





The Clearing-House Mechanism of the Convention on Biological Diversity

TH
National Report for
the Convention on
Biological Diversity

# **Table of contents**

Section I. Information on the targets being pursued at the national level	. 4
Section II. Implementation measures, their effectiveness, and associated obstacles and scientific and technical needs to achieve national targets	13
Section III. Assessment of progress towards each national target	20
Section IV. Description of national contribution to the achievement of each global Aichi Biodiversity Target	37
Section V. Description of the national contribution to the achievement of the targets of the Global Strategy for Plant Conservation	
Section VI. Description of the national contribution to the achievement of the targets of ndigenous peoples and local communities	62
Section VII. Updated biodiversity country profile	62

# Sixth National Report

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Section I. Information on the targets being pursued at the national level

Country

Slovakia

#### **National Targets**

A.1 Stop the deterioration of the status of all species and habitats, especially those covered by EU legislation and achieve a significant and measureable improvement in their condition.

Rationale for the National Target

Main aim is to fulfil and implement the EU legislation, especially designation and establishment of the Natura 2000 network. For Aichi Target 11: Slovakia has met the target with respect to terrestrial

ecosystems, as over 25 % of the area of the country has been protected by law. However, the protection of some protected areas, including some national parks, in practice is insufficient and does not comply with the international standards (especially IUCN criteria). More progress needs to be done in the protection of forests and freshwater (inland) waters and relevant habitats and species. Progress will have to be done on practical implementation on the ground, especially with the measures and actions linked to the managment plans for different protected areas.

ΕN

# Level of application

**Jurisdiction** 

National / Federal

# Relevance of National Targets to Aichi Targets

Aichi Target components

#### 11. Protected areas

At least 17 per cent of terrestrial and inland water areas are protected.

Areas of particular importance for biodiversity and ecosystem services protected Protected areas are ecologically representative

Sub-Aichi Targets or Target components

#### 12. Preventing extinctions

Extinction of known threatened species has been prevented

The conservation status of those species most in decline has been improved and sustained

# A.2 Ensure that both general public and professionals are aware of the importance of biodiversity and the steps towards its protection and sustainable use

Rationale for the National Target

Main aim is to raise awareness about the goals of the global/EU nature, biodiversity and landscape protection, as well as of the interlinkages of the global conventions/EU legislation in nature and biodiversity protection field to other relevant fields (like the goals and links to the EU Common Agricultural Policy, EU Regional Policy or other policies).

One of the most important steps is to mainstream biodiversity into other sectors and understand the value of biodiversity or of the sustainable use of natural resources also for purposes of economic growth, health, human well-being, etc. - it is difficult to explain the importance of biodiversity, but when the natural resources or ecosystems services meaning is used, it is easier to understand the importance of the nature, biodiversity and landscape protection in general.

ΕN

# Level of application

Jurisdiction

National / Federal

# **Relevance of National Targets to Aichi Targets**

Aichi Target components

1. Awareness of biodiversity values

B.3 By 2020, ensure the preservation of ecosystems and the enhancement of ecosystem services by means of green infrastructure and the restoration of at least 15% of degraded ecosystems

Rationale for the National Target

Ensure that the ecosystems restoration will be in place on time with the special aim to better implement the green infrastructure and its elements.

For Aichi Target 5: The area of forests has been increased in Slovakia: however, the proportion of forests (trees) showing signs of poor health has increased, too. Likewise, there appears to be a large proportion of sites in inadequate condition for most types of habitats, with no/little progress within the last decade.

For Aichi Target 8: Slovakia will have to improve significantly its obligations for the reduction of air pollution under international conventions. Further improvement is required with regards to the pollution of aquatic ecosystems (especially in relation to nitrates reduction).

ΕN

For Aichi Target 10. Slovakia has reduced its emissions of greenhouse gases below the level of its international commitments under the Kyoto Protocol. In addition, the stores of organic carbon in forest ecosystems have increased in the past 20 years. But significant changes will have to be done in relation to improvement of forests and availibility to survive in relation to climate change and temperature changes, as not all forests are able to adapt to different climate conditions.

