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BIODIVERSITY STRATEGIES AND ACTION PLANS
AND BIODIVERSITY MAINSTREAMING
Isle of Vilm, Germany, 13-17 June 2009

REPORT OF THE WORKSHOP

Note by the Executive Secretary

1. The Executive Secretary is circulating herewith the report of the Second Regional Capacity-Development Workshop for Europe on National Biodiversity Strategies and Action Plans and Biodiversity Mainstreaming, which was held in the Isle of Vilm, Germany, from 13 to 17 June 2009.
2. The report was prepared by the host Government in consultation with the Secretariat of the Convention on Biological Diversity and is being circulated in the form and language in which it was received by the Secretariat of the Convention.

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In order to minimize the environmental impacts of the Secretariat's processes, and to contribute to the Secretary-General's initiative for a C-Neutral UN, this document is printed in limited numbers. Delegates are kindly requested to bring their copies to meetings and not to request additional copies.

Second Regional Capacity Development Workshop for Europe on National Biodiversity Strategies and Action Plans and Mainstreaming of Biodiversity

**International Academy for Nature Conservation Isle of Vilm, Germany,
June 13 – 17, 2009**

REPORT OF THE WORKSHOP



Convention on
Biological Diversity



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Abbreviations and acronyms

BAP	Biodiversity Action Plan
BfN	<i>Bundesamt für Naturschutz</i> (Federal Agency for Nature Conservation, Germany)
CBD	Convention on Biological Diversity
CEPA	Global Initiative on Communication, Education and Public Awareness (CBD, UNESCO)
CHM	Clearing-House Mechanism
COP	Conference of the Parties
ECA	Ecological Compensation Area (Liechtenstein)
EIA	Environmental Impact Assessment
EU	European Union
GEF	Global Environment Facility
GMO	Genetically Modified Organism
GTZ	<i>Gesellschaft für Technische Zusammenarbeit</i> (German Association for Technical Cooperation)
IPARD	Instrument for Pre-accession Assistance for Rural Development (EU)
IUCN	International Union for Conservation of Nature
JNCC	Joint Nature Conservation Committee (UK)
MoE	Ministry of the Environment
NBS	National Biodiversity Strategy
NBSAP	National Biodiversity Strategy and Action Plan
NGO	Non-Governmental Organisation
PEBLDS	Pan-European Biological and Landscape Diversity Strategy
REC	Regional Environmental Center
REDD	Reducing Emissions from Deforestation and Degradation
SCBD	Secretariat of the Convention on Biological Diversity
SEA	Strategic Environmental Assessment
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFF	United Nations Forum on Forests
UK	United Kingdom
WCMC	World Conservation Monitoring Centre (UNEP)
WGRI	Ad Hoc Open-ended Working Group on Review of Implementation of the CBD
WRI	World Resources Institute
WSSD	World Summit on Sustainable Development

1 Introduction

1. The Convention on Biological Diversity (CBD) and the decisions of its governing body, the Conference of the Parties (COP), as well as the national and regional strategic frameworks which have been established for its implementation, are widely recognised across the world as the most important political instruments to direct activities in the fields of biodiversity conservation and sustainable use of biodiversity.
2. However, because of the broad range of issues covered under the Convention and the large number of commitments laid down in the individual decisions, there is a general need for increased communication between experts involved in CBD policy-making and those engaged in conservation at the national and local levels. An exchange of information is necessary in order to keep practitioners up to date about the most relevant developments with regard to their respective areas of work, to enable them to provide feedback into the decision-making process and to establish a dialogue on ways and means to ensure implementation.
3. A series of regional and sub-regional capacity-building workshops are being organised worldwide, in response to decision VIII/8 (paragraph 6) of the CBD. The International Academy for Nature Conservation Isle of Vilm, Germany agreed to host these workshops for the European countries that did not have a chance to attend the first workshop organized for European countries during April 2008.
4. COP decision IX/8 was agreed in light of poor progress towards goals 2 and 3 of CBD's Strategic Plan (NBSAPs and the integration of biodiversity concerns into relevant sectors serve as an effective framework for the implementation of the objectives of the Convention; see UNEP/CBD/WGRI/1/2) as revealed by the in-depth review undertaken by the Ad Hoc Open-ended Working Group on Review of Implementation of the Convention at its second meeting. A summary of the review is found in UNEP/CBD/COP/9/14/Rev.1. An overview of the outcomes of the capacity development workshops held in other regions before the first Vilm workshop is provided in the brochure: "Mainstreaming Biodiversity: Workshops on national biodiversity strategies and action plans" available on the CBD website¹.
5. The purpose of the second Regional Workshops for Europe on Capacity Building for National Biodiversity Strategies and Action Plans and Mainstreaming of Biodiversity was to strengthen national capacities for the development, implementation, reviewing and updating of national biodiversity strategies and action plans and the integration of biodiversity concerns into relevant sectors, through exchange of experiences and training on the use of relevant tools and mechanisms. The workshop provided an opportunity for countries to identify ways and means for overcoming challenges in the development and implementation of National Biodiversity Strategies and Action Plans (NBSAPs). Another focus of this workshop was on biodiversity mainstreaming. Against this background, the workshop offered opportunities to:

- Share national experiences in NBSAP development, updating and implementation;
 - Identify good practices;
 - Discuss how to address the obstacles;
 - Learn about tools and guidance.
6. This report contains the results of discussions in the plenary and working groups as well as abstracts of the presentations. The presentations will be made available on the CBD website at: <http://www.cbd.int/nbsap/workshops/europe2.shtml>. The recommendations and suggestions elaborated in this report are intended to help individuals and organisations working in the field of NBSAPs and to contribute to further discussions on the issues addressed by CBD COP-10. The report was drafted by Rainer Schliep, with inputs from Gisela Stolpe, Andrea Strauss, Lijie Cai and David Cooper, reviewed by workshop participants.

¹ <http://www.cbd.int/doc/publications/cbd-brochure-nbsap-ws-en.pdf>

2 Proceedings

7. The 2nd Regional Capacity Development Workshop for Europe on National Biodiversity Strategies and Action Plans and Mainstreaming of Biodiversity was held at the International Academy for Nature Conservation Isle of Vilm, Germany, June 12 – 17, 2009. It was organized jointly by the Secretariat of the Convention on Biological Diversity and the German Federal Agency for Nature Conservation. It brought together 27 participants including representatives from 16 European countries. The countries represented were: Albania, Belgium, Croatia, Georgia, Germany, Liechtenstein, FYR of Macedonia, Moldova, the Netherlands, Poland, Romania, Slovakia, Switzerland, Republic of Turkey, the United Kingdom, and Ukraine. In addition the Secretariat of the Convention on Biological Diversity (SCBD) and resource persons from the Stockholm Institute of Environment and SevS Natural and Human Environment Consultancy also attended the workshop. A list of participants is contained in this report.
8. The workshop was facilitated by Natasha Walker of the Institute for Organisational Communication (*Institut für Organisationskommunikation*; IFOK) which also facilitated the German NBSAP development process.
9. Participants were welcomed to Vilm during an informal session following dinner on Friday, June 12th. Ms Gisela Stolpe welcomed the workshop participants on behalf of the International Academy for Nature Conservation and introduced them to the Isle of Vilm. Following that, Ms Natasha Walker (IFOK), the facilitator of the workshop, invited participants to introduce themselves.
10. The Workshop was formally opened on Saturday morning, June 13th. Mr. Hannes Knapp welcomed the participants on behalf of the German Federal Agency for Nature Conservation. Mr David Cooper welcomed the participants on behalf of the Secretariat to the Convention on Biological Diversity. The objectives and programme of the workshop were introduced by Mr David Cooper. Ms Natasha Walker provided further details of the workshop and facilitated the identification of expected outcomes by participants, which, broadly, were consistent with the objectives listed above in paragraph 5.
11. The 16 countries presented national perspectives on the status of development and implementation of NBSAPs in their respective countries and on the updating of NBSAPs while integrating biodiversity into sectoral and cross-sectoral plans, programmes and policies. The country presentations described the development process of NBSAPs, summarised their main features, highlighted the achievements in implementing the NBSAPs, provided information about the national efforts in mainstreaming biodiversity, and reported on evaluating and updating the existing NBSAPs. The country presentations are summarized in section 3 below.
12. Brief question and answer sessions followed each presentation, and some key points (obstacles and success stories) were identified. These points were captured on cards and flip charts so that they could be used for further discussion and analysis later. More general discussions followed each

group of presentations, either in plenaries or in small group discussions (5 to 7 participants per group). The main conclusions emerging were summarized in the Executive Summary above, and are considered in more detail in Section 4.

13. Consistent with the Convention (Article 6b), and the Strategic Plan (Objective 3), mainstreaming of biodiversity was identified as one of the general measures for achieving the objectives of the Convention: it was seen as both a challenge (it is difficult to achieve, in particular for NBSAP coordinators who are usually located in environment ministries and often lack the power to secure the engagement of officials in other ministries) and an opportunity (since successful mainstreaming would leverage additional human and financial resources for implementation of NBSAPs). An exercise was developed to explore this *topic* further. The facilitator, Ms Natasha Walker, explained the basic idea of the exercise to the participants. Participants were invited:
- to choose a case study and specify its objectives (this might be a conservation or development project, or the elaboration of a strategy or policy);
 - to identify the key players and describe what is on their agenda;
 - to define their role in the NBSAP development and implementation process; and
 - to propose a communication strategy for each stakeholder group (message, benefits for the stakeholders and for NBSAP implementation, message mode).

Before going to the working groups, the participants brainstormed in plenary about key players in biodiversity management. After an intense working phase in four small groups, the case studies were presented to the plenary and discussed against the background of the experiences in the national NBSAP processes and the input given by the group discussion facilitators. The following case studies were presented:

- How to make the Romanian NBSAP an operable tool (chaired and presented by Rodica Stefanescu, Romania)
- Sustainable use of wood (chaired and presented by Claire Collin, Belgium)
- How to stop invasive alien species (chaired by and presented Adem Bilgin, Turkey)
- Environmental education in elementary schools (chaired and presented by Zamir Dedej, Albania)

Further information about these group discussions is provided in Annex D.

14. On Sunday afternoon, participants made a brief excursion around Isle of Vilm which forms part of the core zone of the Biosphere Reserve South East Rügen. Isle of Vilm contains all types of coasts found in the southern Baltic, its coastlines are linked by never-ending processes of erosion and land formation. Vilm's flora and fauna have developed within an almost pristine wilderness; only very few other places in Germany remain as untouched as Vilm. Vilm's forests of ancient oak and magnificent beech are among the most impressive across northern Germany.
15. After the excursion on Sunday afternoon, June 14th, Mr David Cooper introduced the ecosystem approach, focussing on the CBD framework (Decision V/5) and the conceptual framework of the Millennium Ecosystem Assessment that links biodiversity to ecosystem services and human well-being. Ecosystems provide natural goods, are the basis of cultural diversity, regulate climate and

other natural systems, and support other ecosystem processes. People impact on nature, which in turn provides benefits for human beings. However, many ecosystem services are in decline and ongoing biodiversity loss is triggered by a variety of direct and indirect drivers. The MA Approach is a framework for integrating ecosystem services into decision-making by incorporating a variety of methods and often applied at watershed or landscape level. It can inform national and sub-national policy makers and planners as well as help develop economic and fiscal incentives, sector policies and plans, and general governance of biodiversity.

16. The workshop participants, working in small groups, were invited to select case studies on ecosystem services, and for each case to:

- Identify ecosystem services;
- Identify beneficiaries and maintenance measures necessary;
- Evaluate benefits before and after implementation of the ecosystem approach.

The working groups were further asked to assess the benefits of ecosystem services according to the following aspects:

- Number of people benefiting before and after;
- Financial benefits before and after;
- Ecological value before and after.

The three cases identified by the working groups were:

1. Golf courses in Istria (chaired and presented by Ivna Vukšić, Croatia)
2. Wetland conversion (chaired and presented by Angela Lozan, Moldova)
3. River restoration (chaired and presented by Sandra Edith Limacher, Switzerland)

The results of the exercises can be found in Annex E.

17. A few presentations were made highlighting tools and concepts relevant to NBSAP implementation:

- On Sunday afternoon, Mr Roel Slotweg (SevS natural and human environment consultancy, The Netherlands) presented the Strategic Environmental Assessment (SEA) as a tool for putting biodiversity and stakeholders interests on decision maker's agenda. Mr Slotweg started to present Environmental Impact Assessment (EIA) and then introduced the use of SEA as a tool to:
 - structure the public and government debate in the preparation of policies, plans & programmes;
 - feed this debate through a robust assessment of the environmental consequences and their interrelationships with social and economic aspects;
 - ensure that the results of assessments and debates are taken into account during decision making and implementation.
- On Monday morning, Mr Mike Jones (Stockholm Resilience Centre) introduced the concept of resilience thinking. He reflected on ecosystem dynamics, land use change, natural disturbances and components of resilience including the role of social institutions. More details about this presentation are provided in Annex B.

18. The remainder of Monday was devoted to a field study visit in the Biosphere Reserve South East Rügen which provided a practical case to demonstrate the link between biodiversity conservation, sustainable energy production, sustainable tourism, and rural development as well as in relevant instruments and approaches to achieve and strengthen such linkages. The field trip was accompanied by staff of the Biosphere Reserve administration, namely Mr. Schnick and Ms. Hartmann. The following issues were presented and discussed at specific sites in the Reserve:
- General introduction to the Biosphere Reserve South East Rügen
 - Tourism, traffic, farming, forestry and biodiversity monitoring (problems and approaches of the BR administration) during the guided tour from Groß Zicker to Gager through the landscape “Zickersche Berge” (Mr. Schnick, Ms. Hartmann)
 - Energy policies and projects and their biodiversity impacts on Rügen Island (Ms. Hartmann)
 - Coastal protection in times of climate change on Rügen Island at Klein Zicker (Mr. Schnick)
- Further information about this field trip is provided in Annex C.
19. On Tuesday morning, June 16th, Lijie Cai of the CBD Secretariat introduced the guidelines and relevant tools for preparing the fourth national report, including a reference manual and a portal. He and Mr David Cooper highlighted the significance of the 4th National Report for reviewing the implementation of the CBD, in particular progress towards the 2010 Biodiversity Target and the goals and objectives of the Strategic Plan of the Convention. They also emphasized the close link between reviewing implementation of NBSAPs, updating NBSAP and reporting. The fourth national reports will also provide important sources of information for development of the 3rd edition of the Global Biodiversity Outlook and celebration of the International Year of Biodiversity in 2010. Participants from Croatia, Poland and the United Kingdom introduced their approaches and experiences for preparing the fourth national report, including indicators developed and used for their national reports. More detailed information is provided in Annex F.
20. Ms Angela Lozan from Moldova, Ms Claire Collin from Belgium, and Mr Dorin Pop from Romania presented their NBSAP posters that had been developed using the NBSAP poster tool. The German GTZ had developed the interactive online tool for NBSAP posters illustrating the implementation of NBSAPs and the contribution of associated activities to the achievement of the eleven goals under the 2010 Biodiversity Target (<http://nbsaps.onlinegeneration.com/>).
21. On Tuesday afternoon, Mr David Cooper outlined major activities or events leading to COP-10 in 2010. Before COP-10 takes place in Nagoya, Japan in 2010,
1. the progress towards the 2010 Target needs to be assessed;
 2. the Strategic Plan of the Convention needs to be revised for the post-2010 period;
 3. additional resources need to be mobilised; and
 4. progress needs to be made in negotiations on an international regime on Access and Benefit Sharing.
22. A discussion on next steps in developing, updating and implementing NBSAPs was led by a group of panellists, drawn from among the participants. Each panellist was asked to commit themselves to

undertaking one task to further the development, updating and implementation of NBSAPs when they returned home, and to identify an area where support is required from the international community. Panellists highlighted the importance of sharing information among and within countries. The Secretariat was requested to develop best practice guidance drawing upon the outcomes of this and other workshops and the fourth national reports.

23. Participants reviewed the outcomes of the workshop against the expectations they had listed the first day.
24. The workshop was closed by David Cooper and Gisela Stolpe. They encouraged the participants to work towards improving the monitoring and reporting of the status of biodiversity and the implementation of the Convention and to look for opportunities to enhance biodiversity conservation in their respective countries in the coming two years until 2010 in order to achieve the 2010 biodiversity target.

3: Country Presentations on NBSAP

Highlights of the country presentations are summarised below. The PowerPoint presentations will be made available on the CBD website at: <http://www.cbd.int/nbsap/workshops/europe2.shtml>.

Albania

Mr. Zamir Dedej presented an overview on the Albanian National Biodiversity Strategy and Action Plan. The World Bank, through the Global Environment Facility (GEF), provided in 1996 financial support to the National Environmental Agency (since 2002: to the Ministry of Environment) for preparing the NBSAP. As part of this process, an Advisory Board was created with the aim of supervising and coordinating the process. Experts, university staff, and representatives of central and local governmental and non-governmental organisations participated in the preparation and drafting of the NBSAP. The document was prepared in 1999 and approved by the government in 2000.

After approval, there was no detailed review of the NBSAP, however, some general analysis was undertaken in the framework of other projects such as the National Capacity Self Assessment (UNDP). The objective of the Self Assessment project was to identify capacity needs and priorities with respect to the implementation of relevant global environmental agreements and in the context of sustainable development. It should help Albania to meet the requirements of the United Nations' environmental agreements (Convention on Biological Diversity, United Nations Framework Convention on Climate Change and Convention to Combat Desertification) in a coordinated and strategic manner. In addition to that, the World Conservation Monitoring Centre of UNEP (UNEP-WCMC) started an assessment of the CBD implementation including NBSAP in 2000.

In Albania, the main objectives for implementing the CBD and PEBLDS are:

1. protection and improvement of biological and landscape diversity;
2. incorporation of the principles and policies required for sustainable biodiversity use and management;
3. promotion of sustainable development for present and future generations.

Some of the major problems in Albania are the lack of financial resources, the high dependency of households on natural resources, and the fact that biodiversity is not really on the political agenda of the country.

In this regard, several points were identified to be part of the NBSAP implementation process:

- dialogue and co-ordination process;
- identification and mobilisation of financial resources;
- identification of economic barriers to biodiversity protection;
- identification and implementation of the appropriate mechanisms to realise the benefits of protection;
- technical support for projects.

Together with the strategic approach and the analysis of biodiversity status and threats, several criteria were

identified for the action plan's priorities and solutions relevant to species and their habitats:

- endangered species and habitats with global, regional, and national importance;
- habitats containing endemic species or high levels of biodiversity;
- species or habitats in danger of total extinction;
- species or habitats which would yield local or national economic benefits;
- species or habitats with local or national education benefits;
- endangered species or habitats which could be better protected through more suitable policies and use;
- actions which could yield viable economic, ecological and social benefits.

