

**Environmental Impact Assessment**  
**for the**  
**Draft Programme**  
***Cross-border Cooperation between***  
***the Republic of Poland and***  
***the Slovak Republic 2007 - 2013***

v. 01

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## 1. Formal Framework for Elaboration of this Assessment

A strategic environmental impact assessment for the draft *Operational Programme of Cross-border Cooperation between the Republic of Poland and the Slovak Republic for 2007 to 2013*, hereinafter referred to as CCPS Programme, is carried out in line with the environmental protection law which has been implemented into the Polish and Slovakian legislation. Thus the production of strategic environmental assessments (SEA) is required by the EU and, consequently, it is an obligation for both parties (Directive 2001/42/EC and the *Espoo Convention* ratified by both countries).

Within the framework of that process a projection of the environmental impact of the said Programme has been produced to order placed by Ministry of Regional Development of the Republic of Poland, i.e. a governmental body which produces the master document. In accordance with the provisions of *Environmental Protection Law Act* the Projection is produced as a separate document on a parallel basis with the development of the Programme itself, with a necessary time shift.

The procedure assessing the environmental impact of some plans and programmes can be numbered among the tools used for fulfilment of the sustainable development principle – one of key constitutional principles of the Polish state political system and one of the fundamental system principles of the European Communities. The environmental assessment procedure is an element of the so-called horizontal EU law; it means that all the Member States are obliged to introduce such a procedure. Relevant provisions can be found in the aforementioned European Parliament and Council Directive 2001/42/EC of 27 June 2001 {the Strategic Environmental Assessment (SEA) Directive} which came

into force on 21 July 2004. This Directive was implemented through *Environmental Protection Law Act* of 27 April 2001 (*the EPL Act*, Official Journal of 2001 No 62, Item 627 as amended subsequently on numerous occasions). The provisions related directly to the said procedure can be found in Section VI, Chapter 1, Articles 40 to 45. Art. 40. It stems from them unambiguously that the draft CCPS Programme is subject to such an assessment on an obligatory basis. The Environmental Protection Law constitutes the sole formal basis for production of the Projection and identification of its contents. And arrangements concerning the character of the international cooperation between neighbouring countries can include various aspects which are important for the condition of the environment and the environmental protection measures; in particular they can decide on launching projects which may have a significant impact on the environment. The strategic assessment procedure has been incorporated into the Slovakian legislation, too. Therefore the Slovakian party has prepared a preliminary draft of such an assessment (Strategic Environmental Assessment of Operational Programme of Cross-border Cooperation between the Slovak Republic and the Republic of Poland 2007-2013. Version: draft October 2006, Bratislava) and it has been assumed that the projection to be produced by the Polish side shall constitute a formal fulfilment of that obligation.

## 2. Goal, Scope and Methodology of the Elaboration Process

The goal of the Projection is to identify the environmental impact of the CCPS program implementation effects in consultation with the Programme Partner. The EPL Act indicates that identification of the scope of the projection (the so-called scoping) is an obligatory element of the assessment procedure. The public administration body which prepares the draft of the document or modifies the already adopted document has to consult the scope and the level of detail of the information required in the environmental impact projection with relevant authorities. In this case the scope has been defined by the Minister of the Environment on the basis of relevant legislative provisions. The Projection is consistent with those recommendations.

The Projection has been produced by setting highlighted CCPS Programme priorities against the sustainable development and environmental protection goals defined in the strategic documents binding in the cooperation area. Moreover, the Projection covers some prospective analyses of possible physical undertakings related to the fulfilment of those priorities. The Projection covers the environmental after-effects on both sides of the Poland-Slovakia border but it focuses on the territory of Poland.

### 3. Procedural Issues

The public administration body which prepares the draft of the document is responsible for production of the projection. When the projection is produced the body which prepares the draft of the main document (in this case: the CCPS Programme) submits both the document and the projection to the authorities which have been consulted about the scope of the projection, to obtain their opinion. However, there is a difference: in case of deciding on the need to produce the Projection and defining the scope the forms of cooperation between the authorities include agreement and consultation respectively (i.e. both forms are based on a shared decision making) whereas in case of a draft document the latter is subject just to the opinion of the environmental protection authority, i.e. here the cooperation takes a non-binding form. Thus the situation is opposite to what you can find in case of the assessments produced for projects where the environmental protection authorities only issue their opinion about the need to produce the assessment (and the scope of the latter), but the consultation covers just the very settlement of the issue. This is especially important in case of an international strategy where the status of the final approval decisions is really high.

The minister responsible for the environmental issues and the Chief Sanitary Inspector (Art. 45 and Art. 381 of the EPL Act) are the public administration bodies competent to be consulted about the scope and the level of detail of the information required in an environmental impact projection in the environmental impact assessment proceedings conducted by a central public administration body, and to issue opinions about draft versions of those documents or modifications in the already adopted documents. Due to the geographical character of the

strategic document the cross-border environmental impact provisions could be applicable here, as well.

## 4. Information and Participation of the General Public

In accordance with Art. 43 Clause 2 of the EPL Act, the participation of the general public is an important element of the proceedings aimed at assessing the environmental impact of programmes and plans. But the EPL Act does not indicate clearly when the proceedings are to be initiated. In the light of Art. 43 it can be argued that the proceedings can be initiated at any point of time prior to approval of the document. Moreover, legal regulations applicable to the public access to the environmental information, in particular Directive 2003/4/EC, the relevant provision in the EPL and the provisions of the *Aarhus Convention* ratified by Poland and Slovakia, and the EU, are of considerable importance for the discussed document.



## 5. Contents of CCPS Programme

The region covered by CCPS Programme is delimited administratively. On the Polish side it includes Krośniensko-Przemyski (Podkarpackie Province), Nowosądecki (Małopolskie Province) and Bielsko-Bialski (Silesia Province) sub-regions and a part of the Krakowsko-Tarnowski (Oświęcim Poviát), Central Silesia (Pszczyna Poviát) and Rzeszowski-Tarnobrzeski (Municipal and Rural Rzeszów Poviát) sub-regions. On the Slovakian side it includes two regions (lands): Žyliński and Preszowski. The total area of the region delimited above is 38,000 sq. km including 22,300 in Poland. The neighbours, apart from other parts of the contracting countries' territories, include the Ukraine and the Czech Republic; and Hungary is a close neighbour, too.

The first priority of the Programme is the **development of the cross-border infrastructure** (DCI). Two task groups are involved here: the traffic and transport structure (T) and the environmental/technical infrastructure (E).

The second priority is the **social and economic development** (SED) with three task groups: tourist exchange (TE), cultural and natural heritage protection (H) and development of the institutional support network (N).

The third priority consists in **supporting local initiatives** (SLI) using the existing Euroregions (Karpacki, Beskidy, Tatry and Śląsk Cieszyński) .

Finally, the fourth priority consists in **technical assistance** (TA).

Moreover the Programme contains an extensive table specifying potential tasks, including a provision about the environmental protection (waste management, water supply, wastewater treatment, air pollution, integrated prevention of pollution – i.e. introduction of IPPC Directive, climate changes, land reclamation, issues related to

*NATURA 2000* sites, ecological municipal transport, and environmental risk problems). Tasks related to the tourism and protection of the cultural heritage have been mentioned, too. In other sections some projects which may have a significant impact on the environment can be found along with environmentally-friendly technologies, e.g. power engineering based on renewable sources. From an ecological point of view two aspects should be pointed out here. The increase of competitiveness (in a spatial sense, in Europe) is currently accompanied by a clear improvement of the environmental/technical infrastructure and the appearance of sustainable development criteria applicable to business operations. Moreover, individual geographical areas enhance their competitiveness, first and foremost, due to development of the service sector, especially the intangible services. Both the aforementioned aspects should have positive environmental effects. As far as the tasks are concerned, it can be achieved by improving the conditions conducive to development of tourism, including a qualified improvement of the area accessibility and improvement of the business development opportunities in general and, in particular, within the framework of the SME sector (as mentioned in the Programme). In the second priority the cooperation of local communities and a general improvement of as many aspects of the living standards as possible is important. From an ecological point of view the third priority (supporting local initiatives) is really important. Improvement of the environmental condition, including the reduction of the hazard sources, and improvement of the civil safety and border security are mentioned outright here. The first three priorities support fulfilment of the sustainable development principles. It will be possible to assess their environmental after-effects after elaboration of the task groups. Thus, the Programme is originally of a pro-environmental character. In particular, it places emphasis on a sustainable development of the rural economy (agriculture) including introduction of new economic and social activities and protection of environmental resources (especially waters, air and the

biosphere resources) to pass them on to future generations and, at the same time, to use them for meeting the needs of the present-day society. The priorities and the task groups are closely related to the geopolitical position of the region on the one hand and its natural and demographic peculiarities (or even distinctions), and its tradition, culture and history on the other hand. A direct reference to ecological matters has been incorporated into a short sub-chapter focusing on the condition of the environment and the measures required to improve it. It has been pointed out there that the infrastructure of the environmental protection facilities, including the water protection facilities, is rather poor. The directions of changes include the raising of the living standards, e.g. by simple improvement of access to free resources and better organisation of the spatial order. In the area of business activity improved significance of the tourist product, streamlined waste management and water/wastewater management, and introduction of new solutions in the power engineering based on renewable sources can be numbered among the most perspective ones. These provisions are of a very general character, yet they are apt, because, indeed, these are the prospects of the Poland-Slovakia borderland and fulfilment of the tasks related to the aforementioned priorities can ensure the expected promotion of the region accompanied by enhanced role of cooperation. Less attention is paid to the role of the *NATURA 2000* sites (both those established recently and those being created now) which constitute the key natural grid of the region. Moreover, the priorities do not refer directly to the nature, landscape or biodiversity conservation needs. The SPA and SAC sites are not indicated on the attached map which shows only National and Landscape Parks the number of which is especially large here (there are 6 Parks on the Polish side and 7 National Parks on the Slovakian side).

