Reviewing the coherence and effectiveness of implementation of multilateral biodiversity agreements in Estonia

Kaja Peterson, Piret Kuldna, Plamen Peev, Meelis Uustal
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<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEWA</td>
<td>Agreement on the Conservation of African-Eurasian Migratory Waterbirds</td>
</tr>
<tr>
<td>Art.</td>
<td>Article</td>
</tr>
<tr>
<td>ASCOBANS</td>
<td>Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas</td>
</tr>
<tr>
<td>Cartagena Protocol</td>
<td>Cartagena Protocol on Biosafety to the Convention on Biological Diversity</td>
</tr>
<tr>
<td>CBD</td>
<td>Convention on Biological Diversity</td>
</tr>
<tr>
<td>CEPA</td>
<td>Communication, Education, Participation and Awareness (Programme)</td>
</tr>
<tr>
<td>CF</td>
<td>Cohesion Fund (EU)</td>
</tr>
<tr>
<td>CHM</td>
<td>Clearing-House Mechanism of the Convention on Biological Diversity</td>
</tr>
<tr>
<td>CITES</td>
<td>Convention on International Trade of Endangered Species</td>
</tr>
<tr>
<td>CMS</td>
<td>Convention on Migratory Species of Wild Animals</td>
</tr>
<tr>
<td>COP</td>
<td>Conference of the Parties</td>
</tr>
<tr>
<td>EAFRD</td>
<td>European Agricultural Fund for Rural Development</td>
</tr>
<tr>
<td>EIA</td>
<td>Environmental Impact Assessment</td>
</tr>
<tr>
<td>EIC</td>
<td>Environmental Investment Centre</td>
</tr>
<tr>
<td>EMFF</td>
<td>European Marine and Fisheries Fund</td>
</tr>
<tr>
<td>ERDF</td>
<td>European Regional Development Fund</td>
</tr>
<tr>
<td>ERDP</td>
<td>Estonian Rural Development Plan</td>
</tr>
<tr>
<td>ESF</td>
<td>European Social Fund</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>EUROBATS</td>
<td>Agreement on the Conservation of Populations of European Bats</td>
</tr>
<tr>
<td>GEF</td>
<td>Global Environment Facility</td>
</tr>
<tr>
<td>GIS</td>
<td>Geographical Information System</td>
</tr>
<tr>
<td>GMO</td>
<td>Genetically Modified Organism</td>
</tr>
<tr>
<td>IA</td>
<td>Impact Assessment</td>
</tr>
<tr>
<td>IBA</td>
<td>Important Bird Area designated by BirdLife International</td>
</tr>
<tr>
<td>IUCN</td>
<td>International Union for Conservation of Nature</td>
</tr>
<tr>
<td>LMO</td>
<td>Living Modified Organism</td>
</tr>
<tr>
<td>MEA</td>
<td>Multilateral Environmental Agreement</td>
</tr>
<tr>
<td>Nagoya Protocol</td>
<td>Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity</td>
</tr>
<tr>
<td>Natura 2000</td>
<td>Network of SPAs and SCIs/SACs in the European Union</td>
</tr>
<tr>
<td>NBSAP</td>
<td>National Biodiversity Strategy and Action Plan</td>
</tr>
<tr>
<td>NCA</td>
<td>Nature Conservation Act</td>
</tr>
<tr>
<td>NCDDP</td>
<td>Nature Conservation Development Plan</td>
</tr>
<tr>
<td>NCSA</td>
<td>National Capacity Needs Self-Assessment</td>
</tr>
<tr>
<td>NEAP</td>
<td>National Environmental Action Plan</td>
</tr>
<tr>
<td>NES</td>
<td>National Environmental Strategy</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-governmental Organisation</td>
</tr>
<tr>
<td>NP</td>
<td>National Park</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>Ramsar Convention</td>
<td>Convention on Wetlands of International Importance especially as Waterfowl Habitat</td>
</tr>
<tr>
<td>RMK</td>
<td>State Forest Management Centre</td>
</tr>
<tr>
<td>SAC</td>
<td>Special Area of Conservation, designated under the EU Habitats Directive (92/43/EEC)</td>
</tr>
<tr>
<td>SBSTTA</td>
<td>Subsidiary Body on Scientific, Technical and Technological Advice</td>
</tr>
<tr>
<td>SCI</td>
<td>Site of Community Importance, designated under the EU Habitats Directive (92/43 EEC)</td>
</tr>
<tr>
<td>SDA</td>
<td>Sustainable Development Act</td>
</tr>
<tr>
<td>SEA</td>
<td>Strategic Environmental Assessment</td>
</tr>
<tr>
<td>SEI Tallinn</td>
<td>Stockholm Environment Institute Tallinn Centre</td>
</tr>
<tr>
<td>SIDA</td>
<td>Swedish International Development Cooperation Agency</td>
</tr>
<tr>
<td>SPA</td>
<td>Special Protection Area, designated under the EU Birds Directive (79/409/EEC)</td>
</tr>
<tr>
<td>STRP</td>
<td>Scientific and Technical Review Panel</td>
</tr>
<tr>
<td>UNEP</td>
<td>United Nations Environment Programme</td>
</tr>
<tr>
<td>UNEP WCMC</td>
<td>UNEP World Conservation Monitoring Centre</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organisation</td>
</tr>
<tr>
<td>WTP</td>
<td>Willingness-To-Pay</td>
</tr>
</tbody>
</table>
Executive Summary

The current report summarises the review of effective implementation of the cluster of biodiversity-related multilateral environmental agreements (MEAs) at the national level in the party country of the Republic of Estonia. The MEAs addressed are:

- Convention on Biological Diversity (CBD),
- Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention),
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES or Washington Convention), and
- Convention on Migratory Species of Wild Animals (CMS or Bonn Convention).

The review methodology was developed by the Stockholm Environment Institute Tallinn Centre (SEI Tallinn) and commissioned by the United Nations Environment Programme (UNEP) Division of Environmental Law and Conventions in 2011. The testing of the methodology was carried out in 2013 and funded by the Stockholm Environment Institute through its Programme Support fund provided by Swedish International Development Cooperation Agency (SIDA).

The review system for coherent and effective implementation of multilateral biodiversity agreements is based on 15 categories, addressing two types of effectiveness: objective-led and implementation effectiveness. Each category formulates a single review question together with several criteria and benchmarks for scoring the implementation of the conventions. The overall assessment of the cluster of MEAs is based on the results of the 15 review categories with implementation effectiveness categorised as high, moderate or low. The review methodology has the most features typical to a compliance and performance audit, and is less comparable to a financial audit.

The review of the coherence and effectiveness of implementation of the four global biodiversity agreements concluded that Estonia scored strong implementation in the category ‘Cross-border cooperation’. The other 14 categories performed at the moderate level, including the category ‘Adequate financing of the implementation’, which, however, should be taken with caution, since there is not a specific budget for implementation of the MEAs, but rather a general budget for nature conservation. The category ‘Coordination across the cluster of MEAs’ is relatively effective within the environmental sector, but should be made more effective across sectors and institutions. The overall implementation effectiveness was evaluated to be relatively high as none of the categories resulted in weak scores.

It is concluded that Estonia has taken the approach of consolidating the governance and financing of implementation of nature conservation, which on one hand provides good governance via optimising the use of human and financial resources, but on the other hand makes the evaluation of the implementation effectiveness of the biodiversity conventions difficult, since the targets and resources are embedded and not directly visible in the system.

The study also provides recommendations for the application of the review methodology. The study results indicate that the 15 review categories, benchmarks and criteria are appropriate for this kind of evaluation and could be further adapted to arising needs.
INTRODUCTION

Multilateral environmental agreements (MEAs) are widespread instruments of environmental governance; the first MEAs were signed in the 19th century. Although international environmental treaties have contributed to multiple achievements, the overall effectiveness of MEAs is still under question. In spite of all the benefits (improved knowledge of the issues, a considerable dissemination of best practices, substantially-improved monitoring, national action programs, networks and numerous implemented projects), the environmental situation itself has continued to worsen. One of the most alarming trends is the loss of biodiversity: genetic resources, species and ecosystems. Rockström and his colleagues have provided evidence that biodiversity loss has been the single most severe change among the nine areas of environmental degradation and has exceeded the safe operating space for humanity. The United Nations has called on states and international organisations to join in action to reverse the processes that lead to further environmental degradation. According to UNEP, by 2009 there were over 280 MEAs completely dedicated to environmental protection, from biodiversity to climate change, and from desertification to hazardous waste and chemicals.

Effectiveness of implementing MEAs depends on several aspects, but most notably on good governance. International treaties are regarded as most effective when they:

• state **precise goals, criteria and benchmarks** for assessing progress;
• are designed to be **flexible and adaptable** to changes in the problem and context;
• have **formal procedures** to ensure new scientific information is taken up quickly; and
• **systematically collect information about the effectiveness** of the treaty and review this information regularly.

In 2011, UNEP commissioned SEI Tallinn to develop a methodology for reviewing the implementation effectiveness of two thematic clusters of MEAs at the national level (biodiversity and chemicals/waste). The aim of UNEP was to improve the evidence base for countries’ performance in complying with the provisions of the MEAs in order to enhance knowledge on the links between global environmental degradation and national implementation of MEAs. The methodology was also aimed to facilitate understanding of whether fulfilling the obligations under the different MEA regimes was sufficient for countries to address properly their particular environmental concerns, whether countries were doing enough to address them, what exactly the gaps in the national implementing capacities were and what the results of a cost-benefit analysis of MEA implementation at the national level would be.

The SEI Tallinn team of experts developed the review methodology of MEAs on behalf of UNEP in close cooperation with the State Audit Office of Estonia and the Secretariat of the Working Group on Environmental Auditing of the International Organisation of Supreme Audit Institutions (INTOSAI). In order to test the methodology, two country case studies were launched in January 2013.

Two countries, Estonia, a European Union country of 1.3 million people in north Europe, and Tanzania, an East African country of 44.9 million people, became the testing grounds of the methodology. The aim of the case studies was to collect empirical data on the usability of the review methodology from these countries, which differ in terms of size, location, population, climate, political framework, biogeographical region and other aspects that influence the state of biodiversity.

The cluster of four global biodiversity conventions were selected for testing: CBD, Ramsar Convention,
CITES and CMS. There is obvious potential for cooperation and synergies between them. The CBD and CITES both address the threat of extinction of wild plants and animals; thus, their aims are clearly complementary and their scope overlapping. However, they are shaped by different political and legal contexts and employ divergent strategies for biodiversity conservation. There are also strong links between the Ramsar Convention, which concerns the habitats of wetland species, especially waterfowl, and CMS, which deals with migratory species. Migratory species in general are also included in CBD. A recent report which analysed the potential for enhancing synergies between the biodiversity-related conventions also developed a set of options for realising these synergies.

This report summarises the results of the testing of the review methodology on the cluster of biodiversity conventions in Estonia and provides recommendations for both advancing the implementation of the MEAs and for the application of the methodology. The results of testing the review methodology in Tanzania are presented in a separate report.

This report is structured as follows:

- **Chapter 1** gives the country profile and general framework for the nature conservation in Estonia;

- **Chapter 2** introduces the review methodology;

- **Chapter 3** describes the main objectives and concept per each of the MEA;

- **Chapter 4** provides the documentary evidence on the implementation of the four conventions by 15 review categories; and

- **Chapter 5** summarises the overall assessment of implementation of the cluster of biodiversity MEAs, and conclusions on the applicability of the methodology.

The study was carried out over the period January–December 2013 by senior researchers of the Stockholm Environment Institute’s Tallinn Centre: Dr Kaja Peterson, Piret Kulina, Dr Plamen Peev and Meelis Uustal. Funding for the study came from the Stockholm Environment Institute’s Programme Support Fund provided by SIDA.

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7 UNEP-WCMC, 2012.
1 GENERAL FRAMEWORK

1.1 COUNTRY PROFILE: ESTONIA

Name: The Republic of Estonia
Territory: 45,227 km²
Population: 1,286,479 (as of 1 Jan 2013)
Population density: 29/km²
Polity: Parliamentary democracy; member of the European Union since 1 May 2004
Human Development Index (HDI): 0.846 (2012), very high
Gini coefficient: 31.9 (2013), medium
Corruption Perceptions Index: Rank: 32/176; score: 64/100 (2012)
Major human pressures on nature: Air and water pollution and waste generation from fossil-fuel (oil-shale) based-energy sector; water pollution from agriculture; decreasing forest land due to expansion of agriculture, housing and industry.¹⁰

Information relevant for biodiversity-related conventions:

<table>
<thead>
<tr>
<th>Biogeographical region</th>
<th>Boreal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land cover</td>
<td>According to CORINE Land Cover (2006)(^{11}):</td>
</tr>
<tr>
<td></td>
<td>Agricultural land 14 740 km(^2) (32.2% of Estonian territory)</td>
</tr>
<tr>
<td></td>
<td>Forests 21 087 km(^2) (45.7%)</td>
</tr>
<tr>
<td></td>
<td>Mires 3 059 km(^2) (6.7%)</td>
</tr>
<tr>
<td></td>
<td>Shrubland 2 937 km(^2) (6.4%)</td>
</tr>
<tr>
<td></td>
<td>Inland waters 2 201 km(^2) (4.8%)</td>
</tr>
<tr>
<td></td>
<td>Parks and gardens 600 km(^2) (1.3%)</td>
</tr>
<tr>
<td></td>
<td>Natural grasslands 562 km(^2) (1.2%)</td>
</tr>
<tr>
<td></td>
<td>Coastal habitats 391 km(^2) (0.9%)</td>
</tr>
<tr>
<td></td>
<td>Artificial areas 371 km(^2) (0.8%)</td>
</tr>
<tr>
<td></td>
<td>Marine waters 24 990 km(^2)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Share of protected area</th>
<th>As of 2013(^{12}):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Land area: 785 373 ha 18%</td>
</tr>
<tr>
<td></td>
<td>Waters: 753 530 ha 28%</td>
</tr>
<tr>
<td></td>
<td>Land and water areas together under protection 1 538 903 ha 22% of Estonian territory</td>
</tr>
<tr>
<td></td>
<td>Ramsar sites 304 778 ha(^{13}) 19.8% of protected areas</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Land ownership of protected areas</th>
<th>As of 2011, the land ownership was divided as follows(^{14}):</th>
</tr>
</thead>
<tbody>
<tr>
<td>State property</td>
<td>63%</td>
</tr>
<tr>
<td>Private property</td>
<td>23%</td>
</tr>
<tr>
<td>Municipal property</td>
<td>1%</td>
</tr>
<tr>
<td>Public + mixed</td>
<td>1%</td>
</tr>
<tr>
<td>Unregistered</td>
<td>12%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Protected areas of IUCN management categories</th>
<th>As of 2011, the area of the IUCN categories was as follows(^{15}):</th>
</tr>
</thead>
<tbody>
<tr>
<td>I a (Strict Nature Reserve)</td>
<td>7 958 ha</td>
</tr>
<tr>
<td>I b (Wilderness Area)</td>
<td>197 722 ha</td>
</tr>
<tr>
<td>II (National Park)</td>
<td>none</td>
</tr>
<tr>
<td>III (Natural Monument or Feature)</td>
<td>1 165 ha</td>
</tr>
<tr>
<td>IV (Habitat/Species Management Area)</td>
<td>180 323 ha</td>
</tr>
<tr>
<td>V (Protected Landscape/Seascape)</td>
<td>160 739 ha</td>
</tr>
<tr>
<td>VI (Protected area with sustainable use of natural resources)</td>
<td>966 040 ha</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specific to the country habitats that need special conservation attention</th>
<th>Semi-natural habitats: alluvial meadows, coastal meadows, Nordic alvars</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Limestone specific habitats: Nordic alvars, Tilio-Acerion forests of slopes, screes and ravines</td>
</tr>
<tr>
<td></td>
<td>Bogs and other wetlands</td>
</tr>
</tbody>
</table>

| Number of protected plant and animal species | 570 (in 2013)\(^{16}\) |

<table>
<thead>
<tr>
<th>IUCN Red List of Threatened Species in categories critically endangered and endangered</th>
<th>As of 2013, there were 5 species in Estonia in these 2 categories(^{17}):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critically</td>
<td>2 (Anguilla anguilla [European eel], Mustela lutreola [European Mink])</td>
</tr>
<tr>
<td>Endangered</td>
<td>3 (Limonicus violaceus [beetle], Melanitta fusca [Velvet Scoter], Unio crassus [Thick Shelled River Mussel])</td>
</tr>
</tbody>
</table>

---

1.2 OVERVIEW OF NATURE PROTECTION FRAMEWORK

Estonian nature conservation has a long history. The first protected area was established in 1910 on its western islands to protect breeding and migratory water birds. The first Nature Conservation Act was adopted in 1935 and amended in 1938. Another phase of legal regulation started after the Second World War, when private land ownership was abolished. In 1957, four large protected areas and many smaller ones were established, including the first national park (Lahemaa National Park) in 1971. A new era of modern nature conservation policy started with Estonia regaining its independence in 1991. In 1994, a new Nature Conservation Act was adopted. This act provided a framework of nature conservation which took into account not only the private and public property rights on land, but also international obligations that Estonia had undertaken by joining several international agreements in the early 1990s. The Nature Conservation Act was renewed in 2004, after Estonia joined the European Union (EU).

