

European Environment Agency



**European Environment Agency
Annual Management Plan 2010**

Copenhagen, January 2010

EEA in brief

The European Environment Agency (EEA) is a specialised agency of the European Union dedicated to providing objective, reliable and comparable information on the all aspects of the environment. The aim of the EEA is to ensure that decision-makers and the general public are kept informed about the state and outlook of the environment. The EEA also provides the necessary independent scientific knowledge and technical support to enable the Community and member countries take appropriate measures to protect and improve the environment as laid down by the Treaty and by successive Community action programmes on the environment and sustainable development. The EEA works in partnership with government departments and agencies, international conventions and UN bodies, the scientific, technical and research communities, private sector and civil society.

The EEA undertakes a comprehensive range of integrated environmental and thematic assessments. These include a five-yearly state and outlook of the environment report, thematic and sectoral assessments, analyses of the effectiveness of policy measures, forward studies and the impacts of globalization on Europe's environment and resources. The EEA is an important source and custodian of up to date environmental data and indicators, and a key provider of environmental knowledge and information services.

The European Environment Agency (EEA) and the European environment information and observation network (Eionet) were established by EEC Regulation 1210/90 on 7 May 1990 (as amended by EC Regulation 933/1999 of 29 April and EC Regulation 1641/2003 of the European Parliament and Council of 22 July 2003). The decision to locate the Agency in Copenhagen was taken in 1993 and the EEA became operational in 1994. Regulation (EC) No 401/2009 of the European Parliament and the Council codified the original founding regulation and its subsequent two amendments without substantive changes; Regulation 401/2009 has entered into force on 10 June 2009 repealing Regulations 1210/90, 993/1999 and 1641/2003. The founding regulation sets out a number of tasks (article 2) and priority areas (article 3) for the EEA, which are addressed through its multi-annual and annual work programmes.

The EEA annual work programme 2010 outlined below is the second work programme of the EEA 2009-2013 strategy. It is based on six strategic areas; four covering the thematic work of the EEA, information services and communications, and two covering governance, partnerships and administration of the EEA, as follows:

1. Environmental themes
2. Cross-cutting themes
3. Integrated environmental assessments
4. Information services and communications
5. EEA governance and partnerships
6. EEA internal management and administration

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I. EEA mission statement and vision

The European Environment Agency aims to support sustainable development and to help achieve significant and measurable improvement in Europe's environment through the provision of timely, targeted, relevant and reliable information to policy-makers, public institutions and the public.

The EEA vision is to become recognised as the world's leading body for the provision of timely, relevant and accessible European environmental data, information, knowledge and assessments.

II. Objectives and major activities for 2010

The core objective of the five year EEA strategy is to continue to produce European, pan-European and regional environment-related data and indicator sets, integrated environmental assessments and thematic analyses in order to provide a sound decision basis for the EU and Member countries' environmental policies. The 2010 annual work programme is the second year of the EEA strategy 2009-2013 and is based on an overall budget of 40.384k Euro (see Section 5) and 206 staff. Activity based budgeting is applied via six major environmental themes, ten cross-cutting themes, five areas of integrated environmental assessment and three cross-agency programmes. In 2010 it is foreseen that the EEA will be changing its financial and accounting system to the EC developed ABAC.

The annual work programme will be undertaken with Eionet partners (national focal points, national reference centres and European Topic Centres) , co-operating countries and a wide range of partner institutions, including the European Commission's Directorate Generals, government departments and agencies, international conventions and UN bodies, the scientific technical and research communities, private sector and civil society, in order to quality assure relevance and quality of the data, information and analyses that we provide.

Major activities in 2010

During 2010, in addition to its regular, ongoing activities and specific work for the Spanish and Belgian presidencies, the EEA will place extra emphasis on five major areas: production of the EEA's 2010 report on the State and Outlook of Europe's environment and other regional assessments; responding to the post-Copenhagen UNFCCC COP 15 process concerning climate change and adaptation; participation in initiatives on greening the economy; contributing to the international year of biodiversity; and supporting the development of a pan-European contribution to the global environmental observing systems of systems. Some of the expected activities and outputs include:

SOER 2010, Mediterranean and wider European assessments

- production of the EEA's regular integrated environmental assessment on the state and outlook of Europe's environment SOER 2010. The report will provide inputs for an evaluation of the operational and strategic policy priorities in the 6th Environment Action Programme and EU Sustainable Development Strategy; and
- establishment of shared environmental information systems (SEIS) to support the continuous and/or regular updating of state and outlook environmental reports, assessments and benchmarking within EEA countries, the Mediterranean and wider European regions.

Climate change and adaptation: the post-Copenhagen process

- development of the strategic orientation of EEA's work on climate change mitigation and adaptation following the outcomes of the UNFCCC COP15 in Copenhagen, reflecting key EU policies i.e. the climate change and energy package, transport, regional development and agriculture;
- evaluation of information on climate change impacts, through the EU Clearinghouse on climate change impacts, vulnerability and adaptation, in close collaboration with DG ENV and JRC;
- developing an ecosystem perspective for agriculture and forestry, including relevant observing, monitoring and assessment requirements, in response to any agreements in Copenhagen on reducing emissions from deforestation and land use change, in cooperation with JRC;
- together with DG ENV and JRC, establishing a European vulnerability and adaptation mapping service including information for disaster management and prevention;
- supporting with DG ENV, the development by the JRC of a European drought observatory; and
- with a range of international partners, continuing to evaluate planetary boundaries and environmental thresholds relating to increases in greenhouse gas emissions and global warming.

Initiatives on greening the economy

- analysis of the scenarios, pathways and fiscal recovery packages to deliver EU agreements on achieving a low-carbon and green economy by 2050, including establishment of natural resource accounting and prospects for ecological tax reform.

International year of biodiversity

- communicating widely on the European and international 2010 biodiversity targets, using the results from the Streamlining European biodiversity indicators 2010 process and contribute to policy debates on 'Beyond 2010 target' and any proposals for a new EU Biodiversity Strategy;
- completion of the EEA's contributions to The Economics of Ecosystems and Biodiversity (TEEB) initiative and participation throughout the year in activities to promote the key strategic messages; and
- production of a first set of analyses of the status, trends and prospects for European ecosystems as part of the likely foreseen Millennium ecosystem assessment in 2015.

Global environmental observing systems of systems

- implementing arrangements on international environmental data sharing and standards for data-tagging between EEA, EEA countries and key international observing programmes; and
- continuing to develop the Agency's role in GMES, in the management of services (especially the land component on the GMES Initial Operations (GIO)), coordination of user needs (particularly in the climate change area) and the coordination of the in-situ component.

III. Strategic indicators of EEA performance

The EEA's performance is measured through the environmental management and audit scheme (EMAS) and internal management systems using objectives and measures in a balanced scorecard across four inter-related perspectives: financial, client, business, and learning and growth. In 2010, continuous risk management will be fully integrated into the EEA's on-line management system.

EMAS perspective

EMAS comprises five main parts: 1) management, 2) environment, 3) communications and human resource management, 4) building operation and 5) common environmental activities. The EEA publishes yearly its environmental statement as part of its annual report documenting the EEA's absolute figures of electricity, heating energy, water and paper consumption, generation of various categories of waste and travel-related CO2 emissions to be off-set. In addition EEA runs specific EMAS projects, for example on greening its canteen and catering activities as well as creating organisational sustainability targets to improve its reporting.

Financial perspective

- Budget
- Sound financial management

Client perspective

- Relevance
- Effectiveness
- Quality/transparency
- Image

Business process

- Data supply chain
- Knowledge sharing
- Data handling
- Publications - timeliness
- Internal support - timeliness
- Impact of publications

Learning and growth

- Work force
- Capability
- Motivation

IV. Annual work programme 2010

1. Environmental themes

- 1.1 Air quality
- 1.2 Air pollutant emissions
- 1.3 Biodiversity
- 1.4 Greenhouse gas emissions
- 1.5 Freshwater
- 1.6 Marine

2. Cross-cutting themes

- 2.1 Climate change impacts
- 2.2 Vulnerability and adaptation
- 2.3 Ecosystem assessments
- 2.4 Environment and health
- 2.5 Maritime
- 2.6 Sustainable consumption and production
including resources and waste
- 2.7 Land use
- 2.8 Agriculture and forestry
- 2.9 Energy
- 2.10 Transport

3. Integrated environmental assessment

- 3.1 State of the Environment and Outlook Report and related activities
- 3.2 Regional and global assessment
- 3.3 Decision support
- 3.4 Economics
- 3.5 Strategic futures

4. Information services and communications

- 4.1 Shared Environmental Information System
- 4.2 Strategic Communication

5. EEA governance and partnerships

- 5.1 Governance and country network support
- 5.2 European and international cooperation and networks

6. EEA internal management and administration

- 6.1 EEA operations
- 6.2 Effectiveness evaluation, quality management and operational services
- 6.3 Administrative services

1. Environmental themes

The EEA supports EU environmental policy by tracking and reporting on the outcomes of the implementation of EU environmental legislation and similar across all EEA member countries. This involves establishing and maintaining reporting mechanisms, building the Shared environmental information system (SEIS) in close collaboration with the European Commission and Eionet, supporting the implementation of Inspire, quality assurance procedures, analytical frameworks and standardised outputs in terms of data sets, indicators and thematic integrated assessments. The work includes, *inter alia*, analyses of the costs of action/inaction, effectiveness evaluations of existing policies and measures, distance-to-target assessments in relation to agreed policy targets and long term reference values, and outlooks for the future in the 2020-2030 perspective.

Over the next period, key policy discussions are likely to focus on post-Copenhagen global agreements to mitigate climate change and reduce greenhouse gas emissions and on adaptation; global agreement on a post-2012 target policy for halting biodiversity loss; and more specifically for the environment in Europe implementation of the new EU Air quality directive; delivery of the first round of river basin management plans and related programmes of measures under the Water framework directive, and implementation of the Marine strategy framework directive in connection with the new Maritime strategy.

General objective across the six environmental themes for 2009-2013

To support policy development and evaluation within the environmental themes covered by the *acquis communautaire* and related areas by providing timely, relevant data and information, thematic analyses, assessments and methodologies to support the various thematic policy agendas and by carrying out evaluations of the existing effectiveness of policies and outlooks in a 2010-2030 perspective.

In 2010, the specific objectives across the six environmental themes will be to:

- ensure that the European thematic data centres for which the EEA has responsibility (i.e. air, biodiversity, climate change, land use and water) function within a common set of operating principles for all data centres agreed by the Group of Four (EEA, DGs ENV, JRC and Eurostat);
- ensure regular quality assured priority data flows, and/or access to the data in accordance with approaches proposed for SEIS;
- ensure delivery, compatibility and added-value of EEA environmental data and information services across GMES;
- maintain, develop and integrate the core indicators and other relevant indicators into the EEA indicator management system; and
- deliver analyses, thematic assessments and outlooks for SOER 2010, the Spanish and Belgian presidencies, the International year of biodiversity including the UN CBD COP10, the post-Copenhagen UNFCCC COP15 process, the 2011 Pan-European environmental assessment and the WHO ministerial conference on Environment and health.

1.1 Air quality

There are important challenges ahead. The EU Air thematic strategy will be reviewed in 2010, and the new Air quality directive that entered into force in May 2008 will have to be implemented and reviewed in 2013.

The EEA provides assessments of air pollution and increasingly its impacts on human health and the environment. This will include tracking progress towards and providing outlooks for, the achievement of short and long term air quality targets (*inter alia* as defined in EU legislation) based on up-to-date and where possible near-real-time quality assured data and indicators to support EU policy making such as in the design and implementation of the reporting requirements of the new Air Quality Directive. Air quality data is a cornerstone of the implementation (including legal enforcement processes) of air quality legislation. EEA plans therefore to put in 2010 additional focus on its ongoing work on quality and accessibility of air quality data to support this process.

EEA will deliver these outputs and services with the support of the European Topic Centre on air and climate change and in cooperation with Eionet, its air quality national reference centres and the network of national reference laboratories on harmonisation of quality control/quality assurance of air quality monitoring, the UNECE Long range transboundary air pollution convention through relevant programmes, centres and task forces, the Group of 4, GMES atmospheric services, WHO and a range of scientific, research and societal institutes.

Continuing activities in 2010:

- maintaining and extending the air quality components of the EEA European air data centre focusing on collection, management, quality assurance and web presentation of up-to-date and near-real time ambient air quality data and spatial maps and to contribute to the GMES Atmospheric services;
- reporting on trends in ambient air quality, on Europe's summer ozone situation (exceedances), on air quality in zones and agglomerations and impacts on human and ecosystem health, based on indicators and targeted assessments and forward;
- supporting European policy making through participation in the Data exchange group, relevant commitment meetings and meetings relating to the review of the new Air quality directive helping DG ENV with the implementing provisions of the new Air quality directive and supporting as well as co-chairing the joint JRC/EEA Forum of AIR quality MODELers (FAIRMODE) network;
- assessing future changes in air quality in Europe taking into account the effects of European air pollutant reduction measures as well as other possible parameters such as meteorology and hemispheric transport of air pollutants;
- finalising inputs to SOER 2010.

New activities in 2010:

- extending air quality information services to include other near real time key air quality parameters, in particular particulate matter and NO₂;
- extending use of modelling techniques to strengthen the links between air pollutant emissions and air quality, *inter alia* based on GMES services.

