IMPLEMENTATION OF EU ENVIRONMENTAL LEGISLATION: HOW IT WORKS, AND LESSONS LEARNT

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Abstract: *The importance of EU legislation has surpassed that of national legislation in the course of the last 20 years. EU environmental legislation has been a success story, both in the old and the new member states. Its development and implementation are still facing many obstacles, including costs. The present contribution reviews the progress of, and obstacles to the implementation of key EU environmental directives, in particular in the field of water protection and management. The implementation of the Sixth Environmental Action Programme is also addressed, in particular with respect to climate change. Emphasis is put on the implementation process in the new member states, and the approximation in Croatia.*

Key words: *EU legislation; environment; approximation; implementation obstacles; Croatia*

1. ENVIRONMENTAL LEGAL FRAMEWORK OF THE EU: PROCEDURES AND TRENDS

As ecosystem borders always never coincide with political borders, states rarely have the luxury of resolving environmental problems on their own. Regionally harmonising policies serve some of these goals in that they permits states to address problems no one state can resolve alone. Regional policy harmonisation is effective, particularly if these policies are backed by good authority [Keilbach 2006]. The European Union (EU) embraces this potential through its environmental *acquis*.

Policy and legislation of the EU, in particular in the field of environmental protection, seem complicated and confusing. There are several reasons for that, including their highly technical nature, the large number of adopted policy and legal instruments, and the "moving target character": changes and additions to policy and legislation are the order of the day. Environmental policy has been hailed as one of the great successes of the EU. At the same time, with growing criticism and lack of orientation within the EU about the future course and speed of general political action, the quality of legislation has become an important topic of the EU political agenda. With the majority of environmental legislation defined by the EU, there is ongoing debate and demand to assess which subjects should or should not be addressed by EU legislation. The question: what is to be subject to EU legislation and what to national decision-making, boils down to the issue of *subsidiarity* [van Iersel 2006].

EU legislation process takes place as interplay of European Community Organs: Council, Commission and Parliament. The EC Treaty forms as primary law the basis for EU policy and for secondary legislation. Secondary laws are prepared by the Commission, discussed by the stakeholders and the Member States, and agreed by the European Parliament (EP). If Art. 130S of the EC Treaty is the basis, a Member State (MS) may impose stricter environmental

standards than contained in EU law. The European Court of Justice is the ultimate authority for the legal interpretation of the Treaty and the legislation.

Most EU laws are *directives, regulations and decisions*[1]. The **directives** are a form of law peculiar to the EU. They impose obligation to MS to transpose requirements into national legislation, but in many cases allow a certain amount of flexibility. As an example, the Large Combustion Plants Directive[2] sets different targets for emission reduction from each MS. Moreover it is the discretion of the MS how to achieve the national target.
Regulations form about 15% of EU environmental laws. They are directly binding, supersede any conflicting national laws, and neither require nor allow transposing into national legislation. Regulations come into force in acceding countries on the day of accession. They have in general a precise purpose where it is important to apply precisely the same requirement everywhere. As examples, regulations address inspection and control of severely restricted chemicals, and of endangered species. They also may address the designation of national sanctions for certain law violations.
Decisions form at present about 20% of the environmental *acquis*. They are binding in their entirety upon parties to whom they are addressed. They differ from directives and regulations as being very specific in nature. Regulations and directives often give power to the Commission to take decisions on implementation, e.g. to amend lists of wastes under the regulation on transfrontier shipment of waste; to specify forms and documentation requirements; or to set conditions for awarding an EU eco-label.

The substantive **scope** of the environmental *acquis* is very broad. It addresses:
Products control: e.g. noise from construction equipment; emissions from motor vehicles; hazardous chemicals.
Production processes: e.g. construction; operation of industrial plants; waste disposal.
Environmental quality protection: dangerous substances in air, water and soil; land development; nature and resource conservation; biodiversity.
Procedures and procedural rights: impact assessment; access to information; public consultation.

Whereas legislation for specific sectors is called **vertical**, the **horizontal** legislation addresses procedural and other issues which cut across different environmental and other subject areas. Horizontal legislation includes matters such as: Environmental Impact Assessment (EIA); public access to information and decision-making in the area of environment; reporting requirements; the European Environmental Agency; the LIFE programme; and the promotion of the NGOs. A summary of the EU environmental legislation as of 2005 is given in Fig 1. It should be noted that Fig 1 contains environmental legislation in a strict sense. However there is much more legislation (e.g. on energy, transport, agriculture etc.) that is relevant for the environment, without having environmental objectives necessarily as a primary goal. Therefore the numbers in Fig. 1 are indicative only.

EU environmental legislation is not a static body. It is being changed continuously, whereby the initiatives may originate from any organ of the European Community: the Commission, the Council or the European Parliament. Apart from political initiative that may happen any time due to unforeseen developments, the main instrument structuring and facilitating the

[1] A good overview of the EU environmental legislation and the corresponding approximation issues is given in [EU Guide 2006]
[2] See e.g. http://ec.europa.eu/environment/air/stationary.htm

development of legislation is the **Environmental Action Plan.** The current 6th Environmental Action Programme (6EAP) was formally adopted on 22 July 2002, by a joint decision of the European Parliament and of the Council[3]. It was in fact the first such Action Programme to be elaborated through a co-decision procedure. As such it is a particular kind of political importance and legitimacy which its predecessors lacked [Pallemaerts 2006]. Contrary to the earlier mentioned horizontal and vertical legislation, the implementation of the Environmental Action Programme is primarily a responsibility of the European Community organs, and in the first place of the Commission.