These criteria, together with the present level of knowledge on national biodiversity status and the opinion and consensus of the country's leading experts, were used to select the plant and animal species as well as the habitat types which need to be included in the action plans with priority. The selected species and habitats were presented in two lists based on their importance and the level of threat: (i) species/habitats action plans which should be implemented within 1-2 years; and (ii) species/habitats action plans which should be implemented within 3-5 years. The first list of short-term priorities includes 80 species/taxa – 42 vertebrates, 26 invertebrates, and 12 plant species, while the longer-term priorities include 143 species/taxa – 95 vertebrates, 31 invertebrates, and 17 plant species.

A look at the government publications reveals that there is no legal report regarding the implementation of the NBSAP. Most of the information presented here is taken from CBD reports or originates from personal knowledge. Achievements made until now are *inter alia*:

- Institutional reform: the establishment of the Ministry of Environment in 2001;
- Legislation: approval of the “Law on Protected Areas”, “Law for the Protection of Biodiversity” and other governmental decisions, regulations, etc.;
- In-situ conservation: surface of protected areas increased from 5,8 % to 12,5 % (on paper);
- Action plans: for several species (lynx, brown bear, wolf, cetacean, invasive species, etc.) elaborated;
- Forest sector: reformation;
- Monitoring system: growing capacities.

The integration of the biodiversity strategy into other sectors remains a very weak point in both the environmental strategy and in other sectors' strategic documents. Mainly the strategies in the forestry, fishery and tourism sector include issues related to biodiversity but they are, however, not concrete enough and do not consider the NBSAP. The same is true for the Climate Change Action Plan where biodiversity remains an empty phrase. On the local level, most of the Local Environmental Action Plans are completed and in some cases biodiversity is mentioned, however, it is not really taken into account.

More efforts and more achievements have been made towards the communication strategy (CEPA) thanks to the projects from the donors (mostly GEF) and the growing NGO community. Some examples for activities in this field are the improved environmental knowledge in the local communities, the inclusion of environmental education in the school system, the celebration of the international and transboundary environment days such as the Lake days in the transboundary lakes, etc..

Questions and answers in plenary discussions:

- Who drafted the Albanian NBSAP? It was prepared by the Institute of Biological Research and the Museum of Natural Sciences.
- Who adopted the Albanian NBSAP? The Albanian government.
- Do you have a monitoring system established in Albania? No, there is no systematic monitoring in Albania, only specific items are assessed.
- Is the issue of biodiversity mainstreaming addressed in the Albanian NBSAP? This issue is not really addressed in the Albanian NBSAP; development issues are far more important and higher on the political agenda of the country.
- What happened to the coastal development project in the southern coast of Albania? This project was stopped.

Belgium

The Belgian NBSAP process was presented by Ms. Claire Collin. Belgium is a federal state with three complementary levels of government authorities: the Federal Government, the Regional Governments (the Flemish, the Brussels Capital and the Walloon Region) and the Communities (the French, the Flemish and the German-speaking Communities). All these government authorities have powers and competences in different fields.

The Regions and the Federal Government have developed biodiversity strategies and/or plans: Numerous actions had already been undertaken before the elaboration of the NBS.

The National Biodiversity Strategy, initiated by a ministerial decision, was designed as a framework document that builds on these existing plans and gives strategic and political orientation in order to improve implementation and create more coherence. It includes plans for the following key sectors: development cooperation, science, transportation, and economy.

The text was drafted by a team representing the major actors in the field of biodiversity in Belgium (federal, regional and local administrations as well as NGOs, scientist, federation, etc.). A public consultation took place between 3 April and 1st June 2006 (ca. 200 answers were gathered).

The text was adopted and endorsed in October 2006 by the Minister of the Environment, the Minister of Mobility, the Secretary of State for Sustainable Development, and the Federal Minister of Economy.

The strategy aims at giving strategic political orientations to contribute to the achievement of the 2010 target. The NBS identifies 15 strategic objectives that are priorities and should be crystallized into actions in a second stage. The NBS further identifies 78 operational objectives to guide and help implementation. Neither specific actions nor targets are adopted in the Strategy itself but they will be adopted and developed in a later stage in the implementation process, in consultation with all the actors for biodiversity in Belgium.

Implementation follows a common approach across the federal and regional governments of Belgium. Evaluation and reporting on progress made and obstacles for implementing the National Biodiversity Strategy will be through the national reporting process for the CBD. This will allow the Steering Committee "Biodiversity Convention" to review the effectiveness of the measures taken and to identify priorities to guide further actions (first review envisaged for 2010).

The necessary complementary measures to implement the operational objectives will be undertaken where necessary in a coordinated way by the Regional and Federal Governments and other relevant actors.

Examples for achievements:

1. Establishment of a network of terrestrial and marine protected areas at national and transboundary levels (13 % of the territory (terrestrial and marine) is part of the NATURA 2000 network)
2. Promotion of the integration of biodiversity concerns into sector policies: a federal plan for the integration of biodiversity in the four key sectors development cooperation, science, transports and economy is currently under negotiation and should be approved by the federal ministers mid 2009. This plan identifies concrete actions to integrate biodiversity. For each action, the plan identifies the responsible organisation/institution for implementation, a time schedule for implementation as well as the budget necessary for implementation.
3. Development of a common strategic approach to avoid the introduction and mitigate the impacts of invasive alien species: co-organisation of workshops, research projects relating to invasive alien species, elaboration of black/grey lists of invasive alien species based on a standardised impact assessment protocol, review/update of existing legislation to prevent introduction of invasive alien species in Belgium, consultation of plant and breeding sectors to increase awareness and understanding of the issue, and identification of the most appropriate measures (e.g. labelling, substitution, information, etc.), development of public awareness tools.
4. Adoption of biodiversity criteria in public procurement policies
5. Joint communication activities

Challenges for the elaboration and implementation of the NBSAP in Belgium were:

- Creating more coherence and filling the gaps among existing Belgian instruments;
- Coordination – inclusion of existing Regional and Federal frameworks or plans;
- Global vision on implementation status;
- Another (technical) challenge was the language.

The Strategy was publicly launched on 22 May 2007 in the presence of the federal and regional ministers of Environment. Folders were prepared in French, Flemish and German in order to explain the strategy in a simple way. Those folders were sent to a broad public concerned by implementation (regional, federal and local authorities, communities, actors for biodiversity conservation, other sectors, scientific institutions, non-governmental organisations, etc.).

Questions and answers in plenary discussions:

- How was the consultation process realised? It took two months and was an e-consultation process.

- What about public ownership against this background? Public ownership is mostly limited to nature conservation activists.
- How is sector integration facilitated in Belgium? Sector integration is based on soft law. There are some action plans under development; however, they are neither binding.
- What is the linkage between biodiversity and public procurement? There was a participatory process for the elaboration of criteria that lasted for one year.
- How is the implementation of the NBSAP coordinated in Belgium? There is no sector coordination; the different sectors set their own priorities.
- Do you have an idea about the mainstreaming of biodiversity into development cooperation? No numbers, sorry.

Croatia

Ms. Ivna Vukšić presented the Strategy and Action Plan for the Protection of Biological and Landscape Diversity which is the fundamental document for nature protection in the Republic of Croatia. In 1999 the Republic of Croatia adopted the Strategy which for the first time systematically defined and planned nature protection activities.

Given the substantial changes in the concept of nature protection due to a renewed legal and institutional framework after the accession to the CBD and aiming at the EU integration, in 2006 the need has arisen not only to revise the 1999 Strategy and Action Plan for the protection on landscapes and biodiversity, but to consider the strategic objectives and guidelines on a completely new basis.

With the aim of analyzing the implementation of the 1999 Strategy and determining new strategic goals, guidelines and priority action plans as components of the new Strategy, ten working groups were established involving competent state administration bodies, professional institutions, public institutions for protected area management, inspection services, scientific institutions, representatives from the economic sector and from NGOs. This was felt necessary as a prerequisite for an integrated and more realistic approach and for the incorporation of biological diversity considerations into all relevant sectors.

The implementation of the Strategy 1999 achieved an improved status of biological and landscape diversity; strengthening of institutional and administrative bodies at all levels; accession to as well as ratification and implementation of all international agreements in the field of nature protection; establishment of a national legislative framework in the field of nature protection and in the field of GMOs in compliance with the EU legislation; establishment of a systematic process for biodiversity inventorying; creation of a basic habitats map and successful implementation of a large number of international projects.

The Ministry of Culture initiated the process of elaborating a new Strategy on the basis of a proposal included in the Report on the State of Nature and Nature Protection for the period 2000 – 2007, which was produced by the State Institute for Nature Protection.

The final draft of the Strategy was available on the web and a public consultation was also held. The revised Strategy and Action Plan for the Protection of Biological and Landscape Diversity of Croatia was adopted by the Parliament in 2008.

The following general strategic objectives are recognized:

1. Conserve overall biological, landscape and geological diversity as an underlying value and potential for further development of the Republic of Croatia;
2. Meet all obligations arising from the process of integration into the European Union and alignment of the legislation with relevant EU directives and regulations;
3. Fulfil the obligations arising from international treaties in the field of nature protection, biological safety, access to information etc.;
4. Ensure integrated nature protection through co-operation with other sectors;
5. Establish and evaluate the state of biological, landscape and geological diversity, set up a nature protection information system with a database connected to the state's information system;
6. Encourage promotion of institutional and non-institutional ways of education about biological diversity, and participation of the general public in decision-making
7. Develop legislation and implementation mechanisms through strengthening of legislative and institutional capacities, education, development of scientific resources, information, and development of funding mechanisms.

Questions and answers in plenary discussions:

- Geological diversity is included in the Strategy and Action Plan for the Protection of Biological and Landscape Diversity of Croatia.
- Funding is a priority issue for the period of the next five years.
- Is *ex-situ* conservation also considered in the Strategy? There are some goals for wild and cultivated species.
- Which sectors play an active role in the implementation of the Strategy? All the sectors named in the presentation, e.g. agriculture, forestry, hunting, tourism, fishery, water management, transport, energy, and mining.
- From your point of view, what are the major differences between the old and the new strategies? The old Strategy included more general action plans while the new one is more concrete. In addition, the participation in the new Strategy development was much broader involving more sectors and NGOs.
- Would you say that the new Strategy is ambitious? Yes.

France

Ms. Cécile Blanc presented the French National Biodiversity Strategy and Actions Plans adopted in February 2004. The main purpose of the French NBSAP is to stop biodiversity loss by 2010 and to monitor the status and trends of biodiversity for the whole territory of France. It includes five major objectives:

1. Maintain and restore genetic diversity,
2. Maintain and restore species diversity,

3. Maintain and restore habitat diversity,
4. Improve the ecological network (connectivity, landscape diversity),
5. Ensure proper functioning of ecosystems.

It defines four axes for action:

1. Involve all stakeholders,
2. Acknowledge nature's value,
3. Mainstream biodiversity within national policies,
4. Develop scientific knowledge and monitoring.

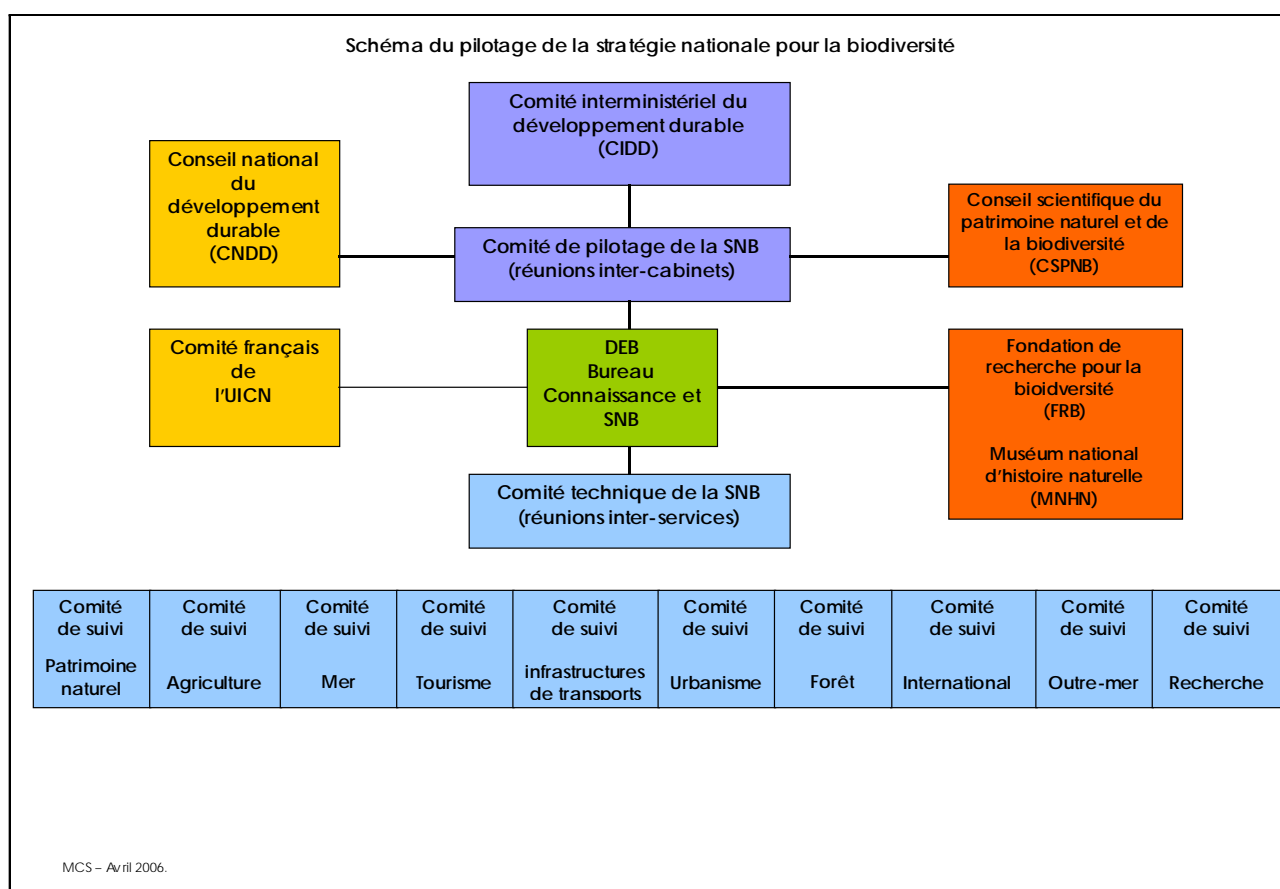


Fig. 1: Steering scheme for the French NBSAP

The French governance structure is based on sector responsibility, participation and monitoring, involving State's representatives, NGOs, the private sector, academia and local authorities at different levels. The overall steering mechanism and the involved actors are illustrated in fig. 1.

The French NBSAB process includes 11 sector action plans:

- adopted in November 2005:
 1. Nature conservation
 2. Agriculture
 3. Territorial planning
 4. Urban planning

5. Transport and infrastructures
 6. Marine and coastal activities
 7. International cooperation
- adopted in September 2006:
 8. Research
 9. Forest
 10. Overseas territories (consisting of one general action plan and one local action plan for each of the overseas territories)
 - adopted in April 2009:
 11. Tourism

The sector action plan is the main tool to implement the objectives of the French Biodiversity Strategy in each sector activity and contains a list of actions and means validated by the government for a period of two years. A multi-stakeholder steering committee chaired by the ministerial department in charge of the sector activity is the responsible body for the implementation. Reporting includes annual progress reports on implementation (from 2006) and a national biodiversity review every two years (2007, 2009).

The update process for the action plans was launched mid-2008, each update is prepared by the steering committees. The decision to check for an update of the action plans after two years of implementation was made at the time of adoption. However, updates are only elaborated when necessary, to allow for maximal focus on implementation. Relevant commitments from the *Grenelle* debates (see box) should be integrated. Actions not implemented should be prolonged and amended when necessary. The updated plans for the period 2009-2010 were validated in an inter-ministerial meeting in April 2009 and published together with the 2008 annual progress report.

Box: *Grenelle de l'environnement* is an open multi-party debate in France and involves a very wide audience of representatives from national and local government and organizations (industry, labour, professional associations, non-governmental organizations). It defines the key points of government policy on ecological and sustainable development issues for the coming five years, with a large focus on biodiversity. Its final commitments were adopted in October 2008. The *Grenelle* process is linked to the French NBS with one group dedicated to "Biodiversity and natural resources". This group decided to reinforce the NBS and put in place regional strategies as well as to integrate *Grenelle's* conclusions into the action plans.

The revision of the French NBSAP included the following main changes:

- The French NBSAP should contribute to the 2010 target to stop biodiversity loss;
- Nature within cities should be restored and eco-areas for town planning should be promoted;
- The French ecological network ("*Trame verte et bleue*") should be integrated into the transport infrastructures planning.

Furthermore, the national strategy for protected areas and the Natura2000 network inspired the protected area network in the French overseas territories. Other outcomes include:

- Integrated management strategy for the marine and coastal environment;
- Re-conciliation of economical and ecological objectives for forests;
- Eco-conditionality in the context of the agricultural policy;

- Reinforcement efforts concerning research and knowledge transfer;
- Creation of a national biodiversity observatory (inventories, mapping, indicators, knowledge transfer);
- Creation of the French Research Foundation for Biodiversity.

Starting in January 2009, the first programme period includes the implementation of a total of 391 actions planned, 32% of which have been implemented, 54% are in progress, and 14% have not been launched yet (see fig. 2).