Besides the four biodiversity-conventions, related protocols and agreements under review, Estonia is a member of several other international treaties related to nature conservation (entry into force for Estonia in brackets):

- Convention on the Conservation of European Wildlife and Natural Habitats – Bern Convention (1992);
- UNESCO World Heritage Convention (1995);
- Convention on the Protection of the Marine Environment of the Baltic Sea Area – Helsinki Convention (1995);

Nature conservation policy and regulatory framework is developed by the Nature Conservation Department of the Ministry of the Environment. The policy and regulations are implemented by the Environmental Board, which has a central nature conservation department and six regional offices. The Environmental Board also performs as the manager of state protected areas, whereas the practical work in the field is executed by the State Forest Management Centre. The latter is the state-owned company whose main function is to manage state forests (38% of the forest area) and promote recreation in state forests. Since none of the protected areas (including national parks) have had local administration since 2006, the Environmental Board acts as the administrator of all protected areas.

The Environment Agency performs as the central data centre and environmental register, a monitoring centre and the Clearing House for the Convention of Biological Diversity (CBD-CHM). CBD-CHM is a technical tool for collecting information concerning biodiversity and efficient dissemination thereof to all potential users. The Environmental Inspectorate is the enforcement authority of environmental law, consisting of the centre in Tallinn for coordination and 15 county offices, which carry out day-to-day environmental supervision. The Land Board, which is a government agency similar to the Environmental Board and the Environmental Inspectorate, manages the land cadastre and database on land use restrictions, such as those arising from nature conservation. All the listed authorities are supervised by the Ministry of the Environment (Figure 1).
In 2012, there were 940 protected areas in Estonia, including 17 sites protected under the Ramsar Convention, 608 Natura 2000 sites protected under the EU Birds and Habitats Directives (66 Special Protection Areas – SPAs and 542 Sites of Community Importance – SCIs, respectively), and other sites that are protected under national legislation. Independent of the designation of the site (area) – either a national park, landscape protected area, species protection site or limited-conservation area – the same system of protection regime is applied. In principle, a protected area may have up to three zones of management or protection, in graduation from strict to limited protection as follows:

- **strict nature reserve** (no management zone);
- **conservation zone** (some management allowed or mandatory for conservation purposes); and
- **limited management zone**.

Thus, a protected area, either of national or international designation (e.g. Special Protection Areas, Sites of Community Importance, and Ramsar sites) is managed/protected via various protection regimes as illustrated on Figure 2.
In conclusion, the status of designation either national or international is not explicitly visible, since the area/site is called either a national park, landscape protected area, species protection site or limited-conservation area and managed via up to three management/protection regimes. The designation(s) appear only in formal documents, particularly in protection rules, which is a government-adopted regulation. In this regulation, one may find that a national park is a SPA or SCI or both, and/or a Ramsar site, etc. An example of this kind of situation is the Matsalu National Park (NP), which was designated as a Ramsar site in 1994 and a SPA and a SCI in 2004. In the case of Matsalu NP, the designations are within the same borders, but there are several cases where the SPA or SCI do not overlap or do it partly, while a Ramsar site may be larger or smaller than the SPA or SCI. Since the obligations for ensuring the good conservation status of the protected sites may differ between the international agreements (such as the Ramsar Convention), EU directives or national legislation, it makes the task to manage the sites rather difficult for national authorities, given the non-overlap of borders and different protection regimes. Such a system requires good GIS and biodiversity databases. Thus, since each site may comprise up to three management zones, IUCN categories of sites cannot be automatically applied. This is the reason why Estonia by IUCN definition does not have ‘national parks’.
2 METHODOLOGY OF THE EVALUATION

The methodology provides a basis for reviewing the implementation effectiveness of a thematic cluster of MEAs at the national level. The methodology builds on several existing guidelines and methods for the implementation evaluations, e.g. Manual on Compliance with and Enforcement of MEAs\textsuperscript{18}, Auditing the Implementation of MEAs: A Primer for Auditors\textsuperscript{19}, and other reviews of implementation of MEAs.

The proposed review system for the implementation of a cluster of MEAs is based on the benchmarking method and takes into account first of all objective-led effectiveness and implementation effectiveness. Specific studies need to be added if cost-effectiveness is also planned for evaluation: whether the outcomes of the implementation of the MEAs in question, i.e., benefits created, are in good correspondence with the budget spent. The assessment consists of 15 review categories (themes) which describe different aspects of good governance that would enable implementation of international environmental agreements effectively as a thematic cluster (Table 1).

Table 1. Review categories and the type of effectiveness they address

<table>
<thead>
<tr>
<th>Review category</th>
<th>Type of effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Adequate legal and policy framework</td>
<td>Implementation effectiveness</td>
</tr>
<tr>
<td>2. Coordinated institutional and administrative framework</td>
<td>Implementation effectiveness</td>
</tr>
<tr>
<td>3. Development of an integrated national implementation/action plan(s)</td>
<td>Implementation effectiveness</td>
</tr>
<tr>
<td>4. Effective implementation and review of the plan(s)</td>
<td>Implementation effectiveness</td>
</tr>
<tr>
<td>5. Effective monitoring of implementation of the MEAs in question</td>
<td>Implementation effectiveness</td>
</tr>
<tr>
<td>6. Consideration of objectives of the MEAs in decision making</td>
<td>Implementation effectiveness</td>
</tr>
<tr>
<td>7. Adequate financing of the implementation</td>
<td>Implementation effectiveness</td>
</tr>
<tr>
<td>8. Strong competencies and capacity</td>
<td>Implementation effectiveness</td>
</tr>
<tr>
<td>9. Stakeholder engagement</td>
<td>Implementation effectiveness</td>
</tr>
<tr>
<td>10. Effective enforcement system</td>
<td>Implementation effectiveness</td>
</tr>
<tr>
<td>11. Cross-border cooperation</td>
<td>Implementation effectiveness</td>
</tr>
<tr>
<td>12. Achieving the objectives</td>
<td>Objective-led effectiveness</td>
</tr>
<tr>
<td>13. Coordination across the cluster of MEAs</td>
<td>Implementation effectiveness</td>
</tr>
<tr>
<td>14. Benefits for the environment</td>
<td>Objective-led effectiveness</td>
</tr>
<tr>
<td>15. Socio-economic benefits</td>
<td>Objective-led effectiveness</td>
</tr>
</tbody>
</table>

\textsuperscript{18} UNEP, 2006.  
\textsuperscript{19} UNEP, 2010.

I Objective-led effectiveness means, in this methodology, that the objectives of the MEAs in the cluster are achieved (positive effects on the environment and society; implementation/action plan(s) are in place and being implemented; environmental policy is integrated with other policies). An objective-led approach to evaluating effectiveness focuses mostly on outcomes.

II Implementation effectiveness refers to the implementation process. Here it is used when the implementation framework for the MEAs in question is in place and operational, which, in turn, means that the legal structure is in place; administrative and research capacities are sufficient; data and information management are effective; transboundary cooperation is taking place; stakeholders are engaged; access to information is ensured; data and information are used in decision making; implementation of the MEAs in question is periodically reviewed; and results are reported in a timely manner to the secretariat of MEAs and communicated.
to the stakeholders and the wider public. The process-oriented assessment emphasises the importance of regulatory, participatory and rationality aspects.20

For each of the 15 categories, the methodology formulates the main review question and describes the best practice benchmarks for ideal level of implementation (see Annex). Based on these benchmarks, the scoring for implementation is on a three-level scale: strong, moderate and weak implementation:

- **Strong**: Some minor gaps or lack of clarity exist in the implementation of the respective category, but it does not hinder the implementation of the MEAs in question and the shortcomings can be easily eliminated.

- **Moderate**: Some gaps or lack of clarity exist in the implementation of the respective category, but it does not significantly hinder the implementation of the MEAs in question. The elimination of shortcomings requires major efforts.

- **Weak**: Major gaps or lack of clarity exist in the implementation of the respective category and these significantly hinder the implementation of the MEAs in question. The elimination of shortcomings requires major efforts.

Based on the findings across the 15 review categories, an overall qualitative assessment of implementation effectiveness of the MEAs at the national level can be formulated and recommendations for improvement drawn. The level of implementation effectiveness can be presented by three levels of grading: high, moderate or low implementation effectiveness (Figure 3).

![Figure 3. The relationships between the score of implementation and the overall assessment of implementation effectiveness of the MEAs](image)

Below is a set of qualitative criteria to take into account while determining the overall implementation effectiveness:

**High effectiveness of implementation:**

- The MEAs in question are implemented and trigger a complete set of national actions in the environmental sector and their impact on improvement of the state of environment and environmental policy integration is significant;

- Objectives of the MEAs are achieved or are in the process of being achieved with significant results already witnessed;

- The objectives of the MEAs, the implementation plans and the achieved results are well acknowledged by the major stakeholder groups and the wider public;

- There are no major gaps identified in the implementation of the MEAs in question; and

- Highly effective implementation of the MEAs is secured by political will that has assigned a high significance to the issues of the MEAs in question and through the allocation of sufficient resources.

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20 Peterson, 2010.
Moderate effectiveness of implementation:

- The MEAs in question are implemented, but there is little evidence of impact in terms of improvement of the state of environment and environmental policy integration;
- Only a limited number of objectives of the MEAs in question are achieved or in the process of being achieved;
- The objectives and implementation plans of the MEAs in question are criticised by major stakeholders and/or are not acknowledged by the public;
- There are some major gaps detected in the implementation of the MEAs in question; and
- Implementation of the MEAs in question lacks political support and/or sufficient resources.

Low effectiveness of implementation:

- The MEAs in question are poorly transposed into national legislation or if the framework legislation for the MEAs is in place, they are not enforced;
- Objectives and implementation of the MEAs in question are poorly integrated into national policies, government plans and the state budget;
- Only a few objectives of the MEAs are achieved or in the process of being achieved;
- Implementation of the MEAs is not sufficiently secured with human, financial and technical resources, even if the implementation plans are in place;
- Major stakeholders are not participating in the implementation of the MEAs in question and the objectives of the MEAs and status of their implementation are not known to the public;
- There are far too many significant gaps identified in the implementation of the MEAs in question;
- Further implementation of the MEAs in question is not secured;
- Negative trends related to the subject of the MEAs are increasing; and
- Issues related to the MEAs in question are not regarded as important to the society.

The overall assessment will take into account country-specific factors, as the reviewed issues can be of different levels of importance for countries. Importance depends on many determinants, including the governance system; the range of policy instruments used in the country; the availability and reliability of environmental data; and the level of development of the society and participation of stakeholders in the policy planning and decision making processes.

In the current study mainly two methods of collecting documentary evidence were used. Firstly, publicly available documents (such as the most recent national reports, monitoring reports, statistics, etc.) were analysed, and secondly, a stakeholder meeting with the national focal points and public authorities was organised not only to verify the data and findings, but also to receive feedback on the usability and ways for improvement of the review methodology.
3 THE CONVENTIONS: OBJECTIVES AND MAIN CONCEPT

3.1 CONVENTION ON BIOLOGICAL DIVERSITY (CBD)

The Convention on Biological Diversity is the main international instrument for addressing biodiversity issues. It provides a comprehensive and holistic approach to the conservation of biological diversity, the sustainable use of natural resources and the fair and equitable sharing of benefits deriving from the use of genetic resources.\(^{21}\)

As such, the biodiversity protection mandate of the CBD addresses aspects relating to the control and ownership of biological resources, encompassing issues pertaining to conservation, development and the equity between the developed and developing countries. The CBD establishes a shared responsibility for the conservation and sustainable use of biodiversity as well as for respecting the sovereign rights of states for the conservation and sustainable use of biological resources within their jurisdiction (Preamble of CBD). The ecosystem approach is the primary framework for action under the Convention.

To achieve its objectives, the CBD contains general requirements for cooperation between states to preserve biodiversity: create national strategies to research, monitor and protect biodiversity; establish, restore and maintain protected areas and habitats; report on national implementation of the convention; govern access to biological resources; and equitably share benefits from biodiversity use. The text also gives the CBD power to develop detailed subsidiary hard law instruments called protocols to deal with distinct aspects of its wide-ranging and general stipulations.

The implementation of the convention is guided through the Strategic Plans. CBD adopted its new Strategic Plan for Biodiversity 2011–2020, including Aichi biodiversity targets at its tenth Conference of the Parties (COP), held in Nagoya, Japan in 2010.\(^{22}\) The plan reconfirms global biodiversity target-setting as a central feature and key mechanism by which to implement CBD objectives.

The meetings of COP – the governing body of CBD – are held every two years to make progress on implementation and finalise agreement on subsidiary instruments and decisions: procedures which constitute what is referred to as the CBD process. The scientific advisory body to the CBD is the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA), which is comprised of government representatives competent in the relevant field of expertise.

To date, three protocols to the CBD have been adopted:

- The Cartagena Protocol on Biosafety to the Convention on Biological Diversity (Cartagena Protocol) was opened for signature in Nairobi on 15 May 2000. It entered into force on 11 September 2003. The Cartagena Protocol aims to ensure the safe handling, transport and use of living modified organisms (LMOs) resulting from modern biotechnology that may have adverse effects on biological diversity, taking also into account risks to human health.

- The Nagoya Protocol on Access to Genetic...
Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity (Nagoya Protocol) was opened for signature on 2 February 2011. It will enter into force 90 days after the date of deposit of the 50th instrument of ratification, acceptance, approval or accession. Its objective is the fair and equitable sharing of benefits arising from the utilization of genetic resources, thereby contributing to the conservation and sustainable use of biodiversity.

- The Nagoya – Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety was opened for signature on 7 March 2011. The Protocol will enter into force on the 90th day after the date of deposit of the 40th instrument of ratification, acceptance, approval or accession. The Supplementary Protocol provides for international rules and procedure on liability and redress for damage to biodiversity resulting from LMOs.

3.2 CONVENTION ON WETLANDS OF INTERNATIONAL IMPORTANCE ESPECIALLY AS WATERFOWL HABITAT (RAMSAR CONVENTION)

<table>
<thead>
<tr>
<th>Date and place of signature:</th>
<th>2 February 1971 in Ramsar, Iran</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry into force:</td>
<td>1 December 1975</td>
</tr>
<tr>
<td>Number of contracting parties:</td>
<td>168 (as of October 2013)</td>
</tr>
<tr>
<td>Location of the secretariat:</td>
<td>in the headquarters facilities’ of IUCN in Gland, Switzerland</td>
</tr>
</tbody>
</table>

The Ramsar Convention is an intergovernmental treaty that provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources. This is the first of the global nature conservation conventions and the only one that deals with a particular ecosystem – a wetland, either coastal or mainland.

The Convention’s member countries cover all geographic regions of the planet. Over 40 years later, as of November 2013 the number of sites designated for Ramsar List was 2,168, with total area covering 2.06 million km² (206,632,105 hectares).

The Convention’s mission is ‘the conservation and wise use of all wetlands through local and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world’. The Convention uses a broad definition of the types of wetlands covered in its mission, including lakes and rivers, swamps and marshes, wet grasslands and peatlands, oases, estuaries, deltas and tidal flats, near-shore marine areas, mangroves and coral reefs, and human-made sites such as fish ponds, rice paddies, reservoirs, and salt pans.

At the centre of the Ramsar philosophy is the ‘wise use’ concept. The wise use of wetlands (Article 3) is defined as ‘the maintenance of their ecological character, achieved through the implementation of ecosystem approaches, within the context of sustainable development’. ‘Wise use’ therefore has at its heart the conservation and sustainable use of wetlands and their resources, for the benefit of humankind.

The Convention is implemented through Strategic Plans. Government representatives from each of the Contracting Parties meet at COP every three years. The scientific advisory body to the Ramsar Convention is the Scientific and Technical Review Panel (STRP) which comprises regional representatives, thematic experts and representatives of the International Organisation Partners of the Convention.

3.3 CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA (CITES/WASHINGTON CONVENTION)

<table>
<thead>
<tr>
<th>Date and place of signature:</th>
<th>3 March 1973 in Washington, United States of America</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry into force:</td>
<td>1 July 1975</td>
</tr>
<tr>
<td>Number of contracting parties:</td>
<td>179 (as of November 2013)</td>
</tr>
<tr>
<td>Location of the secretariat:</td>
<td>In Geneva, Switzerland, administered by UNEP</td>
</tr>
</tbody>
</table>

CITES is a treaty created to ensure that international trade in wild animals and plants does not threaten their survival.24 Calls for an international treaty to regulate global trade in wildlife were made as early as 1963 by IUCN, but it took another ten years before such a treaty was agreed.25

CITES works through a system of import and export permits, and assigns three levels of regulation or protection to more than 35,000 species, that are or possibly could be traded, both terrestrial and marine, including their parts and derivatives. CITES species are listed in three appendices:

- **Appendix I**: species are threatened with extinction and trade in specimens of these species is permitted only in exceptional circumstances.

- **Appendix II**: trade in specimens of these species must be controlled in order to avoid utilization incompatible with their survival.

- **Appendix III**: contains species that are protected in at least one country, which has asked other CITES Parties for assistance in controlling the trade.