1.2 Air pollutant emissions

In 2009, the European pollutant release and transfer register (E-PRTR) was introduced. This is followed in 2010 by the revision of the UNECE Long range transboundary air pollution convention Gothenburg protocol to abate acidification, eutrophication and ground-level ozone, the EU National emissions ceilings (NEC) and the Integrated Pollution Prevention and Control (IPPC) directives.

The EEA contributes to these important developments by providing assessments related to emissions of pollutants, including toxic and hazardous pollutants, to air,

tracking progress towards, and providing outlooks for, the achievement of targets *inter alia* as defined in relevant EU and international legislation and evaluating the effectiveness of European policies and measures to reduce emissions. The EEA provides up-to-date quality assured data, indicators, emission inventory and data review reports and relevant web sites, via the development and implementation of SEIS, Inspire and the EEA European air data centre.

The EEA will deliver all these with the support of the European topic centre on air and climate change and in cooperation with Eionet, the UNECE Long range transboundary air pollution convention and with European Commission services, particularly DG ENV, JRC, AGRI, Eurostat and TREN.

Continuing activities in 2010

- maintaining and extending the air pollutant emissions components of the EEA European air data centre focusing on collection, management, quality assurance and web presentation of up-to-date air pollutant emissions data, with the help of indicators, inventory reports and targeted assessments on synergies and trade-offs between air pollutant emission and greenhouse gas emission reduction policies, in close collaboration with the EEA's work on climate change mitigation;
- preparing and publishing the European Community CLRTAP and NEC annual emission inventory report, and reviewing national air pollutant emission inventory data reports jointly with UNECE EMEP;
- finalising inputs for SOER 2010.

New activities in 2010:

- hosting of the European Commission E-PRTR website and the IRIS database, contributing to associated reporting activities, and maintaining and further developing web applications;
- fostering links with JRC's Emissions Database for Global Atmospheric Research (EDGAR);
- publishing UNECE EMEP/EEA emission inventory guidebook updates, as endorsed by the EMEP SB;
- initiating a process, involving the EIONET, to look into the feasibility of replacing relevant air pollutant emission indicators with more up to date information contained in the EEA air data centre viewers.

1.3 Biodiversity

2010 is the UN International year of biodiversity, and a key year in which future biodiversity policies following on from the ongoing discussions on the future of the international and European biodiversity 2010 targets. These deliberations will influence the UN CBD COP10 meeting in Nagoya and many other UN related activities on desertification, land degradation, deforestation as well as the future of the International platform on biodiversity and ecosystem services (IPBES) and will be supported by evidence gathered by several global studies namely the GBO3 (Global Biodiversity Outlook 3) and the results coming from the international study on the economics of ecosystems and biodiversity (TEEB). These outcomes will be relevant for the further implementation of the EU Biodiversity Action Plan (BAP) as follow-up of the EU Biodiversity communication (2006), the final assessment of the 6th EAP and preparation of the 7th EAP, follow reporting requirements within the marine strategy and Inspire framework directives, SEIS and GMES activities, as well as links to potential new climate change, energy, fisheries, agriculture, forest and soil policies.

The MA methodological framework will be introduced by EEA in guiding its activities on biodiversity in close cooperation with 2.3 activities, namely the production of the first European ecosystem assessment (EURECA) by 2012-15. This process will support the European contribution to the next MA, foreseen for 2015, as well as the global Rio+20 agenda in 2012. The policy relevant frameworks in Europe relevant to biodiversity and to ecosystem services – e.g. Nature Directives, Common Agricultural Policy, Common Fisheries Policy, Territorial Cohesion – will be main drivers for the activities on this heading

The EEA will deliver its outputs and services with the support of the European Topic Centre on Biological Diversity (ETC/BD) and in cooperation with Eionet, its biodiversity national reference centres, networks of excellence and a range of scientific, research and societal institutes and organisations, namely NGO's and in close cooperation with the DG ENV EU Expert Group on Nature and Biodiversity.

Continuing activities in 2010:

- provision of quality assured data on European reporting initiatives under the EU Nature Directives and SEBI process, enabling the provision of relevant analysis on trends of species and habitats. These activities will build up into the EEA European biodiversity data centre, using guidance coming from SEIS, Inspire Directive and the GMES initiatives as well as within the Go4 framework;
- supporting DG ENV on the implementation of Nature directives, namely its Natura2000 network, biodiversity action plans and assessments by improving data collection, harmonisation and accessibility, delivering existing indicators, evaluating requirements for new indicators, reporting methodologies and guidance, and providing scientific support for implementation;
- expanding existing platforms and tools for improved dissemination of data and information, use of information and knowledge management and for co-ordination of relevant networks. These include the EC-Clearinghouse mechanism, the European Nature Information Service (EUNIS) and support the conceptual development of the Biodiversity Information System for Europe initiative (BISE) and its implementation on a step by step approach within a 5 year perspective;
- develop species and habitats assessments for all the major reporting initiatives within the EEA scope of work and at Community level and finalising inputs for SOER 2010, SEBI2010, EURECA (including specific assessment and general assessment) and other key global and regional assessments (ASTANA, Arctic, Mediterranean);
- In consultation with Commission services and through the SEBI 2010 process continue to defining a baseline for biodiversity to underpin the post-2010 policy framework;
- follow up national, European and global biodiversity and ecosystem assessments under the umbrella of or conducting to the MA follow-up liaising with forthcoming reporting activities in a 2015 perspective and EURECA related development in close collaboration with 2.3 activities;
- continue to develop biodiversity and ecosystems based assessments under the umbrella of the EURECA process in close cooperation with 2.3, namely assessments around ecosystems services of protected areas as well as around specific ecosystems and sectors in connection to 2.8 activities.

New activities for 2010:

- reporting and communicating throughout the UN International year of biodiversity on progress towards meeting the 2010 biodiversity

- international and European targets using SEBI2010, the “10 messages to 2010”, SOER2010 and EURECA assessments in coordination with the Commission’s Biodiversity Communication campaign;
- communicating on the importance of biodiversity and ecosystem services to meet the challenges of climate change and a low-carbon future based on EEA and other stakeholders assessments. These assessments will focus on natural green infrastructure, conservation status of species and habitats, protected areas, indicator based assessments (based in SEBI2010, as well as other indicators under development as the species specialisation index and landscape ecological potential) as well as land and water accounts and other relevant spatial assessments;
 - developing linkages with water issues and assessments, in particular in context of Water Framework Directive;
 - providing inputs to policy discussions on an approach for post-2010, including further refinements of the SEBI2010 frame of indicators and assessments, targeted policy relevant assessments encompassing the sectors and themes in the frame of the UN CBD COP-10 meeting results and the EU Biodiversity Communication final review.
 - support the development of an ecosystem approach into other EU environment policies according to the Biodiversity Action Plan (Climate Change Adaptation, Water Framework Directive, Marine policy, Sustainable Consumption and Production) as well as sector policies developments (Agriculture, Forest, Energy, Health, EU regional policy and Territorial Agenda and the EU Maritime policy). Also support to international – regional policy arenas (European Neighbourhood Policy, Horizon 2020, Arctic Council). This activity will be done in close cooperation with 2.3 and
 - follow-up the preparation by DG ENV of a Strategy on Invasive Alien Species and support decision making on an early warning system on Invasive Alien Species in line with the December 2008 Communication and the Council Conclusions of June 2009 on this topic.

1.4 Greenhouse gas emissions

The EU has committed to reduce emissions by 20% by 2020 compared to 1990. The main EU climate mitigation policies needed to reach the EU policy targets are outlined in the Climate change and energy package formally decided in April 2009. The implementation of the climate and energy package and the outcome of the COP15 process will affect the ongoing revision of the EU GHG monitoring mechanism in 2010.

In line with the EEA strategy 2009-2012, the EEA will monitor and assess progress towards achieving EU greenhouse gas emission policy targets (Kyoto and 2020), evaluate the effectiveness of EU and national climate change mitigation policies and measures, and support the development of long term climate change mitigation strategies.

The EEA will use data, information and indicators collected from countries under relevant EU legislation on climate mitigation and further develop the EEA climate change data centre. The EEA will do this with the support of the European Topic Centre on air and climate change and in close cooperation Eionet, and the European Commission services, particularly the Group of 4.

Continuing activities in 2010:

- continuing work under the current EU GHG monitoring mechanism, the EC GHG inventory system and the current EU ETS; supporting the

implementation of the climate and energy package as appropriate, in particular the revision of the EU GHG Monitoring mechanism in the light of the Effort Sharing Decision, and clarifying EEA's role and responsibilities for the rest of strategy period;

- reporting on progress towards EU policy targets under the UNFCCC and unilateral EU 2020 commitments, and assessing the effectiveness of policies and measures to achieve these goals in the Trends & Projections 2010 report;
- compiling the annual EC greenhouse gas inventory under UNFCCC and KP, including new reporting requirements under KP (Art: 3.3/3.4/3.14);
- supporting the UNFCCC review process of greenhouse gas inventories;
- producing more recent estimates of total EU GHG emissions than delivered to the UNFCCC, exploring the possible use of JRC's Emission Database for Global Atmospheric Research (EDGAR) in this context;
- maintaining and further developing the EEA climate change data centre in relation to climate mitigation related elements, data viewers, country profiles, and PAMs data base, in close collaboration with ongoing EEA activities on air emissions, energy and transport; and
- finalising inputs for SOER 2010.

New activities in 2010:

- exploring how to use NAMEA-Air to support climate change policy development post-2012;
- exploring the relationship between various natural thresholds and potential links to sectoral GHG emissions.

1.5 Freshwater

In 2010 the EU freshwater policy will enter a new phase as member states report to the European Commission on their River Basin Management Plans and the respective programme of measures by March 2010. These reports will provide a first indication as to whether a good (ecological, chemical, quantitative) status will be achievable in member state waters by 2015, and allow a closer analysis as to the extent to which other water related directives (UWWTD, Bathing, Drinking and Nitrates Directive) can contribute to the achievement of good (ecological, chemical, quantitative) status of water bodies.

The provision of these data will enable the EEA to provide relevant state and outlook assessments for water, and eventually policy effectiveness evaluations. In 2010 the EEA's work will focus on consolidating the information and priority data flows already covered in the Water Information system for Europe (WISE) as the main tool of the European water data centre with new reporting under the water related directives, following the principles and guidelines under the Inspire directive and SEIS. The aim is for the EEA to produce a state of the environment report on water in 2012, widening the perspective to socio-economic aspects, climate change impacts and adaptation, vulnerability and resilience in ecosystem services including coastal and marine waters, sectoral demands on water and the associated environmental losses, costs and benefits.

The EEA continues to provide through the water data centre, regular quality assured data and reports including the annual bathing water report, to support the WFD and UWWTD reporting and maintain the EEA priority data flows, with the support of the European Topic Centre on water, and in close cooperation with the Eionet, DG ENV, JRC and Eurostat. The emphasis for the water data centre in 2010 will be to establish greater dissemination and sharing of data amongst the general public via WISE, implementing INSPIRE and SEIS principle.

Continuing activities in 2010:

- updating the Water information system for Europe (WISE) including information from other sources about sectoral activities and socio-economic information;
- strengthening links with other data centres to enable the most efficient use of information and architecture elements in a wider SEIS;
- supporting DG ENV by working on European policies related to water quality and quantity, providing regular updates on the EEA priority data flows and core set indicators and publishing the regular reporting on bathing water;
- continuing work on water and pollution, focusing on hazardous substances with a particular link to land/agriculture and human/urban systems and regional development, specifying emissions from point and diffuse sources and their impacts, and evaluating possible management responses
- establishing a wider assessment framework to integrate inter-sectoral dependencies for water and evaluating relevant water related ecosystem services. From a vulnerability perspective this will include structural aspects of water management, hydro-morphological issues and flood management as well as biodiversity; and
- finalising inputs for SOER 2010, Mediterranean and other key assessments.

New activities for 2010:

- developing the scope of the EEA contribution to the report under Art.18 WFD; assessing the first implementation phase of the directive in a wider context of vulnerability and stability of water ecosystems, groundwater and water management; and evaluating first results of the reporting under the WFD in the context and perspective of the EEA's SOE related information;
- increasing the dissemination, viewing and information exchange in WISE towards more near real time and disaggregated data as well as citizen observatory functionalities, in agreement and close cooperation with the existing national information system managers ; and
- developing, together with Eurostat and JRC, in particular in the area of water resources an integrated framework to support policy processes covering water scarcity and drought mapping, water pricing and costs of services, vulnerability to climate change and adaptation. This will be done by taking water accounts as a central methodological element to underpin such framework, relevant to the objectives and needs of the WFD.

1.6 Marine

In the future the EEA will provide marine assessments that further integrate marine, coastal and maritime aspects and better reflect an ecosystems approach to management in the European Regional Seas. The EEA's work is already supporting European and international marine-related policies and their implementation, and in the future will cover *inter alia* linkages between marine ecosystem health and human well-being, deep sea and high seas developments and cross cutting and sectoral aspects (as mentioned in 2.5) and will be supported by up-to-date data, indicators, models and analyses.