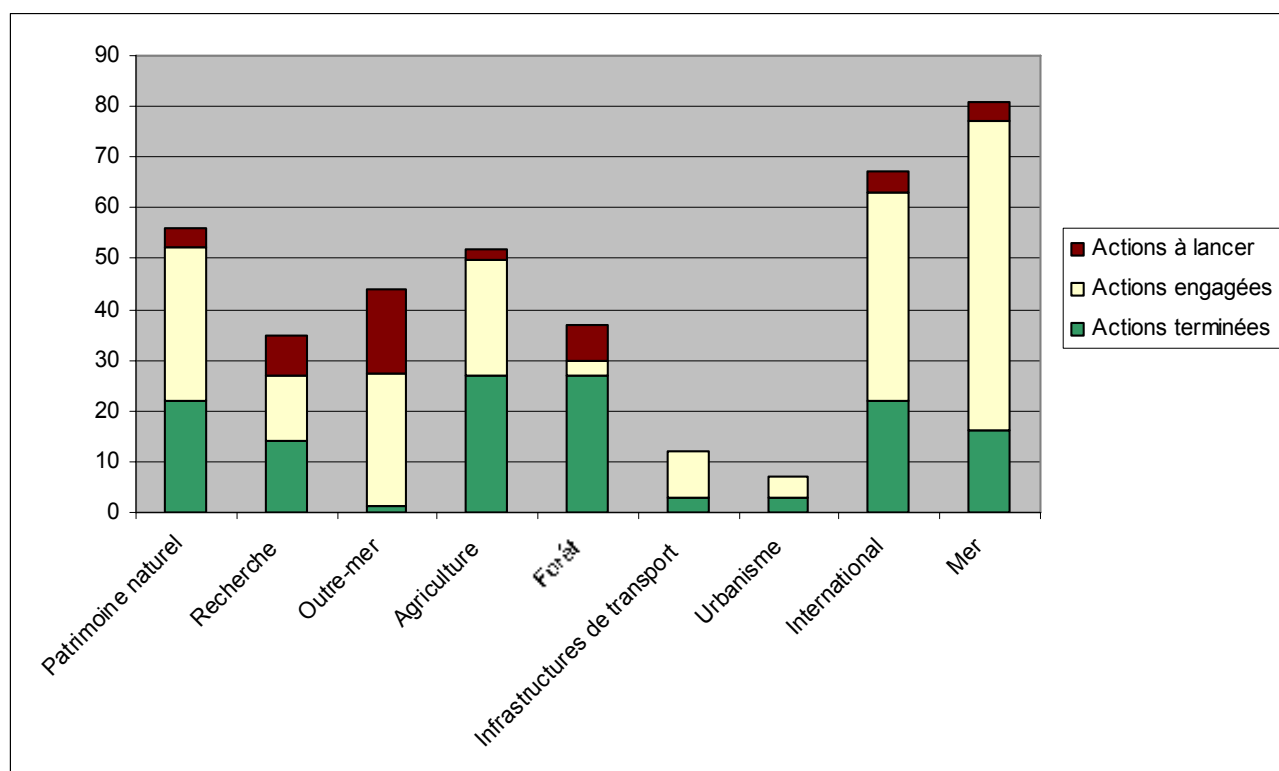


Fig. 2: Implementation of actions – state

The impacts of the National Biodiversity Strategy include numerous actions allowing for nature policies reinforcement (protected areas, species restoration action plans, overseas territories, marine environment). New areas were taken into account considering *inter alia* their general biodiversity and genetic resources. Further achievements are:

- Increased development of cross-cutting studies to structure public action and a better visibility of national actions by all stakeholders and foreign partners;
- Greater consistency in biodiversity-related policies;
- Reinforcement of monitoring and communication (two sets of indicators developed, annual progress reports and other publications...);
- Wider involvement of stakeholders;
- Institutional integration of biodiversity in sector activities with the highest impacts;
- Development of specific sector approaches;
- Increased support from policy makers and elected representatives;

- Public debates, commitments from all the stakeholders;
- Development of partnerships with businesses, civil society organisations, local authorities.

The integration of biodiversity concerns into national policies and sector policies is mainly facilitated through the action plans of the NBS and through the *Grenelle* process. The NBS already constitutes one of the nine axes of the National Sustainable Development Strategy. Additionally, biodiversity is addressed in the National Climate Change Strategy and work is in progress concerning a National Climate Change Adaptation Plan where a working group on biodiversity is contributing. Also under development is a National Strategy for the Sea as integrated approach for all uses of the marine environment, where biodiversity is addressed. Fiscal measures were introduced with the financial law in 2006.

The objectives of the CBD Programme of Work on Communication, Education and Public Awareness (CEPA) constitute one of the axes of the NBS and are addressed in the different action plans to raise general public awareness through publications, events (conferences, exhibitions...), and the educational work of botanical gardens. Awareness raising and guidance for professionals is provided through publication, guidelines, etc; policy makers and elected representatives are involved through training sessions, publications etc..

Questions and answers in plenary discussions:

- Why are the action plans so quickly updated? This does not affect the Strategy which remains unchanged. The update of the action plans is a light version; a more thorough update will follow in 2010. The system is not yet clear.
- How do you safeguard the bondage to sectors and the commitment of ministers? The NBSAP is soft law and not binding, its implementation success heavily depends on individuals in the sectors. There is a slight problem with pushing people to engage.
- Are economic aspects and valuation of ecosystem services considered in the French Strategy? This is certainly one aspect of biodiversity conservation.

Liechtenstein

Mr. Thomas Gerner introduced the status of Liechtenstein's NBSAP process. Due to its small size, Liechtenstein specifically faces the challenge of breaking down CBD goals to the local level. In an existing draft of a landscape development strategy, the highly-populated Rhine valley area was prioritized because of the high pressure on biodiversity.

Liechtenstein has not yet developed a national biodiversity strategy. However, tools exist at both the legal and the strategy level that allow for an up-to-date environmental policy. Strategic documents of particular interest include the "National Strategy on Nature and Landscape Protection in the Forest" (2000), the "Development Strategy of Nature and Agriculture" (2005) and - as a result of regional cooperation - the "Development Strategy on the Alpine Rhine" (ARGE Rheinblick, 2005).

As an outcome of these and other strategies, nature reserves and forest reserves make up 12.5% of the land cover. In terms of forest reserves, high-conservation-value forests were inventoried and account for 27% of the total forest area (70% of forest reserves are unmanaged reserves, the rest is managed towards a specified conservation goal). Another success story concerns agriculture where 20% of the cultivated land is designated as “Ecological Compensation Area” (ECA). Financial incentives on a national level led to an increase in ECAs in the second half of the 1990s.

Despite success stories, public awareness on the necessity of biodiversity protection is still low. Generally, ecological issues have only low priority particularly because of growing opposition against an increase in environmental regulations. The focus of people’s attention is on the building and traffic sector, but coordinated action at national level is rare due to the historically decentralized organisation of the eleven Liechtenstein municipalities with autonomous rights. An up-to-date regional development strategy is needed urgently. Concerning ecology the lack of a coordinated approach results in the urgency to establish an ecological network and landscape protection areas. The national territory will be under serious pressure from settlement development in the next decades. Limitations to nature protection measures in Liechtenstein result from the small size of the country and its successful economic development. Limited personnel capacities and extraordinary high prices for land in rural regions are often opposed to more incentives of saving ground from further construction measures.

The NBSAP will be developed building on the assessment of biodiversity in the 4th National Report to the CBD. However, an open question is the actual benefit for the country from the NBSAP process when compared to the current situation.

Questions and answers in plenary discussions:

- Suggestion by participants: Look at UK LBAPs and on the NBSAPs of high-income island countries for examples.
- Are the 12.5% of protected areas government owned? No, they are partly in private hands.
- How about the public interest in landscape protection? People in Liechtenstein are mostly traditional; the families own the land since generations and like to keep it for future purposes.

The Former Yugoslav Republic of Macedonia

Mr. Aleksandar Nastov introduced the NBSAP process and the mainstreaming of biodiversity in the former Yugoslav Republic of Macedonia.

The legal framework includes a number of legal acts relevant for biodiversity conservation and sustainable use of biological resources. The CBD was ratified in 1998; a law on nature protection was adopted in 2004 and revised twice in 2006 and in 2007. Legislation on water management, forestry, hunting and fishery was adopted between 2007 and 2009. Four strict nature reserves, three national parks and eight nature monuments were legally proclaimed.

The main features of the Macedonian NBSAP concern ten strategic fields:

1. *In situ* conservation of biodiversity
2. *Ex situ* conservation of biodiversity
3. Institutional capacity building
4. Research and monitoring
5. Public awareness and education
6. Environment impact assessment
7. Supporting measures
8. Legislation
9. Financial resources for the NBSAP process
10. Coordination of NBSAP implementation process

The implementation of the 1st Macedonian NBSAP is facilitated by means of 35 strategic objectives and 248 strategic targets. 232 of these strategic targets from 1st NBSAP have been implemented in the period from 2004-2008. Examples are: prohibition of hunting of threatened animal; total prohibition of fishing of salmon in Lake Ohrid; reintroduction of endemic fish species in rivers, lakes and wetlands; farming production of terrestrial turtles and gastropods.

The first evaluation of the Macedonian NBSAP included *inter alia* periodical, annual and thematic reviews, monitoring data, identified main gaps, a draft framework for the 2nd NBSAP (2009-2013) to be commented by 50 relevant institution involved in this process. Among the identified obstacles were insufficient capacity building, education, limited financial resources, decreasing public awareness, etc.. Progress was made concerning national reporting efforts and concerning cooperation among the relevant national committees for master and regional planning. Biodiversity was evaluated in ten protected areas. Endangered plant species, birds (vultures), and mammals (lynx, bear, and European otter) were evaluated as well. Further success stories are the prohibition of hunting threatened animal species, the total prohibition of fishing Ohrid salmon, as well as the reintroduction of endemic fish species into rivers, lakes and wetlands.

Concerning communication, education and public awareness, an internet connection and web-site were set up as well as a central database for biodiversity. Education programmes for schools, universities and other institution were established. Public awareness activities were supported by institutions, NGOs, and media. Books, leaflets, and CDs about biodiversity conservation were produced. Further activities include eco-campaigns, trainings, seminars, and workshops.

Needs for an improved NBSAP implementation include the strengthening of capacity building at national and local level, the provision of appropriate financial resources for the implementation process, improved communication, improved education, and increasing public awareness. Challenges are the implementation of joint programmes for the sustainable use of biological resources balancing trade and biodiversity protection at the regional level. Further challenges are:

- Continuing biodiversity loss,
- The global economic and financial crisis,
- Poverty and indigence in this region,

- Illegal trade,
- Hunting and fishing.

Questions and answers in plenary discussions:

- You managed to implement more than 230 targets of your NBSAP. How did you do this? With the help of the dedicated staff in the ministries, NGOs, etc.
- What is in your opinion the reason for the loss of public awareness? There is a lack of financial resources for related programmes.
- How do you monitor the successes of your NBSAP process? There is a lack of systems for monitoring and indicators for monitoring are missing too.

Republic of Moldova

Ms. Angela Lozan presented the NBSAP of Moldova, which was approved by Parliament Decision # 112-XV in April 2001. This document has been revised and updated in 2007 according to the Governmental Decision.

The national priorities for NBSAP include:

- The consolidation of institutional procedures for biodiversity related impact assessments including transboundary aspects;
- The improvement of the regulatory framework;
- The strengthening of communication strategies with regard to biodiversity conservation.

The main improvements and changes associated with the NBSAP in Moldova are:

- Losses of biodiversity considered to be stabilized;
- Legislation improved and developed;
- Extension of protected areas;
- International financial assistance attracted for capacity building;
- Cooperation with NGOs and local administrations improved;
- Successful practices implemented;
- Public awareness campaign in place.

Generally, the Strategy on Biological Diversity in Moldova implies the realization of 263 actions. The main actions taken so far concern the following sectors:

- Policies, legislation and institutional framework;
- Territorial planning, programs on biodiversity conservation;
- Research and monitoring;
- Ecological education of population.

The approved regulatory framework includes the Law on Ecological Network #94 (2007), the Programme on the Establishment of a Ecological Network (under approval), the Law on Animals Use for Research and

Experimental Scopes #265 (2006), the Law on Fishery #149 (2006), and the Law on Vegetation #239 (2007). Other related national policies and sector policies are: the National Development Strategy 2008-2011 (2007), the Strategy for Economic Growth and Poverty Alleviation, the National Programme “Moldovan Village” 2005-2015 (2005), the National Strategy for Sustainable Development in the Agro-Industrial Complex 2008-2015 (2008), the Strategy for the Sustainable Development of the Forestry Sector in Moldova (2001), the Action Plan “EU-Moldova” (2005), and the Strategy of Industrial Development until 2015 (2006).

The most important practical actions taken in Moldova are as follows:

- extension of natural protected areas in 2009 reaching 4,7% of the national territory of Moldova (157,227.4 ha; for comparison 2001: 2% or 66,476.7 ha) and including three wetlands sites of international importance: Lower Prut Lakes, Lower Dniester and Unguri-Holosnita;
- afforestation of 1,000 ha/year by “Moldosilva”.

Best practice examples include:

- the “Padurea Domneasca” forest reserve where ecological rehabilitation, removal of invasive species (*Acer negundo*) has been implemented at 10 ha area;
- successful ecological rehabilitation of beech trees (*Fagus silvaticus L.*) in the “Plaiul Fagului” forest reserve (a tree typical for this region);
- reconstruction of the Steppe ecosystems in the region of Tartaul-de-Salcie village (6 ha) by seeds planting;
- creation of stepper seed banks on 6 acres in the proximity of Alexanderfeld village, Cahul region;
- re-introduction of the buffalo (*Bison bonasus L.*) which has been living for centuries in the forests of Central Moldova; and
- elaboration of a Land Management Plan for the town Stefan-Voda including the ecological network by REC-Moldova.

However, these activities are hampered by barriers and constraints, among them the following:

- insufficient financial support for biodiversity;
- violation of the national environmental legislation;
- poor cooperation and coordination between governmental actors;
- poor management of protected areas by local administrations and business;
- few economic incentives;
- insufficient use of scientific achievements and monitoring;
- poor mainstreaming of biodiversity considerations into the sector policies;
- high degree of intensively managed agricultural lands threaten ecological landscapes; and
- low level of public awareness.

There are several running capacity building projects in Moldova: “Sustainable Integrated Land Use of the Eurasian Steppe” (TACIS, 2007-2009), “Support for the Implementation of National Biosafety Framework in Moldova” (UNEP/GEF, 2006-2010), “Improving the Coverage and Management Effectiveness of the Protected Area System in Moldova” (UNDP, 2009-2013), “Support for Ecological Emerald Network” (CoE,

2009-2011), “Restoration of Steppe Habitats as Biotopes for endangered snake species in Dniester” (Frankfurter Zoologische Gesellschaft).

Numerous Communication, Education and Public Awareness actions have been undertaken by the Ministry of the Environment and National Resources in cooperation with NGOs such as “Biotica”, MEM, “Ave-Natura”, ”Eco-Tiras”, REC-Moldova, “Ecospectr”, etc. The projects provide public awareness campaigns through mass-media, trainings, workshops, seminars, international, national and regional conferences, publication and dissemination of brochures, leaflets, etc. The educational actions include the publication of books, monographs, manuals, papers, etc., of which the most significant are: Manuals on “Botany” and “Dendrology”, monographs “Genetically Modified Plants” (2003), “Red Book of Moldova” (2002), “Vegetal World of Moldova” (2005-2007), “Animal World of Moldova” (2003-2007), “Medicinal Plants” (2008), and the “Dictionary of Flora” (2007).

Questions and answers in plenary discussions:

- On what basis do you estimate the halt of biodiversity loss if monitoring is weak as you said? This is based on general estimations of researchers. The flaws in the monitoring system are due to financial and personnel gaps but the protected area system is extended.
- How do you manage to involve stakeholder groups and other sectors if you say that there is only a low level of public awareness?
- Is there a sense of urgency in the government? Not sure about that, but the governmental sector is well aware of the problems existing, also the industrial sector.

The Netherlands

Mr. Peter Bos introduced the participants to the history of the National Biodiversity Strategy and Action Plan in the Netherlands. The first Strategy with Action Plan focused on strengthening biodiversity objectives in existing government policies and was adopted in 1995 with the overall objective to strengthen biodiversity objectives in existing government policies. This first Dutch NBSAP was updated and refined in 2001 adding 30 actions in six thematic fields:

- Integration in nature, water, spatial planning, environment;
- Agriculture and trade processes;
- International cooperation;
- Science and monitoring;
- Technology and exchange of expertise;
- Public awareness and participation.

In 2008, the Netherlands updated and elaborated a new biodiversity action plan with additional specific activities and key strategic priorities. The international framework for the adopted Dutch NBSAP “Biodiversity: for nature for humans, forever” for the period 2008-12 addresses four issues:

- Convention on Biological Diversity;
- The Global 2010-target;

- The EU 2010-target and EU Biodiversity Action Plans;
- The Millennium Development Goals.

Main direct causes of biodiversity loss in the Netherlands are:

- Overexploitation of natural resources;
- Decrease/fragmentation of habitats;
- Pollution;
- Invasive species;
- Climate change.

Main indirect causes of biodiversity loss in the Netherlands are:

- Growing world population: competition for scarce land and resources;
- Increase of consumption and production (food, energy, water etc.);
- Richest biodiversity in poorest countries: link with development policies.

While it complements and does not substitute the existing plan, the new Dutch NBSAP will include five strategic priority themes and three supporting priorities:

1. Trade chains and biodiversity: soya, wood, palm oil, peat;
2. Payments for biodiversity: ecosystem services, financing instruments, REDD;
3. Biodiversity works: functional agro-biodiversity, local approaches;
4. Ecological networks: connectivity, flexibility, adaptation;
5. Marine Biodiversity: fisheries, mining.

The below are also three supporting priorities:

6. New coalitions;
7. Knowledge;
8. Communication and education.

Reflecting that the Netherlands is a small trading nation (with many multinational companies based in the Netherlands) there are strong links in the NBSAP between domestic and international aspects. The NBSAP is signed by the Ministers of Agriculture and Nature, Environment and Spatial Planning; and Development Cooperation.

The implementation approach for the Dutch NBSAP focuses inter alia on linking national and international efforts. An inter-ministerial steering group will guide the process. Further, a Task Force on Biodiversity and Natural Resources is established and counts on high level representation from the private sector, from NGO's, the scientific world, and from local governments. The Task Force will advise the NBSAP process on long term solutions and strategies. Short term initiatives are the establishment of discussion platforms and of a National Committee for organising the International Year of Biodiversity. There are also some projects (a) with the business sector, e.g. round tables (Leaders for Nature/IUCN) and pilot projects (BioCom), and (b) on new financial mechanisms such as forests/REDD (UNFF), offsets/compensation (BBOP), European Biodiversity Resourcing Initiative.

Concerning the CBD Programme of Work on Communication, Education and Public Awareness, the Netherlands established inter-ministerial programmes on biodiversity communication and education and related dialogues. To sum up, some key aspects concerning the status of NBSAP implementation in the Netherlands:

- Political recognition of the NBSAP has greatly improved;
- There is a Cabinet agreement on the NBSAP;
- The Dutch Ministry of Agriculture, Nature and Food Quality (LNV) elaborated a vision;
- Local and regional authorities plus the private sector develop own biodiversity policies/activities, e.g. considering the Countdown to2010;
- Biodiversity objectives get integrated in (national) policies for agriculture, forest, sustainable development, climate change;
- There are some examples of implementation based on the CBD ecosystem approach: Waddenzee, Hoeksche Waard, and river management.