The SWOT analysis used in the Programme covers the environmental aspects, as well, but the evaluation recommendations and the suggested set of indicators are

not sufficiently extensive in this respect and therefore the  
Projection supplements them.

## 6. Condition of the Environment in CCPS Area

Below you can find a general assessment of the environmental condition, first and foremost in the Polish part of the area, but some comments apply to the Slovakian part, as well as a specification of the natural values of distinguished cross-border areas which will play an important role in implementation of the Programme.

The analysed region, with the area comparable to that of a small European country, is quite homogenous in terms of the quality and origin of its environment. It includes young folded mountains built, in general, of the Carpathian Flysch with small areas of a different lithology. The highest parts of the Carpathian Mountains along the Slovakia-Poland border covered with forests or (in their eastern part) a mountain pasture land (the so-called *połoniny*) have changed environmentally relatively little. Business operations are concentrated in valleys and at the foothills. As far as industrial hazards are concerned, the impact of the industry on the atmosphere, hydrosphere, pedosphere and biosphere in this area is average or small. No reports about health effects of the physical or chemical hazards caused by the industry have come from that area. The most significant spots of industrial emissions and, at the same time, the areas locally degraded in geochemical terms can be found in the vicinity of local crude oil extraction or prospecting locations. Construction of storage reservoirs on both sides of the border has been and may continue to be the source of significant disturbance of nature. Like Poland, Slovakia faces problems with the quality of potable water, wastewater treatment levels (see table 1) and the need to maintain the good quality of forests. Forest stands suffered heavy destruction in Slovakia as a result of their monoculture structure.

Low resistance of soils developed, first and foremost, on the Carpathian Flysch has resulted in a substantial hazard of environmental acidification on both sides of the border, with the processes of this kind dominating in Slovakia. Moreover, Slovakia faces higher and still growing threat of wind erosion, especially during green winters (probably as a result of the global warming).

The environmental science characteristic of the area can be found in the table below. The table characterises the status of physical and chemical, and some biological hazards. The following data, set against the average conditions recorded in Poland, confirm the general thesis about the cleanliness of the air and soil, and good condition of the biosphere, as well as some sanitary backwardness both in Poland and Slovakia.

**Table 1 – Selected environmental hazard parameters in the CCPS area**

Item	Element related to the condition of the environment	Characteristic or average values in the CCPS area	In relation to the remaining part of the country	Trend of current changes
1	Gaseous emission of SO <sub>2</sub>	0.15 S <sub>98,9</sub> /D <sub>24</sub>	2 times lower concentrations	Continued slow decrease
2	Gaseous emission of NO <sub>x</sub>	0.25 S <sub>a</sub> /D <sub>a</sub>	Two times lower concentrations	Stabilisation; a slow increase locally in the western part
3	Gaseous emission of CO	Below 0.05 S <sub>8max</sub> /D <sub>8max</sub> , practically does not occur	Definitely lower spatially averaged concentrations	Just local focuses
4	Dust emissions	PM10 0.5- 1.0 µg/m <sup>3</sup>	2 times lower concentrations	Slow
5	Wet deposition of sulphates into the soil	600-750 mg S/m <sup>2</sup>	About 60% of the national average	Slow decrease
6	Nitrates and nitrites in underground waters	> 15 mg NO <sub>3</sub> /dm <sup>3</sup>	National average	Stabilisation
7	Municipal waste per inhabitant	270 kg/mk/year	10% less	Quite fast increase
8	Municipal waste at illegal landfill sites and outside the storage and processing points	No data available	Probably less than the national average	No data available
9	Water quality in individual intakes	60% of intakes with bacteriologically contaminated water	In Poland more than half intakes are contaminated bacteriologically.	Very slow improvement
10	Bothersome noise in built-up areas	The road traffic acoustic onerousness ratio– 1.2	Southern Poland – 3, Central Poland 2-2.5	Increase, locally a fast one

Item	Element related to the condition of the environment	Characteristic or average values in the CCPS area	In relation to the remaining part of the country	Trend of current changes
11	Hazard posed to forests by primary and secondary insect pests	Average; locally increased	Lower than in the western part of the mountain zone	Stabilisation
12	Ionising radiation hazard	Hourly gamma radiation dose 68 nGy/h	In Poland from 63 to 85 nGy/h	Stabilisation
13	Households served by wastewater treatment plants	In Poland – around 58%, in Slovakia – 52%	Below the national average both in Poland and Slovakia	Very slow improvement

The legend:

1. Reliable average 24-hour concentrations (percentiles) set against the average permissible 24-hour levels;
2. Average annual levels set against the permissible annual levels;
3. Average maximum 8-hour concentration set against the permissible levels;
4. PM – dust fraction below 10µm;
5. Converted into sulphur;
8. Estimate resulting from the stored waste balance;
10. Podlaskie Province is considered to be least exposed to the transport noise, therefore data from that province are taken for comparison purposes (indicator 1);
12. A dose absorbed by 1 kilogram (of soil – in this case) for an hour, shown in joules – gray (1 Gy = J/kg).

Data from the Environmental Protection Inspection reports on *Condition of the Environment in Poland* and Provincial reports (Podkarpackie, Małopolskie) covering the period of 2003 to 2005, and reports published by Slovakian Environmental Protection Agency have been used here.

In general terms the aforementioned characteristics are constitutive for the border part of the discussed area, although they are heavily diversified internally on the sub-regional and local level. Just compare the landscape of Kotlina Podhalańska with Bieszczady, or that of Kotlina Żylińska with Połoniny in Slovakia to see the point.

In the era of globalisation (and simultaneous centralisation) areas with unique characteristics of the natural and cultural environment become more significant. This distinction and uniqueness becomes a value in its own right and should be protected as such, and used prudently at the same time. The Poland-Slovakia borderland is an example of such a unique area which is a value in its own right and, at the same time, offers a chance for a fast social and economic progress provided that the quality of that environment is maintained or even improved. The characteristic features distinguishing this

area make up a special, intricate and extremely attractive complex. Those features include:

- Low population density fitting the natural conditions there; areas of almost untouched nature hardly known anywhere even in the countries involved in the cooperation;
- Clean air and favourable air exchange conditions;
- Good quality of water, especially in upper sections of mountain rivers and streams polluted actually only with municipal wastewater;
- Exceptional diversity of the natural system; richness of exposure-conditioned ecosystems (proximity of *adretational* slopes and *ubacs*) and Pontic communities; presence of rare species for which special conservation systems should be established and maintained;
- Attractive forest stands (with a well-preserved mountain tier system), mountain pasture land and valley grassland;
- Opportunity to commune with nature unaffected by the civilisation; just to be exposed to beneficial silence and tranquillity;
- Richness of cultures, traditions and customs;
- Good traditional and healthy cuisine; good conditions for production of healthy food and location of “green industry”.
- Attractive and generally accessible network of trekking trails and tourist trails of other types with tourist border checkpoints located quite close to each other.

On the Polish side of the area there are six National Parks (Babiogórski, Tatrzański, Gorczański, Pieniński, Magurski and Bieszczadzki) and at least one more is planned to be created (Przemyski); moreover there is a dozen or so landscape parks, over a hundred and fifty reserves and many other forms of nature conservation (protected landscape areas, monuments of nature, documentation stands, ecological arable lands, and natural and landscape complexes). The discussed area includes UNESCO Biosphere Reserve (Eastern Carpathian Mountains) and water and marsh areas protected under the Ramsar Convention ratified by Poland. Bieszczadzki



National Park has been awarded the Diploma of Europe. The existing *NATURA 2000* sites (both the bird sites *Special Protection Areas* and the habitat sites *Special Areas of Conservation*) are of particular importance there. The *NATURA 2000* network covers all the aforementioned National Parks as well as a long list of other sites. Actually the entire section of the Carpathian Mountains range in that region is subject to conservation.

There are seven national parks on the Slovakian side: Tatrzański, Małej & Wielkiej Fatry, Niskich Tatr, Słowacki Raj, Pieniński and Połoniński. Three of them border on the parks situated on the Polish side (Tatrzański, Pieniński and Bieszczadzki/Połoniński). There are numerous landscape parks, reserves and *NATURA 2000* sites. Natural conditions on the southern slopes of the Carpathian Mountains are different because of their climatic and hydrological distinctness. The flora and fauna is a bit different there, too, including well-represented populations of large predatory mammals (bear, lynx, wolf, wild boar, wildcat). The protected areas account for about 48% of the total area on the Slovakian side (what's surprising – their area is much bigger in the western part of the region), whereas on the Polish side their share is smaller (40%) with the highest percentage in Nowy Sącz area.