Of all the many international environmental conventions, CITES has probably the single most detailed control structure.26 The IUCN report on trade measures of CITES concludes that in general CITES, working with other mechanisms, has been very effective in reducing trade in certain species. However, for some species, other factors have precluded CITES from being fully implemented and from improving the situation.27

Each Party must produce annually a summary of all the CITES permits it has issued. These records of trade (import and export) in CITES-listed species of wildlife per countries are entered into the CITES trade database, which is managed by the UNEP World Conservation Monitoring Centre (UNEP WCMC) on behalf of the CITES Secretariat. In addition to annual report on CITES trade, biennial report on legislative, regulatory and administrative measures taken to enforce the Convention are submitted to the CITES Secretariat.

Any country that has joined the CITES must have domestic legislation to:

1) Designate a CITES Management Authority and a CITES Scientific Authority;

2) Regulate trade in accordance with the Convention, and designate places of introduction and export of endangered species for trade with third countries;

3) Penalize illegal trade; and

4) Confiscate specimens that are illegally traded or possessed.28

The framework for implementation directions is established in the CITES Strategic Vision and Action Plans. Every two to three years, the parties to CITES – the COP – meets to review the implementation of the Convention. The scientific advisory bodies to CITES are the Animals and Plants Committees, which consist of government-designated experts.

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26 Swanson, 1999.
CMS and its associated agreements aim to conserve migratory terrestrial, marine and avian species and their habitats and migration routes through co-operation between the states in the species’ range. The CMS acts as a framework convention. The agreements may range from legally-binding treaties (agreements) to less formal instruments, such as memoranda of understanding, and can be adapted to the requirements of particular regions.

CMS species are listed in two appendices:

- Endangered migratory species in Appendix I of the convention, and

- Migratory species conserved through global or regional Agreements in Appendix II.

From the agreements that have been concluded to date under the auspices of CMS, three concern Estonia:

- Agreement on the Conservation of Populations of European Bats (EUROBATS) covers 63 range states and territories in Europe, North Africa and the Middle East. In Europe, it applies to all European populations of 45 bat species – whether migratory or not. The agreement was opened for signature on 4 December 1991 and it came into force on 16 January 1994.

- Agreement on the Conservation of Small Cetaceans of the Baltic, North-East Atlantic, Irish and North Seas (ASCOBANS) includes dolphins, whales, harbour porpoises and other species. The agreement was opened for signature on 17 March 1992 and it entered into force on 29 March 1994.

- African-Eurasian Waterbird Agreement (AEWA), is an intergovernmental treaty to conserve migratory water birds and their habitats across Africa, Europe, the Middle East, Central Asia, Greenland and the Canadian archipelago. It covers 255 species of birds ecologically dependent on wetlands for at least part of their annual cycle. AEWA was opened for signature on 15 August 1996 and it entered into force on 1 November 1999.

Implementation directions for the CMS are set out in the Strategic Plans. All CMS Agreements have comprehensive action plans, which are key instruments for the implementation of the agreements and provide for range-wide and country specific actions. The decision-making organ of CMS – COP – meets at three-year intervals. The scientific advisory body to CMS is the Scientific Council for which all parties are entitled to nominate a qualified expert.

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4 REVIEW RESULTS AND OBSERVATIONS

4.1 CATEGORY 1. ADEQUATE LEGAL AND POLICY FRAMEWORK

Review question: Is there an adequate legislation and policy in place for enforcing the MEAs in question?

IDEAL:
- The MEAs in question are ratified. National policy and legislation are fully compatible with the MEAs.
- Laws and regulations have brought into compliance with the provisions of the MEAs in question according to the legal gap analysis.
- There is no evidence that legal framework hinders the enforcement of the MEAs in question.
- Legislation imposes concrete responsibilities on the regulated communities (state bodies, private sector, the public, etc.).
- Laws and regulations are regularly reviewed in the context of the relevant international obligations and the national situations.

Ratification

Estonia is a party to all the four biodiversity-related conventions, Cartagena Protocol, AEWA and EUROBATS agreements (Table 2).

According to Nature Conservation Development Plan (NCDP) 2020, the provisions of ASCOBANS will be incorporated into national legislation by 2014. It is planned to become a party of the Nagoya Protocol in 2015.

Table 2. Ratification (or accession) of the biodiversity conventions, protocols and agreements in Estonia

<table>
<thead>
<tr>
<th>Convention / Protocol / Agreement</th>
<th>Signed by Estonia</th>
<th>Ratification / accession</th>
<th>Entry into force for Estonia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nagoya Protocol</td>
<td></td>
<td></td>
<td>Accession planned in 2015</td>
</tr>
<tr>
<td>Nagoya-Kuala Lumpur Supplementary Protocol</td>
<td>In process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ramsar Convention</td>
<td>20 October 1993</td>
<td></td>
<td>29 July 1994</td>
</tr>
<tr>
<td>CITES</td>
<td>20 October 1993</td>
<td>20 October 1993</td>
<td>22 November 1993</td>
</tr>
<tr>
<td>CMS</td>
<td>29 May 2008</td>
<td></td>
<td>1 October 2008</td>
</tr>
<tr>
<td>AEWA</td>
<td>18 June 2008</td>
<td></td>
<td>1 November 2008</td>
</tr>
<tr>
<td>EUROBATS</td>
<td>7 October 2004</td>
<td></td>
<td>11 December 2004</td>
</tr>
<tr>
<td>ASCOBANS</td>
<td></td>
<td></td>
<td>Accession planned in 2014</td>
</tr>
</tbody>
</table>


Legal framework

Sustainable Development Act (SDA), which Estonia adopted in 1995, the second country in the world after Costa Rica to do so, provides several articles on biodiversity conservation, originally based on the principles established in the decisions of the United Nations Conference on Environment and Development (Rio de Janeiro, 1992). For example, article 9 stipulates that ‘Preservation of biological diversity shall be guaranteed through a national programme and an action plan approved by the Government of the Republic, the drafting of which shall be financed from the national budget.’


Policy goals, targets and measures related to biodiversity are defined in the National Environmental Strategy (NES) up to 2030 under the objectives ‘Preservation of diversity of landscapes and biodiversity’, and ‘Sustainable use of natural resources and reduction of waste generation’. The first NES was adopted by the Parliament in 1997. For the application of the NES environmental action plans have been drawn up. The National Environmental Action Plan (NEAP) for the period of 2007–2013 comprised four measures under landscape protection and three measures under biodiversity protection, with total budget allocation of 283.7 million euros over a seven-year period. Several activities to be carried out were related to CBD. However, it is worth mentioning that the NEAP 2007–2013 did not refer explicitly to the Ramsar Convention, CITES or CMS and did not provide for activities in this respect. It is still open with regard to whether the NEAP for the next period will be updated.

The first National Biodiversity Strategy and Action Plan (NBSAP) was developed in 1998–1999 under the auspices of UNEP. The NBSAP was updated several times since then; however, it was never formally adopted neither by the Government nor by the Parliament.

The international commitments, including implementation of the biodiversity conventions are most directly embedded into the objectives and measures of the Nature Conservation Development Plan (NCDP) until 2020. The NCDP, after several attempts, succeeded to adoption by the Government only in 2012. It covers all the areas of nature conservation, nationally and internationally, and serves as a national biodiversity strategy. The measures that are designed to advance the international cooperation are described under measure 2.6 International cooperation for biodiversity protection. The NCDP envisages continuous work in international cooperation on information exchange, joint research and best practice management of protected areas. The measure 2.6 also posits to enlarge the national list of Ramsar sites by 2015, to improve enforcement of CITES and to fulfil legal obligations with regard to ASCOBANS and the Nagoya Protocol.

An implementation plan for the NCDP is under development in the Ministry of Environment. However, according to the Government regulation, such implementation plan shall be presented to the Government three months after the adoption of the sectoral development plan.

The main legal act transposing the provisions of biodiversity-related conventions into national legislation is the Nature Conservation Act. In 1994, the fourth nature conservation act in Estonia (since 1935) was adopted, trying to capture the merits and obligations under the CBD and other international biodiversity conventions. The law was significantly revised and adapted in 2004, when Estonia joined the EU and the Birds and Habitats Directives had to be transposed into national laws (passed 21 April 2004).

Biodiversity-related objectives and references to

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Table 3. Biodiversity-related objectives and references to biodiversity-related conventions in relevant national policy documents, in effect as of October 2013

<table>
<thead>
<tr>
<th>Policy document</th>
<th>Year</th>
<th>Objectives directly related to biodiversity</th>
<th>Reference to biodiversity-related conventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable Development Act (SDA)</td>
<td>Passed by the Parliament in 1995</td>
<td>Preservation of biological diversity is a basis for the sustainable use of the natural environment and of natural resources.</td>
<td>Implementation principles of international agreements (Art. 4). Drafting of national programme and action plan for preservation of biodiversity (Art. 9).</td>
</tr>
<tr>
<td>Nature Conservation Act (NCA)</td>
<td>Passed by the Parliament in 2004</td>
<td>Protecting the natural environment by promoting the preservation of biodiversity through ensuring the natural habitats and the populations of species of wild fauna, flora and fungi at a favourable conservation status.</td>
<td>CITES in relation to liability (Art. 75).</td>
</tr>
<tr>
<td>National Strategy on Sustainable Development “Sustainable Estonia 21”</td>
<td>Approved by the Parliament in 2005</td>
<td>Preservation of biological diversity and natural areas.</td>
<td>Reference to the requirements of international environmental conventions in a course of action (page 78).</td>
</tr>
<tr>
<td>National Environmental Strategy (NES) 2030</td>
<td>Approved by the Parliament in 2007</td>
<td>Preservation of the diversity of landscapes and biodiversity, and sustainable use of natural resources.</td>
<td>–</td>
</tr>
<tr>
<td>National Environmental Action Plan (NEAP) 2007–2013</td>
<td>Adopted by the Government in 2007</td>
<td>Preservation of the diversity of landscapes and biodiversity, and sustainable use of natural resources.</td>
<td>CBD in activities to be carried out under NEAP.</td>
</tr>
<tr>
<td>Nature Conservation Development Plan (NCDP) 2020</td>
<td>Adopted by the Government in 2012</td>
<td>Favourable status of species and habitats and diversity of landscapes have been ensured and habitats function as an ecological network.</td>
<td>Measure 2.6 on international cooperation for biodiversity protection comprises 4 actions in relation to conventions. Cartagena Protocol is also referred to in measure 3.6 on biosafety.</td>
</tr>
</tbody>
</table>

Source: SDA, NCA, Sustainable Estonia 21, NES, NEAP, NCDP.

There are also other cross-sectoral and sectoral development plans and legal acts related to the biodiversity conservation. For example, the Rural Development Plan includes support measures important for nature conservation (more information on it is given in chapter 4.15). The Forestry Development Plan until 2020 is closely related with biodiversity conservation topic in forests. The Baltic Sea Action Plan (2007) and its national implementation plan for Estonia 2012–2015 addresses biodiversity conservation in marine areas.

Other relevant legal acts are summarised in Table 4.
Due to the European Single Market and the absence of systematic border controls within the EU, the provisions of CITES have to be implemented uniformly in all EU Member States. CITES is implemented in the EU through a set of regulations known as the EU Wildlife Trade Regulations.

As of August 2011, Estonia was in Category I of National Legislation Project of CITES – legislation, which is believed generally to meet the requirements for implementation of CITES.40

Two national reports include a question on the domestic legal framework: on Cartagena Protocol41 and Ramsar Convention.42 In both cases the assessment is positive – a domestic regulatory framework for Cartagena Protocol is fully in place and the national wetland policy is in place.

**Score: MODERATE implementation**

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41 CITES, UNEP, 2012.
Review question: Is there an adequate legislation and policy in place for enforcing the MEAs in question?

IDEAL:

- The national focal points for the MEAs in question have been determined.
- Agencies for implementing the MEAs in question are in place. Their responsibilities are:
  - enforcement of laws and regulations related to the MEAs in question;
  - development and review of the implementation plan of the MEAs in question;
  - monitoring and evaluation of implementation of the MEAs in question;
  - collection, reporting and analysing of data; and
  - awareness raising and publicity.
- Principal responsibility for carrying out the commitments under the MEAs in question, as well as the roles and responsibilities of each agency, have been clearly defined and enforced. There are no gaps and overlapping roles and responsibilities.
- Implementation of the MEAs in question is sufficiently coordinated among different levels of government as well as horizontally.
- Responsible agencies exchange information and cooperate closely with each other and with other sectors.
- The number of positions is sufficient for the implementation of the MEAs in question.

The national focal point and competent authority of CBD, including Cartagena Protocol, Ramsar Convention, CITES, and CMS, including AEWA and EUROBATS agreements, is the Ministry of the Environment. The daily duties are carried out by the Nature Conservation Department. Other national focal points for the scientific advisory bodies and initiatives under the four conventions are listed in Table 5.

The general institutional and administrative framework for all the conventions is in place and responsibilities defined. The administrative entities of the Ministry of the Environment are responsible respectively: Nature Conservation Department – for the policy; the Environmental Board – for the implementation; and the Environmental Inspectorate – for processing environmental violations.

National advisory bodies have been established within the area of government of the Ministry of the Environment for the implementation of CBD, Ramsar Convention and CITES:

- CBD advisory working group of Estonia – consists of 11 representatives of the Ministries of the Environment and Agriculture, Environmental Board, universities and environmental NGOs. The working group meets on the basis of need.
- Estonian Ramsar Committee – 13 members representing Ministry of the Environment, NGOs (Estonian Fund for Nature, Estonian Ornithological Society and Estonian Wetland Society), research institutions and the Environmental Board. The Committee meets irregularly depending on issues, usually 1–2 times a year.43
- Estonian Scientific Committee of CITES is the scientific authority of CITES consisting of 5 persons, from them one person works permanently on CITES issues. If necessary, Tallinn Botanical Garden, Tallinn Zoo, Natural History Museum of University of Tartu, and Estonian Museum of Natural History advise the Scientific Committee.

In the issues of the Cartagena Protocol, the advisory body is the Gene Technology Commission which comprises 17 members representing state authorities, universities, institutes, agricultural producers, a farmers’ organisation and an environmental NGO.44

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Table 5. National focal points for scientific advisory bodies and initiatives under the four conventions

<table>
<thead>
<tr>
<th>Scientific advisory bodies and initiatives</th>
<th>Focal points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CBD</strong></td>
<td></td>
</tr>
<tr>
<td>Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA)</td>
<td>Ministry of the Environment</td>
</tr>
<tr>
<td>Clearing-House Mechanism (CHM)</td>
<td>Environment Agency</td>
</tr>
<tr>
<td>Intergovernmental Committee for the Nagoya Protocol on Access and Benefit Sharing, Access and Benefit Sharing Competent National Authority</td>
<td>Ministry of the Environment</td>
</tr>
<tr>
<td>Global Taxonomy Initiative (GTI)</td>
<td>Institute of Ecology and Earth Sciences, University of Tartu</td>
</tr>
<tr>
<td>Global Strategy for Plant Conservation (GSPC)</td>
<td>Institute of Agricultural and Environmental Sciences, Estonian University of Life Sciences</td>
</tr>
<tr>
<td>Programme of Work on Protected Areas (PoWPA)</td>
<td>Environmental Board</td>
</tr>
<tr>
<td><strong>Cartagena Protocol</strong></td>
<td></td>
</tr>
<tr>
<td>Biosafety Clearing-House</td>
<td>Ministry of the Environment</td>
</tr>
<tr>
<td><strong>Ramsar Convention</strong></td>
<td></td>
</tr>
<tr>
<td>Scientific and Technical Review Panel (STRP)</td>
<td>Environmental Board</td>
</tr>
<tr>
<td>Communication, Education, Participation and Awareness (CEPA) Programme</td>
<td>Environmental Board, Estonian Wetland Society</td>
</tr>
<tr>
<td><strong>CITES</strong></td>
<td></td>
</tr>
<tr>
<td>Animals and Plant Committees</td>
<td>Estonian Scientific Committee of CITES</td>
</tr>
<tr>
<td><strong>CMS</strong></td>
<td></td>
</tr>
<tr>
<td>Scientific Council</td>
<td>Environmental Board</td>
</tr>
<tr>
<td><strong>AEWA</strong></td>
<td></td>
</tr>
<tr>
<td>AEWA Technical Committee</td>
<td>Not designated yet</td>
</tr>
<tr>
<td><strong>EUROBATS</strong></td>
<td></td>
</tr>
<tr>
<td>Scientific focal point</td>
<td>Tallinn University</td>
</tr>
</tbody>
</table>

Source: Websites of CBD, Ramsar Convention, CITES and CMS.
Other competent authorities besides the Ministry of the Environment are:

- **The Cartagena Protocol: Veterinary and Food Board** under Ministry of Agriculture and **Labour Inspectorate** under Ministry of Social Affairs.

In addition, the State Agency of Medicines is the national drug regulatory authority for human and veterinary products and competent authority for medical devices in Estonia. In case of unintentional movements, the customs checks documentation of shipments from third countries on board. Customs has a right to take samples from shipments if there is a threat of illegal (not labelled) GMO shipment. Agricultural Board and Veterinary and Food Board are responsible for sampling of GMOs.45

- **CITES**: The management authority is the Ministry of the Environment who issues permits and certificates. The enforcement authorities in addition to Environmental Inspectorate are the **Estonian Tax and Customs Board** and the **Police and Border Guard Board**. The CITES supervision on the state boundary is performed by the Tax and Customs Board and in inland areas by the Environmental Inspectorate.