But: there is still much to do!

Questions and answers in plenary discussions:

- How did you manage to succeed? One of the crucial factors was the involvement of NGOs asking parties during the last elections ten questions about biodiversity. The new government finally took up the issues from the NGOs. Other reasons were a sense of urgency in the face of overpopulation, increasing or at least persistent pollution, and certainly COP-6 in The Haag that pushed public awareness.
- Did you consider the ecological footprint approach? Yes, there was a lot of work on this in the Netherlands. Interesting is the fact that the ecological footprint of the Dutch is three times higher outside the country than inside.
- Is it just another strategy? No, we focus on main issues and do not let it get too broad.
- Do you include payments for ecosystem services? We mainly support international efforts in this.
- How do consider trade chains in your Strategy? We participate e.g. in international round tables on soya; concerning forests we have partnerships with countries that produce timber. Nationally, we initiated a green development mechanism and adapted the tax system.

Poland

Ms. Ewa Pisarczyk from the Polish General Directorate of Environmental Protection, Department of Nature Protection gave a comprehensive overview on the NBSAP process in Poland. The first Polish National Biodiversity Strategy with the Action Plan for 2003-2006 was approved on 25 February 2003 by the Council of Ministers. In 2005, an assessment of the implementation status of the Strategy was carried out. Due to the EU accession the strategy underwent a revision, which was adopted together with the Action Plan 2007-2013 in October 2007. The document was elaborated by the Polish foundation *Narodowa Fundacja Ochrony Środowiska* while the process was monitored by a Steering Committee.

The Polish Strategy (2007) consists of two parts: (1) the text of the Strategy and (2) the task cards for the

Action Plan.

The main goal of the Strategy is the preservation of a rich biodiversity at local, national and global level and the protection of possibilities for the development of all levels of its organisation (within species, between species and at ecosystem and landscape level), while taking into account the needs of Poland's socio-economic development and the need to ensure appropriate conditions for human life.

Eight strategic goals without timeframe with 77 operational goals for different administration sectors were elaborated. 134 tasks were formulated in order to achieve these goals and described in task cards including responsibilities, methods and time frame for implementation.

The following case studies were presented to exemplify the implementation of the Strategy:

1. Improvement and implementation of principles for a biodiversity monitoring system and its realization, which includes the monitoring of birds, habitats and species, forests and integrated monitoring of selected ecosystem.
2. Establishment of legal regulations and principles concerning invasive alien species.

Main obstacles for implementing the Strategy are financial burdens, lack of an administration body responsible for monitoring of the progress, and lack of information among entities responsible for the implementation of the Action Plan.

Biodiversity considerations were integrated and mainstreamed in sector and cross-sector documents, such as: National Environmental Policy for 2007-2010, with a Perspective for 2011-2014, Polish Policy of Sustainable Forest Management National Forest Resources Protection Policy, Rural and Agriculture Development Strategy for the Years 2007-2013, National Development Strategy 2007-2015.

Communication, education and public awareness activities included education on environmental protection in secondary schools and universities, educational activities of NGOs, State Forests, Department of the Ecological Education in the Ministry of the Environment (2008 publication: *Article 13 – in search of social support for the Convention on Biological Diversity management*) and projects subsidised by the National Fund for Environmental Protection and Water Management.

Questions and answers in plenary discussions:

- There are an increased number of goals and tasks. Is this in addition to the original number? We did rework the strategic goals.
- Any tasks completed up to now? Don't know.
- Who does carry out the tasks? Were the responsible entities in the elaboration of the tasks? Generally, the tasks were elaborated in a consultative process; however, the intensity of the process is unknown.

Romania

Ms Rodica Stefanescu presented the Romanians efforts to elaborate the NBSAP. The Government of Romania is currently conducting an enabling activities project facilitated by GEF-UNDP technical and financial assistance. The full title of the project is: “Support to alignment of NBSAP with CBD obligations and development of CHM” (PIMS no. 3955/ ATLAS no. 59788) and its implementation period is March 2008 – October 2009. Involved parties are GEF (funding), UNDP (implementation), Ministry of the Environment (executing agency) and the Ecological University of Bucharest as the delegated executing agency. The project objectives (work packages) are: 1). Aligning the National Strategy and Action Plan on Conservation and Sustainable Use of Biodiversity with the legal obligations under the CBD; 2). Strengthening Romania’s Clearing House Mechanism; 3). Undertaking detailed a capacity needs assessment in the areas of priority to the CBD implementation.

The Government of Romania ratified the CBD in 1994 (Law no. 58). Romania’s first National Strategy for Biodiversity was elaborated in 1996 and revised in 2001, but never adopted as government policy.

The third Romanian National Report to the CBD (2005) was developed with UNDP-GEF support. The Romanian National Capacity Self Assessment process (2004-2005) – also developed with UNDP-GEF assistance, produced a National Report and Action Plan (for the identified needs), three reports on the three Rio Conventions, and formed the foundation of other official documents, e.g. the National Communication to UNFCCC.

The current Ministry of Environment policy reference document is the National Strategy for Sustainable Development (2006) which was also funded by UNDP-GEF.

The need for a third NBSAP and a modernization of the Romanian CHM arose because the existing NBSAP is weak, outdated (since 2001), and requires urgent revision and alignment to both the CBD and the national priorities, especially since the accession to EU. The existing NBSAP is not the result of a participatory process and not endorsed by the government. The CHM consists only of the appropriate equipment and some scattered databases. Furthermore, existing national data is limited and subjective due to lacking technical and human resources. Moreover, there is only little and non-formalised cooperation among the various stakeholders, there are not enough institutional partnerships established, and the scientific community is insufficiently involved in supporting the national efforts for compliance. There are only few data sharing agreements established with neighboring countries, and existing information exchange is hampered by a lack of related rules of procedure.

Against the background of this situation, the current project “Support to alignment of NBSAP with CBD obligations and development of CHM” is aiming for a highly participative NBSAP elaboration process. For reasons of ownership, the project is undertaken and implemented by the Government of Romania and should be independent from the political team elected.

Participatory involvement shall be insured through a broad consultative process with relevant stakeholders and culminate in two national workshops that will be prepared via posting of project documents on relevant websites and by email communications. Additionally, mechanisms of voluntary cooperation will be explored

in order to improve biodiversity related information flow between the institutions.

Currently (June 2009) the project is close to conclude the stocktaking phase and a synthesis report on threats, root causes, and barriers to conservation and potential strategy elements will be elaborated. The document will be subject to public debates, especially via the First National Consultative Workshop and discussions on related professional group forums.

To sum up, past challenges in issuing Romania's NBSAP were:

- several political changes;
- operational and bureaucratic procedures hampering multi-party and multi-level requirements;
- lack of organised and reliable data;
- difference of structural approaches of habitat areas, not eco-systemic;
- lack of maps for Romanian ecosystems;
- gaps, overlaps or confusions in the administrative aspects (Natura 2000, protected areas).

Current challenges to successfully finalizing the GEF-UNDP project are to properly ensure:

- representativeness of stakeholders included in the consultative process, and validity of their possible inputs (a full and effective stakeholders' participation);
- identification of obligations for individual ministries against the background of EU accession and CBD requirements;
- achievement of governmental ownership concerning the final project outcomes to ensure the adoption of the new NBSAP as formal and long term government policy.

Questions and answers in plenary discussions:

- Why should a third attempt of GEF-UNDP be more successful than the previous efforts? How to ensure continuity? Isn't it too late, and too close to CBD COP-10, to change things? There is a firm belief that the degree of necessary ownership will be much higher by making the NBSAP process a participatory one. Besides, the final documents should be legally adopted, which should support achievement of these outcomes. Concerning COP-10, it is hoped that some substantial progress can be demonstrated concerning the CBD requirements with a well up-dated NBSAP and an implemented CHM in action. And, to start with, it could be a pushing chance to prepare the Fourth National Report, as well!
- How will you ensure cooperation concerning the CBD requirements with neighbouring countries? Options are limited to publishing some recommendations. Communication and networking may support these efforts. However, the policy pertains to governmental decisions and actions. There are bilateral agreements with most of Romania's neighbours, as well as the triangle cooperation in the Balkan region and with other neighbouring regions. Additionally, there are case by case collaborations (e.g.: Black Sea, Danube, Danube Delta, migratory birds, fishing, trade, etc).
- What could motivate the individual ministries to comply with the NBSAP requirements? Besides the obligations accepted by signing the CBD and other international environmental conventions, the accession to the EU produces obligations such as environmental protection, which are reflected in the sector strategies and action plans. It should be made clear that these obligations coincide with CBD

requirements. Most of the obligations are already publicly declared and supported by institutional budgets for implementation.

- Which are the stakeholder groups you will consider for consultations? All sectors will be considered: ministries, academia, NGOs, media, administration of natural and protected areas, agencies of different resources, local administrations, industry and private business, professional forums, etc. – all together about 1,300 entries are currently in the directory of contacts.
- Why do you strive for a legally adopted NBSAP? In Romania, each election brought in completely new representatives at each and every institutional level all over the country. This did not only concern the top management level, but reached down to the mid structures too. This resulted in a disregard of regulations adopted by previous governments. A legal act should, at least in principle, ensure some longer term institutional commitment.
- There is a great need for capacity development in Romania.

Switzerland

Ms. Sandra Edith Limacher presented the Swiss strategic approach to biodiversity conservation. Switzerland ratified the Convention on Biodiversity and launched its Red List Programme of threatened species in 1994. In 1995, the Swiss Biodiversity Monitoring Programme was launched. Two years later, the sustainable development strategy (revised in 2002 and 2008) and the Swiss Landscape Concept (NBSAP1) were developed. Further achievements were the National Action Plan on Plant Genetic Resources for Food and Agriculture from 1999, the programme Landscape 2020 and the Guiding principles for Swiss watercourses adopted in 2003, the National Ecological Network to address landscape fragmentation by roads and railways etc. and to introduce links (bridges etc.), the Swiss National Forest Programme 2004 – 2015 established in 2004, and finally the adoption of the Environmental objectives for agriculture in 2008. Further instruments and tools were put in place in order to address and implement the provisions of the Convention, including a comprehensive legal framework, cross-sector and sector strategic and programmatic baselines (see Switzerland's Fourth National Report).

The legal framework as well as the strategic and programmatic baselines take into account the CBD's ecosystem approach and root in a tripartite approach including the protection and sustainable use of biodiversity and the restoration of degraded biodiversity. Actions taken for the conservation of biodiversity are based on the principles of subsidiarity and causality as well as the precautionary principle.

A main basis for further developing Switzerland's biodiversity policy is the comprehensive collection of data on status and trends of biodiversity per se (Swiss Biodiversity Monitoring Programme), on specific ecosystems (e.g. forest, agricultural ecosystem), on pollution (e.g. air, water, soil) and Switzerland's development in general (e.g. sustainable development). The data are managed and made publicly available by national data centres and are the very base for the elaboration of a comprehensive indicator system and the further development of instruments, such as Red Lists or species action plans.

Despite the remarkable array of existing national strategies, programmes and action plans the loss of

biodiversity could not be halted so far (Biodiversity Monitoring Report 2009, Fourth National Report). The Federal Parliament, therefore, mandated the Swiss Federal Office for Environment in September 2008 to elaborate a new and overarching National Biodiversity Strategy.

The Biodiversity Strategy shall set direction for biodiversity conservation over the next decades. By means of the Biodiversity Strategy the resilience of ecosystems shall be strengthened, the provision of ecosystem services secured, and the mainstreaming of biodiversity into all relevant sectors fostered.

There are achievements towards the 2010 target, e.g. data on Switzerland's biodiversity with the Biodiversity Monitoring Switzerland (latest report 2009) and the corresponding Swiss data centers. The size of protected areas in Switzerland increased since 1991 to up to currently around 13% of the national territory. The ecological network has been improved and the private sector involved into biodiversity conservation (e.g. by means of the e.g. Foundation „Nature & Economy“). Communication and education were improved.

However, there are still problems waiting to be resolved:

1. Surface, quality and connectivity of habitats continue to decline; and so are the species that depend on it; every second 0.9 m² of land is converted to settlement; mostly at the loss of fertile agricultural land;
2. Biodiversity decline is insidious; the society does not perceive the decline nor the need for immediate action;
3. The economic costs due to the loss of ecosystem services are underestimated;
4. The ecological footprint of Switzerland is high, and thus the reliance on the global biodiversity.

Further challenges add to these problems:

- Continuous population growth increasing the pressure on remaining land;
- Climate change, increasing water and energy consumption;
- Effects of non-native species (neobiota);
- Effects of new technologies / substances.

In September 2008, the Federal Parliament mandated the elaboration of a new National Biodiversity Strategy. It has to be adopted by the Federal Council and accepted by the Parliament, work has to be finalized early 2011 and started in January 2009. The scope includes national and international issues and the process should involve relevant actors in the elaboration process. In the focus of the attention of the responsible Swiss Federal Office for the Environment are:

- The resilience of biodiversity;
- The safeguarding of ecosystem services in the long-term;
- The mainstreaming of biodiversity into all relevant sectors (*alias* common benefit, shared responsibility).

Obstacles along the way are *inter alia*:

- „Seeing the forest amongst the trees“
 - many processes in parallel at the federal level (e.g. adaptation strategy, development of agricultural policy)
 - NBSAP elaboration at the cantonal level
- ⇒ Challenge to coordinate! To keep an overview!

- ⇒ Challenge for our implementing partners on the ground!
- Legacy of past communication!
 - We say ‚Biodiversity‘
 - They understand nothing!
 - Or they think ‚Giant Panda‘!
- ⇒ Challenge to communicate biodiversity as an essential basis for life! It is more than just something ‚nice to have‘...

Questions and answers in plenary discussions:

- How do you organise data collection? This is done by consultants and volunteers; the data is compiled in data centres which pass it on to the national biodiversity monitoring centre.
- Who uses these data? Decision makers, but the data need to be interpreted for them.
- How is the data used? They are integrated into the NBSAP process; there is free access to the data; two reports were elaborated within eight years time.
- Are there BAPs on the canton level? Some cantons started BAPs without waiting for the federal level (which is due in 2011).
- How do you communicate the NBSAP? We use the 2010 campaign and the term ‚biodiversity‘ and try to anchor in society: “Biodiversity is the basis for life.”
- What is the relation of monitoring and the NBSAP process? These are two interlinked processes: monitoring informs the elaboration of the NBSAP and the monitoring system is evaluated on the basis of the preliminary report.

Turkey

Mr. Adem Bilgin introduced the participants to the NBSAP process in Turkey. Among the priorities for the process are the following:

- Identification of indicator species and establishment and effective implementation of inventory, classification and monitoring systems;
- Identification, registration, conservation and management of genetic diversity important for biological diversity, agriculture, food security and economic value;
- Establishment of a central information management mechanism in order to disseminate and share results of research among decision makers, technical staff and other stakeholders, in order to allow for a faster analysis and understanding of biological and biophysical data;
- Development of specific conservation measures for sensitive and threatened ecosystems and species, for ecosystems with high biodiversity, for critical habitats;
- Classification of components of biodiversity, which have economic value, and of ecosystems under severe pressure due to human induced activities;
- Determination and monitoring of climate change impacts on biodiversity;
- Implementation of measures to protect most affected ecosystems and species against climate change;
- Determination and conservation of biodiversity hotspots;
- Strengthening of relationship and coordination between implementation processes of biodiversity

- related national initiatives such as agricultural strategies, development plans, forestry programmes;
- Encouragement of sustainable use of biological resources and reduction/elimination of negative impacts of natural resource treatment patterns.

The following (knowledge) gaps and needs were identified during the NBSAP process:

- Inventory of invertebrates (in particular insects), microorganisms, fungi, soil biota and pollinators;
- Genetic diversity;
- Biological indicators;
- Risk categories of fauna and flora species;
- Exact distribution of some of the threatened species;
- Distribution of marine meadows;
- Effects of climate change on biodiversity;
- Interrelationships of biotic and abiotic factors within given ecosystems.

These gaps and needs have been reflected in the targets of the NBSAP. The measures included in the NBSAP focus on the institutionalization of a system for data generation and collection, processing, management and data sharing.

The following projects have been identified to be implemented in the scope of the Strategy:

- Identification of the distribution of medical plant species, development and dissemination of cultivation methods to diminish pressure on wild populations;
- Identification and registration of plant and animal genetic resources for the purposes of *ex-situ* and *in-situ* conservation and sustainable use;
- Identification of species' genetic diversity that have genetic centers in Turkey by molecular methods;
- Identification of climate changes impacts on biodiversity, in particular on forests, inlands and marine ecosystems;
- Identification of microbial diversity in Turkey and establishment of a national microbial collection center;
- Cultivation of economically valuable, sensitive, threatened and endangered species in natural flora, development of controlled production and collection mechanisms;
- Determination of ecological relations among species in nature protection areas;
- Development of mechanisms to control invasive alien species;
- Establishment of a laboratory network for GMOs;
- Classification of stressed forest ecosystems and their threat categories;
- Identification and conservation of endangered species in sensitive mountain ecosystems;
- Determination of bio-indicator species;
- Establishment of a gene bank for aquatic species;
- Development and implementation of integrated coastal zone management plans for coastal ecosystems under human pressure;
- GIS mapping of sea grass distribution and preparation of action plans for their conservation;
- Establishment of marine and coastal protected areas;

The following achievements were made under the NBSAP process in Turkey:

- The proportion of protected areas has increased from 4% to 6% since 2001. However, the loss of diversity in steppe ecosystems continued, since the existing legislation does not cover appropriate provisions on the protection of steppe ecosystems' biodiversity;
- Increased capacity of *ex-situ* conservation and number of materials conserved in *ex-situ* conditions, in particular materials of cultivated plants and their wild relatives;
- Positive development toward conservation and sustainable use through the adoption of new regulations (pasture law, environment law etc.), but yet some of the new regulations such as the mining law and the law on tourism promotion have negative effects on biodiversity;
- The proportion of forest cover increased from 26.6 % to 27.2 %, but as half of the forests were degraded, the enhancement was realized through reforestation. Additionally, there is an increase in the number of annual forest fires;
- Interest of media about protection of environment and number of TV programs on this issue increased, understanding and awareness of public on conservation of natural environment improved, but yet the loss of biodiversity caused by human impacts still continues;
- Although Turkey adopted the necessary legal framework, the institutional infrastructure and the human resources to protect biodiversity as a primary concern and in compliance with the provisions of CBD is weak; thus the desirable level of biodiversity conservation could not be achieved due to limited financial resources and insufficient coordination between the institutions.