It is important to point out that this part of Central Europe features some extremely rare natural values (both in ecological and landscape terms); those values can hardly be found in any other place in Europe or even in the world, and are appreciated by naturalists and tourists; and, at the same time, they constitute unique habitat and landscape diversity resources. On the border of the oceanic and continental Europe geo-ecosystems of valleys, dales, foothills, hilltops, sloping peaks and crags with Pontic accents have developed on the base of a glacial, fluvioglacial, fluvial or orographic origin. The meso-regional mosaic is exceptionally well-developed as a result of differences in the base and, first and foremost, distinctness of the climatic and water conditions, including

the supply. Such a nature is supported by a transitional climate with Atlantic and continental features and considerable variability of weather resulting from the fact that the region stretches far along a parallel of latitude and, consequently, is exposed to significant Atlantic/Asian climatic contrasts. On the Slovakian side Pannonian meso-climates occur creating perfect conditions for location of health resorts with a teleso-therapeutic profile.

Six cross-border areas of particular value can be distinguished in the discussed region, namely: Bieszczady, Beskid Niski, Dorzecze Popradu & Pieniny, Spisz, Tatry & Orawa and Śląsk Cieszyński. The Programme should concentrate the key environmental protection efforts in the areas listed above. Those areas account for 80% of the CCPS border zone and, in some cases, reach up to the boundaries of the adopted delimitation.

This overview-type description shows that the entire analysed region is situated in a direct vicinity of extremely valuable areas. Thus, the inhabitants of the discussed region would have to cover a distance of maximum 20 km or, in most cases, even below 10 km to reach places of a high natural value. It is important to point out that the borderlands (almost all of them are covered with forest), apart from other qualities, possess the charm of extensive agrocenoses with untouched structure. Examples of such areas which are waiting for being discovered and linked with the neighbour include Pogórze Cieżkowickie, Beskid Wyspowy & Mały, Pogórze Bocheńskie as well as vast areas in north-eastern Slovakia.

The qualities of a mountain and piedmont landscape stem also from specific environmental-science-related characteristics. Protected areas cover, first and foremost, mountain ridges and upper parts of the slopes. Valleys are predominantly taken up for human settlements and farming purposes. Consequently it is difficult to maintain the compactness of the ecological structure, especially between individual parts of the foothills.

## 7. Identification of Strategic Goals for Sustainable Development in CCPS Area

An analysis of the strategic documents containing the environmental protection and sustainable development issues which are related to the Programme is a statutory element of the Programme assessment exercise because the analysis indicates the place of the document in the system of pro-environmental strategies and makes it possible to record the goals the achievement of which is a measure employed to assess the document by means of the projection. They have been presented in a historical and supplementary order to identify the goals efficiently. The key terms and definitions which make up the record of the goals have been printed in bold type. European strategies, especially the EU ones, as well as Polish and Slovakian strategic documents of a national and regional level have been distinguished. This is how the key goals (their consistency with the main document have been discussed) have been set.

The environmental protection goals defined on an international, national and regional level can be divided into two principal groups: **averting of global threats** including those resulting from depletion of the resources of our plant and those related to a very broad term of the **ecological safety** and **ecological awareness** of an organisation operating in a given community. The main and universal goal is to follow the **idea and principles of the sustainable development** repeatedly referred to in all strategic documents.

The first provisions of a strategic character can be found in the *U'Thant's Appeal* (1969), the *Stockholm Declaration* (1972) and early environmental protection programmes produced by the UN (UNEP) and, especially, in the *Nature Conservation Strategy* (1980), the *World Charter of Nature* (1982) and the report called *Our Common Future* (1987).

All the thoughts and recommendations contained in those documents, enhanced by the events of 1990 (a breakthrough International Environmental Protection Day in Moscow and the meeting of ministers from Europe in Bergen), were included in the documents of the UN Conference *The Environment and Development* which, known as the Earth Summit, was held in Rio de Janeiro in 1992. The principles of necessary rights and responsibilities determining the achievement of a **new ecological order** on Earth and a **better quality of life** formulated at that conference continue to be valid. At least six out of 27 principles are important for development of international cooperation programmes. The principles No 5, 7, 9 and 12 pay attention to the need for **continuous cooperation among all countries** and people in support of the sustainable development in order to **maintain, protect and restore the health and integrity of the ecosystem on Earth**. The principles No 18 and 19 saying about the need to notify the neighbours about any disasters or hazards are of a specific significance. The neighbours should provide an appropriate information about environmental hazards which may have unfavourable effects. Those issues are discussed more broadly in the UN global programme of *Agenda 21*, in the chapter devoted to international cooperation, transfer of technology, international law and circulation of information. The principal goal of the CCPS Programme, i.e. development of border areas of the two countries, is consistent with the principles of sustainable development and modern environmental protection, according to which the economical promotion of people is considered a necessary precondition of increased ecological awareness or a chance for the social acceptance of necessary limitations imposed on the use of the environmental resources.

The Rio de Janeiro documents have introduced, on a common basis, the principles of responsibility for environmental losses (those principles are considered classical ones today) and key criteria of the sustainable development, as well as the environmental protection

management tools which have been employed effectively to this day. The environmental assessments constitute the most important tool and they will be applied within the framework of the CCPS Programme both to individual projects and strategic documents.

Two most important environmental protection conventions of extreme importance for cross-border cooperation were produced in Rio de Janeiro, namely the **Biodiversity Convention** and the **Framework Convention on Climate Changes**. It is important to point out that since the Rio Summit additional legal and political solutions which might replace the conventions and treaties which are not always signed or ratified, have been looked for. **Regionalisation** plays an important role here – if it is difficult to find global solutions regional agreements can be entered into. The Carpathian cooperation within the framework of Euroregions covering, apart from Poland and Slovakia, Hungary, Romania and the Czech Republic is a good example. Those substitutive (in a sense) programme initiatives stem from low effectiveness of the UN actions and poor implementation of *Agenda 21*.

In subsequent years other important eco-developmental documents were adopted. Namely, the *Millennium Development Goals Report* (MDGR – or the millennium declaration) adopted in 2000 in New York specifies eight main goals and the eighth one says about the need to develop and implement national strategies of sustainable development until 2005. Consequently a document called *Poland 2025: Long-term Sustainable Development Strategy* was produced in Poland. However it is commonly criticised for lack of a mission and fragmentation of the problems. In 2001 the *Amsterdam Declaration on Global Changes* discussing the necessary response to those changes was published. The key provision of that declaration is the postulate that the changes should be recognised as a process with characteristic thresholds and changes rather than a simple cause-and-effect paradigm. It has been recognised that the Earth, as a system, has gone far beyond the range of natural variability existing for

hundreds of thousands of years. Therefore an ethical and political framework for a global governance and a strategy for development of Earth as a system are required. The *Amsterdam Declaration* had been the most serious warning of this kind before the recent *Climate Report* (2007). In practice it means that any programmes, plans or policies have to refer to unintentional and ongoing changes in the global and local environment.

Those and other challenges formed the basis for organisation of the Johannesburg Earth Summit of 2002. The Summit was to lead to significant commitments in the area of social- and community-based protection of natural resources and health. Unfortunately the participants failed to reach an agreement about most proposals. As far as the CCPS Programme is concerned, it would be beneficial to pay attention to the principles of **entrepreneurs' and business responsibility for the condition of the environment** which should be incorporated into the best cooperation practice. *The Earth Charter* or *The Tenancy Agreement Concluded with the Earth* developed in Brno in 2004 is the newest document of a global character offering a structured approach to the relationship between the civilisation and the environment. Especially our southern neighbours are very fond of that document. This Declaration is predominantly of a philosophical character but it accurately defines the limited character of our present-day actions and the need for restoration of the natural order of the world as a precondition of a long-term existence of the humankind and our culture. The watchwords of the Declaration fit the goals of the Programme (which foster **cultural values** and sustainable economic development) really well.

Discussing various conventions it is important to draw your attention to the *Aarhus Convention* (1998) on access to information, **participation of the general public in the decision making process and access to justice in environmental issues**. Poland and Slovakia have ratified around 20 environmental protection conventions; some of them have been reflected in the EU legislation in greater

detail and thus are strictly implemented in the national law. The key strategic documents adopted by the European Union and applicable to the environmental protection are the EC environmental protection programmes which have been started to be formulated since 1973. The watchword of the current sixth EC action plan in support of environmental protection for the period of 2001 to 2010 is *The environment 2010: our future, our choice*. It defines four priorities listed below.

- **Restrain unfavourable climate changes** and counteract their after-effects.
- **Nature and biodiversity:** protection of rare biotic and landscape resources.
- The environment and health, **ecological safety** of the citizens.
- Sustainable utilisation of **natural resources** and a new and effective **waste management**.

The program refers to the need to strengthen international institutional framework, create regional structures, improve coordination among the Member States and within the framework of other European structures. The Programme should be related to the EU developmental strategy *Sustainable Europe for a Better World* presented at the Council of Europe meeting in Goeteborg in 2001. It has a three-part executive structure: it is assumed that at the first stage cross-sectional inter-departmental proposals and recommendations will be put together to improve the effectiveness of the policies and achieve the sustainable development. The point is that the sectorial policies should support each other rather than diverge, and the regional policy should be a precursor and the best example of such an integration. At the second phase it is planned to **establish specific instruments** and the third stage will consist in implementation and evaluation.

