

Estonian Ministry of the Environment

THIRD NATIONAL REPORT TO THE
CONVENTION ON BIOLOGICAL DIVERSITY

ESTONIA

Tallinn 2005

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Photos: Lauri Saks
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CONTENTS

Estonian Ministry of the Environment.....	1
Tallinn 2005.....	1
© Estonian Ministry of the Environment.....	2
Edited by Marina Maran.....	2
Photos: Lauri Saks.....	2
Compiled: Lea Tummeleht.....	2
Printed by Infotrükk Ltd.....	2
CONTENTS.....	3
A. REPORTING PARTY.....	8
B. PRIORITY SETTING, TARGETS AND OBSTACLES.....	12
Priority Setting.....	14
Challenges and Obstacles to Implementation.....	15
2010 Target	19
Global Strategy for Plant Conservation (GSPC).....	52
The Conference of the Parties, in decision VI/9, annex, adopted the Global Strategy for Plant Conservation. Parties and Governments are invited to develop their own targets with this flexible framework. The Conference of the Parties considered the Strategy as a pilot approach for the use of outcome oriented targets under the Convention. In decision VII/10, the Conference of the Parties decided to integrate the targets into the reporting framework for the Third National Reports. Please provide relevant information by responding to the questions and requests contained in the following tables.....	52
Ecosystem Approach.....	66
C. ARTICLES OF THE CONVENTION.....	69
Article 5 – Cooperation.....	69
Environmental Conventions In Force In Estonia:	73
Article 6 – General measures for conservation and sustainable use.....	75
.....	75
Biodiversity and Climate Change.....	78
Article 7 – Identification and monitoring.....	79
Decisions on Taxonomy.....	83
Article 8 – In-situ conservation.....	88
[excluding paragraphs (a) to (e), (h) and (j)].....	88
.....	88
Programme of Work on Protected Areas (Article 8 (a) to (e))	91
Article 8(h) – Alien species.....	96
Article 8(j) – Traditional knowledge and related provisions	
.....	100
.....	100
GURTS.....	100
Akwé:Kon Guidelines.....	101
Capacity Building and Participation of Indigenous and Local Communities.....	102
Support to implementation.....	103
Article 9 – Ex-situ conservation.....	105
(2) Animals of native species can be re-inhabited on the basis of permission of the Environmental Department of the county of origin (i.e. county where the animals are taken from the wild for resettlement) and county of re-inhabiting of the animals.	107
Article 10 – Sustainable use of components of biological diversity.....	109
Biodiversity and Tourism.....	112
Article 11 – Incentive measures.....	114
Article 12 – Research and training	117

Article 13 – Public education and awareness.....	119
Article 14 – Impact assessment and minimizing adverse impacts.....	125
Article 15 – Access to genetic resources.....	129
Article 16 – Access to and transfer of technology	132
Programme of Work on transfer of technology and technology cooperation.....	133
Article 17 – Exchange of information	135
Article 18 – Technical and scientific cooperation	137
Article 19 – Handling of biotechnology and distribution of its benefits.....	140
Article 20 – Financial resources.....	141
A r e a s.....	146
X.....	146
X.....	146
X.....	146
X.....	146
X.....	146
X.....	146
X.....	146
X.....	146
X.....	147
X.....	147
X.....	147
D. THEMATIC AREAS.....	148
Challenges.....	148
Programme of Work.....	148
Agricultural.....	148
Forest.....	148
Marine and coastal.....	148
Inland	
water ecosystem.....	148
Dry and subhumid lands.....	148
Mountain.....	148
(a)Lack of political will and support.....	148
2.....	148
2.....	148
1.....	148
0.....	148
(b)Limited public participation and stakeholder involvement.....	148
2.....	148
2.....	148
0.....	148
(c)Lack of main-streaming and integration of biodiversity issues into other sectors.....	148
2.....	148
2.....	148
3.....	148
(d)Lack of precautionary and proactive measures.....	148
2.....	148
2.....	148
1.....	148
1.....	148
(e)Inadequate capacity to act, caused by institutional weakness.....	148
2.....	148
2.....	148
2.....	148

0.....	148
(f)Lack of transfer of technology and expertise.....	148
1.....	148
1.....	148
1.....	148
0.....	148
(g)Loss of traditional knowledge.....	148
1.....	148
1.....	148
0.....	148
0.....	148
(h)Lack of adequate scientific research capacities to support all the objectives.....	148
2.....	148
2.....	148
2.....	148
0.....	148
(i)Lack of accessible knowledge and information.....	148
1.....	148
1.....	148
1.....	148
0.....	148
(j)Lack of public education and awareness at all levels.....	148
2.....	148
3.....	148
2.....	148
0.....	148
(k)Existing scientific and traditional knowledge not fully utilized.....	149
1.....	149
2.....	149
2.....	149
0.....	149
(l)Loss of biodiversity and the corresponding goods and services it provides not properly understood and documented.....	149
2.....	149
2.....	149
2.....	149
0.....	149
(m)Lack of financial, human, technical resources.....	149
2.....	149
2.....	149
2.....	149
2.....	149
(n)Lack of economic incentive measures.....	149
2.....	149
3.....	149
2.....	149
0.....	149
(o)Lack of benefit-sharing.....	149
1.....	149
1.....	149
1.....	149
1.....	149

(p)Lack of synergies at national and international levels.....	149
1.....	149
1.....	149
1.....	149
0.....	149
(q)Lack of horizontal cooperation among stakeholders.....	149
2.....	149
2.....	149
1.....	149
0.....	149
(r)Lack of effective partnerships.....	149
2.....	149
2.....	149
2.....	149
0.....	149
(s)Lack of engagement of scientific community.....	149
2.....	149
1.....	149
0.....	149
0.....	149
(t)Lack of appropriate policies and laws.....	149
2.....	149
2.....	149
1.....	149
1.....	149
(u)Poverty.....	149
1.....	149
1.....	149
0.....	149
0.....	149
(v)Population pressure.....	149
1.....	149
2.....	149
2.....	149
0.....	149
(w)Unsustainable consumption and production patterns.....	149
2.....	149
2.....	149
2.....	149
1.....	149
(x)Lack of capacities for local communities.....	149
2.....	149
2.....	149
2.....	149
1.....	149
(y)Lack of knowledge and practice of ecosystem-based approaches to management.....	149
2.....	149
2.....	149
3.....	149
1.....	149
(z)Weak law enforcement capacity	149
1.....	149

2.....	149
2.....	149
0.....	149
(aa)Natural disasters and environmental change	149
1.....	149
1.....	149
1.....	149
1.....	149
(bb)Others (please specify).....	149
-.....	149
-.....	149
-.....	149
-.....	149
N/A.....	149
N/A.....	149
Inland water ecosystems.....	150
Marine and coastal biological diversity.....	153
General	153
Implementation of Integrated Marine and Coastal Area Management.....	154
Marine and Coastal Living Resources.....	155
A c t i v i t i e s.....	156
Mariculture.....	158
Alien Species and Genotypes.....	159
Agricultural biological diversity.....	160
Annex to decision V/5 – Programme of work on agricultural biodiversity.....	160
Forest Biological Diversity.....	165
General.....	165
Expanded programme of work on forest biological diversity.....	167
Biological diversity of dry and sub-humid lands.....	179
Mountain Biodiversity.....	180

A. REPORTING PARTY

Contracting Party

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SUBMISSION

Signature of officer responsible for
submitting national report

Date of submission

28 September 2005 sent to the Secretariat of
the Convention on Biological Diversity

Information on the preparation of the report

Box I.

Please provide information on the preparation of this report, including information on stakeholders involved and material used as a basis for the report.

Preparation of the third national report started after the steering committee had its first meeting on April 15 in the Ministry of the Environment. Steering committee selected qualified experts for reporting. When experts gave in first outlines of their reports there was a seminar discussing the first draft of the 3rd national report on 7th of July. After this forum the final draft was elaborated by the experts.

Members of steering committee:

Ms **Lilika Käis** – Officer, Nature Conservation Department, Estonian Ministry of the Environment (Art 5, Cooperation; Operations of the convention)

Mrs **Kaja Peterson** – Programme Director, Estonian Institute for Sustainable Development (Art 14, Impact assessment and minimizing adverse impacts; 2010 Target: Pressures from habitat loss, land use change and degradation, and unsustainable water use, reduced)

Mr **Lauri Klein** – Officer, Estonian Environmental Information Centre, Estonian Ministry of the Environment (Art 7a, Monitoring; Art 17, Exchange of information; Art 18, Technical and scientific cooperation)

Dr **Mart Külvik** – Senior Researcher, Institute of Agricultural and Environmental Sciences, Estonian Agricultural University (Art 10, Sustainable use of components of biological diversity; Thematic reports: Ecosystem Approach and Forest biological diversity; 2010 Target: Promote sustainable use and consumption)

Dr **Tiiu Kull** – Head, Senior Research Associate, Institute of Agricultural and Environmental Sciences, Estonian Agricultural University (Art 8h, Alien species; GSPC; Thematic report: Agricultural biological diversity; 2010 Target: Control threats from invasive alien species)

Additionally following experts were involved:

Mr **Aleksei Lotman** – Monitoring specialist, Matsalu National Park (Foreword; Art 6, General measures for conservation and sustainable use)

Prof **Haldja Viinalass** – Professor, Institute of Veterinary Medicine and Animal Sciences, Estonian Agricultural University (Art 15, Access to genetic resources; Art 16, Access to and transfer of technology; 2010 Targets: Promote the conservation of genetic diversity and Ensure the fair and equitable sharing of benefits arising out of the use of genetic resources)

Mr **Tiit Maran** – Conservation Officer, Tallinn Zoological Gardens (Art 9, *Ex situ* conservation)

Mr **Üllas Erlich** – Researcher, Centre for Economic Research, Tallinn University of Technology (Art 11, Incentive measures; Art 20, Financial resources; 2010 Target: Parties have improved financial, human, scientific, technical and technological capacity to implement the Convention)

Mr **Margus Pensa** – Institute of Ecology, Tallinn University (2010 Target: Address challenges to biodiversity from climate change, and pollution)

Mr **Jaak Tambets** – Member of board, Nature Conservation Foundation (Thematic report: Inland water ecosystems)

Dr **Ivar Puura** – Researcher, Institute of Geology, Tartu University (Art 12, Research and training; Art 13, Public education and awareness)

Dr **Merit Otsus** – Researcher, Institute of Agricultural and Environmental Sciences, Estonian Agricultural University (Art 8, *In situ* conservation; 2010 Target: Promote the conservation of the biological diversity of ecosystems, habitats and biomes)

Mr **Hardo Lilleväli** – Officer, Nature Conservation Department, Estonian Ministry of the Environment (Art 19, Handling of biotechnology)

Mrs **Riinu Rannap** – Officer, Nature Conservation Department, Estonian Ministry of the Environment
(2010 Target: Promote the conservation of species diversity)

Ms **Silvia Lotman** – Member of board, Estonian Seminatural Community Conservation Association (Art 8j, Traditional knowledge and related provisions; 2010 Targets: Maintain socio-cultural diversity of indigenous and local communities and Maintain capacity of ecosystems to deliver goods and services and support livelihoods)

Prof **Toomas Saat** and Dr **Henn Ojaveer** – Estonian Marine Institute, University of Tartu
(Thematic report: Marine and coastal biological diversity)

Mrs **Ülle Reier** – Researcher, Institute of Botany and Ecology, Tartu University (Art 7b, Decisions on taxonomy)

B. PRIORITY SETTING, TARGETS AND OBSTACLES

Box II.

Please provide an overview of the status and trends of various components of biological diversity in your country based on the information and data available.

The term 'biological diversity' or 'biodiversity' encompasses the variety of the entire wildlife, starting with the variation of genes at the molecular level and finishing with regional differences in the biosphere. Biological diversity is the outcome of billions of years of evolution and, on the other hand, the hotbed of continuing evolution. Every species of living creature is part of biological diversity, being vitally dependent on it as its evolutionary background, and at the same time having its own impact on it. Almost all species have a greater or lesser impact on the biological diversity of their living environment but the impact of some species is exceptionally great. Man undoubtedly belongs among the latter, being the species with perhaps the most dramatic effect on biological diversity throughout the entire evolution.

Every species may have both an enhancing and reducing effect on biological diversity. The stronger the impact, the more pronounced the decline in biodiversity. While in some colonial bird species the impact is limited to the immediate nesting area, man has already long been reducing the biological diversity of the entire biosphere. Such impoverishment of the biosphere has gradually become a danger to the survival of man himself as a species.

The first attempts to regulate the use of nature and thereby avoid the destruction of man's own living environment date back to times long past. Many nature peoples still maintain the traditions that allow a more sustainable use of nature, and also written laws on the protection of certain natural wealths can be found in very old historical records. Hardly such rules ever achieved full harmony with nature but they obviously helped to prevent the impoverishment of the living environment. During rapid societal changes, however, most of the old rules have been cast aside to increase one's power and wealth at the expense of nature.

One of the periods of fastest destruction of nature in mankind's history was the colonisation of the western part of North America in the 19th century. As a natural reaction, this led to the birth of modern nature conservation, which conventionally (and somewhat conditionally) is considered to have begun with the establishment of Yellowstone National Park in 1872. A hundred years later it was acknowledged that world-wide establishment of national parks and other protected areas has helped to preserve biological diversity in places but the general trend has still been towards the destruction of nature. The United Nations Conference on the Human Environment, held in Stockholm in 1972, noted the continuation of negative trends and emphasized the need for international action to protect our living environment. The Stockholm conference resulted in the establishment of the United Nations Environmental Programme (UNEP). The efforts made in the 1970ies and 1980ies somewhat reduced the speed of global destruction of biodiversity but a general worsening of the situation still continued.

Twenty years later, in 1992, government and state leaders from around the world met in Rio de Janeiro at the UN Conference on Environment and Development, which peaked with the adoption of the Framework Convention on Climate Change and the Convention on Biological Diversity. The former addresses the today's most global environmental problem – anthropogenic climate change, and the latter deals with the nearly as global problematics of protection and use of biological diversity. Over the next dozen years a lot has been done to implement the Conventions and to prevent major environmental hazards. Yet unfortunately the general trends are still negative. Just like we have failed to reduce atmospheric pollution, we have also failed to stop the decline of biodiversity. Naturally, this does not imply that the whole process has been in vain. Without continuous efforts to protect biodiversity the decline would probably be even more rapid. However, there is no reason to be content until the strategic goal of the Convention – to stop the decline of biodiversity – has been fully achieved.

Parties to the Biodiversity Convention are required to report periodically on progress towards the implementation of the Convention. This booklet constitutes the third national report of Estonia. It reveals the fact, obvious to any thinking person, that we, too, still have a long way to go in preserving the diversity of our nature. It also reveals the fact that we nevertheless have many an achievement.

Like in many other countries, integration of the protection and sustainable use of biodiversity into all fields of human activity, without which it will be impossible to achieve the goal of the Convention in the longer run, is becoming the biggest problem in Estonia, while rather good progress has been achieved in actions more narrowly targeted to protection of biodiversity, such as increasing of the area of protected areas. Unfortunately, however, the efficiency of these actions, too, is limited by the very integration of biodiversity protection with other fields of human activity, which is a vital precondition for effective functioning of protected areas and for their adaptation to developments in the surrounding landscapes.

Still, we have achieved some progress in integrating biodiversity protection with the use of nature. The most important example here is the payment of nature management support under the Ministry of the Environment, which enables us to protect seminatural communities – the first priority from a biodiversity point of view – and also to direct agriculture towards more sustainable practices. A similar measure was envisaged in the Rural Development Plan, drawn up for channelling the EU agricultural refunds under the Ministry of Agriculture, but unfortunately it has received no funding to date. Of other measures envisaged in the current Rural Development Plan, financial support paid to the keepers of endangered local breeds of livestock can be mentioned as a measure directly related to biological diversity. Also some other types of benefit paid under the Rural Development Plan contribute to some extent to better consideration of biodiversity in agriculture.

At the same time, the Rural Development Plan includes such benefits whose implementation may seriously damage biodiversity. For instance, reforestation support, which might increase biological diversity in some European countries where the majority of natural forests have long been destroyed, will undoubtedly pose a danger to important seminatural landscapes in Estonia. Allowed payment of refunds for the planting of non-native species should be regarded as particularly dangerous. However, some positive forestry related examples can be drawn from the Forestry Development Plan, which envisages, for instance, the protection of key biotopes in commercial forests and an increase in the share of protected forests.

One of the central goals of the Convention on Biological Diversity is to ensure equitable sharing of benefits from the use of genetic diversity with countries with poorer economies but rich in biological diversity and acting as countries of origin for the genetic material used. Such mechanisms were unacceptable for the USA, who therefore refused to join the convention. Unfortunately, many countries that have joined the convention, Estonia included, have still largely failed to ensure the sharing of economic benefits with the countries of origin of genetic material.

This report is just a milestone in organising the protection of biological diversity, just like the Convention on Biological Diversity as a whole is just one tool for protecting biodiversity. More power to you for working your way through this somewhat bureaucratic document, and even more power to you for contributing to the protection of the diversity of nature!

By Aleksei Lotman

Priority Setting

1. Please indicate, by marking an "X" in the appropriate column below, the level of priority your country accords to the implementation of various articles, provisions and relevant programmes of the work of the Convention.

Article/Provision/Programme of Work	Level of Priority		
	High	Medium	Low
a)Article 5 – Cooperation		X	
b)Article 6 – General measures for conservation and sustainable use		X	
c)Article 7 – Identification and monitoring			X
d)Article 8 – <i>In-situ</i> conservation	X		
e)Article 8(h) – Alien species		X	
f)Article 8(j) – Traditional knowledge and related provisions		X	
g)Article 9 – <i>Ex-situ</i> conservation		X	
h) Article 10 – Sustainable use of components of biological diversity			X
i)Article 11 – Incentive measures			X
j)Article 12 – Research and training		X	
k)Article 13 – Public education and awareness		X	
l)Article 14 – Impact assessment and minimizing adverse impacts		X	
m)Article 15 – Access to genetic resources		X	
n)Article 16 – Access to and transfer of technology		X	
o)Article 17 – Exchange of information		X	
p)Article 18 – Scientific and technical cooperation		X	
q)Article 19 – Handling of biotechnology and distribution of its benefits		X	
r)Article 20 – Financial resources		X	
s)Article 21 – Financial mechanism			X
t)Agricultural biodiversity		X	

u)Forest biodiversity	X	
v)Inland water biodiversity		X
w)Marine and coastal biodiversity	X	
x)Dryland and subhumid land biodiversity		
y)Mountain biodiversity		

Challenges and Obstacles to Implementation

2. Please use the scale indicated below to reflect the level of challenges faced by your country in implementing the provisions of the Articles of the Convention (5, 6,7, 8, 8h, 8j, 9, 10, 11,12, 13, 14, 15,16, 17, 18, 19 and 20)

3 = High Challenge

1 = Low Challenge

2 = Medium Challenge

0 = Challenge has been successfully overcome

N/A = Not applicable

Challenges	Articles																	
	5	6	7	8	8h	8j	9	10	11	12	13	14	15	16	17	18	19	20
a) Lack of political will and support	1	2	3	2	2	2	3	2	2	2	2	1	2	2	3	3	1	1
b) Limited public participation and stakeholder involvement	2	3	2	2	2	3	N/A	3	2	2	2	1	2	2	3	2	2	2
c) Lack of mainstreaming and integration of biodiversity issues into other sectors	3	3	3	3	3	3	N/A	3	1	3	3	1	2	2	3	3	2	1
d) Lack of precautionary and proactive measures	2	3	3	1	2	2	3	2	2	3	3	1	2	2	3	3	1	2
e) Inadequate capacity to act, caused by institution	1	1	2	1	2	1	3	2	2	2	3	1	2	2	3	3	1	2

	al weakness																		
f)	Lack of transfer of technology and expertise	1	1	2	1	1	0	1	2	2	2	2	1	2	2	2	2	1	2
g)	Loss of traditional knowledge	1	2	2	1	N/A	1	N/A	2	N/A	2	2	1	N/A	N/A	3	3	1	N/A
h)	Lack of adequate scientific research capacities to support all the objectives	2	1	2	1	2	1	2	3	1	1	1	1	2	2	3	3	1	1
i)	Lack of accessible knowledge and information	1	1	2	1	2	1	2	2	1	1	2	1	1	1	3	3	1	1
j)	Lack of public education and awareness at all levels	3	2	3	3	1	2	2	2	2	2	1	2	2	2	3	3	2	N/A
k)	Existing scientific and traditional knowledge not fully utilized	1	2	3	1	1	3	2	1	2	2	2	1	2	2	3	3	1	2
l)	Loss of biodiversity and the corresponding goods and services it provides not properly understood and documented	1	2	3	1	N/A	1	1	2	2	2	2	2	1	N/A	3	2	1	N/A
m)	Lack of financial, human, technical resources	2	2	3	3	2	3	3	2	2	2	N/A	1	2	2	3	3	2	3
n)	Lack of economic incentive measures	2	2	3	3	2	3	2	3	2	2	2	1	2	2	3	3	2	N/A

o)	Lack of benefit-sharing	1	1	3	1	N/A	1	N/A	2	3	3	2	1	2	2	3	3	2	2
p)	Lack of synergies at national and international levels	2	2	3	2	2	2	1	2	1	1	1	2	2	1	2	3	2	1
q)	Lack of horizontal cooperation among stakeholders	2	2	3	2	3	2	1	2	2	2	2	2	2	2	3	3	2	N/A
r)	Lack of effective partnerships	2	2	3	1	3	1	1	1	2	2	2	1	2	2	3	3	2	2
s)	Lack of engagement of scientific community	2	2	2	1	2	0	3	1	2	2	2	1	1	1	3	2	1	2
t)	Lack of appropriate policies and laws	1	1	3	1	2	1	3	2	2	2	2	1	2	2	3	3	1	1
u)	Poverty	1	1	1	1	1	0	N/A	1	1	1	2	0	N/A	N/A	2	2	1	2
v)	Population pressure	1	1	2	1	1	0	N/A	2	1	1	1	0	1	1	2	2	1	1
w)	Unsustainable consumption and production patterns	1	2	3	2	N/A	3	N/A	3	2	2	2	2	2	2	3	3	1	N/A
x)	Lack of capacities for local communities	1	1	3	2	N/A	2	N/A	2	2	2	2	2	2	2	3	3	1	2
y)	Lack of knowledge and practice of ecosystem-based approaches to management	2	2	2	1	1	1	N/A	2	3	3	2	2	2	2	2	2	2	2
z)	Weak law enforcement capacity	1	2	3	1	1	1	2	2	2	2	2	2	1	1	3	3	2	2

2010 Target

The Conference of the Parties, in decision VII/30, annex II, decided to establish a provisional framework for goals and targets in order to clarify the 2010 global target adopted by decision VI/26, help assess the progress towards the target, and promote coherence among the programmes of work of the Convention. Parties and Governments are invited to develop their own targets with this flexible framework. Please provide relevant information by responding to the questions and requests contained in the following tables.

Box III.

Goal 1	Promote the conservation of the biological diversity of ecosystems, habitats and biomes.
Target 1.1	At least ten percent of each of the world's ecological regions effectively conserved

I) National target: Has a national target been established corresponding to the global target above?

- a) No
- b) Yes, the same as the global target X
- c) Yes, one or more specific national targets have been established

Please provide details below.

No specific national targets have been defined for Target 1.1. since Estonia has followed the guidelines of the EU Habitats Directives to conserve at least 20% of the area of each habitat type included in Annex I of the Habitats Directive and since ca 11% of the territory of Estonia was protected already before the designation of Natura 2000 sites. Selection and protection of the proposed Natura 2000 sites has increased the percentage of protected territory to 16%.

Protection of sites and species under the Nature Conservation Act remains the most effective tool for biodiversity conservation in Estonia. Nearly 30% of the territory of the proposed Natura 2000 sites was not protected before. Habitats and species on this territory have been subjected to preliminary protective measures since 2004. The final, more specific measures will be established by 2007.

However, some national targets concerning the need to maintain natural and semi-natural habitats and to ensure long term viability of species, are set and specified in national strategic plans and acts: Nature Conservation Act (2004), Estonian National Biodiversity Strategy and Action Plan (2000-2005), National Environmental Strategy (NES) and National Environmental Action Plans (1998-2000; 2001-2003; 2004-2006, in prep.), Nature Conservation Development Plan (in prep.), Forestry Development Plan, Rural Development Plan. These targets emphasize the need to avoid fragmentation of habitats, to identify and implement the most effective measures of species protection outside the designated protected areas, etc.

The National Environmental Strategy aims to establish restrictive protection measures (whereby natural resources are left out of any economic use) on 5% of the Estonian territory.

The Nature Conservation Act establishes quantitative targets for the extent of sites designated for conservation of habitats of protected species.

The Forestry Development Plan sets a national target in the form of the share of strictly protected forest area as percentage of the total forest area.

The long term priorities and targets of nature protection (for the next 35-year period) will be specified in the course of preparation of Nature Conservation Development Plan (NCDP). National conservation targets and progress indicators will be established for the main types of ecosystem in Estonia (forests, mires, grasslands, inland waters, coastal and marine habitats) and the associated habitat types. Preparation of the Nature Conservation Development Plan started in 2004 and the Plan will be submitted for approval to Estonian Government and Parliament.

II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).

Programme of work	Yes	No	Details
a) Agricultural	X		The NCDP includes the following target: to manage or restore seminatural communities and to implement anational support programme for the management of semi-natural communities (wooded meadows, calcareous grasslands, alluvial meadows, coastal meadows, paludifying meadows) in order to preserve the diversity of these species rich habitats.
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest	X		The Forestry Development Plan sets a specific quantitative target that at least 10% of the total forest area should be subject to strict protection.
f) Mountain		N/A	

III) Has the global or national target been incorporated into relevant plans, programmes and strategies?

- a) No
- b) Yes, into national biodiversity strategy and action plan X
- c) Yes, into sectoral strategies, plans and programmes

Please provide details below.

Some of the national targets and the global 2010 target are also incorporated into sectoral strategies and plans: Estonian Environmental Strategy (e.g. general targets for the area of strictly protected areas and forests), Estonian Rural Development Plan (2004-2006), Forestry Development Plan (until 2010). The actual benefit from incorporation of the targets into different sectoral plans and strategies lies in the general agreement to maintain the diverse natural sites for protection. However, the funding of nature conservation measures should be carefully incorporated into state budgeting and set as one of the priorities of national policy.

IV) Please provide information on current status and trends in relation to this target.

The EU Habitats and Birds Directive are being implemented in Estonia. The percentage of protected territory in Estonia has increased from 12% to 16 % as a result of designation of Natura 2000 sites. Ca 30% of the area of Natura 2000 sites was previously unprotected. The new areas have significantly contributed to the protection of raised bogs, calcareous grasslands, wooded and coastal meadows, old natural mixed forests and natural broadleaved deciduous forests, lakes, rivers, marine habitats.

Estonia drew up a national monitoring programme of habitats and species in 1994 and has slightly revised it later. A scientific analysis of the goals, methods and outcome of the present monitoring system was carried out in 2003. The monitoring programme still needs some revision to achieve better inclusion of different habitat types and to provide timely and relevant information about their status, trends and potential hazards in Estonia. Scientifically detailed long term information exists for some habitats in a limited number of sites but appropriate data about the status and trends of habitat types all over the country are still missing for many of the

habitat types. Information on the status of forest habitat types in Estonia is obtained through statistical forest inventory. During a recent revision of the methodology of the inventory, some indicators of biodiversity were added to the list of parameters to be assessed in the field.

V) Please provide information on indicators used in relation to this target.

Both general and more specific indicators, such as the number, area, size, conservation status, representativity, species richness and composition of sites of a habitat type and the relative area maintained for protection, reflect efforts towards the 2010 target.

Updated lists of species of Estonia and the respective distribution maps are prepared and used to estimate the real contribution of habitats conservation measures to the 2010 target. Information about the distribution and status of endangered and protected species is maintained and updated in a common database by the Ministry of the Environment. For one fifth of the species of Estonia the status (i.e. the level of danger to the species) has been assessed, for the rest of the species such information is missing.

National monitoring programmes of species and habitats provide feedback about the effectiveness of actions towards the national targets. Data about the trends of habitats on the scale of the entire country are still mainly lacking. GIS and remote sensing measures should be adequately incorporated into the monitoring programme in future.

To assess the trends in the status of habitats, data from the whole country are needed. Extensive fieldwork carried out recently (2000 – 2004) provided new information about the distribution and conservation status of all habitats and species listed in the EU Habitats Directive. Inventories concentrating on specific habitats have been carried out for grasslands (1999-2000) and mires (1997).

VI) Please provide information on challenges in implementation of this target.

Policy makers consider nature conservation to be a sector of rather low importance and a similar attitude is reflected in the state budget for nature conservation needs, which has relatively low priority compared to all other sectors.

General interest of the public in nature conservation is rather low and nature conservation is regarded as a sector of rather low importance.

Some compensatory measures need to be developed to increase the interest of stakeholders and to involve the owners of private land within protected areas more effectively into nature conservation activities. Nature tourism needs to be developed to decrease the negative socio-economic impacts that nature conservation might bring about in some regions of Estonia.

VII) Please provide any other relevant information.

Box IV.

Target 1.2 Areas of particular importance to biodiversity protected

I) National target: Has a national target been established corresponding to the global target above?

- a) No
- b) Yes, the same as the global target X
- c) Yes, one or more specific national targets have been established

Please provide details below.

Extensive inventories of Natura 2000 habitats (2000-2004/5), seminatural grasslands (1999-2000) and mires (1997) have provided useful information about the areas of importance for biodiversity protection. The share of protected territories in Estonia increased from 11% to 16% by 2004. New sites have been designated for the protection of different habitats and species.

Protection measures differ between sites to take into account the specific protection needs of specific habitats and species.

The national target is to establish strict protection measures (under which natural resources are left out of any economic use) in 5% of the Estonian territory. For each habitat type listed in the EU Habitats Directive, 20-60% of their area in Estonia has been designated for protection.

The representativity, naturalness, species diversity and other parameters indicating the conservation status and importance of a site are taken into account when designating sites for protection.

II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).

Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest	X		The Forestry Development Plan sets the following specific quantitative target: to establish strict protection for at least 10% of the total area of forest. The target is to be achieved through protection of pSCIs under the Habitats Directive, key habitats and important forest sites.
f) Mountain		N/A	

III) Has the global or national target been incorporated into relevant plans, programmes and strategies?

- a) No
- b) Yes, into national biodiversity strategy and action plan X
- c) Yes, into sectoral strategies, plans and programmes

Please provide details below.

The protected areas in Estonia are designated in accordance with the Nature Conservation Act (2004). Management plans of protected areas take into account the specific status and needs of protection activities in the protected area concerned. Twelve management plans of protected areas are being implemented and several are under preparation.

IV) Please provide information on current status and trends in relation to this target.

Ca 30 % of the area of the proposed Natura 2000 sites was not protected before. New sites for habitats and species protection were established and borders of several existing protected areas were expanded. Since 2004 these sites have been subjected to official temporary protection measures. The present temporary measures will be replaced by 2007 and the relevant protection regime established for each site.

V) Please provide information on indicators used in relation to this target.

The number of protected areas and the percentage of protected territory have been estimated. One of the national targets is to designate 5% of the national territory for strict protection of nature where economic use of natural resources is excluded.

VI) Please provide information on challenges in implementation of this target.

Protection of natural values, especially forests, in land owned by private landowners, forest companies, etc. is a difficult task, as effective compensatory measures for land owners are still largely missing in Estonia. The national support system (since 2001) for the management or restoration of seminatural habitats has proved to be an effective and useful tool of nature conservation as it has created a more positive attitude towards nature conservation among landowners and helps to maintain the areas significantly contributing to biodiversity.

VII) Please provide any other relevant information.

Box V.

Goal 2 Promote the conservation of species diversity

Target 2.1 Restore, maintain, or reduce the decline of populations of species of selected taxonomic groups

I) National target: Has a national target been established corresponding to the global target above?

- a) No
- b) Yes, the same as the global target X
- c) Yes, one or more specific national targets have been established

Please provide details below.

25 Action Plans for 43 species has been compiled to meet this goal. *Aquila clanga*, *Halichoerus grypus*, *Cypripedium calceolus*, *Tetrao urogallus*, *Ligularia sibirica*, *Mustela lutreola*, *Coeloglossum viride*, *Gallinago media*, *Crepis mollis*, *Rubus arcticus*, *Aquila pomarina*, *Grus grus*, *Ciconia nigra*, *Castor fiber*, *Lynx lynx*, *Ursus arctos*, *Canis lupus*, *Bufo calamita*, *Hirudo medicinalis*, *Asplenium septentrionale*, *Botrychium matricariifolium*, *Botrychium virginianum*, *Cystopteris sudetica*, *Polystichum braunii*, *Polystichum braunii*, *Osmoderma eremita*, *Cucujus cinnaberinus*, *Boros schneideri*, *Calidris alpina schinzii*, *Myotis daubentoni*, *Myotis dasycneme*, *Myotis brandtii*, *Myotis mystacinus*, *Myotis nattereri*, *Plecotus auritus*, *Nyctalus noctula*, *Pipistrellus pipistrellus*, *Pipistrellus nathusii*, *Vespertilio murinus*, *Eptesicus nilssonii*, *Halichoerus grypus*, *Phoca hispida*, *Bubo bubo*.

II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).