Questions and answers in plenary discussions:

- How will you resolve the problem with the lacking inventory systems? We have to make use of other data sources and have to generate new data.
- What are your most important priorities? Highest priority has the building up of inventory systems.
- There are three major threats to the biodiversity in Turkey: industry (pollution), legislative deficits and lack of enforcement (institutional flaws), and the building of big dams. What do you think of making these three issues the starting point of the Turkish NBSAP? Very good idea.

Ukraine

Mr. Sergey Sorokin presented the biodiversity policy and actions in Ukraine. The National Biodiversity Strategy and Action Plan (NBSAP) process started in 1994, after the ratification of the CBD by Ukraine. Today, there is no NBSAP in the Ukraine.

CBD implementation in Ukraine is regulated by the following documents of national legislation (regulatory framework):

- The Law on Environmental Protection (1991);
- The State Programme for the Ukrainian National Environmental Network Development for the period 2000-2015;
- The Law on Wild Life (2001);
- The Law on Vegetation (1999);

- The Law on the Red Book of Ukraine (2002);
- The Law on Natural Protected Areas (1992);
- The National Concept on Biological Diversity for the period 2002-2010;
- The Law on Biosafety (2007).

Thus, the necessary national legislative framework for CBD implementation is in place; however, its enforcement is weak due to lack of appropriate resources. The current institutional framework is not enabling towards CBD implementation.

The Ukrainian Strategy for Biodiversity Conservation is implementing the framework of CBD and Pan-European Biological and Landscape Diversity (PEBLDS) objectives. Due to the PEBLDS and the development of a Pan-European Environmental Network, Ukraine has developed and adopted the Law on the State Programme of Ukrainian National Environmental Network Development for the period 2000-2015. It aims to conserve the typical and valuable ecosystems, in particular through the creation of 23 new national natural parks.

The new draft of the State Programme of Ukraine's National Environmental Network Development until 2027 is currently being designed. In parallel, the draft of the mentioned Programme is prepared for approval by the Government of Ukraine.

Questions and answers in plenary discussions:

- What components and actions are included in the State Programme of Ukraine's National Environmental Network Development for the period 2000-2015? The Programme includes the following components and actions:
 - areas and objects of the natural reserve funds being the major natural elements of the environmental network, namely: natural and biosphere reserves, national natural parks, regional landscape parks, sanctuaries (landscape, forest, botanical, general zoological, ornithological, entomological, ichthyologic, hydrological, general geological, palaeontological, and karst/speleological), natural monuments, as well as their protection zones; artificial objects (botanical gardens, dendrological parks, zoological parks, parks being monuments of the landscape architecture);
 - water objects (sections of sea, lake, water reservoir, river), wetlands, water protection zones, coastal protection belts, allocation belts, coastal belts of waterways and sanitary protection zones, which make up the relevant basin systems;
 - forests of the first group and forests of the second one;
 - resorts and curative areas with their natural resources;
 - recreational areas for the organisation of public recreation and tourism;
 - other natural areas (areas with steppe vegetation, meadows, pastures, rock placers, sands, saline lands, etc.);
 - land plots, where plant species and species groups grow that are listed in the Green Book of Ukraine;
- What priorities under the NBSAP, excluding the creation of ecological network, are realised in Ukraine?

The Action Plans on the conservation of the European bison (*Bison bonasus* L.) and the brown bear (*Ursus arctos* L.), etc. are designed and approved.

- What nearest future prospects in implementation of NBSAP you see?
 - Implementing the CBD's ecosystem approach into sector policies (transport, land planning, energy, agriculture, etc.);
 - Extension of forestry areas to 16-20 % of the national territory;
 - Extension of Natural Protected Areas to 10,4% of the national territory;
 - Reintroduction of species with critical conservation status into their historical areas;
 - Mainstreaming of biodiversity concerns into sector policies and plans (transport, energy, agriculture, etc.);
 - Conservation of endangered species of flora and fauna (according to Red Book);
 - Development of a concept on combating invasive and alien species;
 - Raising public awareness and improving education on biodiversity;
 - Elaboration of databases and cadastres for fauna and flora.

4: Lessons learned and conclusions from the discussions

This section synthesizes the overall lessons learned and presents conclusions from the presentations and many group discussions during the workshop. These aspects were compiled by the facilitator during the workshop and presented to the plenary (see fig. 3 and 4). Expectedly, the aspects raised in the second workshop can mainly be structured along the issues already raised in the respective chapter of the first European workshop report:

The presentations and discussions in this second European workshop again showed considerable variations among countries in various aspects of NBSAPs:

Development and updating of NBSAPs: Most countries have developed NBSAPs (34), 8 have updated their strategies, as have the Netherlands, Poland and the Republic of Moldova. Croatia, Romania and Switzerland have their NBAPS under revision, while Liechtenstein has its first strategy under development. A full list of the status of NBSAPs in the European region is provided in Annex A.

Structure and content of NBSAP: Besides approaches that are focused on species and habitat protection (e.g. Ukraine) or on ecosystem services, other approaches were presented: the Netherlands put up for discussion a problem oriented approach that uses major threats to biodiversity as a starting point for developing the national strategy and for deducing targets. Belgium followed a more broad approach in developing its NBSAP which links existing plans and strategies and thus includes mostly general objectives.

Processes of the development and implementation: The development of NBSAPs in most countries has been or currently is a participatory endeavour involving national workshops and other consultative mechanisms. However, the involvement of other sector interests remains a difficult task. As in the countries that participated in the first European NBSAP workshop, there is wide variation in the way how NBSAPs are politically adopted: in some countries the NBSAP is adopted by the government (sometimes as an action by the environment ministry, sometimes with explicit cross-government approval); in others it is approved by the Parliament. Coherent implementation is a challenge for many countries. The experience from the first European workshop was confirmed that frequent changes in government and administrative structures hamper the development or updating of NBSAPs although to some of these countries even financial assistance was awarded to identify capacity needs. Long-term commitment of civil servants is seen as an asset for development and implementation of the NBSAP.

Targets, indicators, monitoring and review: Monitoring and the NBSAP process are two interlinked processes: monitoring informs the elaboration of the NBSAP and the monitoring system is evaluated on the basis of the preliminary report. Only few of the participating European countries have developed indicators (e.g. France) and data management systems (e.g.: Swiss National Biodiversity Monitoring Centre) to monitor progress towards the 2010 biodiversity target. Most of the participating countries struggle with gaps in data as well as flaws concerning systematic monitoring and identified the elaboration of indicator sets as urgent task within the NBSAP development process.

Integration of biodiversity concerns into national policies, planning processes and sectors: As the NBSAP (or equivalent instruments) is soft law in most countries, the goals formulated in the NBSAP are only binding when they are formally adopted by the sector ministries. Thus, implementation of NBSAPs often suffers from lacking cross-sector ownership in government, administration and business. Biodiversity conservation is not high on the political agenda in many countries and is overridden by socio-economic concerns due to considerable economic development pressure. Positive examples include Croatia, France, the Netherlands and Switzerland, which succeeded in engaging a broad spectrum of actors from different sectors into the implementation process.

Communicating the NBSAP and involving the public and other stakeholders: Improving the awareness of the contribution of biodiversity and ecosystem services to sustained human welfare is widely seen as a way of strengthening support for biodiversity conservation and use. This approach is taken by Switzerland that formulates the following simple key message: “Biodiversity is the basis for life.”

However, weaknesses in communicating the benefits from an ecosystem approach to sustainable development remain a common issue across the European region. Communication strategies and understanding of basic communication principles are widely lacking. In addition to the widespread deficits with regards to communication, participation remains often understood as a venture of bare one-way consultation instead of a diverse and active stakeholder dialogue. Thus, ownership is mostly limited to nature conservation activists and experts, as one participant stated.

More positive examples were presented concerning environmental education from countries such as Albania.

The accession to the EU still produces considerable positive impact on national nature conservation policies. Obligations from the EU Environmental *Acquis* are reflected in sector strategies and action plans which coincide with CBD requirements.

Some countries still have a great need for capacity development. Scarce financial and human resources remain a clear bottleneck for NBSAP development, implementation and monitoring in the region.

Lessons learnt from the workshop

The facilitator compiled the lessons learnt in plenary with the participants and clustered the contributions the following way (see fig. 5):

Strategic Action Plans (and also regional and transnational strategies) focus NBSAP development and implementation in a strategic way. They facilitate a systemic approach with quantitative targets considering the linkage between systems and highlight the regional level in sustainable development.

Indicators should be strategic, pragmatic and outcome oriented and not confused with targets. Public opinion should be considered as an indicator. There should be a harmonised framework for indicators. Data collection could be supported by NGOs.

Coordination and management should integrate other sectors. The participants highlighted the role of directors-level coordination and responsibility. Coordination and management highly depend on financial resources; however, volunteering is not always possible.

Sharing of experience should be promoted by enhancing the CBD-CHM nationally and globally. It is a constructive way to learn and further creativity and innovation. The experience at the workshop motivated participants to take lessons home and is hoped to strengthen their beliefs and actions. The follow-up of the workshop is a crucial issue for the participants who welcomed the organised, facilitated information exchange during the workshop. In their eyes, information sharing furthers a cross-sectoral approach and cooperation and thus the mainstreaming of biodiversity concerns into other sectors. It should include the sharing of responsibilities at ministerial level.

The **Strategic Environment Assessment** as an instrument that promotes the attitude to act local and to think global; it is an appropriate instrument to provide feedback for decision-makers. Environmental Impact Assessments are only targeted to single objectives

Building trust (as a prerequisite for successful **participation** and as a result from **communication**) is a key issue for NBSAP implementation. In fact, implementation means communication with stakeholders and coping with interests of local people. Information and dialogue facilitate integrated results and further acceptance. Feedback from the stakeholders is needed when initiating the NBSAP review process. Communication and active participation counteract the lack of a coherent vision. They facilitate the achievement of high level commitment provided that benefits for stakeholders were clarified. Reaching out is a means to collect support; in the centre of each communication plan should be the addressee. Communication should be qualified: who, when and how are basic questions for successful strategic communication.

The workshop input on **resilience** did raise considerable interest among the participants, however, the concept produced more questions than answers and remained abstract; the participants concluded that the maintenance of resilience requires biodiversity and that the concept is included in the CBD's ecosystem approach. However, there is still much to learn about the concept and it was felt that further CBD guidance is required. Open questions are:

- Is resilience an indicator for adaptation and transformation?
- What are indicators for resilience?
- Definitions of the terms used (resilience, buffering capacity etc.)?
- From conservation to resilience (in the face of climate change)?

Concluding summary

The main success factors for NBSAP development and implementation identified by the workshop are (see fig. 6):

- **Stability of the institutional framework and government** that facilitates trust, mutual understanding between sectors, and motivation (want, not must).
- **Existence of a network of supporters that** provides competence and expertise.

- **Flexibility in the approach instead of a prescriptive attitude towards the process** enhances participation. Stakeholders are confronted by the expectations of the process management that is in turn perceived as the ruler of the game. A flexible attitude helps mutual understanding.
- **Continuity** allows for keeping track of the process message and for responding to demands emerging in the process.
- **Clear target and focus** of the process are prerequisites for the ability to formulate a new vision.
- **Support** from both the political arena (will to change) and from the civil society (will to engage).



Fig. 3: Summary of country presentations: flipchart with positive issues / aspects in NBSAP process

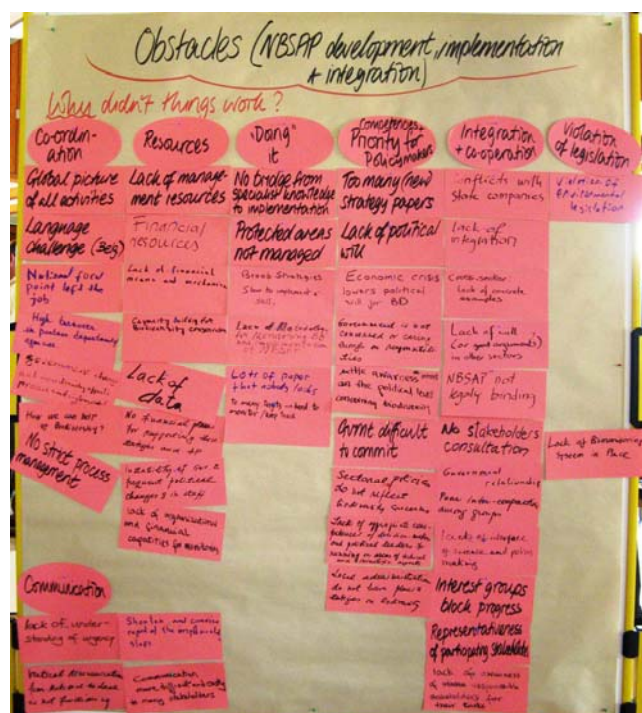


Fig. 4: Summary of country presentations: flipchart with negative issues / aspects in NBSAP process

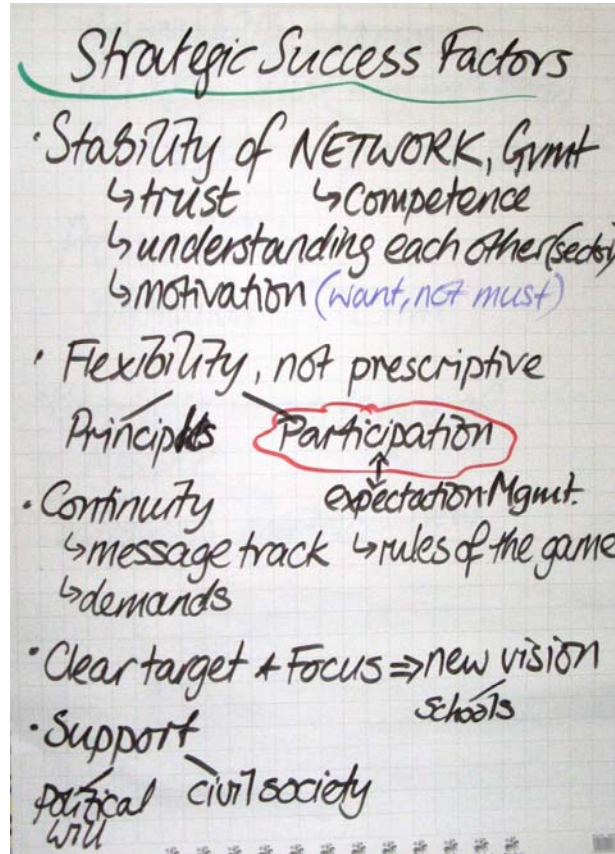


Fig. 5: Summary of lessons learnt by participants



Fig. 6: Strategic success factors for NBSAP development and implementation, derived from fig. 3 and 4

Programme of the Workshop

Friday, 12 June 2009

- 18:20 *Welcome and Registration*
- 18:30 *Dinner*
- 19:30 Welcome by the International Academy for Nature Conservation (G. STOLPE, BfN)
Self-introductions of participants

Saturday, 13 June 2009

- 07:30 *Breakfast*
- 09:00 **1 Opening of the workshop**
Opening statements by the organizers:
 - Federal Agency for Nature Conservation (H. KNAPP)
 - Secretariat of the Convention on Biological Diversity (D. COOPER)
- 09:20 **2 Overview of the objectives and programme for the workshop**
Introduction and expectations of the participants
Plenary discussion
- 10:00 *Coffee/Tea break and group photo*
- 10:30 **3 Status of development and implementation of national biodiversity strategies and action plans and of biodiversity mainstreaming in the region**
Country presentations:
 - Albania
 - Belgium
 - Croatia
 - France
 Discussion and group exercises: identification of good practices and obstacles to implementation
- 12:30 *Lunch break*
- 14:00 **Status of development and implementation of national biodiversity strategies and action plans and of biodiversity mainstreaming in the region (continued)**
Country presentations:
 - Liechtenstein
 - Romania
 - Moldova
 Discussion and group exercises: identification of good practices and obstacles to implementation

- 15:30 *Coffee/Tea break*
- 16:00 **Status of development and implementation of national biodiversity strategies and action plans and of biodiversity mainstreaming in the region (continued)**
Country presentations:
 - The Netherlands
 - Macedonia FYRDiscussion and group exercises: identification of good practices and obstacles to implementation
- 18:00 *Reception, courtesy of the International Academy of Nature Conservation*

Sunday, 14 June 2009

- 07:30 *Breakfast*
- 08:30 Recap of the discussions on Saturday: 'hot seat' exercise
- 09:00 **Status of development and implementation of national biodiversity strategies and action plans and of biodiversity mainstreaming in the region (continued)**
Country presentations:
 - Poland
 - Switzerland
 - Turkey
 - UkraineDiscussion and group exercises: identification of good practices and obstacles to implementation

General discussion and summary by the facilitator
- 10:30 *Coffee/Tea break*
- 11:00 **4 Enhancing the implementation of national biodiversity strategies and action plans and integrating biodiversity into sectoral and cross-sectoral plans, programmes, policies and local planning processes**
Introductory presentations:
 - Mainstreaming – tools and challenges (D. COOPER, SCBD)
 - Strategic communication for NBSAPs (P. BOS, N. WALKER)General discussion and group exercises: identification of good practices and obstacles to implementation
- 12:30 *Lunch break*
- 13:00 *Excursion to the Isle of Vilm Nature Protection Area (G. STOLPE, BfN)*
- 14:30 **Enhancing the implementation of national biodiversity strategies and action plans and integrating biodiversity into sectoral and cross-sectoral plans, programmes,**

policies and local planning processes (continued)

Tools for enhancing implementation and mainstreaming:

- Ecosystem services (D. COOPER, SCBD)

Group exercise (case studies) on ecosystem services

15:30 *Coffee/Tea break*

16:00 Tools for enhancing implementation and mainstreaming:

- Strategic Environmental Assessment (SEA) (R. SLOOTWEG)
- The ecosystem approach (D. COOPER, SCBD)

18:00 *Dinner*

19:30 Integrating biodiversity into sectoral and cross-sectoral plans, programmes and policies; working group presentations:

- Romania
- Belgium
- Turkey
- Albania

Monday, 15 June 2009

07:30 *Breakfast*

08:30 Recap of the discussions on Sunday: ‘hot seat’ exercise

09:00 **Enhancing the implementation of national biodiversity strategies and action plans and integrating biodiversity into sectoral and cross-sectoral plans, programmes, policies and local planning processes (continued)**

Ecosystem dynamics, land use change, natural disturbances and components of resilience including the role of social institutions (M. JONES, STOCKHOLM RESILIENCE CENTRE)

10:00 Introduction to field trip (G. STOLPE, BfN)

FIELD TRIP: Integrating nature conservation in sustainable tourism and rural development