Figure1. Summary of the EU environmental legislation 2005

SECTOR	Directives	Regulations	Decisions	Total
Horizontal	5	2		7
Air quality	18	1	10	29
Waste management	17	3	8	28
Water protection	11		1	12
Nature protection	4	6	1	11
Industrial pollution + Risk Management	6	2	7	15
Chemicals & GMOs	8	5	4	17
Noise	10			10
Nuclear safety and radiation protection	5	3		8
Civil protection		1	7	8
TOTAL	82	23	39	145

Source: [BiH 2005]

2. APPLICATION OF THE COMMUNITY LAW IN THE MEMBER STATES

In the current EU member states, EU policy and legislation have an increasing importance for national environmental legislation. In a "founding" member state like the Netherlands, about three quarters of environmental legislation is determined, directly or indirectly, by EU policy [Wieringa 2001]. This proportion is much higher than 30 years ago when the EU legislation represented a small part of the overall environmental legislation. It is important to keep in mind, however, that national authorities still have much freedom in determining their own legislation, provided it does not violate the "4 freedoms" forming the basis of EU law - i.e. free movement of goods, persons, services and capital. On the other hand, health and environment considerations may overrule other legislation, as long as the measures taken are not discriminatory. The interpretation of non-discrimination is a difficult juridical problem, as can be seen in the dispute about air traffic rights between Switzerland, a future EU member state, and Germany[4]. National environmental legislation may be more stringent than the *acquis* as long as it is not discriminatory. It should take into account existing institutions, traditions and needs. In addition, there is a role for different levels of administration. The *subsidiarity principle* leaves much room for specific national needs and traditions. In Western Europe the regions and municipalities not only have large competences and obligations for implementation, but also have fiscal resources at their disposal.

[3] Decision 1600/2002/EC

[4] "Deutsche Forderungen nicht EU-kompatibel. Der Staatsvertrag unter EG-rechtlichen Gesichtspunkten". In *Neue Zürcher Zeitung*. 13 August 2001.

The watchdog function given to the EU bodies in monitoring the implementation is of particular importance. The European Commission has the task to monitor national implementation and to admonish Governments if they fail in their obligations. Ultimately, appeal can be made to the European Court of Justice to order sanctions. In July 2000, for example, the Court of Justice ordered Greece to pay a penalty payment of 20.000 Euros per day for failure to comply with one of its previous judgments[5]. Greece had failed to take the necessary measures for disposal of toxic and dangerous waste while ensuring that health and environment were protected. There is, however, an important difference in possible sanctions between current member states and candidate countries. In the first case, the sanctions are moral or financial, while in the second case non-compliance can lead to delays in the accession process.

The relationship of environmental policy to other policy areas is not always harmonious. Other sectoral policies, in particular agriculture and transport, can intentionally or inadvertently have an enormous impact on the environment. As a result, conflicts between sectoral goals and policies may arise. Such conflicts may come about through inter-sectorally inconsistent EU policies (e.g. agricultural subsidies to maximize production, leading to enormous pressures on soil and water quality; transport policies). In this respect, the role of spatial planning as an instrument of harmonization and mediation between conflicting goals cannot be over-estimated. On the other hand, positive synergies between policy sectors can exist, as is the case with the current promotion of renewable energies [Bošnjaković 2004].

The implementation of environmental policies does not occur solely through governmental action and investment. The bulk of financial and technical efforts needs to be done by the business community. This necessitates burden sharing by various economic sectors. It also requires a dialogue with well-organised sectors and industrial and agricultural branch associations, as well as with municipal associations, in the early phases of policy development. The Netherlands pioneered in the 1980's, by introducing to that end an interactive approach to policy development and implementation. This approach has now widely been adopted in Europe.

3. WATER QUALITY AS EXAMPLE OF VERTICAL REGULATIONS

Water quality is the most comprehensively regulated area of the environmental *acquis*. During the first wave of regulation, from 1975 to 1980, a number of directives were adopted, including: on surface water (1975), fish waters (1978), shellfish water (1979), bathing waters (1976), ground waters (1980). In the second wave of legislation, from 1991 to 1996, additional directives were adopted on urban waste water treatment (1991), nitrates (1991), ecological quality (1994). The need for a combined approach in the legislation, bringing together water quality standards and emission limits, resulted in the adoption of the Water Framework Directive in 2000.

The Water Framework Directive (WFD) is an interesting example of advanced EU environmental legislation[6]. This Directive came into force on December 22, 2000. It

[5] European Court of Justice. 2000. *Judgment of the Court of Justice in Case C 387 / 97* (http://curia.eu.int/jurisp/cgi-bin/form.pl?lang=en&Submit=Pesquisar&docrequire=alldocs&numaff=&datefs=&datefe=&nomusuel=&domaine=&mots=C-387%2F97&resmax=100).