There is no inter-agency or inter-sectoral committee on CITES, but mechanisms are used by the Ministry of the Environment to ensure coordination with other CITES authorities: 1–3 meetings are held per year and 2–3 consultations per week according to the national report.46 In addition, the report points out that at the national level there is collaboration with the State Agency of Medicines and the Veterinary and Food Board as well as consultations and discussions with private companies and NGOs.

Both national reports of CBD and Ramsar Convention point out the need for better inter-sectoral and inter-institutional cooperation and coordinated action, as CBD and Ramsar Convention cover a broad range of environmental issues and concern a large number of institutions (governmental and non-governmental). The national report to the CBD admits that biodiversity is insufficiently integrated into ministerial and regional policies due to insufficient information exchange and communication between sectors as well as low awareness of the role of different sectors in fulfilling the obligations of the conventions.47

The national report to the Ramsar Convention COP 1148 states that cross-sectoral cooperation in wetland-related issues has not been sufficient, therefore the understanding and valuation of wetland ecosystem services and achievement of wise use of all wetlands of the country is an ongoing challenge. According to the report, between the Ramsar Convention administrative authority (the Ministry of the Environment), the Ramsar sites managers, other Convention’s focal points and the relevant ministries, departments and agencies, there are no institutionally-established communication mechanisms in place (apart from the national committee). The information on wetland issues is communicated if needed via personal contacts, meetings, round-tables or seminars.

The national administrative and scientific focal points for CMS, for EUROBATS and AEWA agreements are designated, except for the national focal point for AEWA Technical Committee matters which is not designated yet.49 In addition, the Estonian Ornithological Society is monitoring the migratory bird species and the Estonian Fund for Nature is monitoring bat species.50

The national report on AEWA implementation also mentions an operational mechanism for cooperation on a regular basis between the Ministry of the Environment as administrative authority, the Environmental Board, universities, NGOs and local birds clubs in a form of case-by-case cooperation.

Figure 4 summarises the CBD, Ramsar Convention, CITES and CMS governance system in Estonia.

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Figure 4. Governance of the biodiversity-related conventions in Estonia

Score: MODERATE implementation
4.3 CATEGORY 3. DEVELOPMENT OF AN INTEGRATED NATIONAL IMPLEMENTATION/ACTION PLAN(S)

Review question: Is there an elaborated implementation/action plan for meeting the obligations of the MEAs in question?

IDEAL:

- The state has an enforced national implementation/action plan(s) for the MEAs in question.
- The plan and its objectives are in accordance with all objectives of the MEAs in question.
- The plan includes:
  - a prioritised list of measures with due dates to implement the MEAs in question at the national and sub-national levels;
  - monitoring and evaluation objects, measures and measurable indicators;
  - responsible agencies for implementation, monitoring and reporting; and
  - allocation of resources (human, financial, technical).
- The plan has an integrated approach to the MEA issues: it identifies policies, programmes and plans in related sectors through which specific measures need to be taken in order to effectively implement the MEAs in question.
- The plan has been developed through a consultative and participatory multi-stakeholder process.
- Implementation of the MEAs in question is sufficiently coordinated among different levels of government as well as horizontally.
- Responsible agencies exchange information and cooperate closely with each other and with other sectors.
- The number of positions is sufficient for the implementation of the MEAs in question.

There is no specific integrated action plan for the biodiversity-related conventions in Estonia. The overall policy directions for the implementation of these MEAs are provided in the NCDP 2020 and measures in respective species conservation action plans and protected area management plans.

The Environmental Board is responsible for drafting and implementing the protected area management plans. Ministry of the Environment and the Environmental Board organise the drafting and implementing of the species conservation action plans.

**Action plan for species** is prepared according to the Nature Conservation Act for:

1) organisation of protection of a species in the protected category I;

2) ensuring the favourable conservation status of a species, if the results of the species inventory indicate that the current measures fail to do so, or if prescribed by an international obligation; and

3) management of a species if the results of the species inventory indicate a significant negative impact to the environment caused by the increase in the population of the species, or a danger to the health or property of persons.

The plan shall include:

- biological data, population dynamics data and information on the range of the species;

- conditions for guaranteeing the favourable conservation status of an endangered species;

- risk factors to the species;

- objective for conservation or management;

- priority of measures for achieving a favourable conservation status or management of the species, and a schedule for application thereof; and

- budget for organisation of conservation or management.

At the end of 2013 there were 10 action plans in effect for conservation of bird species who are protected under biodiversity conventions (*Anser erythropus, Aquila chrysaetos, Aquila pomarina, Calidris alpina schinzii, Ciconia nigra, Cygnus columbianus bewickii Yarr, Grus grus, Haliaeetus albicilla, Pandion haliaetus, Philomachus pugnax*). There are also action plans for the management and protection of
large carnivores grey wolf, Eurasian lynx, brown bear (CITES); and great cormorant (AEWA), and management plan for eel resources (CITES).

**Management plan** is prepared for the purpose of organising the conservation action of protected areas. The plan sets out:

- conservation objectives of the area;
- significant socio-economic factors and their impact to the conservation objectives of the area;
- actions necessary to be taken to maintain or achieve favourable conservation status of species and habitats, the priority, schedule and volume of work; and
- budget for accomplishing the plan.

The Nature Conservation Development Plan 2020 anticipates that by 2014 other protected areas have management plans in place. As of 1 June 2013, there were 940 protected areas in Estonia. A total of 147 management plans have been adopted, which is almost 40% of the target by 2020 by surface of protected areas.51

**Management plans for habitat types** are compiled for integrated protection of the habitats. Based on these plans specific actions have to be planned in the management plans of protected areas.

In 1997, the **National Programme on the Implementation of the Ramsar Convention** was adopted by the Government.52 The programme listed nine Ramsar sites which were added to the Ramsar list in 1997 and 14 potential Ramsar sites. Today, 17 Ramsar sites are designated. The main goal of the so-called Ramsar programme was preparing management plans for all internationally-important wetlands by 2002. The programme has not been updated since 2002.

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**Table 6. Specific action plans for biodiversity protection relevant for the four conventions**

<table>
<thead>
<tr>
<th>Plan</th>
<th>Convention/ agreement</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action plans for conservation and management of species</td>
<td>CBD, CMS, AEWA</td>
<td>Are developed without a term, activities for 15 years and budget for 5 years. After 5 years, action continuity plan is developed. Adopts the commission for action plans of species in the Ministry of the Environment and approves Minister of the Environment.</td>
</tr>
<tr>
<td>Action plan for conservation management of bats</td>
<td>CMS, EUROBATS</td>
<td>Action plan for 2012-2016 has been compiled, but not approved.</td>
</tr>
<tr>
<td>Management plans for protected areas</td>
<td>CBD, Ramsar Convention, CMS, AEWA</td>
<td>Are developed for up to 10 years, approves Director General of the Environmental Board.</td>
</tr>
<tr>
<td>Management plans for habitats</td>
<td>CBD, Ramsar Convention, CMS, AEWA</td>
<td>Action plan for semi-natural communities 2014–2020 has been approved by Minister of the Environment. Action plan for wetlands is in preparation by the Ministry of the Environment.</td>
</tr>
<tr>
<td>Action Plan for Implementing the Programme of Work on Protected Areas of the CBD</td>
<td>CBD</td>
<td>Submitted to the Secretariat of the CBD 15.06.2012 by the Environmental Board.</td>
</tr>
<tr>
<td>A prioritised action framework (PAF) for Natura 2000</td>
<td>CBD, Ramsar Convention, CMS, AEWA, EUROBATS</td>
<td>Action plan for 2014–2020 has been developed: defining the funding needs and priorities for Natura 2000 at the national level and integrating them into the operational programmes for the different EU funding instruments.</td>
</tr>
<tr>
<td>Implementation plan of the NCDP 2020</td>
<td>All conventions</td>
<td>Under preparation by the Ministry of the Environment.</td>
</tr>
</tbody>
</table>

Source: National reports to the convention secretariats, national focal points.

**Score: MODERATE implementation**

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4.4 CATEGORY 4. EFFECTIVE IMPLEMENTATION AND REVIEW OF THE PLAN(S)

**Review question: Is the implementation of the plan effective?**

IDEAL:
- Measures are taken and objectives met according to the plan.
- The plan is reviewed and updated regularly according to the monitoring and evaluation results in order to meet the set targets.
- Sufficient, correct and timely reports are submitted to secretariats of the MEAs in question. Reporting requirements of the MEAs are fulfilled.
- The reports provide a complete and understandable picture of the state’s implementation of the MEAs in question.
- The reports assess compliance with the MEAs in question, identify compliance problems and indicate solutions which are included in the national implementation/action plan.
- The reports evaluate effectiveness of the policy measures implemented so far on issues covered by the MEAs in question.
- The reports identify barriers to effective implementation and mechanisms to facilitate implementation of the MEAs in question.
- The reports are made public via Internet and other publication channels.

As there is no specific national action plan for biodiversity conventions in Estonia, the objectives of the conventions are being fulfilled indirectly by means of national and EU legislation. The national reports on the implementation of the conventions are the only periodic reviews conducted on that matter, which are regarded as sufficient by the national focal points. The assessment of the implementation of management measures has to be carried out as a part of updating the protected area management plans and species conservation action plans.

National reporting to the secretariats is an obligation in all four biodiversity-conventions. In case of CITES, Estonia as an EU member state submits the reports on permits issued and implementation of CITES to the convention secretariat and to the European Commission. Most of the national reports have been submitted in a timely manner to secretariats of MEAs; they are also publicly available on the websites of the conventions. However, there are some information gaps in national reports: not all of the report questions are answered.

The implementation of CBD in Estonia was assessed in detail in the framework of the National Capacity Needs Self-Assessment (NCSA) project, initiated with the support of UNEP in 2003. The aim of that self-assessment process was to improve the management of global environmental issues in Estonia on the basis of three environmental conventions adopted in Rio de Janeiro in 1991 (Convention on Biological Diversity, Framework Convention on Climate Change and Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa).\(^5\)

**Score: MODERATE implementation**

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4.5 CATEGORY 5. EFFECTIVE MONITORING OF THE MEAs IN QUESTION

Review question: Is there an effective monitoring system in place?
IDEAL:
- Compliance and impacts of the implementation of the MEAs in question are regularly monitored and evaluated according to the national implementation/action plan.
- A monitoring system for environmental components covered by the MEAs in question is in place.
- Monitoring is based on updated and reliable environmental data.
- Monitoring is carried out by independent professionals.
- Environmental performance is improving in issues covered by the MEAs in question.

There are three types of environmental monitoring schemes in Estonia:
- State environmental monitoring (organised by the Ministry of the Environment);
- Environmental monitoring carried out by local governments; and
- Environmental monitoring carried out by undertakings.

The state environmental monitoring programme consists of 12 sub-programmes: monitoring of biodiversity and landscapes, forest, soil, ground water, inland waterbodies, the sea, ambient air, radiation, meteorology and hydrology, seismology, cross-border air pollution and support programme.

The most relevant sub-programmes for the biodiversity conventions are monitoring of biodiversity and landscapes, forests, internal waters and the sea (Table 7).

<table>
<thead>
<tr>
<th>Sub-programme</th>
<th>Responsible authority for organisation of monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biodiversity and landscapes:</td>
<td></td>
</tr>
<tr>
<td>Monitoring of populations (incl. landscapes)</td>
<td>Environment Agency since 2014, previously Environmental Board</td>
</tr>
<tr>
<td>Coastal landscapes</td>
<td></td>
</tr>
<tr>
<td>Agricultural landscapes</td>
<td></td>
</tr>
<tr>
<td>Soil biota</td>
<td></td>
</tr>
<tr>
<td>Pollinators</td>
<td></td>
</tr>
<tr>
<td>Populations of burnt areas</td>
<td></td>
</tr>
<tr>
<td>Endangered plant populations</td>
<td></td>
</tr>
<tr>
<td>Monitoring of species</td>
<td></td>
</tr>
<tr>
<td>Endangered species of vascular plants and bryophytes</td>
<td></td>
</tr>
<tr>
<td>Protected species of fungi</td>
<td></td>
</tr>
<tr>
<td>Invertebrates</td>
<td></td>
</tr>
<tr>
<td>Fish species of international importance</td>
<td></td>
</tr>
<tr>
<td>Amphibia and reptilia</td>
<td></td>
</tr>
<tr>
<td>Birds</td>
<td></td>
</tr>
<tr>
<td>Mammals</td>
<td></td>
</tr>
<tr>
<td>Wild game</td>
<td></td>
</tr>
<tr>
<td>Remote sensing of landscapes</td>
<td>Ministry of the Environment</td>
</tr>
<tr>
<td>Forests</td>
<td>Environment Agency</td>
</tr>
<tr>
<td>Inland waterbodies</td>
<td>Ministry of the Environment</td>
</tr>
<tr>
<td>Sea</td>
<td>Ministry of the Environment</td>
</tr>
</tbody>
</table>

The sub-programme of biodiversity and landscapes, which is the largest sub-programme, comprises regular (annual) monitoring of species, populations and landscapes. Monitoring of species populations and habitats specified by international conventions is one of the obligations of the sub-programme.\textsuperscript{54} The main implementing institutions are universities, NGOs and the Environmental Board. There are also a lot of volunteers engaged in monitoring, especially in bird counts.

The monitoring reports are made public annually. Specific monitoring reports are not delivered on the conventions, with the exception of the EUROBATS agreement, as monitoring of bats is one of the specific areas of the sub-programme ‘Biodiversity and landscapes’, operational since 1994.

Monitoring of species and habitats protected by the conventions is carried out according to the species conservation action plans, while monitoring of Ramsar sites and other protected areas is carried out according to the management plans of protected areas. On the territories of all Ramsar sites, there are state environmental monitoring stations or sites, the number and types of which vary in different sites.

Monitoring of CITES listed species is implemented via permitting system by the CITES management and scientific authorities and via the National Environmental Monitoring Programme for the CITES listed species present in Estonia. According to the number of permits issued, the export of CITES species from Estonia has remained at around the same level since 2004, but import volumes have grown, primarily due to import of leather products (Figure 5).\textsuperscript{55}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{CITES_permits.png}
\caption{CITES permits issued in Estonia, 2003–2010}
\label{fig:CITES_permits}
\end{figure}

\textit{Source: National biennial reports to the CITES Secretariat.}

\textsuperscript{54} Procedure for Implementation of Sub-programmes of National Environmental Monitoring Programme. Regulation of Minister of the Environment No 71 of 7 Dec. 2006.

\textsuperscript{55} EEIC, 2012.
Some national reports bring out areas where monitoring needs to be improved:

- Monitoring of alien invasive species in both water and terrestrial environments.\textsuperscript{56}

- Monitoring scheme for Ramsar sites and other wetlands in order to be comprehensive and effective.\textsuperscript{57}

- Regular monitoring for the AEWA species in reedbeds, lakes and some IBAs/SPAs.\textsuperscript{58}

- The data obtained through monitoring and independent sources is statistically insufficient for estimating status and trends of bats covering whole Estonia.\textsuperscript{59}

Regular monitoring carried out by local governments and undertakings have not included biodiversity so far.

\textbf{Score: MODERATE implementation}

\section*{4.6 CATEGORY 6. CONSIDERATION OF OBJECTIVES OF THE MEAs IN DECISION-MAKING}

\textbf{Review question: Are objectives of the MEAs in question taken into account in Impact Assessment of projects, plans, policies and programmes?}

\textbf{IDEAL:}

\begin{itemize}
  \item The objectives of the MEAs in question are taken into account through an Impact Assessment (IA) process of projects (permitting process), spatial planning, policies, and programmes.
  \item The Impact Assessment of projects, plans, policies and programmes is conducted systematically to ensure that the MEA objectives are mainstreamed into the planning activities and policy measures of all sectors and levels.
  \item There are no conflicts between objectives, actions and targets in other areas and the MEAs in question.
  \item Clear instructions are given to relevant agencies of all the sectors whose activities can have an impact on the issues covered by the MEAs in question.
\end{itemize}

Impact assessment is addressed in all four conventions, either in the convention text (CBD), in resolutions (Ramsar Convention, CMS) or in decisions (CITES).

The relevant national legislation is the Environmental Impact Assessment and Environmental Management System Act (adopted in 2005), which regulates the Environmental Assessment at project level (EIA) and strategic level (SEA). Biodiversity issues form a distinct part in this act – it stipulates that an assessment of potential significant environmental impacts shall include direct, indirect, cumulative, synergistic, short and long-term, positive and negative impacts on biological diversity, populations, flora, fauna and the landscape, among other impacts.

Impacts on protected species and habitats, as well as on sites of European importance (Natura 2000 sites) are

\textsuperscript{56} IV National Report to the Convention on Biological Diversity, 2008.
mandatory to consider once permits for construction, extraction of minerals or water, air emissions, waste management are applied for (called Appropriate Assessment). Similar aspects are expected to be considered when spatial plans at local, regional or state level are drawn or sectoral strategies and policies are developed, e.g. on energy, transport, land use, forestry etc.