10:35 *Departure from Vilm*

11:45 Introduction to South-East Rügen Biosphere Reserve
(H. SCHNICK, SOUTH-EAST RÜGEN BIOSPHERE RESERVE)

12:20 *Lunch break (packed lunch)*

12:50 Guided tour in the “Zickersche Berge”
(H. SCHNICK, D. HARTMANN, SOUTH-EAST RÜGEN BIOSPHERE RESERVE)
Issues: tourism, traffic, farming, forestry and biodiversity monitoring; walk from Groß Zicker to Gager

15:30 Energy policies and projects and their biodiversity impacts on Rügen Island
(D. HARTMANN, SOUTH-EAST RÜGEN BIOSPHERE RESERVE)

- 16:15 *Bus transfer to Klein Zicker*
- 16:30 Klein Zicker: coastal protection on Rügen Island
(H. SCHNICK, SOUTH-EAST RÜGEN BIOSPHERE RESERVE)
- 17:10 *Departure to Baabe Bollwerk*
- 17:30 *Walk in the nature reserve, view on the lagoon Greifswalder Bodden*
- 18:00 *Dinner at Moritzburg*
- 20:00 *Return by bus to Lauterbach*
- 20:45 *Departure from Lauterbach/Mole by boat to Vilm*
- 21:00 *Arrival on Vilm*

Tuesday, 16 June 2009

- 07:30 *Breakfast*
- 08:30 Recap of the discussions and the field trip on Monday
- 09:15 **5 Monitoring, reporting, and use of indicators**
- Preparation of the Fourth National Report – An Introduction (L. CAI, SCBD)
Discussion
Country presentations:
 - Poland
 - Croatia
 - United Kingdom
 - Use of indicators for monitoring and reporting (P. ROSE, JNCC)
- 10:30 *Coffee/Tea break*
- 11:00
- Monitoring for implementation of national biodiversity strategies and action plans; exchange of country experiences using posters prepared by:
 - Romania
 - Belgium
 - Moldova
- Wrap up: learnings and open questions
- 12:30 *Lunch break*
- 14:00 **6 The way forward to 2010: upcoming events related to the Convention on Biological Diversity**
- The road to the tenth meeting of the Conference of the Parties to the Convention on Biological Diversity and the International Year of Biodiversity (D. COOPER, SCBD)
 - Panel discussion and consideration of open questions concerning the implementation and updating of national biodiversity strategies and action plans

- 15:30 *Coffee/Tea break*
- 16:00 **7 Consideration of the Conclusions of the Workshop** (D. COOPER, SCBD)
- 17:00 **Workshop Evaluation** (G. STOLPE, BfN)
- 17:45 **8 Closing of the Workshop** (D. COOPER, SCBD)
- 18:00 *Dinner*
- 20:00 *Farewell Party (to be organised by the participants)*

Wednesday, 17 June 2009

- 07:30 *Breakfast*
- 09:20 *Departure from Vilm (alternative: departure 07:25)*

List of Participants

No.	Name	Institution	Country
1.	Alexandru, Dorin	Ecological University of Bucharest	Romania
2.	Ambros, Ladislav	Ministry of the Environment	Slovakia
3.	Bilgin, Adem	Ministry of Environment and Forestry	Turkey
4.	Blanc, Cécile	French Ministry of Ecology, Energy, Sustainable Development and Town and Country Planning	France
5.	Bos, Peter	Ministry of Agriculture, Nature & Food Quality	The Netherlands
6.	Cai, Lijie	SCBD / UNEP Canada	Canada
7.	Collin, Claire	Federal Public Service Health, Food Chain Security and Environment – DG Environment	Belgium
8.	Cooper, David	Secretariat Convention on Biological Diversity	Canada
9.	Dedej, Zamir	Institute for Nature Conservation in Albania- INCA	Albania
10.	Emruli, Burin	Ministry of Environment and Physical Planning	Macedonia
11.	Gerner, Thomas	Amt für Wald, Natur und Landschaft	Liechtenstein
12.	Granovska, Tetyana	Secretary of the Cabinet of Ministers	Ukraine
13.	Karchava, Teona	Ministry of Environment Protection and Natural Resources	Georgia
14.	Limacher, Sandra Edith	Swiss Federal Office of Environment	Switzerland
15.	Lozan, Angela	Ministry of Environment and Natural Resources	Moldova
16.	Jones, Mike	Stockholm Resilience Centre	Sweden
17.	Nastov, Alexander	Ministry of Environment and Physical Planning	Macedonia
18.	Pisarczyk, Ewa	General Directorate of Environment Protection	Poland
19.	Rose, Paul	JNCC	United Kingdom
20.	Schliep, Rainer	Environmental Information & Communication Services	Germany

No.	Name	Institution	Country
21.	Slootweg, Roel	SevS natural and human environment consultancy	The Netherlands
22.	Sorokin, Sergiy	Ministry of Environmental Protection	Ukraine
23.	Stefanescu, Rodica	Ecological University of Bucharest	Romania
24.	Stolpe, Gisela	Federal Agency for Nature Conservation International Academy for Nature Conservation	Germany
25.	Strauss, Andrea	Federal Agency for Nature Conservation International Academy for Nature Conservation	Germany
26.	Vukšić, Ivna	Ministry of Culture	Croatia
27.	Walker, Natasha	IFOK GmbH	Germany

Annex A

Field Trip into the Biosphere Reserve South East Rügen - Mainstreaming Biodiversity Conservation into Land Use at a Local Level



Fig. 1: Map of the Biosphere Reserve South East Rügen

The field trip to the Biosphere Reserve South East Rügen was accompanied by staff of the Biosphere Reserve administration, namely Mr. Schnick and Ms. Hartmann. The following issues were presented and discussed at specific sites in the Reserve:

- General introduction to the Biosphere Reserve South East Rügen
- Tourism, traffic, farming, forestry and biodiversity monitoring (problems and approaches of the BR administration) during the guided tour from Groß Zicker to Gager through the landscape “Zickersche Berge” (Mr. Schnick, Ms. Hartmann)
- Energy policies and projects and their biodiversity impacts on Rügen Island (Ms. Hartmann)
- Coastal protection in times of climate change on Rügen Island at Klein Zicker (Mr. Schnick)

The participants elaborated a list reflecting their perceptions of the problems in the Biosphere Reserve (see table below). The concluding discussion of the participants’ plenary tackled the following topics:

- There is a lack of strategic approach (long-term vision) to managing ecosystems; the Reserve is not enough part of the whole development process on the island, the management gave the impression that there are a lot of piecemeal things.

- There is a lack of coordinated strategy and shared vision; there is a need for initiating a process (facilitated) with stakeholders (in context of whole Rügen); the management does not seem to have an idea of strategic approaches.
- There is a lack of incentives to cooperate with the Biosphere Reserve.
- There is a lack of management capacity in the Biosphere Reserve.

Biosphere Reserve South East Rügen: perception by participants	
(Potential) problem	What should be done?
Image of administration	Integration with Rügen
Community	Sustainable development approach
Consequences	Scenario development
Possibilities	Create options
Lack of clear vision	
What' s in it for me (ecosystem services)?	
Fishing	
Private	
Food and crops	
Geographical pressure	
Meadows	
Incentives	
Management	
"Forest"	
Use	
Management	
Waste management	
Infrastructure development	
Houses	
Roads	
Tourism (income industry! Carrying capacity exceeded!)	
Lack of visitor information	
Lack of control	
Traffic	
Lack of funding	
Reactive management	
Passive management	
Lack of data (e.g. socio-economic)	
Incomplete monitoring	
Institutional framework, setup	

Annex B

Strategic Environmental Assessment: Putting Biodiversity and Stakeholder Interests on the Decision Maker's Agenda

(excerpts from a presentation by ROEL SLOOTWEG)

Environmental Impact Assessment is the process of identifying, predicting, evaluating and mitigating the biophysical, social, and other relevant effects of development proposals prior to major decisions being taken and commitments made. In short: Analysing, monitoring and managing the consequences of development (see IAIA principles at www.iaia.org).

What is good Environmental Impact Assessment?

- Describes activities likely to cause impacts
- Documents and analyses the setting
- Identifies affected and/or interested peoples
- Facilitates the process of participation
- Describes possible impacts on identified groups
- Presents project alternatives (including a no development option)
- Recommends mitigation measures
- Implements environmental monitoring and management

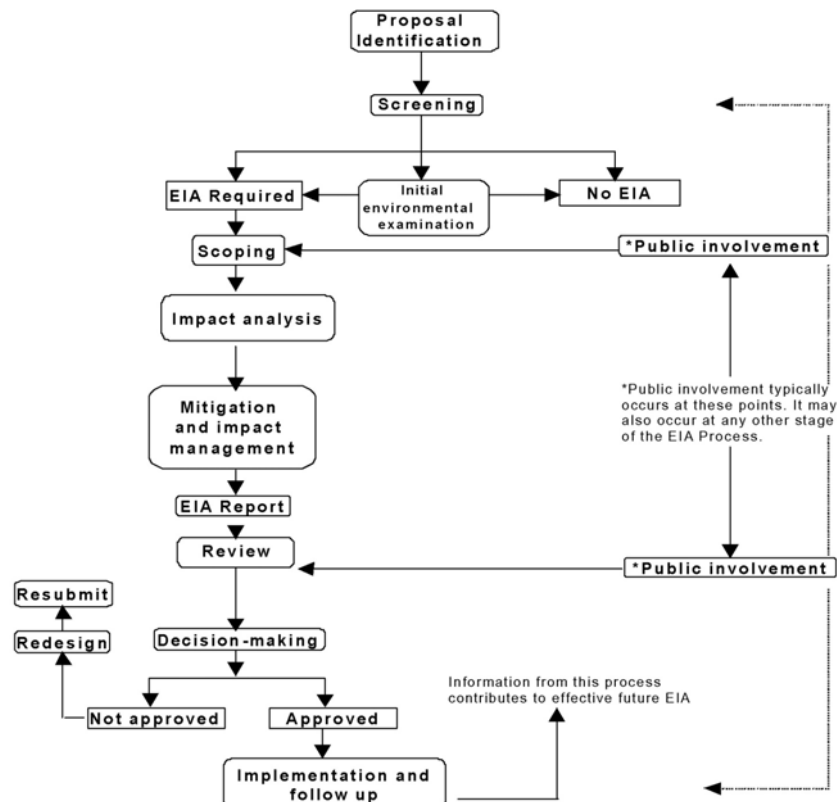


Figure 1: Environmental Impact Assessment is a legally embedded and highly structured process

Strategic Environmental Assessment (SEA) is a tool to:

- Structure the public and government debate in the preparation of policies, plans & programmes;
- Feed this debate through a robust assessment of the environmental consequences and their interrelationships with social and economic aspects;
- Ensure that the results of assessment and debate are taken into account during decisions making and implementation.

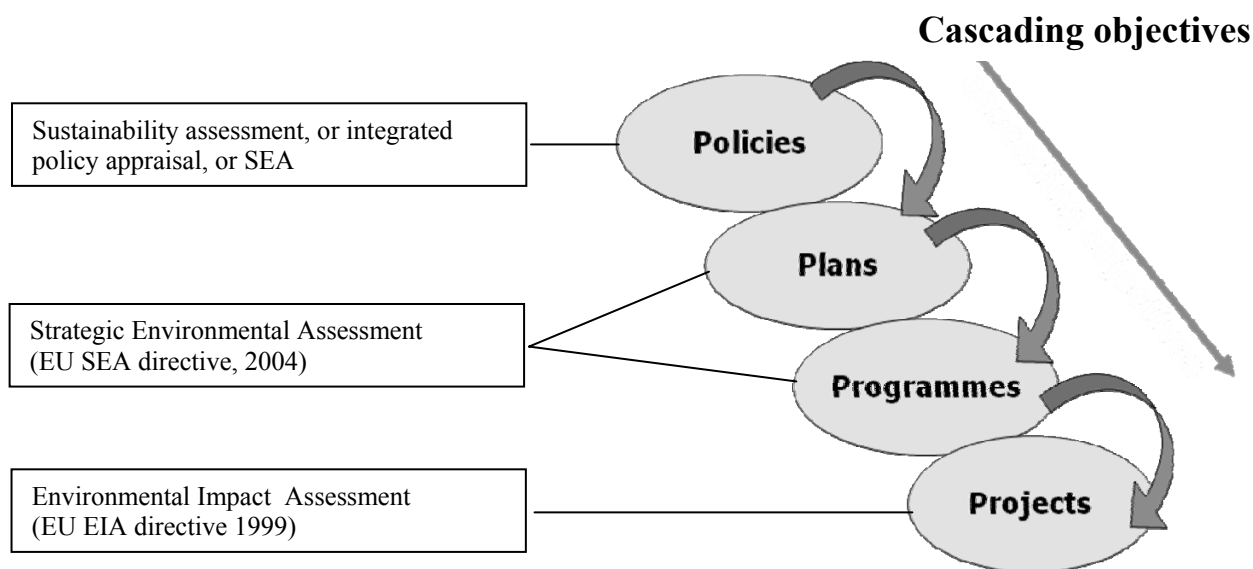


Figure 2: Tiering of SEA and EIA

Relevant international agreements are:

- Convention on Environmental Impact Assessment in a Transboundary Context or ‘Espoo EIA Convention’ (1991); Kiev SEA Protocol (2003)
- Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters or ‘Aarhus Convention’ (1998)
- Convention on Biological Diversity (CBD): SEA Guidelines (2006) – followed by Ramsar and CMS

Table 1: How do SEA and EIA differ?

SEA	EIA
Early in decision cycle	At the end of the cycle
Pro-active – development of plans	Reactive to existing plans
Broad range of alternatives	Alternatives very limited
Can deal with cumulative effects	Limited view on cumulative impacts
Broad perspective, little detail, vision	Narrow perspective, high level of detail
No clear proces – linked to planning cycle	Well-defined process
Focus on sustainability agenda	Focus on symptoms of environmental degradation

There are two dominant SEA approaches: Technical assessment versus facilitator of decision-making

SEA is derived from the EIA methodology:

- Formalized methodology;
- Assessment of impacts of specific proposals;
- Structured opportunity for feedback to decision makers.

“*Re-active*” approach; often forced by law (EU SEA directive) upon the “unwilling”.

Policy / planning approach:

- Timing and form of input depends on the planning process;
- Interventions are made before proposals are finalized;
- Tries to influence the overall process.

“*Pro-active*” approach; considered as contribution to good planning by the “converted”.

Why to pay special attention to biodiversity?

- Legal and international obligations: protected species / areas, protected ecosystem services, indigenous areas, treaties, etc.
- Safeguarding livelihoods: people depending on biodiversity
- Sound economic decision making: ecosystems services make economic sense
- Identification of stakeholder: services represent people’s interests
- Future opportunities for development: unknown potential hidden in (genetic) diversity

Convention on Biological Diversity(CBD) and EIA / SEA:

- Article 14: Impact assessment and minimizing adverse impacts
- Memorandum of Cooperation with the International Association for Impact Assessment (IAIA)
- 2002 EIA Guidelines adopted
- 2006 Voluntary guidance on SEA adopted

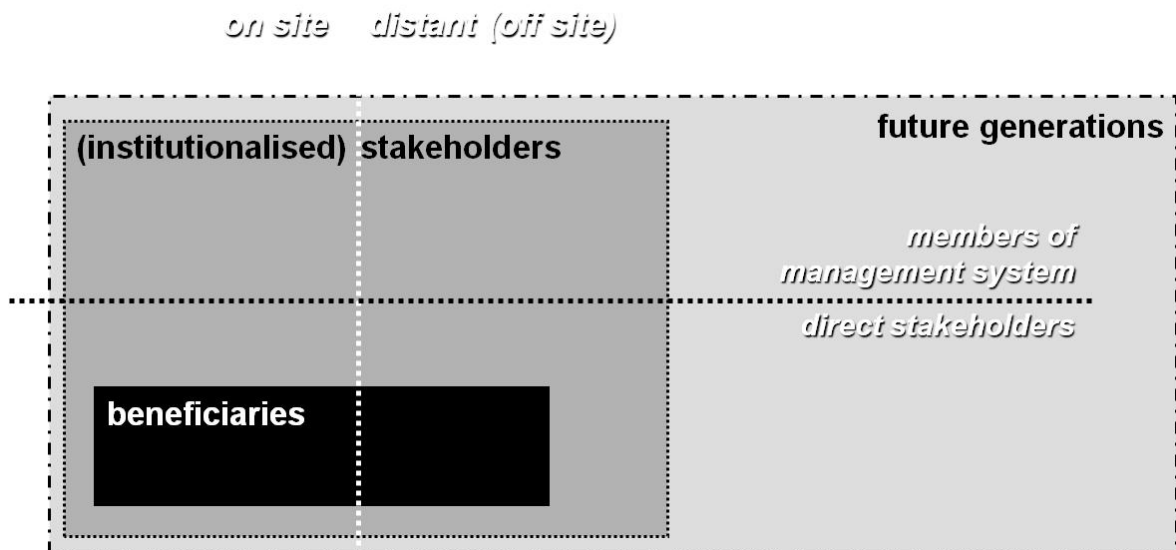


Figure 3: Who are stakeholders?