Programme of work	Yes	No	Details
a) Agricultural	X		The Ministry of Agriculture has a programme to support the maintenance of semi-natural habitats (coastal meadows, floodplain meadows, wooded meadows and pastures, dry meadows, etc.).
b) Inland water	X		A network of areas for the protection of inland water habitats and species has been established under the national programme "Estonian Natura 2000". Several

			action plans and management plans have been drawn up for those areas and implementation of the plans is going on.
c)	Marine and coastal	X	A network of areas for the protection of marine and coastal habitats and species has been established under the national programme "Estonian Natura 2000". Several action plans and management plans have been drawn up for those areas and implementation of the plans is going on. For semi-natural coastal areas, a national subsidy system has been established to promote the maintenance and restoration of such habitats.
d)	Dry and subhumid land	X	A network of areas for the protection of dry and subhumid habitats and species has been established under the national programme "Estonian Natura 2000". Several action plans and management plans have been drawn up for those areas and implementation of the plans is going on. For semi-natural dry meadows, a national subsidy system has been established to promote the maintenance and restoration of such habitats.
e)	Forest	X	A network of areas for the protection of forest habitats and species has been established under the national programme "Estonian Natura 2000". Several action plans and management plans have been drawn up for those areas and implementation of the plans is going on.
f)	Mountain	N/A	

III) Has the global or national target been incorporated into relevant plans, programmes and strategies?

- a) No
- b) Yes, into national biodiversity strategy and action plan X
- c) Yes, into sectoral strategies, plans and programmes

Please provide details below.

The national targets has been incorporated into Management Plans and Action Plans for species. The implementation of Action Plans is one of the main goal of the species protection in Estonia.

IV) Please provide information on current status and trends in relation to this target.

According to the Nature Conservation Act of Estonia protection of all known habitats or growth sites of species of Protection Category I shall be ensured by designation of protected areas, special conservation areas or species protection sites.

Protection of at least 50 % of known habitats or growth sites of species of Protection Category II registered in the environmental register shall be ensured by establishing protected areas or special conservation areas or designating species protection sites, based on the representativity of the areas.

Protection of at least 10 % of known habitats or growth sites of species of Protection Category III registered in the environmental register shall be ensured by establishing protected areas or special conservation areas or designating species protection sites, based on the estimation of representativity of the areas.

Several LIFE-Nature projects have been carried out in Estonia to restore and maintain the habitats of threatened species (*Aquila pomarina*, *Aquila clanga*, *Ciconia nigra*, *Crex crex*, *Bufo calamita*, *Mustela lutreola*, *Gladiolus imbricatus*, *Triturus cristatus*, *Pelobates fuscus*, *Calidris alpina schinzii*, ect).

V) Please provide information on indicators used in relation to this target.

The monitoring of the trends of the populations of threatened species provides information about the state of their habitats. Therefore for many habitat types (old forest, rivers, semi-natural habitats, such as flood plain meadows, coastal meadows) the threatened species are used as indicators.

VI) Please provide information on challenges in implementation of this target.

In frame of different national and international projects the restoration and maintaining of the habitats have been carried out.

Since 2001 the maintaining and restoration of semi-natural habitats (flood plain meadows, coastal meadows, wooded meadows, dry meadows) has been subsidized by the Ministry of the Environment.

VII) Please provide any other relevant information.

Box VI.

Target 2.2 Status of threatened species improved

I) National target: Has a national target been established corresponding to the global target above?

- a) No
- b) Yes, the same as the global target X
- c) Yes, one or more specific national targets have been established

Please provide details below.

According to the Nature Conservation Act of Estonia protection of known habitats or growth sites of protected species shall be ensured by designation of protected areas, special conservation areas or species protection sites.

Tetrao urogallus: 160 special conservation areas has been designated and taken under protection.

Pteromys volans: 24 special conservation areas has been designated and taken under protection.

Mustela lutreola: 10 special conservation areas has been designated and taken under protection.

Triturus cristatus: 10 special conservation areas has been designated and taken under protection.

Cucujus cinnaberinus, *Boros shneideri*, *Osmoderma eremita*, *Ligularia sibirica*, *Radiola linoides*: all known habitats has been designated and taken under protection.

Cinna latifolia, *Liparis loeselii*, *Saxifraga hirculus*: 8 special conservation areas has been designated and taken under protection.

Halicoherus grypus, *Phoca hispida*: 9 special conservation areas has been designated and taken under protection.

According to the Nature Conservation Act of Estonia the nesting trees and an area surrounding it

of following species have been taken under the protection automatically after the nest has been discovered and the local environmental authority has been informed.

Nesting trees of Flying Squirrels and an area surrounding it within a radius of 25 metres (m).

Nesting trees of White-tailed Eagles, Short-toed Eagles and Ospreys and an area surrounding it within a radius of 200 metres (m).

Nesting trees of Spotted Eagles and Black Storks and an area surrounding it within a radius of 250 metres (m).

Nesting trees of Lesser Spotted Eagles and an area surrounding it within a radius of 100 metres (m).

Nesting trees of Golden Eagles and an area surrounding it within a radius of 500 metres (m).

Nesting trees of a mixed couple of Lesser Spotted Eagles and Spotted Eagles and an area surrounding it within a radius of 250 metres (m).

II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).

Programme of work	Yes	No	Details
a) Agricultural	X		<p>Ministry of Agriculture has a program to support the maintaining of semi-natural habitats (coastal meadows, flood plain meadows, wooded meadows and pastures, dray meadows ect).</p> <p>In the frame of national programme "Estonian Natura 2000" the framework of areas for protection of species which are present in inland water habitats has been established.</p>
b) Inland water	X		<p>The designation of special conservation areas for threatened species which occur in inland waters is in progress.</p> <p>Several action plans and management plans have been established for those species and areas and the implementation of those plans is going on.</p> <p>In the frame of national programme "Estonian Natura 2000" the framework of areas for protection of marine and coastal habitats and species has been established.</p>
c) Marine and coastal	X		<p>The designation of special conservation areas for threatened species which occur on marine and coastal habitats is in progress.</p> <p>Several action plans and management plans have been established for those species and areas and the implementation of those plans is going on.</p> <p>For semi-natural coastal areas the national subsidy system is worked out to promote the maintaining and restoration of such habitats.</p> <p>In the frame of national programme "Estonian Natura 2000" the framework of areas for protection of dry and subhumid habitats and species has been established.</p>
d) Dry and subhumid land	X		<p>The designation of special conservation areas for threatened species which occur on dry and subhumid habitats is in progress.</p> <p>Several action plans and management plans have been established for those species and areas and the implementation of those plans is going on.</p> <p>For semi-natural dry meadows the national subsidy system is worked out to promote the maintaining and restoration of such habitats.</p>

		In the frame of national programme "Estonian Natura 2000" the framework of areas for protection of forest habitats and species has been established.
e) Forest	X	The designation of special conservation areas for threatened species which occur in different forest types is in progress. Several action plans and management plans have been established for those species and areas and the implementation of those plans is going on.
f) Mountain	N/A	

III) Has the global or national target been incorporated into relevant plans, programmes and strategies?

- a) No
- b) Yes, into national biodiversity strategy and action plan X
- c) Yes, into sectoral strategies, plans and programmes

Please provide details below.

The national targets has been incorporated into Management Plans and Action Plans for species. The implementation of Action Plans is one of the main goal of the species protection in Estonia.

IV) Please provide information on current status and trends in relation to this target.

25 Action Plans for 43 species has been compiled. *Aquila clanga*, *Halichoerus grypus*, *Cypripedium calceolus*, *Tetrao urogallus*, *Ligularia sibirica*, *Mustela lutreola*, *Coeloglossum viride*, *Gallinago media*, *Crepis mollis*, *Rubus arcticus*, *Aquila pomarina*, *Grus grus*, *Ciconia nigra*, *Castor fiber*, *Lynx lynx*, *Ursus arctos*, *Canis lupus*, *Bufo calamita*, *Hirudo medicinalis*, *Asplenium septentrionale*, *Botrychium matricariifolium*, *Botrychium virginianum*, *Cystopteris sudetica*, *Polystichum braunii*, *Polystichum braunii*, *Osmoderma eremita*, *Cucujus cinnaberinus*, *Boros schneideri*, *Calidris alpina schinzii*, *Myotis daubentoni*, *Myotis dasycneme*, *Myotis brandtii*, *Myotis mystacinus*, *Myotis nattereri*, *Plecotus auritus*, *Nyctalus noctula*, *Pipistrellus pipistrellus*, *Pipistrellus nathusii*, *Vespertilio murinus*, *Eptesicus nilssonii*, *Halichoerus grypus*, *Phoca hispida*, *Bubo bubo*.

V) Please provide information on indicators used in relation to this target.

VI) Please provide information on challenges in implementation of this target.

Several LIFE-Nature projects have been carried out in Estonia to secure the populations of threatened species (*Aquila pomarina*, *Aquila clanga*, *Ciconia nigra*, *Crex crex*, *Bufo calamita*, *Mustela lutreola*, *Gladiolus imbricatus*, *Triturus cristatus*, *Pelobates fuscus*, *Calidris alpina schinzii*, etc).

VII) Please provide any other relevant information.

Box VII.

Goal 3

Promote the conservation of genetic diversity

Target 3.1

Genetic diversity of crops, livestock, and of harvested species of trees, fish and wildlife and other valuable species conserved, and

associated indigenous and local knowledge maintained

I) National target: Has a national target been established corresponding to the global target above?

- a) No
- b) Yes, the same as the global target
- c) Yes, one or more specific national targets have been established X

Please provide details below.

The NBSAP for the years 2000-2005 has been drawn up (1999). The strategy needs to be updated.

The Estonian National Environmental Strategy until 2010 (currently as a draft) aims to preserve local breeds and varieties, prevent the negative effects of genetically modified organisms and prepare an act on the preservation of genetic resources.

The Council of Plant Genetic Resources has been established in Estonia. This Council coordinates the collection, preservation, assessment and documentation of plant genetic resources. Preservation of farm animal genetic resources is coordinated by the Veterinary and Food Board, which also represents Estonia in FAO programmes. There are active conservation programmes for all endangered breeds. As part of implementation of the Rural Development Plan, agri-environmental support is paid for rearing animals of endangered breeds.

The Estonian National Programme on Collection and Conservation of Plant Genetic Resources for Food and Agriculture will terminate in 2006. This programme needs to be carried on and also a long-term programme for conservation of farm animal genetic resources has to be prepared.

II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).

Programme of work	Yes	No	Details
a) Agricultural	X		Targets in the Rural Development Programme 2004-2006 for the maintenance of local plant varieties and farm animal breeds.
b) Inland water		X	
c) Marine and coastal	X		Planned to carry out the detailed inventory of current status of marine and coastal biodiversity.
d) Dry and subhumid land		N/A	
e) Forest	X		Targets in the Estonian Forestry Development Plan up to 2010 on protection and maintenance of forests genetic diversity.
f) Mountain		N/A	

III) Has the global or national target been incorporated into relevant plans, programmes and strategies?

- a) No
- b) Yes, into national biodiversity strategy and action plan X
- c) Yes, into sectoral strategies, plans and programmes X

Please provide details below.

See the previous answer.

IV) Please provide information on current status and trends in relation to this target.

The Estonian Biodiversity Strategy and Action Plan for 2000-2005 has unfortunately not been discussed and approved by the Government but some of the actions under the Action Plan have been partly financed.

V) Please provide information on indicators used in relation to this target.

The number of animals of endangered breeds is increasing thanks to agri-environmental support paid under the Rural Development Plan.

VI) Please provide information on challenges in implementation of this target.

VII) Please provide any other relevant information.

Goal 4

Promote sustainable use and consumption.

Target 4.1

Biodiversity-based products derived from sources that are sustainably managed, and production areas managed consistent with the conservation of biodiversity

I) National target: Has a national target been established corresponding to the global target above?

- a) No
- b) Yes, the same as the global target
- c) Yes, one or more specific national targets have been established X

Please provide details below.

The Government of Estonia has committed to practical implementation of the action plan formulated at the UN World Summit on Sustainable Development in Johannesburg. Estonia has identified the priority goals, objectives and activities included in the expanded programme of work for implementation at the national level in a number of environmental policy documents. The principal document of national environmental policy, the *National Environmental Strategy until 2010* (approved by the Government in 2005) envisages promotion of sustainable development among the priority goals and *inter alia* includes the task of promotion of sustainable use of natural resources, incl. forest resources, historically intrinsic to Estonia.

The implementation document of the strategy – National Environmental Action Plan until 2010 –

foresees a variety of actions oriented to sustainable use of biological resources, e.g. in the chapters

4.1 "SUSTAINABLE FOREST MANAGEMENT" and 4.6 "SUSTAINABLE USE AND RESTORATION OF AQUATIC BIOTA AND HABITATS". However, no specific work programmes or national targets covering specifically the global target "Biodiversity-based products derived from sources that are sustainably managed, and production areas managed consistent with the conservation of biodiversity".

II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).

Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	

III) Has the global or national target been incorporated into relevant plans, programmes and strategies?

- a) No
- b) Yes, into national biodiversity strategy and action plan X
- c) Yes, into sectoral strategies, plans and programmes X

Please provide details below.

IV) Please provide information on current status and trends in relation to this target.

V) Please provide information on indicators used in relation to this target.

VI) Please provide information on challenges in implementation of this target.

VII) Please provide any other relevant information.

Box VIII.

Target 4.2 **Unsustainable consumption, of biological resources, or that impacts upon biodiversity, reduced**

I) National target: Has a national target been established corresponding to the global target above?

- a) No X
- b) Yes, the same as the global target
- c) Yes, one or more specific national targets have been established

Please provide details below.

Unsustainable consumption of natural (incl. biological) resources as such has not attained specific attention so far in the environmental policies of Estonia. The strategy "Sustainable Estonia 21" targets "balanced" sustainable use and management of natural resources (Target 4: Ecological balance) instead of mere protection of resources and the environment. No specific targets for the reduction of unsustainable consumption of natural resources has been set, apart from the notion (in Target 2: Well-being) that development of the idea of well-being and options for non-material consumption (e.g. characteristic of ecological life-style) is a sphere for cooperation between the third sector, media and the government, especially in its initial stage.

II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).

Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	

III) Has the global or national target been incorporated into relevant plans, programmes and strategies?

- a) No X
- b) Yes, into national biodiversity strategy and action plan
- c) Yes, into sectoral strategies, plans and programmes

Please provide details below.

IV) Please provide information on current status and trends in relation to this target.

V) Please provide information on indicators used in relation to this target.

VI) Please provide information on challenges in implementation of this target.

VII) Please provide any other relevant information.

In the *National Environmental Strategy until 2010* Estonia has identified some goals, objectives and activities in areas which only indirectly relate to such programme element as reduction of unsustainable consumption of biological resources, or reduction of impacts upon biodiversity.

Box IX.

Target 4.3 No species of wild flora or fauna endangered by international trade

I) National target: Has a national target been established corresponding to the global target above?

- a) No X
- b) Yes, the same as the global target
- c) Yes, one or more specific national targets have been established

Please provide details below.

No danger at the moment.

II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).

Programme of work	Yes	No	Details
a) Agricultural			
b) Inland water			
c) Marine and coastal			
d) Dry and subhumid land			
e) Forest			
f) Mountain			

III) Has the global or national target been incorporated into relevant plans, programmes and strategies?

- a) No
- b) Yes, into national biodiversity strategy and action plan
- c) Yes, into sectoral strategies, plans and programmes

Please provide details below.

IV) Please provide information on current status and trends in relation to this target.

V) Please provide information on indicators used in relation to this target.

VI) Please provide information on challenges in implementation of this target.

VII) Please provide any other relevant information.

Box X.

Goal 5 **Pressures from habitat loss, land use change and degradation, and unsustainable water use, reduced.**

Target 5.1 **Rate of loss and degradation of natural habitats decreased**

I) National target: Has a national target been established corresponding to the global target above?

- a) No
- b) Yes, the same as the global target
- c) Yes, one or more specific national targets have been established X

Please provide details below.

The draft Nature Conservation Development Plan (2005) sets several targets that correspond to Goal 5 to be achieved by 2035, such as:

- To restore at least 30% of semi-natural habitats by 2035,
- To maintain the share of green areas at at least 10% in towns and at least 40% in rural areas,
- To reduce the share of polluted and degraded landscapes,
- To reduce the amount of visually polluting man-made elements in natural areas,
- To ensure that the area of coastal territories (incl. small islands) and coastal communities in a natural state is maintained at the level of 2005,
- To establish marine protected areas,
- To ensure that the area of integral mire landscapes and mire communities of conservation value is maintained at the level of 2005,
- To ensure sustainable use of the natural resources of mires,
- To restore mires whose water regime has been altered,
- To prevent the degradation of natural water bodies and to maintain the natural state of water bodies of high conservation value,
- To ensure a good state and productivity of fish stock (incl. freshwater crayfish stock),
- To ensure sustainable and environmentally sound production of hydropower,
- To ensure sustainable use of sapropel,
- To ensure sustainable use of surface water,

- To maintain at least 40% of forest area as state forest,
- To maintain at least 1/3 of all forests more than 100 yrs old,
- To protect all sites of rare (indigenous) forest communities,
- To maintain at least 10% of state forest land as protected and protection forest,
- To ensure that at least 5000 ha of key biotopes in private forests are protected by contract.

The National Forestry Development Plan until 2010 sets the following targets:

- To increase the area of protected forests from the present 7,2% to at least 10% of the total area of forests by 2010
- The optimal annual yield in the next ten years is 12 million cubic metres per year

The Estonian Rural Development Plan 2004-2006 sets the following targets:

- To increase agricultural producers' interest in sustainable use of the environment, including the introduction of environmentally friendlier technologies and techniques, maintenance of biological diversity and natural landscapes.

II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).

Programme of work	Yes	No	Details
a) Agricultural	X		<p>The <u>Draft Nature Conservation Development Plan (2005)</u> sets the following targets:</p> <p>Target: To ensure that organic farming is profitable also for large scale agricultural producers;</p> <p>Target: To ensure the necessary scientific and technical prerequisites for the maintenance of old breeds and cultivars;</p> <p>Target: To maintain a balance between hunting and ecosystem management.</p> <p>The <u>Estonian Rural Development Plan 2004-2006</u> sets the following targets:</p> <p>Target: To increase agricultural producers' interest in sustainable use of the environment, including the introduction of environmentally friendlier technologies and techniques, maintenance of biological diversity and natural landscapes.</p>
b) Inland water	X		<p>The <u>Draft Nature Conservation Development Plan (2005)</u> sets the following targets:</p> <p>Target: To ensure that the area of integral mire landscapes and mire communities of conservation value is maintained at the level of 2005;</p> <p>Target: To ensure sustainable use of the natural resources of mires;</p> <p>Target: To restore mires whose water regime has been altered;</p> <p>Target: To ensure a good state and productivity of fish stock (incl. freshwater crayfish stock);</p> <p>Target: To ensure sustainable and environmentally sound production of hydropower;</p> <p>Target: To ensure sustainable use of sapropel;</p> <p>Target: To ensure sustainable use of surface water.</p>
c) Marine and coastal	X		<p>The <u>Draft Nature Conservation Development Plan</u></p>

			(2005) sets the following targets: Target: To ensure that the area of coastal territories (incl. small islands) and coastal communities in a natural state is maintained at the level of 2005"; Target: To establish marine protected areas.
d)	Dry and subhumid land	N/A	
			<u>Draft Nature Conservation Development Plan (2005)</u> sets the following targets: Target: To maintain at least 40% of forest area as state forest; Target: To maintain at least 1/3 of all forests more than 100 yrs old; Target: To protect all sites of rare (indigenous) forest communities;,,
e)	Forest	X	Target: To ensure that at least 5000 ha of key biotopes in private forests are protected by contract., <u>National Forest Development Plan until 2010</u> sets the following targets: Target: To increase the area of protected forests from the present 7,2% to at least 10% of the total area of forests by 2010; Target: The optimal annual yield in the next ten years is 12 million cubic metres per year.
f)	Mountain	N/A	

III) Has the global or national target been incorporated into relevant plans, programmes and strategies?

- a) No
- b) Yes, into national biodiversity strategy and action plan
- c) Yes, into sectoral strategies, plans and programmes X

Please provide details below.

The target "Rate of loss and degradation of natural habitats decreased" is integrated into the National Environmental Strategy and National Environmental Action Plan until 2006, Forestry Development Plan until 2010 (adopted in 2002), Estonian Rural Development Plan 2004-2006 (adopted in 2004) and the draft National Nature Conservation Development Plan (2005). As the National Environmental Strategy is a primary strategic document that constitutes a basis also for sectoral plans and programmes, this target has not been separately incorporated into the development plans of the transport or energy sector.

IV) Please provide information on current status and trends in relation to this target.

Not analysed

V) Please provide information on indicators used in relation to this target.

Indicators are being developed

VI) Please provide information on challenges in implementation of this target.

Not analysed

VII) Please provide any other relevant information.

Box XI.

Goal 6 Control threats from invasive alien species.

Target 6.1 Pathways for major potential alien invasive species controlled

I) National target: Has a national target been established corresponding to the global target above?

- a) No X
- b) Yes, the same as the global target
- c) Yes, one or more specific national targets have been established

Please provide details below.

II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).

Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	

III) Has the global or national target been incorporated into relevant plans, programmes and strategies?

- a) No X
- b) Yes, into national biodiversity strategy and action plan
- c) Yes, into sectoral strategies, plans and programmes

Please provide details below.

IV) Please provide information on current status and trends in relation to this target.

V) Please provide information on indicators used in relation to this target.

VI) Please provide information on challenges in implementation of this target.

VII) Please provide any other relevant information.

Box XII.

Target 6.2 Management plans in place for major alien species that threaten ecosystems, habitats or species

I) National target: Has a national target been established corresponding to the global target above?

- a) No X
- b) Yes, the same as the global target
- c) Yes, one or more specific national targets have been established

Please provide details below.

II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).

Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	

III) Has the global or national target been incorporated into relevant plans, programmes and strategies?

- a) No X
- b) Yes, into national biodiversity strategy and action plan
- c) Yes, into sectoral strategies, plans and programmes

Please provide details below.

IV) Please provide information on current status and trends in relation to this target.

V) Please provide information on indicators used in relation to this target.

VI) Please provide information on challenges in implementation of this target.

VII) Please provide any other relevant information.

Box XIII.

Goal 7 **Address challenges to biodiversity from climate change, and pollution.**

Target 7.1 **Maintain and enhance resilience of the components of biodiversity to adapt to climate change**

I) National target: Has a national target been established corresponding to the global target above?

- a) No X
- b) Yes, the same as the global target
- c) Yes, one or more specific national targets have been established

Please provide details below.

Estonia has ratified the Kyoto Protocol and the Estonian Government has approved the Programme for Reducing GHG Emissions for the period 2003-2013. Estonia has committed to reduce GHG emissions by at least 8% compared to the 1990 level between 2008 and 2012. The National Environmental Strategy sets the target to stop the decline in biodiversity and to enhance the preservation, restoration and protection of natural and seminatural habitats (communities), plant and animal species and their habitats and landscape diversity. This general target, thus, involves enhancing of the resilience of biodiversity to anthropogenic climate change. However, there is no direct target formulated addressing the resilience of biodiversity and its adaptation to climate change.

II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).

Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	

e) Forest X

f) Mountain X

III) Has the global or national target been incorporated into relevant plans, programmes and strategies?

a) No X

b) Yes, into national biodiversity strategy and action plan

c) Yes, into sectoral strategies, plans and programmes

Please provide details below.

IV) Please provide information on current status and trends in relation to this target.

V) Please provide information on indicators used in relation to this target.

VI) Please provide information on challenges in implementation of this target.

VII) Please provide any other relevant information.

Box XIV.

Target 7.2 Reduce pollution and its impacts on biodiversity

I) National target: Has a national target been established corresponding to the global target above?

a) No

b) Yes, the same as the global target

c) Yes, one or more specific national targets have been established X

Please provide details below.

Requirements for water quality have been established in the Water Act (16.06.1994) according to the effect of pollutants on human health and on the condition of water ecosystems. Thus, improvement of the condition of both inland and coastal waters reduces the negative effect of pollution on water biota.

The requirements for air quality have been established in the Ambient Air Protection Act (05.05.2004) according to the effect of pollution on human and ecosystem health. Reduction of air pollution to the admissible levels will, thus, have a positive effect on ecosystems and their biota.

Therefore, the targets in the new National Environmental Strategy, which aim to improve the quality of water and air by 2010, correspond well to the CBD target 7.2. The National

Environmental Strategy sets the following targets:

- To reduce eutrophication of water bodies in order to avoid a decline in water quality and in the diversity of water biota
- Waste water of all settlements must be collected by the end of 2009, and waste water of settlements with more than 2,000 inhabitants must be cleaned by 2010
- To reduce the amount of pollution discharged from economic activities into the sea; to avoid a decline in the health of coastal ecosystems
- To avoid the release of hazardous pollutants into coastal waters; to ensure strict implementation of the established requirements
- To ensure sufficient cleaning of waste water discharged into the sea
- By 2010, emissions of sulphur compounds must be reduced by 40% compared to the 1980 level
- Annual total emission of sulphur dioxide must not exceed 100,000 t by 2010
- Annual total emission of nitrogen oxides must not exceed 60,000 t by 2010
- Annual total emission of VOCs must not exceed 49,000 t by 2010
- Annual total emission of ammonia must not exceed 29,000 t by 2010

II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).

Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	

III) Has the global or national target been incorporated into relevant plans, programmes and strategies?

- a) No
- b) Yes, into national biodiversity strategy and action plan
- c) Yes, into sectoral strategies, plans and programmes X

Please provide details below.

The following targets in national and sectoral strategies and plans are the most relevant to the CBD Target 7.2:

- The Estonian Rural Development Plan 2007–2013
- To reduce agricultural pollution by supporting organic farming, promoting efficient use of fertilizers and improving the environmental awareness of farmers
- The Long-term Development Plan of Fuel and Energy Sector until 2018
- To reduce emissions of alkaline fly ash and SO₂ from oil shale fired power plants
- To clean the alkaline waste water of oil shale fired power plants

IV) Please provide information on current status and trends in relation to this target.

The new National Environmental Strategy has not been approved by the Government yet. The targets incorporated into the Strategy and into the relevant plans, programmes and strategies can be achieved within the defined period but further specification of tasks might be necessary.

V) Please provide information on indicators used in relation to this target.

The following indicators used in National Environmental Monitoring are the most relevant to the CBD Target 7.2:

- Concentration of air pollutants (e.g., SO₂, NO_x, O₃, CO, hydrocarbons, particles)
- Chemistry of precipitation
- Heavy metals in plants
- Hydrochemistry of inland and coastal waters; concentration of pollutants in water biota
- Radiation (e.g., total gamma-radiation, nSv/h; also radon and Cs-137, UV radiation)
- Emissions of pollutants from industry and transport sector are estimated on the basis of monitoring of energy use and fuel consumption.

VI) Please provide information on challenges in implementation of this target.

The targets in national and sectoral programmes and strategies are often too general. Therefore it may be difficult to measure the efficiency of implementation measures.

VII) Please provide any other relevant information.

Box XV.

Goal 8 **Maintain capacity of ecosystems to deliver goods and services and support livelihoods.**

Target 8.1 **Capacity of ecosystems to deliver goods and services maintained**

I) National target: Has a national target been established corresponding to the global target above?

- a) No
- b) Yes, the same as the global target
- c) Yes, one or more specific national targets have been established X

Please provide details below.

The Estonian Environmental Strategy sets the following target: to maintain the diversity of species and landscapes.

II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).

Programme of work	Yes	No	Details
a) Agricultural	X		In the Rural Development Plan (2004-2006)

b) Inland water	X	Sub-basin management plans
c) Marine and coastal	X	Draft Nature Conservation Development Plan
d) Dry and subhumid land	N/A	
e) Forest	X	National Forestry Development Plan (2001-2010),
f) Mountain	N/A	

III) Has the global or national target been incorporated into relevant plans, programmes and strategies?

- a) No
- b) Yes, into national biodiversity strategy and action plan
- c) Yes, into sectoral strategies, plans and programmes X

Please provide details below.

See above II)

IV) Please provide information on current status and trends in relation to this target.

V) Please provide information on indicators used in relation to this target.

VI) Please provide information on challenges in implementation of this target.

VII) Please provide any other relevant information.

Box XVI.

Target 8.2 **Biological resources that support sustainable livelihoods, local food security and health care, especially of poor people maintained**

I) National target: Has a national target been established corresponding to the global target above?

- a) No X
- b) Yes, the same as the global target
- c) Yes, one or more specific national targets have been established

Please provide details below.

Poverty in Estonia is related to social inequality rather than the lack of biological resources.

II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).

Programme of work	Yes	No	Details
-------------------	-----	----	---------

- | | |
|-----------------------------|---|
| a) Agricultural | X |
| b) Inland water | X |
| c) Marine and coastal | X |
| d) Dry and subhumid
land | X |
| e) Forest | X |
| f) Mountain | X |

III) Has the global or national target been incorporated into relevant plans, programmes and strategies?

- | | |
|---|---|
| a) No | X |
| b) Yes, into national biodiversity strategy and action plan | |
| c) Yes, into sectoral strategies, plans and programmes | |
- Please provide details below.

IV) Please provide information on current status and trends in relation to this target.

V) Please provide information on indicators used in relation to this target.

VI) Please provide information on challenges in implementation of this target.

VII) Please provide any other relevant information.

Box XVII.

Goal 9 **Maintain socio-cultural diversity of indigenous and local communities.**

Target 9.1 **Protect traditional knowledge, innovations and practices**

I) National target: Has a national target been established corresponding to the global target above?

- a) No

- b) Yes, the same as the global target
- c) Yes, one or more specific national targets have been established X

Please provide details below.

The Estonian Rural Development Plan and the draft Nature Conservation Development Plan set targets related to protection of traditional knowledge and practices. However, protection of traditional knowledge is seen as a secondary target.

II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).

Programme of work	Yes	No	Details
a) Agricultural	X		In Rural Development Plan
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		N/A	
e) Forest		X	
f) Mountain		N/A	

III) Has the global or national target been incorporated into relevant plans, programmes and strategies?

- a) No X
- b) Yes, into national biodiversity strategy and action plan
- c) Yes, into sectoral strategies, plans and programmes

Please provide details below.

IV) Please provide information on current status and trends in relation to this target.

V) Please provide information on indicators used in relation to this target.

VI) Please provide information on challenges in implementation of this target.

VII) Please provide any other relevant information.

Box XVIII.

Target 9.2

Protect the rights of indigenous and local communities over their traditional knowledge, innovations and practices, including their rights to benefit sharing

I) National target: Has a national target been established corresponding to the global target above?

- a) No X
- b) Yes, the same as the global target
- c) Yes, one or more specific national targets have been established

Please provide details below.

Since there are no indigenous peoples living in Estonia other than Estonians, the target is not relevant for Estonia.

II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).

Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	

III) Has the global or national target been incorporated into relevant plans, programmes and strategies?

- a) No X
- b) Yes, into national biodiversity strategy and action plan
- c) Yes, into sectoral strategies, plans and programmes

Please provide details below.

IV) Please provide information on current status and trends in relation to this target.

V) Please provide information on indicators used in relation to this target.

VI) Please provide information on challenges in implementation of this target.

Box XIX.**Goal 10**

Ensure the fair and equitable sharing of benefits arising out of the use of genetic resources.

Target 10.1

All transfers of genetic resources are in line with the Convention on Biological Diversity, the International Treaty on Plant Genetic Resources for Food and Agriculture and other applicable agreements

I) National target: Has a national target been established corresponding to the global target above?

- a) No X
- b) Yes, the same as the global target
- c) Yes, one or more specific national targets have been established

Please provide details below.

II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).

Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		N/A	
e) Forest		X	
f) Mountain		N/A	

III) Has the global or national target been incorporated into relevant plans, programmes and strategies?

- a) No X
- b) Yes, into national biodiversity strategy and action plan
- c) Yes, into sectoral strategies, plans and programmes

Please provide details below.

IV) Please provide information on current status and trends in relation to this target.

V) Please provide information on indicators used in relation to this target.

VI) Please provide information on challenges in implementation of this target.

Box XX.

Target 10.2 Benefits arising from the commercial and other utilization of genetic resources shared with the countries providing such resources

I) National target: Has a national target been established corresponding to the global target above?

- a) No X
- b) Yes, the same as the global target
- c) Yes, one or more specific national targets have been established

Please provide details below.

II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).

Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		N/A	
e) Forest		X	
f) Mountain		N/A	

III) Has the global or national target been incorporated into relevant plans, programmes and strategies?

- a) No X
- b) Yes, into national biodiversity strategy and action plan
- c) Yes, into sectoral strategies, plans and programmes

Please provide details below.

IV) Please provide information on current status and trends in relation to this target.

V) Please provide information on indicators used in relation to this target.

VI) Please provide information on challenges in implementation of this target.

VII) Please provide any other relevant information.

Box XXI.

Goal 11

Parties have improved financial, human, scientific, technical and technological capacity to implement the Convention.

Target 11.1

New and additional financial resources are transferred to developing country Parties, to allow for the effective implementation of their commitments under the Convention, in accordance with Article 20

I) National target: Has a national target been established corresponding to the global target above?

- a) No X
- b) Yes, the same as the global target
- c) Yes, one or more specific national targets have been established

Please provide details below.

II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).

Programme of work	Yes	No	Details
a) Agricultural			
b) Inland water			
c) Marine and coastal			
d) Dry and subhumid land			
e) Forest			
f) Mountain			

III) Has the global or national target been incorporated into relevant plans, programmes and strategies?

- a) No X
- b) Yes, into national biodiversity strategy and action plan

c) Yes, into sectoral strategies, plans and programmes

Please provide details below.

IV) Please provide information on current status and trends in relation to this target.

V) Please provide information on indicators used in relation to this target.

VI) Please provide information on challenges in implementation of this target.