Moreover, the strategic documents prepared within the framework of the EU actions are of great importance for the provisions of the CCPS Programme. There is a dozen or so of them. Let's mention just two of them. At the conference of ministers of the environment in Lucerne (1993) *Action Plan in Support of Environmental Protection*

*in Central and Eastern Europe* was adopted. It can be considered a model for actions in support of sustainable development in the CCPS Programme. The Lucerne programme includes the principles to be followed in the process of calculating the environmental losses and setting the priorities, points to necessary reforms in the environmental protection policy including establishment of better institutions and addresses the **environmental protection financing** issues specifying the facilities which should benefit from priority financing. But first and foremost the Lucerne programme addresses (to the largest extent seen so far) the cross-border and regional issues; e.g. the programme expands on management of the biodiversity protection in border areas. Its provisions concerning the cross-border emissions, ionising radiation and waste trade are important, too. The arrangements related to the **European Ecological Network Natura 2000** have a direct and very up-to-date connection with the CCPS Programme. The special character of those sites stems from the provisions of the Council Directive 79/409 EEC of 1979 (the *Bird Directive*), the Council Directive 92/43 EEC on protection of natural habitats and wild fauna and flora (the *Habitat Directive*) and the Commission Decision 97/266 EEC of 1996 on the scope of information about the Natura 2000 system sites. As a result of those regulations a cohesive network of protected areas has been created throughout the European Community since 2004. This network includes Special Protection Areas (SPAs) created under the Bird Directive and Special Areas of Conservation (SACs) created under the Habitat Directive. Such areas have been designated and approved (SPAs), and proposed (SACs) in Poland and Slovakia, as well. They create a system covering a dozen or so per cents of the territories of both countries including all the national parks, some landscape parks and reserves and quite substantial areas which actually have not been subject to any protection yet. It is important to point out that Poland and Slovakia adopted different methods of creating the NATURA 2000 sites – Slovakia preferred more numerous but smaller mainstays limited to



the areas where the occurrence of protected taxons has been observed; whereas in Poland larger but less numerous mainstays have been proposed. The problem of creation and maintenance of those sites is a fundamental issue in the present-day nature conservation in Poland. On the south-eastern borders of our country there is a dozen or so Natura 2000 sites the maintenance of which requires, in accordance with the European standards, a cooperation with the Ukraine and Slovakia.

The first more or less official strategic documents about the environmental protection were developed in Poland in the eighties. This historical (from today's perspective) heritage is worth remembering. The growing social criticism of the environmental condition led to development of one of the first natural environment conservation programmes in the countries of Central and Eastern Europe (1985 to 1988). A substantial portion of that document, known as *National Environmental Protection Programme*, is up-to-date even now; among other things it contains very reasonable provisions saying about the need to stop the land improvement (dewatering) work and to create situation conducive to proper functioning of ecosystems, and to eliminate physical and chemical threats to the population. The *Programme* did not enter the implementation phase for obvious political reasons. The ideas contained in that programme, supplemented by suggestions put forward by ecological activists of that time contributed, to a large extent, to creation of the basis for the Round Table Arrangements (1989), the ecological component. The 28 postulates included an extensive provision concerning the cross-border cooperation and proposals to create functional bilateral sites in areas of high natural value situated on both sides of the Polish border (adjacent to each other). It is fair to say that those postulates were put into practice only partially. Adoption of the eco-developmental principles declared at that time and a new forest management model in Poland, and a general stocktaking of nature (completely abandoned), and creation of an ecological system of protected areas

(actually, this system has been finalised only recently) should be considered important for the CCPS Programme.

The document called *National Ecological Policy* adopted by the Sejm (the Polish Parliament) in May 1991 is considered the best one in opinion of a very large number of experts. It was a form of rendering the Round Table provisions, taking into consideration operational objectives. On the basis of that document in May 1991 the Sejm passed a resolution on the ecological policy. The resolution defines the principles enhancing the role of environmental protection and eco-developmental actions aimed at improvement of the quality of life of the Poles and preservation of the resources of nature; and those principles have not grown stale. In particular, the document points to urgent needs to modernise the environmental legislation package and make the evaluation of environmental losses which should lead to stimulation of **pro-ecological behaviours demonstrated by businesses**, identification of principles applicable to shaping of **ecological safety**, development of the **ecological education** system etc. Those and other provisions of NEP made it possible to formulate, in subsequent years, detailed and up-to-date strategic documents. Some of them refer directly to the areas of interest to the CCPS Programme and all of them analyse the needs which should be taken into consideration in this Programme.

In 1993 the so-called *Warsaw Appeal* appeared in Warsaw; it originated at the First World Congress of Universalism. The Appeal suggests that we should head for new forms of life and development together with the social and natural environment. It is a precondition of survival of all the nations, both rich and poor.

In 1994 the Forecast Committee working at the Presidium of the Polish Academy of Sciences produced a report on preparation of a long-term developmental strategy for Poland for fifteen years. It was a very optimistic developmental forecast highlighting the mountain areas which should be used for tourist and recreation purposes.

The *Strategy for Poland* of the same year and the *Resolution on the Ecological Policy of the State* passed by the Senate constitute a formally stronger (because they have been adopted by the Government of the Republic of Poland and its Sejm) more extensive version of that document. The provisions contained in those more extensive documents confirmed what had been declared, i.e. that it was necessary to follow the one and only path of the sustainable development with a conscious and full involvement of the entire general public and above particular interests of individual organisations and in the name of the well-being of future generations. Another strategic document of considerable importance was the *National Ecological Policy II* which fostered similar values and identified, in a structured way, all the ecological policy principles (taken both from the Earth Summit and the EU documents) equipped with necessary implementation tools. That document was produced in 2000, the implementation programme for NEP II for the period of 2002 to 2010 was adopted in 2002 and its variant called *National Ecological Policy for the period of 2003 to 2006 taking into consideration the perspective of 2007 to 2010* was adopted in 2003. Those are the key strategic papers directly related to the environmental protection and sustainable development. Their extensive provisions contain declarations and resolutions adopted and passed previously, including the draft *Mountain Land Development Programme* which is so important for this Programme. The *Long-term Sustainable Development Strategy* (produced in the Governmental Centre for Strategic Studies – Poland 2025) which specifies the tasks without locating them or defining a necessary mission is a bit less related to this Programme. But it is important to mention the apt and long expected provisions of the *National Strategy for Protection and Moderate Utilisation of Biodiversity* accompanied by a programme of actions (2003) which emphasise the importance of the conservation of the Carpathian nature.

The strategic documents focusing on the social and economic development of the country take into

consideration the environmental aspects in various ways. The *National Developmental Plan for 2004 to 2006* adopted by the Cabinet in 2003 was to include Chapter 6 devoted to the environmental protection. Unfortunately, the Chapter turned out to be inconsistent with the EU standards and was withdrawn. The axis V, i.e. the *Integrated Operational Programme of Regional Development* (ERDF) is important for the goals of the CCPS Programme. The cross-border cooperation programmes for the period of 2007 to 2013 which are currently being developed and which cover actually all our neighbours are of even greater importance. Those programmes contain provisions about the role of the border regions in the economic development of the Country, including their role in promotion of the sustainable development.

The key Slovakian document devoted to the issues discussed herein is the *National Sustainable Development Strategy for the Slovak Republic* adopted by the Cabinet. That document defines the directions for the social and economic development taking into consideration the eco-developmental goals e.g. rationalisation of resource utilisation, ecological safety of the citizens and a deglomeration-based regional policy. The *Strategy* is connected with the *General Outline of the Spatial Development of Slovakia* which takes into account the neighbour-related circumstances, including those related to Poland. The *General Outline* is a general set of guidelines for lower level plans, especially the regional ones.

The key regional documents focusing on the environmental protection are provincial environmental protection plans including waste management plans and provincial spatial development plans. Those documents are updated every four years and they continue to be hardly cohesive with *NEP II* and the *General Outline of Spatial Development Policy for the Country*. In Slovakia regional development plans have been produced (e.g.

Tarnawski, Trenczyński or Žyliński plans) which combine the spatial, socioeconomic and eco-developmental issues.

In terms of the specialist/technical content the ecological, eco-developmental and pro-health subject area important for the Programme goals covers a very broad array of issues. The ecological policy should be implemented through **changes in the production and consumption model**, i.e. reduction of the material consumption, energy consumption and water consumption levels, and employment of good practice and environmentally-friendly techniques. The CCPS area offers good opportunities in this respect. Ecological aspects should be incorporated into the sectorial policies and the regional/local development programmes on an obligatory basis. This important postulate continues not to be fulfilled sufficiently and frequently it is treated just as an empty declaration.

The market should be stimulated to take actions in support of the environment. Such actions could include organisation of **“green competitions”**, **partnership with the business**, shaping of consumers’ attitudes, liquidation of environmentally detrimental subsidies, environmental management, responsibility for **environmental effects of the implemented projects**. It is quite easy to imagine a wide array of opportunities consisting in involvement of financial institutions in the support (based on free market principles) of projects conducive to environmental protection and sustainable development in the CCPS area.

New economic mechanisms and financing systems are required. Especially the pro-ecological functional areas situated in the Polish borderland should benefit from them. Because it is expected that the charges for the use of the environment will become regionalised.

As far as the institutional enhancement is concerned, establishment of pro-ecological drainage basin administrations and strengthening or even reform of the **environmental inspection services** should be especially important for the CCPS Programme. It is really important to delegate the tasks stemming from implementation of

international ecological conventions to those strengthened units. Services of that kind practically do not operate (in the field) – it is difficult to imagine supervision over implementation of the CCPS Programme, which contains substantial pro-environmental components, without the possibility of enforcing the results.