EIA and SEA draft reports have to be made publicly available and comments and proposals for amendments have to be considered. As far as the nature conservation aspects are concerned, the most stringent regulations are set by the EU Birds and Habitats Directives, stipulating that the decision makers have to ascertain that no harm would arise to the Natura 2000 sites before any development consent is issued or a plan adopted. Appropriate Assessment is regulated under the articles 6(3) and (4) of EU Habitats Directive. The quality analysis of Appropriate Assessment reports, however, has revealed a poor quality of such assessments.60

Score: MODERATE implementation

4.7 CATEGORY 7. ADEQUATE FINANCING OF THE IMPLEMENTATION

Review question: Is an adequate level of funding secured for the implementation of the MEAs in question?

IDEAL:

- The implementation, monitoring and enforcement of the MEAs in question are financed continuously from the national budget, which contains a specific budget line for it.
- There are other public and private funding sources and international funding sources (e.g. European Union, World Bank, Global Environment Facility, etc.) available and used for the implementation of the plan.
- All the measures in the implementation plan are covered by sufficient funding.
- The funding allocations match the roles and responsibilities of implementing agencies and staff.

The main sources for financing the implementation of the biodiversity-related conventions in Estonia are:

- State budget, from which administrative and labour costs, national environmental monitoring programme and other measures are financed;

- Environmental Investment Centre which channels the funds – environmental fees from the state budget and grants from European Regional Development Fund (ERDF), European Social Fund (ESF) and EU Cohesion Fund (CF) – into environmental and nature protection projects;

- EU nature conservation related payments and projects (e.g. European Agricultural Fund for Rural Development – EAFRD, Life Programme, Framework Programmes for Research and Innovation, European Marine and Fisheries Fund – EMFF); and

- Non-EU financing, e.g. European Economic Area and Norway Grants mechanism and Estonian-Swiss Cooperation Programme.

Since the state budget does not specify the allocation of funds per international convention or agreement, the adequacy of financing cannot be estimated in detail.

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60 Peterson, 2011.
The total NCDP 2020 budget allocated for implementing its three strategic objectives and corresponding 18 measures in 2012–2020 is 582.2 million euros. The measure 2.6 on international cooperation comprises 1.23 million euros (0.21%) of the total budget. As referred above, the cost of implementing the international agreements is not specifically outlined in the budget, but embedded in the total budget, largely because the multilateral nature conservation agreements cover various areas of nature conservation.

The direct costs of being a party to a convention and corresponding agreements imply an annual membership fee, costs for participation in the COPs and working groups. The 2013 membership fees for Estonia are shown in Table 8.

Table 8. Membership fees of the biodiversity conventions for Estonia in 2013

<table>
<thead>
<tr>
<th>Convention</th>
<th>Membership fees in 2013 (euros)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBD</td>
<td>4 700</td>
</tr>
<tr>
<td>Cartagena Protocol</td>
<td>1 100</td>
</tr>
<tr>
<td>Ramsar Convention</td>
<td>1 700</td>
</tr>
<tr>
<td>CITES</td>
<td>1 700</td>
</tr>
<tr>
<td>Ramsar Convention</td>
<td>1 844</td>
</tr>
<tr>
<td>AESA</td>
<td>1 844</td>
</tr>
<tr>
<td>EUROBATS</td>
<td>750</td>
</tr>
<tr>
<td>Total</td>
<td>13 794</td>
</tr>
</tbody>
</table>

Source: Data received from the Ministry of the Environment, 19 Sept. 2013.

According to the Ministry of the Environment, the fees are expected to increase on average 15–20% by 2016.

The financing of CBD in Estonia was estimated in 2012 by the Ministry of the Environment and Tallinn University of Technology, based on the template provided by the CBD Secretariat and on 2010 data. This was the first attempt to provide an overview of the domestic and international financial resources used by the public and private organisations and NGOs to protect the biodiversity in one year. A total of 166 million euros was calculated by this special study in 2012, but due to the diversity of data sources and complexity of such calculations, this sum should be regarded as a very rough estimation. The report does not provide evaluation of the adequacy of the funds for implementing the CBD.

For other conventions, such estimations have not been requested by the secretariats.

Although there are various funding sources available, there is also a question whether adequacy of financing ensures sufficiency of staff necessary for the implementation of the conventions or whether the lack of competent human resources is more acute than lack of financial resources. This issue was pointed out by some of the national focal points and representatives of enforcement authority at the meeting to discuss the findings of the current review.

Score: MODERATE implementation
4.8 CATEGORY 8. STRONG COMPETENCIES AND CAPACITY

Review question: Are the competences and capacity of officials of the responsible authorities and of the experts providing input to the implementation of the MEAs in question sufficient?

IDEAL:
• The kinds of competencies that are required from the officials to implement and enforce the MEAs in question are clearly defined, available and sufficient.
• The competencies that are required from the experts for the implementation of the plan (providing data, monitoring, research, etc.) are clearly defined, available and sufficient.
• Capacity building is taking place through systematic training programmes. All positions are staffed with well-trained specialists.

This category looks into the education, training and sufficiency of relevant staff and capacity building needs for implementation of the convention.

The competence of officials of the Nature Conservation Department in the Ministry of the Environment is high. All staff has higher level education, most of them have MSc and some of them PhD degrees, usually in biology/ecology. As of August 2013, the department consisted of 19 people, including head of department, three councillors and 15 senior officials. The same competence level is also typical to the staff of the implementing (also permitting) authority Environmental Board and Environment Agency, which deals with monitoring and reporting.

All national focal points have a full time position at the Nature Conservation Department of the Ministry of the Environment, except for the CMS focal point, who has part-time position (0.8). However, besides the convention-related work, their positions also comprise other duties. For example, the responsibilities of the CBD national focal point include national coordination of the biodiversity topic in strategies of other sectors; implementation of the EU Biodiversity Strategy; participation in planning of the funding mechanisms relevant for biodiversity; preparing the Ministry’s biodiversity considerations for the EIA and SEA consultations; participation in the OECD working group on water and biodiversity; informing and reporting work; preparation of regulations, etc.

Terms of reference for the CBD national focal point is available at the convention website.  

There is a separate national focal point for Cartagena Protocol at the Nature Conservation Department. The focal point for CMS also coordinates the implementation of AEWA and EUROBATS agreements.

The enforcement authority – Environmental Inspectorate – does not have separate nature protection inspectors, but the inspectors also must deal with supervision in other environmental areas.

However, it is not the nature conservation officials only whose assignments are crucial to the implementation of the conventions: colleagues in other sectoral ministries and administrative areas are needed to support their efforts. Among the sectoral ministries, it is the Ministry of the Environment and Ministry of Agriculture that have the in-house environmental (including nature conservation) competence.

The national report on the implementation of CBD\textsuperscript{62} states the problems with the administrative set-up in order to fulfil all obligations under CBD. The main obstacles are a lack of qualified personnel in governmental “non-conservation” sectors and brain-drain of qualified personnel into the private sector. The biodiversity topic is a relatively specific concern for public administration and thus the staff needs more training on these issues.

Capacity building needs are also highlighted in the national report on the EUROBATS implementation: Estonia is in need of capacity building for bat monitoring.\textsuperscript{63}


\textsuperscript{62} IV National Report to the Convention on Biological Diversity, 2008.

Adequate training of customs officials is of crucial importance for effective implementation of CITES. The Ministry of the Environment has periodically conducted seminars and trainings on CITES for customs officials and environmental inspectors. In addition, there are awareness-raising activities like CITES exhibitions, presentations and lectures at different forums organised for the general public or specialized audience. The NCDP 2020 envisages trainings on biosafety to be implemented continuously.

Score: MODERATE implementation

4.9 CATEGORY 9. STAKEHOLDER ENGAGEMENT

Review question: Is the stakeholder engagement system in place and comprehensive?

IDEAL:

- A stakeholder participation system is in place. Stakeholders are involved in the whole cycle of the MEAs in question, including:
  - preparation for ratification of the MEAs in question;
  - developing national implementation/action plan(s);
  - implementing the plan;
  - monitoring of compliance and impacts; and
  - national reporting.

- Stakeholders include anyone who is affected by or is otherwise interested in the MEAs or its implementation in either the governmental or non-governmental sectors, including businesses, national umbrella organisations and issue-oriented national groups (environmental NGOs) and civil society groups.

- The government secures a high level of stakeholder participation in the implementation of the MEAs in question by allowing free access to the process, providing timely information, allocating financial resources and securing sufficient time for participation.

- Stakeholders are engaged early in the process when options are still open. Feedback/input from stakeholders is registered and it improves the implementation of the MEAs in question.

- Regular (yearly or more often) stakeholder meetings presenting progress and under-achievements of implementation of the MEAs in question take place.

- National delegations to COP of the MEAs in question include NGO representative(s) and progress reports of the COPs are made available for public.

- Public awareness and outreach activities are systematically implemented (concerning obligations deriving from the MEAs in question, the benefits of being party to the MEAs, new developments at international level, etc.).

- Stakeholders and public have right of access to administrative and judicial proceedings in issues of the MEAs in question.

Stakeholders are involved in some of the stages of the implementation of the conventions, through the following actions, mainly:

- Nature protection NGOs are implementing nature conservation measures (management of semi-natural habitats, creating habitats for endangered species, etc.);

- Management planning processes of protected areas and species;

- Participation in EIA and SEA processes; and

- Participation in environmental awareness and nature protection projects.

There are several country-wide, regional and local NGOs whose main objective is to conserve nature, such as the Estonian Naturalists’ Society, Estonian Fund for Nature, Estonian Ornithological Society, Estonian Seminatural Community Conservation Association, Wildlife Estonia, Estonian Wetland Society, Eagle Club, NGO Suurkõrv, NGO Põhjakonn, Estonian Orchid Protection Club, and others. However, there is no regular communication between the authorities and environmental NGOs on the implementation of the biodiversity conventions.

According to the Nature Conservation Act, the draft protection rules and management plan, either of a new or already established protected area, have to be made public, and public consultations have to be conducted. The rules of protection of the area are a legal document which establishes the protection procedure and is approved by the Government. The rules form part of the land use conditions that are passed over to the new land owner once the land is bought or sold. The management plan is developed for implementing the rules. Stakeholder engagement is organised by the Environmental Board.

Stakeholders shall be also engaged into the EIA and SEA processes. According to the law, the draft documents of EIA and SEA must be made publicly available and the stakeholders have to be consulted prior to the decision-making.

The Environmental Investment Centre (EIC) finances projects that promote public awareness on the environment, including biodiversity. For example, in 2012, EIC financed 789 environmental awareness projects with a total budget of 10.5 million euros. Among them, the largest budget allocations were made for the renewal of environmental education infrastructure: 13 projects to renew the premises of local and regional nature education centres are in process and 5.4 million euros were paid out in 2012 by EIC.

Awareness-raising activities have been carried out on the topics of all the biodiversity-related conventions by public and non-governmental organisations all over Estonia. Such activities are seminars, lectures, information days, excursions, bird monitoring and counts for stakeholders and general public, educational programmes for schools and kindergartens, CITES exhibitions and displays, TV and radio programmes, publications, websites, etc. Each year events are organised to celebrate:

- International Day for Biological Diversity (22 May);
- World Wetlands Day (2 February);
- World Migratory Bird Day (second weekend of May);
- International Bat Night and European Bat Night (last full weekend of August), etc.

Other observations on stakeholder engagement / public awareness and outreach activities are:

- So far there has been no formal procedure established to send all national reports to stakeholders for commenting as is the case in compilation of the Aarhus Convention national report. In the latter case, the stakeholders are widely consulted in the process of drafting of the report. Thus the draft or final results of the national reports of biodiversity conventions have not usually been discussed with the stakeholders.

- Representatives of environmental NGOs are not regularly included in the delegations of COP of the biodiversity conventions.

- Ramsar sites are not much used as brands nor receive much special mentioning. The fact that a site is also a Ramsar site, is not very clear in many cases. Challenging is the involvement of local communities and undertaking local actions for conservation and wise use of wetlands, which is one of the main principles of the Ramsar Convention.

- The last national report to the CBD noted the low level of awareness-raising and publicity. The report points out that there is a need for more thorough inclusion of local communities and the private sector into implementation of the convention.

Score: MODERATE implementation

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45 Estonian Environmental Investment Centre, 2013.
4.10 CATEGORY 10. EFFECTIVE ENFORCEMENT SYSTEM

Review question: Is the enforcement system in place with effective enforcement tools at the disposal of relevant authorities?

IDEAL:
- An enforcement system has been established.
- The enforcement agency has clear authority and a sufficient mandate (up to stopping illegal activity and issuing penalties) related to the issues of the MEAs in question.
- Non-compliance and violations are registered by the national enforcement agency and made public via Internet and media.
- Corrective measures to curb the growth of violation numbers and severity are undertaken by designated authority, including amendments to the legislation and practices.
- The cost of non-compliance exceeds the cost of compliance. Enforcement tools include effective economic instruments and penalties for violations are established at a level where number and severity of violations are clearly decreasing.

The main authority for implementing enforcement and supervision of environmental legislation in Estonia is the Environmental Inspectorate. Supervision activities have been classified by the Inspectorate into three main areas: environmental protection, nature protection and fisheries protection. Nature protection supervision comprises the following sub-areas:
- forest protection;
- protection of protected natural objects;
- protection of shores and banks;
- hunting; and
- protection of animals and fauna.

Implementation of environmental legislation is also supervised by local governments and several state agencies, whose fields of responsibility relevant for biodiversity are the following:
- Agricultural Board – GMOs, plant protection;
- Health Board – GMOs;
- Local governments – maintenance, nature protection, tree felling permits;
- Police and Border Guard Board – fishing, marine pollution, prevention of offences;
- Rescue Board – forest and landscape fires, terrestrial pollution, wild animal rescue; and
- Tax and Customs Board – CITES, transactions with forest.

According to the 2012 annual report of the Environmental Inspectorate, the main violations in nature protection were concerned with violations of the forestry law (128 violations) and nature conservation law, specifically the protection of shores and banks (73 violations). The greatest number of violations in the responsibility area of the Inspectorate was in the category of fish protection (1547). By legal acts, the largest number of environmental violations were related to the Local Governmental Organisation Act, Fishing Act, Waste Act and the Nature Conservation Act (257 violations in the latter case). Since 2011, the Environmental Inspectorate has had the authority to process criminal offences against the environment. There were 39 criminal cases against the environment processed by the Inspectorate both in 2012 and in 2011. The cases were mainly related to violation of the Forest Act (15 cases), followed by violations of the Fishing Act (14 cases), illegal extraction of minerals (7 cases), violations of the Nature Conservation Act (2 cases) and of the Ambient Air Act (1 case).

The annual report of the Environmental Inspectorate does not specify the locations of violations by protected areas. The Inspectorate regards early action to avoid illegal

building on the sea coast and on banks of the inland water bodies, illegal forest management and hunting, as well as illegal trade of CITES species as priority activities in the nature protection area for the next years.

In 2012, in addition to the Inspectorate, six other authorities (local governments, Police and Border Guard Board, Rescue Board, Tax and Customs Board, Consumer Protection Board, Veterinary and Food Board) processed altogether 1512 environmental cases.

The overall number of environmental violations registered by all supervisory authorities and persons fined has been decreasing in the last years (Figure 6). As an example, the number of violations and persons fined in the field of protected objects of nature is given in Figure 7.

![Figure 6. Total number of environmental violations registered by all supervisory authorities and number of persons fined, 2005–2011](image)


![Figure 7. Number of violations and persons fined in the field of protected objects of nature, 2005–2011](image)

In 2009–2010, there were 5 CITES-related misdemeanours in Estonia.\(^{68}\) 15 to 23 CITES specimens have been seized/confiscated every two years since 2003 (Table 9). So far there have not been CITES-related criminal cases in Estonia.

### Table 9. Total number of seizures/confiscations of CITES specimens in Estonia, 2003–2010

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of seizures/confiscations</td>
<td>16</td>
<td>20</td>
<td>23</td>
<td>15</td>
</tr>
</tbody>
</table>

Source: National biennial reports to the CITES Secretariat.

The Environmental Inspectorate has also started to control fulfilment of the requirement on the total ban of lead shots in waterfowl hunting, which derives from the AEWA agreement and was enacted in the national legislation in 2013. Generally, the Inspectorate estimated the control results as satisfactory. In addition to controlling hunters, the Inspectorate plans to start taking control samples from the birds which were hunted.\(^{69}\)

**Score: MODERATE implementation**

### 4.11 CATEGORY 11. CROSS-BORDER COOPERATION

**Review question:** Is there bilateral and multilateral cooperation at the regional and international levels in the context of the MEAs in question?

**IDEAL:**
- Bilateral and multilateral cooperation mechanisms, including those with neighbouring countries, are in place (agreements/Memoranda of Understanding, coordination bodies).
- Joint projects to meet the targets of the MEAs in question are implemented.
- Exchange of information and experience as well as joint projects are considered useful by the parties of the MEAs in question.
- The state is participating in COPs / Meetings of the Parties.
- The state is participating in the work of the MEAs in question as a member of a Task Force, an expert group or a technical group, etc.
- Results of joint activities improve the implementation of the MEAs in question.

Estonia has signed several bilateral agreements on environmental protection, including nature conservation, with its neighbouring and other countries since 1991. However, the agreements address nature conservation as a general area of bilateral cooperation, not specifically in the framework of the four biodiversity conventions.

Estonia has participated in most of the COPs of the biodiversity conventions since becoming a party to the convention. The state is also taking part in the work of several task forces, committees, expert or technical groups of the MEAs in question in the EU and other venues.