VII) Please provide any other relevant information.

Box XXII.

Target 11.2

Technology is transferred to developing country Parties, to allow for the effective implementation of their commitments under the Convention, in accordance with its Article 20, paragraph 4

I) National target: Has a national target been established corresponding to the global target above?

- a) No X
- b) Yes, the same as the global target
- c) Yes, one or more specific national targets have been established

Please provide details below.

II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).

Programme of work	Yes	No	Details
a) Agricultural			
b) Inland water			
c) Marine and coastal			
d) Dry and subhumid land			
e) Forest			
f) Mountain			

III) Has the global or national target been incorporated into relevant plans, programmes and strategies?

- | | | |
|---|--|---|
| a) No | | X |
| b) Yes, into national biodiversity strategy and action plan | | |
| c) Yes, into sectoral strategies, plans and programmes | | |

Please provide details below.

IV) Please provide information on current status and trends in relation to this target.

V) Please provide information on indicators used in relation to this target.

VI) Please provide information on challenges in implementation of this target.

VII) Please provide any other relevant information.

Global Strategy for Plant Conservation (GSPC)

The Conference of the Parties, in decision VI/9, annex, adopted the Global Strategy for Plant Conservation. Parties and Governments are invited to develop their own targets with this flexible framework. The Conference of the Parties considered the Strategy as a pilot approach for the use of outcome oriented targets under the Convention. In decision VII/10, the Conference of the Parties decided to integrate the targets into the reporting framework for the Third National Reports. Please provide relevant information by responding to the questions and requests contained in the following tables.

Box XXIII.

Target 1. A widely accessible working list of known plant species, as a step towards a complete world flora.

I) Has your country established national target corresponding to the above global target?

a) Yes X

b) No

Please specify

A list of known plants is accessible and also several floras have been published.

II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?

a) Yes

b) No X

Please specify

III) Current status (please indicate current status related to this target)

IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)

V) Progress made towards target (please specify indicators used to monitor progress towards the target)

VI) Constraints to achieving progress towards the target

VII) Any other relevant information

Box XXIV.

Target 2. A preliminary assessment of the conservation status of all known plant species, at national, regional and international levels.

I) Has your country established national target corresponding to the above global target?

a) Yes X

b) No

Please specify

Rare and threatened species are legally protected.

II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?

a) Yes

b) No X

Please specify

III) Current status (please indicate current status related to this target)

Rare and threatened species are legally protected.

IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)

V) Progress made towards target (please specify indicators used to monitor progress towards the target)

VI) Constraints to achieving progress towards the target

VII) Any other relevant information

Box XXV.

Target 3. Development of models with protocols for plant conservation and sustainable use, based on research and practical experience.

I) Has your country established national target corresponding to the above global target?

a) Yes

b) No X

Please specify

II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?

a) Yes	
b) No	X
Please specify	

III) Current status (please indicate current status related to this target)

IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)

V) Progress made towards target (please specify indicators used to monitor progress towards the target)

VI) Constraints to achieving progress towards the target

VII) Any other relevant information

Box XXVI.

Target 4. At least ten percent of each of the world's ecological regions effectively conserved.

I) Has your country established national target corresponding to the above global target?

a) Yes	
b) No	X
Please specify	

II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?

a) Yes	
b) No	X
Please specify	

III) Current status (please indicate current status related to this target)

IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)

V) Progress made towards target (please specify indicators used to monitor progress towards the target)

VI) Constraints to achieving progress towards the target

VII) Any other relevant information

Box XXVII.

Target 5. Protection of fifty percent of the most important areas for plant diversity assured.

I) Has your country established national target corresponding to the above global target?

a) Yes

b) No

X

Please specify

II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?

a) Yes

b) No

X

Please specify

III) Current status (please indicate current status related to this target)

IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)

V) Progress made towards target (please specify indicators used to monitor progress towards the target)

VI) Constraints to achieving progress towards the target

VII)Any other relevant information

Box XXVIII.

Target 6. At least thirty percent of production lands managed consistent with the conservation of plant diversity.

I) Has your country established national target corresponding to the above global target?

a) Yes

b) No

X

Please specify

II)Has your country incorporated the above global or national target into relevant plans, programmes and strategies?

a) Yes

b) No

X

Please specify

III)Current status (please indicate current status related to this target)

Organic farming is supported, as well as management of semi-natural communities.

IV)Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)

V)Progress made towards target (please specify indicators used to monitor progress towards the target)

VI)Constraints to achieving progress towards the target

VII)Any other relevant information

Box XXIX.

Target 7. Sixty percent of the world's threatened species conserved *In-situ*.

I) Has your country established national target corresponding to the above global target?

a) Yes

b) No

X

Please specify

II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?

a) Yes

b) No

X

Please specify

III) Current status (please indicate current status related to this target)

IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)

V) Progress made towards target (please specify indicators used to monitor progress towards the target)

VI) Constraints to achieving progress towards the target

VII) Any other relevant information

Box XXX.

Target 8. Sixty percent of threatened plant species in accessible *Ex-situ* collections, preferably in the country of origin, and 10 percent of them included in recovery and restoration programmes.

I) Has your country established national target corresponding to the above global target?

a) Yes

b) No

X

Please specify

II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?

a) Yes

b) No

X

Please specify

III) Current status (please indicate current status related to this target)

IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)

V) Progress made towards target (please specify indicators used to monitor progress towards the target)

VI) Constraints to achieving progress towards the target

VII) Any other relevant information

Box XXXI.

Target 9. Seventy percent of the genetic diversity of crops and other major socio-economically valuable plant species conserved, and associated indigenous and local knowledge maintained.

I) Has your country established national target corresponding to the above global target?

a) Yes

b) No

X

Please specify

II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?

a) Yes

b) No

X

Please specify

III) Current status (please indicate current status related to this target)

IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)

V) Progress made towards target (please specify indicators used to monitor progress towards the target)

VI) Constraints to achieving progress towards the target

VII) Any other relevant information

Box XXXII.

Target 10. Management plans in place for at least 100 major alien species that threaten plants, plant communities and associated habitats and ecosystems.

I) Has your country established national target corresponding to the above global target?

a) Yes

b) No

X

Please specify

II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?

a) Yes

b) No

X

Please specify

III) Current status (please indicate current status related to this target)

IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)

V) Progress made towards target (please specify indicators used to monitor progress towards the target)

VI) Constraints to achieving progress towards the target

VII)Any other relevant information

Box XXXIII.

Target 11. No species of wild flora endangered by international trade.

I) Has your country established national target corresponding to the above global target?

a) Yes

b) No

X

Please specify

There is no danger in the moment.

II)Has your country incorporated the above global or national target into relevant plans, programmes and strategies?

a) Yes

b) No

X

Please specify

III)Current status (please indicate current status related to this target)

IV)Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)

V)Progress made towards target (please specify indicators used to monitor progress towards the target)

VI)Constraints to achieving progress towards the target

VII)Any other relevant information

Box XXXIV.

Target 12. Thirty percent of plant-based products derived from sources that are sustainably managed.

I) Has your country established national target corresponding to the above global target?

a) Yes

b) No

X

Please specify

II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?

a) Yes

b) No

X

Please specify

III) Current status (please indicate current status related to this target)

IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)

V) Progress made towards target (please specify indicators used to monitor progress towards the target)

VI) Constraints to achieving progress towards the target

VII) Any other relevant information

Box XXXV.

Target 13. The decline of plant resources, and associated indigenous and local knowledge, innovations and practices that support sustainable livelihoods, local food security and health care, halted.

I) Has your country established national target corresponding to the above global target?

a) Yes

b) No

X

Please specify

II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?

a) Yes

b) No

X

Please specify

III) Current status (please indicate current status related to this target)

IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)

V) Progress made towards target (please specify indicators used to monitor progress towards the target)

VI) Constraints to achieving progress towards the target

VII) Any other relevant information

Box XXXVI.

Target 14. The importance of plant diversity and the need for its conservation incorporated into communication, educational and public-awareness programmes.

I) Has your country established national target corresponding to the above global target?

a) Yes

b) No

X

Please specify

II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?

a) Yes

b) No

X

Please specify

III) Current status (please indicate current status related to this target)

IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)

V) Progress made towards target (please specify indicators used to monitor progress towards the target)

VI) Constraints to achieving progress towards the target

VII) Any other relevant information

Box XXXVII.

Target 15. The number of trained people working with appropriate facilities in plant conservation increased, according to national needs, to achieve the targets of this Strategy.

I) Has your country established national target corresponding to the above global target?

a) Yes

b) No

X

Please specify

II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?

a) Yes	
b) No	X
Please specify	

III)Current status (please indicate current status related to this target)

IV)Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)

V)Progress made towards target (please specify indicators used to monitor progress towards the target)

VI)Constraints to achieving progress towards the target

VII)Any other relevant information

Box XXXVIII.

Target 16. Networks for plant conservation activities established or strengthened at national, regional and international levels.

I) Has your country established national target corresponding to the above global target?

a) Yes	
b) No	X
Please specify	

II)Has your country incorporated the above global or national target into relevant plans, programmes and strategies?

a) Yes	
b) No	X
Please specify	

III)Current status (please indicate current status related to this target)

IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)

V) Progress made towards target (please specify indicators used to monitor progress towards the target)

VI) Constraints to achieving progress towards the target

VII) Any other relevant information

Box XXXIX.

Please elaborate below on the implementation of this strategy specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

No special plans for plant conservation exist. Some of the targets are still covered in the overall framework of nature conservation.

Ecosystem Approach



The ecosystem approach is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way. Application of the ecosystem approach will help to reach a balance of the three objectives of the Convention. At its second meeting, the Conference of the Parties has affirmed that the ecosystem approach is the primary framework for action under the Convention (decision II/8). The Conference of the Parties, at its fifth meeting, endorsed the description of the ecosystem approach and operational guidance and recommended the application of the principles and other guidance on the ecosystem approach. The seventh meeting of the Conference of the Parties agreed that the priority at this time should be facilitating implementation of the ecosystem approach. Please provide relevant information by responding to the following questions.

3. ¹ Is your country applying the ecosystem approach, taking into account the principles and guidance contained in the annex to decision V/6? (decision V/6)
- a) No
 - b) No, but application is under consideration X
 - c) Yes, some aspects are being applied
 - d) Yes, substantially implemented

¹ Please note that all the questions marked with have been previously covered in the second national reports and some thematic reports.

4. Is your country developing practical expressions of the ecosystem approach for national policies and legislation and for implementation activities, with adaptation to local, national, and regional conditions? (decision V/6)
- a) No
- b) No, but development is under consideration X
- c) Yes, practical expressions have been developed for applying some principles of the ecosystem approach
- d) Yes, practical expressions have been developed for applying most principles of the ecosystem approach
5. Is your country strengthening capacities for the application of the ecosystem approach, and providing technical and financial support for capacity-building to apply the ecosystem approach? (decision V/6)
- a) No X
- b) Yes, within the country
- c) Yes, including providing support to other Parties
6. Has your country promoted regional cooperation in applying the ecosystem approach across national borders? (decision V/6)
- a) No X
- b) Yes, informal cooperation (please provide details below)
- c) Yes, formal cooperation (please provide details below)

Further comments on regional cooperation in applying the ecosystem approach across national borders.

7. Is your country facilitating the exchange of experiences, capacity building, technology transfer and awareness raising to assist with the implementation of the ecosystem approach? (decisions VI/12 and VII/11)
- a) No X
- b) No, some programmes are under development X
- c) Yes, some programmes are being implemented (please provide details below)
- d) Yes, comprehensive programmes are being implemented (please provide details below)

Further comments on facilitating the exchange of experiences, capacity building, technology transfer and awareness raising to assist with the implementation of the ecosystem approach.

The actions that Estonia is taking to address the conservation and sustainable use of e.g. forest biological diversity partly and indirectly conform with the ecosystem approach. The approach is used in some cases, e.g. by conservationists and researchers dealing with the planning of protected areas on Hiiumaa Island. Information on the relevant workshops and public meetings is available on the Internet at: www.bka.hiuloodus.ee/reform/e_6.html

Ecosystem approach has been the basic principle in formulating the management plan for Lahemaa National Park. Ecosystem approach has been declared as one of the policy targets for the Estonian fisheries sector.

8. Is your country creating an enabling environment for the implementation of the ecosystem

approach, including through development of appropriate institutional frameworks? (decision VII/11)

- a) No X
- b) No, but relevant policies and programmes are under development
- c) Yes, some policies and programmes are in place (please provide details below)
- d) Yes, comprehensive policies and programmes are in place (please provide details below)

Further comments on the creation of an enabling environment for the implementation of the ecosystem approach.

C. ARTICLES OF THE CONVENTION

Article 5 – Cooperation

9. Is your country actively cooperating with other Parties in respect of areas beyond national jurisdiction for the conservation and sustainable use of biological diversity?
- a) No
- b) Yes, bilateral cooperation (please give details below) X
- c) Yes, multilateral cooperation (please give details below) X
- d) Yes, regional and/or subregional cooperation (please give details below) X
- e) Yes, other forms of cooperation (please give details below)

Further comments on cooperation with other Parties in respect of areas beyond national jurisdiction for the conservation and sustainable use of biodiversity.

b-d) Since 1990 Estonia has signed 51 bi- and multilateral agreements on the environment. The ones that have been signed after the year 2000 are listed below:

1. Agreement between the Government of the Republic of Estonia and the Government of the Republic of Finland on Environmental Impact Assessment in a Transboundary Context, February 21, 2002 (Helsinki).
2. Declaration by the Ministry of the Environment of the Republic of Estonia and the Ministry of the Environment of the Land of Mecklenburg-Vorpommern on Co-operation in the fields of Environmental Protection and Nature Conservation, March 12, 2002 (Castle Granitz/Binz).
3. Memorandum between the Ministry of the Environment of the Republic of Finland and Ministry of the Environment of the Republic of Estonia on Provision of Support to the Project for Water and Waste Accession Programme for 17 Small Municipalities in Estonia, September 30, 2002 (Tallinn).
4. Agreement between the Ministry of the Environment of the Republic of Estonia and the Ministry of the Environment and Natural Resources of the Ukraine on Cooperation in the field of Environmental Protection, October 14, 2002 (Kiev).
5. Memorandum of understanding between the European Community and the Republic of Estonia on Estonia`s participation in the Community action programme promoting non-governmental organisations active primarily in the field of environmental protection, September 27, 2002 (Tallinn).
6. Agreed record of conclusions of fisheries consultations between the delegations of the Republic of Latvia and the Republic of Estonia, November 1, 2002 (Riga).
7. Agreement on joint implementation of emission reductions of greenhouse gases between the Government of the Republic of Estonia and the Government of the Republic of Finland, December 17, 2002 (Tallinn).
8. Memorandum of understanding on co-operation between the Government of the Republic of Estonia and the Government of the Netherlands in reducing emissions of greenhouse gases under article 6 of the Kyoto Protocol, September 9, 2003 (Tallinn).
9. Memorandum of understanding between the Government of the Republic of Estonia and the Government of the Kingdom of Denmark on co-operation for the implementation of the Kyoto Protocol to the UN Framework Convention on Climate Change, September 25, 2003 (Tallinn).
10. Project agreement between the Government of the Republic of Estonia and the Government of the Republic of Finland concerning Paide Bioenergy JI project, October 10, 2003 (Tallinn).

11. Agreement between the Ministry of the Environment of the Republic of Estonia and the Ministry of Environment of the Republic of Latvia on co-operation in protection and sustainable use of trans-boundary water courses, October 24, 2003 (Palanga).
12. Memorandum of Understanding between the Department for Environment, Food and Rural Affairs of the United Kingdom, Environmental Protection Agency of Denmark, Energy Market Authority of Finland, Ministry of Environment and Territory of Italy, Ministry of Climate Change and Industry of the Netherlands, Norwegian Ministry of the Environment, Ministry of the Environment, Spatial Planning and Energy of Slovenia, Lithuanian Environmental Investment Fund, the Swedish Energy Agency, Environmental Protection Agency – Ireland and Ministry of the Environment – Republic of Estonia concerning a Generic and UN/EU Compatible Registry System, November 15, 2004 (Tallinn).
13. Joint Implementation agreement between the Minister of Environment of the Republic of Estonia and the Minister for the Environment of the Kingdom of Denmark concerning Türisalu Wind Farm project , December 14, 2004 (Buenos Aires).

Estonia takes part in the European Union's network of Natura 2000 for the protection of species and habitats under the nature conservation directives of the European Union. Sites for the Natura 2000 network are selected in accordance with the approved national programme "Estonian NATURA 2000" for 2000-2007. Estonia also participates actively in the EU LIFE-Nature projects aimed to preserve the species and habitats of Natura 2000. In Estonia there are almost 10 national and multinational projects of LIFE-Nature (EU funded projects to promote the Natura 2000 network) approved by the EU. Some of them are finished but most are still ongoing. Estonia is also a partner in other EU Life-Nature projects, e.g. in Finland, Latvia and Denmark.

Estonia also participates in the implementation of the Pan-European Biological and Landscape Diversity Strategy (PEBLDS) (1995), which was initially the most important integrating response to the Global CBD process in the region. The main concept in the strategy – the Pan-European Ecological Network (PEEN) - entails the designation of natural heartlands, buffer zones around them, and ecological corridors between the heartlands. The PEEN also acts as a communication network between states, institutions and persons in issues of relevance to nature management.

Estonia has been actively participating in the process of the *Ministerial Conference on the Protection of Forests in Europe (MCPFE)*. The MCPFE with its conferences, contact and expert group meetings, is an intergovernmental forest protection cooperation process for 40 European countries. It aims at tackling forests and forestry related developments, possibilities, and dangers. It also coordinates actions and developments of sustainable forestry. The work began in 1990 and has been developing into one of the main political means for dialog and cooperation in European forest and forestry related activities.

Estonia, among other Baltic Sea states, has been actively involved in cooperation on pollution prevention in the Baltic Sea through the framework of the intergovernmental Baltic Marine Environment Protection Commission (HELCOM) set up by the Helsinki Convention in 1974.

Estonian-Finnish nature conservation cooperation goes back to the 1960ies. Official nature conservation cooperation started in 1991 with an environmental cooperation agreement between the two countries. A nature conservation working group was established to tackle and share experience in the most relevant nature conservation issues. Cooperation has been in the form of seminars, institutional visits, expert recommendations and cooperation projects. Thematic cooperation includes forest protection, plant species protection and monitoring, coastline protection, selection of IBAs (important bird areas), organisation of biodiversity monitoring, carrying out of inventories of semi-natural habitats, raising of environmental and nature conservation awareness, and issues concerning restoration of forest biota. Finnish experience has been helpful for Estonia in establishing the Natura 2000 network prior to joining the EU in May 2004.

Estonia participates in the Nordic/Baltic Network on Invasive Alien Species (NOBANIS), which deals with the development of a comprehensive and integrated network of common databases encompassing national and regional specialist databases in the Nordic/Baltic countries. A common Internet portal facilitates access to IAS-related data, information and knowledge in the region.

10. Is your country working with other Parties to develop regional, subregional or bioregional mechanisms and networks to support implementation of the Convention? (decision VI/27 A)

- a) No
- b) No, but consultations are under way
- c) Yes, some mechanisms and networks have been established (please provide details below) X
- d) Yes, existing mechanisms have been strengthened (please provide details below) X

Further comments on development of regional, subregional or bioregional mechanisms and networks to support implementation of the Convention.

See questions 9 and 11, box I

11. Is your country taking steps to harmonize national policies and programmes, with a view to optimizing policy coherence, synergies and efficiency in the implementation of various multilateral environment agreements (MEAs) and relevant regional initiatives at the national level? (decision VI/20)

- a) No
- b) No, but steps are under consideration
- c) Yes, some steps are being taken (please specify below) X
- d) Yes, comprehensive steps are being taken (please specify below)

Further comments on the harmonization of policies and programmes at the national level.

Estonia is taking steps to harmonize its national policies and programmes, with a view to optimizing policy coherence, synergy and efficiency in the implementation of various multilateral environmental agreements (MEAs) and the relevant regional initiatives at the national level. The relevant requisitions from different international agreements and conventions are transposed into legal acts, strategies and action plans.

Since Estonia's accession to the European Union in 2004, the relevant EU environmental legislation has been transposed and is being implemented.

In 2003 and 2004 Estonia participated in the UNEP GEF project No. GF/2740-03-4608 National Capacity Needs Self- Assessment for Global Environmental Management. The project tackled the issues of joint implementation of three UN conventions: United Nations Framework Convention on Climate Change (UNFCCC), United Nations Convention on Biological Diversity (UNCBD) and United Nations Convention to Combat Desertification (UNCCD). The primary goal of the project was to provide Estonia with the opportunity to take the lead in articulating its own capacity needs and priorities with respect to the global environment, taking into account the three global conventions on biodiversity, climate change and land degradation.

Box XL.

Please elaborate below on the implementation of this strategy specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

In general, Estonia participates actively in international cooperation to preserve biological diversity. The situation is good but could be still improved by more active international cooperation.

ENVIRONMENTAL CONVENTIONS IN FORCE IN ESTONIA:

- 1. Basel (1989) Convention** on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (ratified on May 14, 1992),
- 2. Gdansk (1973) Convention** on Fishing and Conservation of the Living Resources in the Baltic Sea and the Belts (ratified on February 10, 1993), members until 31.12.2005.
- 3. Ottawa (1978) Convention** on Future Multilateral Co-operation in the North-West Atlantic Fisheries (ratified on February 10, 1993),
- 4. Copenhagen (1964) Convention** on International Council for the Exploration of the Sea (ratified on February 10, 1993),
- 5. Ramsar (1971) Convention** on Wetlands of International Importance Especially as Waterfowl Habitat (ratified on October 20, 1993),
- 6. Washington (1973) Convention** on International Trade in Endangered Species of Wild Fauna and Flora (ratified on October 20, 1993),
- 7. Vienna (1963) Convention** on Civil Liability for Nuclear Damages (ratified on April 6, 1994), Joint protocol (1988) relating to the application of the Vienna Convention and the Paris Convention (ratified on April 6, 1994),
- 8. Rio de Janeiro (1992) Convention** on Biodiversity (ratified on May 11, 1994), Cartagena Protocol on Biosafety (ratified on January 21, 2004),
- 9. New York (1992) UN Framework Convention** on Climate Change (ratified on May 11, 1994), Kyoto protocol (ratified on September 3, 2002),
- 10. Helsinki (1992) Convention** on the Protection of the Marine Environment of the Baltic Sea Area (ratified on April 19, 1995),
- 11. Helsinki (1992) Convention** on the Protection and Use of Transboundary Watercourses and International Lakes (ratified on May 3, 1995), **1**
- 12. Vienna (1985) Convention** for the Protection of the Ozone Layer (ratified on September 11, 1996), Montreal (1987) Protocol on Substances that Deplete the Ozone Layer (ratified on September 11, 1996), London (1990) and Copenhagen (1992) Amendments to the Montreal Protocol (ratified on January 27, 1999),
- 13. Helsinki (1992) Convention** on Transboundary Effects of Industrial Accidents (ratified on

March 9, 2000),

- 14. Geneva (1979) Convention** on Long-Range Transboundary Air Pollution (LRTAP) (ratified on January 19, 2000), Helsinki (1985) Protocol to the LRTAP on the Reduction of Sulphur Emissions or their Transboundary Fluxes by at least 30 per cent (ratified on January 19, 2000), Sofia (1988) Protocol to the LRTAP concerning the Control of Emissions of Nitrogen Oxides or their Transboundary Fluxes (ratified on January 19, 2000), Geneva (1991) Protocol to the LRTAP concerning the Control of Emissions of Volatile Organic Compounds or their Transboundary Fluxes (ratified on January 19, 2000), Geneva (1984) Protocol on Long-term Financing of the Cooperative Programme for Monitoring and Evaluation of Long-range Transmission of Air Pollutants in Europe (EMEP) (ratified on December 6, 2000), Protocol on Persistent Organic Pollutants (POPs) (ratified on March 16, 2005),
- 15. Espoo (1991) Convention** on Environmental Impact Assessment in a Transboundary Context (ratified on November 15, 2000),
- 16. Aarhus (1998) Convention** on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (ratified on June 6, 2001),
- 17. Berne (1979) Convention** on Conservation of European Wildlife and Natural Habitats (entered into force for Estonia on August 3, 1992),
- 18. London (1973) Convention** on Prevention of Pollution from Ships (entered into force for Estonia on March 16, 1992) and its supplementary protocol (MARPOL 1973/78) and Annexes I - V (Annexes I and II entered into force for Estonia on March 16, 1992, Annexes III - V on November 18, 1992),
- 19. Brussels (1969) Convention** on Civil Liability for Oil-pollution Damage (entered into force for Estonia on March 1, 1993),
- 20. Brussels (1971) Convention** on Establishment of an International Fund for Compensation for Oil-pollution Damage (entered into force for Estonia on March 1, 1993).
- 21. North East Atlantic Fisheries Commission (NEAFC)** (ratified on May 15, 2003). Denounced on 08.06.2005.
- 22. Convention on the Physical Protection** of Nuclear Material (ratified on June 8, 1994),
- 23. Convention on Assistance** in the Case of a Nuclear Accident or Radiological Emergency (ratified on June 9, 1994)
- 24. Convention on Early Notification** of a Nuclear Accident (ratified on June 9, 1994).
- 25. Agreement on the conservation of bats in Europe (Eurobats), 1991** (came into force on 11.12.2004).

Article 6 – General measures for conservation and sustainable use



- 12.** Has your country put in place effective national strategies, plans and programmes to provide a national framework for implementing the three objectives of the Convention? (Goal 3.1 of the Strategic Plan)
- a) No
 - b) No, but relevant strategies, plans and programmes are under development
 - c) Yes, some strategies, plans and programmes are in place (please provide details below) X
 - d) Yes, comprehensive strategies, plans and programmes are in place (please provide details below)

Further comments on the strategies, plans and programmes for implementing the three objectives of the Convention.

The National Biodiversity Strategy and Action Plan (2002-2005) has been developed and updated but not submitted for governmental approval because some financial issues are yet to be clarified. It is available at <http://www.biodiv.org/world/map.asp?ctr=ee>. Related plans include the National Programme "Estonian Natura 2000" for the years 2000-2007, the National Environmental Strategy and National Environmental Action Plan (both including a chapter on biological and landscape diversity), the Nature Conservation Development Plan (currently under development) and, to a limited extent, the National Strategy for Sustainable Development, which is currently under debate in the Riigikogu (Parliament of Estonia).

- 13.** Has your country set measurable targets within its national strategies and action plans? (decisions II/7 and III/9)
- a) No
 - b) No, measurable targets are still in early stages of development
 - c) No, but measurable targets are in advanced stages of development X
 - d) Yes, relevant targets are in place (please provide details below)
 - e) Yes, reports on implementation of relevant targets available (please provide details below)

Further comments on targets set within national biodiversity strategies and action plans.

The Biodiversity Strategy and Action Plan includes some clear targets but these are not quantitative and hence cannot be viewed as measurable. The draft Nature Conservation Development Plan includes some quantitative targets, such as "to restore at least 30% of semi-natural habitats by 2035".

- 14.** Has your country identified priority actions in its national biodiversity strategy and action plan? (decision VI/27 A)
- a) No
 - b) No, but priority actions are being identified
 - c) Yes, priority actions identified (please provide details below) X

Further comments on priority actions identified in the national biodiversity strategy and action plan.

Priority actions are listed in the draft Biodiversity Strategy and Action Plan, which is available at <http://www.biodiv.org/world/map.asp?ctr=ee>

- 15.** Has your country integrated the conservation and sustainable use of biodiversity as well as benefit sharing into relevant sectoral or cross-sectoral plans, programmes and policies? (decision VI/27 A)
- a) No
 - b) Yes, in some sectors (please provide details below) X
 - c) Yes, in major sectors (please provide details below)
 - d) Yes, in all sectors (please provide details below)

Further information on integration of the conservation and sustainable use of biodiversity and benefit-sharing into relevant sectoral or cross-sectoral plans, programmes and policies.

Some issues related to biodiversity are included in national plans for agriculture and forestry. The key planning document dealing *inter alia* with agricultural biodiversity is the Rural Development Plan, which contains some agri-environmental biodiversity measures, such as conservation of traditional habitats or endangered breeds. The National Forestry Development Plan includes biodiversity issues in the chapter concerning protection of ecosystems, including the target of increasing the area of protected forests.

- 16.** Are migratory species and their habitats addressed by your country's national biodiversity strategy or action plan (NBSAP)? (decision VI/20)

- a) Yes X
- b) No

I) If **YES**, please briefly describe the extent to which it addresses

- | | |
|--|--|
| (a) Conservation, sustainable use and/or restoration of migratory species | Conservation, sustainable use and/or restoration of migratory species is addressed in the draft Biodiversity Strategy and Action Plan under the objectives of integrating biodiversity into hunting and fisheries policies |
| (b) Conservation, sustainable use and/or restoration of migratory species' habitats, including protected areas | Management of seminatural coastal wetlands important for migrating birds is included in the draft Biodiversity Strategy and Action Plan |
| (c) Minimizing or eliminating barriers or obstacles to migration | Minimization of negative impacts of transport infrastructure is an objective in the draft Biodiversity Strategy and Action Plan, as is integration of biodiversity into spatial planning |
| (d) Research and monitoring for migratory species | Not specifically addressed in the draft Biodiversity Strategy and Action Plan but the need to monitor biodiversity in general is stated as a key means to assess the efficiency of implementation of the Action Plan; furthermore, monitoring of migratory species is part of various monitoring schemes |
| (e) Transboundary movement | Not specifically addressed in the draft Biodiversity Strategy and Action Plan |

II) If **NO**, please briefly indicate below

- (a) The extent to which your country addresses migratory species at national level
- (b) Cooperation with other Range States since 2000

Biodiversity and Climate Change

17. Has your country implemented projects aimed at mitigating and adapting to climate change that incorporate biodiversity conservation and sustainable use? (decision VII/15)

- a) No X
- b) No, but some projects or programs are under development
- c) Yes, some projects have been implemented (please provide details below)
-

Further comments on the projects aimed at mitigating and adapting to climate change that incorporate biodiversity conservation and sustainable use.

18. Has your country facilitated coordination to ensure that climate change mitigation and adaptation projects are in line with commitments made under the United Nations Framework Convention on Climate Change and the United Nations Convention to Combat Desertification? (decision VII/15)

- a) No X
- b) No, but relevant mechanisms are under development
- c) Yes, relevant mechanisms are in place (please provide details below)

Further comments on the coordination to ensure that climate change mitigation and adaptation projects are in line with commitments made under the UNFCCC and the UNCCD.

An assessment of coordination between different conventions is available at:
http://www.eco.edu.ee/?_eng.rakendus

Box XLI.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Article 7 – Identification and monitoring

19. On Article 7(a), does your country have an ongoing programme to identify components of biological diversity at the genetic, species, ecosystem level?

- a) No
- b) Yes, selected/partial programmes at the genetic, species and/or ecosystem level only (please specify and provide details below) X
- c) Yes, complete programmes at ecosystem level and selected/partial inventories at the genetic and/or species level (please specify and provide details below)

Further comments on ongoing programmes to identify components of biodiversity at the genetic, species and ecosystem level.

The *Estonian National Biological Diversity Monitoring Programme* gained a legal status in Estonia in 1994. After four years of implementation based on this scientifically ungrounded legal document, a need for improvements became obvious. In 1998, a PHARE project entitled "Establishment of a GIS based Biodiversity Monitoring System for Estonia" was carried out. This project also included identification of the components of biological diversity for further monitoring. The main efforts were put into the monitoring of habitats but also the monitoring of landscape and species level components was included. Genome level monitoring was not planned at that stage since the national financial resources were limited. Only minimum requirements were set, covering 47 monitoring programmes addressing the most important components of biological diversity. As a result of this project, a *Biodiversity Monitoring Master Plan* for Estonia was drawn up and governmental approval of the Master Plan was planned. This approval is, however, still missing. Still, in 1999 to 2005 this Master Plan has constituted a basis for biological diversity monitoring in Estonia to a greater or lesser extent.

Currently (in 2005) the national monitoring programme "Monitoring of Biological and Landscape Diversity in Estonia" includes 37 subprogrammes. Ten subprogrammes deal with monitoring of habitat diversity. More than half of them are aimed at monitoring of changes in biodiversity of semi-natural communities (wooded meadows, alvars, etc.). All habitat types covered by the monitoring programme are included in the annexes of EU directives (i.e. Natura 2000 habitat types). Biodiversity of habitats is monitored in 120 sites. There are 25 subprogrammes dealing with species diversity monitoring. Various vascular plants and mosses (ca 160 species) are monitored on more than 600 plots. Ten subprogrammes have been created for the monitoring of birds, covering all main bird groups. Under 16 subprogrammes, different species groups are monitored (among invertebrates - butterflies, moths, ants, molluscs and beetles; among vertebrates - amphibians, reptiles, large carnivores, bats, beaver and otter, seals, flying squirrel, etc.).

The recent changes in the Estonian National Biological Diversity Monitoring Programme have been directed mainly towards monitoring of the status of species and habitats of Natura 2000, which is a requirement for all EU member states.

20. On Article 7(b), which components of biological diversity identified in accordance with Annex I of the Convention, have ongoing, systematic monitoring programmes?

- | | |
|--|---|
| a) at ecosystem level (please provide percentage based on area covered) | X |
| b) at species level (please provide number of species per taxonomic group and percentage of total known number of species in each group) | X |
| c) at genetic level (please indicate number and focus of monitoring programmes) | |

Further comments on ongoing monitoring programmes at the genetic, species and ecosystem level.