[6] "Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy." In *Official Journal of the European Communities. Legislation*. L 327 / 1-73. Volume 43, 22 December 2000.

rationalizes increasingly fragmented policies and incorporates all earlier requirements for water management and protection in a single system of river basin management. The WFD addresses a range of issues:

- River basin approach (characteristics, review of the environmental impact of human activities, economic analysis of water use, coordination of administrative arrangements)
- Environmental objectives for and monitoring of surface waters, ground waters and protected areas
- Register of protected areas
- Waters used for abstraction of drinking water
- Combined approach for point and diffuse sources
- Programme of measures
- River basin management plans and reporting
- Strategies to prevent and control pollution
- Penalties to breaches of national provisions

Figure 2. Timetable for Implementing the Water Framework Directive

Year	Fig. 2 Timetable for Implementing the Water Framework Directive
2000	**WFD comes into force**
2001	**Common Implementation Strategy published**
2003	**Transposition into national legislation** **Designation of river basin districts and competent authorities**
2004	**For each river basin:** **- Analysis of the natural characteristics, pressures and human impacts** **- Economic analysis of water use** **- Register of areas needing special protection**
2006	**Operational water monitoring programmes**
2008	**Public consultation on proposed river basin management plans**
2009	**River basin management plans with programmes of measures finalised**
2009-15	**Implementation of programmes of measures**
2010	**Water pricing policies in place to promote sustainable use of water**
2015	**Achievement of good status for all surface waters and ground waters**

Source: footnote[7]

The WFD contains very important provisions on cost recovery for water services. A central provision of the WFD is that it gives economic instruments a clear role in water policy making for the first time in EU environmental legislation. Article 9 of the WFD, together with Annex III, addresses the following issues: (i) recovery of environmental and resources costs; (ii) economic analysis (e.g. long-term forecasts of supply and demand for water in the river basin; estimate of volumes, prices and costs associated with water services) and polluter pays principle; (iii) water pricing policies providing an incentive for more efficient use of resources; (iv) re-coup of the true value of water. The overall timetable for implementing the WFD is given in Fig. 2.

(http://www.europateam.cc.cec/eur-op/ojol/en/oj/2000/1_32720001222en.html).

[7] EU Water Framework Directive: Purpose and its implementation process. http://www.unep.org/GC/GCSS-VII/EU.Water

The integration of economic elements of the WFD in the river basin management planning is based on a number of steps. *Article 5* requires performing and reporting (during 2004/2005) an analysis of pressures and impact, to define the protected areas, to determine the importance of water uses, and to describe the baseline practices, cost recovery and incentive pricing. A *cost-effectiveness analysis* (2005-2009) should allow choosing programmes of measures (including economic instruments) that are most cost-effective in reaching good water status. A *disproportionate cost analysis* (2005-2009) should form the basis for justifying possible time exemptions and alternative (less stringent) environmental objectives. By 2009, *River Basin Management Plans* should have been established, with the inclusion of financing and cost recovery considerations.

The reporting under Article 5 has been the subject of an EEB/ WWF study [EEB- WWF 2006]. The study screened the reports provided, within the submission deadline of 22 March 2005, for 24 river basins in 19 Member States and Romania. The EEB/WWF assessment of the Article 5 Reports concludes that their analytical quality is poor. The approaches to economic analysis are disparate in water basins, using little direct input from stakeholders. Whereas 22 reports identify significant hydro-morphological pressures (navigation, hydropower, flood management), only six reports touch upon at least one of those sectors, and only two reports include environmental and resource costs for corresponding services. Current pricing structures (taxes, pollution charges…) are often described, but without an analysis of their effectiveness and sustainability. The overall conclusion of the EEB/WWF assessment is that (a) the integration of environmental concerns into economic analysis has so far largely failed, and (b) the financing for WFD measures and integrating WFD objectives into other policy sectors and business activities will be seriously hampered.

4. MONITORING THE IMPLEMENTATION OF EU ENVIRONMENTAL LAW IN THE MEMBER STATES

Each year the European Commission draws up a report on the monitoring of application of Community law[8]. In exercising its exclusive function as guardian of the Treaties, the Commission ensures and monitors the uniform application of Community law by the Member States as set out in Article 211 of the EC Treaty. The primary objective of infringement proceedings, particularly in the pre-litigation stage, is to encourage the Member States to comply voluntarily with Community law as quickly as possible.

The undertaking of monitoring the application of Community law is vital in terms of the rule of law generally, but it also helps to make the principle of a Community based on the rule of law a tangible reality for Europe's citizens and economic operators. The numerous complaints received by the citizens of the Member States constitute a vital means of detecting infringements of Community law. In the pre-litigation procedure, the Commission is ensuring that increased information is systematically provided to the public. National experts are being invited to participate in bilateral meetings with Commission services. Efforts are being made to anticipate implementation problems when designing legislation which has to be drafted in such a way as to make it "enforcement friendly".

In its role as "guardian of the Treaty", the Commission is called upon to take all necessary steps to avoid the repetition of infringements committed by Member States. Under Article 228 EC, the Commission may ask the Court of Justice to require a penalty payment or lump sum of

[8] See e.g. the 21st Annual Report from the Commission on Monitoring the Application of Community Law (COM/2004/0839 final).

a Member State which has failed to take necessary measures to comply with a first judgement that it has failed to fulfill its obligations.