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\(^{69}\) Tiirutaja, No 24, December 2013. Quarterly of the Estonian Ornithological Society
### Table 10. Bilateral, regional or multilateral agreements or arrangements relevant for the biodiversity conventions in Estonia

<table>
<thead>
<tr>
<th>Agreement</th>
<th>Examples of bilateral, regional or multilateral agreements or arrangements</th>
</tr>
</thead>
</table>
| **All biodiversity-conventions** | - The Estonian Ministry of the Environment has its longest working relationship in nature conservation with the Finnish Ministry of the Environment. In 2013, 22 years of cooperation was celebrated. A joint working group meets twice a year to discuss management of protected areas, including Natura 2000 sites, alien species, visitors’ services as well as also nature education and impact assessment.  
- In 2003 Estonia became a Voting Participant of the Global Biodiversity Information Facility (GBIF), an international open data infrastructure, funded by governments.\(^{70}\)  
- Since 2007, Estonia has been a member of International Union for the Conservation of Nature (IUCN). Membership right is exercised by the Ministry of the Environment. In addition, Estonian Fund for Nature (NGO) is a member of IUCN.\(^{71}\)  
- The Ministry of the Environment is a member of Co-ordination Group for Biodiversity and Nature, which is an Expert Group of the European Commission. Estonian governmental officials and species/habitat experts meet regularly in the EU biogeographical seminars and HABITAS and ORNIS Committee meetings to discuss the sufficiency of the number and area of Sites of Community Importance and Special Protection Areas. The boreal biogeographical region seminars are attended by officials and experts from Estonia, Latvia, Lithuania, Finland and Sweden. |
| **CBD, Ramsar Convention, CMS** | - Estonia established a biosphere reserve in the West Estonian Archipelago in 1990 and joined the UNESCO “Man and the Biosphere Programme”, intergovernmental scientific programme aiming to set a scientific basis for the improvement of the relationships between people and their environment globally.\(^{72}\) Two Ramsar sites located in the West Estonian Archipelago (Hiiumaa Islets and Käina Bay and Laidevahe Nature Reserve).  
- Lahemaa National Park and Environmental Board are members of EUROPARC Federation, European organisation for protected areas bringing together professionals, government agencies, decision makers and supporters – and its Nordic-Baltic section.\(^{73}\)  
- Soomaa National Park is a member of PAN Parks network, the European wilderness protection organisation, which works for the protection, greater understanding and appreciation of Europe’s wilderness areas.\(^{74}\) |
| **Cartagena Protocol** | Estonia has not entered such specific agreements or arrangements.\(^{75}\) |
| **Ramsar Convention** | - Estonian and Latvian Ministries of the Environment have designated the North-Livonian Trans-boundary Ramsar site pursuant to article 5 of the Ramsar Convention.  
| | - Estonia is a member of the Nordic-Baltic Wetlands Initiative (NorBalWet), which is a regional initiative for the Ramsar Convention (with Denmark, Greenland, Faroe Islands, Estonia, Finland, Iceland, Latvia, Lithuania, Norway, Sweden, Russian Federation).\(^{76}\) |
| **CITES** | Exchange of intelligence: customs collaborates with police and customs of different countries for joint operations (e.g. with neighbouring countries) and with international organisations (World Customs Organisation, Europol etc.).\(^{77}\) |
| **AEWA** | Estonia participated in the first international, flyway-scale wetland and waterbird conservation initiative: African-Eurasian flyways project “Wings Over Wetlands”, supported by UNEP-GEF (2006–2010).\(^{78}\) |
| **EUROBATS** | Several Estonian bat experts are involved in cooperation with range states. Active cooperation is held amongst Estonia, Latvia, Lithuania and Finland.\(^{79}\) |

Score: STRONG implementation

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4.12 CATEGORY 12. ACHIEVING THE OBJECTIVES

Review question: Are the objectives achieved under the MEAs in question?

IDEAL:
- There is a political will for achieving the objectives and meeting the obligations of the MEAs in question.
- The objectives of the MEAs in question are achieved and obligations met.
- The overall effectiveness of the MEAs in question in meeting their objectives is regularly reviewed and improvement measures undertaken.
- The national implementation/action plan is enforced by the national government.
- The reports on compliance, non-compliance and impacts of the MEAs in question are reviewed by Minister of the Environment/the national government/parliament and discussed in public.

There are no specific reports on compliance, non-compliance and impacts of the MEAs in question and these issues are not generally discussed in public media. It can be concluded that in general the goals of the MEAs in question are met, but in specific objectives there is still room for improvement.

Table 11. Objectives of the biodiversity conventions and assessment to their achievement

<table>
<thead>
<tr>
<th>Objectives / goals</th>
<th>Assessment / comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CBD</strong></td>
<td></td>
</tr>
<tr>
<td>1. Conservation of biodiversity</td>
<td>Assessment to the achievement is positive, yet there is much to achieve in putting the knowledge into practice.(^\text{80})</td>
</tr>
<tr>
<td>2. Sustainable use of its components</td>
<td>Achievement is more complicated: the use of resources is often not yet subject to the principle of sustainable use of biodiversity in places where the actual usage of resource takes place. Biodiversity-related and wider environmental knowledge in society are low.(^\text{81})</td>
</tr>
<tr>
<td>3. Fair and equitable sharing of the benefits arising out of the use of genetic resources, taking into account all rights over those resources.</td>
<td>This issue is, from a practical point of view, not tackled yet in Estonia.(^\text{82}) The procedure towards ratification of the Nagoya Protocol is under way.</td>
</tr>
<tr>
<td><strong>Cartagena Protocol</strong></td>
<td>The national report does not provide evidence on non-achievement of goals or failure to meet obligations.</td>
</tr>
</tbody>
</table>

\(^{80}\) IV National Report to the Convention on Biological Diversity, 2008.
\(^{81}\) IV National Report to the Convention on Biological Diversity, 2008.
\(^{82}\) IV National Report to the Convention on Biological Diversity, 2008.
### Ramsar Convention
To promote the conservation and wise use of all wetlands through local, regional and national actions and international cooperation, as a contribution towards achieving sustainable development worldwide.

There are 17 Ramsar sites in Estonia with a total area of 304,778 hectares, covering marine areas, coastal areas, bogs and freshwater habitats.\(^{84}\) Inventory of nature protection values and status has been carried out in all Estonian mires in 2009–2012.\(^{85}\) Several initiatives on national action and international cooperation are implemented according to the national report.

### CITES
To ensure that international trade in specimens of wild animals and plants does not threaten their survival.

The national report to the CITES secretariat does not provide evidence on non-achievement of goals or failure to meet obligations.

### CMS
To conserve terrestrial, aquatic and avian migratory species throughout their range by conserving or restoring their habitats and mitigating the obstacles to their migration.

Most CMS species for which Estonia is a range state are protected under the Nature Conservation Act. Exceptions include some vagrant mammal and bird species and two breeding bird species: Long-eared owl (*Asio otus*) and Turtle dove (*Streptopelia turtur*), for which Estonia is a range state and which are not under national protection.

Main areas for wintering, breeding, stop-over, etc. of CMS species in Estonia are located in protected areas. Estonia is a range state for 103 species listed in Appendix II of CMS and 6 bird species protected under Appendix I.\(^{86}\)

### AEWA
To conserve migratory waterbirds and their habitats across Africa, Europe, the Middle East, Central Asia, Greenland and the Canadian archipelago.

There is a need to update the inventory on sufficiency of protected areas network for AEWA species.

As Estonia is located on the East-Atlantic migratory route, it has an important role in the protection of arctic water birds. There are 139 AEWA species that are found in Estonia.\(^{87}\)

### EUROBATS
To protect all 52 European bat species through legislation, education, conservation measures and international co-operation.

All regularly breeding bat species (11) in Estonia are protected under the Nature Conservation Act, except for Soprano pipistrelle bat (*Pipistrellus pygmaeus*), which is not yet under national protection.

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**Score: MODERATE implementation**

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\(^{85}\) Paal and Leibak, 2013.


4.13 CATEGORY 13. COORDINATION ACROSS THE CLUSTER OF MEAs

Review question: Are the MEAs in question effectively implemented as a cluster?

IDEAL:
• The implementation of the MEAs in a cluster is effectively coordinated.
• The national implementation/action plan of the MEAs in question identifies cross-cutting themes and synergies between the MEAs in the cluster.
• Responsible agencies for the implementation of the MEAs in the cluster share data and tools.
• Reporting is coordinated within the cluster of MEAs.
• National legislation supports the implementation of the cluster of thematically related MEAs.

The national focal points for the four MEAs under review are all working in the Nature Conservation Department of the Ministry of the Environment. Thus, the interaction between the focal points is very close and coordination of the biodiversity cluster is implemented from a single authority. Mostly there are informal mechanisms at the national level in place for collaboration between the focal points and other concerned authorities of biodiversity-MEAs: personal contacts and exchange of information in the Ministry of the Environment and its agencies. Generally, it can be evaluated that the coordination across the cluster of the biodiversity MEAs is relatively effective within the environmental sector, but less effective across sectors. For example, there is no clear evidence on high level and various modes of cooperation between the Ministry of the Environment and other ministries with powers in sustainable use of biodiversity and genetic resources (e.g. Ministry of Agriculture) as well with local governments. Considering also other institutions (governmental and non-governmental) involved in the implementation of biodiversity MEAs, it is clear that only inclusive governance with working mechanisms could lead to a functioning coordination across the cluster of MEAs.

Almost all forms of the national reports under review include a question about the coordination across the cluster of biodiversity MEAs. However, the national reports do not provide yet an overarching approach to the implementation of this issue.

As the Ministry of the Environment is a managing and policy-making authority for all biodiversity MEAs, it is a question of initiative first within the ministry to drive stronger coordination means and invite all the other concerned institutions to inter-sectoral group(s) or committee(s).

Score: MODERATE implementation
4.14 CATEGORY 14. BENEFITS FOR THE ENVIRONMENT

Review question: Has the implementation of the MEAs in question created benefits for the environment?

IDEAL:
• The cluster-specific and wider environmental benefits have been assessed in the national implementation/action plan, for example, as to whether and how:
  - the implementation of the MEAs in question has improved the status of species and habitats;
  - the implementation of the MEAs in question has increased or maintained the ecosystem services;
  - the implementation of the MEAs in question has resulted in reduced emissions to the environment; and
  - the implementation of the MEAs in question has resulted in more efficient land use, mineral use and biomass use.

It has to be noted that Estonian environmental law has been directly based on EU environmental law since Estonia became an EU member in 2004. Prior to EU membership, it is difficult to undervalue the significance of the CBD and Ramsar Convention in promoting nature conservation during the 1990s. Nowadays, however, the obligations deriving from EU law may be as strict as or even stricter than those coming from the MEAs. That fact has diminished the significance of these environmental MEAs to the benefits for the Estonian environment or at least made it difficult to distinguish the role of EU legislation from that of the MEAs. The total ban of lead shots since 2013 in waterfowl hunting may be the only direct recent ecological benefit, which does not derive from EU law, but from the biodiversity MEAs – AEWA.

The benefits for the environment from the biodiversity-conventions can be indirectly measured via trends in favourable condition of species and habitats.

Every 6 years, the EU member states report to the European Commission on the progress of implementation of the Habitats Directive, according to its article 17. Estonia has submitted the respective national report in 2007 and 2013 on the status of species and habitats protected under this directive. Both submissions admit gaps in data on species and the 2007 submission also noted gaps in habitats. As an overall assessment, the favourable status of species and habitats has increased in 2013 compared to 2007 (Table 12 and Table 13). The target levels by 2020 set out in the NCDP are the improved status of 28 species and 14 habitat types.


<table>
<thead>
<tr>
<th>Status of species</th>
<th>2007</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>%</td>
</tr>
<tr>
<td>Favourable</td>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td>Unfavourable-inadequate</td>
<td>41</td>
<td>43</td>
</tr>
<tr>
<td>Unfavourable-bad</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Unknown</td>
<td>25</td>
<td>26</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>96</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Data received from the Ministry of the Environment, 14 Nov. 2013.

89 Data received from the Ministry of the Environment, 14 Nov. 2013.
A total of 19 species out of 99 which are protected under the Habitats Directive in Estonia are also protected species of the biodiversity conventions (CITES, CMS or EUROBATS). The assessment of their status in Estonia in 2007 and 2013 is given in Table 14.

### Table 13. Status of habitats in the national implementation report of the Habitats Directive, 2007 and 2013

<table>
<thead>
<tr>
<th>Status of habitat types</th>
<th>2007</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>%</td>
</tr>
<tr>
<td>Favourable</td>
<td>25</td>
<td>42</td>
</tr>
<tr>
<td>Unfavourable-inadequate</td>
<td>21</td>
<td>35</td>
</tr>
<tr>
<td>Unfavourable-bad</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>Unknown</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Data received from the Ministry of the Environment, 14 Nov. 2013.

### Table 14. Status of species in Estonia who are protected under the EU Habitats Directive as well as under the biodiversity conventions

<table>
<thead>
<tr>
<th>Species protected under Habitats Directive</th>
<th>Convention / agreement</th>
<th>Overall assessment to the status in the national report of the Habitats Directive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canis lupus (Gray Wolf)</td>
<td>CITES Appendix II</td>
<td>Favourable</td>
</tr>
<tr>
<td>Cyripedium calceolus (Lady’s slipper orchid)</td>
<td>CITES Appendix II</td>
<td>Inadequate</td>
</tr>
<tr>
<td>Epitesicus nilsonii (Northern bat)</td>
<td>EUROBATS</td>
<td>Favourable</td>
</tr>
<tr>
<td>Halichoerus grypus (Grey seal)</td>
<td>CMS Appendix II</td>
<td>Inadequate</td>
</tr>
<tr>
<td>Hirudo medicinalis (Medicinal leech)</td>
<td>CITES Appendix II</td>
<td>Inadequate</td>
</tr>
<tr>
<td>Lutra lutra (European otter)</td>
<td>CITES Appendix I</td>
<td>Favourable</td>
</tr>
<tr>
<td>Lynx lynx (Eurasian lynx)</td>
<td>CITES Appendix II</td>
<td>Favourable</td>
</tr>
<tr>
<td>Myotis brandtii (Brandt’s bat)</td>
<td>EUROBATS</td>
<td>Unknown</td>
</tr>
<tr>
<td>Myotis dasycneme (Pond bat)</td>
<td>EUROBATS</td>
<td>Inadequate</td>
</tr>
<tr>
<td>Myotis daubentonii (Daubenton’s bat)</td>
<td>EUROBATS</td>
<td>Favourable</td>
</tr>
<tr>
<td>Myotis mystacinus (Whiskered bats)</td>
<td>EUROBATS</td>
<td>Unknown</td>
</tr>
<tr>
<td>Myotis nattereri (Natterer’s bat)</td>
<td>EUROBATS</td>
<td>Unknown</td>
</tr>
</tbody>
</table>


The initial national report on the implementation of the Birds Directive was completed by the end of December 2013.

The global assessment of the status of species can be done by applying the IUCN Red List Categories and Criteria to species and species groups registered in a country. Out of the species of Estonia listed in the IUCN Red List of Threatened Species (categories Critically Endangered, Endangered and Vulnerable), all five bird species are under protection of CMS/AEWA; two species belong to the CITES Appendix II; and four species are protected under the Habitats Directive (Table 15).

<table>
<thead>
<tr>
<th>Species保护 under Habitats Directive</th>
<th>Convention / agreement</th>
<th>Overall assessment to the status in the national report of the Habitats Directive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nyctalus noctula (Common noctule)</td>
<td>EUROBATS</td>
<td>Unknown Favourable</td>
</tr>
<tr>
<td>Pipistrellus nathusii (Nathusius’ pipistrelle)</td>
<td>EUROBATS</td>
<td>Unknown Favourable</td>
</tr>
<tr>
<td>Pipistrellus pipistrellus (Common pipistrelle)</td>
<td>EUROBATS</td>
<td>Unknown Favourable</td>
</tr>
<tr>
<td>Pipistrellus pygmaeus (Soprano pipistrelle)</td>
<td>EUROBATS</td>
<td>Was not on the list in 2007 Favourable</td>
</tr>
<tr>
<td>Plecotus auritus (Brown long-eared bat)</td>
<td>EUROBATS</td>
<td>Favourable Favourable</td>
</tr>
<tr>
<td>Ursus arctos (Brown bear)</td>
<td>CITES Appendix II</td>
<td>Favourable Favourable</td>
</tr>
<tr>
<td>Vespertilio murinus (Particoloured bat)</td>
<td>EUROBATS</td>
<td>Unknown Favourable</td>
</tr>
</tbody>
</table>

Source: Data received from the Ministry of the Environment, 14 Nov. 2013; websites of the conventions [accessed 20 Nov. 2013].