At ecosystem level, monitoring is currently carried out in 120 sites under 10 subprogrammes. The following habitat types are monitored: alvars, dry meadows, floodplain meadows, wooded meadows, coastal meadows, bogs and fens, dry and fresh forests. At present it is not possible to estimate the percentage of area covered per habitat type because actual monitoring is going on in selected sites and the results are then extrapolated for the whole country.

At species level, the numbers and percentages are as follows (including only the species monitored under species specific monitoring subprogrammes and excluding those monitored under habitat/ecosystem monitoring subprogrammes):

Plants: 160 species monitored (ca 10 per cent of the total number).

Mammals: 28 species monitored (ca 40 per cent of total).

Birds: 35 species monitored (ca 10 per cent of total).

Amphibians: 11 species monitored (100 per cent of total; actually monitoring of amphibian communities, not specifically species by species).

Reptiles: 5 species monitored (100 per cent of total; actually monitoring of reptile communities, not specifically species by species).

Fish: 20 species monitored (26 per cent of total).

Invertebrates: only some groups, such as butterflies, moths and ants, are monitored. Also two special priority species – pearl mussel and crayfish – have separate subprogrammes.

21. On Article 7(c), does your country have ongoing, systematic monitoring programmes on any of the following key threats to biodiversity?

- | | |
|--|---|
| a) No | |
| b) Yes, invasive alien species (please provide details below) | |
| c) Yes, climate change (please provide details below) | |
| d) Yes, pollution/eutrophication (please provide details below) | |
| e) Yes, land use change/land degradation (please provide details below) | X |
| f) Yes, overexploitation or unsustainable use (please provide details below) | X |

Further comments on monitoring programmes on key threats to biodiversity.

b) There is no specific subprogramme for the monitoring of all invasive alien species together but some invasive alien species are still monitored, e.g. the populations of *Heracleum sosnowskyi*. Also some invasive alien bird species (*Branta canadensis*, *Columba livia*, etc.) are monitored together with other species under habitat based bird monitoring subprogrammes. However, these monitoring subprogrammes are not specially designed for the monitoring of invasive alien species as a threat but for the monitoring of the status of specific native species and their habitats.

c) There is no special programme for monitoring climate change as a threat to biodiversity but

- data for assessing this threat are gathered under the hydro-meteorological monitoring programme.
- d) The existing subprogrammes of monitoring of fresh water and sea ecosystems under the National Environmental Monitoring Programme indirectly provide also data about pollution and eutrophication.
 - e) Monitoring of coastal landscapes gives also data about land use change and land degradation. There existed also a monitoring programme for remote sensing of selected landscapes but it has stopped due to the lack of funding. Land use change is monitored also under the statistical Forest Monitoring Programme, which includes a biodiversity component, but the main purpose of this programme is to monitor changes important for the use of resources. Also the monitoring of management of semi-natural habitats, such as wooded meadows, coastal meadows, alvars, etc. is carried out.
 - f) Monitoring of the use of resources, such as forest, game and fish monitoring, is performed in the form of subprogrammes under either the Environmental Monitoring Programme or Biological Diversity Monitoring Programme.

22. On Article 7 (d), does your country have a mechanism to maintain and organize data derived from inventories and monitoring programmes and coordinate information collection and management at the national level?

- a) No
- b) No, but some mechanisms or systems are being considered
- c) Yes, some mechanisms or systems are being established
- d) Yes, some mechanisms or systems are in place (please provide details below) X
- e) Yes, a relatively complete system is in place (please provide details below)

Further information on the coordination of data and information collection and management.

The Ministry of the Environment (MoE) is the body responsible for coordinating environmental monitoring and gathering information at the national level. For maintenance and analysis of monitoring and identification data, the MoE has established a general national information system on nature – the *Estonian Nature Information System (EELIS)*. This information system is a database containing data obtained *via* biodiversity inventories and monitoring programmes. Also the data of the National Nature Conservation Register are available *via* EELIS. At the same time, EELIS is an official part of the Estonian Environmental Register, which is the official data holder for all environmental matters (including biological diversity) at the highest national level.

However, in reality there exists no technical structure as yet under EELIS for the module of monitoring data. Nor are biological diversity monitoring data entered into EELIS as yet. Data and information from biological diversity monitoring subprogrammes are stored as separate reports and database files in various formats.

23. Does your country use indicators for national-level monitoring of biodiversity? (decision III/10)

- a) No
- b) No, but identification of potential indicators is under way (please describe)
- c) Yes, some indicators identified and in use (please describe and, if available, provide website address, where data are summarized and presented) X
- d) Yes, a relatively complete set of indicators identified and in use (please describe and, if available, provide website address, where data are summarized and presented)

Further comments on the indicators identified and in use.

The lists of indicator species are used as a component of habitat monitoring.

Apart from that there exists a set of national environmental indicators, including some reflecting biological diversity. However, as this indicator system is not fully developed and its development stopped already at the end of the 1990ies, it cannot be regarded as a system really in use.

Box XLII.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
 - b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
 - c) contribution to progress towards the 2010 target;
 - d) progress in implementing national biodiversity strategies and action plans;
 - e) contribution to the achievement of the Millennium Development Goals;
 - f) constraints encountered in implementation.
-
- a) The main outcome of the actions taken is a better understanding of the ecological state of threatened and typical species and habitats of Estonia. The feedback gained by biodiversity monitoring is used in implementing the National Biodiversity Strategy and Action Plan.
 - b) The monitoring actions taken and the rise of knowledge as well as better identification of the status of different components of biological diversity constitute a clear contribution to goals 2, 3 and 4.
 - c) and e) Monitoring of the state of threatened habitats and species and also monitoring of the impact of conservation measures directed towards these habitats and species is a vital component to achieve the 2010 target and the Millennium Development Goals.
 - f) One challenge is to find the best cost-effective methods for monitoring the biodiversity of more or less widely spread typical habitats in Estonia.

Decisions on Taxonomy

24. Has your country developed a plan to implement the suggested actions as annexed to decision IV/1? (decision IV/1)

- a) No X
- b) No, but a plan is under development
- c) Yes, a plan is in place (please provide details below)
- d) Yes, reports on implementation available (please provide details below)

Further information on a plan to implement the suggested actions as annexed to decision IV/1.

There is no formal plan but several relevant activities are being carried out under the current National Programme of Humanitarian and Natural History Collections (2004-2008).

25. Is your country investing on a long-term basis in the development of appropriate infrastructure for your national taxonomic collections? (decision IV/1)

- a) No X
- b) Yes (please provide details below)

Further information on investment on a long-term basis in the development of appropriate infrastructure for your national taxonomic collections.

The Estonian government has, however, allocated short-term financial support for the maintenance and curation of biological collections under the current National Programme of Humanitarian and Natural History Collections (2004-2008).

Since 2003 Estonia is a voting party to the Global Biodiversity Information Facility (GBIF). GBIF is an open-ended international co-ordinating body set up with the overall aim of furthering technical and scientific efforts to develop a global digitised information facility for biodiversity data.

26. Does your country provide training programmes in taxonomy and work to increase its capacity of taxonomic research? (decision IV/1)

- a) No
- b) Yes (please provide details below) X

Further information on training programmes in taxonomy and efforts to increase the capacity of taxonomic research.

Estonia has a long (over 200-year) tradition of taxonomic work at the national level as well as on the regional scale (especially within the territory of the former Soviet Union). We have highly competent scientists on many groups of organisms (fungi, lichenized fungi).

There is a decline in taxonomy training at the universities, which is mainly caused by short term funding of the relevant research projects and the global situation in the valuation of taxonomic research.

There are very limited possibilities at the universities to produce professional taxonomists, especially considering the global need. It must be stressed here that without special taxonomic research projects there will be no taxonomists, and this will have a drastic effect on biology education at the universities and, in the end, also a very negative effect on the maintenance and

understanding of biological diversity as a whole.

However, in the current National Programme of Humanitarian and Natural History Collections (2004-2008), the importance of taxonomy has been highlighted.

Apart from regular university courses, local Estonian NGOs (Estonian Naturalists' Society, Estonian Ornithological Society, Estonian Orchid Protection Club, etc.) are active in providing educational programmes focussing on local faunistic and floristic studies.

27. Has your country taken steps to ensure that institutions responsible for biological diversity inventories and taxonomic activities are financially and administratively stable? (decision IV/1)
- a) No
 - b) No, but steps are being considered
 - c) Yes, for some institutions
 - d) Yes, for all major institutions
- 28.* ² Is your country collaborating with the existing regional, subregional and global initiatives, partnerships and institutions in carrying out the programme of work, including assessing regional taxonomic needs and identifying regional-level priorities? (decision VI/8)
- a) No
 - b) No, but collaborative programmes are under development
 - c) Yes, some collaborative programmes are being implemented (please provide details about collaborative programmes, including results of regional needs assessments) X
 - d) Yes, comprehensive collaborative programmes are being implemented (please provide details about collaborative programmes, including results of regional needs assessment and priority identification)

Further information on the collaboration your country is carrying out to implement the programme of work for the GTI, including regional needs assessment and priority identification.

The GTI NFP participated in the 1st European workshop 'Building Capacity for the Global Taxonomy Initiative (GTI) in a larger Europe' (21-23 June 2004) and in the 2nd workshop 'Creating GTI European Toolkit' (6-8 June 2005). http://www.gti-kontaktstelle.de/toolkit/toolkit_June.html

The botanical gardens in Estonia are members of BGCI (Botanic Gardens Conservation International), an organization for plant conservation furthering both the GTI and the Global Strategy for Plant Conservation.

Estonia is a member of the European Platform for Biodiversity Strategy (2003).

Some of the taxonomists in Estonia are active in international networks (UNITE, Nordic Gene Bank, Atlas Florae Europaeae, Fauna Europaea, etc.)

The University of Tartu (with all the museums and collections included) is the member of Universeum (the European Network of Academic Heritage).

29. * Has your country made an assessment of taxonomic needs and capacities at the national level for the implementation of the Convention? (annex to decision VI/8)

² The questions marked with * in this section on Taxonomy are similar to some questions contained in the format for a report on the implementation of the programme of work on the Global Taxonomy Initiative. Those countries that have submitted such a report do not need to answer these questions unless they have updated information to provide.

- a) No
- b) Yes, basic assessment made (please provide below a list of needs and capacities identified) X
- c) Yes, thorough assessment made (please provide below a list of needs and capacities identified)

Further comments on national assessment of taxonomic needs and capacities.

The Estonian Nature Information System (<http://www.eelis.ee/>) was established under the Estonian Environmental Information Centre to strengthen Estonia's work on threatened and vulnerable species, habitat types, etc. and is part of the national programme for mapping and monitoring of biological diversity. Its main task is to provide the society with up-to-date and easily accessible information on biological diversity in Estonia. It collaborates closely with several institutions. This year the Estonian Environmental Information Centre is starting a joint project with the Natural History Museum of the University of Tartu to develop a national register of all Estonian species. This will serve as a national standard for all scientific institutions and management authorities and will considerably simplify data exchange on species.

The Estonian government has allocated financial support for the maintenance and curation of the main biological collections under the current National Programme of Humanitarian and Natural History Collections (2004-2008).

The Estonian Taxonomy Initiative is an acknowledgment of the fundamental importance of highly developed taxonomic competence and thriving natural history museums for all aspects of biological research, conservation, and environmental monitoring. For the fulfilment of Estonia's commitment to the CBD, it is essential that these efforts be given continued support.

There are numerous local NGOs engaged in activities which in part coincide with the programme of work for the GTI (Estonian Naturalists' Society, Estonian Ornithological Society, Estonian Orchid Protection Club, etc.).

30. * Is your country working on regional or global capacity building to support access to, and generation of, taxonomic information in collaboration with other Parties? (annex to decision VI/8)

- a) No
- b) Yes, relevant programmes are under development
- c) Yes, some activities are being undertaken for this purpose (please provide details below) X
- d) Yes, many activities are being undertaken for this purpose (please provide details below)

Further comments on regional or global capacity-building to support access to, and generation of, taxonomic information in collaboration with other Parties.

Estonia is participating in capacity building projects both at the regional and global levels. The projects include both human and infrastructure capacity building to support access to and generation of taxonomic information. The Estonian Nature Information System under the Estonian Environmental Information Centre (<http://www.eelis.ee/>) has several programmes with focus on biodiversity.

Estonia is participating in several network capacity building projects at the regional level, including but not limited to BioCASE, GBIF, SYNTHESYS, ENBI and EUNIS.

See also Question 28.

31. * Has your country developed taxonomic support for the implementation of the programmes of work under the Convention as called upon in decision VI/8? (annex to decision VI/8)

- | | |
|--|---|
| a) No | |
| b) Yes, for forest biodiversity (please provide details below) | X |
| c) Yes, for marine and coastal biodiversity (please provide details below) | X |
| d) Yes, for dry and sub-humid lands (please provide details below) | |
| e) Yes, for inland waters biodiversity (please provide details below) | X |
| f) Yes, for mountain biodiversity (please provide details below) | |
| g) Yes, for protected areas (please provide details below) | X |
| h) Yes, for agricultural biodiversity (please provide details below) | X |
| i) Yes, for island biodiversity (please provide details below) | X |

Further comments on the development of taxonomic support for the implementation of the programmes of work under the Convention.

- b) Estonia has ongoing projects which provide a basic assessment of forest biological diversity, including in areas under current threat of habitat conversion or of high conservation value, notably under the auspices of Estonian Ministry of Environment and Estonian Fund for Nature (inventories of old-growth forests, woodland key habitats and preselection of Natura 2000 habitats).
- c) Estonia has some permanent monitoring activities relating to marine and coastal biodiversity.
- e) Estonia has permanent monitoring activities relating to inland waters biodiversity
- g) Estonia has several ongoing projects related to protected areas, which include monitoring activities notably under the auspices of the Estonian Ministry of the Environment and the Estonian Nature Information System managed by the Estonian Environmental Information Centre (<http://www.eelis.ee/>), which serves as the focal point for information on threatened species and biodiversity in Estonia.
- h) The Estonian government has financed a national programme Collection and Conservation of Plant Genetic Resources for Food and Agriculture. The Jõgeva Plant Breeding Institute and the Botanical Garden of University of Tartu host a database for genetic resources of cultivated plants and variety names.

32. * Has your country developed taxonomic support for the implementation of the cross-cutting issues under the Convention as called upon in decision VI/8?

- a) No
- b) Yes, for access and benefit-sharing (please provide details below)
- c) Yes, for Article 8(j) (please provide details below)
- d) Yes, for the ecosystem approach (please provide details below) X
- e) Yes, for impact assessment, monitoring and indicators (please provide details below) X
- f) Yes, for invasive alien species (please provide details below) X
- g) Yes, for others (please provide details below)

Further comments on the development of taxonomic support for the implementation of the cross-cutting issues under the Convention.

- d), e) Estonia has several permanent monitoring activities using the ecosystem approach, notably under the auspices of the Estonian Ministry of the Environment.
- f) Estonia recognizes the issue of invasive species and a few species have been targeted for management (e.g. *Heracleum sosnowskyi*). Comprehensive policies and programmes are under joint development by several actors, e.g. the Estonian Ministry of the Environment, Estonian Agricultural University, Estonian Marine Institute, etc.

Article 8 – *In-situ* conservation
[excluding paragraphs (a) to (e), (h) and (j)]



33. On Article 8(i), has your country endeavored to provide the conditions needed for compatibility between present uses and the conservation of biological diversity and sustainable use of its components?
- a) No
- b) No, but potential measures are being identified X
- c) Yes, some measures undertaken (please provide details below)
- d) Yes, comprehensive measures undertaken (please provide details below)

Further comments on the measures taken to provide the conditions needed for compatibility between present uses and the conservation of biological diversity and sustainable use of its components.

The Environmental Register Act (2003, amended 2005) lays down the obligation to create a national environmental database of natural resources and protected natural objects. The register will function as a common electronic database that provides information on the status and use of natural resources (e.g. mineral resources, peat, forest, game animals (birds, mammals), groundwater, surface waters, fish stock) and data about protected natural objects, alien species, genetically modified organisms. The common database is under construction. Aggregation of the relevant data existing in different databases and formats is needed.

The current database of protected areas and species is a GIS-based comprehensive register,

which is a source of information and a legal basis for decision makers responsible for issuing of environmental, building, planning and other permits. The data are provided (and can be used) by scientific institutions, nature protection officials, NGO-s. The database is kept by the Ministry of the Environment and is continuously improved to make it more convenient and complete.

34. On Article 8(k), has your country developed or maintained the necessary legislation and/or other regulatory provisions for the protection of threatened species and populations?
- a) No
 - b) No, but legislation is being developed
 - c) Yes, legislation or other measures are in place (please provide details below) X

Further information on the legislation and/or regulations for the protection of threatened species and populations.

The Nature Conservation Act (NCA) was passed by the Riigikogu in 2004. Up to that, species protection was regulated mainly by the Protected Natural Objects Act (1994). The NCA establishes rules for species protection, both for protecting individuals of threatened species in any location where they might be present and for preserving their habitats in specially designated species protection sites important for maintaining local populations or entire species (i.e. valuable local populations of plants and fungi and the staging, feeding and/or breeding grounds of animals). Such species protection sites constitute a new measure of species protection.

The lists of protected species were analysed by experts with regard to the status of the species in Estonia and new revised lists were drawn up in 2004. Lists of three categories of protected species were approved by regulations of the Government of Estonia and Minister of Environment. A number of new plant, fungus and animal species were listed for protection.

Since 2004 the conservation status of protected species is analysed species by species and the relevant conservation actions are being taken. The process of designating new species protection sites is underway.

Protection of the species listed in Annexes II and IV of the Habitats Directive (92/43/EEC) and in the Birds Directive (79/409/EEC) has been strengthened by the establishment of Natura sites and the respective protection rules, which take into account the different protection needs of different species.

35. On Article 8(l), does your country regulate or manage processes and categories of activities identified under Article 7 as having significant adverse effects on biological diversity?
- a) No
 - b) No, but relevant processes and categories of activities being identified
 - c) Yes, to a limited extent (please provide details below)
 - d) Yes, to a significant extent (please provide details below) X

Further comments on the regulation or management of the processes and categories of activities identified by Article 7 as having significant adverse effects on biodiversity.

The Environmental Impact Assessment and Environmental Management Systems Act (2005) lays down the obligation to assess the environmental impact of activities, projects and programmes which may have an adverse effect on biological diversity. There exists a specified list of activities for which environmental impact assessment is a strict obligation. Such obligation is not restricted to protected areas but is a general obligation.

A special provision of the new EIA Act stipulates the obligation to assess all plans and projects which might have an impact on the proposed Natura 2000 sites.

Box XLIII.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation

The most significant outcomes related to *in situ* conservation in Estonia over the reporting period, contributing to achievement of the 2010 target, the Millennium Development Goal and the goals of the Strategic Plan of the Convention, were as follows:

- 1) passing of the Nature Conservation Act (2004), which establishes a legal basis for *in situ* conservation;
- 2) revision of the lists of protected species and continuous work to assess the conservation status of species and the need to designate species protection sites;
- 3) management plans have been drawn up and are being implemented for 32 species and 12 protected areas;
- 4) the total area of protected territories was increased to 16% of the territory of Estonia, i.e. the area of protected territories increased by 33%;
- 5) establishment of protection measures for representative, diverse and unfragmented sites of different habitat types (e.g. raised bogs, fens, meadows, coastal habitats, marine and inland water habitats);
- 6) state support system for the management of semi-natural communities is in place.

The project to revise the existing institutional structure of nature conservation, incl. management and administration of protected areas, started in 2004.

General public awareness of the targets and issues of *in situ* conservation and sustainable use of natural resources has increased but it still needs to be recognised as an important topic for further work.

Programme of Work on Protected Areas (Article 8 (a) to (e))

- 36.** Has your country established suitable time bound and measurable national-level protected areas targets and indicators? (decision VII/28)
- a) No (please specify reasons)
 - b) No, but relevant work is under way
 - c) Yes, some targets and indicators established (please provide details below) X
 - d) Yes, comprehensive targets and indicators established (please provide details below)

Further comments on targets and indicators for protected areas.

Establishment of protected areas is based on the Nature Conservation Act and on the relevant proposals containing information on high nature value, discoveries of new sites of threatened species, etc.

National targets are related mainly to Estonia's membership in the EU and the Natura 2000 process. The EU guidance to designate 20-60% of the area of Annex I habitat types and habitats of populations (or individuals) of Annex II species of the Habitats Directive as Natura sites, as well as the relevant requirements of the Birds Directive, have been taken as targets. The previously unprotected Natura 2000 sites have been granted preliminary protection, which will be replaced by more specific protection rules based on the specific management and conservation needs of habitats and species in the sites. It is planned that the relevant protection rules will come into force by May 2007.

Specific quantitative targets have been established for designating protected areas for species of the three protection categories provided in the NCA. The present conservation status of the species is being analysed species by species. The level of threat to the species and effectiveness of the existing protected areas in terms of preservation of the species determine whether the designation of additional species protection sites is needed. Designation of species protection sites for all protected species is underway.

- 37.** Has your country taken action to establish or expand protected areas in any large or relatively unfragmented natural area or areas under high threat, including securing threatened species? (decision VII/28)
- a) No
 - b) No, but relevant programmes are under development
 - c) Yes, limited actions taken (please provide details below)
 - d) Yes, significant actions taken (please provide details below) X

Further comments on actions taken to establish or expand protected areas.

Since 2004, protection measures have been taken in 451 new sites, including both the expansion of the existing protected areas and establishment of new ones. The Estonian list of Natura 2000 sites includes 490 sites: 66 SPAs and 509 pSCIs. Only 67% of the Natura network is located within the existing protected areas. The total area of protected areas has been increased from 10.8% to 16% of the Estonian territory.

New protected areas are being designated to protect different habitat types (e.g. raised bogs, fens, old forests, wooded meadows, alvars, species rich grasslands, lakes, rivers, coastal and marine habitats, etc.) in places where they have preserved their natural unfragmented status, are inhabited by a diverse set of species, are important for habitat restoration, etc. Also the aspect of improving the conservation status of threatened species and securing their preservation has been taken into account when establishing new sites or expanding the existing ones.

- 38.** Has your country taken any action to address the under representation of marine and inland water ecosystems in the existing national or regional systems of protected areas? (decision

VII/28)

- a) No
- b) Not applicable
- c) No, but relevant actions are being considered
- d) Yes, limited actions taken (please provide details below)
- e) Yes, significant actions taken (please provide details below) X

Further comments on actions taken to address the under representation of marine and inland water ecosystems in the existing national or regional systems of protected areas.

Protected areas have been established for the protection of marine territories with the total area of app. 700 000 ha (which makes 50% of the area of the Estonian Natura 2000 network). These sites aim to maintain a good status of habitat for a variety of species: birds, fishes, invertebrates, etc.

In 2004, protection measures for the preservation of lake and river ecosystems were established in a number of new sites. New sites for protecting lakes and natural river habitats have been established in over 200 lakes and over 400 km of rivers, most of which representing the first priority from the conservation point of view.

39. Has your country identified and implemented practical steps for improving the integration of protected areas into broader land and seascapes, including policy, planning and other measures? (decision VII/28)

- a) No
- b) No, but some programmes are under development
- c) Yes, some steps identified and implemented (please provide details below) X
- d) Yes, many steps identified and implemented (please provide details below)

Further comments on practical steps for improving integration of protected areas into broader land and seascapes, including policy, planning and other measures.

Management of protected areas is the responsibility of 15 County Environmental Departments (CED) and 17 Protected Area Administrations (PAA). The presence of protected areas must be taken into account in different policy sectors, such as spatial planning (national, county, case level), planning of land use changes, forestry and forest management, building, etc.

40. Is your country applying environmental impact assessment guidelines to projects or plans for evaluating effects on protected areas? (decision VII/28)

- a) No
- b) No, but relevant EIA guidelines are under development
- c) Yes, EIA guidelines are applied to some projects or plans (please provide details below) X
- d) Yes, EIA guidelines are applied to all relevant projects or plans (please provide details below)

Further comments on application of environmental impact assessment guidelines to projects or plans for evaluating effects on protected areas.

The environmental impact assessment procedure is regulated by the Environmental Impact Assessment and Environmental Management Systems Act.

Article 6 of the EU Habitats Directive (92/43/EEC) has been fully transposed into the Estonian legislation. The relevant guidance document concerning impact assessment under Article 6 is used as guidance in dealing with projects and plans which may have an impact on Natura sites.

41. Has your country identified legislative and institutional gaps and barriers that impede effective establishment and management of protected areas? (decision VII/28)

- a) No
- b) No, but relevant work is under way
- c) Yes, some gaps and barriers identified (please provide details below)) X
- d) Yes, many gaps and barriers identified (please provide details below)

Further comments on identification of legislative and institutional gaps and barriers that impede effective establishment and management of protected areas.

Extensive analyses of the current management structure of nature conservation were carried out in 2002-2005. Their aim was to increase the capacity and efficiency of nature conservation institutions responsible for the management of protected areas, to optimise the institutional structure of nature conservation, and to accordingly modify the division of responsibilities. The analyses pointed out the gaps in the present management system, such as: one protected area managed by different environmental departments, the number of personnel in local protected area management authorities poorly correlated with actual needs and the complexity of management tasks, the attention paid to protected areas (number of management personnel, level of financing) does not directly correspond to the natural and conservational complexity of the areas.

42. Has your country undertaken national protected-area capacity needs assessments and established capacity building programmes? (decision VII/28)

- a) No
- b) No, but assessments are under way X
- c) Yes, a basic assessment undertaken and some programmes established (please provide details below)
- d) Yes, a thorough assessment undertaken and comprehensive programmes established (please provide details below)

Further comments on protected-area capacity needs assessment and establishment of capacity building programmes.

An extensive analysis to identify the most effective structure of nature conservation institutions with regard to their protected area capacity was carried out in 2002-2005.

Improvement of awareness and competence of nature conservation officials has been carried out on a continuous basis in the form of workshops, infodays, etc.

43. Is your country implementing country-level sustainable financing plans that support national systems of protected areas? (decision VII/28)

- a) No
- b) No, but relevant plan is under development
- c) Yes, relevant plan is in place (please provide details below) X
- d) Yes, relevant plan is being implemented (please provide details below)

Further comments on implementation of country-level sustainable financing plans that support national systems of protected areas.

Protected areas are financed from the state budget on a continuous basis. The actual yearly amount of funding allocated to protected areas may vary, depending on priorities in the overall state budget. However, overall support to nature conservation from the state budget has increased.

An additional state funding system for various projects in protected areas is functioning on the basis of proceeds from environmental taxes.

Since 2001, management and restoration of semi-natural grasslands has been supported from the state budget. Land owners have received state support for preserving key biotopes in forests.

However, effective use of the EU agri-environmental funding schemes for environmental protection purposes still needs to be further developed, combined with national support schemes and improved at the national level.

Assessment of the funding needs of protected areas and analyses of cost-effectiveness of the present financing system have been carried out for the MoE by economic experts so as to estimate and envisage the administration and management costs of protected areas.

All management plans of protected areas include a management budget for a certain period listing and prioritising all management activities as appropriate.

44. Is your country implementing appropriate methods, standards, criteria and indicators for evaluating the effectiveness of protected areas management and governance? (decision VII/28)

- a) No
- b) No, but relevant methods, standards, criteria and indicators are under development
- c) Yes, some national methods, standards, criteria and indicators developed and in use (please provide details below) X
- d) Yes, some national methods, standards, criteria and indicators developed and in use and some international methods, standards, criteria and indicators in use (please provide details below)

Further comments on methods, standards, criteria and indicators for evaluating the effectiveness of protected areas management and governance.

Management plans of protected areas envisage a subsequent evaluation of the plan, i.e. evaluation of the effectiveness of implementation of the planned activities.

The MoE keeps strict account of active protection measures – management of semi-natural grasslands.

Regular monitoring of habitats and species gives feedback on the effectiveness of measures taken in protected areas.

Several Protected Area Administrations (PAAs) have engaged local monitoring experts, who gather information about the status of species or habitats, giving quick and relevant information about the effectiveness of management.

Box XLIV.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

The most significant outcomes related to protected areas in Estonia over the reporting period, contributing to achievement of the 2010 target, Millennium Development Goal and the goals of the Strategic Plan of the Convention, were as follows:

- 1) extensive designation of sites for the Natura 2000 network and implementation of conservation measures in the sites;
- 2) establishment of protection measures in more than 400 formerly unprotected sites to preserve different habitat types (raised bogs, fens, old forests, etc.);
- 3) state support system for the management of semi-natural communities is functioning;
- 4) investigation, selection and designation for protection of a large number of lakes, rivers and marine territories of high conservation priority;

Implementation of the article concerned is partly (but significantly) dependent on good cooperation of PAAs and CEDs with all relevant stakeholders. Involvement and awareness of stakeholders and local people of the targets of biodiversity conservation still needs to be increased.

Capacity and motivation of PAAs and CEDs needs to be increased and their tasks divided in a more efficient way. In order to achieve these goals, a relevant project started in 2004, involving nature conservation officials from the MoE, CEDs and PAAs, as well as experts and scientists.

Article 8(h) – Alien species

45. Has your country identified alien species introduced into its territory and established a system for tracking the introduction of alien species?

- a) No
- b) Yes, some alien species identified but a tracking system not yet established X
- c) Yes, some alien species identified and tracking system in place
- d) Yes, alien species of major concern identified and tracking system in place

46. Has your country assessed the risks posed to ecosystems, habitats or species by the introduction of these alien species?

- a) No
- b) Yes, but only for some alien species of concern (please provide details below)
- c) Yes, for most alien species (please provide details below) X

Further information on the assessment of the risks posed to ecosystems, habitats or species by the introduction of these alien species.

Invasive species have been identified in different organism groups (plants, vertebrates, terrestrial and water invertebrates) and the vectors identified. Estonia has published a review of the current situation regarding invasive species (available on the Internet at www.envir.ee)

47. Has your country undertaken measures to prevent the introduction of, control or eradicate, those alien species which threaten ecosystems, habitats or species?

- a) No
- b) No, but potential measures are under consideration
- c) Yes, some measures are in place (please provide details below) X
- d) Yes, comprehensive measures are in place (please provide details below)

Further information on the measures to prevent the introduction of, control or eradicate those alien species that threaten ecosystems, habitats or species.

Eradication programme of *Heracleum sosnowskyi* and *H. mantegazzianum* has started. Pests of agriculture, such as *Avena fatua*, *Leptinotarsa decemlineata*, etc., are monitored and controlled.

48. In dealing with the issue of invasive species, has your country developed, or involved itself in, mechanisms for international cooperation, including the exchange of best practices? (decision V/8)
- a) No
 - b) Yes, bilateral cooperation
 - c) Yes, regional and/or subregional cooperation
 - d) Yes, multilateral cooperation X

49. Is your country using the ecosystem approach and precautionary and bio-geographical approaches as appropriate in its work on alien invasive species? (decision V/8)
- a) No X
 - b) Yes (please provide details below)

Further comments on the use of the ecosystem approach and precautionary and bio-geographical approaches in work on alien invasive species.

Transboundary cooperation is going on with Nordic and Baltic Sea countries.

According to the Nature Conservation Act (RT I 2004, 38, 258;53,373), no alien species may be planted or released into the wild without special permission. There exists a list of alien species (RT 2004/126) containing 2 plant species and 19 animal species whose live individuals may not be exported into Estonia nor be grown or bred here.

50. Has your country identified national needs and priorities for the implementation of the Guiding Principles? (decision VI/23)
- a) No
 - b) No, but needs and priorities are being identified X
 - c) Yes, national needs and priorities have been identified (please provide below a list of needs and priorities identified)

Further comments on the identification of national needs and priorities for the implementation of the Guiding Principles.

51. Has your country created mechanisms to coordinate national programmes for applying the Guiding Principles? (decision VI/23)
- a) No X
 - b) No, but mechanisms are under development
 - c) Yes, mechanisms are in place (please provide details below)

Further comments on the mechanisms created to coordinate national programmes for implementing the Guiding Principles.

52. Has your country reviewed relevant policies, legislation and institutions in the light of the

Guiding Principles, and adjusted or developed policies, legislation and institutions? (decision VI/23)

- a) No X
- b) No, but review under way
- c) Yes, review completed and adjustment proposed (please provide details below)
- d) Yes, adjustment and development ongoing
- e) Yes, some adjustments and development completed (please provide details below)

Further information on the review, adjustment or development of policies, legislation and institutions in light of the Guiding Principles.

53. Is your country enhancing cooperation between various sectors in order to improve prevention, early detection, eradication and/or control of invasive alien species? (decision VI/23)

- a) No
- b) No, but potential coordination mechanisms are under consideration X
- c) Yes, mechanisms are in place (please provide details below)

Further comments on cooperation between various sectors.

54. Is your country collaborating with trading partners and neighboring countries to address threats of invasive alien species to biodiversity in ecosystems that cross international boundaries? (decision VI/23)

- a) No X
- b) Yes, relevant collaborative programmes are under development
- c) Yes, relevant programmes are in place (please specify below the measures taken for this purpose)

Further comments on collaboration with trading partners and neighboring countries.

We have extensive scientific cooperation regarding invasive species with Finland, the largest trading partner of Estonia.

55. Is your country developing capacity to use risk assessment to address threats of invasive alien species to biodiversity and incorporate such methodologies in environmental impact assessment (EIA) and strategic environmental assessment (SEA)? (decision VI/23)

- a) No X
- b) No, but programmes for this purpose are under development
- c) Yes, some activities for developing capacity in this field are being undertaken (please provide details below)
- d) Yes, comprehensive activities are being undertaken (please provide details below)

Further information on capacity development to address threats of invasive alien species.