Issues related to social communication are very important, as well. In Poland this system is formally in operation but is far from being perfect. Given the low ecological awareness of the farmers which dominate the CCPS area this issue is especially important. The point is not only to make the **information about the environment** available efficiently by the public administration offices but also to establish and ensure the operation of permanent consultation bodies dealing with ecological issues.

The issues of the **spatial order and rational use of land** can be numbered among the key tasks determining, to a large extent, the success of the CCPS Programme. It is necessary to change relevant regulations because the Polish ones are particularly unsuccessful. At the same time there is a need to verify old spatial development plans, including the provincial ones, and subject them to the environmental assessment procedure. Finally, the available array of the quasi-planning tools used for the environmental protection purposes should be expanded in line with the EU initiatives. The OOS process should be considered a foundation for the decision-making and **voluntary pro-environmental management systems** should be developed.

It is necessary to introduce innovative techniques and technologies taking into consideration the environmental benefits. In this respect a broad regional initiative based on the specific character of the environmental resources, traditions and social preferences is anticipated.

In the area of the protection of natural heritage and rational utilisation of the resources of nature Polish strategic documents raise the issue of increased forestage (up to 30%), conservation of water and marsh areas,

creation of a *Natura 2000* site network and improvement of the surface water cleanliness status.

In the area of the **sustainable utilisation of raw materials**, materials, water and energy actions aimed at control of the water consumption, energy consumption and material consumption, and creation of a new organisational structure with a data base of pro-environmental technologies (using the BAT criteria) are important. Utilisation of the renewable sources of energy is a separate issue.

The *Polish Ecological Policy* strongly supports the principles of the **ecological safety and ecological justice**. Apart from the water (including potable one) and air quality issues and the waste removal standards, the growing importance of modern systems of protection against noise, electromagnetic radiation, presence of harmful chemicals in the environment and avoidance of serious industrial emergencies can be noticed. **Prevention of the global warming** and smooth adaptation to its inevitable after-effects (it's especially significant in the mountain areas) can be numbered among the priority tasks for the CCPS Programme in this group.

## 8. Evaluation of Programme Compatibility with Provisions of Strategic Documents and Goals Identified on That Basis

The foregoing presentation of the documents made it possible to put together the key strategic goals related to the environmental protection and introduction of the sustainable development. You can find those goals listed below.

**The main goal.** (0) Introduce the idea, the principles and the tools of the sustainable development as defined in the *National Ecological Policy II* in line with the following statement: “from the civilisation of unlimited needs and limited resources to the civilisation of rational needs and sustainable utilisation of the environmental resources”.

### Reference goals:

1. Restrain global environmental hazards, first and foremost, the climate change and the loss of biodiversity-related abundance through local and individual actions.
2. Create and maintain a nature protection system network including the conservation-based, spatial, species and habitat protection to ensure the durability of the wealth of the nature and, at the same time, create opportunities to benefit from the natural wealth situated nearby for the local community, regions and countries.
3. Ensure higher and higher level of citizens' health and physical fitness care through improved quality of food and water, and creation of favourable conditions for recreation and contact with nature.
4. Limit greedy consumption attitudes and reduce the increase in the offer of superfluous products, and avoid the production of waste.
5. Take institutional and individual care of the region traditions and image.



6. Convert gradually the life style towards greater interest in culture, including the culture of communing with nature.
7. Solve the problems caused by common environmental hazards which degrade the space and resources: first and foremost those resulting from the after-effects of the wastewater discharging operations and release of waste, and emissions of harmful substances into the atmosphere, soil and hydrosphere.
8. Introduce higher and higher ecological safety standards: it should be a shared effort made by the general public, business entities and public administration taking into consideration natural disasters.
9. Enhance the role of the general public, including local government and non-governmental organisations, in shaping of the landscape and selection of sustainable developmental directions.
10. Create conditions conducive to building on any knowledge and experience in promotion and support of pro-environmental forms of business operations.
11. Expand international cooperation (especially between neighbouring countries) definitely in order to solve environmental, spatial and sustainable-economy-related problems on a shared basis.
12. Strengthen humanistic and democratic basis for development of the civilisation; especially raise the ecological awareness of the entire general public.
13. Finance the environmental protection in an efficient and sufficient (i.e. proportionally to the costs of the tasks) manner.

In general it should be concluded that the proposed Programme supports the actions conducive to replacement of non-renewable resource utilisation with renewable resources, because the Programme promotes an extensive but modern method of utilisation of those resources and care of their renewable character as a guarantee of the well-being. At the same time the Programme points to the need to introduce eco-innovative solutions. Good examples include development of power engineering based on renewable sources and individual water sanitation systems (in locations where it is

impossible to build wastewater systems, i.e. generally in Poland in substantially dispersed settlements).

It is important to point out that there are no contradictions between the Programme and the provisions of the strategic documents focusing on the conservator-based and species protection, although this subject area is not referred to in the Programme. The idea and the wording of the Programme do not violate the arrangements concerning the *NATURA 2000* site network in Poland; the said idea and the wording make it possible to establish cooperation aimed at increasing the range of those sites. A full analysis and assessment of the essential environmental protection problems from the point of view of the goals of the planned document is difficult, especially given the lack of detailed information about the expected physical projects within the Programme and the spatial decisions expected to be taken in the nearest future, including the protective ones.

However, an opinion about the aforementioned system of protected areas can be formulated and a general assessment of the probable changes in the quality of the environment (broken down into individual components) can be made. Implementation of the Programme should contribute to improvement of the condition of the environment in currently threatened or degraded areas and stabilisation of the conservator-based landscape and nature protection system. In particular, the top class conservator-based protection systems should get strengthened (National Parks, *NATURA 2000* sites and reserves) situated in the border zone. The species conservation conditions outside those areas will not improve due to the expected development of the transport infrastructure and the consequent fragmentation of areas not covered by protection.

A critical teleological and programme-based analysis in the areas of environmental protection, ecological safety, ecological justice, implementation of sustainable development, health care and maintenance of spatial order has to be general because the Programme does not

present specific tasks. They will be proposed at the Programme implementation stage. However if the tasks will be consistent with the recorded priorities and management principles (those will be favoured in the course of the application procedures) it can be assumed that the Programme implementation effects will include positive changes in the following areas:

- Rational utilisation of the resources, especially the space and resources of the biosphere;
- Favourable change in the consumption trends;
- Introduction of environmentally-friendly technologies and techniques;
- Improvement of the spatial order;
- Improved ecological awareness and knowledge.

The CCPS Programme, in most of its aspects, refers to the key watchwords and principles of sustainable development. Most sustainable development provisions are consistent with the Programme, as documented in the following table. The principles listed below derive from the aforementioned strategic documents concerning the sustainable development and environmental protection objectives.

**Table 2 – Relation of the CCPS Programme to key principles of sustainable development**

Sustainable development principle	Relation to the CCPS Programme
1. All the people have the right to a healthy and creative life in harmony with nature.	The Programme treats both the inhabitants of the region and incomers this way.
2. Countries make a commitment that their actions will not result in damaged natural environment of other countries, including the neighbouring ones.	It's an element of the Program basis.
3. The law and business operations should be managed in a way to satisfy developmental needs and ensure environmental resources for future generations.	The foundation of sustainable development. That's the development assumed by the Programme.
4. Environmental protection should be considered together with other developmental processes.	Introduction of the Programme should indicate the need for such an action. Today this principle is hardly followed.
5. Liquidation of poverty is an integral task of sustainable development and is conducive to environmental protection in every aspect of it.	Locally, poverty is a problem in the CCPS area, also on the Polish side. It is important to see the connection between that and sustainable development.
6. The priority in the international assistance should be given to countries undergoing political and economic transformation which show various delays in implementation of the sustainable development principles.	The Programme focuses on such an assistance to Poland and Slovakia.
7. Production and consumption models contradicting the sustainable development principles should be eliminated.	The Programme does not apply to this issue directly, but supports eco-innovativeness.
8. Development of science and technology should support implementation of sustainable development.	The role of science and technology has been emphasised, also in the pro-ecological terms.
9. Access to information about the condition of the environment and actions aimed at improving it and the involvement of the general public in solution of environmental issues form a foundation for implementation of sustainable development.	The forms and intensity of social communication will increase.
10. Countries should develop their environmental protection legislation building on the international output but maintaining their distinction resulting from existing differences.	This principle applies to the CCPS Programme to a smaller extent, because Poland and Slovakia and the EU Member States.
11. International relations conducive to environmental protection should be based on bilateral and multilateral agreements; it applies e.g. to the issue of trade exchange, the responsibility for environmental damage, shared prevention of regional and global threats, objection to and prevention of the transfer of substances and technologies which pose a serious threat to the environment.	Those aspects should be incorporated into detailed provisions of cooperation and constitute a tangible and durable outcome of that cooperation; the provisions should be conducive to conclusion of specific contracts in line with the EU standards.