According to the 22nd Annual Report[9], in the area of the environment, implementation of Community legislation by the Member States has improved in recent years. This is borne out by the substantial reduction in the number of new complaints registered by the Commission in 2004 (336 as compared with 555 in 2002). The Commission issued 101 reasoned opinions under Article 226 of the EC Treaty and referred 45 cases to the Court of Justice. It also adopted 14 letters of formal notice and 6 reasoned opinions under Article 228 of the EC Treaty. It initiated infringement proceedings against eight new Member States.

The European Commission presents annual surveys on the implementation and enforcement of Community environmental law in the form of Commission Staff Working Papers[10]. The surveys contain statistics on open infringements by sector. Moreover the annual survey includes scoreboards per member state and sector showing the number of non-communication, non-conformity and bad application cases. The following typology is used for infringement cases:
Non-communication = Member State fails to adopt the measures (national laws, regulations and administrative provisions) to transpose Directives and to communicate them to the Commission within the prescribed time limit.
Non-conformity = Member State transposition measures do not conform to the requirements of the Directive.
Bad application = through actions or inactions Member State fails to comply with EU environmental law requirements, other than requirements to adopt and communicate correct implementing legislation.

Non-communication
The Commission automatically opens an infringement procedure for non-communication if a Member State has not adopted the national measures to transpose the Directive within a prescribed deadline. Member States are regularly late in communicating their transposition measures for Community environmental Directives. The problems with non-communication are mainly in the air and waste sectors. This has to do with the fact that a relatively large number of Directives were due to be transposed in these areas during the last few years.
Non-conformity
Problems with non-conformity are concentrated in the sectors of impact assessment, nature, waste and water. Where impact assessment is concerned, conformity problems often relate to national laws that do not ensure that all projects for which an impact assessment must be carried out are made subject to the assessment procedures required by the Directive. In the waste sector, conformity problems mainly concern the incorrect transposition of the Waste Framework Directive, the Hazardous Waste Directive, the Packaging Waste Directive and the End-of-Life Vehicles Directive. In the water sector, non-conformity issues include non-compliance with the parameters of bathing water quality under the Bathing Water Directive and failure to adopt pollution reduction programmes under the Dangerous Substances Directive.
Bad application

[9] 22nd Annual Report from the Commission on Monitoring the Application of Community Law (COM/2005/0570 final).

[10] See e.g. the Sixth Annual Survey on the implementation and enforcement of Community environmental law 2004 (SEC(2005) 1055).

In addition to correct and timely transposition, the effectiveness of Community environmental law is largely dependent on the prudent application of certain obligations and requirements under the Directives. Community environmental directives frequently include obligations to classify or designate certain protection or vulnerable areas, adopt programmes or plans, produce reports, etc. Bad application cases are concentrated in the areas of nature, waste and water.

The above analysis by the Commission Staff indicates, in a preliminary way, that the distribution of non-communication cases does not indicate a significant difference between the "old" and the "new" Member States. It is remarkable, however, that with respect to non-conformity and bad application, the biggest "sinners" are not the "new" MS but the old ones, in particular Spain, France, Ireland, Italy, UK (8 or more non-conformity cases) and Greece, Spain, France, Ireland, Italy, Portugal (25 or more bad application cases).

An example of the **naming and shaming** policy [van Iersel 2006] is given in a recent press release by the Commission[11]. The European Commission is continuing legal action against Portugal over three breaches of EU law to protect human health and the environment. In each case Portugal is being sent a final written warning that it will be taken to the European Court of Justice unless the infringement is rectified in the near future. The breaches concern serious shortcomings in Portugal's management of *industrial waste*, a *leisure development* that threatens to damage an important nature conservation site, and *inadequate treatment of waste water* from a major coastal city near Lisbon.

Article 226 of the Treaty gives the Commission powers to take **legal action** against a Member State that is not respecting its obligations. If the Commission considers that there may be an infringement of EU law that warrants the opening of an infringement procedure, it addresses a "Letter of Formal Notice" (first written warning) to the Member State concerned, requesting it to submit its observations by a specified date, usually two months. In the light of the reply or absence of a reply from the Member State concerned, the Commission may decide to address a "Reasoned Opinion" (final written warning) to the Member State. This clearly and definitively sets out the reasons why it considers there to have been an infringement of EU law, and calls upon the Member State to comply within a specified period, usually two months. If the Member State fails to comply with the Reasoned Opinion, the Commission may decide to bring the case before the Court of Justice. Where the Court of Justice finds that the Treaty has been infringed, the offending Member State is required to take the measures necessary to conform. Article 228 of the Treaty gives the Commission power to act against a Member State that does not comply with a previous judgement of the European Court of Justice. The article also allows the Commission to ask the Court to impose a financial penalty on the Member State concerned.