56. Has your country developed financial measures and other policies and tools to promote activities to reduce the threats of invasive species? (decision VI/23)

- a) No
- b) No, but relevant measures and policies are under development X
- c) Yes, some measures, policies and tools are in place (please provide details below)
- d) Yes, comprehensive measures and tools are in place (please provide details below)

Further comments on the development of financial measures and other policies and tools for the promotion of activities to reduce the threats of invasive species.

Eradication programme of *Heracleum sp.*

Box XLV.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

The topic of alien species and their spreading causing damage to local species and communities has received quite a lot of attention in Estonia during the last years and several regulatory mechanisms have been worked out. However, better cooperation between different ministries is needed.

Effort has been made to raise public awareness of dangers related to alien species.

Article 8(j) – Traditional knowledge and related provisions



GURTS

57. Has your country created and developed capacity-building programmes to involve and enable smallholder farmers, indigenous and local communities, and other relevant stakeholders to effectively participate in decision-making processes related to genetic use restriction technologies?

- a) No X
- b) No, but some programmes are under development
- c) Yes, some programmes are in place (please provide details below)
- d) Yes, comprehensive programmes are in place (please provide details below)

Further comments on capacity-building programmes to involve and enable smallholder farmers, indigenous and local communities and other relevant stakeholders to effectively participate in decision-making processes related to GURTs.

Status and Trends

58. Has your country supported indigenous and local communities in undertaking field studies to determine the status, trends and threats related to the knowledge, innovations and practices of indigenous and local communities? (decision VII/16)

- a) No
- b) No, but support to relevant studies is being considered
- c) Yes (please provide information on the studies undertaken) X

Further information on the studies undertaken to determine the status, trends and threats related to the knowledge, innovations and practices of indigenous and local communities, and priority actions identified.

Under the Ministry of Culture there is the **Võro Institute**, which is dedicated to the preservation and promotion of the Võro language and culture, which are tightly connected with the historic center of Võro culture, the rural and mostly agricultural southeast Estonian county of Võromaa.

No other field studies related to the knowledge, innovations and practices of local communities are supported on a large scale.

Akwé:Kon Guidelines

59. Has your country initiated a legal and institutional review of matters related to cultural, environmental and social impact assessment, with a view to incorporating the Akwé:Kon Guidelines into national legislation, policies, and procedures?

- a) No X
- b) No, but review is under way
- c) Yes, a review undertaken (please provide details on the review)

Further information on the review.

A working group for the protection of sacred sites has been established under the Ministry of Culture. As the work is still in an early stage, there are no outcomes yet for legal or institutional development.

60. Has your country used the Akwé:Kon Guidelines in any project proposed to take place on sacred sites and/or land and waters traditionally occupied by indigenous and local communities? (decision VII/16)

- a) No X
- b) No, but a review of the Akwé: Kon guidelines is under way
- c) Yes, to some extent (please provide details below)
- d) Yes, to a significant extent (please provide details below)

Further information on the projects where the Akwé:Kon Guidelines are applied.

Capacity Building and Participation of Indigenous and Local Communities

61. Has your country undertaken any measures to enhance and strengthen the capacity of indigenous and local communities to be effectively involved in decision-making related to the use of their traditional knowledge, innovations and practices relevant to the conservation and sustainable use of biodiversity? (decision V/16)

- a) No
- b) No, but some programmes being developed
- c) Yes, some measures taken (please provide details below) X
- d) Yes, comprehensive measures taken (please provide details below)

Further information on the measures to enhance and strengthen the capacity of indigenous and local communities.

The Estonian Small Islands Act stipulates that small islands with a permanent population are represented by a special board that consults the Estonian Government on financial and legal decisions concerning life on small islands. The board consists of representatives of small islands, municipal heads and representatives from Ministries of the Environment, Internal Affairs, Finance and Economy.

62. Has your country developed appropriate mechanisms, guidelines, legislation or other initiatives to foster and promote the effective participation of indigenous and local communities in decision making, policy planning and development and implementation of the conservation and sustainable use of biodiversity at international, regional, subregional, national and local levels? (decision V/16)

- a) No
- b) No, but relevant mechanisms, guidelines and legislation are under development
- c) Yes, some mechanisms, guidelines and legislation are in place (please provide details below) X

Further information on the mechanisms, guidelines and legislation developed.

The process for the new Rural Development Plan (2007-2013) involves plans to activate local communities to make decisions on local level agricultural planning.

The issues of traditional knowledge are also reflected in terms of protection and restoration of traditional landscapes and habitats. The Rural Development Plan (2004-2006) managed by the Ministry of Agriculture constitutes a basis for providing support for restoration of stone hedges and re-use of abandoned fields to revitalize traditional rural knowledge. The Ministry of the Environment has provided direct support to farmers for mowing, grazing and shrub removal to restore and manage semi-natural habitats, e.g. alluvial, coastal and wooded meadows and alvars. The plans for 2007-2014 include provision of sufficient support to farmers for managing semi-natural habitats.

Under the foundation Enterprise Estonia there is also the Program for Local Activities, which involves support to the third sector and local municipalities for developing local community life.

63. Has your country developed mechanisms for promoting the full and effective participation of indigenous and local communities with specific provisions for the full, active and effective participation of women in all elements of the programme of work? (decision V/16, annex)

- a) No X
- b) No, but relevant mechanisms are being developed
- c) Yes, mechanisms are in place (please provide details below)

Further comments on the mechanisms for promoting the full and effective participation of women of indigenous and local communities in all elements of the programme of work.

Support to implementation

64. Has your country established national, subregional and/or regional indigenous and local community biodiversity advisory committees?

- a) No X
- b) No, but relevant work is under way
- c) Yes

65. Has your country assisted indigenous and local community organizations to hold regional meetings to discuss the outcomes of the decisions of the Conference of the Parties and to prepare for meetings under the Convention?

- a) No X
- b) Yes (please provide details about the outcome of meetings)

Further information on the outcome of regional meetings.

Not relevant for Estonia.

66. Has your country supported, financially and otherwise, indigenous and local communities in formulating their own community development and biodiversity conservation plans that will enable such communities to adopt a culturally appropriate strategic, integrated and phased approach to their development needs in line with community goals and objectives?

- a) No
- b) Yes, to some extent (please provide details below)
- c) Yes, to a significant extent (please provide details below)

Further information on the support provided.

Box XLVI.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

As mentioned above, Estonians are the only indigenous people living in this country. Thus there is no need for special rules and support for indigenous people. Yet there is still a need for support to local communities and small-scale farms in order to maintain the traditional practices of managing semi-natural grasslands and other traditional lifestyles. Unfortunately the agri-environmental support under the Rural Development Plan has still very little effect on supporting biodiversity maintenance in agricultural landscapes. It is hoped that the newly established Working Group on Sacred Sites will supplement the Estonian legislation with some new practices for supporting the maintenance of traditional knowledge.

Article 9 – *Ex-situ* conservation

67. On Article 9(a) and (b), has your country adopted measures for the *ex-situ* conservation of components of biological diversity native to your country and originating outside your country?
- a) No
 - b) No, but potential measures are under review
 - c) Yes, some measures are in place (please provide details below) X
 - d) Yes, comprehensive measures are in place (please provide details below)

Further information on the measures adopted for the *ex-situ* conservation of components of biodiversity native to your country and originating outside your country.

1. There exists no governmental plan defining the role of *ex situ* conservation and/or its importance in the overall conservation system, although one specific action with strong emphasis on *ex situ* conservation of one species has been included in the National Environmental Action Plan. Also, the priority level of *ex situ* actions for government funding is unclear.
2. The on-going *ex situ* conservation measures have been undertaken by municipalities and/or NGOs.
3. The following measures of *ex situ* conservation have been undertaken:
 - a. Maintenance of the captive population of the European Mink, *Mustela lutreola* (native species) in a special breeding facility in Tallinn Zoo and coordination of the relevant European EEP Programme, which foresees regular genetic and demographic analyses on the status of captive population. The breeding facility of Tallinn Zoo hosts more than a half of the global captive population.
 - b. Tallinn Zoo is actively participating in 27 EEP Programmes with the aim to collectively manage the genetic resources of the respective species kept in European Zoos
4. In addition to the measures mentioned under point 3, several institutions keep a number of rare and/or threatened species in *ex situ* conditions but without clearly defined conservation aims:
 - a. Tallinn Botanical Garden – 73 plant species regarded as threatened in Estonia
 - b. Botanical Garden of the University of Tartu – 49 plant species threatened in Estonia and/or listed in the Bern Convention
5. The National Programme for the Protection of Threatened Fish Species and Fish Restocking, drawn up with the aim of maintaining the resources of rare fish species, was approved by the Minister of Environment. This document serves also as a basis for maintenance and keeping of fish of commercial value in *ex situ* conditions. The *ex situ* stock of commercially valuable fish species is used in two ways: (a) maintenance of breeding stock in captivity and regular release of individuals for reinforcing the existing wild populations; (b) collection of early development phases of fish for the purpose of raising them *ex situ*. These activities do not have conservation goals but are aimed mainly at the maintenance of commercial stock. Yet indirectly these actions may also bring some conservation benefit.

68. On Article 9(c), has your country adopted measures for the reintroduction of threatened species into their natural habitats under appropriate conditions?

- a) No
- b) No, but potential measures are under review
- c) Yes, some measures are in place (please provide details below) X
- d) Yes, comprehensive measures are in place (please provide details below)

Further comments on the measures for the reintroduction of threatened species into their natural habitats under appropriate conditions.

1. There is no general government-level plan for the use of *ex-situ* measures and re-introduction of threatened species for conservation purposes. However, in the following two species action plans approved by the Minister of Environment, the re-introduction component of species conservation has a crucial role:
 - a) Management plan for the European Mink (2000 – 2004)
 - b)** Management Plan for the European Mink *Mustela lutreola* on the island of Hiiumaa (2004–2008)
2. Foundation LUTREOLA in cooperation with Tallinn Zoo has been dealing with the re-introduction of the threatened European Mink, *Mustela lutreola*, on the island of Hiiumaa since the year 2000. The main objective of the release activities is to establish a wild population of this species in locations inaccessible to the American Mink, *Mustela vison*. The impact of the latter, which is an invasive species, has been identified as one of the main causes of extinction of the European Mink. However, full success has still not been achieved despite the efforts. Identification of the best methodology for efficient use of captive populations for restoration of wild populations is underway. Success is expected to be achieved within the next few years. The experience gained so far has revealed the importance of research to identify the "gateway" between the existing *ex situ* population and the planned *in situ* population. The lack of this type of studies is one of the main (and poorly understood) reasons why the success rate of the re-introduction project is very low.
3. In addition, Tallinn Zoo, in the framework of the relevant all-European EEP Programmes, has provided animals for re-introduction efforts elsewhere:
 - (1) Black Vulture, *Aegypius monachus*, for re-introduction in Mallorca;
 - (2) Bearded Vulture, *Gypaetus barbatus*, for re-introduction in the Alps

69. On Article 9(d), has your country taken measures to regulate and manage the collection of biological resources from natural habitats for *ex-situ* conservation purposes so as not to threaten ecosystems and *in-situ* populations of species?
- a) No
 - b) No, but potential measures are under review
 - c) Yes, some measures are in place (please provide details below)
 - d) Yes, comprehensive measures are in place (please provide details below) X

Further information on the measures to regulate and manage the collection of biological resources from natural habitats for *ex-situ* conservation purposes so as not to threaten ecosystems and *in-situ* populations of species.

1. The Nature Conservation Act, which entered into force on 01 May 2004, addresses issues related to the protection of ecosystems and *in situ* populations of species against the collection of biological resources for *ex situ* conservation purposes. Section 58 of this Act stipulates:

(1) Returning of introduced specimens of native species into the wild is prohibited, with the exception of scientifically grounded re-introduction on the basis of permission of the Minister of Environment.

(2) Animals of native species can be re-inhabited on the basis of permission of the Environmental Department of the county of origin (i.e. county where the animals are taken from the wild for resettlement) and county of re-inhabiting of the animals.

(3) Release into the wild of captive-bred specimens of native animal species, except for release of animals that have been kept in captivity for the purpose of curing their injuries or restoring their vitality, shall be carried out only on the basis of the Action Plan specified in Section 49 of this Act.

(4) Taking from the wild of specimens of protected species, except for curing their injuries and in the cases provided by subsection (5) of this section, is prohibited.

(5) Specimens of protected species can be taken from the wild only for educational, medical or scientific purposes, or for the purposes of reintroduction on the basis of permission of the Minister of Environment unless this affects the favourable status of the species.

(6) Protected species shall be resettled pursuant to the procedure established by the Government of the Republic.

(7) Tagging of specimens of animal species (including the supplying of them with radio transmitters) shall be permitted on the basis of the permission of the Minister of Environment or a person authorized by him or her.

(8) For the purposes of regulating a species, an environmental authority may permit gathering of bird eggs, except eggs of protected species, if this is necessary:

- a) in the interest of the human population;
- b) in the interest of air safety;
- c) for avoiding damage to agricultural crops, farm animals or fish farms or any other property.

Box XLVII.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
 - b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
 - c) contribution to progress towards the 2010 target;
 - d) progress in implementing national biodiversity strategies and action plans;
 - e) contribution to the achievement of the Millennium Development Goals;
 - f) constraints encountered in implementation.
- a) A well-managed *ex-situ* population of the European Mink is kept in captivity; the respective pan-European breeding programme is being coordinated. The maintained genetic pool guarantees the survival of the species and rescue operations for the case that the currently existing tiny wild populations fully vanish.

The ongoing release of the European Mink on the Hiiumaa Island has provided a lot of new information concerning the problems faced in using captive-bred animals for re-introduction purposes. The experience gained increases the likelihood of reaching the formation of a viable population in the next few years. The experience and knowledge acquired constitutes valuable support for every new case where the same or a similar animal needs to be reintroduced into the wild.

- b) The actions undertaken contribute to achievement of Goal 2 in the Strategic Plan of the Convention.
- c) No direct relevance
- d) No approved national biodiversity strategies and action plans exist. The ongoing actions are listed in the National Biodiversity Strategy and Action Plan, which has been drawn up but not approved.
- e) The actions undertaken aim to reduce the loss of biological diversity in inland water ecosystems.
- f) Strategic needs for *ex situ* actions for maintenance of threatened species have not been assessed and prioritised.

Article 10 – Sustainable use of components of biological diversity

70. On Article 10(a), has your country integrated consideration of the conservation and sustainable use of biological resources into national decision-making?
- a) No
 - b) No, but steps are being taken
 - c) Yes, in some relevant sectors (please provide details below) X
 - d) Yes, in most relevant sectors (please provide details below)

Further information on integrating consideration of conservation and sustainable use of biological resources into national decision-making.

The Sustainable Development Act (1995) defines *inter alia* the “critical reserve of renewable natural resources” as the smallest quantity which guarantees the natural balance and renewal of biological and landscape diversity. The critical reserve, including the margin value of uncertainty, shall be determined by the Government. In planning economic activity, this usable reserve must not be exceeded. However, to date, critical reserve has been determined for none of the renewable natural resources.

The objective of the *National Environmental Strategy until 2010* (approved by the Government in 2005), the principal environmental policy document in the country, is to bring environmental problems to public attention and to identify priority goals and tasks for promoting sustainable development. One of the first priorities in the Strategy is promotion of sustainable use of natural resources historically intrinsic to Estonia. However, the strategy does not specify any activities to determine critical reserves for any biological resources.

Some sectoral development programmes, like the *National Forestry Development Plan* and *Rural Development Plan*, have addressed the topic of sustainable use of the components of biological diversity. However, the approach has been general, partial and indirect.

The only sectors with such consumption codes and limits to the use of biological resources that can be considered as analogues to critical reserve are hunting and fisheries.

71. On Article 10(b), has your country adopted measures relating to the use of biological resources that avoid or minimize adverse impacts on biological diversity?
- a) No
 - b) No, but potential measures are under review
 - c) Yes, some measures are in place (please provide details below) X
 - d) Yes, comprehensive measures are in place (please provide details below)

Further information on the measures adopted relating to the use of biological resources that avoid or minimize adverse impacts on biological diversity.

Biodiversity issues are reflected in the EIA procedure and can be considered as one of the aspects describing the location of the proposed development. The Nature Conservation Act specifies the need for environmental impact assessment in cases where a proposed activity outside the borders of a protected object may still impose adverse effect on the object. The procedure is well developed for Natura 2000 areas. See also Question 14. Measures for minimization of adverse impacts on biological diversity are envisaged, as a rule, in management plans for protected areas and in management plans for species.

72. On Article 10(c), has your country put in place measures that protect and encourage customary use of biological resources that is compatible with conservation or sustainable use requirements?
- a) No
 - b) No, but potential measures are under review
 - c) Yes, some measures are in place (please provide details below) X
 - d) Yes, comprehensive measures are in place (please provide details below)

Further information on the measures that protect and encourage customary use of biological resources that is compatible with conservation or sustainable use requirements.

Customary use of biodiversity is regulated by the system of permits for the use of natural resources (forest, fish, game, mushrooms, plants).

73. On Article 10(d), has your country put in place measures that help local populations develop and implement remedial action in degraded areas where biological diversity has been reduced?
- a) No
 - b) No, but potential measures are under review
 - c) Yes, some measures are in place (please provide details below) X
 - d) Yes, comprehensive measures are in place (please provide details below)

Further information on the measures that help local populations develop and implement remedial action in degraded areas where biodiversity has been reduced.

Management targets for semi-natural habitats (e.g. wooded meadows, coastal and alluvial meadows) are often implemented on the basis of contracts with landowners or allotment holders. Several protected areas involve local people into the management of valuable habitats in a mutually beneficial way. Financial support is provided from the state budget or from the funds of the EU agri-environmental programme.

74. Has your country identified indicators and incentive measures for sectors relevant to the conservation and sustainable use of biodiversity? (decision V/24)
- a) No
 - b) No, but assessment of potential indicators and incentive measures is under way X
 - c) Yes, indicators and incentive measures identified (please describe below)

Further comments on the identification of indicators and incentive measures for sectors relevant to the conservation and sustainable use of biodiversity.


Sustainability indicators have been developed under a few projects. However, no widely accepted indicators have been identified. Some incentive measures have been established in sectors like forestry, hunting, fishing and extraction of minerals.

75. Has your country implemented sustainable use practices, programmes and policies for the

sustainable use of biological diversity, especially in pursuit of poverty alleviation? (decision V/24)

- a) No X
- b) No, but potential practices, programmes and policies are under review
- c) Yes, some policies and programmes are in place (please provide details below)
- d) Yes, comprehensive policies and programmes are in place (please provide details below)

Further information on sustainable use programmes and policies.

76.  Has your country developed or explored mechanisms to involve the private sector in initiatives on the sustainable use of biodiversity? (decision V/24)

- a) No
- b) No, but mechanisms are under development X
- c) Yes, mechanisms are in place (please describe below)

Further comments on the development of mechanisms to involve the private sector in initiatives on the sustainable use of biodiversity.

Management targets for semi-natural habitats (e.g. wooded meadows, coastal and alluvial meadows) are often implemented on the basis of contracts with land-owners or allotment holders. Several protected areas involve local people into the management of valuable habitats in a mutually beneficial way. Financial support is provided from the state budget or from the funds of the EU agri-environmental programme.

77. Has your country initiated a process to apply the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity? (decision VII/12)

- a) No X
- b) No, but the principles and guidelines are under review
- c) Yes, a process is being planned
- d) Yes, a process has been initiated (please provide detailed information)

Further information on the process to apply the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity.

78. Has your country taken any initiative or action to develop and transfer technologies and provide financial resources to assist in the application of the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity? (decision VII/12)

- a) No X
- b) No, but relevant programmes are under development
- c) Yes, some technologies developed and transferred and limited financial resources provided (please provide details below)
- d) Yes, many technologies developed and transferred and significant financial resources provided (please provide details below)

Further comments on the development and transfer of technologies and provision of financial resources to assist in the application of the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity.

Biodiversity and Tourism

79. Has your country established mechanisms to assess, monitor and measure the impact of tourism on biodiversity?

- a) No
- b) No, but mechanisms are under development X
- c) Yes, mechanisms are in place (please specify below)
- d) Yes, existing mechanisms are under review

Further comments on the establishment of mechanisms to assess, monitor and measure the impact of tourism on biodiversity.

A Sustainable Tourism Action Plan was drawn up in the framework of NBSAP in 1999 and revised and up-dated in spring 2001. The Estonian Tourism Agency has suggested that this action plan could be used as a basis for further work.

Visitor counts and surveys as a basis for PA management have been conducted as part of the Estonian-Finnish nature conservation cooperation in 2003-2005. A seminar dedicated to this subject was held in Palmse, Lahemaa National Park, in September 2004.

80. Has your country provided educational and training programmes to the tourism operators so as to increase their awareness of the impacts of tourism on biodiversity and upgrade the technical capacity at the local level to minimize the impacts? (decision V/25)

- a) No
- b) No, but programmes are under development X
- c) Yes, programmes are in place (please describe below)

Further comments on educational and training programmes provided to tourism operators.

The Estonian Eco-Tourism Association has been bringing together the small and medium-sized businesses engaged in the eco-tourism sector. The Association was established in 1996 and manages also the eco-label scheme "Estonia – the Natural Way" (www.ecotourism.ee/estekas).

81. Does your country provide indigenous and local communities with capacity-building and

financial resources to support their participation in tourism policy-making, development planning, product development and management? (decision VII/14)

- a) No X
- b) No, but relevant programmes are being considered
- c) Yes, some programmes are in place (please provide details below)
- d) Yes, comprehensive programmes are in place (please provide details below)

Further comments in the capacity-building and financial resources provided to indigenous and local communities to support their participation in tourism policy-making, development planning, product development and management.

82. Has your country integrated the Guidelines on Biodiversity and Tourism Development in the development or review of national strategies and plans for tourism development, national biodiversity strategies and actions plans, and other related sectoral strategies? (decision VII/14)

- a) No, but the guidelines are under review X
- b) No, but a plan is under consideration to integrate some principles of the guidelines into relevant strategies
- c) Yes, a few principles of the guidelines are integrated into some sectoral plans and NBSAPs (please specify which principle and sector)
- d) Yes, many principles of the guidelines are integrated into some sectoral plans and NBSAPs (please specify which principle and sector)

Further information on the sectors where the principles of the Guidelines on Biodiversity and Tourism Development are integrated.

See response to question 79.

Box XLVII.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Article 11 – Incentive measures

83. Has your country established programmes to identify and adopt economically and socially sound measures that act as incentives for the conservation and sustainable use of components of biological diversity?
- a) No
 - b) No, but relevant programmes are under development
 - c) Yes, some programmes are in place (please provide details below) X
 - d) Yes, comprehensive programmes are in place (please provide details below)

Further comments on the programmes to identify and adopt incentives for the conservation and sustainable use of biodiversity.

Incentives for the conservation and sustainable use of biodiversity are included in several legal acts and other regulative documents. The Sustainable Development Act sets the objective of sustainable use of natural resources but it is a declarative rather than regulative document. The use of biological resources is regulated by a system of permits, e.g. quotas for commercial fishing and hunting of game animals are fixed annually by the Ministry of the Environment.

The framework document for the conservation and use of biodiversity is the Estonian Biodiversity Strategy and Action Plan (1998). The Nature Conservation Development Plan until 2030 is under preparation. Economic (monetary) measures for environmental protection and biodiversity conservation – pollution tax, land tax exemptions, etc. – are described in Article 20 of the Act. The Ecological Tax Reform is under preparation.

Special attention has been paid to the restoration and maintenance of seminatural communities as the most endangered habitats in Estonia beside old forests. Annual allocation from the State Budget for restoration and maintenance of seminatural habitats has been established.

The general forestry policy of Estonia is based on the Forestry Development Plan. Timber cutting and reforestation is regulated by forest management plans. The State Forest Management Centre has been developing the framework of Key Biotopes.

In the agricultural sector, the approved framework document is the Estonian Rural Development Plan 2003-2006, which follows the new EU guidelines for agriculture. A lot of attention is paid to landscape management with direct positive impact on biodiversity.

- 84.** Has your country developed the mechanisms or approaches to ensure adequate incorporation of both market and non-market values of biological diversity into relevant plans, policies and programmes and other relevant areas? (decisions III/18 and IV/10)
- a) No
 - b) No, but relevant mechanisms are under development X
 - c) Yes, mechanisms are in place (please provide details below)
 - d) Yes, review of impact of mechanisms available (please provide details below)

Further comments on the mechanism or approaches to incorporate market and non-market values of biodiversity into relevant plans, policies and programmes.

There is no overall system for taking into account the (monetary) market and non-market values of biodiversity. Illegal use of biodiversity resources (i.e. illegal fishing and hunting) must be compensated through fines to compensate for damages caused to nature, e.g. specific monetary value is placed on most of protected species. Theoretical studies on the non-market value of biodiversity have been financed by the Estonian Science Foundation (e.g. grant No. 4187 Economics of Estonian Biodiversity).

- 85.** Has your country developed training and capacity-building programmes to implement incentive measures and promote private-sector initiatives? (decision III/18)
- a) No
 - b) No, but relevant programmes are under development
 - c) Yes, some programmes are in place X
 - d) Yes, many programmes are in place

- 86.** Does your country take into consideration the proposals for the design and implementation of incentive measures as contained in Annex I to decision VI/15 when designing and implementing incentive measures for the conservation and sustainable use of biodiversity? (decision VI/15)
- a) No X
 - b) Yes (please provide details below)

Further information on the proposals considered when designing and implementing the incentive measures for the conservation and sustainable use of biodiversity.

87. Has your country made any progress in removing or mitigating policies or practices that generate perverse incentives for the conservation and sustainable use of biological diversity? (decision VII/18)

- a) No
- b) No, but identification of such policies and practices is under way X
- c) Yes, relevant policies and practices identified but not entirely removed or mitigated (please provide details below)
- d) Yes, relevant policies and practices identified and removed or mitigated (please provide details below)

Further information on perverse incentives identified and/or removed or mitigated.

The overall quality of the environment has been increasing in almost all sectors (except forests) because of a significant decline in agriculture and amelioration following the Soviet occupation.

The most important positive changes have taken place in terms of:

- reduced use of mineral fertilizers;
- extensification of agriculture (e.g. dissolution of huge pig farms);
- a significant decrease in amelioration activities;
- intensive construction and reconstruction of sewage treatment systems all over the country.

Also the implementation of the EU regulations and requirements in both the environmental and agricultural sector have had a positive effect on environmental quality and thereby on overall biodiversity.

The relevant incentive measures are also reflected in the development plans of forestry, transport and rural development.

Box XLVIII.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Article 12 – Research and training

88. On Article 12(a), has your country established programmes for scientific and technical education and training in measures for the identification, conservation and sustainable use of biological diversity and its components?
- a) No
- b) No, but programmes are under development
- c) Yes, programmes are in place (please provide details below) X

Further information on the programmes for scientific and technical education and training in the measures for identification, conservation and sustainable use of biodiversity.

Relevant programmes for educating experts in biodiversity have been developed, with an emphasis on PhD and MSc levels but some unwanted trends can be observed in practical studies of biodiversity at the BSc level.

The various BSc, MSc, and PhD curricula in the University of Tartu and the Estonian Agricultural University, e.g., biology, geology, geography, ecology and biological diversity, environmental technology, landscape management, etc., offer undergraduate and postgraduate education with elements of biodiversity.

Some of the curricula guarantee a sound knowledge of the relevant biodiversity topics sufficient for starting MSc studies. Following the Bologna convention, Estonian universities have started to switch from the 4+2 to the 3+2 system in BSc + MSc studies.

In biodiversity studies, new curricula for three-year BSc studies support the arrangement of general theoretical courses for large groups of 200 or more students. Although formally efficient, the large-group approach is not always coupled with sufficient practical studies. For instance, practical overview courses on biodiversity (e.g. single-day courses on plants, insects, mammals, etc.) and a limited number of field excursions remain almost the only source of practical knowledge of biodiversity in many new curricula within biosciences (e.g. gene technology), where the main focus is on applied research and "engineering approach" and very little emphasis is placed on the conservation of biodiversity. Estonian university teachers and researchers have expressed their concern on the resulting degradation of knowledge of biodiversity among "average students", which may lead to degradation of the practical knowledge basis of future MSc and PhD students.

As compared to the BSc level, research and training on biodiversity at the MSc and PhD level is better supported. Supported by Measure 1.1. of the European Union Structural Funds, six doctoral schools have been launched at the University of Tartu in 2005, among them a school on ecology and biodiversity.

The research topics in the training of MSc and PhD students depend on the priorities set by their supervisors. At least some research groups at the universities are focusing on Estonian biodiversity. Still, many biodiversity topics are related to theoretical aspects or case studies in distant countries. From the analysis of research topics (p. 89), it can be concluded that only a small part of the full potential of MSc and PhD students and their supervisors is put in the service of studies and conservation of local and regional biodiversity.

89. On Article 12(b), does your country promote and encourage research which contributes to the conservation and sustainable use of biological diversity?

a) No

b) Yes (please provide details below)

X

Further information on the research which contributes to the conservation and sustainable use of biodiversity.

In Estonia, fundamental science is supported through a research grant system. Research groups can apply for support for research themes covering salaries, procurement of basic equipment and equipment maintenance costs *via* state funding. The Ministry of Education and Research is responsible for evaluation and selection of themes to be supported. Research grants of the Estonian Science Foundation (ESF) provide financial support for the best scientific research topics (www.eris.ee).

Modern infrastructure for science is being built up step by step. In some research directions, development of infrastructure and purchasing of expensive equipment has been successful thanks to international co-operation projects. Still, many research groups have to rely on studies in laboratories abroad.

A review of research topics carried out by the initiative Estonian Bioplatfrom revealed that 67 research topics of the ESF were dealing with biodiversity in the widest sense. However, only a few specific research topics for postgraduate studies focus on local biodiversity issues.

For the new top competence centres (including the competence centre for ecology and biodiversity), state support is continuously sought and the EU funds are seen as a potential source of future funding.

It is expected that from this year grants from the EU Structural Funds will open up opportunities for large investments into the infrastructure of Estonian science, which will first and foremost concern natural sciences, including research on biodiversity. Application for these funds will require considerable co-financing from the state budget. In general, becoming a member of the European Union has significantly improved the prospects of Estonian natural sciences and biodiversity studies.

90. On Article 12(c), does your country promote and cooperate in the use of scientific advances in biological diversity research in developing methods for conservation and sustainable use of biological resources?

a) No

b) Yes (please provide details below)

X

Further information on the use of scientific advances in biodiversity research in developing methods for conservation and sustainable use of biodiversity.

Most of academic research focuses on excellency in scientific contribution. Still, bridging the gap between theoretical achievements or results of research on distant ecosystems and practical application of this knowledge in local biodiversity conservation is not always easy. Fortunately, there are some new and emerging research teams focusing primarily on biodiversity and its conservation in Estonia.

The state-supported monitoring programme (www.seiremonitor.ee) includes the monitoring of biodiversity. However, as yet, the coverage of biodiversity monitoring in the Estonian territory is selective and, according to the opinion of many experts, insufficient. As yet, there is no systematic approach to applied research needed for documenting and protecting biodiversity. An overview of state-supported applied research programmes is needed, preferably involving the establishment of a new state programme for supporting applied biodiversity research for biodiversity monitoring and conservation purposes, with educational tasks integrated into the programme.

Box XLIX.

Please elaborate below on the implementation of this article specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Article 13 – Public education and awareness

91. Is your country implementing a communication, education and public awareness strategy and promoting public participation in support of the Convention? (Goal 4.1 of the Strategic Plan)

- a) No
- b) No, but a CEPA strategy is under development X
- c) Yes, a CEPA strategy developed and public participation promoted to a limited extent (please provide details below)
- d) Yes, a CEPA strategy developed and public participation promoted to a significant extent (please provide details below)

Further comments on the implementation of a CEPA strategy and the promotion of public participation in support of the Convention.

The Estonian National Curriculum for Basic and Secondary Schools was approved in 2002. The emphasis is placed on interrelations of the natural, social and cultural environment and on the idea of sustainable attitude towards the surrounding environment. The topic **environment and sustainable development** is one of the so-called "integrated themes" in the curriculum. The syllabi for biology and geography include biodiversity issues and include overviews of the Convention on Biological Diversity and Aarhus Convention.

The Ministry of Education and Research and the Ministry of the Environment have established a working group for promoting environmental education and education for sustainable development. The working group has started the development of a national strategy on education for sustainable development. On June 15, 2005, the working group submitted an interim report, with an emphasis on promotion of non-formal environmental education *via* the development of a network of nature schools. The report also included a suggestion to establish a national programme for biodiversity protection and education for sustainable development. Support to nature centres and to the national programme is sought but not yet granted. Aspects of environmental education with an emphasis on biodiversity have been included in many strategic documents, such as the new draft National Nature Conservation Development Plan and the National Environmental Action Plan, but financial support for the related activities has not been secured yet.

92. Is your country undertaking any activities to facilitate the implementation of the programme of work on Communication, Education and Public Awareness as contained in the annex to decision VI/19? (decision VI/19)

- a) No
- b) No, but some programmes are under development
- c) Yes, some activities are being undertaken (please provide details below) X
- d) Yes, many activities are being undertaken (please provide details below)

Further comments on the activities to facilitate the implementation of the programme of work on CEPA.

The concepts of environmental awareness and sustainable development are part of the basic and secondary school curriculum. The international students' study for evaluation of educational achievement – Trends in International Mathematics and Science Study (TIMSS) – showed a high level of theoretical knowledge of subjects related to environmental education and natural sciences among Estonian students. In contrast, the need for improvement of practical skills, attitudes and values towards nature and biodiversity is voiced and some steps have been undertaken (e.g. the initiative for establishing a working network of nature centres with the help of state support and promoting practical biodiversity studies at all levels of education).