Table 15. Species in Estonia listed in the IUCN Red List of Threatened Species (categories: Critically Endangered, Endangered and Vulnerable) who are also protected under biodiversity conventions or the EU Habitats Directive

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Anguilla anguilla (European eel)</td>
<td>Critically endangered</td>
<td>Decreasing</td>
<td>CITES Appendix II</td>
<td>–</td>
</tr>
<tr>
<td>Anser erythropus (Lesser White-fronted Goose)</td>
<td>Vulnerable</td>
<td>Decreasing</td>
<td>CMS Appendix I, AEWA</td>
<td>–</td>
</tr>
<tr>
<td>Aquila clanga (Greater Spotted Eagle)</td>
<td>Vulnerable</td>
<td>Decreasing</td>
<td>CMS Appendix I, CITES Appendix II</td>
<td>–</td>
</tr>
<tr>
<td>Astacus astacus (Noble Crayfish)</td>
<td>Vulnerable</td>
<td>Decreasing</td>
<td>–</td>
<td>Inadequate</td>
</tr>
<tr>
<td>Clangula hyemalis (Long-tailed Duck)</td>
<td>Vulnerable</td>
<td>Decreasing</td>
<td>CMS Appendix II, AEWA</td>
<td>–</td>
</tr>
</tbody>
</table>
As to the socio-economic benefits, one can notice a similar trend to the environmental benefits (see Chapter 4.14): it is EU law that first and foremost affects the level of socio-economic benefits, not the biodiversity-related MEAs. Thus, the role of MEAs during the 1990s and nowadays in generating socio-economic benefits is difficult to assess and so far it has not been done for Estonia.

Such benefits arising from biodiversity conservation may be manifold for both the society and private persons. It can be estimated that the implementation of the biodiversity-related conventions in Estonia, for example, has created health benefits and better governance, provided incentives for local communities. Both land land management for biodiversity conservation and nature tourism in rural areas have contributed to the reduced unemployment rate in rural areas in Estonia. The following benefits could be highlighted here in relation to private persons: land tax incentive in protected areas; subsidies for management; compensation for income losses due to land use restrictions; selling the land containing protected natural object to the state.
1. Nature tourism and recreational benefit

Nature tourism is part of overall incoming and outgoing tourism in Estonia. According to Statistics Estonia, tourism forms about 8% of the GDP of Estonia. Protected areas promote local businesses in rural areas by creating demand from tourists for lodging and local food to tourists. In the past 15 years, both domestic and international nature tourism in Estonian protected areas has been rising. For example, birdwatching tours and kayak tours with experienced guides in the West Estonian Archipelago have become very popular. The State Forest Management Centre (RMK) provides free nature tourism services for the public in 13 recreation areas across the country. According to the RMK annual report\footnote{State Forest Management Centre, 2012.}, the number of visitors to these recreation areas and RMK managed protected areas has doubled in five years, from almost 800,000 visitors in 2008 to 1.6 million visitors in 2012.

Everyman’s right

According to the Nature Conservation Act, all roads and pathways within conservation zones and limited management zones of protected areas must be open for public use from sunrise to sunset. There must be free public access to the shore paths of public or publicly-used water bodies; the width of shore paths must extend from 4 to 10 m depending on the water body. In state forests, free public access should be ensured to pick berries, mushrooms and plants, including medicinal plants, that are not protected, and to fish with a single handline in a public water body.

2. Tax incentives, subsidies, compensations

2.1 Land tax incentive

Land owners located in protected areas may enjoy a reduced rate of land tax, depending on the level of restrictions imposed on private land use by nature conservation. Pursuant to the Land Tax Act, land in strict nature reserves and conservation zones of protected areas as well as in conservation zones of species protection sites are exempt from land tax since 2009: the land tax rate is 0%. The land in limited management zones of protected areas, species protection sites and protected nature monuments as well as in limited-conservation areas is 50% exempt from land tax. In 2011, 73% of the land (1,127,132 ha) in protected areas benefited from the 50% reduced rate, while 27% of the land (413,960 ha) was not taxed (zero rate).\footnote{EEIC, 2012.}

2.2 Payments to farmers

Semi-natural communities. For restoring and maintaining semi-natural communities, subsidies to farmers are provided by the EU and from the state budget. Maintenance of semi-natural communities in Natura 2000 areas are subsidised from the EAFRD through Estonian Rural Development Plan (ERDP). The Ministry of Agriculture manages the ERDP budget. In 2012, managers of about 26,500 ha of semi-natural habitats (alluvial meadows, coastal meadows, wooded meadows, Nordic alvars, etc) received such a subsidy.\footnote{ERDP 2014–2020} In the Nature Conservation Development Plan 2020, it is foreseen to increase the area of maintained semi-natural communities to 45,000 ha by 2020.

The Ministry of the Environment provides subsidies for restoring semi-natural communities. Restoration of such habitats is a prerequisite for further management and application for respective subsidies from the ERDP. The Environmental Board as the manager of protected areas also outsources nature conservation work, such as mowing, clearing of brush and installation of culverts.

Farmland and forests. The Government provides payments to the owners of private farmland and forest located within Natura 2000 areas by partly compensating for the loss of income due to restrictions on land use imposed by nature conservation. The payments are made from the EAFRD through the ERDP. In 2012, 22,293 ha of farmland and 54,448 ha of forest land received such compensation.\footnote{A Prioritised Action Framework for Natura 2000. Estonia. For the EU Multiannual Financing Period 2014–2020.} Altogether there are about 55,000 ha of farmland and 85,000 ha of private forest land on Natura 2000 areas.\footnote{ERDP 2014–2020.}
In rural areas where jobs are scarce, such subsidies may provide additional income to people. However, no statistics on benefits exists. The compensatory measures for land owners also help protect natural values, especially in forests, on privately-owned land which otherwise would be a much more difficult task.

2.3 Selling the land containing protected natural object to the state

The Nature Conservation Act provides the possibility for private land owners located in protected areas to sell the land to the state. The Government does not accept all such applications but will consider seriously cases where significant natural features (values) are concerned, and the restrictions on land use are severe for the land owner. Some years ago, in such circumstances, the law also provided options to swap private land with state land. This option became a major real estate business, since it was used for buying land with restricted land use from several landowners by real estate companies first and then proposing the Government to buy the land or swap the land with land lots in cities. The law was amended and currently land lots of high nature value and restricted use can be purchased by the state, but not swapped with state land.

3. Monetary valuation of the ecosystem services

There are a handful of scientific studies on biodiversity and ecosystem service value assessments and willingness to pay (WTP) for ecosystem services in Estonia. For example:

- **Protected forests**: WTP of Estonian working-age population for maintaining protected forests. A survey undertaken in 2011 by Tallinn University of Technology concluded from the responses of 1000 people that a vast majority (82%) of the Estonian working-age population had a positive WTP and only 18% had a negative WTP. The annual average possible payments to maintain protected forests ranged from 3 to 40 euros, depending on sex, education, age and income.

- **Ecosystem services of bogs**: Estonian University of Life Sciences carried out a study on the economic valuation of Estonian bogs in 2011. As a case study, the authors identified and analysed the ecosystem services of Kuresoo bog in the Soomaa Ramsar site. The study used various methods for calculating the monetary value of ecosystem services per year in Kuresoo bog.

- **Ecosystem services of Lahemaa National Park**: a master’s thesis in Tallinn University (2013) studied the economic valuation of ecosystem services in Lahemaa National Park and the WTP of the Estonian working-age population for these services.

- **Use of marine waters**: WTP of residents of North-West Hiiumaa for development of an off-shore wind park and establishment of a marine protected area.

### Table 16. The budget of support measures for semi-natural habitats, Natura 2000 agricultural and forest land in Estonian Rural Development Plans 2007–2013 and 2014–2020

<table>
<thead>
<tr>
<th>Measure</th>
<th>Budget (million €)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support for the maintenance of semi-natural habitats</td>
<td>26.8</td>
</tr>
<tr>
<td>Natura 2000 support for agricultural land</td>
<td>8.7</td>
</tr>
<tr>
<td>Natura 2000 support for private forest land</td>
<td>25.4</td>
</tr>
</tbody>
</table>


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95 Ehrlich, 2012.
96 Kosk and Lõhmus, 2011.
97 Kosk, 2012.
98 Ehvert, 2013.
99 Nõmmann et al. 2014.
4. Benefits for public awareness

Socio-economic benefits can also be evaluated in terms of the opinion of the general public on the value of the environment and nature conservation. The Ministry of the Environment has conducted all-Estonian surveys of public opinion on the environment biannually since 2008. The most recent survey is from 2012. An example is given here on the visits to nature trails and protected areas, although exact comparison between the years cannot be done due to the slight variation in questions and possible replies.

In 2012:

- 43% had visited a nature trail or hiking trail, and
- 32% had visited an environmental education centre, nature house or visitor centre of protected area in the past 12 months.

In 2010:

- 58% had visited a protected area, nature trail or hiking trail, and
- 18% had visited an environmental education centre or nature house in the past 12 months.

In 2008:

- 36% had visited an environmental education centre, nature house, protected area, nature trail or hiking trail in the past 12 months.

In general, 84% of the respondents regarded themselves as rather or very environmentally aware, while 64% of the respondents considered the access to environmental information on Estonia good or very good in 2012.100

Score: MODERATE implementation

5 OVERALL ASSESSMENT OF IMPLEMENTATION OF FOUR BIODIVERSITY CONVENTIONS AND WAYS FOR IMPROVEMENT

The review of the coherence and effectiveness of the implementation of four biodiversity conventions (CBD, Ramsar Convention, CITES and CMS) resulted in the following conclusions:

1. Legal and policy framework. Estonia has ratified all four conventions, the Cartagena Protocol and the AEWA and EUROBATS agreements. The national legislation and policy for enforcing these MEAs is in place. However, Estonia has not yet ratified the ASCOBANS under CMS, the Nagoya Protocol under CBD or the Nagoya-Kuala Lumpur Supplementary Protocol.

2. Institutional and administrative framework. Estonia has developed a unified nature conservation administrative system (from policy to management and enforcement) under the Ministry of the Environment. Responsibilities between the management, scientific and enforcement authorities of the MEAs have been designated. The Ministry of the Environment has the exclusive responsibility to ensure effective implementation of the MEAs in question. Public authorities in other sectors share some of the specific responsibilities within their authority and capacity.

3. National implementation plan for the biodiversity conventions. The Estonian Government has adopted a single policy document on nature conservation: the national Nature Conservation Development Plan 2020. The NCDP aims at covering all nature conservation targets and responsibilities arising from national laws, EU directives and international agreements, such as the four conventions in question. Due to the general character of the NCDP, the specifics of the conventions are not addressed in it.

4. Implementation and review of the plan. The review of implementation of the biodiversity conventions is periodically conducted via mandatory national reporting to secretariats of the conventions by the Ministry of Environment, but at different points in time and scope. There is no synergies report available that addresses the issues of implementation of the four conventions.

Thus, it is largely impossible to evaluate the implementation effectiveness of the biodiversity conventions only, but the NCDP 2020 will provide a good opportunity to evaluate the overall effectiveness of implementation of the nature conservation policy once the first review of the implementation of the NCDP is completed in 2014.

5. Monitoring system. A national environmental monitoring scheme is in place and comprises elements that are largely relevant and adequate for meeting the monitoring obligations in the cluster of biodiversity conventions. However, special monitoring obligations under the Ramsar Convention need to be included in the national scheme more distinctively.

6. Consideration of the MEAs in decision-making. Impacts on species and habitats are typically addressed in Environmental Assessment procedure, either at the project (EIA) or strategic level (SEA) and also in the transboundary context. Studies on the Appropriate Assessment that is required by the EU Habitats Directive have revealed the poor quality of the assessment, which needs to be improved.

7. Financing. Various sources for financing the implementation of the biodiversity-related conventions are available in Estonia, both nationally and internationally. The state budget does not specify the use of public funds per convention. Thus, it is almost impossible to evaluate the sufficiency of the funds for the effective implementation of biodiversity conventions. Only approximate estimates can be provided, mostly by qualitative evaluations of the institutions involved.

8. Competencies and capacity. The competence of focal points and nature conservation officials at the Ministry of Environment and its agencies is high. The capacity to implement the four MEAs in question is adequate. However, in terms of supervision, there are no separate nature protection inspectors, but the inspectors also have to deal with other environmental areas. The competence in nature conservation issues needs to be expanded to other sector ministries and respective institutions to ensure sufficient consideration of biodiversity protection in decision-making.

9. Stakeholder engagement. Stakeholders are involved in some stages of the implementation of the conventions. So far there have been no formal procedures in place to engage stakeholders in all stages (e.g. to discuss the draft or final results of the national reports of biodiversity conventions with the stakeholders).

10. Enforcement system. The enforcement system is in place. The overall number of environmental violations has been decreasing since 2003. The greatest number of violations in the last years has been in the category of fish protection.

11. Cross-border cooperation. Estonia is actively involved in bilateral, regional or multilateral cooperation on biodiversity conservation.

12. Achieving the objectives. It can be evaluated that in general the objectives of the biodiversity conventions are met, but in terms of specific objectives there is still room for improvement.

13. Coordination across the cluster of biodiversity MEAs is done informally and there is no formal procedure or strategic approach established for this issue. Coordination is relatively effective within the environmental sector, but less effective across sectors.

Thus, it is suggested that setting up a permanent working group for biodiversity conventions could be considered, involving representatives of all the responsible governmental authorities, local governments, experts and NGOs. Such a working group can periodically review the implementation of the conventions, discuss the challenges and communicate the results to a wider audience. Review reports of the conventions could become part of the regular review of the NCDP which...
provides general nature conservation targets and measures. Establishment of a joint working group could also enhance the competence and capacity of other sectors to implement the biodiversity conventions.

14. **Benefits for the environment.** The benefits for the environment are mostly arising from the designation of protected areas (18% of the territory of Estonia), such as national designations (over 900 sites), Natura 2000 network (608 sites) and Ramsar sites (17 sites), and management of the habitats. However, 35% of species and 48% of habitats protected under the EU Habitats Directive were in unfavourable status, most of them in inadequate status, in 2013.

15. **Socio-economic benefits** are poorly studied and understood as of yet; however, the first attempts to evaluate the ecosystem services of raised bogs, protected forests and a national park have been made. To the authors’ knowledge, the effects of the natural environment in good conservation status on human safety and health have not yet been studied. Management of semi-natural habitats and nature tourism have provided jobs in rural areas, but the actual value of this has not been estimated.

In summary, the review of implementation of the four global biodiversity agreements concluded that the strongest implementation in Estonia is in the category ‘Cross-border cooperation’ (Table 17). Although the rest of the categories were scored as moderate, there are several categories which are close to strong implementation, for instance ‘Adequate legal and policy framework’, ‘Achieving the objectives’ and ‘Benefits for the environment’. It was difficult to score the category ‘Adequate financing’, since nature conservation budget does not specify the budget for implementation of the MEAs. The overall implementation effectiveness was evaluated to be relatively high as none of the categories resulted in weak scores. Objective-led and implementation effectiveness received almost equal scores; however, the latter can be more easily measured than the objective-led effectiveness.

<table>
<thead>
<tr>
<th>Review categories</th>
<th>Strong</th>
<th>Moderate</th>
<th>Weak</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Adequate legal and policy framework</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>2. Coordinated institutional and administrative framework</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>3. Development of an integrated national implementation/action plan(s)</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>4. Effective implementation and review of the plan(s)</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>5. Effective monitoring of implementation of the MEAs in question</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>6. Consideration of objectives of the MEAs in decision-making</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Adequate financing of the implementation</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>8. Strong competencies and capacity</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>9. Stakeholder engagement</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>10. Effective enforcement system</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>11. Cross-border cooperation</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>12. Achieving the objectives</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>13. Coordination across the cluster of MEAs</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>14. Benefits for the environment</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>15. Socio-economic benefits</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
5.1 OBSERVATIONS AND SUGGESTIONS TO THE METHODOLOGY

Based on the testing of the methodology for reviewing the coherence and effectiveness of implementation of the biodiversity conventions in Estonia, the following conclusions were made:

1. The 15 review questions and categories appeared appropriate to be applied in such evaluations. The criteria and benchmarks for ‘ideal implementation’ were taken as overall guidance and therefore it was not attempted to evaluate the implementation of each given benchmark separately.

2. The review was carried out based on existing reports and studies as well as on information and opinions received from the focal points and other stakeholders. Conducting new studies and focus group interviews, which is proposed in the methodology as one option to collect evidence, would give additional information, but would also take more time and resources.

3. The review focused on objective-led and implementation effectiveness. If cost-effectiveness is also planned for evaluation, specific studies may need to be conducted on whether the outcomes of the implementation of the MEAs in question, i.e., benefits created, are in good correspondence with the budget spent.

4. It is not always possible to distinguish the implementation of the biodiversity conventions from the overall nature conservation. In this case the implementation practice of the latter was evaluated, for example in the categories ‘Consideration of objectives of the MEAs in decision making’ and ‘Adequate financing’. Or, vice versa, some categories were handled more widely than providing convention-specific information only, since the wider nature conservation activities also contribute to the implementation of the conventions, for example in the categories ‘Stakeholder engagement’, ‘Cross-border cooperation’, ‘Benefits for the environment’, ‘Socio-economic benefits’.

5. While the process of implementation is usually documented more thoroughly and thus can be better evaluated, the outcomes of implementation are less traceable by influencing factors, such as in the categories: ‘Achieving the objectives’, ‘Benefits for the environment’, ‘Socio-economic benefits’.