New data, indicators and analytical methods for marine/maritime integrated assessments will be delivered via the Water Information System for Europe as

WISE –Marine. WISE-Marine will be developed as a wider web-based communication platform for information and assessment products linked to: European marine observation and data network (EMODNET); the GMES marine core service; and, information from new sources, such as the web-based European atlas of the seas (MARATLAS -see 2.5), operational oceanographic products as well as from regional seas conventions and other international organisations. This will ensure an efficient reporting process established in the EU marine and maritime areas. As marine ecosystems are highly dependent on impacts and loads going from inland based sources reaching marine environment via freshwaters (main draining rivers) WISE-Marine development should become a part of WISE (already established for freshwaters). This will support improvement to perform integrated environmental assessment at national, regional and EU level"

The EEA's involvement in providing marine assessments is a key part of defining the marine data exchange and increasing the provision of data and indicators. The first 'initial/baseline assessments' under the MSFD, which are focused on the characteristic, pressures and impacts as well as socio-economic aspects of the marine environment, are only to be reported by Member States in 2012. Until then assessments will need to both cover the effectiveness of Water Framework Directive implementation in transitional and coastal waters and help map the current situation so that the impacts of future management efforts can be assessed.

Continuing activities in 2010:

- continuing the regular update of the EEA transitional, coastal and marine waters priority data flows and core set indicators including further information on biological elements derived from the Water framework directive inputs on coastal waters, marine biodiversity and climate change impacts. This will help support a state of the environment reporting element within the Marine strategy framework directive common implementation;
- developing further the transitional and coastal components of the existing WISE, and develop an implementation plan for WISE-Marine, as a structural and closely interlinked part of existing WISE, that ensures links to the EMODNET;
- supporting DGs ENV and MARE by participating in the MSFD common implementation strategy, defining relevant complementary EEA assessment work in the first phase of the MSFD implementation, including the analysis and use of the regional pre-cursors to the 'initial assessments', such as the OSPAR QSR2010 and the HELCOM HOLAS;
- integrating GMES marine core service products and geo-information sources on oceanographic data into EEA data sources, making them usable for EEA marine/maritime assessments and ensuring the coordination of the marine GMES in-situ components; experiences with the GRAME assessment of the assessments process can further inform and help the EU developments in this perspective.
- further developing the marine/maritime ecosystem assessments under EURECA in the marine general assessment concept as well as 'Fish Behind the Net' specific assessment;
- integrating issues relating to marine climate change adaptation and mitigation with freshwater inputs in relation to eutrophication and pollution from hazardous substances; and
- finalising inputs for SOER 2010, SEBI2010 Report, Mediterranean and other key assessments.

New activities in 2010:

- extending the coverage of marine biodiversity beyond EU-protected habitats and species to include further work on overseas territories and marine invasive species;
- establishing data exchange links with the global carbon programme on ocean acidification as part of the global and regional assessment of the marine environment;
- consider ways to enter into the environmental the issue of plastic debris in the oceans; and
- providing the transitional and coastal waters component for the EEA contribution to the report under Art.18 WFD and assessing the first implementation phase of the directive.

2. Cross-cutting themes

Demand for cross-cutting integrated analyses is growing in recognition of rapidly changing realities and growing uncertainties. Europe's consumption and production patterns, their influence on climate change and biodiversity, how they are served by ecosystems around the world, and how these patterns might be adapted in the face of change, are clearly in focus. The requirement for connected information on all these processes is growing as a result. In a globalised economy where individuals, businesses and governments can exert a global reach, often with unintended consequences and rapid non-linear changes, many different types of policy can affect the resilience of the natural environment and the resources it provides whether on land or at sea.

Over the next five years, the EEA will focus on three main threads of activity: building on the achievements of the 2004–2008 strategy with respect to the methods and analyses needed to generate cross-cutting assessments such as spatial analysis, impact indicators, outlooks and scenarios, policy effectiveness evaluations, economics; putting these methods to work more explicitly across a range of cross-cutting themes in this strategic area; and paying special attention to issues that are priorities for the SOER 2010 and EURECA 2012.

General objectives for 2009-2013

The first objective is to build on the achievements of the 2004–2008 strategy with respect to the methods and analyses needed to generate cross-cutting assessments such as spatial analysis, impact indicators and vulnerability mapping, outlooks and scenarios, policy effectiveness evaluations, economics. The second objective is to put these methods to work more explicitly across a range of cross-cutting themes in this strategic area such as sectoral integration, land use conflicts, adaptation to climate change, sustainable consumption and production and maritime, territorial and cohesion policies. The third objective is to pay special attention to issues that are priorities for the SOER 2010, EURECA 2012 and IPCC 2013. The fourth objective is to build alliances and capacities within our networks to undertake such cross-cutting analyses and assessments within the context of SEIS.

2.1 Climate change impacts

Recent scientific information, e.g. from the Copenhagen International Scientific Congress (March 2009) shows that the worst-case IPCC (2007) climate change scenario trajectories (or even worse) are being realised. For many key parameters, the climate system is moving beyond the patterns of natural variability within which our society and economy have developed and thrived (e.g. global mean surface temperature, sea-level rise, ocean and ice sheet dynamics, ocean acidification, and extreme climatic events). There is a significant risk that many of the trends will accelerate, leading to an increasing risk of abrupt or irreversible climatic shifts. Climate change impacts on ecosystems, natural resources and human health (in particular in combination with reduced air quality) and activities are expected to continue despite strong mitigation action to reduce greenhouse gas emissions, because even achieving the EU target of limiting temperature increase to not more than +2 °C still means there will be many impacts. Climate change is an additional pressure on natural and human systems, which are already under increasing pressure from e.g. globalization and rising consumption patterns across the world.

The IPCC is further developing in 2010 the scope and content of their next Fifth Assessment Report (AR5) which will be finalized in 2014. EEA should use that process for AR5 to improve its own assessments (SOER and EURECA).

Furthermore EEA should decide if/how to contribute to various elements of the AR5, in particular to the expected chapter on Europe in the report from the IPCC WGII (Working Group II: Impacts, adaptation and vulnerability).

Continuing activities in 2010:

- further development and maintenance of the climate change data centre by regularly updating the main climate change and climate change impact indicators by using information from major EU research projects and existing GMES services, and streamlining them with related data and indicators, including SEBI2010 and post-2010, in the data centres water, biodiversity and land use), consistent with SEIS and compliance with the Inspire directive (See 1.3, 1.5 and 1.6);
- supporting the inclusion the climate change impact related information in the EU Clearinghouse on CC impacts, vulnerability and adaptation (in close collaboration with DG ENV and JRC) (see also under 2.2.);
- organising an annual Eionet workshop on climate change impacts, vulnerability and adaptation together with the new proposed (2009) PCPs and linked with other related networks (see also under 2.2.)
- further stimulating and facilitating initiatives for hindcasting Europe's climate (EURRA, European Reanalysis) in partnership with key organisations including ECMWF, EUMETNET and JRC;
- support the GMES process further in the development of user requirements for a potential climate change GMES service/contribution in collaboration with JRC;
- finalising the relevant building blocks for the SOER2010 assessment, in particular updates of climate change indicators, and
- providing relevant contributions to EURECA (link to 2.3), SEBI2010 Report (link to 1.3), Signals 2011 (link to 4.2), coastal assessment (link to 2.5), as well as relevant regional (e.g. Horizon2020) assessments.

2.2. Vulnerability and adaptation

Vulnerability to natural and technological disasters is increasing as a consequence of intensified land use, industrial development, urban expansion and infrastructure construction and also climate change. In 2010 the post-2010 global climate change mitigation and adaptation processes could be in place. At EU level follow-up to the European Commission's White Paper on adaptation will be discussed in Council and Parliament. Adaptation actions should be focused on the most vulnerable areas in Europe (e.g. mountains, coastal areas, river flood prone areas, Mediterranean, Arctic). Mainstreaming of climate change into existing EU policies will be a key policy in 2010 and beyond, including the Water Framework Directive, Marine Strategy Framework Directive, Nature protection and biodiversity policies, integrated coastal zone management and other (sectoral) policies (agriculture, forestry, energy, transport, health) and disaster risk prevention. Several European countries have recently started to prepare and/or adopt national adaptation plans or frameworks. Also some regions have done so. Sharing of good practices on climate change vulnerability methods and adaptation actions is so far limited, but is essential to improve such plans, at national, sub-national and local level where much of the adaptation action is already taking place and will be expanding in future, also involving the business community. The EU Clearinghouse on CC impacts, vulnerability and adaptation should address these needs and it is planned to be operational in 2011. The EEA is expected to have an important role in its development in 2010.

The European Commission has also published a Communication in 2009 on disaster risk prevention aiming to integrate policies and instruments related to

disaster (e.g. floods, droughts, wind storms) risk assessment, forecasting, prevention, preparedness and recovery (supported at EU level by JRC, e.g. on forecasts of forest fires, floods and droughts). The Commission's communication calls for improving and better sharing of data on disasters, disaster risk mapping and disaster risk management, in the context of the EU civil protection mechanism. GMES is developing observation data services required for rapid mapping, models and risk mapping. Regarding disaster risks the main added value that EEA is proposed to provide is the assessment of the effects of climate change on disasters and the effects of disasters on the environment over a longer time period (decades). EEA will also support Commission work on risk mapping, by means of improving synergies with vulnerability mapping.

There will be a need to analyse the links and develop synergies between the EU Clearinghouse on climate change, the required improved information sharing on disaster risks and the proposals for a JRC Drought Observatory.

At global level climate change and disaster risk assessments have recently started to be done in a more coordinated way. IPCC, in close collaboration with the UN International Strategy for Disaster Reduction (ISDR), will produce in 2009/2010 a report on "Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation" to be published in mid/end 2011.

Regarding climate change and biodiversity at the global level a technical group between CBD and UNFCCC has prepared a document on the integration of the conservation and sustainable use of biodiversity into climate change mitigation and adaptation activities. Also the EU Council (June 2009) has prepared various related conclusions e.g. on the need for ecosystem-based adaptation (see area 1.3). Furthermore a Commission working group has started to develop an EU strategy biodiversity and climate change which could be finalised in 2009/2010.

Continuing activities in 2010:

- supporting the development of the EU Clearinghouse on climate change impacts, vulnerability and adaptation (in close collaboration with member countries, DG ENV and JRC) and ensure appropriate links with existing other EU information systems (e.g. WISE, Biodiversity Clearinghouse, JRC Drought Observatory), consistent with SEIS and INSPIRE.
- prototyping the clearinghouse by mid 2010 as a preparatory step towards a more advanced clearinghouse by 2011 (to be confirmed with DG ENV); that would subsequently sustain the inclusion of climate change vulnerability assessments, adaptation actions and best practice;
- finalising the building blocks to SOER2010 including: mapping of environmental impacts of natural disasters (similar to the 2004 EEA report) in collaboration with JRC; assessment of main future adaptation actions and their costs (scenarios); work on adaptation indicators (follow-up from 2009); guidance on good practices in adaptation actions (follow-up from 2009) (see also 2.1)
- organising an annual Eionet workshop on climate change impacts, vulnerability and adaptation together with the new proposed (2009) PCPs and linked with other related networks (see also under 2.1.);
- partnership with GMES in developing observation data services required for rapid mapping, models and risk mapping;
- providing relevant contributions to EURECA (link to 2.3), SEBI2010 Report (link to 1.3), Signals 2011 (link to 4.2), coastal assessment (link to 2.5), as well as relevant regional (e.g. Horizon2020) assessments;
- support the Commission in their follow-up work to the Communication on disaster risk prevention by identifying the comparability issues and information gaps and finalising the scoping study on the EEA's possible

role in developing data and information base on disasters and their impacts and mapping disaster hazards and risks and prevention/management options at European level, taking into account work being done by the European Commission (DG ENV, DG Regio, etc) and ESPON; and

- Providing support to
 - o EC-DG ENV and countries (EPA Network interest group) regarding follow-up of the White Paper on Adaptation
 - o WHO climate change and health strategy (for the 2010 Ministerial conference)
 - o EU Council Expert Groups on Science and on Adaptation for UNFCCC meetings (post COP15)
 - o Key scientific/methodological events/meetings (in particular IPCC meetings)

New activities in 2010:

- Contribute to the development and implementation of the JRC European Database of Vulnerabilities for Urban Areas
- Develop methods for mapping and analysis of vulnerability and adaptation to climate change and natural disasters in close collaboration with JRC and Member States.

2.3. Ecosystem assessments

Ecosystems can be described as functional units that are formed by the dynamic and complex interactions between plant, animal and other species with their physical environment. All ecosystems deliver different goods and services to society. There is an increasing policy interest in better understanding the benefits obtained as well as the factors influencing them. More analysis is required to assess the status and functioning of ecosystems in Europe and worldwide.

The Millennium Ecosystem Assessment (MA) conceptual framework divides ecosystems services into: a) Provisioning services – products obtained from ecosystems, including for example, genetic resources, food and fibre, fresh-water; b) Regulating services – benefits from the regulation of ecosystems processes, including flood and disease control, climate, water and human health; c) Cultural services – including non-tangible benefits as recreation, aesthetic values and spiritual enrichment; d) Supporting services – those that are necessary for the production of all other ecosystems services, including biomass production, clean air, nutrient cycling, water cycling, etc.

The MA framework is applied by EEA in guiding its activities especially to produce the first European ecosystem assessment (EURECA) by 2012. This will also serve as a contribution to the MA follow-up, as foreseen for 2015, as well as support the global Rio+20 agenda in 2012. The work on EURECA and ecosystem accounts is placed in the context of the 'Beyond GDP' initiative and will contribute to The Economics of Ecosystems and Biodiversity (TEEB) global initiative that seeks to put economic values on ecosystem services and for which first results are foreseen by 2010. EEA will make various contributions to TEEB, including ecosystem accounts for key services and developing operational guidelines for actors at different levels to produce their own accounts at varying scales.

A focus on the benefits from ecosystems can add strong economic arguments that could help both change policy priorities, action and financing within the environment policy arena (e.g. Natura 2000), as well as capture the attention of other stakeholders by increasing awareness of the economic significance of change. The policy framework in Europe relevant to ecosystem services – e.g.