93. Is your country strongly and effectively promoting biodiversity-related issues through the press, the various media and public relations and communications networks at national level? (decision VI/19)

- a) No
- b) No, but some programmes are under development
- c) Yes, to a limited extent (please provide details below) X
- d) Yes, to a significant extent (please provide details below)

Further comments on the promotion of biodiversity-related issues through the press, the various media and public relations and communications networks at national level.

Many TV-programmes and other media outputs receive state support *via* the Ministry of the Environment and Environmental Investment Centre. In recent years, promotion the EU NATURA 2000 network has been a central theme among biodiversity-related issues.

Still, most of the existing media programmes have their weaknesses, mostly because journalists try to make up their own stories on the basis of very limited background knowledge and they seldom consult experts.

Rapid feedback from scientists and other experts possessing the relevant specific knowledge would allow better use of media for adequate communication of various aspects of biodiversity. Direct interviews and discussions with leading experts in the Ministry of the Environment and representatives of the scientific community and NGOs should be encouraged.

94. Does your country promote the communication, education and public awareness of biodiversity at the local level? (decision VI/19)

- a) No
- b) Yes (please provide details below) X

Further information on the efforts to promote the communication, education and public awareness of biodiversity at the local level.

Environmental communication specialists work at the county environmental departments of the Ministry of the Environment.

Environmental education specialists have been employed by some protected areas and nature houses in Tartu and Pärnu.

Development of a network of local nature centres and nature schools has been identified as a priority by the Ministry of the Environment and Ministry of Education and Research.

The Environmental Investment Centre (www.kik.ee) has regional programmes for supporting local (municipal and NGO) initiatives in the field of education and conservation of biodiversity on a competitive basis. This allows local active organizations to seek project-based state support.

95. Is your country supporting national, regional and international activities prioritized by the Global Initiative on Education and Public Awareness? (decision VI/19)

- a) No
- b) No, but some programmes are under development
- c) Yes, some activities supported (please provide details below) X
- d) Yes, many activities supported (please provide details below)

Further comments on the support of national, regional and international activities prioritized by the Global Initiative on Education and Public Awareness.

Development of an environmental education network and organization of co-operation within the network has been identified as a priority both at the national and regional level.

Among international activities, a number projects supported by different funding schemes of the European Union have started. Many of these projects are carried out in co-operation between state structures (e.g. Ministry of the Environment) and NGOs and receive large amounts of state co-financing *via* different ministries or implementation authorities of the relevant EU programmes.

Examples of international co-operation activities in this field include the Interreg projects BSR Eagle "Nature Schools in the Baltic Sea Region" (10 countries) and the BIRD project promoting the use of wetlands for regional development *via* eco-tourism.

http://www.bsreagle.net/files/misc/eagle_newsletter_01-weebi.pdf

<http://www.eurowetlands.org/>

96. Has your country developed adequate capacity to deliver initiatives on communication, education and public awareness?

- a) No
- b) No, but some programmes are under development X
- c) Yes, some programmes are being implemented (please provide details below)
- d) Yes, comprehensive programmes are being implemented (please provide details below)

Further comments on the development of adequate capacity to deliver initiatives on communication, education and public awareness.

The Ministry of Education and Research and Ministry of the Environment have established a working group for promoting environmental education, which has started the development of a national strategy on education for sustainable development – see p. 91.

97. Does your country promote cooperation and exchange programmes for biodiversity education and awareness at the national, regional and international levels? (decisions IV /10 and VI/19)

- a) No
- b) Yes (please provide details below) X

Further comments on the promotion of cooperation and exchange programmes for biodiversity education and awareness, at the national, regional and international levels.

European initiatives supporting research and education support several international exchange programmes that have become available for Estonian researchers and students. European mobility programmes allow them to study extensive collections and use laboratory equipment in 20 European museums and universities in 11 countries associated to SYNTHESYS network.

Stipendia for mobility of post-graduate students are also granted by Estonian foundations (e.g. Kristjan Jaak Foundation, Archimedes Foundation).

Many international projects supported by the EU are designed to support information exchange and educational exchange of teachers in nature centers, nature schools and schools of general education.

Promotion of university and student exchange programmes depends largely on local initiative. The resources are available from many local, regional and EU sources.


98. Is your country undertaking some CEPA activities for implementation of cross-cutting issues and thematic programmes of work adopted under the Convention?

- a) No (please specify reasons below)
- b) Yes, some activities undertaken for some issues and thematic areas (please provide details below) X
- c) Yes, many activities undertaken for most issues and thematic areas (please provide details below)
- d) Yes, comprehensive activities undertaken for all issues and thematic areas (please provide details below)

Further comments on the CEPA activities for implementation of cross-cutting issues and thematic programmes of work adopted under the Convention.

Some cross-cutting issues have been discussed in expert working groups, e.g. invasive alien species, biological diversity and tourism, education and public awareness. Discussions on the development of national taxonomy databases linked to the Global Taxonomy Initiative have started.

Reports of thematic programmes have been submitted for protected areas, forest biodiversity, intellectual property and traditional knowledge related to genetic resources.

99.  Does your country support initiatives by major groups, key actors and stakeholders that integrate biological diversity conservation matters in their practice and education programmes as well as into their relevant sectoral and cross-sectoral plans, programmes and policies? (decision IV/10 and Goal 4.4 of the Strategic Plan)

- a) No
- b) Yes (please provide details below) X

Further comments on the initiatives by major groups, key actors and stakeholders that integrate biodiversity conservation in their practice and education programmes as well as their relevant sectoral and cross-sectoral plans, programmes and policies.

The most significant part of state support to NGOs and other organizations is allocated *via* the Environmental Investment Centre (www.kik.ee). There are also EU projects (e.g. PHARE projects) designed for capacity building and networking of environmental NGOs moderated by the Ministry of the Environment and Ministry of Interior. Part of the co-financing of these projects is provided by the state.

100. Is your country communicating the various elements of the 2010 biodiversity target and establishing appropriate linkages to the Decade on Education for Sustainable Development in the implementation of your national CEPA programmes and activities? (decision VII/24)

- a) No
- b) No, but some programmes are under development
- c) Yes, some programmes developed and activities undertaken for this purpose (please provide details below) X
- d) Yes, comprehensive programmes developed and many activities undertaken for this purpose (please provide details below)

Further comments on the communication of the various elements of the 2010 biodiversity target and the establishment of linkages to the Decade on Education for Sustainable Development.

The Ministry of the Environment and Ministry of Education and Research have established a working group for promoting environmental education, which has started the development of a national strategy on education for sustainable development. On June 15, 2005, the working group submitted an interim report, which places the main emphasis on promotion of non-formal environmental education *via* the development of a network of nature centres and includes a suggestion to establish a national programme on biodiversity protection and education for sustainable development.

This document also includes an analysis of issues for the Decade of Education for Sustainable development and suggestions for priorities in promoting education for sustainable development.

Box L.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Article 14 – Impact assessment and minimizing adverse impacts

101. On Article 14.1(a), has your country developed legislation requiring an environmental impact assessment of proposed projects likely to have adverse effects on biological diversity?

- a) No
- b) No, legislation is still in early stages of development
- c) No, but legislation is in advanced stages of development
- d) Yes, legislation is in place (please provide details below) X
- e) Yes, review of implementation available (please provide details below) X

Further information on the legislation requiring EIA of proposed projects likely to have adverse effects on biodiversity.

The Environmental Impact Assessment and Environmental Management Systems Act (EIA Act), which replaced the previous EIA Act, came into force on 3 April 2005. The new EIA Act was developed to meet the requirements of 2001/42/EC (SEA Directive) and 92/43/EC (Habitats Directive). Also the directives 85/337/EEC and 97/11/EC are fully transposed by the new EIA Act. The new EIA Act obligates decision makers to evaluate the likely impact of proposed activities on the environment and the carrying capacity of the environment prior to issuing a development consent or environmental permit. According to the EIA Act it is mandatory to assess also the likely impacts on Natura 2000 sites.

A review of the implementation of EIA in Estonia is available at the Estonian Ministry of the Environment (MoE). The review was made in the framework of the Phare project "Capacity Building in Implementation of the Environmental *Acquis* at the Local and Regional Level: EIA and IPPC" (EuropeAid/116215/CSV/PHA).

102. On Article 14.1(b), has your country developed mechanisms to ensure that due consideration is given to the environmental consequences of national programmes and policies that are likely to have significant adverse impacts on biological diversity?

- a) No
- b) No, mechanisms are still in early stages of development
- c) No, but mechanisms are in advanced stages of development
- d) Yes, mechanisms are in place (please provide details below) X

Further comments on the mechanisms developed to ensure that due consideration is given to the environmental consequences of national programmes and policies that are likely to have significant adverse impacts on biodiversity.

Estonia has fully transposed directive 2001/42/EC (SEA directive) *via* the adoption of the new EIA Act. The new EIA Act established the obligation to assess the impacts of strategic planning documents (development plans, programmes and strategies, as well as spatial plans) on the environment, including on species and biodiversity. A special provision concerns the assessment of likely impacts on Natura 2000 sites. Over the period of 2001-2004, ten SEAs have been finalized, including those for the National Forestry Development Plan, the Single Programming Document and the Rural Development Plan, which have an effect on biodiversity in one way or other.

103. On Article 14.1(c), is your country implementing bilateral, regional and/or multilateral agreements on activities likely to significantly affect biological diversity outside your country's jurisdiction?

- a) No
- b) No, but assessment of options is in progress
- c) Yes, some completed, others in progress (please provide details below)
- d) Yes (please provide details below)

X

Further information on the bilateral, regional and/or multilateral agreements on activities likely to significantly affect biodiversity outside your country's jurisdiction.

Estonia ratified the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention) in 2001. Estonia has signed bilateral agreements in the framework of the Espoo Convention (1991) with the Republic of Latvia (in 1997) and Republic of Finland (in 2002). Negotiations with the Russian Federation are still pending.

Estonia and Latvia have also signed bilateral agreements on the use and conservation of natural resources of transboundary water courses (2003) and on nature conservation in transboundary context (2000). Estonia and Hungary have signed a bilateral agreement on environmental protection and nature conservation (2000). Estonia and Russia signed a bilateral agreement on the protection and sustainable use of transboundary water courses in 1997.

All the above agreements comprise also a nature conservation component.

104. On Article 14.1(d), has your country put mechanisms in place to prevent or minimize danger or damage originating in your territory to biological diversity in the territory of other Parties or in areas beyond the limits of national jurisdiction?

- a) No
- b) No, mechanisms are still in early stages of development
- c) No, but mechanisms are in advanced stages of development
- d) Yes, mechanisms are in place based on current scientific knowledge

X

105. On Article 14.1(e), has your country established national mechanisms for emergency response to activities or events which present a grave and imminent danger to biological diversity?

- a) No
- b) No, mechanisms are still in early stages of development
- c) No, but mechanisms are in advanced stages of development
- d) Yes, mechanisms are in place (please provide details below)

X

Further information on national mechanisms for emergency response to the activities or events which present a grave and imminent danger to biodiversity.

No special mechanisms have been developed for preventing accidents and disasters posing danger to biodiversity. However, general mechanisms for prevention and control of accidents and disasters are applied.

106. Is your country applying the Guidelines for Incorporating Biodiversity-related Issues into

Environment-Impact-Assessment Legislation or Processes and in Strategic Impact Assessment as contained in the annex to decision VI/7 in the context of the implementation of paragraph 1 of Article 14? (decision VI/7)

- a) No
- b) No, but application of the guidelines under consideration
- c) Yes, some aspects being applied (please specify below)
- d) Yes, major aspects being applied (please specify below) X

Further comments on application of the guidelines.

Impact on biodiversity, including species and their populations and habitats, is one of the criteria for discretionary decision making, both in the EIA and SEA process.

107. On Article 14 (2), has your country put in place national legislative, administrative or policy measures regarding liability and redress for damage to biological diversity? (decision VI/11)

- a) No
- b) Yes (please specify the measures) X

Further comments on national legislative, administrative or policy measures regarding liability and redress for damage to biological diversity.

The Nature Conservation Act (RT I 2004, 38, 258) establishes the framework of liability for damage caused to protected species and their habitats (e.g. nest sites). Supervision and enforcement of the Act is the responsibility of the Environmental Protection Inspectorate. High liability is applied to cases of damage caused to protected areas and species.

108. Has your country put in place any measures to prevent damage to biological diversity?

- a) No
- b) No, but some measures are being developed
- c) Yes, some measures are in place (please provide details below) X
- d) Yes, comprehensive measures are in place (please provide details below)

Further information on the measures in place to prevent damage to biological diversity.

Firstly, assessment of potential adverse impacts arising from the proposed activities either at the strategic planning level (SEA) or project level (EIA) is regarded as the most important instrument of preventing and minimizing damage to biological diversity.

Secondly, implementation of management plans of protected areas and species constitutes a tool for biodiversity conservation. Drawing up and implementation of management plans is required by law.

Thirdly, annual state support is available to farmers for the management of semi-natural habitats (the most biodiversity rich habitats in Estonia) and maintenance of the diversity of species and habitats in the long run. The state programme of management of semi-natural habitats has also an educational role – it places a public value on biodiversity conservation.

Fourthly, Natura 2000 sites have been identified and designated.

109. Is your country cooperating with other Parties to strengthen capacities at the national level for the prevention of damage to biodiversity, establishment and implementation of national

legislative regimes, policy and administrative measures on liability and redress? (decision VI/11)

- a) No
- b) No, but cooperation is under consideration
- c) No, but cooperative programmes are under development
- d) Yes, some cooperative activities being undertaken (please provide details below) X
- e) Yes, comprehensive cooperative activities being undertaken (please provide details below)

Further comments on cooperation with other Parties to strengthen capacities for the prevention of damage to biodiversity.

Estonia has signed bilateral and trilateral agreements on cooperation in the field of nature conservation with the following countries: Latvia and Lithuania (1995), Latvia (2000), German Federal State of Mecklenburg-Vorpommern (2002). Most of the environmental cooperation agreements signed by Estonia include provisions on nature conservation. See the full list under question 103.

Box LI.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
 - b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
 - c) contribution to progress towards the 2010 target;
 - d) progress in implementing national biodiversity strategies and action plans;
 - e) contribution to the achievement of the Millennium Development Goals;
 - f) constraints encountered in implementation.
-
- a) outcomes and impacts of actions taken;
Legal framework for EIA and SEA in place and implemented, guidance documents are still needed.
 - b) contribution to achievement of the goals of the Strategic Plan of the Convention;
Implementation of Article 14 is in good progress.
 - c) contribution to progress towards the 2010 target;
The contribution has not been evaluated yet
 - d) progress in implementing national biodiversity strategies and action plans;
The NBSAP has not been formally approved.
 - e) contribution to the achievement of the Millennium Development Goals;
The contribution has not been evaluated yet.

Article 15 – Access to genetic resources

110. Has your country endeavored to facilitate access to genetic resources for environmentally sound uses by other Parties, on the basis of prior informed consent and mutually agreed terms, in accordance with paragraphs 2, 4 and 5 of Article 15?

a) No

b) Yes (please provide details below)

X

Further information on the efforts taken by your country to facilitate access to genetic resources for environmentally sound uses by other Parties, on the basis of prior informed consent and mutually agreed terms.

The Act on the collection and preservation of genetic material, which is going to regulate the establishment of genetic resources collections, their protection, preservation and general access to genetic resources, is being drafted.

Currently there are two state financed programmes facilitating access to genetic resources - "Collection and Conservation of Plant Genetic Resources for Food and Agriculture" (2002-2006) and "Humanitarian and Natural Collections" (2004-2008).

Estonia participates in the ABS (Access to Benefit Sharing and Genetic Resources) working group and has joined the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) and International Treaty on Plant Genetic Resources for Food and Agriculture.

A Council of Plant Genetic Resources has been established in Estonia for the purpose of coordinating the collection, preservation, assessment and documentation of genetic resources of cereals, potatoes, grasses, fruit and berry plants, vegetables, ornamental plants, aromatics, medicinal and forest plants. Conservation of farm animal genetic resources is coordinated by the Veterinary and Food Board.

Estonia is a member of several international organizations and programmes (FAO, IPGRI; EFUROGEN; UPOV; ECP/GR; EPGRIS, etc).

111. Has your country taken measures to ensure that any scientific research based on genetic resources provided by other Parties is developed and carried out with the full participation of such Parties, in accordance with Article 15(6)?

a) No

X

b) No, but potential measures are under review

c) Yes, some measures are in place (please provide details below)

d) Yes, comprehensive measures are in place (please provide details below)

Further information on the measures to ensure that any scientific research based on genetic resources provided by other Contracting Parties is developed and carried out with the full participation of such Contracting Parties.

112. Has your country taken measures to ensure the fair and equitable sharing of the results of research and development and of the benefits arising from the commercial and other use of genetic resources with any Contracting Party providing such resources, in accordance with Article 15(7)?

- a) No
- b) No, but potential measures are under review
- c) Yes, some measures are in place (please provide details below) X
- d) Yes, comprehensive legislation is in place (please provide details below)
- e) Yes, comprehensive statutory policy or subsidiary legislation are in place (please provide details below)
- f) Yes, comprehensive policy and administrative measures are in place (please provide details below)

Further information on the type of measures taken.

Some aspects are regulated by the Plant Variety Rights Act, Seed and Plant Propagating Material Act and Farm Animals Breeding Act.

113. In developing national measures to address access to genetic resources and benefit-sharing, has your country taken into account the multilateral system of access and benefit-sharing set out in the International Treaty on Plant Genetic Resources for Food and Agriculture?

- a) No
- b) Yes (please provide details below) X

Further information on national measures taken which consider the multilateral system of access and benefit-sharing as set out in the International Treaty on Plant Genetic Resources for Food and Agriculture.

Estonia has joined the International Treaty on Plant Genetic Resources for Food and Agriculture and adheres to it when developing the national legislation.

114. Is your country using the Bonn Guidelines when developing and drafting legislative, administrative or policy measures on access and benefit-sharing and/or when negotiating contracts and other arrangements under mutually agreed terms for access and benefit-sharing? (decision VII/19A)

- a) No
- b) No, but steps being taken to do so (please provide details below) X
- c) Yes (please provide details below)

Please provide details and specify successes and constraints in the implementation of the Bonn Guidelines.

The Act on the collection and preservation of genetic material is being drafted. The act follows the Bonn Guidelines.

115.Has your country adopted national policies or measures, including legislation, which address the role of intellectual property rights in access and benefit-sharing arrangements (i.e. the issue of disclosure of origin/source/legal provenance of genetic resources in applications for intellectual property rights where the subject matter of the application concerns, or makes use of, genetic resources in its development)?

- a) No
- b) No, but potential policies or measures have been identified (please specify below)
- c) No, but relevant policies or measures are under development (please specify below)
- d) Yes, some policies or measures are in place (please specify below) X
- e) Yes, comprehensive policies or measures adopted (please specify below)

Further information on policies or measures that address the role of IPR in access and benefit-sharing arrangements.

These aspects are regulated by the Plant Variety Rights Act, Seed and Plant Propagating Material Act, Farm Animals Breeding Act, Patent Act, Copyright Act and Databases Act. Issues concerning microorganisms are regulated by the Budapest Agreement (which Estonia joined in 1996). Estonia is implementing the Directive 98/44/EC on legal protection of biotechnological inventions.

116.Has your country been involved in capacity-building activities related to access and benefit-sharing?

- a) Yes (please provide details below) X
- b) No

Please provide further information on capacity-building activities (your involvement as donor or recipient, key actors involved, target audience, time period, goals and objectives of the capacity-building activities, main capacity-building areas covered, nature of activities). Please also specify whether these activities took into account the Action Plan on capacity-building for access and benefit-sharing adopted at COP VII and available in annex to decision VII/19F.

Information on the existing genetic resource collections has been made publicly available with financial support from national programmes. A seminar on the establishment and use of genetic resources databases has been held.

In 2001, the EU project "BioCASE" (Biological Collection Access Service) was launched under the coordination of the Institute of Agricultural and Environmental Sciences of Estonian Agricultural University (former Institute of Botany and Zoology).

Box LII.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Article 16 – Access to and transfer of technology

117. On Article 16(1), has your country taken measures to provide or facilitate access for and transfer to other Parties of technologies that are relevant to the conservation and sustainable use of biological diversity or make use of genetic resources and do not cause significant damage to the environment?

- a) No X
- b) No, but potential measures are under review
- c) Yes, some measures are in place (please provide details below)
- d) Yes, comprehensive measures are in place (please provide details below)

Further information on the measures to provide or facilitate access for and transfer to other Parties of technologies that are relevant to the conservation and sustainable use of biodiversity or make use of genetic resources and do not cause significant damage to the environment.

118. On Article 16(3), has your country taken measures so that Parties which provide genetic resources are provided access to and transfer of technology which make use of those resources, on mutually agreed terms?

- a) No X
- b) No, but potential measures are under review
- c) Yes, some measures are in place
- d) Yes, comprehensive legislation is in place
- e) Yes, comprehensive statutory policy or subsidiary legislation are in place
- f) Yes, comprehensive policy and administrative arrangements are in place
- g) Not applicable

119. On Article 16(4), has your country taken measures so that the private sector facilitates access to joint development and transfer of relevant technology for the benefit of Government institutions and the private sector of developing countries?

- a) No X
- b) No, but potential measures are under review
- c) Yes, some policies and measures are in place (please provide details below)
- d) Yes, comprehensive policies and measures are in place (please provide details below)
- e) Not applicable

Further information on the measures taken.

Box LIII.

Please elaborate below on the implementation of this article specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Programme of Work on transfer of technology and technology cooperation

120. Has your country provided financial and technical support and training to assist in the implementation of the programme of work on transfer of technology and technology cooperation? (decision VII/29)

- a) No X
- b) No, but relevant programmes are under development
- c) Yes, some programmes being implemented (please provide details below)
- d) Yes, comprehensive programmes being implemented (please provide details below)

Further comments on the provision of financial and technical support and training to assist in the implementation of the programme of work on transfer of technology and technology cooperation.

121.Is your country taking any measures to remove unnecessary impediments to funding of multi-country initiatives for technology transfer and for scientific and technical cooperation? (decision VII/29)

- a) No X
- b) No, but some measures being considered
- c) Yes, some measures are in place (please provide details below)
- d) Yes, comprehensive measures are in place (please provide details below)

Further comments on the measures to remove unnecessary impediments to funding of multi-country initiatives for technology transfer and for scientific and technical cooperation.

122.Has your country made any technology assessments addressing technology needs, opportunities and barriers in relevant sectors as well as related needs in capacity building? (annex to decision VII/29)

- a) No X
- b) No, but assessments are under way
- c) Yes, basic assessments undertaken (please provide details below)
- d) Yes, thorough assessments undertaken (please provide details below)

Further comments on technology assessments addressing technology needs, opportunities and barriers in relevant sectors as well as related needs in capacity building.

123.Has your country made any assessments and risk analysis of the potential benefits, risks and associated costs with the introduction of new technologies? (annex to decision VII/29)

- a) No
- b) No, but assessments are under way
- c) Yes, some assessments undertaken (please provide details below) X
- d) Yes, comprehensive assessments undertaken (please provide details below)

Further comments on the assessments and risk analysis of the potential benefits, risks and associated costs with the introduction of new technologies.

Issues related to genetically modified organisms have been the object of extensive assessments and risk analyses. The area is regulated by the Release into the Environment of Genetically Modified Organisms Act. The Act for Contained Use of Genetically Modified Microorganisms regulates the conditions and specifications required for scientific and/or industrial use of GMMs. Both legal instruments comprise risk analyses as prerequisites of licence for work with GMOs. The EU legislation is followed. An advisory body, the Commission of Gene Technology, which evaluates the risk analyses and consists of appreciated scientists, administrators and public representatives, exists at the administration scope of the Ministry of the Environment.

124.Is your country identified and implemented any measures to develop or strengthen

appropriate information systems for technology transfer and cooperation, including assessing capacity building needs? (annex to decision VII/29)

- a) No
- b) No, but some programmes are under development
- c) Yes, some programmes are in place and being implemented (please provide details below) X
- d) Yes, comprehensive programmes are being implemented (please provide details below)

Further comments on measures to develop or strengthen appropriate information systems for technology transfer and cooperation.

In 1999, the NBSAP was completed. Unfortunately this document has not been discussed in our government, yet some actions under the NBSAP have been partly financed. Currently there are two relevant state-financed programmes in Estonia – "Collection and Conservation of Plant Genetic Resources for Food and Agriculture" (2002-2006) and "Humanitarian and Natural Collections" (2004-2008). The Act on collection and preservation of genetic material is being drafted.

125. Has your country taken any of the measures specified under Target 3.2 of the programme of work as a preparatory phase to the development and implementation of national institutional, administrative, legislative and policy frameworks to facilitate cooperation as well as access to and adaptation of technologies of relevance to the Convention? (annex to decision VII/29)

- a) No
- b) No, but a few measures being considered X
- c) Yes, some measures taken (please specify below)
- d) Yes, many measures taken (please specify below)

Further comments on the measures taken as a preparatory phase to the development and implementation of national institutional, administrative, legislative and policy frameworks to facilitate cooperation as well as access to and adaptation of technologies of relevance to the Convention.

Transfer of technology takes place through international cooperation. Estonian universities and research institutions are actively participating in different cooperation networks and programmes. The Nordic Council of Ministers has financed the following projects: Conservation of Plant Genetic Resources in the Baltic States; Nordic-Estonian Cooperation in Potato Seed Production.

Box LIV.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Article 17 – Exchange of information

126. On Article 17(1), has your country taken measures to facilitate the exchange of information from publicly available sources with a view to assist with the implementation of the Convention and promote technical and scientific cooperation?

- a) No
- b) No, but potential measures are under review
- c) Yes, some measures are in place X
- d) Yes, comprehensive measures are in place

The following question (127) is for DEVELOPED COUNTRIES

127. On Article 17(1), do these measures take into account the special needs of developing countries and include the categories of information listed in Article 17(2), such as technical, scientific and socio-economic research, training and surveying programmes, specialized knowledge, repatriation of information and so on?

- a) No
- b) Yes, but they do not include the categories of information listed in Article 17(2), such as technical, scientific and socio-economic research, training and surveying programmes, specialized knowledge, repatriation of information and so on
- c) Yes, and they include categories of information listed in Article 17 (2), such as technical, scientific and socio-economic research, training and surveying programmes, specialized knowledge, repatriation of information and so on

Box LV.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
 - b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
 - c) contribution to progress towards the 2010 target;
 - d) progress in implementing national biodiversity strategies and action plans;
 - e) contribution to the achievement of the Millennium Development Goals;
 - f) constraints encountered in implementation.
- a) The main outcome related to exchange of information from publicly available sources is the launched complex of CHM tools at the national level. This outcome also refers to close cooperation with scientific stakeholders as well as most of other interest groups from the main sectors of economy.
- b) Actions like the setting up of the CHM and BCH, including a draft Information Exchange Strategy and Action Plan, directly contribute to goals 2, 3 and 4 of the Strategic Plan of the Convention.
- c), d) and e) All actions taken in field of information exchange (including public awareness campaigns under the Natura 2000 project) have served both the 2010 target as well as many of the Millennium Development Goals, being in accordance with the National Biodiversity Strategy and Action Plan.
- f) The main constraints are related to uncontrolled planning of resource use in the conditions of a rapidly developing economy.

Article 18 – Technical and scientific cooperation

128. On Article 18(1), has your country taken measures to promote international technical and scientific cooperation in the field of conservation and sustainable use of biological diversity?

- a) No
- b) No, but potential measures are under review X
- c) Yes, some measures are in place (please provide details below) X
- d) Yes, comprehensive measures are in place (please provide details below)

Further information on the measures to promote international technical and scientific cooperation.

Some cooperation projects of Nordic-Baltic countries (Iceland, Norway, Denmark, Sweden, Finland, Estonia, Latvia, Lithuania and Russian Karelian region) have been implemented recently in the field of conservation and traditional use of rural landscapes and biotopes as the carriers of high biological diversity.

However, no such projects have been promoted or coordinated by Estonia itself.

129. On Article 18(4), has your country encouraged and developed methods of cooperation for the development and use of technologies, including indigenous and traditional technologies, in pursuance of the objectives of this Convention?

- a) No
- b) No, but relevant methods are under development X
- c) Yes, methods are in place

130. On Article 18(5), has your country promoted the establishment of joint research programmes and joint ventures for the development of technologies relevant to the objectives of the Convention?

- a) No
- b) Yes (please provide some examples below) X

Examples for the establishment of joint research programmes and joint ventures for the development of technologies relevant to the objectives of the Convention.

Cooperation on traditional management of rural landscapes and biotopes (Nordic-Baltic cooperation).

Cooperation on Natura 2000 and nature conservation issues with Finland.

Participation in the joint venture "Baltic Environmental Forum", which is an international body assisting Estonia, Latvia, Lithuania and Germany in environmental matters, including biological diversity and nature conservation.

Participation in the European Environmental Agency and its Topic Centre for Biological Diversity.

Participation in the 5th and 6th Scientific Framework Programme of the EU.

131. Has your country established links to non-governmental organizations, private sector and other institutions holding important databases or undertaking significant work on biological

diversity through the CHM? (decision V/14)

- a) No
- b) No, but coordination with relevant NGOs, private sector and other institutions under way X
- c) Yes, links established with relevant NGOs, private sector and institutions

The following question (132) is for DEVELOPED COUNTRIES

132.Has your country further developed the CHM to assist developing countries and countries with economies in transition to gain access to information in the field of scientific and technical cooperation? (decision V/14)

- a) No
- b) Yes, by using funding opportunities
- c) Yes, by means of access to, and transfer of technology
- d) Yes, by using research cooperation facilities
- e) Yes, by using repatriation of information
- f) Yes, by using training opportunities
- g) Yes, by using promotion of contacts with relevant institutions, organizations and the private sector
- h) Yes, by using other means (please specify below)

Further comments on CHM developments to assist developing countries and countries with economies in transition to gain access to information in the field of scientific and technical cooperation.

133.Has your country used CHM to make information available more useful for researchers and decision-makers? (decision V/14)

- a) No
- b) No, but relevant initiatives under consideration
- c) Yes (please provide details below) X

Further comments on development of relevant initiatives.

During 2001-2004 several steps have been taken towards the setting up of a national CHM in Estonia. Although a widely applicable web application for CHM does not really exist yet, it is just in the finalisation phase. In addition, two big fora on biodiversity conservation and, in particular, the issues concerning the Convention on Biological Diversity, have been held during the above mentioned period. These fora had participants also from other sectors of economy. Also a big infoday was held in cooperation with a private initiative Bioplatform. The following relevant web addresses have been set up lately: <http://eelis.ic.envir.ee/btv> (temporary web page for the Estonian CHM); <http://eelis.ic.envir.ee/chm> (future web page for the Estonian CHM, still under construction); <http://eelis.ic.envir.ee/bioplatform> (temporary web page for the Bioplatform Initiative).

134.Has your country developed, provided and shared services and tools to enhance and facilitate the implementation of the CHM and further improve synergies among biodiversity-related Conventions? (decision V/14)

- a) No X
- b) Yes (please specify services and tools below)

Further comments on services and tools to enhance and facilitate the implementation of CHM and further improve synergies among biodiversity-related Conventions.

Box LVI.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Article 19 – Handling of biotechnology and distribution of its benefits

135. On Article 19(1), has your country taken measures to provide for the effective participation in biotechnological research activities by those Contracting Parties which provide the genetic resources for such research?

- a) No
- b) No, but potential measures are under review
- c) Yes, some measures are in place X
- d) Yes, comprehensive legislation are in place
- e) Yes, comprehensive statutory policy and subsidiary legislation are in place
- f) Yes, comprehensive policy and administrative measures are in place

136. On Article 19(2), has your country taken all practicable measures to promote and advance priority access by Parties, on a fair and equitable basis, to the results and benefits arising from biotechnologies based upon genetic resources provided by those Parties?

- a) No
- b) No, but potential measures are under review
- c) Yes, some measures are in place X
- d) Yes, comprehensive measures are in place

Box LVII.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Estonia has adopted the Human Gene Research Act, which is aimed to regulate all issues concerning the Estonian Genome Project Foundation, a national project for gathering a large database and sample collection from the Estonian population. The project aims solely to bring benefit to science, in particular medical sciences. The Act safeguards the gene donors against undesirable use of their gene data and regulates the authorisation procedures for working with the samples, encoding, decoding and security of personal data. The scope of the Act includes the use of genetic data but does not include the interests of third parties.

Estonia signed the Cartagena Protocol on Biosafety (CPB) in September 2000 and ratified it on 24 March 2004. Estonia participated in the UNEP GEF project "Development of National Biosafety Framework" during 2001 - 2003 and established a preliminary framework. In May 2004 Estonia adopted the Deliberate Release into the Environment of Genetically Modified Organisms Act, which was drafted under the UNEP-GEF development project and is aimed at regulating the issues arising from or related to LMOs, e.g. release into the environment of LMOs in order to grow them for scientific purposes as well as placing on the market of products consisting of and/or containing LMOs.

The Act is in harmony with the Cartagena Protocol as well as EU directive 2001/18. However, several secondary legal acts need to be drafted, including the amendments to (updating of) the GMO Act and its secondary legislation: regulations on processing of applications from other EU member states, on establishment and maintenance of GMO register, on obligations of importers and on state monitoring and surveillance. Many other legal acts, including those regulating contained use of GMMs, the use of GM test animals, GM seeds and plant propagation material and GM fertilizers, have been drawn up and are in force. The Food Act regulates the use of genetically modified organisms in food products and is in conformity with EU regulation 1829/2003. Fair and equitable sharing of benefits arising from biotechnology is regulated by the Patent Act (1994, last amended 2005).