Sustainable development principle	Relation to the CCPS Programme
12. It is necessary to aim at internationalisation of environmental costs and employment of economic tools in line with the "polluter pays principle".	As yet, in practical valuation of environmental losses those tools are rarely applied in all the countries of the region.
13. A system of environmental impact assessments produced, among other things, for specific investments, plans, programmes and strategies should be used as an internal environmental control tool.	The Projection makes definitive suggestions in this respect.
14. It is necessary to build a system of immediate notification about extraordinary environmental hazards, also within the framework of international relations.	The postulate to be implemented in the Programme.
15. Environmental protection should emphasise the role of women and youth.	The CCPS area predestines those social groups because it is clearly addressed to the rural population and offers a broad perspective.
16. It is necessary to see the importance of traditions and culture in implementation of sustainable development.	One of fundamental assumptions of the Programme.
17. Sustainable development is in an antagonistic contradiction with militarization and warfare. Peace, development and environmental protection are interrelated and indivisible.	The Programme does not cover military issues.
18. Any environmental disputes should be solved peacefully, following the principles of democratic dialogue and in observance of those and other sustainable development declarations.	The tightening of the contacts may trigger a list of such conflicts. They have to be resolved in a way described on the left.
19. There is no universal environmental and nature protection philosophy; any outlook-based superstructures aimed at sustainable development goals are treated equally.	The CCPS Programme should not be considered an opportunity to get involved in ideological disputes about ecological issues. The Programme shun such aspects.
20. Local communities have the right to establish principles resulting from historical circumstances and their own sound ambitions.	It's one of the Programme principles.
21. The resources of the world environment, both the renewable and non-renewable ones, should be treated as the property of the entire mankind and used in accordance with the sustainable development principles.	A thesis for educational actions within the framework of the Programme.

The following assessment builds on the environmental protection and sustainable development goals specified on the basis of the strategic documents. The assessment checks whether the Programme is consistent with those goals. There you can find numerous direct and indirect references (the latter require some additional actions) to the main goal which is to introduce the idea and principles

of sustainable development. Moreover, certain threats can be pointed to. It is illustrated by the following table containing key elements of the Programme.

**Table 3 – Relation of key cooperation areas within the framework of the CCPS Programme to the idea and principles of sustainable development and the environmental protection requirements**

Areas covered by CCPS assistance	Sustainable development and environmental protection		
	Direct relations between the Programme and the sustainable development principles and idea	Indirect relations requiring additional actions; specification of those actions	Threats and weaknesses of the Programme
Development of technical infrastructure; transport	Potential threats to the biotic environment and landscape	Indirect benefits resulting from transport improvements, reduction of collisions and physical onerousness	No specific data about transport improvements are available; the improvements will consist mainly in repairs and improved traffic logistics.
Development of technical infrastructure; the environment	Substantial, long-term benefits	Promotion of the region	Possible spot hazards, and social resistance
Social and economic development; tourism	Qualified tourism is definitely pro-ecological; other types of tourism can easily avoid environmental damage.	Tourism brings about favourable changes on the labour market, in the spatial order and in ecological safety.	Local concentrations of stationary tourism. Low tourist infrastructure standards in areas of particular value.
Social and economic development; cultural and natural heritage	Definite pro-environmental priority	Improved cohesion of the planning systems focusing on cultural and natural landscape.	No threats
Social and economic development; assistance network	Support for local and regional development by organisational methods	Increased interest in sustainable development as an idea and a lifestyle.	The threat consisting in an expanded acceptance of environmentally-greedy consumption models.

Support for local initiatives	Obvious and indispensable component of sustainable development	In the long term: an active local organisational and technical structure of the environment leads to extensive environmental benefits	Possible mistakes in spatial planning caused by hurried implementation of initiatives; possible mistakes in selection of techniques and technologies.
Organisational and technical assistance	Desirable and beneficial	It creates a good atmosphere conducive to fulfilment of eco-developmental tasks.	Red tape and administrative stereotypes are enemies of sustainable development.



The foregoing breakdown is supplemented by Table 4 below where the same CCPS Programme priorities are assessed by being set against the environmental protection and sustainable development goals highlighted in Table 2 above.

**Table 4. Assessment of the CCPS Programme priorities set against highlighted sustainable development goals**

CCPS priorities	0	1	2	3	4	5	6	7	8	9	10	11	12	13
DCI T		-	-					+	+		+	++		+
DCI E	+	++		++		+	++	+	++		+		+	++
SED TE	+	+	+	++		++	++			++		+	+	+
SED H	+	+	+	+	+	++	++	+		++		+	++	
SED N			+	+	+	+		+	++	++	++	++	+	
SLI	+	++		++	++	+	+	+	++	++	++	+		++
TA		+		+			+	+		++		++	+	+

The legend:

The CCPS priorities from Table 3 are shown in the form of simple abbreviations. The sustainable development goals and numbered according to Table 2. The key to the assessment:

- +++ conformity with the sustainable development goal; direct favourable effect of the CCPS Programme implementation effort
- ++ conformity with the sustainable development goal; indirect favourable effect of the CCPS Programme implementation effort
- +
- general conformity with the sustainable development goal; without any significant benefits
- possible triggering of unfavourable eco-developmental after-effects
- (blank box) no relation to the sustainable development goals; no threats or significant environmental benefits

## 9. Expected Environmental Impact of the Programme Implementation Process

Implementation of the CCPS Programme will not bring about significant changes in the natural environment of the discussed area in terms of depletion of the resources and qualities of the abiotic or biotic environment, or the cultural landscape. As far as the latter element is concerned some positive changes should be expected due to enhancement of actions aimed at improvement of the spatial order. Relatively more significant threats may occur during implementation of specific investment tasks, which will be decided upon in the process of their selection by a competent board, and accelerated development of some industries represented especially well by the Programme beneficiaries. It should be expected (on the basis of the task structures from the previous developmental programmes) that the road infrastructure projects will prevail. It should be pointed out that the natural structure of the area is conducive to environmentally-conserving activities related to organisation of infrastructural systems (both national and international, and local ones). In particular, development of meridional directions in this structure is more beneficial for the environment than the directions along a parallel of latitude. The presence of large buffer-type areas which give some room for manoeuvre in location selecting exercise is another beneficial circumstance. Moreover, the Programme assumes that there will be certain concentration of physical implementations in the vicinity of the borders – some locations and areas where such projects will not have any significant negative environmental effects can be indicated there. Those locations include the transit junction of Cieszyn and the Sądecki Corridor, and Przełęcz Dukielska (Dukla Pass). In the future the Tatra Mountains might be considered in this context, as well, but only to a limited extent.

The Projection should indicate possible project implementations (related to the Programme) which may have a significant environmental impact, and identify a package of recommended mitigating measures. The linear infrastructure (roads and related objects, railway lines, transmission lines of a regional character and small hydraulic engineering projects) constitutes the most significant group of such potential projects. Those investments could pose a serious threat to the biotic environment because they fragmentise landscapes and habitats. The limited character of the Programme funds practically excludes construction of new transport routes but the Programme can stimulate development of the network. Modernisation work, new junction and ring road solutions etc. are expected. In mountain areas even small projects result in deterioration of aesthetic qualities of the landscape. The key groups of necessary mitigating measures include prudent planning of locations and carrying out of architectural and landscape studies focusing on the most sensitive sections.

Projects related to modernisation of the border checkpoints on routes crossing the main Carpathian Mountains ridge (it is not planned to build new checkpoints), may be of particular importance. As far as the necessary extension of power engineering connections (new transmission lines) is concerned the lessons learned in recent years point to vast opportunities for mitigation of unfavourable environmental effects, including those in the mountain landscape. But planning of large wind farms in Beskid Niski is a controversial problem, although the application for support from the Programme may be submitted for those farms.

An increase in the intensity of waste management project implementations may be anticipated. Given significant potential problems with location of such projects soft (organisational or logistic) tasks should rather be expected.

Another group of expected investments related to environmental protection is made up of the water and

wastewater management projects. Here the technological direction should take into account the specific character of the street-type settlements in valleys justifying the extension of wastewater systems and wastewater treatment plants. In areas of specific dispersed settlements, which are common especially on the Polish side, individual wastewater treatment methods and collective local water supply systems should be preferred. Definitely it is necessary to solve the problem of removal of sludge from wastewater treatment plants and the noxiousness of those facilities.

Development of enterprise and services of various types requires that environmentally- conserving energy supply techniques and technologies should be introduced (especially heat supply, utilisation of local raw materials, reduction of unnecessary transport, and promotion of favourable architectonic solutions). It would be advisable to establish regional ecological standards for the CCPS area for such sectors of managements as construction services, fruit, vegetable and milk processing, local transport, reclamation and revitalisation, calorific plant plantations, waste processing, water supply and wastewater systems, agri-tourism and qualified tourism, organisation of border tourism, hotel industry, tourist navigation. The Programme does not provide for such opportunities, therefore it is necessary to try and launch a complementary project. Hence such standards will be a Programme derivative implemented through actions of local governments (which have vast opportunities in this respect both in Poland and Slovakia), rather than a Programme objective. The Programme does not contain provisions that would entail the need or clear aspiration for location of large industrial centres/facilities and substantial population concentrations in this area. Anyway, it is excluded by the financial scope of the Programme. It is important to point out that such potential prospects may apply only to the neighbourhood of the east-west trunk highway running along the northern boundaries of the area (the transport corridor No 4 (Dresden-Cracow-Kiev). On the Slovakian side regional developmental axes have

developed (Preszów-Koszyce) and those related to the Żylin junction.

