of competence to intervene in cases of breach of permit conditions and/or relevant legislation, and ensure they are held accountable if they remain inactive.

The Banovići example points to the necessity to improve the process of assigning and preparing environmental impact assessment studies that often contain erroneous and misleading information, which then impacts the environmental permits and heavily prolongs the permitting procedure when the data needs to be corrected. It also points to the necessity to fix the dysfunctional appelate mechanism within the environmental permitting process so that ordinary courts of law do not serve to replace the role of authorities issuing environmental permits and avoid the arbitrariness of ministries as to whether they will allow any challenge of their decisions.

ArcelorMittal perhaps best illustrates the urgent need of comprehensive legislation to govern functional environmental permitting procedure and reliable institutions to implement it. The lack thereof is currently compensated by the combination of private lawsuits of pollution victims, criminal charges against state officials, and demonstrations to induce authorities to take action, but it is obvious that such a situation is, in the end, unsustainable. Similarly, active participation in environmental decision-making procedures cannot be effective if authorities do not give due consideration to concerns of environmental impact on particular industrial operations.

BiH can look up to a number of countries for a functional and transparent environmental permitting system. The closest example, Croatia, has a successful record of accomplishment in preparing and implementing national environmental protection and strategy plans. Over the years, Croatia has made significant progress in strengthening the existing, and adopting new, environmental legislation in various sectors, such as air quality or waste management.

Even though the Croatian IPPC process is thought to be too lengthy, suffers from complex application, lacks guidance on how to prepare integrated permit applications, determine permit conditions, or assess BAT and use BREF documents, Croatia has created particularly solid foundations for the IPPC system embedded in legislation that has transposed both the IPPC and the Industrial Emissions Directive and made significant efforts to ensure that the IPPC system is results-oriented, transparent, and participative. Unlike Bosnia, the public does not need to initiate protests to induce authorities to take action on environmental matters. Public participation in environmental decision-making procedures is safeguarded, and concerns of environmental impact of particular industrial operations are given due consideration by authorities.

In the Czech Republic, most large industrial and agricultural facilities have gone through the IPPC process. Though bureaucratic and heavy on paperwork, the IPPC process in the Czech Republic is a functional procedure governed by well-structured regulation (IPPC Act) with clearly spelled rights and obligations of relevant stakeholders, guaranteed safeguards of participants' procedural rights, and a well-established enforcement mechanism. The Czech Republic has developed a successful system in which regional authorities, not ministries, issue IPPC permits. There exists clear guidance on how to prepare integrated permit applications (a form is available), determine permit conditions, or assess BAT and use BREF documents, which prevents inconsistent applications and interpretation problems in implementing and enforcing permit conditions.

Experiences from the Czech Republic show that many IPPC mechanisms have proved efficient in preventing pollution and protecting the environment. Třinecké Železárny, a large steel producer, acknowledged the Integrated Pollution Register as a useful tool for reducing negative impacts on environment, providing better overview of the amount of pollution generated, and the opportunity to compare the degree of pollution with other factories in the Czech Republic.

The example of Kronospan, the large chipboards producer, demonstrates the significance of the Integrated Pollution Register in informing the public about the pollutant releases into air, water, and soil. Spolana Neratovice, a large chemical factory, shows the impact of public intervention in the course of the IPPC process on re-examination of factory technologies to eliminate out-dated facilities by forcing industrial enterprises to replace the polluting and dangerous production technologies with more progressive and environmentally friendly ones.

Ireland is peculiar in that it established a specialized independent public agency to handle the entire IPPC agenda from issuing environmental permits to enforcing their conditions. The country can also serve as an example of using local press and the Internet to make IPPC-related decisions and correspondence available to the public. In terms of regulation governing the IPPC process, we can spot the Anglo-Saxon legal tradition of leaving considerable room for interpretation and reliance on case law.

Whichever country's IPPC system will serve as an inspiration to BiH, it is important to realize that any effort to create a functional IPPC system is wasted if the system is poorly implemented, the enforcement mechanism is weak, the authorities obstruct the transparency of the process, or curtail the public's right to participate and access information. It is in BiH's best interest, as an aspiring EU Member State, to mobilize its capacities, make progress in the field of environmental law and policy, and gradually achieve a fully integrated IPPC system.

About us

Arnika – Citizens Support Centre (Czech Republic)

Established in 1996, non-governmental organization Arnika has long experience promoting information openness, supporting public participation in decision-making, and enforcing environmental justice. Its assists civil society organizations, municipalities, and individuals in solving cases related to environmental pollution and its prevention throughout the Czech Republic. Arnika also participates in strengthening the implementation of the Aarhus Convention in Central and Eastern Europe, Caucasus, and Central Asia. Arnika is a member of the Green Circle of the Czech Republic, European Environmental Bureau, and European ECO Forum.

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EKO forum Zenica (Bosnia and Herzegovina)

In 2008, civic association EKO forum Zenica was established as a reaction to widespread environmental pollution resulting from the reopening of the Arcelor Mittal steelworks in the city of Zenica. Currently, the organization has some 2,000 members specialized in various fields related to environmental protection, including air emission monitoring, waste management, water protection, health protection, information technologies, and media. EKO forum regularly cooperates with other non-governmental organizations in the immediate canton and throughout the country.

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