5. IMPLEMENTATION OF THE 6TH ENVIRONMENTAL ACTION PROGRAMME (6EAP)

The procedure leading to the adoption of the 6EAP Decision in 2002 was initiated by the submission of the Commission's proposal to the European Parliament and Council in January

[11] "Brussels, 30 June 2006. Portugal: Commission send final warnings over environmental infringement. " http://europa.eu.int/rapid/pressReleasesAction.do

2001[12] and lasted a year and a half, during which intensive political negotiations were held within both institutions as well as between them. The Commission's proposal for the 6EAP followed on from a 'global assessment' of the implementation of the 5EAP[13], which had been requested by Parliament and Council in 1998. This assessment, conducted by the Commission services, concluded that, during the period of the 5EAP, despite improvements in some areas of environmental policy, 'practical progress towards sustainable development has been rather limited'. Two main causes were identified for the limited success of the 5EAP: its lack of quantifiable targets and monitoring mechanisms, and the fact that 'there was no clear recognition of commitment from Member States and stakeholders and little ownership by other sectors'. The Commission announced that the 6EAP 'would set general objectives that will need to be translated into quantifiable targets to steer the development of both environmental measures and the strategies in the economic sectors.'

From the outset, 6EAP identifies four "key environmental objectives": *climate change; nature and biodiversity; environment and health; and natural resources and waste*. In its actual proposal for a 6EAP, the Commission focused on general objectives, but with a few exceptions, refrained from proposing any quantifiable targets [Pallemaerts 2006]. Some targets (e.g. for waste prevention and noise reduction) are mentioned in the introductory Communication, but omitted from the proposal for a decision. Effectively, this Communication suggests that the target-setting process be deferred.

It is worthwhile having a brief look at the climate change objective, which is described as the "outstanding challenge of the next 10 years and beyond". To attain that objective, the 6 EAP describes nearly 30 actions, which are grouped in 8 categories. For each category a shorthand evaluation is given below [Pallemaerts 2006].

- *Ratification and entry into force of the Kyoto Protocol (+)*
- *Demonstrable progress in achieving Kyoto commitments by 2005 (+)*
- *Reducing greenhouse gas emissions in the energy sector (±)*
- *Reducing greenhouse gas emissions in the transport sector (-)*
- *Reducing greenhouse gas emissions in industry (±)*
- *Reducing greenhouse gas emissions in other sectors (±)*
- *Promoting the use of fiscal measures (-)*
- *Ensuring climate change as a major theme of EU and national RD & D programmes (+)*

In summarising the progress to the *key environmental objectives*, [Pallemaerts 2006] presents the following picture:
Climate change: Overall, the short-term international political objectives of the EU have been achieved and demonstrable progress has been made towards meeting the Kyoto commitments for the period 2008-2012. However, achievement of internal policy objectives with respect to the main source sectors of greenhouse gas emissions in the EU is uneven, with transport clearly standing out as the main source of concern.
Nature and biodiversity: Progress to date is insufficient to achieve the overall objective of halting biodiversity decline by 2010, but serious efforts are being made to protect habitats and species on the ground through implementation of existing legislation. Some progress has also been made in the integration of environmental concerns in the Common Agricultural Policy (CAP) and Common Forestry Policy (CFP). However, the measures proposed for the

[12] COM(2001) 31
[13] COM(1999) 543

protection of the marine environment are disappointing and are not likely to achieve visible results before 2012.
Environment and health: New chemicals legislation (REACH), though delayed, will represent significant progress but fall short of the ambitious objectives laid down in the 6EAP[14]. The more limited objectives in the area of water quality have generally been met, except with respect to priority hazardous substances, where action is significantly delayed. However, the measures taken and proposed to improve air quality and urban environmental quality are far from sufficient to achieve the health and environment protection objectives of the 6EAP.
Natural resources and wastes: The Thematic Strategies in these two areas have watered down the 6EAP objectives. The measures proposed to promote more sustainable use of natural resources are clearly insufficient to achieve the initial objective of breaking the link between economic growth and resource consumption. New measures are proposed in the field of waste prevention and management, but priority is given to recycling and recovery rather than reduction of waste production.

6. ISSUES AND COSTS OF ADOPTING *ACQUIS* IN THE ACCESSION COUNTRIES

The accession countries are confronted with three central issues when implementing the *acquis*: *legislative challenge, financial challenge, and cultural (mentality) challenge.*

The legislative challenge[15]

Each state aspiring accession hast to comply with a number of criteria: stability of institutions (democracy, rule of law, human rights, protection of minorities); functioning and competitive market economy; ability to take up obligations of membership with respect to the political, economic and monetary union; transposition and implementation of EU legislation; resolution of all outstanding border issues. During the negotiation process, bilateral intergovernmental conferences examine different chapters of the acquis ("screening"). Common negotiating positions have to be approved by the Member States. Negotiation sessions taking place at Ministerial level lead eventually to a draft accession treaty. After the Council approval, EP assent and signature follows ratification.

The governments play in the approximation process a major role since countries aspiring to join EU must align their laws, rules and procedures to give effect to the whole body of *acquis communautaire.* This process consists, as is the case with any new piece of EU legislation for a MS, of three key elements: transposition, implementation, and enforcement. It is important during the process to consult interested groups and individuals.