It will be difficult to restrain quickly numerous environmental hazards posed by agriculture which is actually (to a large extent) of an extensive character in this area, but shows considerable underinvestment in the simplest equipment protecting against the pressure exercised on waters, soil and spatial order. In this context the key method of avoiding the growing threats is education.

The projects implemented in relation to the Programme should be covered by environmental assessment procedures if it results from their character. In accordance with the principles followed in the making of such assessments all the significant impacts on the environment and historical buildings should be taken into consideration, including the negative, positive and neutral ones; the direct and secondary ones; the one-off and shifted in time ones; the accumulated and dispersed ones; synergic and de-synergic ones; reversible and non-reversible ones; local, regional, spot, linear, spatial and cross-border ones; moreover, all the activities resulting from operation in standard and extreme conditions (including emergency ones) should be taken into account. A systemic identification should be done and the significance of potential environmental threats and effects related to implementation of each and every of the analysed CCPS priorities should be assessed; and economic and social analyses should be carried out on a parallel basis.

The impacts on the biosphere and landscape should be distinguished, and the impact on the *NATURA 2000* sites should be formally considered separately. In particular the following elements should be taken into account:

- Loss or fragmentation of habitats;
- Reduction of biodiversity;
- Impact on endangered species;

- Impact on natural corridors and migration of mammals on a macro-scale (in the context of corridors of a continental significance);
- Changes in the land utilisation method; changes in the quality of the landscape;
- Impact on soils and geological structures, and hydrological regimes with a special emphasis placed on threats to usable aquiferous levels and water intakes;
- Global, regional and local air pollution and its consequences for the climate, ecosystems and health;
- Soil and surface/underground water pollution of a local and regional character and its consequences for the ecosystems and health;
- Increased intensity of noise and its effects on human settlements and animal habitats;
- Changes in the flood control safety level.

The Programme covers a border area, therefore the cross-border aspect is obvious. The signatory countries of the Programme have not developed a procedure of consulting border investments which may have a significant impact on the environment in the exposed country yet, but some work is done in this respect. Such procedures have been defined by the EU and they are respected in a large part of Europe. As far as viable preconditions for occurrence of significant cross-border aspects related to implementation of the Programme are concerned, such threats have not been perceived in a strategic sense. The Programme mitigates the developmental policy and channels it towards pro-environmental directions, and introduces retardant elements to the task groups. In terms of physical projects the problems of cross-border impacts shall not occur. Either in Poland or in Slovakia there are no plans of large investment projects which may have an impact on the environment of the neighbour, and the Programme budget is too small to trigger such projects.

Possible changes in the morphologic/lithologic, water, geochemical, soil or climate conditions, or the quality of air and acoustic climate, or the quality of the landscape result rather from general transformations of the landscape

envelope and, especially, from the ongoing climate changes. Some changes in biodiversity are expected. Consolidation of protected areas, especially the systems protecting habitats and taxons (in line with the assumptions applicable to biosphere reserves and the *NATURA 2000* network) will take place. At the same time the diversity can deteriorate in a direct vicinity of the borders at some sections and along the preferred routes, including the tourist routes. A faster progress than in the past should be expected in the area of waste, water and wastewater management quality. Especially the qualitative changes in segregation of municipal waste *in situ* and increase in the recovery and recycling levels should be mentioned in this context. In the water management area positive changes related to the quality of potable water are expected – today on the Polish side numerous remaining individual water intakes (at least half of them) produce water unsuitable for household use. A very unfavourable ratio of houses benefiting from the water supply system to those benefiting from wastewater system/treatment should decrease. Simple systems designed for treatment and recirculation of water and raw materials used in agriculture and agriculture-supporting services back into the environment should become available. The estimate of the expected changes can be found in the table below.

**Table 5. Observed and expected trend of environmental changes related to implementation of the CCPS Programme**

Component	Current trend of changes	Expected trend of changes after introduction of the CCPS Programme
General climate and perceptible climate	▼	▼
Quality of atmospheric air	△	△△
Quality of surface waters in the mountain part	△	△△
Quality of surface waters in the piedmont part	○	△
Quality of underground waters	▼/○	△
Fresh water resources	▼	▼▼
Quality of soil cover and best soil resources	○	○/△
Abundance of farming space	○	△
Forests, quality, abundance and non-productive functions	△	△△
Forests, diversity and naturalness	▼▼	▼/○
Flora, diversity and abundance	▼	○
Fauna, diversity and condition of habitats	▼	△
Acoustic climate	▼▼	○
Natural disaster and flooding threats	▼	▼
Landscape as a whole	○	△
Cultural landscape	▼	△
Spatial order	▼	○/△
Value of space	△	△△
Environmental protection management efficiency	○/△	△△
Breakdown and civilisation-related disaster threat	▼	△
Condition of the surface of the ground, waste	○	△
Level of environmental change monitoring	△	△△
Ecological awareness and environmental education	△	△△△
Development of pro-ecological tourism	△	△△△
Environmental aspects of health and life quality	○	△△

Key to the symbols used:

○

no significant changes

▼, ▼▼, ▼▼▼

negative changes: small, clear, significant

△, △△, △△△

positive changes: small, clear, significant

The foregoing assessment covers the expected results of the complete implementation of the Programme, but also the results of implementation of probable physical projects



of a rational size provided that the latter would be distributed evenly. It can be concluded that no threat of aggravated negative trends has been found in any category of components. The threats related to ongoing climate changes and the resultant changes in the water resources will be the most difficult ones. The Programme is not in a position to reverse those trends. It is important that the potentially proposed projects take into account the need to protect the nature and landscape, and will contribute to creation and proper functioning of protected areas, including the *Natura 2000* network. In this respect positive effects are expected in both countries.

Three other important issues of a general character remain to be discussed.. Two of them are: counteract global threats and support material-efficient and energy-efficient economy. These issues are interlinked. Poland, in spite of certain difficulties, has to increase reduction of greenhouse gases to a much larger extent than declared so far. To this end it will be necessary to broaden the array of actions reducing the demand for energy. Because there is no chance that production of energy from renewable sources will increase rapidly in Poland. Therefore, the CCPS area, as a potentially convenient location for introduction of a wide array of actions restraining the global warming hazards, should be used for that purpose. The provisions of the Programme can be construed as a good signal encouraging introduction of such solutions; nevertheless those provisions are not unambiguous.

The third issue is the question whether the proposed Programme and physical actions related to it will decrease the health hazard resulting from the condition of the environment. The general answer is positive, because fast sanitation of living standards in rural areas and small towns should be expected along with reduction of traditional hazards (aero-sanitary, waste). On the other hand several health hazards, which are currently insignificant or spatially limited, will occur in that area, namely McDonald-isation of consumption, civilisation stress and introduction of bad habits in relations with the

animated nature and aesthetic qualities of landscape. Therefore it would be justified to be concerned about the fact that fast implementation of the economic part of the Programme may pose a threat to the maintenance of cultural values. The Programme has to provide for appropriate countermeasures which consist in combining specific tasks with educational measures and organisational mitigation. It means that there is a need to distribute the funds available within the Programme in such a way that the non-material sphere (educational, organisational and promotional) was substantial and contained ecological aspects.

## 10. Mitigating Measures and Environmental Monitoring

The CCPS Programme is structured in accordance with the principles the fulfilment of which definitely reduces unfavourable trends in changes of environmental conditions.

But it is important to try and introduce organisational measures which make it possible to mitigate environmental threats, if any, related to implementation of the Programme, namely:

- Evaluation of ecological effects of the Programme implementation efforts, in accordance with recommendations presented below;
- Appropriate allocation of the Programme funds in a way that the projects of a potentially environmentally hazardous character were reduced or modified;
- Adequate architecture of the application regulations supporting the projects conducive to the environmental protection and the idea of the sustainable development;
- Broad participation of the general public in making decisions about allocation of funds for individual tasks;
- Verification of the Programme every several years;
- Setting the Programme against other strategic documents, environmental protection problems on the Provincial, Powiat and Community levels, and spatial development plans for individual provinces.

In the strategic assessment process the possible and recommended minimising, compensating and monitoring measures (matched up with given conditions) related to specific projects which may have a substantial environmental impact, can be presented.

The PBU Programme makes it possible to mitigate, prevent, limit and compensate (in terms of the affected nature) negative environmental impacts which may result from implementation of the document. Moreover, it prompts the stakeholders to make bilateral arrangements and introduce standardisation. Thus, the projects planned as a result of the CCPS Programme implementation can contribute to making the development more sustainable through employment of measures (characteristic for individual sectors) which eliminate or reduce the negative environmental impact.

The issue of monitoring the condition of the environment in the course of the CCPS Programme tasks fulfilment is especially important in this area, but the size of the Programme does not make it possible to introduce a separate survey and measurement system. The existing National Environmental Monitoring System of both countries (run by National Environmental Protection Inspection represented by Provincial Environmental Protection Inspection Authorities in Rzeszów, Cracow and Katowice, and branch offices in Przemyśl, Krosno, Nowy Sącz, Tarnów and Bielsko-Biała, and by Slovakian Environmental Agency) should be used. It is important to notice a very important role of those organisations in implementation of the Programme.

## 11. CCPS Programme Variants and Modifications

Certain spatial or regional variants of the Programme can be created to support certain areas (e.g. Euroregions); it is also possible to distribute the funds allocated for goal implementation purposes differently among individual industries. This latter aspect is currently of an estimative and relative character. The funds allocated for physical activities are definitely limited and this situation, from the environmental point of view, restrains the threats and makes it possible to give up diversification of financial variants.