Nature Directives, Common Agricultural Policy, Common Fisheries Policy, Territorial Cohesion – will have a strong influence on the focus of EURECA activities.

The overall objective is to embed an ecosystems approach into relevant EEA and other indicator frameworks (e.g. SEBI 2010, SD indicators), as well as into key EEA reporting exercises and broader integrated and cross-cutting assessments – SOER 2010, thematic assessments, regional assessments and Green Economy (see 3.4). Related activities will have strong policy relevance through evaluating and supporting present and future policy frameworks and scenarios.

The development and implementation of ecosystem accounts and the wider ecosystems approach is an ambitious exercise and requires cooperation with, and support of, strong partners. Both work on EURECA and environmental accounts will therefore be carried out in close coordination with Eurostat, the JRC, DG Environment and other Commission services as well as national and research organisations.

Continuing activities in 2010:

- actively contributing to SOER2010, through EURECA activities, with a special focus on European policy priorities and Europe-global interdependencies;
- producing focused assessments around selected ecosystem services (food and agrofuels as well as fisheries) and Natura 2000;
- producing Europe-wide physical accounts for land and water ecosystems and services and exploring ecosystem approaches for marine assessments;
- developing and implementing tools for overview analyses relevant to European policy priorities (quick-scan approach);
- continue producing guidelines for land and ecosystem accounting (building on related EEA activities and linking to relevant UN processes) – for use at national and international level;
- promoting the understanding of ecosystems resilience with respect to Europe's adaptation to climate change and other challenges; and
- actively supporting an ecosystems approach in EU environment and sectoral policies (Climate Change Adaptation, Water Framework Directive, EU Marine and Maritime policy, EU regional policy) Territorial Agenda as well sector developments (Agriculture, Forest, Energy, Health), and international – regional policy arenas (European Neighbourhood Policy, Horizon 2020, Arctic Council).

New activities in 2010:

- producing European footprint accounts for land and water based on the 144 agricultural products described in the National Accounts Classification system of the UN (ref. to area 2.6).

2.4 Environment and health

Environmental quality and the link to human health is recognized as one of the priorities of the 6th Environment Action Programme, with several identified areas for action, related to air and water quality, noise, chemicals and pesticides, improved understanding of the threats to the environment and health, and better quality of life, focusing on urban areas. It is also reflected in the Community action program in the field of health 2008-2013; in the renewed EU Sustainable Development Strategy; as well as in main chemical policies (e.g. REACH).

For the two European processes that focus on E&H the year 2010 is particularly relevant. The EU E&H Action Plan 2004-2010 comes to an end, and the future of this process is to be decided; the WHO pan-European E&H process, focusing on children (CEHAPE), will be evaluated and discussed during the Ministerial conference on 10-12 March, 2010, in Parma, Italy. The mid-term evaluations of these policy processes recognized the progress made, but indicated strongly a need for further intense work including on the evidence base.

Integration of environment and health concerns into the EU strategic policies and programs was highlighted in relevant Council conclusions¹. The document underlines a need for early action on E&H problems and the benefits of preventive and precautionary measures, and development of tools for anticipating, preventing and responding to potential threats from emerging and re-emerging issues (e.g. nanotechnology), and to strengthen the involvement of relevant stakeholders through partnerships across sectors at all levels. It also calls for gathering information on environmental determinants with positive health impacts, such as bio-diverse environments, non-motorized means of transport and housing conditions.

Assessments, including spatial dimension, which address complex E&H interactions in various settings (e.g. urban) provide support to policies aiming at reducing adverse impacts on human health, including environment and health risks from chemicals. There is a growing need for support to early actions, awareness initiatives that stress the benefits of preventive and precautionary measures, and communication on E&H issues with various partners. This also needs to include cooperation with other EU bodies in relation to potential divergence in scientific assessment.

Due to the nature of E&H theme, work will be strongly linked with integrated assessments on other cross-cutting themes (e.g. CC impacts and adaptation, SCP, spatial planning and mobility, ecosystem services), as well as the thematic areas (e.g. air, freshwater, biodiversity) of the AWP 2010. Work in partnership and cooperation with many stakeholders is crucial for gathering/exchanging data, information, and knowledge to produce better quality E&H assessments. Working both within and beyond the EEA geographical coverage is particularly relevant due to transboundary nature of many environmental threats to human health, as well impacts of globalization (e.g. of global trade, movement of chemicals, vectors for infectious diseases, etc) on human health and well-being.

Continuing activities in 2010

- finalisation and dissemination of the joint EEA/JRC report on Environment and Health across Europe, and assimilation of health aspects into the SOER2010, in line with priority areas for action identified in the 6th EAP;
- further improving accessibility of information on E&H and chemicals, including further development of E&H indicators, country analysis with Eionet, spatial dimension, and links to SEIS;
- exploring the applicability of various methodological approaches to estimate impacts (both adverse and beneficial) of the environment and ecosystems on human health and wellbeing and environmental burden of chemicals;
- providing contributions and support to various activities and reports (eg the WHO Ministerial 2010 conference; health focus in Late Lessons Vol. 2);
- strengthening inter-institutional cooperation, e.g. with DG SANCO, and WHO on SEIS and ECDC on developing environmental/epidemiological

¹ Council Conclusions on Environment and health, 2842nd Environmental Council meeting Brussels, 20/12/07

information system for infectious diseases and the environment, with JRC and others on analytical methods; and with the European Public Health Association.

New activities in 2010:

- begin implementation of a country analysis project with Eionet fully compatible with SEIS principles and SOER Part C guidelines; and
- explore possibilities of more effective use of bio-monitoring data for E&H information and assessments; and
- contribute to EU level discussions on evaluating scientific evidence on environment and health to avoid potential miscommunication and move towards full transparency on the use of scientific evidence as decision support.

2.5 Maritime

The EU Integrated Maritime policy and its environmental pillar, the Marine Strategy Framework Directive (MSFD, see 1.6) place an ecosystem-based approach at the centre of an integrated policy response to oceans, seas and coastal issues. The same vision is underpinning the EU Recommendation on Integrated Coastal Zone Management. This working area therefore focuses on activities regulated outside the environmental acquis on which the environmental assessments scoped in section 1.5 highly rely.

Maritime data and assessments need to integrate between marine and maritime aspects closing the link between environmental field (see 1.6) depending on its related sectoral impacts and responses; relevant ecosystem diverse and competing services and socioeconomic activities and dependencies (inter alia shipping, fishing, energy, resource exploitation incl. wind energy). The coastal development including e.g. tourism and port infrastructure (maritime spatial planning) is integrated part of the developments to be seen at high seas. Those assessments need to account for the aspects of human management and influences e.g. from coastal and marine spatial planning, regarding Climate change sea level rise is particular important. The maritime work is closely related to marine integrated assessments (see 1.6) and the EEA ecosystem assessment (EURECA, 2.3). In the link to area 1.5 the Maritime assessments need to provide the developments, trends and outlooks of the main drivers. Special focus needs to be put on the spatial planning in coastal and marine areas and its analysis.

New data, indicators and analytical methods for the maritime area need to focus on the cross sectoral cooperation beyond the environmental acquis. The participation of EEA in EMODNET should help to provide the most efficient reporting processes in the marine and maritime area and with this prevent any double reporting as explicitly wished from Member States. The EEA link to EMODNET will be operated via the Water Information System for Europe (WISE) – Marine; which is the marine/maritime component of the Shared Environmental Information System (SEIS). WISE-Marine includes the existing EEA priority and new MSFD SoE dataflow; information from new sources, like the web-based European Atlas of the Seas (MARATLAS), GMES-operational oceanography products; and from regional seas conventions and other international organisations. It is as a wider web-based communication platform for information and assessment products linked to the Marine Strategy Framework Directive (MSFD) and the GMES Marine Core Service.

These activities will enhance cooperation and help connect source organisations to provide online and shared access to the necessary data, to support maritime

spatial planning, coastal zone management and state of the environment reporting.

Continuing activities in 2010:

- further development of the maritime data part of WISE-Marine with emphasis on the spatial aspects and liaison with EMODNET regarding topics concerned;
- more specifically, advancing the maritime geospatial reference data set to complement thematic transitional, coastal and marine data collection relevant to WISE-marine and MSFD implementation by using the cooperation within MARATLAS development;
- continuing cooperation with Integrated Maritime Policy preparatory action on European broad- scale sea bed habitat mapping (EUSeaMap) to further assure relevant spatial reference data for EEA marine/maritime assessments;
- undertaking further work on an update of the coastal assessment for 2011/2012 including, coastal regional and spatial planning, aspects of protected areas as well as economic aspects including a revised methodology for environmental accounting . Where necessary this will be coordinated with the marine/maritime and EURECA assessments; and
- providing the assessment material to all the relevant EEA products, including as SOER 2010 (to be finalised), Signals 2010, EURECA, regional assessments (Horizon 2020, Baltic Sea, Mediterranean ICZM) etc.

New activities in 2010:

- providing driving force assessments and coastal aspects to the marine/maritime assessments and start tracking progress and effectiveness of maritime spatial planning;
- cooperating with organisations outside the environmental administration (EUROSTAT, shipping-, fisheries agencies) to integrate relevant socio-economical and environmental information;
- providing the coastal element for the EEA contribution to the report under Art.18 WFD; assessing the first implementation phase of the directive (see 1.5.) linking to ICZM and maritime spatial planning and related issues.

2.6 Sustainable consumption and production (SCP) including resources, and waste

It is increasingly recognised that European countries have to take responsibility not only for the environmental impacts from production within Europe, but also for changing their consumption and life-cycle environmental impacts in other regions of the world. Sustainable management of resources, chemicals and waste is an integrated part of this obligation.

The importance of sustainable consumption and production (SCP) is reflected in policy priorities and plans, including the UNCSD 2010-11 review of SCP, the EU Action Plan on Sustainable Consumption and Production and Sustainable Industrial Policy, the 2010 review of the EU thematic strategies on sustainable use of natural resources and on waste prevention and recycling, the implementation of the Waste Framework Directive and national policies on SCP, resources and waste. It is also reflected in the increased business activities related to sustainability and in increased focus on sustainable lifestyle across Europe.

In 2010, the EEA will continue to reinforce our efforts to support national, EU and global policy processes on SCP by strengthening the analytical basis through

further development and use of SCP indicators, environmental accounts and integrated assessments focusing particularly on the high pressure areas of housing, food, mobility and tourism/recreation. EEA work in this area is done in close cooperation with in particular DG Environment, the JRC, Eurostat, the OECD and UNEP, complementing and building on current and previous work done by these and other organisations.

Continuing activities in 2010:

- **Waste:** Supporting, in cooperation with Eurostat, the implementation of the Waste Framework Directive, the Waste Statistics Regulation (and other waste directives) and the 2010 review of the Thematic Strategy on Waste Prevention and Recycling. This will include supporting implementation of the data centre, developing country analysis, analysing transboundary movements of waste and support to member countries in the development of waste prevention strategies;
- **SCP assessments:** Further developing, identifying and using SCP indicators and country factsheets on sustainable consumption and production in support of EEA assessments to monitor the progress in sustainable consumption and production. The indicators and factsheets will be further developed in consultation with Eionet, the group of 4 and UNEP building on existing work. As input to our assessments from a life cycle perspective we will use facts and if not available estimations, but also input from the European Platform on Life Cycle Assessment and JRC life cycle based indicators.
- **Resource productivity:** Support the data centre on resources and the 2010 review of the Thematic Strategy on Sustainable use of Resources through EEA indicators and assessments, including on materials use, consumption and lifestyles. Work with the International Panel for Sustainable Resource Management through the EEA Executive Director, on products with high impacts and resource accounting (NAMEA, MFA).
- **Consumption:** Analysing and compiling unique data on consumption in European countries and its worldwide lifecycle environmental impacts (using e.g. NAMEA, ecosystem and material flow accounts, and trade statistics), and identifying the factors that shape consumption taking into account the rebound effect. Working with industry and retailers (and their organisations) to identify and communicate options for reducing lifecycle environmental impacts from their activities, including how to take better account of natural resource use.

New activity in 2010:

- begin analysis of the synergies between environmental and sectoral policies that most influence SCP objectives, building on work achieved by the EEA on policy effectiveness since 2001.

2.7 Land use

The development of tools for coordination, coherence, environmental awareness and synergies of sectoral policies, as required by the implementation of territorial cohesion policies is the prerequisite to monitor and ensure the sustainable spatial development and multi-level governance system of the European. The development, populating and exploiting of a robust platform of knowledge and assessments of the state, perspectives, trends and policy impacts over the diverse European territories in all their dimensions is the Agency contribution to this need. The Agency has for long analysed tensions over the use of land in Europe and suggested that they are driven by many factors having different dynamics, which are not all elucidated or documented. The current issues are

hence the development of more accurate monitoring, assimilating new sets of relevant data and create synergies between spatial observations and in-situ monitoring to soundly understand these pathways to land transformation that address as many different domains as societal aspirations, mobility and housing, demography, changes of territorial landscape, climate change as well as ecological risks.