Article 20 – Financial resources

Box LVIII.


Please describe for each of the following items the quantity of financial resources, both internal and external, that have been utilized, received or provided, as applicable, to implement the Convention on Biological Diversity, on an annual basis, since your country became a Party to the Convention.

a) Budgetary allocations by national and local Governments as well as different sectoral ministries	2002	77 Mill. EEK
	2003	80 Mill. EEK
	2004	87 Mill. EEK
e) Extra-budgetary resources (identified by donor agencies)	2002	19 Mill. EEK
	2003	27 Mill. EEK
	2004	26 Mill. EEK
f) Bilateral channels (identified by donor agencies)	2002	12 Mill. EEK
	2003	6 Mill. EEK
	2004	
b) Regional channels (identified by donor agencies)	2002	6 Mill. EEK
	2003	7 Mill. EEK
	2004	7 Mill. EEK
c) Multilateral channels (identified by donor agencies)	N/A	
d) Private sources (identified by donor agencies)	2002	10 Mill. EEK
	2003	8 Mill. EEK
e) Resources generated through financial instruments, such as charges for use of biodiversity		

Box LIX.

Please describe in detail below any major financing programmes, such as biodiversity trust funds or specific programmes that have been established in your country.

- a) 2002 Ministry of the Environment – 54 Mill. EEK; Environmental Investment Centre (EIC) – 23 Mill. EEK
 2003 Ministry of the Environment – 56 Mill. EEK; Environmental Investment Centre – 24 Mill. EEK
 2004 Ministry of the Environment – 53 Mill. EEK; Environmental Investment Centre – 34 Mill. EEK
 The EIC is a public institution under the Ministry of Finance.
- b) 2002 Life Nature – 12 Mill. EEK; Phare – 2 Mill. EEK; UNEP GEF – 5 Mill. EEK
 2003 Life Nature – 14 Mill. EEK; Phare – 8 Mill. EEK; UNEP GEF – 4 Mill. EEK
 2004 Life Nature – 22 Mill. EEK; Phare – 3 Mill. EEK; UNEP GEF – 1 Mill. EEK
- d) The figures for regional channels reflect allocations for biodiversity conservation by local communities. The figures are approximate and based on estimations.
- f) The figures for private resources express the turnover of the Estonian Fund for Nature. The Estonian Fund for Nature is an independent non-governmental organization based on citizen initiative. The Fund is the main organization gathering and distributing private resources for the nature conservation sector.

137.  On Article 20(1), has your country provided financial support and incentives to those national activities that are intended to achieve the objectives of the Convention?

- a) No
- b) Yes, incentives only (please provide a list of such incentives below)
- c) Yes, financial support only
- d) Yes, financial support and incentives (please provide details below) X

Further comments on financial support and incentives provided.

Beside annual financing of the nature conservation system (protected area administrations, etc.) from the State Budget there are some targeted funds and payments available for the nature conservation sector:

- Nature conservation support – annual support from the State Budget for maintenance and restoration of seminatural communities. The total available funds have amounted to 19 million EEK/yr, which has allowed the maintenance and restoration of app. 20,000 ha of various seminatural communities as the most endangered habitats.
- Environmental Investment Centre (EIC) – an important source of financing for nature conservation and other activities having a positive impact on biodiversity. The EIC was established pursuant to the Use of Proceeds from Use of the Environment Act. The main activities of EIC are as follows:
 - 1) channelling of proceeds from the use of the environment into the development of national environmental projects;
 - 2) performance of the tasks of the Implementing Agency for European Regional Development Fund projects;
 - 3) performance of the tasks of the Implementing Agency for the European Union Cohesion Fund projects;

4) provision of long-term loans to environmental projects.

The EIC is a public institution under the Ministry of Finance. In 2004 the total allocations from the EIC to the nature conservation sector amounted app. 34 million EEK.

- Landowners having their land within protected areas where economic activities are restricted or forbidden are granted extended land tax exemptions.
- An important incentive measure is the pause in timber cutting during the nesting period of birds agreed by the State Forest Management Centre.

The next question (138) is for DEVELOPED COUNTRIES

138. On Article 20(2), has your country provided new and additional financial resources to enable developing country Parties to meet the agreed incremental costs to them of implementing measures which fulfill the obligations of the Convention?

- a) No
- b) Yes (please indicate the amount, on an annual basis, of new and additional financial resources your country has provided)

Further comments on new and additional financial resources provided.

The next question (139) is for DEVELOPING COUNTRIES OR COUNTRIES WITH ECONOMIES IN TRANSITION

139. On Article 20(2), has your country received new and additional financial resources to enable it to meet the agreed full incremental costs of implementing measures which fulfill the obligations of the Convention?

- a) No X
- b) Yes

140. Has your country established a process to monitor financial support to biodiversity, including support provided by the private sector? (decision V/11)

- a) No X
- b) No, but procedures being established
- c) Yes (please provide details below)

Further comments on processes to monitor financial support to biodiversity, including support provided by the private sector.

141. Has your country considered any measures like tax exemptions in national taxation systems to encourage financial support to biodiversity? (decision V/11)

- a) No
- b) No, but exemptions are under development (please provide details below)
- c) Yes, exemptions are in place (please provide details below) X

Further comments on tax exemptions for biodiversity-related donations.

- Landowners having land within protected areas where economic activities are restricted or forbidden are granted land tax exemptions.
- Tax exemptions are applied to nature conservation support.

142. Has your country reviewed national budgets and monetary policies, including the effectiveness of official development assistance allocated to biodiversity, with particular attention paid to positive incentives and their performance as well as perverse incentives and ways and means for their removal or mitigation? (decision VI/16)

- a) No
- b) No, but review is under way
- c) Yes (please provide results of review below) X

Further comments on review of national budgets and monetary policies, including the effectiveness of official development assistance.

- The pollution charge established by the Riigikogu (Parliament of Estonia) is an important monetary instrument to direct the industry (and consumption of natural resources in a broader sense) toward more environmentally friendly practices. The pollution charge rates in 2003 were as follows: SO₂ - 120 EEK/t; NO_x - 265 EEK/t; particulates - 115 EEK/t; CO₂ - 7.5 EEK/t. The total proceeds from CO₂ pollution charge in 2002 amounted 80.7 million EEK. Pollution charge is an important source of funds for the EIC.
- The new so-called ecological tax reform is under preparation.

143. Is your country taking concrete actions to review and further integrate biodiversity considerations in the development and implementation of major international development initiatives, as well as in national sustainable development plans and relevant sectoral policies and plans? (decisions VI/16 and VII/21)

- a) No
- b) No, but review is under way
- c) Yes, in some initiatives and plans (please provide details below) X
- d) Yes, in major initiatives and plans (please provide details below)

Further comments on review and integration of biodiversity considerations in relevant initiatives, policies and plans.

The principles of biodiversity conservation are represented in all major sectoral and institutional development plans: Forestry Development Plan 2002-2010; Nature Conservation Development Plan until 2030 (under preparation); Rural Development Plan 2003-2006; Development Plan for the Ministry of Environment (under preparation), Sustainable Development Strategy of Estonia "Sustainable Estonia 21".

144. Is your country enhancing the integration of biological diversity into the sectoral development and assistance programmes? (decision VII/21)

- a) No
- b) No, but relevant programmes are under development
- c) Yes, into some sectoral development and assistance programmes (please provide details below) X
- d) Yes, into major sectoral development and assistance programmes (please provide details below)

Further comments on the integration of biodiversity into sectoral development and assistance programmes

Biodiversity conservation has been taken into consideration in the drawing up of all major sectoral development plans:

- Forestry Development Plan 2002–2010;
- Nature Conservation Development Plan until 2030 (under preparation);
- Rural Development Plan 2004–2006

The next question (145) is for DEVELOPED COUNTRIES

145. Please indicate with an "X" in the table below in which area your country has provided financial support to developing countries and/or countries with economies in transition. Please elaborate in the space below if necessary.

A r e a s	Support provided
a) Undertaking national or regional assessments within the framework of MEA (decision VI/8)	
b) <i>In-situ</i> conservation (decision V/16)	
c) Enhance national capacity to establish and maintain the mechanisms to protect traditional knowledge (decision VI/10)	
d) <i>Ex-situ</i> conservation (decision V/26)	
e) Implementation of the Global Strategy for Plant Conservation (decision VI/9)	
f) Implementation of the Bonn Guidelines (decision VI/24)	
g) Implementation of programme of work on agricultural biodiversity (decision V/5)	
h) Preparation of first report on the State of World's Animal Genetic Resources (decision VI/17)	
i) Support to work of existing regional coordination mechanisms and development of regional and sub regional networks or processes (decision VI/27)	

- j) Development of partnerships and other means to provide the necessary support for the implementation of the programme of work on dry and subhumid lands biological diversity (decision VII/2)
- k) Financial support for the operations of the Coordination Mechanism of the Global Taxonomy Initiative (decision VII/9)
- l) Support to the implementation of the Action Plan on Capacity Building as contained in the annex to decision VII/19 (decision VII/19)
- m) Support to the implementation of the programme of work on mountain biological diversity (decision VII/27)
- n) Support to the implementation of the programme of work on protected areas (decision VII/28)
- o) Support to the development of national indicators (decision VII/30)
- p) Others (please specify)

Further information on financial support provided to developing countries and countries with economies in transition.

The next question (146) is for DEVELOPING COUNTRIES OR COUNTRIES WITH ECONOMIES IN TRANSITION

146. Please indicate with an "X" in the table below in which areas your country has applied for funds from the Global Environment Facility (GEF), from developed countries and/or from other sources. The same area may have more than one source of financial support. Please elaborate in the space below if necessary.

A r e a s	Applied for funds from		
	GEF	Bilateral	Other
a)Preparation of national biodiversity strategies or action plans	X		
b)National capacity self-assessment for implementation of Convention (decision VI/27)	X		
c)Priority actions to implement the Global Taxonomy Initiative (decision V/9)			
d) <i>In-situ</i> conservation (decision V/16)	X	X	X
e)Development of national strategies or action plans to deal with alien species (decision VI/23)			
f) <i>Ex-situ</i> conservation, establishment and maintenance of <i>Ex-situ</i> conservation facilities (decision V/26)			X
g)Projects that promote measures for implementing Article 13 (Education and Public Awareness) (decision VI/19)	X		

- | | | |
|---|---|---|
| h)Preparation of national reports (decisions III/9, V/19 and VI/25) | X | |
| i)Projects for conservation and sustainable use of inland water biological diversity (decision IV/4) | | X |
| j)Activities for conservation and sustainable use of agricultural biological diversity (decision V/5) | | |
| k)Implementation of the Cartagena Protocol on Biosafety (decision VI/26) | X | |
| l)Implementation of the Global Taxonomy Initiative | | |
| m)Implementation of the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity | | |
| n)Others (please specify) | | |

Further information on application for financial support.

Box LX.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

D. THEMATIC AREAS

147. Please use the scale indicated below to reflect the level of challenges faced by your country in implementing the thematic programmes of work of the Convention (marine and coastal biodiversity, agricultural biodiversity, forest biodiversity, inland waters biodiversity, dry and sub-humid lands and mountain biodiversity).

3 = High Challenge

1 = Low Challenge

2 = Medium Challenge

0 = Challenge has been successfully overcome

N/A = Not applicable

	Challenges	Programme of Work					Mountain
		Agricultural	Forest	Marine and coastal	Inland water ecosystem	Dry and subhumid lands	
(a)	Lack of political will and support	2	2	1	0		
(b)	Limited public participation and stakeholder involvement	2	2	2	0		
(c)	Lack of mainstreaming and integration of biodiversity issues into other sectors	2	2	2	3		
(d)	Lack of precautionary and proactive measures	2	2	1	1		
(e)	Inadequate capacity to act, caused by institutional weakness	2	2	2	0		
(f)	Lack of transfer of technology and expertise	1	1	1	0		
(g)	Loss of traditional knowledge	1	1	0	0		
(h)	Lack of adequate scientific research capacities to support all the objectives	2	2	2	0		
(i)	Lack of accessible knowledge and information	1	1	1	0		
(j)	Lack of public education and awareness at all levels	2	3	2	0		

(k)	Existing scientific and traditional knowledge not fully utilized	1	2	2	0		
(l)	Loss of biodiversity and the corresponding goods and services it provides not properly understood and documented	2	2	2	0		
(m)	Lack of financial, human, technical resources	2	2	2	2		
(n)	Lack of economic incentive measures	2	3	2	0		
(o)	Lack of benefit-sharing	1	1	1	1		
(p)	Lack of synergies at national and international levels	1	1	1	0		
(q)	Lack of horizontal cooperation among stakeholders	2	2	1	0		
(r)	Lack of effective partnerships	2	2	2	0		
(s)	Lack of engagement of scientific community	2	1	0	0		
(t)	Lack of appropriate policies and laws	2	2	1	1		
(u)	Poverty	1	1	0	0		
(v)	Population pressure	1	2	2	0		
(w)	Unsustainable consumption and production patterns	2	2	2	1		
(x)	Lack of capacities for local communities	2	2	2	1		
(y)	Lack of knowledge and practice of ecosystem-based approaches to management	2	2	3	1		
(z)	Weak law enforcement capacity	1	2	2	0		
(aa)	Natural disasters and environmental change	1	1	1	1		
(bb)	Others (please specify)	-	-	-	-	N/A	N/A

Inland water ecosystems

148. Has your country incorporated the objectives and relevant activities of the programme of work into the following and implemented them? (decision VII/4)

Strategies, policies, plans and activities	No	Yes, partially, integrated but not implemented	Yes, fully integrated and implemented	N/A
a) Your biodiversity strategies and action plans		X		
b) Wetland policies and strategies		X		
c) Integrated water resources management and water efficiency plans being developed in line with paragraph 25 of the Plan of Implementation of the World Summit on Sustainable Development		X		
d) Enhanced coordination and cooperation between national actors responsible for inland water ecosystems and biological diversity	X			

Further comments on incorporation of the objectives and activities of the programme of work

The objectives and the relevant activities are described in the Estonian National Environmental Strategy and National Environmental Action Plan.

The process of preparing river basin management plans (including socio-economic analyses) is underway in Estonia, as required by the Water Framework Directive and the Water Act of Estonia. The Water Framework Directive clearly states the importance of the ecological status as a measure and indicator of the quality of streams and rivers.

Coordination and cooperation between different actors is arranged at the level of County Environmental Departments.

149. Has your country identified priorities for each activity in the programme of work, including timescales, in relation to outcome oriented targets? (decision VII/4)

- | | |
|--|---|
| a) No | X |
| b) Outcome oriented targets developed but priority activities not developed | |
| c) Priority activities developed but not outcome oriented targets | |
| d) Yes, comprehensive outcome oriented targets and priority activities developed | |

Further comments on the adoption of outcome oriented targets and priorities for activities, including providing a list of targets (if developed).

150.Is your country promoting synergies between this programme of work and related activities under the Ramsar Convention as well as the implementation of the Joint Work Plan (CBD-Ramsar) at the national level? (decision VII/4)

- a) Not applicable (not Party to Ramsar Convention)
- b) No
- c) No, but potential measures were identified for synergy and joint implementation
- d) Yes, some measures taken for joint implementation (please specify below) X
- e) Yes, comprehensive measures taken for joint implementation (please specify below)

Further comments on the promotion of synergies between the programme of work and related activities under the Ramsar Convention as well as the implementation of the Joint Work Plan (CBD-Ramsar) at the national level.

Implementation of both the CBD and the Ramsar convention in Estonia is coordinated by the Ministry of the Environment and provides a good basis for promoting synergies between the CBD programme of work and the related activities under the Ramsar Convention as well as implementation of the Joint Work Plan (CBD-Ramsar) in Estonia.

151.Has your country taken steps to improve national data on: (decision VII/4)

Issues	Yes	No	No, but development is under way
a) Goods and services provided by inland water ecosystems?			X
b) The uses and related socioeconomic variables of such goods and services?			X
c) Basic hydrological aspects of water supply as they relate to maintaining ecosystem function?			X
d) Species and all taxonomic levels?	X		
e) On threats to which inland water ecosystems are subjected?	X		

Further comments on the development of data sets, in particular a list of data sets developed in case you have replied "**YES**" above.

River Basin Management Plans list the socio-economic values of inland water ecosystems. Environmental monitoring (contains elements of water ecosystem monitoring) is coordinated at the national level and financed from the state budget.

152.Has your country promoted the application of the guidelines on the rapid assessment of the biological diversity of inland water ecosystems? (decision VII/4)

- a) No, the guidelines have not been reviewed X
- b) No, the guidelines have been reviewed and found inappropriate
- c) Yes, the guidelines have been reviewed and application/promotion is pending
- d) Yes, the guidelines promoted and applied

Further comments on the promotion and application of the guidelines on the rapid assessment of the biological diversity of inland water ecosystems.

The Water Act Commission has made a proposal to draft a new Water Act.

Box LXI.

Please elaborate below on the implementation of this programme of work and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Marine and coastal biological diversity

General



153. Do your country's strategies and action plans include the following? Please use an "X" to indicate your response. (decisions II/10 and IV/15)

- | | |
|--|---|
| a) Developing new marine and coastal protected areas | X |
| b) Improving the management of existing marine and coastal protected areas | X |
| c) Building capacity within the country for management of marine and coastal resources, including through educational programmes and targeted research initiatives (if yes, please elaborate on types of initiatives in the box below) | X |
| d) Instituting improved integrated marine and coastal area management (including catchments management) in order to reduce sediment and nutrient loads into the marine environment | X |
| e) Protection of areas important for reproduction, such as spawning and nursery areas | X |
| f) Improving sewage and other waste treatment | X |
| g) Controlling excessive fishing and destructive fishing practices | X |
| h) Developing a comprehensive oceans policy (if yes, please indicate current stage of development in the box below) | |

- i) Incorporation of local and traditional knowledge into management of marine and coastal resources (if yes, please elaborate on types of management arrangements in the box below)
- j) Others (please specify below)
- k) Not applicable

Please elaborate on the above activities and list any other priority actions relating to conservation and sustainable use of marine and coastal biodiversity.

- c) Applied curriculum "Fisheries and management of waterbodies" was launched in Pärnu College of the University of Tartu in 2002. The curriculum received full accreditation in 2005.

Implementation of Integrated Marine and Coastal Area Management

154. Has your country established and/or strengthened institutional, administrative and legislative arrangements for the development of integrated management of marine and coastal ecosystems?

- a) No
- b) Early stages of development X
- c) Advanced stages of development
- d) Arrangements in place (please provide details below)
- e) Not applicable

Further comments on the current status of implementation of integrated marine and coastal area management.

155. Has your country implemented ecosystem-based management of marine and coastal resources, for example through integration of coastal management and watershed management, or through integrated multidisciplinary coastal and ocean management?

- a) No
- b) Early stages of development X
- c) Advanced stages of development
- d) Arrangements in place (please provide details below)
- e) Not applicable

Further comments on the current status of application of the ecosystem to management of marine and coastal resources.

Marine and Coastal Living Resources

156. Has your country identified components of your marine and coastal ecosystems, which are critical for their functioning, as well as key threats to those ecosystems?

- a) No
- b) Plans for a comprehensive assessment of marine and coastal ecosystems are in place (please provide details below)
- c) A comprehensive assessment is currently in progress
- d) Critical ecosystem components have been identified, and management plans for them are being developed (please provide details below)
- e) Management plans for important components of marine and coastal ecosystems are in place (please provide details below)
- f) Not applicable

Further comments on the current status of assessment, monitoring and research relating to marine and coastal ecosystems, as well as key threats to them

- b) Regular research activities for several biotic components of marine and coastal ecosystems have been carried out already for decades. Comprehensive assessment of marine and coastal ecosystems is planned as part of implementation of EU directives (Habitats Directive, Birds Directive, etc.) The current situation can be regarded as the planning phase of a detailed inventory of the current status and conservation needs of marine and coastal biodiversity.

157. Is your country undertaking the following activities to implement the Convention's work plan on coral reefs? Please use an "X" to indicate your response.

Activities	Not implemented nor a priority	Not implemented but a priority	Currently implemented	Not applicable
a) Ecological assessment and monitoring of reefs				X
b) Socio-economic assessment and monitoring of communities and stakeholders				X
c) Management, particularly through application of integrated coastal management and marine and coastal protected areas in coral reef environments				X
d) Identification and implementation of additional and alternative measures for securing livelihoods of people who directly depend on coral reef services				X
e) Stakeholder partnerships, community participation programmes and public education campaigns				X
f) Provision of training and career opportunities for marine taxonomists and ecologists				X
g) Development of early warning systems of coral bleaching				X
h) Development of a rapid response capability to document coral bleaching and mortality				X
i) Restoration and rehabilitation of degraded coral reef habitats				X
j) Others (please specify below)				X

Please elaborate on ongoing activities.

Marine and Coastal Protected Areas

158. Which of the following statements can best describe the current status of marine and coastal protected areas in your country? Please use an "X" to indicate your response.

- a) Marine and coastal protected areas have been declared and gazetted (please indicate below how many) X
- b) Management plans for these marine and coastal protected areas have been developed with involvement of all stakeholders
- c) Effective management with enforcement and monitoring has been put in place
- d) A national system or network of marine and coastal protected areas is under development
- e) A national system or network of marine and coastal protected areas has been put in place
- f) The national system of marine and coastal protected areas includes areas managed for purpose of sustainable use, which may allow extractive activities
- g) The national system of marine and coastal protected areas includes areas which exclude extractive uses
- h) The national system of marine and coastal protected areas is surrounded by sustainable management practices over the wider marine and coastal environment.
- i) Other (please describe below)
- j) Not applicable

Further comments on the current status of marine and coastal protected areas.

- a) 18 marine and coastal protected areas (Natura 2000 sites and BSPAs = Baltic Sea Protected Areas)

Mariculture

159. Is your country applying the following techniques aimed at minimizing adverse impacts of mariculture on marine and coastal biodiversity? Please check all that apply.

- | | |
|---|------------|
| a) Application of environmental impact assessments for mariculture developments | X |
| b) Development and application of effective site selection methods in the framework of integrated marine and coastal area management | |
| c) Development of effective methods for effluent and waste control | |
| d) Development of appropriate genetic resource management plans at the hatchery level | |
| e) Development of controlled hatchery and genetically sound reproduction methods in order to avoid seed collection from nature. | |
| f) If seed collection from nature cannot be avoided, development of environmentally sound practices for spat collecting operations, including use of selective fishing gear to avoid by-catch | |
| g) Use of native species and subspecies in mariculture | |
| h) Implementation of effective measures to prevent the inadvertent release of mariculture species and fertile polypoids. | |
| i) Use of proper methods of breeding and proper places of releasing in order to protect genetic diversity | X (partly) |
| j) Minimizing the use of antibiotics through better husbandry techniques | |
| k) Use of selective methods in commercial fishing to avoid or minimize by-catch | X (partly) |
| l) Considering traditional knowledge, where applicable, as a source to develop sustainable mariculture techniques | |
| m) Not applicable | |

Further comments on techniques that aim at minimizing adverse impacts of mariculture on marine and coastal biodiversity.

Alien Species and Genotypes

160. Has your country put in place mechanisms to control pathways of introduction of alien species in the marine and coastal environment? Please check all that apply and elaborate on types of measures in the space below.

- a) No X
- b) Mechanisms to control potential invasions from ballast water have been put in place (please provide details below)
- c) Mechanisms to control potential invasions from hull fouling have been put in place (please provide details below)
- d) Mechanisms to control potential invasions from aquaculture have been put in place (please provide details below)
- e) Mechanisms to control potential invasions from accidental releases, such as aquarium releases, have been put in place (please provide details below)
- f) Not applicable

Further comments on the current status of activities relating to prevention of introductions of alien species in the marine and coastal environment, as well as any eradication activities.

Box LXII.

Please elaborate below on the implementation of this programme of work and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Agricultural biological diversity

161. Has your country developed national strategies, programmes and plans that ensure the development and successful implementation of policies and actions that lead to the conservation and sustainable use of agrobiodiversity components? (decisions III/11 and IV/6)

- a) No
- b) No, but strategies, programmes and plans are under development
- c) Yes, some strategies, programmes and plans are in place (please provide details below) X
- d) Yes, comprehensive strategies, programmes and plans are in place (please provide details below)

Further comments on agrobiodiversity components in national strategies, programmes and plans.

National Biological Diversity Strategy and Action Plan (1997-2005)

The National Programme "Collection and Conservation of Plant Genetic Resources for Food and Agriculture" (2002-2006) has been launched.

Rural Development Plan (2004-2006)

162. Has your country identified ways and means to address the potential impacts of genetic use restriction technologies on the *In-situ* and *Ex-situ* conservation and sustainable use, including food security, of agricultural biological diversity? (decision V/5)

- a) No X
- b) No, but potential measures are under review
- c) Yes, some measures identified (please provide details below)
- d) Yes, comprehensive measures identified (please provide details below)

Further information on ways and means to address the potential impacts of genetic use restriction technologies on the *In-situ* and *Ex-situ* conservation and sustainable use of agricultural biodiversity.

Annex to decision V/5 – Programme of work on agricultural biodiversity

Programme element 1 – Assessment

163. Has your country undertaken specific assessments of components of agricultural biodiversity such as on plant genetic resources, animal genetic resources, pollinators, pest management and nutrient cycling?

- a) No
- b) Yes, assessments are in progress (please specify components below) X
- c) Yes, assessments completed (please specify components and results of assessments below)

Further comments on specific assessments of components of agricultural biodiversity.

Inventories of farm animal breeds have been carried out.

Analysis of the state of genetic variation in horse and cattle landrace breeds.

Biodiversity of plant genetic resources (apple, plum, rye, potato, etc.).

Pollinators monitoring programme.

164. Is your country undertaking assessments of the interactions between agricultural practices and the conservation and sustainable use of the components of biodiversity referred to in Annex I of the Convention (e.g. ecosystems and habitats; species and communities; genomes and genes of social, scientific or economic importance)?

- a) No
- b) Yes, assessments are under way X
- c) Yes, some assessments completed (please provide details below)
- d) Yes, comprehensive assessments completed (please provide details below)

Further comments on assessment of biodiversity components (e.g. ecosystems and habitats; species and communities; genomes and genes of social, scientific or economic importance).

Monitoring system established and scientific projects are dealing with it.

165. Has your country carried out an assessment of the knowledge, innovations and practices of farmers and indigenous and local communities in sustaining agricultural biodiversity and agro-ecosystem services for food production and food security?

- a) No X
- b) Yes, assessment is under way
- c) Yes, assessment completed (please specify where information can be retrieved below)

Further comments on assessment of the knowledge, innovations and practices of farmers and indigenous and local communities.

Sporadic data exists.

166. Has your country been monitoring an overall degradation, status quo or restoration/rehabilitation of agricultural biodiversity since 1993 when the Convention entered into force?

- a) No X
- b) Yes, no change found (status quo)
- c) Yes, overall degradation found (please provide details below)
- d) Yes, overall restoration or rehabilitation observed (please provide details below)

Further comments on observations.

Programme element 2 – Adaptive management

167.Has your country identified management practices, technologies and policies that promote the positive, and mitigate the negative, impacts of agriculture on biodiversity, and enhance productivity and the capacity to sustain livelihoods?

- a) No
- b) No, but potential practices, technologies and policies being identified
- c) Yes, some practices, technologies and policies identified (please provide details below) X
- d) Yes, comprehensive practices, technologies and policies identified (please provide details below)

Further comments on identified management practices, technologies and policies.

EU subsidies for endangered breeds and field crops.

Programme element 3 – Capacity-building

168.Has your country increased the capacities of farmers, indigenous and local communities, and their organizations and other stakeholders, to manage sustainable agricultural biodiversity and to develop strategies and methodologies for *In-situ* conservation, sustainable use and management of agricultural biological diversity?

- a) No
- b) Yes (please specify area/component and target groups with increased capacity) X

Further comments on increased capacities of farmers, indigenous and local communities, and their organizations and other stakeholders.

Seminars, newsletter, leaflets and web site on endangered breeds and field crops.

169.Has your country put in place operational mechanisms for participation by a wide range of stakeholder groups to develop genuine partnerships contributing to the implementation of the programme of work on agricultural biodiversity?

- a) No X
- b) No, but potential mechanisms being identified
- c) No, but mechanisms are under development
- d) Yes, mechanisms are in place

170.Has your country improved the policy environment, including benefit-sharing arrangements and incentive measures, to support local-level management of agricultural biodiversity?

- a) No
- b) No, but some measures and arrangements being identified
- c) No, but measures and arrangements are under development
- d) Yes, measures and arrangements are being implemented (please specify below) X

Further comments on the measures taken to improve the policy environment.

Agri-environmental support is paid as part of the horizontal Rural Development Programme for 2004-2006 approved by the EU.

Programme element 4 – Mainstreaming

171.Is your country mainstreaming or integrating national plans or strategies for the conservation and sustainable use of agricultural biodiversity in sectoral and cross-sectoral plans and programmes?

- a) No
- b) No, but review is under way
- c) No, but potential frameworks and mechanisms are being identified X
- d) Yes, some national plans or strategies mainstreamed and integrated into some sectoral plans and programmes (please provide details below)
- e) Yes, some national plans or strategies mainstreamed into major sectoral plans and programmes (please provide details below)

Further comments on mainstreaming and integrating national plans or strategies for the conservation and sustainable use of agricultural biodiversity in sectoral and cross-sectoral plans and programmes.

172.Is your country supporting the institutional framework and policy and planning mechanisms for the mainstreaming of agricultural biodiversity in agricultural strategies and action plans, and its integration into wider strategies and action plans for biodiversity?

- a) No
- b) Yes, by supporting institutions in undertaking relevant assessments X
- c) Yes, by developing policy and planning guidelines
- d) Yes, by developing training material
- e) Yes, by supporting capacity-building at policy, technical and local levels
- f) Yes, by promoting synergy in the implementation of agreed plans of action and between ongoing assessment and intergovernmental processes.

Further comments on support for institutional framework and policy and planning mechanisms.

173.In the case of centers of origin in your country, is your country promoting activities for the conservation, on farm, *In-situ*, and *Ex-situ*, of the variability of genetic resources for food and agriculture, including their wild relatives?

a) No

b) Yes (please provide details below)

X

Further comments on of the conservation of the variability of genetic resources for food and agriculture in their center of origin.

Estonian breeds are being studied and supported.

Box LXIII.

Please provide information concerning the actions taken by your country to implement the Plan of Action for the International Initiative for the Conservation and Sustainable Use of Pollinators.

State monitoring programme on pollinators

Box LXIV.

Please elaborate below on the implementation of this programme of work and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Some programmes have been launched but are still inadequate.

Forest Biological Diversity General



174. Has your country incorporated relevant parts of the work programme into your national biodiversity strategies and action plans and national forest programmes?

- a) No X
- b) Yes, please describe the process used
- c) Yes, please describe constraints/obstacles encountered in the process
- d) Yes, please describe lessons learned
- e) Yes, please describe targets for priority actions in the programme of work

Further comments on the incorporation of relevant parts of the work programme into your NBSAP and forest programmes

The current Estonian *National Biodiversity Strategy and Action Plan (1999)* and *National Forestry Development Plan (2002)* were prepared before the adoption of the work programme on forest biodiversity at COP6 in 2002. However, on many occasions the priority goals, objectives and activities in the above documents are based on the principles of the CBD expanded programme of work on Forest Biological Diversity.

Box LXV.

Please indicate what recently applied tools (policy, planning, management, assessment and measurement) and measures, if any, your country is using to implement and assess the programme of work. Please indicate what tools and measures would assist the implementation.

Estonia has identified the priority goals, objectives and activities included in the expanded programme of work for implementation at the national level in a number of environmental policy documents. The principal document of national environmental policy, the *National Environmental Strategy until 2010* (approved by government in 2005), envisages promotion of sustainable development among the priority goals and *inter alia* includes the task of promotion of sustainable use of natural resources, incl. forest resources, historically intrinsic to Estonia.

The *Estonian Forest Policy* (1997) is a strategic planning document for the most important biological resource in the country and includes also a number of goals, objectives and activities included in the expanded programme of work.

The *National Biodiversity Strategy and Action Plan* (1999) sets several tasks for the forestry sector in line with the terms of the biodiversity process.

The *Estonian Forestry Development Plan (2002)* has detailed a set of activities in the area of protection and sustainable use of forest biodiversity.

Box LXVI.

Please indicate to what extent and how your country has involved indigenous and local communities, and respected their rights and interests, in implementing the programme of work.

Different stakeholders, including local communities, are represented in the working groups responsible for planning, implementation, monitoring and revision of the above mentioned policies, programmes, strategies and action plans.

The *National Environmental Strategy* until 2010 (chapter 5.3, Institutions) envisages the decision-making process to be transparent and close to citizens and the environmental competency of local authorities to be increased.

Box LXVII.

Please indicate what efforts your country has made towards capacity building in human and capital resources for the implementation of the programme of work.

Estonia has been supporting thematic research and development through implementation of the actions targeted in the ecosystems protection chapter of the Forestry Development Plan and through financial contribution from the Environmental Investment Centre.

Several education programmes and campaigns related to forest biodiversity have been carried out in Estonia. Information is made available also in books and other printed publications, on the Internet and in magazines published by various forestry organisations, NGOs and interest groups. Activities to increase forest-related knowledge and skills among the youth have been increasing in recent years.

For more on education, see *Article 13 - Public education and awareness* of this report.

Box LXVIII.