The challenge during the **transposition** process is to *incorporate* requirements of EU by adopting or changing national laws, rules and procedures. The first step in the process of approximation is to determine the *state of conformity* of the national with the EU legislation. In the second step, choice and content of *national measures* (e.g. new laws and administrative measures vs. amendment of the existing ones) have to be made. The choice of measures depends on the type and/or requirement of the EU regulation: a prohibition is a *fixed*

[14] See also [Lenaerts 2006]
[15] For details, see [EU Guide 2006]

requirement (e.g. use or discharge of asbestos), but a fixed limit value (e. g. lead in air) may be achieved through *discretionary measures.*

Implementation implies the provision of the institutions and budgets necessary to carry out the laws and regulations. One authority at state level must have overall responsibility for the sector. Competencies may be divided among several institutions at the same or different levels: e.g. EIA implementation by Ministry of Public Works, environmental permits at local/province/state level, monitoring and enforcement delegated to regional/local level. Changes may be needed for institutions, procedures, standards. A cost/benefit analysis of implementation choices must identify methods of needed financing.

Enforcement implies that the necessary controls and penalties are provided to ensure that the law is being complied with fully and properly. Monitoring and control mechanisms have to be established or improved, and inspection systems strengthened by taking the necessary administrative and judicial measures. Growing focus of attention on enforcement in the EU has revealed that compliance problems can arise even with strict laws and procedures.

The financial challenge

The bulk of the investment is likely to be needed for infrastructure in air pollution abatement, water and wastewater management, and solid waste management. Setting up and reinforcing environmental management structures requires substantial additional resources. Based on the first region-wide estimates, the total investment costs of implementing the environmental *acquis* were initially estimated [EDC-EPE 1997] to be around 100 – 120 billion Euros (Fig. 3) for all the ten candidate countries. In the meantime more detailed and reliable estimates have been carried out, resulting in a downscaling of total investment needs to about 70-90 billion Euros [Jantzen 2000]. On the other hand, ongoing increase of EU legislation puts increasing demands on financing. Moreover, the specific circumstances of single countries have led to more refined calculations of financing needs[16]. The work on the financial implications of implementing single directives in individual pre-accession countries is of immediate priority. It is unrealistic to expect from the candidate countries and the new MS to bear all the costs of approximation. On the other hand, there should be no illusion about the magnitude of the possible support by the EU. It is not likely that this support will exceed 10 percent of the total investment costs. In fact, the bulk of investments are expected to be borne by the private sector, with money from regular and specialised investment banks.

There are no reliable estimates on the total investment costs of implementing the environmental *acquis* in Croatia. By scaling down the costs for the 10 present candidate countries, with a total population of just over 100 million, to the population size of Croatia, one would arrive at a guesstimate of about 4 billion Euros for environmental infrastructure.

[16] For Lithuania see [Bluffstone 2002]

Figure 3. Investment for approximation to EU environmental legislation: 1997 estimates (in billion Euros)

	AIR	WATER	WASTE	TOTAL	Euro per capita
Bulgaria	5.1	2.7	1.8	**9.6**	**1157**
Czech Republic	6.4	1.1	0.8	**8.3**	**806**
Estonia	1.6	1.4	0.1	**3.1**	**2076**
Hungary	2.7	3.1	0.6	**6.4**	**633**
Latvia	2.7	1.6	0.1	**4.5**	**1796**
Lithuania	4.1	2.3	0.2	**6.5**	**1769**
Poland	13.9	13.7	2.2	**29.8**	**770**
Romania	9.1	6.3	1.0	**16.4**	**729**
Slovakia	1.9	0.9	0.3	**3.1**	**574**
Slovenia	0.7	n.a.	1.2	**1.9**	**925**
TOTAL	**48.3**	**33.1**	**8.3**	**89.6**	**853**

Source: EDC-EPE 1997

The cultural (mentality) challenge

In addition to the main challenges and priorities identified by the European Commission, there is another critical factor: culture and mentality. Innovation in the economic and environmental realms requires considerable cultural and mentality changes from a past model that is incompatible with free market and transparency. In this sense, compliance with the EU *acquis* cannot happen in isolation from an overall process of profound political, judiciary and economic reforms.

The Environmental Sustainability Index (ESI), developed by a World Economic Forum Task Force and based on 67 variables, is a measure of overall progress towards sustainability in 122 countries [ESI 2001]. A remarkable fact is that *Reducing Corruption* is the variable that has the highest correlation with the ESI. This fact supports the view that good governance broadly conceived enhances environmental sustainability.

The non-governmental organisation Transparency International (TI)[17] first released in 1995 the Corruption Perception Index (CPI). TI has been widely credited with putting the issue on corruption on the international policy agenda. CPI ranks countries by their perceived levels of corruption, as determined by expert assessments and opinion surveys. In this context it is instructive to see the evolution of Croatia's CPI in the recent years. Using the data available on the website of TI, it emerges that Croatia's CPI has a middle place worldwide, with little improvement over the last 5 years (Fig. 4).