The 2010 work plan is first driven by the specific agenda (State of the Environment report), SEBI (Streamlining European 2010 Biodiversity Indicators), EURECA (European Ecosystem Assessment) and TEEB (The Economics of Ecosystems and Biodiversity) that all strongly demand land based information. This agenda requires specific tasks to be undertaken, such as exploiting the finally completed 2006 Corine Land Cover inventory and related data bases, in particular the high-resolution soil sealing information and the derived catchment related information. Capitalising on the EEA's know-how will enable further long-term development aimed at shifting the Land Use Data Centre from a spatial mapping facility into the operational spatial data node required for intertwining the requirements of all thematic areas: water management issues (see 1.4), biodiversity (fragmentation, connectivity - see 1.3), environment & health (see 2.4), noise exposure and impacts (EU Environmental Noise Directive), transport & mobility (see 2.10), Urban Audit and land changes modelling.

The development aims also to back the newly started "vulnerabilities" process and the experimental Ecosystem (priority on carbon, biomass) and water accounts, in the perspective of SEEA revision.

It is important to note that all the continuing and new activities involve cooperation with the EU institutions, particularly DGs REGIO (ESPON), ENTR and JRC.

Continuing activities in 2010:

- upgrading reference layers in LUDC, which is in parallel shifted to service on land based features by upgrading and populating reference layers (ECRINS: European Catchment and Rivers network System, Land and Ecosystem Accounting (LEAC), maritime space,...) with the important land based features, liaising with other ETCs to populate / collect relevant multi-targeted attributes, the Water accounts exercise, SEBI and "Biodiversity 2010" plus the first developments in vulnerability provide enough cases to process both from spatial and SEIS point of views. The current reference layers will be, where possible, extended to eastern and southern regions to facilitate the envisaged developments in strategic area;
- assimilation of data in LUDC, with special regard to landscape ecology, modelling and ecosystem accounting. This is the complement of the LUDC development (infrastructure and data model parts). The assimilation requires an important development in providing facilities to accurately integrate spatial data (attachment of objects). This aims at providing the basis for land use modelling and forecast trends analysis. It aims at providing the now-cast and forecast data to ecosystem analysis and other projections;
- liaising with SEIS team and GMES core service land monitoring programme to improve the access to data being exchanged and provided on Member State and European level. In cooperation with SES Programme the implementation and design of the GMES core services on land monitoring will be supported. This will include liaising with JRC on soil monitoring projects, with the view to improving observations and data integration in support to assessments (e.g. soil functional mapping);

- in cooperation with JRC reinforce integrated analysis of soil related issues in their spatial dimension and land management contexts;
- fully updating and exploiting CORINE land cover 2006 including other spatial and socioeconomic datasets such as soil sealing, urban Atlas, regional statistics. LUCAS and the other statistical data sets, produced by Eurostat, provides data not only for validation and/or production of CLC and other GMES land monitoring product, but also complementary source data for landscape, biodiversity and other terrestrial indicators;
- to establish functional links of ECRINS with WISE (and further in 2011 with WISE-marine) to be able to make integrated assessment and management of water ecosystems and land ecosystems depending on water";
- developing the environmental components of territorial assessments: regional, urban, transport and maritime space. The current developments for integrating environmental indicators in territorial policies are reinforced. Main developments aim at supporting ESPON in the development of territorial indicators, with special attention to DG REGIO / ESPON "Regio 2020" and EU Territorial Agenda: and
- Continuing to assist the review of the Noise Directive with the Expert Panel on Noise.

2.8. Agriculture and forestry

Global change will alter the nature and extent of ecosystems services supplies that are necessary for human well being. While some of these trends may be positive and offer new opportunities (e.g. increases of productivity and positive links to forestry and agriculture extensification), most of them are likely to increase the vulnerability of ecosystems to supply the goods and services society/-ies are expecting. Decreases in productivity, declining of soil fertility, declining of water availability and increased risks of forests fires have been listed and may turn to have dramatic consequences in some of European regions (namely mountains and Mediterranean areas).

Considering that half of the EU territory is farmed, forests cover 44% of European territory, 20% of EU territory is under Natura2000 designation and 4 out of 5 European citizens currently live in cities, adapting to climate and other changes will require new management strategies that have to be analysed and equated within the broader principle of integrating environmental concerns as well as biodiversity concerns into sector policies.

Assessing the fate of agro-ecosystems in Europe given global change factors (climate, economic and social) from one side and policy attainment from the other (namely the future of CAP) will be the basis for EEA activities over the next 4 years. The balance between agricultural land and forest and the health of ecosystems will be also assessed in a rural development framework.

In a context of tensions around agricultural markets contrasting insights into food production and consumption, energy targets, carbon balances and fossil fuel consumption will require a new framing of agro forest ecosystems role from local to global scales. The ecosystems approach, integrating ecological, economic and social questions and its double role of conservation strategy and rural development will be developed within a broader regional development perspective and landscape potential, centred on high natural value agriculture and forestry.

Continuing activities in 2010

- development of an ecosystem perspectives for the agriculture and forest areas in response to future challenges and recognised outputs, namely the MA follow-up and in support of future reporting perspective within the

areas (CAP reform 2013 - negotiations starting 2010-2011 - and MCPFE report 2012);

- maintaining and following up data and indicator frameworks in connection with respective providers complementing the SEBI2010 set and integrating them into the European data centres, SEIS implementation planning and GMES developments;
- revising and streamlining European and international institutional cooperation within these sectors (e.g. OECD on indicators and agri-env policy analysis, FAO, DG AGRI and Eurostat on data sources, info on third countries e.g. for the pan-European assessments, but also with JRC, MCPFE) as well as the regional perspective (e.g. Mediterranean and Alpine);
- integrating assessments within these sector areas into a broader spatial development perspective within a frame of vulnerability and adaptation analysis, in response to EURECA needs and its developing frame; as well, to scope the links to the sustainable production and consumption (food and fibre); and
- working on the assessment needs for environmental-economic tools (in particular subsidies, public goods, externalities, trade issues and the role of EU in multilateral trade agreements dealing also with non-trade concerns as social rights and environment ultimately related to protection of denominations of origin, genetic resources at international level, etc).

Continuing specific activities on agriculture in 2010:

- analysis of policy developments and negotiations at EU level with a view to the CAP beyond 2013 and its role within broader regional development perspectives and landscape potential;
- maintenance and update of the agri-environment indicators built up during the IRENA operation (in close cooperation with Eurostat, DG AGRI, JRC and DG ENV) following the MoU between EEA and the previously mentioned organisations and within a SEIS context;
- supporting biodiversity assessments related to agriculture, based on the HNVF analysis & maps in close collaboration with JRC, art. 17 reporting and other knowledge coming from diverse stakeholders, namely the research community;
- enhancing interlinkages and developing knowledge around projects on territorial assessments, in particular, regarding the agri-rural dimensions of territorial cohesion in the EU as well as agro/biodiversity experiences; and
- contributing to major EEA assessments namely SOER 2010 in agriculture related issues, EURECA, ASTANA, as well as biodiversity led assessments related to SEBI2010 and work towards CBD/COP10.

Continuing specific activities on forestry in 2010:

- analysis and support of forestry and forest management related developments in Europe and internationally;
- evaluation of the range of ecosystem functioning versus multi functionality with a special focus on forests within a changing climate (contribution to EURECA);
- supporting biodiversity and climate change related assessments based on foresight studies on future conditions of forests and its impacts to human well being in Europe (using results from, for instance, MOTIVE conducted by EFI) based on data and information from JRC data centre for Forests among other data providers;
- analysis of forest management models and sustainability in Europe in relation to mitigation and adaptation strategies; and

- assessing forest biodiversity and renewable resources for wood, energy, water and other ecosystems services following work done under UN/ECE.

New activities in 2010

- working on processes arising from the UNFCCC COP 15 meeting in Copenhagen in respect to land use change and deforestation scenarios in partnership with European and global institutions (e.g. JRC, UN/REDD+, LULUC(F));
- participate and support EU processes on forest monitoring, in particular developments in GMES and other global observatory activities;
- examining opportunities and identify possible action in relation to the UN International Year of Forests in 2011 in cooperation with relevant international institutions and processes.

2.9 Energy

Energy policy plays a central role in combating climate change while at the same time ensuring a secure supply of energy in Europe. Energy production and consumption (including renewable energy such as bioenergy) has substantial impacts on human health and the environment (including emissions of air pollutants, waste generation, oil spills).

In November 2008, the European Commission took initiatives to increase energy solidarity among Member States, to stimulate investment in more efficient, low-carbon energy networks and to secure sustainable energy supplies in the EU. A package of energy efficiency proposals for key areas, such as reinforcing energy efficiency legislation on buildings and energy-consuming products were also adopted.

In December the European Parliament and the European Council reached agreement on the energy and climate change package, including a target of increasing the share of renewables in energy use to 20 % by 2020.

EEA will contribute by providing integrated assessments of how changes in the energy sector influence climate change and have effects on human health and the environment; analyses of costs and benefits and tracking progress towards meeting policy targets for the energy sector and their environmental effectiveness, all supported by up-to-date data and indicators.

Continuing activities in 2010:

- further exploring the environmental impacts of bioenergy production;
- reporting on energy and the environment based on country data and information submitted to Eurostat and other Commission services, EEA, IEA and UNEP;
- finalising inputs to SOER 2010 and continued involvement in EURECA.

New activities in 2010

- studying good practice in integrated planning of renewables deployment at local level including the integration of energy systems via smart grids, storage facilities, etc; and
- using energy and environment modelling tools to assess the environmental constraints and benefits of increasing the share of renewable energy, other technologies and energy efficiency improvements.

2.10 Transport

Transport is an integral element in most of the activities that together form the gross domestic product. Transport volumes grow more or less in parallel with the economy. The transport sector influences a number of environmental issues and is for some of those a main contributor to the impacts. Climate change and air pollution are the most prominent. Even if the growth in emissions of greenhouse gases from the transport sector has slowed recently, projections for the future foresee a notable growth if no additional mitigating measures are implemented.

In addition to greenhouse gas mitigating measures EU and its Member States must also implement further measures to meet the air quality standards and manage environmental noise. A large share of the population is expected to be exposed to noise levels that are above the target values recommended by WHO.

Furthermore transport growth increases the pressure for infrastructure expansion creating or augmenting the intrusion in landscape and has a negative impact on biodiversity.

In response to the increasingly ambitious greenhouse gas emission targets there is a need to develop sector specific targets. To ensure the ancillary benefits these targets should cover all the main aspects of a 'sustainable transport system' and its use. EEA is already contributing to this debate and should continue to do so. All work will be done in close collaboration with the work areas climate change mitigation, air quality, noise, energy, land use, scenarios and sustainable consumption and production.

Continuing activities in 2010:

- development, maintenance and streamlining of transport and environment TERM indicators as basis for assessments of the impacts of transport on human health and the environment and tracking of progress towards environmentally related policy targets for transport;
- tracking developments in transport technology (both vehicles and fuels) and the associated environmental impacts;
- finalising inputs to SOER 2010; and
- continuing work on trajectories towards a sustainable transport system with emphasis on energy efficiency and sustainable mobility and access.

New activities in 2010

- Support to DG ENV with the establishment and maintenance of the registry under Regulation EC 443/2009 of CO₂ emissions from passenger cars.

3. Integrated environmental assessment

Integrated environmental assessment is increasingly important for policy making. Consequently the EEA is receiving more and more requests to contribute to different integrated assessments. Integrated environmental assessment implies an interdisciplinary approach that draws together knowledge from across many different environmental domains, as well as from economic and social driving forces, to support the framing and implementation of relevant policies and strategies. The EEA has the responsibility of using and reviewing integrated assessment approaches and methodologies and assessing the knowledge gained in their implementation to strengthen practice in this area.

The most important integrated environmental assessment activity in 2010 is the EEA's 5-year report which is mandated in the Agency's establishing regulation: *"...to publish a report on the state of, trends in and the prospects for the environment every five years, supplemented by indicator reports focusing upon specific Issues"* (Article 2 of EEA establishing Regulation). The next State of the Environment and Outlook report is due in 2010 and aims to support integrated environmental assessments in Europe as well as policy evaluation processes, e.g. relating to the 6th Environment Action Programme and the EU Sustainable Development Strategy.

A continuing challenge facing the EEA is how to deliver its 5-year mandate and at the same time contribute to other regional, pan-European and global assessments. The increasing number of integrated assessments being requested to support different processes can often be overlapping, covering common geographical units or patterns, yet compete for the same resources. Analysing the environmental status of these diverse yet interconnected areas requires improved coordination.

An important new activity in 2010 which will begin to address this issue on a pan-European scale is the "Assessment of Assessments" (AoA) for the Astana pan-European ministerial conference to be held in 2011. The Astana AoA aims to support the streamlining of environmental assessment activities across pan-Europe by over viewing their needs, activities and required capacities to effectively implement them.

Another challenge for integrated environmental assessments is how to improve their relevance, usefulness and effectiveness for decision and policy making. Three elements are identified on which to focus; 1) a better understanding of what it means to make decisions under risk, uncertainty, complexity and ignorance: to support this, the work under the heading "Late Lessons from Early Warnings" will continue; 2) providing economic analyses to help put environment into the heart of economic decision making and 3) an increased emphasis on providing forward looking information and strategic futures.

The major integrated assessment exercises of the EEA will also be used to promote important objectives regarding the organisation and implementation of gathering and communicating data and information. The SOER 2010 process, in particular, will provide a vehicle for further embedding SEIS principles and web communication approaches in EEA reporting processes.