Please indicate how your country has collaborated and cooperated (e.g., south-south, north-south, south-north, north-north) with other governments, regional or international organizations in implementing the programme of work. Please also indicate what are the constraints and/or needs identified.

There is collaboration of a limited scope with some neighbouring governments, like Finland, Sweden and Denmark, as well as within certain regional initiatives, like the Baltic Environmental Forum, Agenda 21 for the Baltic Sea Region, etc.

Expanded programme of work on forest biological diversity

Programme element 1 – Conservation, sustainable use and benefit-sharing

175. Is your country applying the ecosystem approach to the management of all types of forests?

- a) No (please provide reasons below)
- b) No, but potential measures being identified (please provide details below) X
- c) Yes (please provide details below)

Comments on application of the ecosystem approach to management of forests (including effectiveness of actions taken, lessons learned, impact on forest management, constraints, needs, tools, and targets).

Estonia has integrated the National Biodiversity Strategy and Action Plan partly into national forestry programmes and is indirectly applying the ecosystem approach and sustainable forest management. This has been the case in the Estonian Forest Policy (1997) and, in an advanced and more specific manner, in the decennial Estonian Forestry Development Plan (2002).

Actions that Estonia is taking to address the conservation and sustainable use of forest biological diversity partly and indirectly conform with the ecosystem approach. Conservationists and researchers have gained some practical experience on Hiiumaa Island when applying the ecosystem approach in the planning of protected areas on the island. Information on the relevant workshops and public meetings is available on the Internet at: www.bka.hiiuloodus.ee/reform/e_6.html

As an example, the forest certification schemes used in Estonia (FSC, PEFC and ISO 14001) contribute to sustainable management as well as application of the ecosystem approach in forests. However, the certification criteria as well as the ecosystem approach in general are easier to achieve for state forest management and other large land owners.

176. Has your country undertaken measures to reduce the threats to, and mitigate its impacts on forest biodiversity?

Options	X	Details
a) Yes		Please specify below the major threats identified in relation to each objective of goal 2 and the measures undertaken to address priority actions
	X	Threats to forest biodiversity are implicitly addressed in all policy documents listed in Box LXVII . Estonia has not chosen any specific priority goals, objectives and activities from the expanded programme of work, yet many of our efforts overlap to some extent with the programme of work.
b) No		Please provide reasons below

Further comments on measures to reduce threats to, and mitigate the impacts of threatening processes on forest biodiversity (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).

GOAL 2. To reduce the threats and mitigate the impacts of threatening processes on forest biological diversity

(Objective 1. Prevent the introduction of invasive alien species that threaten ecosystems, and mitigate their negative impacts on forest biological diversity in accordance with international law)

Evident threat: the possible appearance of invasive alien species that threaten forest ecosystems.

No particular action specific for forest is taken. The subject is being dealt with on the more general level of invasive alien species.

See also *Article 8(h) – Alien species* of this report.

(Objective 2. Mitigate the impact of pollution such as acidification and eutrophication on forest biodiversity)

Evident threat: changes in sensitive forest ecosystems

Over 100 km² of forest land has been degraded and polluted by oil shale open-cast and underground mining activities and dumping of ash into heaps from oil shale fired power plants in NE Estonia. Another group of degraded and polluted lands including forests are the territories of former military bases of the Soviet Union. An inventory of those military sites identified 2900 sites contaminated to a larger or lesser extent with various chemicals as well as metal, mineral, construction, wood and domestic waste and oil pollution. These areas have partially been rehabilitated by afforestation. Over the last decade harmful emissions – notably those of nitrogen and sulphur dioxide – have decreased significantly in Estonia.

Since 1988, Estonia has been participating in the International Cooperative Programme on the Assessment and Monitoring of Air Pollution Effects on Forests (ICP Forests), which is based on the UNECE Convention on Long-Range Transboundary Air Pollution (CLRTAP). The health and vitality of forests are assessed annually on 98 permanent sample plots. The relationships between the condition of forests and atmospheric pollutants as well as other stress factors are monitored in forest stands in various parts of the country. Since Estonia's accession to the EU in 2004, these monitoring activities have become obligatory and are co-financed by the European Commission.

(Objective 3. Mitigate the negative impacts of climate change on forest biodiversity)

Evident threat: negative impacts on forest biodiversity

The research and monitoring activities currently undertaken in Estonia to mitigate the impact of climate change on forest biodiversity include mainly the monitoring of the relevant impacts on

forest ecosystems. The data management system is based mainly on two international reporting schemes – Sustainable Forest Management Criteria and Indicators of the Ministerial Conference on the Protection of Forests in Europe and Framework for UNFAO Global Forest Resources Assessment (notably the List of Indicators of the Temperate and Boreal Forest Resources Assessment 2000). Collection of forestry related data is carried out mainly in the course of field inventory works (standwise forest inventory, NFI, inventories of felling, reforestation and damaged forest areas, forest monitoring in the ICP Forest Framework, etc.). A preliminary review on the subject has been completed (Punning, 1999).

For more information on related activities, see *Biodiversity and climate change, question 17* of this report.

(Objective 4. To prevent and mitigate the adverse effects of forest fires and fire suppression)

Evident threat: biodiversity losses caused by burnt forests

In general, forest fires have stayed under control in Estonia during the recent decades owing to efficient fire control by authorities. The *Estonian Forestry Development Programme Until 2010* includes the task of bringing the relevant legislation into compliance with the requirements of international standards for forest fire protection. The State Forest Management Centre will build and reconstruct the fire protection systems of state forests. The state will support the implementation of similar measures in private forests pursuant to the National Forest Fire Protection Scheme and depending on the availability of the relevant funds. The adverse effects on forest biodiversity or biodiversity losses caused by burnt forest have not been estimated in Estonia.

However, as forest fires are a natural phenomenon in the succession of boreal forests, it is discussed in academic and practitioners' circles whether they have a positive effect on forest biodiversity. In that case, to compensate for the diminishing area of burnt forests, it would be necessary to promote prescribed burning.

(Objective 5. To mitigate effects of the loss of natural disturbances necessary to maintain biodiversity in regions where these no longer occur.)

Evident threat: the negative impact of the loss of natural disturbances on biodiversity

The important forest elements ensuring the preservation of biodiversity (dead trees, stand structure resembling the natural structure, etc.) have been rather extensively preserved. In addition to that, a variety of methods simulating natural processes are currently being identified.

(Objective 6. To prevent and mitigate losses due to fragmentation and conversion to other land uses)

Evident threat: losses of biodiversity due to fragmentation and conversion to other land uses

The latest statistical inventories demonstrate an increase in the area of forests, which cover more than a half of the land area of Estonia. The increase in forest area has been caused mainly by specification of the nature of plots and by the process of open areas turning into forests. It has been estimated that another 300,000 ha of former agricultural lands have fallen out of active use and are undergoing afforestation. This is mainly an uncontrolled process, often increasing the share of species of low economic and ecological value. Some preliminary project-based measures to restore forest biological diversity in degraded secondary forests and in forests established on abandoned farmlands are being identified.

Due to changing land use and ownership structure of forests in Estonia, forest holdings are small in size (ca 10 ha on an average). Consequently the forest blocks subject to forest management operations are very small, averaging 1–2 hectares. The advantage is that regeneration sites are generally small, causing little harm e.g. to the scenery. On the other hand, this kind of management breaks vast continuous forest areas, which are essential for some threatened forest species, like eagles or capercaillie.

177. Is your country undertaking any measures to protect, recover and restore forest biological diversity?

Options	X	Details
a) Yes	X	Please identify priority actions in relation to each objective of goal 3 and describe measures undertaken to address these priorities
b) No		Please provide reasons below

Further comments on measures to protect, recover and restore forest biological diversity (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).

**GOAL 3. To protect, recover and restore forest biological diversity
(Objective 1. Restore forest biological diversity in degraded secondary forests and in forests established on former forestlands and other landscapes, including in plantations.)**

Priority: Protection and restoration of special features of boreal forests

Striven by the EU accession process, the Ministry of the Environment has prepared for the establishment of the Natura 2000 network, which expands the current nature conservation areas and promotes forest management practices that further also the conservation of special features of boreal forests.

(Objective 2. Promote forest management practices that further the conservation of endemic and threatened species.)

The biodiversity of managed forests is still on a satisfactory level only. Important forest elements ensuring the preservation of biodiversity (dead trees, stand structure resembling the natural structure, etc.) are increasingly preserved. Based on the results of the inventory of key habitats, protection measures can be applied in the areas most valuable for the preservation of biodiversity. The rapid increase in cutting volumes, however, has created a risk that the present favourable situation cannot be maintained without applying effective protection measures. The most important management measures are cutting methods facilitating the protection of key habitats and preservation of biodiversity (including methods simulating natural processes). This equally concerns clear felling, thinning and selection cutting. Key habitats situated in state forests (i.e. more than a half of them) are well protected but in private forests implementation of protection mechanisms has been inhibited by the lack of resources. Legal acts addressing the environmental requirements applied in the forests are not harmonised and the statutory requirement for the protection of biodiversity has been formulated in quite a general manner.

(Objective 3. Ensure adequate and effective protected forest area networks.)

Protection of habitats of threatened species is being paid more attention to than earlier. The Estonian Forest Conservation Area Network and the Forest Key Biotopes projects contribute as sector specific measures to in-situ conservation of forest species and habitats.

178. Is your country undertaking any measures to promote the sustainable use of forest biological diversity?

Options	X	Details
a) Yes	<input checked="" type="checkbox"/>	Please specify priority actions in relation to each objective of goal 4 and describe measures undertaken to address these priorities
b) No	<input type="checkbox"/>	Please provide reasons below

Further comments on the promotion of the sustainable use of forest biological diversity (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).

**GOAL 4. To promote the sustainable use of forest biological diversity
(Objective 1. Promote sustainable use of forest resources to enhance the conservation of forest biological diversity)**

The principle of sustainable forest management is integrated into forest policy and legislation and is implemented through all forestry related programmes and action plans at different levels. The *National Forestry Development Plan* places a special emphasis on ecological sustainability.

Two principal, closely interrelated objectives for the Estonian forestry sector have been set in the National Forest Policy:

- a) sustainability of forestry, which is defined as the management of forests in a manner and to the extent that maintains their biological diversity, productivity, capacity for regeneration and vitality as well as their potential to fulfil at present and in the future the ecological, economic and social functions at the local, national and global level without damaging other ecosystems;
- b) efficiency of forest management, which entails efficient production and effective utilisation of all the forest-based goods both in the short and long run.

The State Forest Management Centre (SFMC) has so far remained the only profit-making state agency in Estonia. The SFMC has introduced the ISO 14001 environmental management system and all state forests managed by the SFMC received an FSC sustainable forestry certificate in 2002.

(Objective 2. Prevent losses caused by unsustainable harvesting of timber and non-timber forest resources.)

Many of the 55 000 Estonian private forest owners manage their forests in compliance with sustainable forestry principles but forest inventory data demonstrate, however, that the level of compliance with environmental requirements and the general forest management quality is comparatively low in certain private forests. This is due to the ineffectiveness of supervision, but also weakness of the support system for private forest owners: the latter does not ensure adequate counselling of forest owners and state subsidies on a level adequate to work as incentives for sustainable forest management.

The process of analysing the Estonian tax legislation with the aim of introducing the elements promoting internationally recognised and sustainable forestry practises has been launched and utilisation of the results for making amendments to the legislation is under preparation in cooperation between the Ministries of the Environment, Finance and Justice.

(Objective 3. Enable indigenous and local communities to develop and implement adaptive community-management systems to conserve and sustainably use forest biological diversity.)

Forest sustainability co-operation networks between landowners, local environmental and forest authorities and other local interest groups to share their ideas and experience related to biodiversity conservation are missing so far in Estonia. However, the *National Forestry Development Plan* sets *inter alia* the following objectives: to ensure forestry research and education at a level meeting the international requirements and satisfying local needs; to inform the population about the principles of sustainable use of forests.

(Objective 4. Develop effective and equitable information systems and strategies and promote implementation of those strategies for *in situ* and *ex situ* conservation and sustainable use of forest genetic diversity, and support countries in their implementation and monitoring.)

Genetic resources of the main tree species of Estonia (*Picea abies*, *Pinus sylvestris*, *Betula pendula*) are currently secured mainly in gene reserve forests (currently about 2600 ha) and *ex situ* collections. No specific working group or genetic resources programme has been established in Estonia as yet.

179.Is your country undertaking any measures to promote access and benefit-sharing of forest genetic resources?

Options	X	Details
a) Yes		Please specify priority actions in relation to each objective of goal 5 and describe measures undertaken
b) No	X	Please provide reasons below No specific activities related to access to and benefit-sharing of forest genetic resources have been carried out in Estonia. National legislation concerning genetically modified organisms (GMOs), including forest organisms, goes in line with the relevant EU Directives on contained use of GMOs, see answers to questions 110-116.

Further comments on the promotion of access and benefit-sharing of forest genetic resources. (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets)

Programme element 2 – Institutional and socio-economic enabling environment

180. Is your country undertaking any measures to enhance the institutional enabling environment for the conservation and sustainable use of forest biological diversity, including access and benefit-sharing?

Options	X	Details
a) Yes		Please identify priority actions in relation to each objective of Goal 1 and describe measures undertaken to address these priorities
	X	No specific measures to enhance the institutional enabling environment for access and benefit-sharing in the area of forest biological diversity undertaken; see priority actions and measures described under "Futher comments..."
b) No		Please provide reasons below

Further comments on the enhancement of the institutional enabling environment for the conservation and sustainable use of forest biological diversity, including access and benefit-sharing (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).

GOAL 1. Enhance the institutional enabling environment (Objective 1. Improve the understanding of the various causes of forest biological diversity losses)

Several *ecosystem level inventories*, which partly reveal the various causes of forest biological diversity losses, have been carried out recently: Inventory of old-growth forest (by Estonian Fund for Nature, in 1993-1996); Inventory of wooded meadows (by Estonian Fund for Nature, in 1995-1996); Inventory of wetlands (by Ministry of the Environment, in 1997-1998); Inventory of valuable forest sites and establishment of forest conservation area network in Estonia (by Estonian Forest Centre, 1996-2000) and inventory of woodland key biotopes (coordinated by the Ministry of the Environment, 1999-2002).

Estonia has developed its national criteria and indicators for sustainable forest management in accordance with the Pan-European Ministerial Forestry process. The Pan-European criteria and indicators will be further developed within the Pan-European process and comparability between national statistics improved. The possibility to produce data at regular intervals is currently being discussed.

However, the understanding of various causes of forest biodiversity losses is still limited and an additional focussed and comprehensive analysis is needed.

(Objective 2. Parties, Governments and organizations to integrate biological diversity conservation and sustainable use into forest and other sector policies and programmes.)

Estonia has attempted to integrate the conservation and sustainable use of biodiversity into forest and other sector policies and programmes mostly through the National Biodiversity Strategy and Action Plan, applying *inter alia* the ecosystem approach and sustainable resource management. In forestry sector this has been performed in the Estonian Forest Policy (1997) and, in an advanced and more specific manner, in the decennial Estonian Forestry Development Plan (2002).

(Objective 3. Parties and Governments to develop good governance practices, review and revise and implement forest and forest-related laws, tenure and planning systems, to provide a sound basis for conservation and sustainable use of forest biological diversity.)

Estonia applies the following good governance practices of sustainable management and use of forest biological diversity: legislation, policies, development plans, action plans, monitoring programmes and forest survey. Some activities are currently underway to develop good governance practices, forest-related laws, tenure and planning systems to provide a sound basis for conservation and sustainable use of forest biodiversity.

(Objective 4. Promote forest law enforcement and address related trade.)

The Estonian legislation provides tight standards for forestry practices. In addition, all the major logging companies follow their own codes of conduct. Illegal activities as well as the procedures for punishment are clearly defined in the Penal Code, the Nature Conservation Act, the Forest Act and the Hunting Act. Most commonly illegal activities are punished with a fine.

Estonia is involved in the WTO, ITTO and CITES processes related to international trade regulations.

181. Is your country undertaking any measures to address socio-economic failures and distortions that lead to decisions that result in loss of forest biological diversity?

Options	X	Details
a) Yes	X	Please identify priority actions in relation to each objective of Goal 2 and describe measures undertaken to address these priorities
b) No		Please provide reasons below

Further comments on review of socio-economic failures and distortions that lead to decisions that result in loss of forest biological diversity (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).

The share of forestry and wood industry in the Estonian GDP has been constantly increasing in the last decade. Wood industry exceeded 1/7 of the total volume of manufacturing industry in 2003. In the same year, the share of forest products formed 15% of the total value of national export. The favourable influence of forestry on national trade balance should be emphasized, as a very high share of its production inputs is of domestic origin.

However, only few measures mitigating the market failures and distortions that lead to decisions resulting in loss of forest biodiversity have been identified yet. As an example, there are in place some schemes to provide market incentives for the use of sustainable practices and develop alternative income generation programmes for local communities.

182.Is your country undertaking any measures to increase public education, participation and awareness in relation to forest biological diversity?

Options	X	Details
a) Yes	X	Please identify priority actions in relation to each objective of goal 3 and describe measures undertaken to address these priorities
b) No		Please provide reasons below

Further comments on measures to increase public education, participation and awareness in relation to forest biological diversity (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).

**GOAL 3. Increase public education, participation, and awareness
(Objective 1. Increase public support and understanding of the value of forest biological diversity and its goods and services at all levels.)**

Estonia has improved its technical capacity at the national level, benefiting from the GEF funded project GF/2716-01-4354 "Assessment of Capacity Building Needs for Biodiversity and Participation in Clearing House Mechanism in Estonia". Completion of the above objective requires additional development work in this country.

See also *Article 13 – Public education and awareness* of this report

Programme element 3 – Knowledge, assessment and monitoring

183.Is your country undertaking any measures to characterize forest ecosystems at various scales in order to improve the assessment of the status and trends of forest biological diversity?

Options	X	Details
a) Yes	X	Please identify priority actions in relation to each objective of Goal 1 and describe measures undertaken to address these priorities
b) No		Please provide reasons below

Further comments on characterization of forest ecosystems at various scales (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).

Since 1988, under the *European Network of Permanent Sample Plots for Monitoring of Forest Ecosystems*, the level I network for monitoring of forests was established. In Estonia, the Centre of Forest Protection and Silviculture has been coordinating the survey, based on a 16*16 km network with 92 permanent sample plots covering the forest area of the whole country.

The monitoring network has been established in accordance with the Strasbourg Resolution 1 and Manual on the Methods and Criteria for Harmonised Sampling, Assessment, Monitoring and Analysis of the Effects of Air Pollution on Forests. Altogether, more than 2100 sample trees have

been used.

Estonia has worked out its national criteria and indicators for sustainable forest management in accordance with the Pan-European Ministerial Forestry process. The Pan-European criteria and indicators will be further developed within the Pan-European process and comparability between national statistics improved. The possibility to produce data at regular intervals is currently being discussed.

184. Is your country undertaking any measures to improve knowledge on, and methods for, the assessment of the status and trends of forest biological diversity?

Options	X	Details
a) Yes	<input checked="" type="checkbox"/>	Please identify priority actions in relation to each objective of goal 2 and describe measures undertaken to address these priorities
	<input checked="" type="checkbox"/>	
b) No	<input type="checkbox"/>	Please provide reasons below

Further comments on improvement of knowledge on and methods for the assessment of the status and trends (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).

GOAL 2. Improve knowledge on and methods for the assessment of the status and trends of forest biological diversity, based on available information.
(Objective 1. Advance the development and implementation of international, regional and national criteria and indicators based on key regional, sub-regional and national measures within the framework of sustainable forest management.)

The Pan-European criteria and indicators for sustainable forest management developed as part of follow-up to the Helsinki Ministerial Conference on the Protection of Forests in Europe have provided a framework for the development of national criteria and indicators. The Pan-European criteria were adopted in their original form but much more indicators were developed to meet the national needs.

The data management system for assessment of the status and trends of forest biological diversity is based on two international reporting schemes mainly – Sustainable Forest Management Criteria and Indicators of the Ministerial Conference on the Protection of Forests in Europe and Framework for UNFAO Global Forest Resources Assessment (notably the List of Indicators for the Temperate and Boreal Forest Resources Assessment 2000). Collection of forestry related data in Estonia is carried out mainly in the course of field inventory works (standwise forest inventory, NFI, inventories of felling, reforestation and damaged forest areas, forest monitoring in ICP Forest Framework, etc.).

185.Is your country undertaking any measures to improve the understanding of the role of forest biodiversity and ecosystem functioning?

Options	X	Details
a) Yes	X	Please identify priority actions in relation to each objective of goal 3 and describe measures undertaken to address these priorities
b) No		Please provide reasons below

Further comments on the improvement of the understanding of the role of forest biodiversity and ecosystem functioning (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).

See *Article 12 – Research and Training* of this report.

186.Is your country undertaking any measures at national level to improve the infrastructure for data and information management for accurate assessment and monitoring of global forest biodiversity?

Options	X	Details
a) Yes	X	Please identify priority actions in relation to each objective of goal 4 and describe measures undertaken to address these priorities
	X	X
b) No		Please provide reasons below

Further comments on the improvement of the infrastructure for data and information management (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).

GOAL 4. Improve the infrastructure for data and information management for accurate assessment and monitoring of global forest biological diversity.
(Objective 1. Enhance and improve the technical capacity at the national level to monitor forest biological diversity, benefiting from the opportunities offered through the CHM, and to develop associated databases as required on a global scale.)

According to the *Estonian Forestry Development Plan (2002)*, the first among the main shortcomings of the public forestry administration in Estonia has been formulated as insufficient gathering, processing and analysing of forestry-related information. This regards also communication among different organizations dealing with sustainable management and use of biodiversity. The current task is to set up an integral information system (registry) for maintaining information on forests and forest management. Access to the registry will be ensured for public authorities, for companies engaged in obtaining and buying up timber and for environmental organisations, enabling them to determine the origin of procured timber.

The registry will be continuously updated to ensure that it adequately meets potential new demands, incl. those proceeding from strategies for *in situ* and *ex situ* conservation and sustainable use of forest genetic diversity.

See also answer to question 182.

Box LXIX.

Please elaborate below on the implementation of this programme of work and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Estonia has incorporated the relevant parts of the CBD work programme into the National Biodiversity Strategy and Action Plan but has not yet adopted a forestry work programme as such.

Biological diversity of dry and sub-humid lands

187.Is your country supporting scientifically, technically and financially, at the national and regional levels, the activities identified in the programme of work? (decisions V/23 and VII/2)

- a) No
- b) Yes (please provide details below)

Further comments on scientific, technical and financial support, at the national and regional levels, to the activities identified in the programme of work.

Questions 187 - 192 are not relevant for Estonia. There are no dry and sub-humid lands.

188.Has your country integrated actions under the programme of work of dry and sub-humid lands into its national biodiversity strategies and action plans or the National Action Programme (NAP) of the UNCCD? (decisions V/23, VI/4 and VII/2)

- a) No
- b) Yes (please provide details below)

Further comments on actions under the programme of work of dry and sub-humid lands integrated into national biodiversity strategies and action plans or the National Action Programme (NAP) of the UNCCD.

189.Has your country undertaken measures to ensure synergistic/collaborative implementation of the programme of work between the national UNCCD process and other processes under related environmental conventions? (decisions V/23, VI/4 and VII/2)

- a) No
- b) Yes, some linkages established (please provide details below)
- c) Yes, extensive linkages established (please provide details below)

Further comments on the measures to ensure the synergistic/collaborative implementation of the programme of work between the national UNCCD processes and other processes under related environmental conventions.

Programme Part A: Assessment

190.Has your country assessed and analyzed information on the state of dryland biological diversity and the pressures on it, disseminated existing knowledge and best practices, and filled knowledge gaps in order to determine adequate activities? (Decision V/23, Part A: Assessment, Operational objective, activities 1 to 6)

- a) No
- b) No, but assessment is ongoing
- c) Yes, some assessments undertaken (please provide details below)
- d) Yes, comprehensive assessment undertaken (please provide details below)

Further comments on the relevant information on assessments of the status and trends and dissemination of existing knowledge and best practices.

Programme Part B: Targeted Actions

191.Has your country taken measures to promote the conservation and sustainable use of the biological diversity of dry and sub-humid lands and the fair and equitable sharing of the benefits arising out of the utilization of its genetic resources, and to combat the loss of biological diversity in dry and sub-humid lands and its socio-economic consequences? (part B of annex I of decision V/23, activities 7 to 9)

- a) No
- b) Yes, some measures taken (please provide details below)
- c) Yes, many measures taken (please provide details below)

Further comments on the measures taken to promote the conservation and sustainable use of the biological diversity of dry and sub-humid lands and the fair and equitable sharing of the benefits arising out of the utilization of its genetic resources, and to combat the loss of biological diversity in dry and sub-humid lands and its socio-economic consequences.

192.Has your country taken measures to strengthen national capacities, including local capacities, to enhance the implementation of the programme of work?

- a) No
- b) Yes, some measures taken (please provide details below)
- c) Yes, comprehensive measures taken (please provide details below)
- d) Yes, all identified capacity needs met (please provide details below)

Further comments on measures taken to strengthen national capacities, including local capacities, to enhance the implementation of the programme of work.

Box LXX.

Please elaborate below on the implementation of this programme of work and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Mountain Biodiversity

Programme Element 1.**Direct actions for conservation, sustainable use and benefit sharing**

193.Has your country taken any measures to prevent and mitigate the negative impacts of key threats to mountain biodiversity?

- a) No
- b) No, but relevant measures are being considered
- c) Yes, some measures taken (please provide details below)
- d) Yes, many measures taken (please provide details below)

Further comments on the measures taken to prevent and mitigate the negative impacts of key threats to mountain biodiversity

Questions 193 - 201 are not relevant for Estonia. There are no mountains.

194.Has your country taken any measures to protect, recover and restore mountain biodiversity?

- a) No
- b) No, but some measures are being considered
- c) Yes, some measures taken (please provide details below)
- d) Yes, many measures taken (please provide details below)

Further comments on the measures taken to protect, recover and restore mountain biodiversity

195.Has your country taken any measures to promote the sustainable use of mountain biological resources and to maintain genetic diversity in mountain ecosystems?

- a) No
- b) No, but some measures are being considered
- c) Yes, some measures taken (please provide details below)
- d) Yes, many measures taken (please provide details below)

Further comments on the measures to promote the sustainable use of mountain biological resources and to maintain genetic diversity in mountain ecosystems

196.Has your country taken any measures for sharing the benefits arising from the utilization of mountain genetic resources, including preservation and maintenance of traditional knowledge?

- a) No
- b) No, but some measures are being considered
- c) Yes, some measures taken (please provide details below)
- d) Yes, many measures taken (please provide details below)

Further comments on the measures for sharing the benefits arising from the utilization of mountain genetic resources

Programme Element 2.

Means of implementation for conservation, sustainable use and benefit sharing

197.Has your country developed any legal, policy and institutional framework for conservation and sustainable use of mountain biodiversity and for implementing this programme of work?

- a) No
- b) No, but relevant frameworks are being developed
- c) Yes, some frameworks are in place (please provide details below)
- d) Yes, comprehensive frameworks are in place (please provide details below)

Further comments on the legal, policy and institutional frameworks for conservation and sustainable use of mountain biodiversity and for implementing the programme of work on mountain biodiversity.

198.Has your country been involved in regional and/or transboundary cooperative agreements on mountain ecosystems for conservation and sustainable use of mountain biodiversity?

- a) No
- b) No, but some cooperation frameworks are being considered
- c) Yes (please provide details below)

Further information on the regional and/or transboundary cooperative agreements on mountain ecosystems for conservation and sustainable use of mountain biodiversity

Programme Element 3.**Supporting actions for conservation, sustainable use and benefit sharing**

199.Has your country taken any measures for identification, monitoring and assessment of mountain biological diversity?

- a) No
- b) No, but relevant programmes are under development
- c) Yes, some measures are in place (please provide details below)
- d) Yes, comprehensive measures are in place (please provide details below)

Further comments on the measures for identification, monitoring and assessment of mountain biodiversity

200.Has your country taken any measures for improving research, technical and scientific cooperation and capacity building for conservation and sustainable use of mountain biodiversity?

- a) No
- b) No, but relevant programmes are under development
- c) Yes, some measures are in place (please provide details below)
- d) Yes, comprehensive measures are in place (please provide details below)

Further comments on the measures for improving research, technical and scientific cooperation and capacity building for conservation and sustainable use of mountain biodiversity

201.Has your country taken any measures to develop, promote, validate and transfer appropriate technologies for the conservation of mountain ecosystems?

- a) No
- b) No, but relevant programmes are under development
- c) Yes, some measures are in place (please provide details below)
- d) Yes, comprehensive measures are in place (please provide details below)

Further comments on the measures to develop, promote, validate and transfer appropriate technologies for the conservation of mountain ecosystems

E. OPERATIONS OF THE CONVENTION

202. Has your country actively participated in subregional and regional activities in order to prepare for Convention meetings and enhance implementation of the Convention? (decision V/20)

- a) No
- b) Yes (please provide details below) X

Further comments on the regional and subregional activities in which your country has been involved.

Estonia has taken part in the PEBLDS (Pan-European Biological and Landscape Diversity Strategy) meetings. Estonia has also taken part in Vilm meetings – European Biodiversity Expert meetings to prepare for various CBD working groups and meetings.

Estonia has also taken part in the SBSTTA and various other CBD working groups, e.g. in implementation of the programme of work on forest biodiversity.

203. Is your country strengthening regional and subregional cooperation, enhancing integration and promoting synergies with relevant regional and subregional processes? (decision VI/27 B)

- a) No
- b) Yes (please provide details below) X

Further comments on regional and subregional cooperation and processes.

Estonia recognises the importance of implementation, monitoring and updating of international environmental conventions. We are party to almost a hundred environmental multi- and bilateral agreements.

The main partners in regional cooperation are Latvia, Lithuania, Russian Federation, Nordic Countries, Poland, Ukraine, Germany. The main cooperation areas are fisheries and marine environment, forestry, species and areas conservation, reduction of transboundary air and water pollution.

Estonia, among other Baltic Sea states, has been actively involved in cooperation on pollution prevention in the Baltic Sea through the framework of the intergovernmental Baltic Marine Environment Protection Commission (HELCOM) set up by the Helsinki Convention in 1974. In 1992, conservation of biodiversity of marine environment was added among the goals of the Helsinki Convention. The aim is to reduce pollution in the Baltic Sea by agreeing on the phase-out of all sources of pollution. HELCOM also convenes meetings of environment ministers to support and foster the implementation of the Convention and the Baltic Sea Joint Comprehensive Environmental Action Programme.

The Estonian Ministry of the Environment is responsible for implementing the European Union nature conservation policy (Habitats and Birds Directives) and is actively participating in the establishment of the Natura 2000 network of protected areas. A transboundary nature reserve – Sookuninga (3847 ha) – was established on the border between Estonia and Latvia in 1999. A management plan has been drafted for the nature reserve but not yet approved. An Estonian-Russian Intergovernmental Transboundary Water Commission was established in 1998 in accordance with the Estonian - Russian Bilateral Agreement on the Protection and Use of transboundary waters. Lake Peipsi River Basin Management Plan is being prepared under the guidance of the Transboundary Water Commission. Lake Peipsi with its surface area of 3555 km² is the fourth largest lake in Europe and the largest border lake in Europe.

Estonia (Mr. Mart Külvik) participates in CBD in an *ad hoc* technical expert group on implementation of the programme of work on forest biodiversity. Ms. Kaja Peterson, Programme Director of SEI-Tallinn, was involved in projects initiated by UNEP and WCMC to review the implementation of CBD in Lithuania and Kyrgyzstan in 2000-2001. An Estonian expert (Mr. Lauri Klein) has participated in the work of the European Environmental Agency, European Topic Centre on Nature Protection and Biological Diversity - EEA-ETC/NPB. The main focus of the expert is to develop a CDDA - Common Database of Designated Areas (EUNIS - European Nature Information System). The CDDA information is gathered from 38 EU countries. The expert has also taken part in the technical analysis of the Emerald network (Emerald Network is an ecological network made up of "areas of special conservation interest", launched by the Council of Europe as part of its work under the Bern Convention) for 14 and more countries and has compiled a biodiversity indicators data block. He also takes part in the work of the Programme Steering Committee of the EC CHM - IDA (European Commission's Clearing-House-Mechanism, Interchange of Data among Administrations) developed by the European Environment Agency (EEA). Estonia is actively participating in the work of the IUCN council and in the establishment of ecological networks in Europe (Mr. Kalev Sepp) and also in the work of GBIF (Global Biodiversity Information Facility) (Mr. Mart Rahi).

The Estonian Ministry of the Environment is responsible for reporting to the CBD.

The following question (204) is for DEVELOPED COUNTRIES

204. Is your country supporting the work of existing regional coordination mechanisms and the development of regional and subregional networks or processes? (decision VI/27 B)

- a) No
- b) No, but programmes are under development
- c) Yes, included in existing cooperation frameworks (please provide details below)
- d) Yes, some cooperative activities ongoing (please provide details below)

Further comments on support for the work of existing regional coordination mechanisms and the development of regional and subregional networks or processes.

205. Is your country working with other Parties to strengthen the existing regional and subregional mechanisms and initiatives for capacity-building? (decision VI/27 B)

- a) No
- b) Yes X

206. Has your country contributed to the assessment of the regional and subregional mechanisms for implementation of the Convention? (decision VI/27 B)

- a) No
- b) Yes (please provide details below) X

Further comments on contribution to the assessment of the regional and subregional mechanisms.

See question 203 and the answers to the Article 5 "Cooperation".

Box LXXI.

Please elaborate below on the implementation of the above decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

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