Ecosystem services represent values for society:

- Social:
 - employment, safety, health, etc. (quality of life)
- Economic:
 - direct monetary (selling of products)
 - inputs (raw materials for processing)
 - indirect (protection of infrastructure by mangroves)
- Ecological
 - future value (saving opportunities for our children)
 - spatial value (guarantee functioning of systems elsewhere)

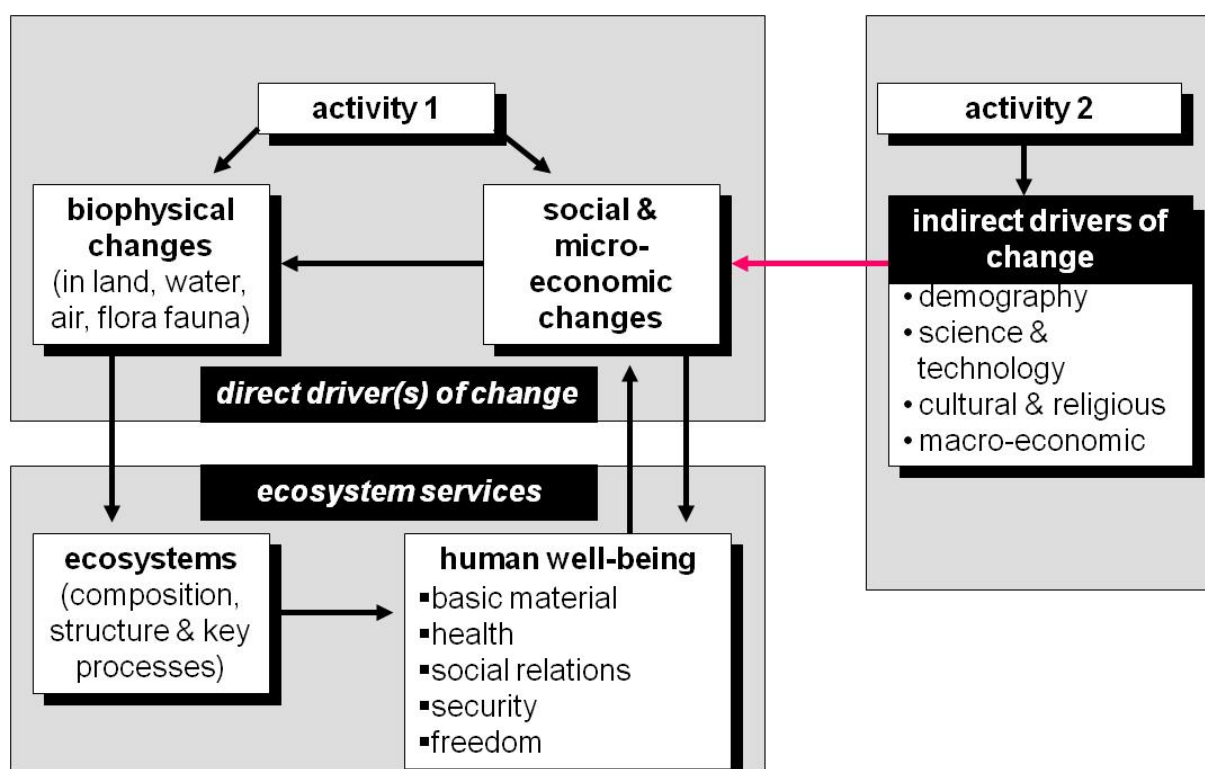


Figure 4: The assessment framework for addressing biodiversity in EIA / SEA

- SEA identifies and quantifies ecosystem services
- Defines limits of acceptable change
- Useful to set boundaries for human activities

Approach to SEA:

- Map ecosystem services
- Identify stakeholders of these services to participate in SEA process (valuation)
- Define opportunities (underexploited services) and constraints (conflicting use)
- Study at national scale:
 - quantify drivers of change (computer model)
 - focus on simple indicators (vegetation).

Examples of ecosystem services linked to formal regulations:

- *Ecosystem service*: preservation of biodiversity
 - protected areas/habitats, protected species;
 - International status: Ramsar Convention, UNESCO Man and Biosphere, World Heritage Sites
 - Subject to national policies: Biodiversity Action Plans (BAP), the Netherlands Ecological Network (NEN), and Natura2000 Network.
 - Marine Areas (sensitive areas prone to oil pollution from shipping)
 - Sites designated under international agreements, e.g. OSPAR Marine Protected Areas
 - Sites hosting species under the Bonn Convention (migratory sp.)
 - Sites hosting species under the Bern Convention (Annex 1 and 2 of the Convention on the Conservation of European Wildlife and Natural Habitats, 1979)
- *Ecosystem service*: provision of livelihood to people
 - Extractive reserves (forests, marine)
 - Areas of indigenous interest
 - Touristic (underwater) parks
- *Ecosystem service*: preservation of human cultural history / religious sites
 - Landscape parks
 - Sacred sites, groves
 - Archaeological parks
- *Other ecosystem services*, in some countries formally recognised
 - Flood storage areas (service: flood protection or water storage)
 - Water infiltration areas (service: public water supply)
 - Areas sensitive to erosion (service: vegetation preventing erosion)
 - Coastal defences (dunes, mangroves) (service: protecting coastal hinterlands)
- Urban or peri-urban parks (service: recreational facilities to urban inhabitants)

In general: interventions lead to known direct drivers of change in biodiversity. Procedure:

- Identify drivers of change
- Draw administrative boundaries of the project
- Identify ecosystems (or related ecosystem services) sensitive to the expected drivers of change
- Make sensitivity map

CBD's EIA Guidelines:

- Define activities for which impact assessment may be required from a biodiversity perspective, characterised by direct drivers of change:
 - Change of land-use or land cover, and underground extraction (thresholds for level of assessment relate to surface area)
 - Fragmentation, usually related to linear infrastructure (thresholds for level of assessment relate to length of the proposed works)
 - Emissions, effluents or other chemical, thermal, radiation or noise input - (relate level of assessment to the ecosystem services map)

-
- Introduction or removal of species, changes to ecosystem composition, ecosystem structure, or key ecosystem processes responsible for the maintenance of ecosystems and ecosystem services - relate level of assessment to ecosystem services map
 - Determining norms or threshold values for screening

Indirect drivers of change: biodiversity attention needed when PPP is expected to affect the way in which society:

- consumes products derived from living organisms,
- consumes products that depend on ecosystem services for their production;
- occupies area of land and water;
- exploits its natural resources and ecosystem services.

Example: trade agreements (WTO, NAFTA, etc.)

What input can NBSAPs provide for EIA / SEA?

- Ecological footprint - What commodities are imported for own consumption; what is the consequence of their production elsewhere (safeguards / certification / etc)
- What commodities are exported: making money at the cost of ecosystem quality / functioning

Annex C

The Road to Resilience Thinking - Basic Resilience Concepts for Conservation and Development Professionals

(excerpts from a presentation by MIKE JONES)

This programme is developed to translate the complex concept of resilience into language, models and practices for daily life use to serve purposes of biodiversity conservation and as a basis of sustainability.

The complex system is illustrated by the story of the blind men and the elephant (to illustrate the limited human knowledge on the complex system of nature); communicating this complex concept like this is a challenge due to the different language of, and natural, social and economic conditions and systems people are living in.

Two propositions about resilience thinking in relation to CBD implementation

- Implementing the CBD is about learning to manage Complex Adaptive Social Ecological Systems
- Three models of resilience are useful tools for understanding managing and learning about how complex adaptive SES work; how they might be adapted or if necessary; how they might be transformed

Presentation of three core models of resilience thinking

1. Adaptive cycles

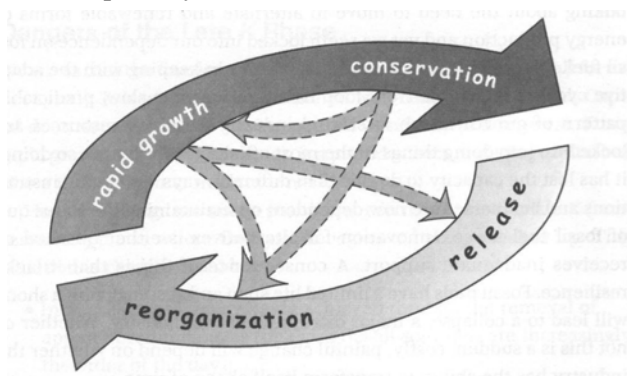


Figure 1: Adaptive cycle 1

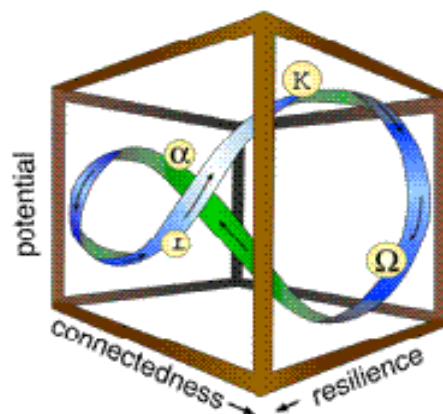


Figure 2: Adaptive cycle 2 (Holling 2004)

- Potential is equivalent to social and ecological capital, or the “wealth” of a system.
- Connectedness is equivalent to internal controllability of variables and processes, their flexibility or rigidity.
- Resilience is the ability of the system to withstand shock and retain the same elements and connections; it is roughly the opposite of vulnerability.

2. Scale

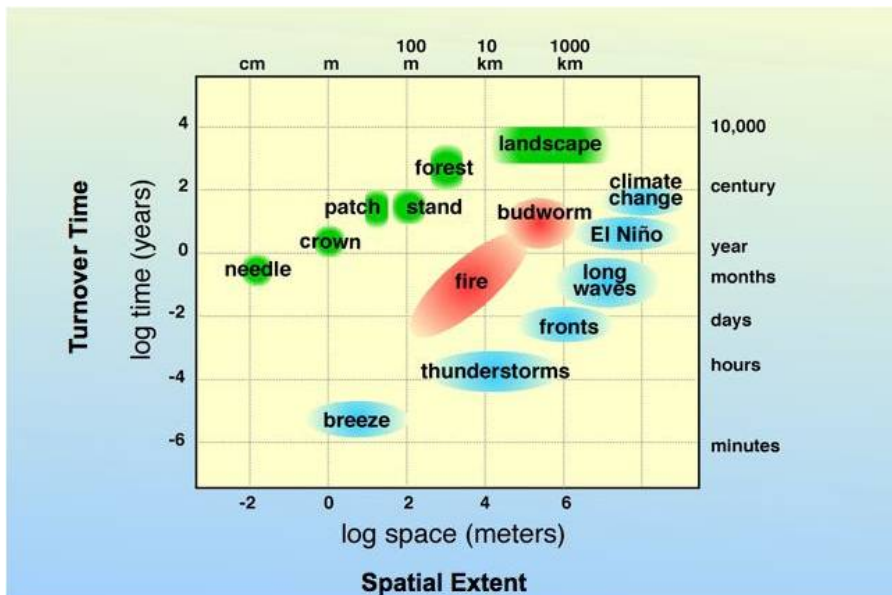


Figure 3: Exemplified spatial and temporal scales

3. Panarchy – hierarchies of linked adaptive cycles

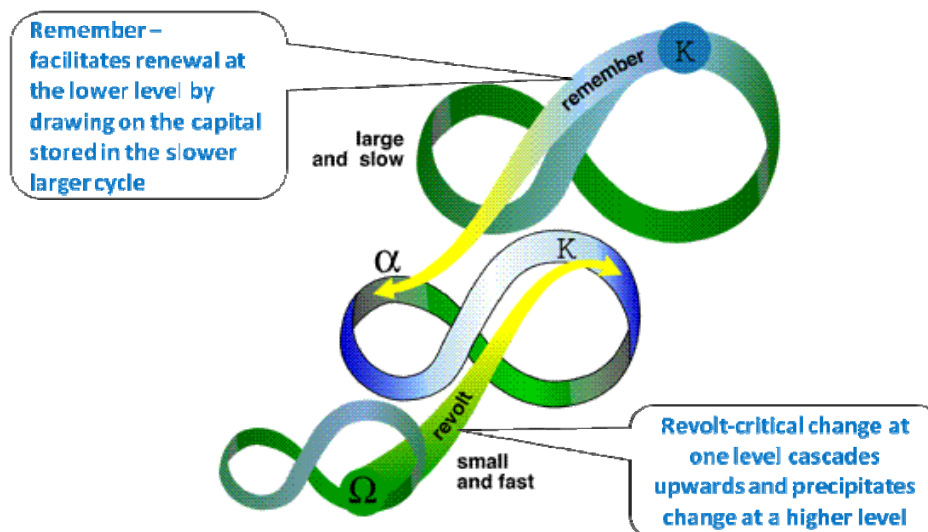


Figure 4: Hierarchies of linked adaptive cycles (Holling 2001, 2004)

- Bridging organizations
- Boundary organizations
- Social and policy entrepreneurs
- Cumulative impacts lead to collapse
- Educate policy makers for cascade of change
- Know the system boundaries and cross scale interactions

Regime shifts

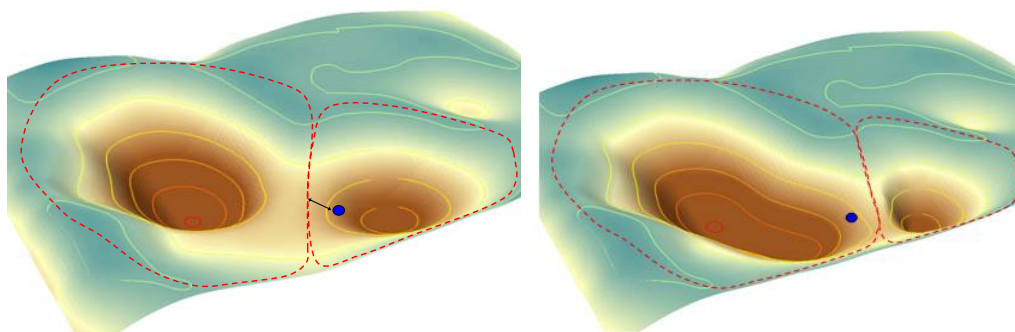


Figure 4: The 3D stability landscape and basin of attraction metaphor (Walker et al 2004)

Resilience: the capacity of a system to absorb disturbance and reorganize while undergoing change so that it remains essentially the same system.

Regime Shift: the components of the system may remain essentially the same but relationships and feedbacks between them change.

Regime shifts in small systems can be detected and avoided if they are driven by factors that can be changed quickly. Slow decision making processes are a challenge. Example: Fishing quotas

Regime shifts in large systems may not be detected until after the threshold or tipping point has been crossed or the drivers cannot be quickly changed. Example: Climate change

Presentation on maladaptive systems

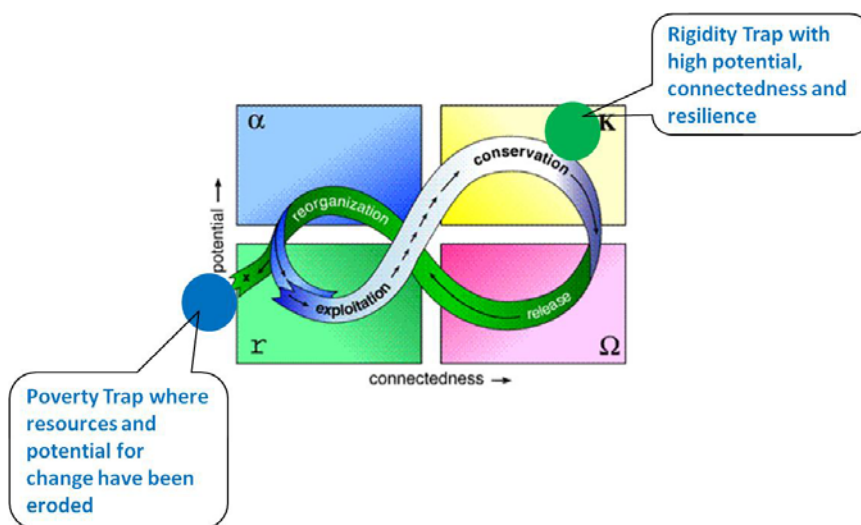


Figure 5: Example for maladapted cycle

- Innovative idea: biodiversity to be used for livelihoods as well as protected for the future

- CBD's ecosystem approach principle – consider all forms of relevant information and involve all sectors of society

Resilience

- Resilience is a difficult concept to define but in essence it is the ability of a system to absorb disturbance and remain unchanged
- Three resilience models are sense making tools for understanding how complex systems function
- Resilience models help us to understand the paradox of sustainable development
- Resilience thinking is not a panacea because complex systems always produce surprises.
- We are better able to manage surprise if we are adaptable and prepared to transform SES

Building a resilient world

Values for a resilient world:

1. Promote and sustain diversity in all forms (biological, landscape, social, and economic).
2. Embrace ecological variability rather than control it.
3. Maintain a degree of modularity or disconnectedness.
4. Recognise the importance of slow variables like nutrient, carbon and water cycles.
5. Create tighter feedback loops between human actions and environmental outcomes.
6. Promote trust, well-developed social networks, and leadership.
7. Emphasise experimentation, learning, locally developed rules, and change.
8. Develop overlapping institutions to increase response diversity and flexibility to change.
9. Include all the un-priced ecosystem services in development proposals and assessments.

Trap of the expert

The symptoms (Holling, Gunderson & Ludwig 2002):

- Failure to identify a handful of critical variables and processes operating at different scales in space and time
- Leading to crisis and political gridlock
- Giving science a bad name

The underlying causes:

- Competing scientific perspectives
- Disciplinary hubris

The remedy:

- An inter-disciplinary approach combining ecological and social sciences

- Value local knowledge
- Manage adaptively
- Expect surprise

Problems of epistemology

Epistemology: study of personal beliefs people hold about the nature of knowledge, how something is known, and how this affects perception, learning, and behavior.

Resilience thinking requires a fundamental shift in beliefs about knowledge and how it is acquired. Two key findings for resilience capacity development:

- Well developed epistemological beliefs are necessary for resilience thinking; and
- Sophisticated ways of knowing are relatively rare – possibly a function of age, training and experience.

Epistemological beliefs have a major impact on how people tackle “wicked” or “messy” problems and affect:

- use of strategies;
- thinking processes;
- judgments;
- conflict; and
- the extent to which mental models and deeper conceptual change occurs during learning

Less sophisticated view	More sophisticated view
<ul style="list-style-type: none"> • Absolute truth and certainty exists 	<ul style="list-style-type: none"> • Knowledge is tentative and evolving
<ul style="list-style-type: none"> • Knowledge consists of discrete, concrete, knowable facts 	<ul style="list-style-type: none"> • Knowledge is relative, contingent, and context dependent
<ul style="list-style-type: none"> • Knowledge originating from outside the self (e.g. an expert or external authority) 	<ul style="list-style-type: none"> • Knowledge is constructed by individuals through interaction with their environment and others
<ul style="list-style-type: none"> • Justification of a view through observation, authority, or on the basis of what feels right 	<ul style="list-style-type: none"> • Justification of a view through active evaluation or assessment of the evidence, expertise or authority involved

More Information

- For more information on resilience, a resilience blog and resilience workbooks for scientists and practitioners: <http://www.resalliance.org/1.php>
- For more information on resilience science: <http://www.ecologyandsociety.org/>
- For more information on Stockholm Resilience Centre: <http://www.stockholmresilience.org/>

Annex D

Strategic Communication and NBSAPs – A Case Study Exercise

Mr David Cooper from the SCBD explained the basic idea that is behind a strategic approach to NBSAP development and implementation (see fig. 1). He elaborated on the role of prioritisation, the initiation of change and the meaning of unlocking systems in this context.

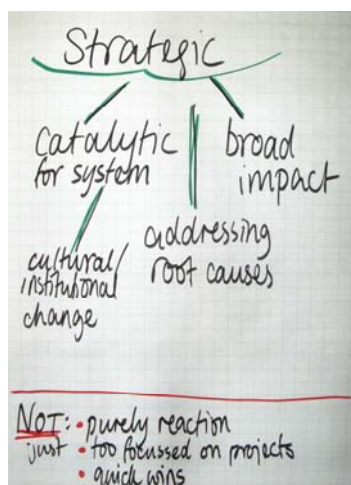


Fig. 1: Strategic aspects in NBSAP development and implementation

Before going to the working groups, the participants brainstormed on the question: “What might be stakeholders?” The result was compiled on a card board (see fig. 2).