General objectives for 2009-2013

Over the five year strategy the first objective is to deliver in support of EU policy objectives a 5-year report in 2010 and to consolidate the foundations (especially through SEIS and a long term integrated assessment strategy) for delivering more efficiently future assessments including those for different geographical

units. For this, a long-term integrated assessment strategy will be developed covering the ongoing 5-year reporting cycle and other geographical and issue orientated assessment needs. This will support improved planning and linkage of the different assessments, help and turn potential overlaps into synergies and enable them to be used as building blocks for the 5-year reporting process delivering in 2010, 2015 etc. The second objective is to improve the effectiveness of the assessments by developing knowledge on decision making under risk, uncertainty, complexity and ignorance, making economic evaluations and developing strategic futures.

In 2010, the specific objectives will be:

- to complete the 2010 State and Outlook report and related strategic futures work;
- to review approaches for producing integrated assessments and environmental outlooks;
- to respond to the Mediterranean Horizon 2020 process and contribute to the Eastern partnership, by developing relevant assessment activities (in the context of the European Neighbourhood Policy, the Strategic Partnership with Russia and the EU-Central Asia Strategy);
- to prepare inputs and analyses of assessments and environmental performance and capacities for the UN ECE 2011 ministerial meeting in Astana, Kazakhstan; and
- to publish Volume 2 of "Late Lessons from Early Warnings".

3.1. State of the Environment and Outlook Report and related activities

2010 will be a year of intense activity focused on completing the next State of the Environment and Outlook report. Content-wise the report will cover key environmental issues, packaged in four major cross-cutting thematic areas: ecosystems and biodiversity, climate change, environment and health as well as sustainable consumption and production. The assessment will be complemented by indicators and country profiles ensuring a proper balance between the European perspective and the country specificity and performance. The structure of the report follows a matrix approach developed in 2009, complemented by scenario-based analysis and other activities. This will result in web-based outputs linked to country contributions, thematic and cross-cutting integrated analyses and explorative scenario analysis. The key printed output will be the SOER synthesis report, defined in 2009, written in accessible style and translated into all EEA languages. The geographical coverage of the report includes the 32 EEA member countries and cooperating countries (32 + 6).

Due to the cross-cutting nature of the report, many elements coming from the thematic areas in sections 1 and 2 of the AWP 2010 feed into joint outputs and therefore are embedded under the respective headings (e.g. 2.1....). Under this heading only activities of an integrative nature or management and coordination of the work will be reflected.

The SOER 2010 process will also provide the platform for a review of the processes and methods used in the major SOE reporting, integrated environmental assessment exercises and other analytical activities in the Agency and Eionet to document and share knowledge gained in this area.

Continuing activities in 2010:

- coordinating the production of the different SOER elements and quality assuring the implementation and consistency across the different parts of the SOER;

- working with EEA EIONET countries on country analysis and carry out suitable country comparisons in consultation with them;
- maintaining good working relationships with European partners, in particular the JRC and DG ENV, and ensuring an open dialogue and consultation with all stakeholders using the SOER 2010 portal and other tools;
- finalising and implementing a wide range of web-based publications and supporting their communication;
- coordinating provision of a package of outcomes, with the SOER synthesis at the core, for the SOER launch on 29 November 2010; and
- ensuring continuity from the SOER 2010 to any future pan-European assessment from the perspective of EEA membership and West Balkan countries.

New activities in 2010:

- Reviewing and documenting process and methods used for integrated assessment and SOE reporting, including the relevance of precaution in decision making processes and forward looking information and strategic futures; and
- support beyond GDP activities by coordinating and enhancing EEA contributions to: environmental accounting, in particular improving timeliness, inter alia of sets of articulated accounts on land, carbon, water and biodiversity in cooperation with Eurostat and JRC; environmental stress indicators and related communication activities through SEIS implementation, including indicator factsheets material; and, by scoping purpose, scope and use of information on sustainability targets and reference values (STAR) including revisiting the defunct STAR database first established in the 1990s.

3.2 Regional and global assessment

Common geographical and environmental patterns characterize specific areas in Europe, such as coastal regions or mountain ranges. They correspond on the one hand to the reality of Europe's landscape diversity and, on the other, to some form of targeted processes and policies such as the Barcelona EuroMed process or more generally territorial cohesion. Analyzing the environmental status of these diverse areas is thus rooted in the particular socio-economic characteristics of the different areas as defined (coastal, urban, rural, mountain) and the current and historical land uses of their specific geographical patterns.

The proposed Astana "Assessment of Assessments" is an important recent development. This activity aims at support the streamlining of environmental assessment activities across pan-Europe. The assessment will inter alia build on work under SOER 2010, in particular country analysis.

Other relevant assessments include the Mediterranean Horizon 2020 processes and those expected for the Arctic and other ecological or territorial units.

Continuing activities in 2010

- Eastern Europe: Collaboration with countries of Eastern Europe in the development of capacity for environmental assessment, in the context of the European Neighbourhood Policy, the Strategic Partnership with Russia, the Eastern partnership and the EU-Central Asia Strategy. This will include the progressive development of SEIS for the region and in the short term the planning, coordination and preparation of an "Assessment of

Assessments” to be used among other things as input to the 2011 Astana Ministerial conference.

- Eastern Europe: capacity building for environmental assessment, in the context of the European Neighbourhood Policy, the Strategic Partnership with Russia, the Eastern Partnership and the EU-Central Asia Strategy.. Based on SOER practice and SEIS principles
- Mediterranean environment: building up a regular reporting process under the Horizon 2020 initiative focused on indicators and scorecard analysis.
- Arctic environment: preparing specific tailor-made assessments on the state of the Arctic as input to various assessments such as SOER2010.
- Territorial assessments: in support to Cohesion policies, spatial planning and areas defined by their ecological relatedness using inter-alia Corine land cover 2006 and GMES Land services data.

3.3 Decision support

There is growing scientific awareness that environmental, ecological and health issues are more complex, multi-causal and inter-connected than was previously understood. Systems science, non-linear dynamics and threshold phenomena are characteristics of most environmental and health issues, such as climate change; ecosystems health; biodiversity loss; and the priorities of the EU Action Plan on Environment and Health (cancer, respiratory, neurological, and endocrine mediated diseases). Timely responses by governments, and increasingly by civil society, to perturbations in such complex ecological and biological systems involve taking action on lower strengths, and sometimes different types, of evidence, (e.g. relevant knowledge rather than precise data), if the precautionary prevention of harm is the goal.

Such decisions need to be taken in light of a broader knowledge base, in part derived from public participation, supported by increased awareness of the effectiveness and consequences of previous actions, or inactions, on emerging issues and early warnings.

Public and stakeholder participation is increasingly recognized as a component of effective decision making on issues that arise from complex ecological, biological and social systems e.g. river basin management; strategic impact assessment; climate change adaptation; land management; nature protection; spatial planning; strategic futures development; the demand-side management of transport, water, energy and resource use; and the lay monitoring of environmental change.

Continuing activities in 2010:

- publishing volume 2 of “Late Lessons from Early Warnings” in early 2010, including a summary booklet for wide distribution, and weave relevant findings into the SOER synthesis;
- organising a workshop on disseminating Research Results with the European Environmental Advisory Committees network (EEAC);

New activities in 2010:

- organising a workshop and producing a report on “The use of Lay and Local Knowledge in integrated assessments”.

3.4 Economics

There is an increasing focus on economic damage and welfare loss in the case of inadequate action or inaction. At the same time policies and measures must

induce effective and least-cost solutions. Moreover, there is increasing recognition that environmental protection can go hand-in-hand with the pursuit of social goals and economic prosperity. For example in the field of energy and climate change several actions are profitable even from a business perspective. The economic component of environmental analysis and evaluations is getting stronger as reflected in the further development of methods such as ex-ante-type cost of policy inaction, impact assessments and integrated analysis, and ex-post evaluations. Market-based instruments are increasingly recognised as potentially cost-saving tools, and environmental tax reform aims to reconcile environmental, fiscal and social objectives.

Continuing activities in 2010:

- support and delivery of integrated economic analysis across DPSIR with the focus on cost of policy inaction, cost of measures, benefits of improved environmental quality and ecosystems services, and the role and impact of market-based instruments and environmental tax reform;
- using methods developed in 2007-2008, including benefit transfer, for scaling up of non-market valuation case study results for ecosystems and services, in support of EURECA and ecosystem accounts; and
- further development of data gathering and assessments of the economic consequences of action and of lack of action with a particular focus on climate change and ecosystems.

New activities in 2010:

- publication of integrated analysis of existing economic drivers and environmental problems and policy tools as part of the SOER synthesis;
- producing Green Economy analyses during 2010 in support of post COP-15 and post CBD-11 discussions as well as the production of SOER 2010;
- producing an analysis of the potential for ecological tax reform in Europe as a response to long terms reconciliation of environmental, economic, fiscal and social objectives; and
- considering how a SEIS-like approach can be applied to maintaining inventories of market-based solutions and environmental tax reforms with Eionet and other players (e.g. OECD, European Commission).

3.5 Strategic futures

During the next 5 years, work in this area will focus on the forward looking component of major EEA assessments; the use of scenarios and other forward looking methods for decision making in conditions of complexity, increased risk and uncertainty; the expansion of the Environmental Information Systems through the incorporation of a forward looking component, applying SEIS principles; capacity building with Eionet, and the development of adequate methodological approaches that allow for a better integration of uncertainty, complexity risk, and stakeholder participation in forward looking assessments. We will make better use of existing processes, information and available methods and approaches in doing this work.

Continuing activities in 2010:

- supporting on-going EEA assessment processes, in particular SOER2010, through bespoke forward looking/scenario activities;
- building on information and experience to foster the use of scenario foresight methods and scenarios in strategic decision-making with Eionet and other stakeholders including the EPA network;
- continue improving information systems in this area through further implementation of SEIS Forward components; and

- continue strengthening strategic partnerships with relevant knowledge centres and research programmes in order to improve methodological approaches to the area, and extend it to business and non-governmental organisations when relevant.

New activities in 2010:

- to support OSCE and other players in the development of forward-looking assessment(s) on environment and security and other priority areas with neighbourhood countries and other European and other global regions.

4. Information Services and Communications

The demand for easy to understand up-to-date information has grown significantly. This demand comes from both political decision makers and from European citizens, who increasingly request full transparency of information from public bodies. On the other hand, researchers, policy analysts, experts or NGOs, and also informed citizens, request more and more detailed in-depth data and information. Alongside this development, the rapid evolution in new information technologies provides us with tools to communicate more effectively. Work in this area will focus on building the Shared Environmental Information System (SEIS); shaping strategic messages; communicating effectively with target groups and evaluating our impact.

General Objectives for 2009-2013

To reach as broad an audience as possible, the EEA will work closer with our institutional networks throughout Europe and with international and national media. The aim is to build a shared environmental information system for Europe to support sustainable development and the achievement of significant and measurable improvement in the environment, and to promote EEA strategic messages in a pro-active, responsive way and contribute to political and public agendas. This depends on effective two-way communication, engaging in dialogue with target groups to understand their information needs and to give the right information at the right time, so it has most impact.

4.1 Shared Environmental Information System

The EEA in close collaboration with Eionet member countries is supporting the European Commission i.e. the Group of 4 (DG Environment, Eurostat, Joint Research Centre and EEA) on the development of a detailed implementation plan for the Shared Environmental Information System (SEIS). The Group of 4 is closely cooperating on the development of European Data Centres for 10 environmental themes as part of the implementation of SEIS. The five EEA European Topic Centres are continuing to support the EEA on European data products and information services.

SEIS country visits have been organised by Eionet and EEA to assess the needs and current state-of-play of today's national information systems that will eventually become information nodes of SEIS as a decentralised information system. These visits will continue in 2010 as part of the outreach into the European Neighbourhood Programme.

The EEA together with Eionet is continuing to support the preparation of the Inspire directive 2007/2/EC implementing rules i.e. participation in thematic

working groups, user requirements surveys and consultation on selected use cases for data specification development.

The Commission's Communication "GMES: we care for a safer planet" (COM(2008)748) defines that EEA is expected to play an important role, in coordination with the Commission, in relation to the supervision of some services and coordination with user communities under the SEIS umbrella. The role is further described in the Council conclusions on GMES: "Towards a GMES programme" (16722/08). The Space Theme of the Framework Programme 7 of DG Enterprise includes a project for in-situ GMES data coordination for three years to be allocated to EEA. The European Commission published a proposal for a regulation of the European Parliament and of the Council (COM(2009)223) on the European Earth observation programme (GMES) and its initial operations 2011-2013.

The overall objective is to continue modernisation of the current environmental information system towards a network of decentralised systems providing online access to data that are managed as close to the source as possible and improving quality and the timeliness of information. EEA and Eionet will work together with the European Commission and other international stakeholders to implement the system. EEA will achieve this by building further on the systems and tools developed for reporting (Reportnet), the emerging initiatives related to e-Government, Inspire, GMES and the Global Earth Observation System of Systems (GEOSS). SEIS principles will be applied for moving towards web based state of the environment reporting. SOER2010 will be used as pilot.

A major challenge in 2010 will be to develop SEIS as a platform that can be used for two-way communication with the general public about the environment, enabling users to upload and share their information with others from the local to the global level.