6. Qualitative assessment was used in all review categories. Quantitative assessment had a bigger role in the categories ‘Effective enforcement system’ and ‘Benefits for the environment’.
REFERENCES

*Articles, reports, books*


**Legal acts**

**Directives:**


**Laws:**


Regulations and orders:


National reports to convention secretariats


Strategies, programmes and action plans


## ANNEX. CHECKLIST FOR REVIEWING THE NATIONAL IMPLEMENTATION OF A CLUSTER OF MEAs

<table>
<thead>
<tr>
<th>Review category</th>
<th>Review question</th>
<th>Criteria and benchmarks for ideal implementation</th>
<th>Method of response</th>
</tr>
</thead>
</table>
| 1. Adequate legal and policy framework | 1.1. Is there an adequate legislation and policy in place for enforcing the MEAs in question? | IDEAL:  
- The MEAs in question are ratified. National policy and legislation are fully compatible with the MEAs.  
- Laws and regulations have been brought into compliance with provisions of the MEAs in question according to a legal gap analysis.  
- There is no evidence that legal framework hinders the enforcement of the MEAs in question.  
- Legislation imposes concrete responsibilities on the regulated communities (state bodies, private sector, the public, etc.)  
- Laws and regulations are regularly reviewed in the context of the relevant international obligations and the national situations. |  
- Review of legal acts or review of documents to provide evidence that the legal analysis has been done;  
- Review of court cases and complaints regarding the implementation of the MEAs in question;  
- Interviews with stakeholders (MEA implementing agencies, representatives of non-governmental sectors). |
<table>
<thead>
<tr>
<th>Review category</th>
<th>Review question</th>
<th>Criteria and benchmarks for ideal implementation</th>
<th>Method of response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Coordinated institutional and</td>
<td>2.1. Have the responsibilities been effectively designated among different</td>
<td>IDEAL:&lt;br&gt;• The national focal points for the MEAs in question have been determined.&lt;br&gt;• Agencies for implementing the MEAs in question are in place. Their responsibilities are:&lt;br&gt;  - enforcement of laws and regulations related to the MEAs in question,&lt;br&gt;  - development and review of the implementation plan of the MEAs in question,&lt;br&gt;  - monitoring and evaluation of implementation of the MEAs in question,&lt;br&gt;  - collection, reporting and analysing of data,&lt;br&gt;  - awareness raising and publicity;&lt;br&gt;• Principal responsibility for carrying out the commitments under the MEAs in question, as well as the roles and responsibilities of each agency, have been clearly defined and enforced. There are no gaps and overlapping roles and responsibilities.&lt;br&gt;• Implementation of the MEAs in question is sufficiently coordinated among different levels of government as well as horizontally;&lt;br&gt;• Responsible agencies exchange information and cooperate closely with each other and with other sectors;&lt;br&gt;• The number of positions is sufficient for the implementation of the MEAs in question.</td>
<td>• Review of documents (job descriptions, reports);&lt;br&gt;• Review of the implementation plan and reports to the MEA secretariat;&lt;br&gt;• Interviews with agencies for their self-assessment and with other stakeholders;&lt;br&gt;• Review of guidelines or rules of procedure for coordination and cooperation if these exist.</td>
</tr>
<tr>
<td>administrative framework</td>
<td>levels of government as well as horizontally?</td>
<td></td>
<td>------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>3. Development of an integrated national</td>
<td>3.1. Is there an elaborated implementation/action plan for meeting the obligations</td>
<td>IDEAL:&lt;br&gt;• The state has an enforced national implementation/action plan for the MEAs in question.&lt;br&gt;• The plan and its objectives are in accordance with all objectives of the MEAs in question.&lt;br&gt;• The plan includes:&lt;br&gt;  - a prioritised list of measures with due dates to implement the MEAs in question at the national and sub-national levels;&lt;br&gt;  - monitoring and evaluation objects, measures and measurable indicators;&lt;br&gt;  - responsible agencies for implementation, monitoring and reporting; and&lt;br&gt;  - allocation of resources (human, financial, technical);&lt;br&gt;• The plan has an integrated approach to the MEA issues; it identifies policies, programmes and plans in related sectors through which specific measures need to be taken in order to effectively implement the MEAs in question;&lt;br&gt;• The plan has been developed through a consultative and participatory multi-stakeholder process.</td>
<td>• Review of the plan and reports to the MEA secretariat;&lt;br&gt;• Interviews with stakeholders (MEA implementing agencies, representatives of non-governmental sectors).</td>
</tr>
<tr>
<td>Review category</td>
<td>Review question</td>
<td>Criteria and benchmarks for ideal implementation</td>
<td>Method of response</td>
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</table>
| 4. Effective implementation and review of the plan | 4.1. Is the implementation of the plan effective? | IDEAL:  
- Measures are taken and objectives met according to the plan.  
- The plan is reviewed and updated regularly according to the monitoring and evaluation results in order to meet the set targets.  
- Sufficient, correct and timely reports are submitted to secretariats of the MEAs in question. Reporting requirements of the MEA are fulfilled.  
- The reports provide a complete and understandable picture of the state’s implementation of the MEAs in question.  
- The reports assess compliance with the MEAs in question, identify compliance problems and indicate solutions which are included in the national implementation/action plan.  
- The reports evaluate effectiveness of the policy measures implemented so far on issues covered by the MEAs in question.  
- The reports identify barriers to effective implementation and mechanisms to facilitate implementation of the MEAs in question.  
- The reports are made public via Internet and other publication channels. | Review of the plan and reports to the MEA secretariat to analyse the accomplishment of the designed actions and use of budgets;  
Focus group interviews with stakeholders (MEA implementing agencies, representatives of non-governmental sectors) to evaluate the implementation effectiveness of the plan. |
| 5. Effective monitoring of the MEA in question | 5.1. Is there an effective monitoring system in place? | IDEAL:  
- Compliance and impacts of the implementation of the MEAs in question are regularly monitored and evaluated according to the national implementation/action plan.  
- A monitoring system for environmental components covered by the MEAs in question is in place.  
- Monitoring is based on updated and reliable environmental data.  
- Monitoring is carried out by independent professionals.  
- Environmental performance is improving in issues covered by the MEAs in question. | Review of the monitoring plan and reports to the MEA secretariat to analyse the accomplishment of the designed actions and use of budgets;  
Focus group interviews with stakeholders (MEA implementing agencies, representatives of non-governmental sectors) to evaluate the effectiveness of monitoring. |
| 6. Consideration of objectives of the MEAs in decision-making | 6.1. Are objectives of the MEAs in question taken into account in Impact Assessment of projects, plans, policies and programmes? | IDEAL:  
- The objectives of the MEAs in question are taken into account through an Impact Assessment (IA) process of projects (permitting process), spatial planning, policies, and programmes.  
- The Impact Assessment of projects, plans, policies and programmes is conducted systematically to ensure that the MEA objectives are mainstreamed into the planning activities and policy measures of all sectors and levels.  
- There are no conflicts between objectives, actions and targets in other areas and the MEAs in question.  
- Clear instructions are given to relevant agencies of all the sectors whose activities can have an impact on the issues covered by the MEAs in question. | To provide evidence via analysis of the IA process; the source of evidence could be legal documents, but also IA guidelines;  
Review of relevant policy documents;  
Interviews with stakeholders (MEA implementing agencies, representatives of non-governmental sectors). |
<table>
<thead>
<tr>
<th>Review category</th>
<th>Review question</th>
<th>Criteria and benchmarks for ideal implementation</th>
<th>Method of response</th>
</tr>
</thead>
</table>
| 6. Consideration of objectives of the MEAs in decision making | 6.1. Are objectives of the MEAs in question taken into account in Impact Assessment (IA) of projects, plans, policies and programmes? | **IDEAL:**  
• The objectives of the MEAs in question are taken into account through an IA process of projects (permitting process), spatial planning, policies, and programmes.  
• The IA of projects, plans, policies and programmes is conducted systematically to ensure that the MEA objectives are mainstreamed into the planning activities and policy measures of all sectors and levels.  
• There are no conflicts between objectives, actions and targets in other areas and the MEAs in question.  
• Clear instructions are given to relevant agencies of all the sectors whose activities can have an impact on the issues covered by the MEAs in question.  
**To provide evidence via analysis of the IA process; the source of evidence could be legal documents, but also IA guidelines;**  
**Review of relevant policy documents;**  
**Interviews with stakeholders (MEA implementing agencies, representatives of non-governmental sectors).** |                                                                                                                                                                                      |
| 7. Adequate financing of the implementation | 7.1. Is an adequate level of funding secured for the implementation of the MEAs in question? | **IDEAL:**  
• The implementation, monitoring and enforcement of the MEAs in question are financed continuously from the national budget, which contains a specific budget line for it.  
• There are other public and private funding sources and international funding sources (e.g. EU, World Bank, GEF, Asian Development Bank etc.) available and used for the implementation of the plan.  
• All the measures in the implementation plan are covered by sufficient funding.  
• The funding allocations match the roles and responsibilities of implementing agencies and staff.  
**Analysis of trends in budgets and tasks for implementation of the MEAs in question;**  
**Analysis of the share of national budget and other sources in total funding;**  
**Qualitative assessment by stakeholders (MEA implementing agencies, representatives of non-governmental sectors).** |                                                                                                                                                                                      |
| 8. Strong competencies and capacity     | 8.1. Are the competencies and capacity of officials of the responsible authorities and of the experts providing input to the implementation of the MEAs in question sufficient? | **IDEAL:**  
• The kinds of competencies that are required from the officials to implement and enforce the MEAs in question are clearly defined, available and sufficient.  
• The competencies that are required from the experts for the implementation of the plan (providing data, monitoring, research, etc.) are clearly defined, available and sufficient.  
• Capacity building is taking place through systematic training programmes. All positions are staffed with well-trained specialists.  
**Review of relevant documents and focus group interviews to analyse education, working experience and possible training needs of officials and experts.** |                                                                                                                                                                                      |
<table>
<thead>
<tr>
<th>Review category</th>
<th>Review question</th>
<th>Criteria and benchmarks for ideal implementation</th>
<th>Method of response</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Stakeholder engagement</td>
<td>9.1. Is the stakeholder engagement system in place and comprehensive?</td>
<td>IDEAL:</td>
<td>• Review of documents (minutes of stakeholder meetings, implementation plan, monitoring reports, SEA reports, budgets);</td>
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<td>• A stakeholder participation system is in place. Stakeholders are involved in the whole cycle of the MEAs in question, including:</td>
<td>• Focus group interviews (MEA implementing agencies, representatives of non-governmental sectors) to analyse satisfaction of stakeholders with the implementation of the MEAs in question;</td>
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<td>- preparation for ratification of the MEAs in question,</td>
<td>• Percentage of environmental NGOs from all stakeholders;</td>
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<td>- developing national implementation/action plan,</td>
<td>• Review of composition of national delegations at COPs.</td>
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<td>- implementing the plan,</td>
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<td>- monitoring of compliance and impacts, and</td>
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<td>- national reporting.</td>
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<td>• Stakeholders include anyone who is affected by or is otherwise interested in the MEAs or its implementation in either the governmental or non-governmental sectors, incl. businesses, national umbrella organisations and issue-oriented national groups (environmental NGOs), and civil society groups.</td>
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<td>• The government secures a high level of stakeholder participation in the implementation of the MEAs in question by allowing free access to the process, providing timely information, allocating financial resources and securing sufficient time for participation.</td>
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<td>• Stakeholders are engaged early in the process when options are still open. Feedback/input from stakeholders is registered and it improves the implementation of the MEAs in question.</td>
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<td>• Regular (yearly or more often) stakeholder meetings presenting progress and under-achievements of implementation of the MEAs in question take place.</td>
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<td>• National delegations to the Conference of the Parties of the MEAs in question include NGO representative(s).</td>
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<td>• Public awareness and outreach activities are systematically implemented (concerning obligations deriving from the MEAs in question, the benefits of being party to the MEAs, new developments at international level, etc.).</td>
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<td>• Stakeholders and public have right of access to administrative and judicial proceedings in issues of the MEAs in question.</td>
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<td>Review category</td>
<td>Review question</td>
<td>Criteria and benchmarks for ideal implementation</td>
<td>Method of response</td>
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<td>10. Effective enforcement system</td>
<td>10. Is the enforcement system in place with effective enforcement tools at the disposal of relevant authorities?</td>
<td><strong>IDEAL:</strong>&lt;br&gt;• An enforcement system has been established.&lt;br&gt;• The enforcement agency has clear authority and a sufficient mandate (up to stopping illegal activity and issuing penalties) related to the issues of the MEAs in question.&lt;br&gt;• Non-compliance and violations are registered by the national enforcement agency and made public via Internet and media.&lt;br&gt;• Corrective measures to curb the growth of violation numbers and severity are undertaken by designated authority, incl. amendments to the legislation and practices.&lt;br&gt;• The cost of non-compliance exceeds the cost of compliance. Enforcement tools include effective economic instruments and penalties for violations are established at level where number and severity of violations are clearly decreasing.</td>
<td>• Review of legislation; &lt;br&gt;• Review of documents and registries: - non-compliance reports and trends; - complaints on implementing the MEAs in question; - appealation court cases won by penalty issuer; &lt;br&gt;• Interviews with stakeholders (MEA implementing agencies, representatives of non-governmental sectors).</td>
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<td>11. Cross-border cooperation</td>
<td>11. Is there bilateral and multilateral cooperation at the regional and international levels in the context of the MEAs in question?</td>
<td><strong>IDEAL:</strong>&lt;br&gt;• Bilateral and multilateral cooperation mechanisms, incl. those with neighbouring countries, are in place (agreements/Memoranda of Understanding, coordination bodies).&lt;br&gt;• Joint projects to meet the targets of the MEAs in question are implemented.&lt;br&gt;• Exchange of information and experience, and joint projects are considered useful by the parties of the MEAs in question.&lt;br&gt;• The state is participating in the Conferences of the Parties / Meetings of the Parties and progress reports are made available for public.&lt;br&gt;• The state is participating in the work of the MEAs in question as a member of a task force, an expert group or a technical group, etc.&lt;br&gt;• Results of joint activities improve the implementation of the MEAs in question.</td>
<td>• Review of relevant documents and reports;&lt;br&gt;• Interviews with stakeholders (MEA implementing agencies, representatives of non-governmental sectors).</td>
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<td>Review category</td>
<td>Review question</td>
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<td>12. Achieving the objectives</td>
<td>12.1. Are the objectives achieved under the MEAs in question?</td>
<td>IDEAL: • There is a political will for achieving the objectives and meeting the obligations of the MEAs in question. • The objectives of the MEAs in question are achieved and obligations met. • The overall effectiveness of the MEAs in question in meeting its objectives is regularly reviewed and improvement measures undertaken. • The national implementation/action plan is enforced by the national government. • The reports on compliance, non-compliance and impacts of the MEAs in question are reviewed by Minister of the Environment/the national government/parliament and discussed in public.</td>
<td>• Focus group interviews with stakeholders (MEA implementing agencies, representatives of non-governmental sectors) to assess priority of the MEAs in question for the national government on a scale of 1–10; • The review of documents (e.g., reports to the MEA secretariat, national implementation/action plan, media monitoring reports, minutes of stakeholder meetings).</td>
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<td>13. Coordination across the cluster of MEAs</td>
<td>13.1 Are the MEAs in question effectively implemented as a cluster?</td>
<td>IDEAL: • The implementation of the MEAs in a cluster is effectively coordinated. • The national implementation/action plan of the MEAs in question identifies cross-cutting themes and synergies between the MEAs in the cluster. • Responsible agencies for the implementation of the MEAs in the cluster share data and tools. • Reporting is coordinated within the cluster of MEAs. • National legislation supports the implementation of the cluster of thematically related MEAs.</td>
<td>• Review of relevant legal acts or review of documents to provide evidence that the legal analysis has been done; • Interviews with stakeholders (MEA implementing agencies, representatives of non-governmental sectors).</td>
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<td>14. Benefits for the environment</td>
<td>14.1. Has the implementation of the MEAs in question created benefits for the environment?</td>
<td>IDEAL: • The cluster-specific and wider environmental benefits have been assessed in the national implementation/action plan, for example, as to whether and how: - the implementation of the MEAs in question has improved the status of species and habitats; - the implementation of the MEAs in question has increased or maintained the ecosystem services; - the implementation of the MEAs in question has resulted in reduced emissions to the environment; and - the implementation of the MEAs in question has resulted in more efficient land use, mineral use and biomass use.</td>
<td>• Review of national implementation/action plan; • Interviews with stakeholders (MEA implementing agencies, representatives of non-governmental sectors).</td>
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<td>15. Socio-economic benefits</td>
<td>15.1. Has the implementation of the MEAs in question created socio-economic benefits?</td>
<td>IDEAL: • The cluster-specific and wider socio-economic benefits have been assessed in the national implementation/action plan, for example, as to whether and how: - the implementation of the MEAs in question has created more jobs, incl. green jobs; - the implementation of the MEAs in question has increased safety benefits; - the implementation of the MEAs in question has created health benefits; - the implementation of the MEAs in question has promoted the introduction of green technologies; - the implementation of the MEAs in question has created better governance; - the implementation of the MEAs in question has provided incentives for local communities; and - the costs of implementation of the MEAs in question are smaller than benefits gained.</td>
<td>• Review of the national implementation/action plan; • Cost-benefit analysis; • Effectiveness analysis; • Interviews with stakeholders (MEA implementing agencies, representatives of non-governmental sectors).</td>
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</table>
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