Fig. 2: Possible stakeholders for NBSAP development and implementation

In the case studies, the participants were asked to identify stakeholders, to determine their interests and what is on their agenda, and to define their roles in the NBSAP development and implementation process. They should make proposals on how communication could be organised concerning each stakeholder group (message, benefits for the stakeholders and for NBSAP implementation, message mode; see fig. 3).

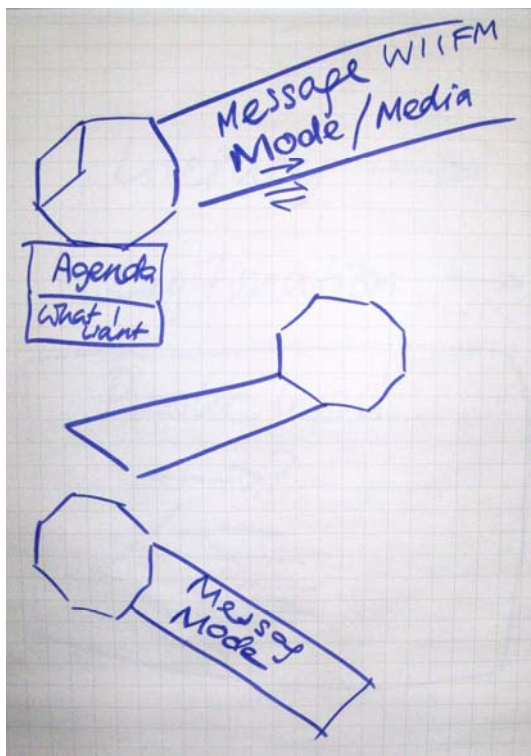


Fig. 3: How to structure the case study presentation (input by Natasha Walker)

The participants then formed four case study working groups and discussed about:

- How to make the Romanian NBSAP an operable tool (chaired and presented by Rodica Stefanescu, Romania)
- Sustainable use of wood (chaired and presented by Claire Collin, Belgium)
- How to stop invasive alien species (chaired by and presented Adem Bilgin, Turkey)
- Environmental education in elementary schools (chaired and presented by Zamir Dedej, Albania)

Peter Bos (The Netherlands) gave a short and concise input on basic principles of strategic communication for NBSAP development and implementation. He elaborated on five points (see fig. 4):

1. NBSAP implementation is communication;
2. Link communication to issues;
3. Distinguish between target groups;
4. Distinguish between different forms of communication:
 - a. Information (provided for the target groups)
 - b. Communication and education (which are both two way processes)
5. Consider the CEPA Programme as an instrument in the communication process.

The facilitator Natasha Walker added some theoretic aspects of communication to be considered in



Fig. 6: Zamir Dedej, (Albania) presents the case study on environmental education in elementary schools

Stakeholders	Interests	What they should do	Main message to stakeholders
Ministry of Environment	Precaution and quality	Provide information for documentation/facilitate network	Invest in young generation and long-term healthy environment
Ministry of Education	Mainstreaming environmental issues into education	Include environmental issues in their educational strategy	
Regional Education Office	Having well-trained teachers	Choose teachers for continuing education and develop training modules	
School principal	Having best possible teachers	Facilitate training	
Teachers	Getting more knowledge and update educational methodologies	Participating in training and delivering what they have learned to students	You are responsible for educating the next generation
Children	Play and learn in a better environment	Get to know, feel and smell “nature”	Love what is humming, crawling and colours of flowers! What is alive is worth keeping alive!
Parents	Having well-educated children – at low cost	Listen and support children’s expectations	You need a healthy environment and help the next generation take care of it.
Community	Next generation is educated and sensitized	Support, finance and facilitate the process	Same as above
NGOs	Mainstreaming biodiversity in specific target groups	Make available time, knowledge and toolkits	



Fig. 7: Rodica Stefanescu (Romania) presents the case study on how to make the Romanian NBSAP an operable tool

Stakeholders	Interests	What they should do	Main message to stakeholders
President/Prime Minister	Government performance and election results	Put political pressure to do more about biodiversity and adopt a strategy	If you do not do your job, you will lose public support and election
Mass media	Call for government actions to protect the environment	Report on inaction by government on the environment and biodiversity and consequence of inaction and ask the government to pay attention to their public image	Put more pressure on government for action in biodiversity and safeguard the environment and public interests
International organizations (EU)	International collaboration needed to protect biodiversity	Put pressure on Romanian government by persuasion (including through reminding of possible damage to Romanian international image due to inaction and undermining its EU membership commitments, as well as in worst case cutting aid and financial support to Romania)	As a member of EU and international community, Romania is obliged to improve its environmental performance, including doing more in biodiversity conservation.

Stakeholders target at the Ministry of Environment and the Ministry of Agriculture. The relevant stakeholders that influence decisions are the President/Prime Minister, the mass media, and international organizations (e.g. EU). Their interests are to keep their job, to raise funds (aid) or improve their image. Main interests of the President/Prime Minister are impacts on election and public opinion on government performance.

Participants recommended to identify and raise a broader, relevant issue to persuade influential actors to take advice.



Fig. 8: Claire Collin (Belgium) presents the case study on sustainable use of wood

Stakeholders	Interests	What they should do	Main message to stakeholders
Coordinating ministry	Improve image	Help implement commitment/raise political profile in leading administration "greening"	
Other ministries and local authorities	Improve policy/responding to commitment	Coordinate/set rules/monitor implementation/communicate with relevant stakeholders	
Trade unions	Defend social criteria	Bring info to the debate	
Representatives of certification schemes	Recognition of their systems	Bring info to the debate/improve their systems if needed/coordinate and harmonize certification schemes	Harmonization of certification schemes will make them more operationally and more widely used
Wood and products importers	Keep business and keep it manageable	Identify problems on the field and provide certified products	Scheme will improve their image and promote sustainable use of wood
Suppliers of final products	Same as above	Same as above	
NGOs	Defend ecological criteria/stop illegal logging	Bring info to debate/monitor implementation/communicate	Help communicate the benefits of the approach/raise profile for sustainable logging and broaden this approach to non-governmental users



Fig. 9: Adem Bilgin (Turkey) presents the case study on how to stop invasive alien species

Stakeholders	Interests	What they should do	Main message to stakeholders
Ministry of Environment	Implementing NBSAP particularly strategies for marine biodiversity and invasive species	Coordination Create ownership by stakeholders Develop incentives to prevent invasive alien species	
Transport industry	Easiness of passage and maintenance of ships	Share responsibilities, collaborate in implementing solutions	
Shipyard industry	Maintenance of ships	Same as above	
Fishery industry	Sustainable harvesting and livelihood	Monitoring of harvest and reporting	Invasive species threaten fishing and your help is needed to prevent and eliminate IAS
Scientists	Research	Identification of impacts and providing solutions	We need your help for quantitative assessment of risks of IAS
NGOs (conservation, trade, fishery, transport)	Maintenance of ecosystems, safeguarding interests of fishery and transport sectors	Identifying impacts and solutions and increasing public awareness	You need to communicate effectively with your interest groups to increase their awareness and meet with them regularly
East Mediterranean countries & UK & Egypt		Share responsibilities and collaborate in finding and implementing solutions	

Annex E

The Ecosystem Services Approach – An Introduction with Exercise

Mr David Cooper introduced the topic by explaining the inter-linkages between biodiversity and human well-being. Biodiversity underpins ecosystem functioning and the services that support human well-being. Ecosystems provide natural goods, are the basis of cultural diversity, regulate climate and other natural systems, as well as support other ecosystem processes. People impact on nature, which in turn provides benefits for the human population.

However, many ecosystem services are in decline and the ongoing biodiversity loss is triggered by a variety of direct and indirect drivers. Following the Millennium Ecosystem Assessment, most of these drivers for biodiversity loss are increasing.

Mr Cooper presented the WRI's Ecosystem Services Approach to the participants of the workshop. This Approach is a framework for integrating ecosystem services into decision-making incorporating a variety of methods and often applied at watershed or landscape level. It can inform national and sub-national policies and plans as well as economic and fiscal incentives, sector policies and plans, and general governance of biodiversity. Mr Cooper introduced the key elements of the Approach and a stepwise procedure.

For more information see: <http://www.wri.org/publication/ecosystem-services-a-guide-for-decision-makers>

Exercise

Mr Cooper initiated three working groups on fictitious or non-fictitious case studies formulating the tasks:

1. Identify ecosystem services;
2. Identify beneficiaries and maintenance measure necessary;
3. Evaluate benefits before and after implementation.

The objective of each case study should be the sustained benefits from the identified ecosystem services.

The working groups were further asked to assess the benefits of ecosystem services according to the following aspects:

- Number of people benefiting before and after;
- Financial benefits before and after;
- Ecological value before and after.

The three cases discussed by working groups were:

4. Golf courses in Istria (chaired and presented by Ivna Vukšić, Croatia)
5. Wetland conversion (chaired and presented by Angela Lozan, Moldova)
6. River restoration (chaired and presented by Sandra Edith Limacher, Switzerland)

The results of the three working groups (see fig. 1 - 3 below) were presented to the plenary by members of each working group.



Fig. 1: Case study on golf courses in Istria (presented by Ivna Vukšić, Croatia)

Croatia: Forest ecosystems → golf course

Ecosystem services	Beneficiaries	before	after
Climate regulation	Local pops	5 (people)	2
Soil protection (& water quality)	Local pops	5	1
Recreation/ecotourism	PS, tourists, Local pops	3; \$	2, \$\$\$\$\$\$
NTFP	Local pops	1; \$	



Fig. 2: Case study on wetland conversion (presented by Angela Lozan, Moldova)

Ecosystem services	before	after
Capture fisheries and wild food	*	***
Water treatment	costs: \$\$\$	costs: \$
Local climate and water regulation	*	***
Crops	\$\$\$	\$
Tourism	*	**
Scientific, cultural aspects of biodiversity	\$\$	\$

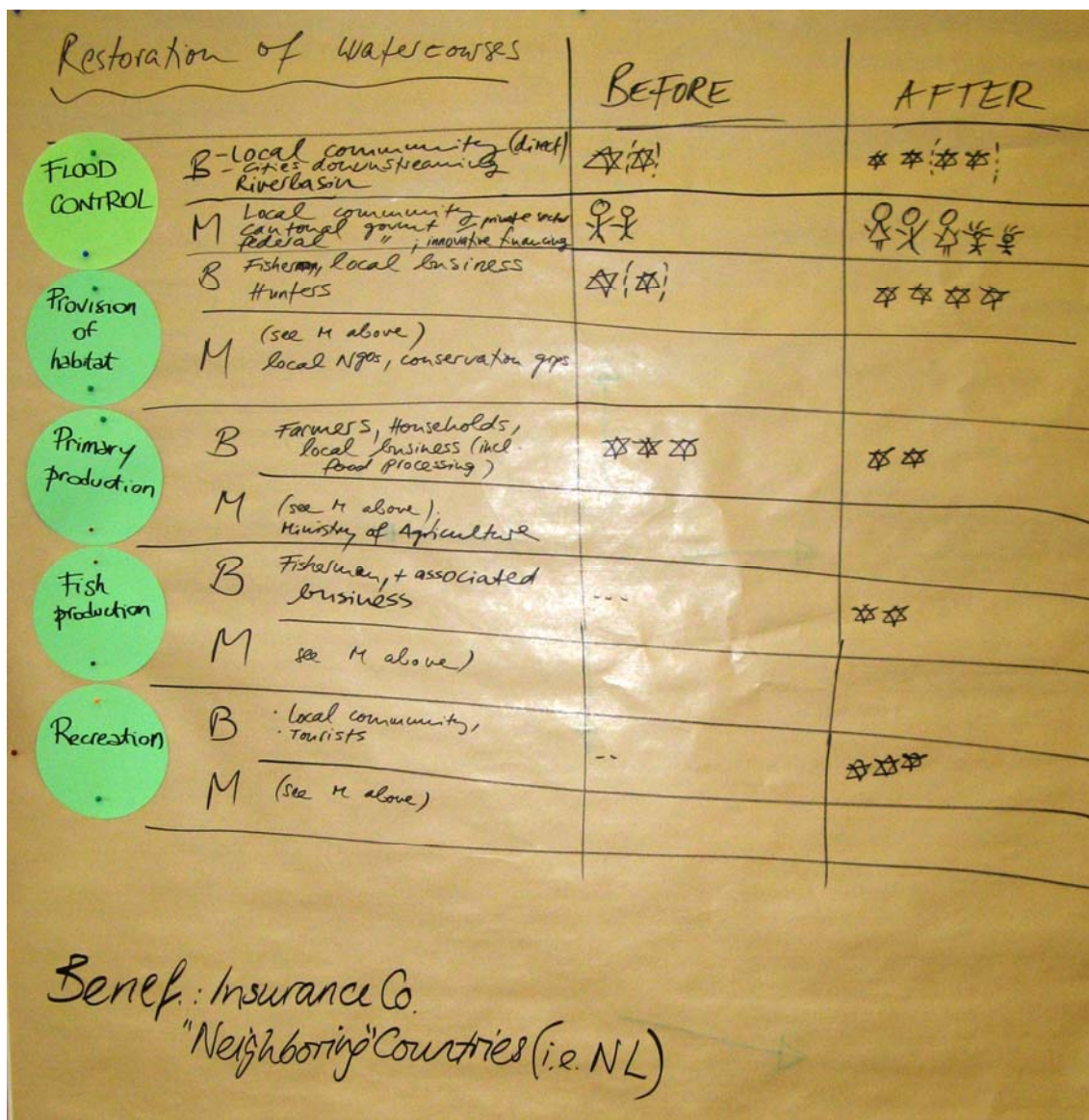


Fig. 3: Case study on river restoration (presented by Sandra Edith Limacher, Switzerland)

Ecosystem services	beneficiaries	before	after
Flood control	Local community (direct), cities and countries downstream All ES: Local community and governments	** 2	**** 5
Provision of habitat	Fisherman, hunters, local business		
Primary production	Farms, households, local food processing		
Fish production	Fisherman and associated business		
Recreation	Local, tourists		

Annex F

Country Presentations on the 4th National Report

Croatia

IVNA VUKŠIĆ

Process of preparation

The Ministry of Culture (MoC) established a National Report Coordination Team to oversee the preparation of the report and to provide additional information.

One short-term local consultant in the area of biodiversity and nature protection was employed for the coordination of preparation and drafting of the 4th National Report to CBD to compile existing data and to collect and review information and additional data.

After finalisation, the 1st draft report was presented to the stakeholders at the consultation meeting; at the same time it was made available on the MoC web-site. All comments received for the 1st draft report were reviewed; afterwards the final report has been prepared, and submitted to the SCBD on 20 May 2009.

Preparation of Chapter III: Sector and Cross-sector Integration of Biodiversity Conservation

For each sector, the general status, threats and trends are given. Also, a success story for some of the sectors is presented to highlight examples of good cooperation. The status of integrating biodiversity concerns into the other sectors is provided through different activities such as adoption of legal acts, enactment of strategies, implementation of programmes (e.g. EU's IPARD programme in Agriculture) and proposals for a list of indicators of the other thematic areas related to biodiversity indicators. In this chapter, information is provided on the assessment of the National Strategy's implementation as well as on recommendations for the future period.

Poland

EWA PISARCZYK

Main remarks concerning the content of the report:

- Size of the report (89 pages): on the one hand it should be concise, on the other hand it should reflect the status of implementation of the Convention and the state of biodiversity;
- Some discussion was among scientists and government officers about the quantity and quality of information, a.o. concerning air, soil and water;
- There are some repetitions in different chapters that could be avoided by cross-references;
- Scientists were having difficulties in assessing the state of the biodiversity components due to lack of a scientific research approach;
- The start of the reporting period was not clear, so previous data were presented for clearer view;
- The question was raised about whether the previous or revised version of NBSAP or both should be assessed.

Main remarks concerning the cooperation with the writer:

- The selection of the author was carried out by a formal procedure for a public contract;
- Selection criteria were: costs, professional experience, work concept, set of experts;
- During the contract negotiations, details were discussed to achieve an agreement;
- The result was that the scope of the work occurred to be wider than assumed in the beginning;
- The subcontractors caused delay, so the coordinator played a crucial role in harmonizing and streamlining the team work;
- The work process and progress was monitored by NFP;
- It was difficult to obtain or confirm certain information, a.o. from different sectors.

United Kingdom

PAUL ROSE

Indicators and Reporting within the UK Biodiversity Action Plan

In the UK, the authority for biodiversity decision taking and policy is devolved to the level of the countries (England, Northern Ireland, Scotland and Wales) which each has their own strategies. This approach leads to a healthy divergence of approaches to implementation, but can lead to difficulties in communicating, measuring and reporting what has been achieved. To overcome these difficulties a number of responsibilities for standards, reporting, information and international work remain at a whole UK level. By concentrating on the outcome for biodiversity as the common measure of success it becomes less essential to try and standardise implementation actions or the operational targets associated with these actions.

The UK has developed a suite of outcome oriented indicators to report overall progress in the UK towards the 2010 target and has then used these indicators to produce the 4th Chapter of the fourth national report to the CBD by mapping the indicators to the goals and targets of the CBD strategic plan. The indicators were developed in line with the flexible framework agreed at CBD COP 7 and are updated (another year added to the line) annually. So far they have been published in 2008 and 2009 with a third publication in 2010 set to provide a final assessment on progress towards the 2010 targets.

Another means of coping with devolved action in the UK is a standard piece of reporting software called BARS (Biodiversity Action Reporting Software). This software requires quantitative targets to be agreed at a UK level and then once this has been achieved anybody working at any geographic scale can record their contribution to the target online and see total progress towards the UK target. The quantitative UK targets are sometimes established by simply adding up similar country targets or as a UK target which is then broken down to country level. There are a number of parameters involved in choosing which approach to take when setting targets for which the UK has produced some simple principles and guidance. The software can also be adapted to provide estimations of the quantity of action or biodiversity required at any local scale to meet the target. At present, JNCC is reviewing the BARS software and looking to broaden its scope and increase its utility.

For the remaining Chapters 1-3 of the 4th National Report to the CBD, the UK provided a more detailed but still rather general overview of the state of biodiversity and linked this to the indicators as a means of further interpreting the messages behind the indicators. Chapters 2 and 3 were completed by the countries with very little attempt to summarise implementation actions or mainstreaming at a UK level.