Continuing activities in 2010:

- Further development of SEIS in close collaboration with the Group of Four and Eionet as a policy co-ordination framework for providing the knowledge base of EU environmental policy;
- European data management: coordination of data flows within Eionet, link to other data needed for EEA assessments i.e. statistics (link to Eurostat), and the management of the five thematic Environmental Data Centres in close collaboration with the Group of Four;
- European spatial data infrastructure: management and updating of the geospatial data hosted by EEA, in compliance with the Inspire directive and corresponding implementing rules; supporting the European Commission and member states with the implementation of Inspire i.e. for implementing rules related to annex II and III data specifications and related services in close collaboration with Eionet;
- Applications and thematic service development: maintenance of web-based data and information services (i.e. WISE, Eye on Earth, Corine Land Cover, Natura2000, GHG, etc.), clearinghouses (i.e. biodiversity), and the indicator management system (i.e. IMS);
- GMES and GEOSS: continuing to develop the EEA's role in GMES, in the management of services (especially the land component on the GMES Initial Operations (GIO), coordination of user needs (particularly in the climate change area) and for GMES core services, federation of user requirements and service provision i.e. on land monitoring and climate change, support to the governance structure of GMES, contribution to the development of the system of systems within the global initiative coordinated by the Group on Earth Observation (GEO);

- Further maintenance and enhancement of Reportnet tools including updating the reporting obligation database ROD and e-Reporting pilots; and
- System integration, maintenance and management: providing high quality, continuous (24/7) ICT services based on internal and external user demands, including the EEA geographic information system (GIS).

New activities in 2010:

- Coordination of the development and maintenance of new web-based data and information services of the European environmental data centres based on SEIS principles i.e. WISE marine, BISE biodiversity, Noise, EPRTTR, clearinghouse on climate change impacts, vulnerability and adaptation;
- Automatically fetching, synchronising, publishing and sharing national state of the environment information via the EEA website based on SEIS principles, using SOER2010 Part C process as first application;
- Promotion of open standards in collaboration with international organisations (i.e. OGC, CEN, ISO) and open file formats that improve the exchange of data for SEIS and the implementation of Inspire;
- Coordination of the in-situ component of GMES in close collaboration with Eionet, other relevant European networks (e.g. mapping, meteorology) and the European Commission (i.e. DGs Enterprise, Environment, JRC);
- Contribution to the GEOSS implementation on global land monitoring, advocacy of sustainability of observing systems, data sharing and data tagging; and
- Implementation of SEIS components as defined in the ENP assistance project to ENP South and East neighbours (see section 5.1).

4.2 Strategic communication

The EEA's communications efforts for 2010 will be consistent with the three 'overall communication goals' set out in the Agency's Communication Strategy (2007):

- Give Europe's decision-makers and citizens the independent information they need to make informed choices about the environment.
- Raise awareness on the environment by communicating our messages in a transparent, understandable way to as broad an audience as possible.
- Raise the profile of the Agency and its network as being the key providers of relevant and reliable information on Europe's environment.

These goals also lie at the core of the EEA Strategy 2009-2013.

Communications planning will be 'strategic' in the sense that specific communication outputs (i.e. products and activities) will carry specific messages and information (content) to specific target audiences to achieve specific goals (with a focus on the goals set out in the EEA Communication Strategy above). Thematic communication strategies (e.g. for climate change, SOER, biodiversity) will increasingly be used to this end.

The EEA will serve its primary target audiences of European decision- and policy-makers and influencers, while also reaching as broad an audience as possible. This will include enhanced efforts to research, and create relationships based on two-way dialogue with, potential users of our information to better understand

and meet their needs and expectations for the right information at the right time, thereby maximizing value and impact.

2010 will be an important year in cementing relations with key policy-making agents as the new European Parliament enters its first full calendar year and the new college of European Commissioners sets out its future agenda. The EEA will integrate its communication initiatives with the environmental agendas of the European Commission, European Parliament and the Presidency-in-office of the Council of Ministers. We will also expand our outreach to cover other (non-environmental) sectors engaged in policy-making that affects the environment, to meet their needs for environmental information where possible.

The EEA will work closely with its institutional networks (e.g. NRCs for Communication) and other relevant environmental communication networks throughout Europe (e.g. Europe Direct, DG COM).

Key milestones and outputs for 2010 include: Signals 2010, SOER 2010, messages for the International Year of Biodiversity, and communications on climate change.

EEA Signals 2010: In 2009, EEA successfully re-launched Signals as a snapshot of key environmental stories for the general public. Signals 2009 played an instrumental part in introducing the agency to new networks and organisations. Signals 2010 will have an even greater focus on clear communication for non-experts while building links to existing and future EEA products and processes such as the SOER, UN Atlas and the Biodiversity Communication Strategy. We are also working closely with our Eionet partners and the Europe direct network organised by DG Communications.

SOER 2010: The SOER 2010 Communication Strategy, approved in late 2009, will guide the implementation of all products and activities related to disseminating SOER content to identified target audiences and achieving SOER goals. This includes, among other points: pre-launch, launch and post-launch activities; user research with policy-making agents; and the development and dissemination of outputs with network support.

International Year of Biodiversity: In 2010, the Agency will increase its communication efforts on biodiversity. The Biodiversity Communication Strategy provides an overview of the planned outputs in the form of EEA reports as well as possible communication products at the Agency's disposal, while aligning our communication activities with those of the Commission and the CBD Secretariat. The strategy foresees a two-peak approach to our communication efforts, with the first peak in February around the launch of Signals, and the second in September around the launch of the assessment report.

Climate change: The communication activities on climate, reflected in a separate Climate Communication Strategy, will build on the work started in 2009 in the run-up to UNFCCC COP15 in Copenhagen. The Climate Communication Strategy will take into account the outcome of the international climate conference, as well as the EEA's work contributing to the implementation of the climate change and renewable energy (CARE) legislative package.

Specific communication activities

Media

The EEA will maintain and continue to develop its core network of journalists across Europe, update the media database, organise the effective dissemination of EEA outputs, organise media briefings with selected journalists and ensure visibility of the Agency at environmental exhibitions and events in line with the activities and projects described in the AMP across the EEA. Special media efforts will be made for the following key reports: Signals, SOER, TERM and the GHG emissions reports.

Public awareness-raising

We will continue our efforts to raise environmental awareness and the profile of the EEA through direct interaction with the public, as well as collaborating with various networks. This entails participation in international, national and local events, such as those related to the Spanish and Belgian EU presidencies, and through the creation of EEA outreach events (out-of-house, in-house or on the web). It will also involve promotional activities enhancing the outreach of SOER 2010. The EEA will ensure that its public awareness-raising activities are strategically tailored to underline the role of the Agency as a key provider of environmental information during the international year of biodiversity.

Meeting information needs

In line with the EEA Communication Strategy, we will continue to ensure that the EEA further establishes itself as a key place for European citizens requiring information on the environment. The EEA will continue to network with information centres from other international organisations and ministries/EPAs in EEA member countries to further explore ways to work together and promote each others' information products, including educational material.

Website

The website is the key communication channel for the EEA but it will only be effective if it is used by target groups. In 2010, the EEA will continue to improve its website identity, user-friendliness and navigation, with a focus on the EEA homepage and thematic websites. Particular attention will be paid to the integration of SOER 2010 information. The use of web-tailored products such as articles and multimedia will be enhanced to maximise outreach and the impact of EEA messages. The EEA will continue to produce audiovisuals on a regular basis, including short and snappy videos, web animations and audio products. We will pursue sharing audiovisuals with other international organisations and member countries. Efforts will also be made to disseminate EEA information via external online fora and networks.

EEA traditional publications (reports) will gradually be moved from paper to digital editions, optimised for reading on the Web or downloaded for off-line reading in various formats for eBook readers. The translations in 2010 will focus on Signals and various SOER products - the key product being the SOER 2010 Synthesis Report in all EEA languages. The development of multilingual versions of some Web applications (e.g. data viewers) will also be considered.

Communicating with youth

Communications with younger audiences will be strengthened by tying the EEA's main messages for various outputs suitable for children and broader education purposes. A consistent production series of videos and animated presentations will be developed. Eco Agents will continue to be developed as our educational 'flagship' targeted at children. In addition to outreach to schools, the links we established in 2009 with broader educational and training (life-long learning) networks will be further consolidated. The EEA will also link its information to relevant educational processes (e.g. UN Decade for Education on Sustainable

Development, UNECE ESD Strategy, EU Education and Training 2010 Work Programme).

5. EEA governance and partnerships

This area of work addresses the formal governance activities with the EEA management board, scientific committee and Eionet partners as well as the coordination of relations with the various partners and networks with whom we work to help develop our work programme and achieve our mission. Many of the activities and relationships are laid down in the EEA regulation; others are being developed as our work programme evolves and the needs for networking and partnerships with a broader range of actors relevant to the development of environmental policy and its implementation become clear.

General objectives for 2009 – 2013

The EEA aims to provide efficient and effective support to its management board, bureau and scientific committee to ensure that they are well informed for their decision making and advisory duties. The EEA also aims to further develop its relationships with Eionet and other partners/networks in Europe and internationally to ensure the economic, efficient and effective delivery and use of policy relevant information on Europe's environment and Europe's impact on the global environment.

5.1 Governance and country network support

The growing recognition of the Agency as a key provider of timely, targeted, reliable and relevant environmental data in Europe requires an increased attention to its governance and network support. We will need to sustain and strengthen the cooperation with our main clients and partners in the countries which are part of Eionet and beyond.

The increasing number of partnerships and international activities the EEA is involved in will necessitate consolidating further the close relations with the members of the EEA Management Board, the Scientific Committee and the NFP/Eionet group. To facilitate this, the EEA will need to continue to strengthen the smooth administration of the stakeholders meetings and regular contacts with them, as well as to ensure their involvement in the provision of advice and decision-making in respectively the strategic scientific and operational development of the EEA work programme.

Following a major transformation in the EEA Scientific Committee at the start of 2009, the EEA will be looking beyond the established support to the regular meetings to establish closer links to research communities across Europe and into better utilisation of RTD project results.

With regard to the cooperation with countries from the West Balkan region, the EEA will be seeking through the new funding provided by the IPA (Instrument for Pre-Accession) Programme to further strengthen the national networks and harmonise their work with the EEA's processes in order to prepare the grounds for their future EEA membership. We will also need to be ready to respond to countries beyond the current Eionet seeking participation in the EEA work programme, possibly as a first step towards membership.

To meet the demands and expectations of all countries participating in Eionet, support SEIS implementation within the countries and improve mutual

understanding of EEA and national activities, EEA will also build up its networking and contacts with the national Eionet partners through further development of EEA country desk officer activities, reinforced by an enhanced network coordination group and increased networking activities by all staff across the Agency. Additional support for the West Balkan countries will be provided under an Instrument for Pre-Accession grant from DG Enlargement.

Regarding cooperation with the EU neighbour countries (both East and South) under the European Neighbourhood Policy and with the Russian Federation under the Strategic Partnership (financially assisted by the European Neighbourhood Policy Instrument: ENPI), the Agency will be promoting through the development of activities and networking the gradual extension of SEIS principles to these regions. The work will build further on the previous cooperation and focus on the use of tools, concepts, experience and knowledge developed within EU and EEA to improve the quality and availability of data, information, assessments and reporting from and about these countries as well as to build capacities in these areas at national level.

Continuing activities in 2010:

- provision of secretariat support for up to three Management Board meetings, three Bureau meetings and an annual MB seminar;
- provision of secretariat support for up to three Scientific Committees and Scientific Committee member participation in other meetings and events;
- provision of secretariat support for up to three NFP/Eionet meetings and other NFP working group meetings;
- provision of support/coordination of EEA activities with countries, NFPs and ETCs including the EEA Country Desk Officer network.

New activities in 2010:

- implementation of the various SEIS components including capacity building as defined in the ENP assistance project to ENP South neighbours in support to the Horizon 2020 objectives for the Mediterranean region; and
- implementation of the various SEIS components including capacity building as defined in the ENP assistance project to ENP East neighbours and Russian Federation.

5.2. European and international cooperation and networks

The Agency works through an increasing number of partnerships and networks to improve its own capacities and capabilities and to support others in their endeavours. These range from European to International and across the science-policy bridge.

At the European level, the EEA will continue to work for mutual benefit with networks such as the network of Heads of the European Environmental Protection Agencies (EPA Network) and Heads of European Nature Conservation Agencies (ENCA Network) as well as the Directors Meeting for Environment Statistics and Accounts (DIMESA) coordinated by Eurostat. The EEA will also continue to provide the secretariat for EPA Network as requested.

The EEA has the mandate to be active in the dissemination of information on the results of relevant environmental research and to do this in a form which can best assist policy development. Together with various international and European Community bodies, Eionet and the Scientific Committee, efforts will be made to establish a networking structure in order to be able to maintain links to the

research and scientific community, disseminate and utilise the results, particularly information and data, from research activities at international, European and national levels, in a more systematic way.

In order to better perform its mandate and assess the main environmental threat in a transboundary and global context, the EEA is working with a wide range of international and regional bodies and organisations as well as with bodies in countries beyond its membership. Of particular relevance are the partnerships which the EEA has built over the years with UNEP and other relevant UN bodies and structures (UNECE, UNDP, UN GA, WHO, etc), ASEAN and bodies of ASEM. In 2010, EEA intends to consolidate its cooperation with other key international players such as OECD, OSCE as well as with regional structures and bodies (i.e. Arctic Council, UNEP/MAP, Black Sea and Caspian Sea Secretariats, Regional Environmental Centres across the pan-European region, etc.) and countries including India and China.

With the support of Eionet partners, EEA will continue to systematically promote to other countries in Europe and beyond, its networking model and tools as well as standards and methodologies applied in the EU and EEA area. This will be done through the EcoInformatics network which now involves Canadian and Chinese experts as well as those from Europe and the US (especially USEPA).