[17] www.transparency.org

Figure 4. Evolution of Croatia's Corruption Perception Index CPI

Evolution of Croatia's Corruption Perception Index CPI				
Year	**N = Number of CPI rankings this year**	**CPI (CR) = Croatia's CPI this year**	**CPI(CR) / N**	**Some other countries with the same or nearly same CPI this year**
1999	**99**	**74**	**0.748**	**Colombia, India, Ivory Coast, Moldova, Ukraine**
2000	**90**	**51**	**0.567**	**Brazil, Turkey, Argentina, Bulgaria, Ghana, Senegal, Slovakia**
2001	**91**	**48**	**0.528**	**Colombia, Czech Republic**
2002	**102**	**51**	**0.500**	**Ghana, Czech Republic**
2003	**133**	**60**	**0.451**	**Colombia, El Salvador, Peru, Slovakia**
2004	**146**	**67**	**0.459**	**Peru, Poland, Sri Lanka**
2005	**159**	**71**	**0.447**	**Burkina Fasso, Egypt, Lesotho, Poland, Saudi Arabia, Syria**
Source: adapted from the website www.transparency.org of Transparency International				

Recent research [Pellegrini 2005] examined the variance in environmental policies in the enlarged Europe. Stringency of environmental regulations countries was measured by the Environmental Regulatory Regime Index (ERRI)[18]. That research concluded that differences in corruption levels across countries appear to be more important than income differences. Therefore the lower environmental standards in pre-accession states were not implied by lower income levels but likely reflect low institutional quality. This is a powerful rationale for new and acceding member states to adjust to EU legislation both in letter and in spirit, the latter meaning more transparency and less corruption, especially at the judiciary level. In this respect, the Directive 90/313/EEC on the freedom of access to information on the environment is of highest relevance. Related to the Aarhus UNECE Convention, it imposes the duty to ensure that information held by publicly accountable bodies be available to the public. In particular, answers to the requests have to be provided within specified time. There must be a right of appeal when information is denied, and the MS must make periodic state of the environment reports.

Candidate countries can learn useful lessons from previous accession processes [Bošnjaković 2001]. The examples of Austria, Finland and Sweden show that it is important to find partners in the accession phase to share experiences and strengthen the negotiation position. Environment may be the key to enlargement, but major difficulties remain due to key obstacles such as agriculture or transport, as well as to widely different traditions for enforcement in the member states. It is important to elaborate minimum requirements and to achieve good results during the negotiation phase. In past accessions, the single difficult issue in negotiations was the length of transitional periods and granting of deadline extensions.

[18] For the definition of ERRI, see (Pellegrini 2005) and further references quoted by them, such as (Esty 2002)

7. PROGRESS AND CHALLENGES OF IMPLEMENTATION IN CROATIA

EU Croatia's 2005 progress report[19] on chapter 27 testifies that good progress has been made in the areas of air quality and waste management and some progress in the water quality sector. Limited progress has been made in other areas.
Regarding **horizontal legislation**, limited progress could be reported. There has been no development concerning the ratification of the Kyoto Protocol. Further efforts are needed to limit the growth of greenhouse gas emissions in order to meet Croatia's Kyoto target for the period 2008-2012. The transposition and implementation of the Emissions Trading Directive and the Linking Directive are at the core of cost effective climate actions to be implemented in Croatia. Elements of a number of horizontal directives in the area of environment, such as provisions related to public participation in environmental decision making, are transposed through existing Croatian legislation but none of the regulations are currently fully in line with the *acquis*. Revisions continue to be needed to bring Croatian legislation in line with the *acquis* on Environmental Impact Assessment. No particular progress can be reported on the implementation of the *acquis* on Strategic Environmental Assessment.

In relation to **air quality**, good progress could be reported. The Air Protection Act, adopted in November 2004, transposes a substantial part of the Ambient Air Quality Framework Directive. This act has also given rise to partial transposition of a number of other directives in the sector. The development of the national network for monitoring air quality continued.

Good progress could also be reported concerning **waste management.** Transposition has advanced through the adoption of the Waste Act in December 2004 and a regulation transposing the European waste catalogue and the list of hazardous wastes in April 2005. The national waste management strategy has been adopted. However, an action plan to implement the strategy needs to be urgently adopted. The newly established Environmental Protection and Efficiency Fund focussed on remediation of official municipal waste landfills to EU standards in its first year of operation.

As regards **water quality**, progress could be reported as the transposition of the Drinking Water Directive was completed in 2004 through the adoption of an ordinance on drinking water quality. Whilst transposition of the *acquis* in the field of **nature protection** is already relatively advanced, completion of the alignment process has encountered delays and limited progress could be reported on the 15 legislative measures foreseen in the 2004 national programme for the integration of the Republic of Croatia into the EU, only one of which was adopted within the timescales foreseen by the programme.

Regarding **industrial pollution and risk management** no substantial developments could be reported on the transposition of the *acquis*. The level of transposition remains low and Croatia faces a major challenge in aligning with the *acquis* in this sector. Croatia has been operating a permitting system for a number of years and though it is not compliant with the requirements of the *acquis,* it nevertheless provides a good foundation upon which to build.