The Programme constitutes a casual concept of the border development of both countries and it does not stem from political or economic commitments. The Programme can, depending on the will expressed by the general public of both countries, be implemented in full, in part or abandoned.

The variant consisting in abandonment of the Programme is not justified from the environmental point of view. It would be a mistake not to draw on the funds a vast majority of which will be allocated for projects consistent with the sustainable development principles and implemented under a strict supervision of the EU institutions.

Two possible funds distribution variants can be taken into consideration if the Programme is adopted: in the first one most funds would be pumped into physical projects whereas the second one would allocate more funds for potential soft projects. Usually the projects of this kind balance the funds in accordance with the aforementioned division. Assuming that 10% of the funds is allocated for the technical assistance (in line with the European Commission rules), a physical variant allocating over 50% of the funds for the development of the cross-border

infrastructure priority (the first one) and a soft variant allocating over 50% of the funds for the social and economic development and the support for the local initiative priorities (the latter prevailing) can be distinguished. The Projection clearly supports the soft allocation which enhances the opportunities of co-operation between the Polish and Slovakian population and creates a favourable neighbourly atmosphere which is required to maintain the environmental qualities.

In any case the Programme should be supplemented with pro-environmental contents as its task groups are developed in greater detail and ecological or spatial standards, if any, are established.

## 12. Evaluation

All the strategic documents should be accompanied by a system assessing the progress in implementation of those documents. The Programme provides for such a procedure. The Strategy contains apt recommendations applicable to monitoring and improving both the Strategy and the set of tasks resulting from it. From the environmental protection point of view the evaluation methods should be proposed together with a package of indicators covering the ecological and eco-developmental aspects.

It is advisable to incorporate at least two groups of criteria into the evaluation procedures: a new ecological/economic benefit and loss statement, and trends in global threats. The Projection is not able to propose everything; besides, it would be sufficient to ensure in writing in the Strategy that such an approach will be applied in the evaluation process. For obvious reasons it is necessary to move from a GDP-based approach to development used so far to synthetic calculations of sustainable economic development. An Index-of-Sustainable-Economic-Welfare-based approach (ISEW) is a proven one and there are plans to introduce it in Poland. This indicator is sensitive to most socially accepted components of welfare and life quality and highlights developmental qualities (or deficiencies) quite well. It is definitely better than its predecessors, i.e. previous welfare and sustainable development indicators, e.g. the well-known MEW (1973) or EAW (1981), not to mention GDP. The ISEW indicator is well known in Slovakia, as well.

As far as the global threats are concerned a special attention should be paid to the global warming issue, because the economic development (even a sustainable one which is the case in the CCPS Programme) can lead to a relative increase in GHG (greenhouse gases)

emissions. Therefore, one of many indicators linking the greenhouse gas emissions with a parameter characterising the economic growth should be used as a monitoring indicator. The assessment of the projected changes in the greenhouse gas emissions in economic sectors should be a starting point for structuring and valorisation of such an approach. Unfortunately, such data are unavailable for the discussed area. Regardless of the actions taken the emission of greenhouse gases will increase e.g. due to the traffic which is related to the priority development of transport. It is so because of the more and more intensive development of that sector and the growing share of the road transport. With time, as technologies and fuel quality will improve, the increase will slow down. The frequency and the scope of the analysis assessing the share of transport in the greenhouse gas balance in the CCPS area (including, especially CO<sub>2</sub>) should be consulted with Ministry of the Environment, in particular with Climate Convention Offices and EPER (emission monitoring). It is suggested that several indicators which take into account some environmental aspects should be incorporated into the Programme. The indicators should be presented in relation to the reference goals:

- Energy consumption levels in selected industries;
- Carbon dioxide emissions in relation to GDP;
- Relation between the levels of water supply system and wastewater system availability (i.e. the share of households the wastewater from which is channelled to a wastewater treatment plant);
- A percentage share of segregated municipal waste;
- Flood losses set against the population;
- Number of agro- and eco-tourist farms;
- Number of regional products with quality certificates;
- Number of local ecological organisations;



- Length of tourist trails;
- Traffic at tourist checkpoints.

Approved strategic documents should be evaluated every two years, and verified and supplemented every four years. Analysis of the goal up-to-date status is always the key assessment criterion – in this respect no dramatic changes should be expected – the environmental (and sustainable development) goals are stable.

Monitoring of the Programme implementation progress is another issue. It can be done in two ways: through the task control and the effect (including the indirect ones) control.

## 13. Resume and Conclusions

The document has been produced in line with the principal challenges of sustainable development and at this stage (prior to writing down detailed tasks and decisions on the allocation of funds, and consulting the project selection criteria) it does not portend any escalation of environmental threats in the analysed area. On the contrary, the priorities recorded therein indicate that the pressure on the environment will decrease. In particular, implementation of the specified task groups related to individual priorities should lead to:

- Stabilisation of the good aero-sanitary status in the entire area, and liquidation of local air pollution sources accompanied by certain intensification of the emissions from the means of transport;
- Gradual improvement of the water quality, including an improved access to healthy potable water accompanied, unfortunately, by worsening problems with unlimited access to water resources;
- Stabilisation of the soil, ground and vegetation quality;
- Improved structure of nature conservation;
- Gradual improvement in the waste management area;
- Improvement of the spatial order and sanitation of human settlements;
- Definite improvement of the ecological awareness;
- Introduction (to a larger extent) of pro-ecological enterprise, “green competitions” and, in particular, a qualified tourism and environmentally-conserving production (OZE, environmental science and

technology, recovery and recycling) in the CCPS area.

The analysis carried out in the Projection points to the needs to limit the share of the physical projects in favour of the soft projects, and highlight the pro-ecological tasks in the course of the application procedure. The Programme has been formulated in a feasible way and should be perceived well by non-governmental ecological organisations and citizens who take care of the quality of their environment. It is comprehensible, therefore it will be easy to submit it for consultation in the course of which it will be possible to expand the task section, both in terms of industries and regions.

## 14. Summary in a Non-specialist Language

The Projection has been produced in accordance with recommendations of the authorities which determine its scope on a statutory basis. The Projection discusses the structure and contents of the Programme and distinguishes the pro-environmental goals. In its principal section it analyses possible environmental and sustainable-development-related after-effects of the implementation of the priorities defined in the Programme. All the priorities have been subject to such an analysis and, on that basis, threats which may occur during implementation of the Programme task groups have been pointed to. Moreover, the Projection contains a prospective diagnosis of the environmental condition in the analysed area. The conclusions from the Projection can be summarised in several essential items.

The Programme supports the so-called sustainable variant of Poland-Slovakia borderland development. It has been discussed in the Projection and assessed in terms of its ecological effects. It is definitely more beneficial than traditional developmental strategies or planning documents.

The discussed area is one of the most valuable nature regions of Europe. Therefore it is justified to channel developmental priorities towards areas which do not pose a threat of environmental resource depletion or upsetting the balance between human activities and needs of nature.

The Projection analyses developmental opportunities of the borderland and points to the chance for raising the living standards of local inhabitants through development of services (including tourism), and makes this development dependent on quick improvement of municipal facilities (water, wastewater, solid waste, wider

access to cheaper energy) and development of infrastructure, mainly transport.

This latter area can develop strongly in the discussed area causing certain threats to the environment (including the global one) by release of gases contributing to the global warming. Therefore the Projection points to the need to adopt various measures which would reduce undesirable effects.

A structured approach to the space is a very important aspect of the CCPS area development. It will consist in reaching a final agreement on the network of protected sites and determining what limitations are applicable to that network.

The Programme presents a specific offer addressed to potential entrepreneurs and organisations (from the two neighbouring countries) operating, first and foremost, in the sector of small industry and services, including operations which would build on local resources and the opportunities of cross-border cooperation. Moreover, vast opportunities can be found in the area of social, cultural, educational and promotional initiatives. The objectives of such initiatives can be convergent with the challenges of the sustainable development.

The Projection does not see any significant threats to the environment resulting from implementation of the Programme. State-of-the-art methods of assessing the environmental impact and the impact on human health will be applied to individual projects. The threats, if any, will be eliminated by means of methods developed on a shared basis.

It is recommended to allocate a greater portion of the funds for intangible projects to prevent environmental hazards. Moreover, it is suggested that ecological criteria should be incorporated into the project selection regulations.

Hence, the results of the Programme implementation effort should include:

- Increased integration of this part of the Carpathian Mountains;
- Improved accessibility of the area accompanied by care of its natural qualities;
- Reduced water, soil and air quality hazards; improved accessibility of good potable water;
- Broadening the offer addressed to enterprise, including that consistent with the principles of sustainable development;
- Improved spatial order;
- Stimulated business activity in peripheral and rural areas.

The Projection and the Programme contain provisions aimed at reduction of possible negative after-effects of fast economic growth in the region. In particular, the point is to reduce: exclusion of valuable areas from certain forms of utilisation; separation of ecosystems (deteriorated conditions of fauna and flora existence); changes in the landscape and visual interference; occupation of recreational areas; separation of socioeconomic communities; contamination of underground and surface waters; deterioration of the water status; and occurrence of accident- and disaster-related threats.

It is expected that the environmental-protection-oriented provisions of the Projection will supplement the draft Programme, and the ecological arguments contained in the former will be useful for promotion of the CCPS region.