Throughout the strategy, specific attention will be given to regional networking in the Arctic and Mediterranean regions for which partnerships with key players and countries in the EEA and outside will be strongly enhanced and better coordinated. There will also be a strengthened cooperation with the conventions and institutional bodies of the Alps, Danube, Carpathians, Caspian and Central Asia.

Continuing activities in 2010:

- contributing to the EPA Network meetings and interest groups as member agency and supporting the EPA secretariat hosted at the EEA;
- contributing to ENCA Network meetings and relevant interest groups;
- continuing the dialogue with the Commission with Central Asia countries to identify modalities for future cooperation and gradual extension of SEIS under the framework of EU-Central Asia Strategy;
- partnerships and cooperation with international and regional bodies, in particular UNEP, UNECE, WHO;
- cooperation with regional bodies, such as UNEP/MAP (Mediterranean Action Plan) Arctic Council and Caspian Sea Secretariat;
- cooperation with organisations and networks beyond Europe, such as, ASEF (Asia-Europe Environment Forum of Asia-Europe Foundation), the Central Asia Conference and EcoInformatics (including collaboration with US EPA); and
- exchange of information and experiences with countries beyond Europe, for example, Central Asia republics, China, Canada, India.

6. EEA internal management and administration

EEA staff and management activities, quality control of processes, products and services, administrative and building services are brought together under one strategic area in the EEA Strategy 2009-2013. This is to help ensure that core horizontal activities are planned, implemented, monitored and reported on more coherently and consistently to ensure the economic, efficient and effective delivery of the EEA's operational work programme and as part of the sound financial management and data protection required for all EU Community bodies.

The EEA ensures that it has the necessary skills and expertise to provide this infrastructure and deliver of its operational work programme through the recruitment of appropriately qualified staff and the tailored training and development of all staff. Expertise in multi-disciplinary working and management as well as in communication remains a high priority for 2010. The EEA Personnel Policy implemented in 2009 provides the basis for staff development.

The EEA premises and IT infrastructure in Copenhagen are maintained and developed so that staff can work effectively and meetings run efficiently and comfortably even when the buildings are at full capacity.

In 2010 the EEA will ensure that it manages its physical resources and reflects closely on the value and need for travelling prior to organising meetings and missions so as to minimise the negative impacts on the environment and increasingly set an example for other organisations to follow.

General objectives for 2009-2013

The Agency aims to provide economic, efficient and effective management and administration of its work programme and resources, financial and human, through a total quality management approach to planning, execution, monitoring, control and reporting of activities based on a balanced scorecard, and through the recruitment, skills training and competency development of staff.

6.1 EEA operations

This area of the work programme includes general management activities covering preparation of the five-year strategy and annual work programmes, management of the EEA by the senior management team to deliver the current strategy, line management using the EEA Career Development Cycle, management of operational and cross-EEA activities and general support for these activities and staff training and development. All staff are involved in this work area, to achieve the coordination and communication needed to ensure the quality, efficiency and effectiveness of the EEA's work. Internal communications with staff through the Staff Committee and staff meetings are included here.

Efforts to improve the internal communication will be strengthened. The focus will be on both short and long term objectives. Short term objectives include ongoing communication activities enabling staff to work together and engage in activities across their usual working areas; long term objectives address strategic communication issues involving analyses, forward looking initiatives and involvement of staff across the agency.

6.2 Effectiveness evaluation, quality management and operational services

According to the EEA's quality statement, the Agency strives towards excellence and outstanding results and continuously works towards improved quality of the information being offered and of the underpinning data, as well as for increased efficiency and effectiveness. To reach these goals, the EEA has implemented a number of management and control systems and operational services. The activities under this heading cover the Environmental Management and Audit Scheme (EMAS), the Quality Management System (QMS), the Internal Audit Capability, Data Protection measures and Document Management, as well as IT and Facilities management services.

Continuing activities in 2010:

- continuing to strive towards minimizing the EEA's environmental impacts and run the EEA as a carbon neutral organisation, making use of carbon offsetting as needed. Apart from minimizing the environmental impacts of travelling, this covers also green facilities management and optimising the resource use of IT operations;
- strengthening the existing risk management structures to improve the EEA's planning and decision making processes. A more structured and proactive management of risks will help becoming more dynamic and forward-looking and reinforce the integrated internal control framework, thereby contributing towards achieving a positive statement of assurance;
- following up the positive audit of the QMS by improving the system based on the recommendation of the European Commission's Internal Audit Service;
- evaluating the impacts of its products and services on an ongoing basis, as a part of the QMS and the five-yearly external evaluations of the EEA;
- presenting key performance indicators drawn from the output of the data gathered in the quarterly resource hearings as input to the Balanced scorecard;
- introducing new measures for Data protection in line with recommendations of the European Data Protection Officer, including maintenance of an inventory of relevant data processing operations;
- implementing the new IT strategy that is under development in 2009;
- implementing the Business Continuity Management system, being designed in 2009;
- consolidating the operation of the Document Management System launched in 2009; and
- providing IT infrastructure, support and technical developments for Agency's internal management, networking and public systems.

The effectiveness evaluation is conducted as a continual improvement project within the EEA Quality Management System. The EEA will continue to evaluate whether the information and key messages set out in its products and services reach designated target groups, assess their added value to the target groups and provide feedback to EEA staff. The EEA will continue to regularly monitor the media, policy documents and reports, and scientific publications for quotes and other references and use this knowledge to improve outreach and impact.

6.3 Administrative services

Administrative services covers human resource management, budget planning, implementation and reporting/accounting, legal services, internal administrative and IT systems, logistics and building support.

To provide many of these services in line with the staff and financial regulations, the Agency has adopted a range of on-line systems either provided by the Commission or developed in-house. They include systems for management planning, budget and financial control, accounting, inventory control human resource management, mail registration, document management and time registration. In addition the EEA has developed and maintains up-to-date an advanced intranet providing online access to the information required for internal management and administration of the EEA. All these systems are kept under review and adapted or replaced as appropriate. In 2010 the remaining implementing rules under the Staff Regulations will be put forward for Management Board adoption and links between measures, resources and results made more explicit.

V. EEA 2010 budget outline

The annual budget of the EEA follows a clearly defined cycle consisting of two main phases. The first phase is a specification of the budgetary needs as part of the European Commissions budgetary preparations. The table below is a first breakdown of the total budget presented in the so-called Preliminary Draft Budget (PDB). This is transmitted to the budgetary authorities for approval in a second phase – i.e. the European Council and the European parliament, at which point the final budget envelope is approved and any changes to the EEA 2010 budget made accordingly.

The draft budget includes three main titles that divide expenditures into three categories: staff expenditure, infrastructure and operating expenditure. The second table is an attempt to distribute total expenditures across all EEA activities (i.e. direct costs and overhead).

<u>PRELIMINARY DRAFT BUDGET</u>	
<u>EXPENDITURE</u>	Budget Forecast 2010
-	
Title 1	
Staff Expenditure	
11 Salaries & allowances	19,566,330.00
12 Expenditure relating to Staff recruitment	350,000.00
13 Mission expenses	910,000.00
14 Socio-medical infrastructure	279,480.00
142 Professional development	500,000.00
16 Social Services	5,000.00
Title 1 - Total	21,610,810.00
Title 2	
Infrastructure and operating expenditure	
21 Rental of buildings and associated costs	2,589,080.00
22 Movable property and associated costs	265,000.00
23 Current administrative expenditure	600,000.00
24 Entertainment and representation expenses	12,000.00

25 EEA Governance	230,000.00
26 Environmental management of the agency	10,000.00
Title 2 - Total	3,706,080.00
Title 3	
Operating expenditure	
33 Resources	11,747,000.00
34 Strategic actions	3,326,703.00
Title 3 - Total	15,073,703.00
TOTAL EXPENDITURE	40,383,593.00

Total expenditures across all EEA activities (i.e. direct costs and overhead).

Environmental issues	
Air quality 1.1	1,539
Air pollutant emissions 1.2	1,019
Biodiversity 1.3	2,252
Greenhouse gas emissions 1.4	1,641
Freshwater 1.5	1,294
Marine 1.6	1,019
Cross-cutting themes	
Climate change impacts 2.1	927
Vulnerability and adaptation 2.2	815
Ecosystem assessments 2.3	846
Environment and health 2.4	102
Maritime 2.5	153
SCP and waste 2.6	2,283
Land use 2.7	2,619
Agriculture and forestry 2.8	703
Energy 2.9	520
Transport 2.10	540
Integrated environmental assessment	
State of the Environment and Outlook Report and related activities 3.1	1,488
Regional and global assessment 3.2	438
Decision support 3.3	306
Economics 3.4	204
Strategic futures 3.5	1,233
Information services and communications	
Shared environmental information system 4.1	5,666
Communications 4.2	2,211
EEA governance and partnerships	
Governance and country network support 5.1	1,162
European and international cooperation and networks 5.2	204
EEA internal management and administrations	
EEA operations 6.1	2,422
Quality management and control 6.2	204
Administrative and building services 6.3	6,573
Total:	40,384

VI. List of acronyms and abbreviations

ASEAN	Association of Southeast Asian Nations
ASEF	Asia-Europe Foundation
ASEM	Asia – Europe Meeting
BAP	Biodiversity Action Plan
CAFE	Clean Air for Europe
CBD	Convention on Biological Diversity
CEHAPE	Children's Environment and Health Action Plan for Europe
CLRTAP	Convention on Long-range Transboundary Air Pollution
COP	conference of the parties
CORINE	Coordination of Information on the Environment
DG	Directorate General
DG ENV	Directorate General for Environment of the European Commission
DG SANCO	Directorate General for Health and Consumer Protection of the European Commission
DIMESA	Directors' meeting for environmental statistics and accounts
E&H	Environment and health
EAP	Environment Action Programme
EBD	environmental burden of disease
EC	European Commission
ECDC	European Centre for Disease Prevention and Control
ECMWF	European Centre for Medium-Range Weather Forecasts
EEA	European Environment Agency
EEAC	European Environment Advisory Committee
EEC	European Economic Community
EFTA	European Free Trade Association
EHIS	Environmental Health Information Services
EIONET	European environment information and observation network
EMAS	Eco-Management and Audit Scheme
EMEP	European Monitoring and Evaluation Programme
EMEP SB	Steering Body of the European Monitoring and Evaluation Programme' under the Convention on Long-range Transboundary Air Pollution
EMODNET	European Marine Observation and Data Network
ENEA	European Network of Environmental Authorities
EPA	Environmental Protection Agency
EPER	European pollutant emission register
E-PRTR	European Pollutants Release and Transfer Register
ESD	Education for sustainable development
ESPON2013	European observation network for territorial development
ETC/ACC	European Topic Centre on Air and Climate Change
ETC/BD	European Topic Centre on Biological Diversity
ETC/RWM	European Topic Centre on Resource and Waste Management
ETC/WTR	European Topic Centre on Water
ETR	environmental tax reform
ETS	Emissions Trading Scheme
EU	European Union
EUCC	European Union Coastal Conservation
EUNIS	European Nature Information System
EURECA	European Ecosystem Assessment
Eurostat/ESTAT	Statistical Office of the European Communities
GDP	gross domestic product
GEO	Global Environment Outlook
GEO	Group on Earth Observations
GEOSS	Global Earth Observation System of Systems
GHG	greenhouse gas
GHS	Globally Harmonized System
GMES	Global Monitoring for Environment and Security

GMOs	Genetically modified organisms
HELCOM	Helsinki Commission - Baltic Marine Environment Protection Commission
ICT	Information and Communication Technology
IEA	International Energy Agency
IHPA	International HCH and Pesticides Association
IMS	Indicator Management Systems
INSPIRE	Infrastructure for Spatial Information in Europe
IOMC	Inter-Organization Programme for the Sound Management of Chemicals
IPCC	Intergovernmental Panel on Climate Change
IPPC	Integrated Pollution Prevention and Control
IRENA	Indicator reporting on the integration of environmental concerns into agricultural policy (in this context)
JRC	Joint Research Centre (European Commission)
LIFE	EU Financial Instrument for the Environment
LRTAP	Long-range Transboundary Air Pollution
MA	Millennium ecosystem Assessment
MAP	Mediterranean Action Plan
MED POL	pollution monitoring and assessment programme - Mediterranean region
NAMEA	National Accounting Matrices including Environmental accounts
NEC	National Emission Ceilings
NESIS	Network to enhance a European Environment Shared and Interoperable Information System
NFP	National Focal Point
NGO	Non-governmental organization
OECD	Organisation for Economic Cooperation and Development
OSCE	Organisation for Security and Co-operation in Europe
OSPAR	Convention for the Protection of the Marine Environment of the North-East Atlantic
PRELUDE	PRospective Environmental analysis of Land Use Development in Europe
PRTR	Pollutant Release and Transfer Register
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RTD	Research and Technological Development
SAICM	Strategic Approach to International Chemicals Management
SCOUT	Sustainable Consumption and OUTlook and scenarios for Europe
SCP	sustainable consumption and production
SD	sustainable development
SDS	safety data sheets
SEBI	Streamlining European Biodiversity Indicators
SEEAW	System of Environmental-Economic Accounting for Water
SEIS	Shared Environmental Information System for Europe
SOER	The European Environment – State and outlook
TEEB	The Economics of Ecosystems and Biodiversity
TERM	Transport and environment reporting mechanism
UN	United Nations
UNCSD	United Nations Commission on Sustainable Development
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
USEPA	The US Environmental Protection Agency
WCMC	World Conservation Monitoring Centre
WFD	Water Framework Directive
WHO	World Health Organisation
WISE	Water Information System for Europe
WTO	World Trade Organisation