In the field of **chemicals and genetically modified organisms**, the revised 2004 Chemicals Act did not come into effect on 1 July 2005 as foreseen, since the government proposed to postpone the adoption of the amendments to the law in parliament. This revised act would partially transpose a number of directives. In its absence, no particular progress on

[19] This section is closely following the EU Croatia's 2005 progress report on Chapter 27, accessible via the website http://www.euractiv.com/en/enlargement/progress-report-prods-croatia-reforms/article . It is a snapshot of the situation found at the time of its writing (end 2005).

transposing the *acquis* can be reported in this sector. There has been limited progress in transposing the *acquis* in the **noise** sector. As regards **forestry**, administrative capacity has been provided and work is ongoing on drafting legislation in conformity with the *acquis.*

With regard to **administrative capacity** in the environmental sector, following the reorganisation of the Ministry of Environmental Protection, Physical Planning and Construction the number of staff has increased by 14. Reorganisation of the Directorate for Inspection has resulted in a small increase in staffing levels. The Agency for Environmental Protection (established in 2002) is now operational and currently has 15 staff members. Whilst many institutions have staff who are knowledgeable of the *acquis* there remain resource constraints that affect their ability to implement environmental law. Of particular concern are staffing levels in local authorities responsible for issues such as municipal waste collection and disposal. The distribution and fragmentation of responsibility within the administration is hampering efforts to align with the *acquis*. The relative weakness of the Ministry of Environmental Protection, Physical Planning and Construction in relation to other ministries weakens the influence of environmental protection in Croatia and jeopardises its ability to fully implement the requirements of the environmental *acquis*.

The basic requirements of an **inspection and enforcement** system are in place but its effectiveness varies from sector to sector. The water inspection system works well whilst the industrial inspectorate is too small and poorly resourced to perform its current tasks let alone those required in order to implement the Integrated Pollution Prevention and Control (IPPC) Directive. At local level the situation remains poor with many waste facilities rarely inspected. The level of fines for breaches of environmental law do not offer an adequate deterrent and collection rates remain low. There is little evidence that the judicial system is sufficiently supportive of enforcement of environmental law.

Regarding **financial resources**, 0.46% of the 2004 State budget was allocated for environmental protection (administrative and salary expenditure not included). The 2005 State budget provides for a similar level of expenditure. In addition, counties and local self-government units have their own revenues that are used, amongst other things, for environmental protection. An Environmental Protection Fund was established and became operational in 2004. The fund has allocated grants for co-financing remediation of 151 municipal waste landfills.

The specific findings by the EU in the environmental sector in Croatia are in line with the more general recommendations for the way forward in the administrative development [Koprić 2004]: rationalisation of the public administration; strengthening of the institutional capacity; strengthening of the professionalism and ethical standards and de-politicization of the administrative service; de-bureaucratisation; orientation towards results, transparency and openness; decentralisation; partial privatisation in public administration.

8. CONCLUSIONS

Without exaggeration one may state that the EU environmental policy and legislation rank among the best in the world. National transposition and implementation of adopted legislation often take place with delay, and not always effectively. However, Community instruments for monitoring and sanctions in case of non-compliance are in place. With respect to the new and aspiring Member States, the environmental *acquis* proved to be a most effective tool to introduce improved environmental protection policy and practices. However, important obstacles remain: financial and mental.

At the Community level, the recent overriding concern for growth and jobs has been used to call into question the very legitimacy of Community regulatory action in many fields, including the environment. The evolution of EC environmental policy during the period of the 6EAP provides evidence of the political downgrading of law from its traditional position as the prime form of Community action for the protection of the environment. The stated support for wider use of economic instruments seems to serve as much as a political discourse designed to justify the retreat from classical legislative action as it reflects a genuine political commitment to the further development of indirect, market-based forms of regulation at EU level. As a result, EU environmental policy seems to be retreating increasingly into the realm of soft instruments. The increased recourse to "comitology" and standardisation to complete the 'technical details' of legislation has profound implications for the transparency and democratic legitimacy of EU environmental policy [Pallemaerts 2006].

In Croatia, good progress has been made in the areas of air quality and waste management. Some progress has been made concerning water quality whilst limited progress has been made in the other sectors. Overall progress is slower than envisaged in the 2004 National Programme for the Integration of the Republic of Croatia into the EU. Most of the problems highlighted in the Commission Opinion on Croatia's application for EU membership remain present and continue to pose a threat to successful implementation of the *acquis*. In particular, sustainable progress can only be achieved if all the necessary instruments that guarantee full transparency in environmental field are adopted and implemented.

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OKOLIŠNO ZAKONODAVSTVO EU: KAKO PROVEDBA RADI, I ŠTO SE IZ TOGA UČI

Sažetak: *Važnost zakonodavstva EU postala je veća od nacionalnog zakonodavstva u posljednjih 20 godina. Okolišno zakonodavstvo EU smatra se velikim uspjehom, u starim i novim zemljama članicama. Razvoj i provedba zakonodavstva još su suočeni s mnogim preprekama uključujući i njihove troškove. Rad daje pregled napretka i prepreka u provedbi ključnih okolišnih smjernica EU, posebice na polju zaštite i upravljanja vodama. Provedba šestog Akcijskog okolišnog plana se također tematizira, a posebice što se tiče promjene klime. Naglasak se daje procesu aproksimacije i provedbe u novim zemljama članicama, kao i procesu pristupanja Hrvatske u EU.*

Ključne riječi*: Zakonodavstvo EU; okoliš; aproksimacija; prepreke u provedbi; Hrvatska*