# Level of application

**Jurisdiction** 

National / Federal

# Relevance of National Targets to Aichi Targets

Aichi Target components

### 5. Loss of habitats

Sub-Aichi Targets or Target components

- 8. Pollution
- 10. Vulnerable ecosystems
- 14. Essential ecosystem services

Ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded

15. Ecosystem resilience

Ecosystem resilience and the contribution of biodiversity to carbon stocks have been enhanced through conservation and restoration

C.4 By 2020, implement the measures of the Common Agricultural Policy that have positive effects on biodiversity at all cultivated areas so as to measurably improve the condition of species and

# habitat

Rationale for the National Target

Aim of this national target is to fulfil and properly implement the EU agricultural as well as forestry policy, which is covered mainly by several measures of the EU Common Agricultural Policy (CAP) - for the moment for the period 2014 - 2020, but also previous measures (as we implement the CAP already from 2004) as well as future CAP are important as a continuation (after 2020, where the interlinkages between the new strategic framework for biodiversity protection will have to be linked also to the new CAP 2021 - 2027). CAP is covering the significant part of Slovakia and its agricultural and forestry land and it cover all the direct payments for farmers as well as other measures for them, but also for foresters - without this financial budget, we would not be able to protect and manage our landscape - esp. management of grasslands is sustainable both for agricultural, but also for nature protection purposes. Although we still have some difficulties on cooperation between agricultural and environmental measures, there are elements, which are improving and we will continue to work on improvements also for the future.

ΕN

# Level of application

Jurisdiction

National / Federal

# Relevance of National Targets to Aichi Targets

Aichi Target components

7. Areas under sustainable management

Areas under agriculture are managed sustainably, ensuring conservation of biodiversity Areas under aquaculture are managed sustainably, ensuring conservation of biodiversity Areas under forestry are managed sustainably, ensuring conservation of biodiversity

Sub-Aichi Targets or Target components

- 13. Agricultural biodiversity
- 20. Resource mobilization

Mobilization of financial resources implementing the Strategic Plan for Biodiversity from all sources have increased substantially from 2010 levels

#### Relevant documents and information

Links to the Rural Development Programme 2014 - 2020 (also in English) is available on the webpage of the Ministry of Agriculture and Rural Development of the Slovak Republic

www.mpsr.sk

C.5 Implement national programs of forest management so as to achieve a measurable improvement in the condition of species and habitats dependent on suitable forest environment and those, which are significantly affected by forestry practices, and to ensure a measurable improvement in the provision of ecosystem services in accordance with sustainable forestry practices as compared to the EU reference condition (2010)

Rationale for the National Target

Main aim is to fulfil the EU nature protection legislation in line with the existing national forestry legislation (as forestry is not covered by the common EU policy or legislation - the only requirement is to fulfil the EU reference condition (2010)). As forests and their management belongs to the Ministry of Agriculture and Rural Development of the Slovak Republic, the role of the Ministry of Environment of the Slovak Republic is work in harmony with them. We are trying to find the balance between the sustainable use of forests on one side and their protection (esp. in protected areas) on the other side. Also both acts - one on forests management and the second on nature and landscape protection have to be harmonised.

ΕN

#### Level of application

Jurisdiction

National / Federal

#### **Relevance of National Targets to Aichi Targets**

Aichi Target components

5. Loss of habitats

Sub-Aichi Targets or Target components

7. Areas under sustainable management Areas under forestry are managed sustainably, ensuring conservation of biodiversity C.6 Ensure adequate protection of water and water- dependent habitats and species to achieve a good condition of aquatic ecosystems by 2020, and ensure that the development of aquaculture does not have adverse effects on aquatic species and ecosystems

Rationale for the National Target

Main aim is to help implement the EU legislation on water protection (which is covered mainly by the Water Framework Directive and Floods Directive, partially also by the Nitrate Directive) - these legislations cover also good ecological status of water bodies (to which helps also the implementation of the EU nature protection legislation, both Directives on the habitats and on the birds protection, which cover also the protection of water habitats and species). NBSAP have to be also in harmony with the Slovak Water Plan, which covers all the need and goals in water protection in Slovakia - on all levels, from technical and technological infrastructure through green requirements linked also to the nature protection. Ideal situation, on which are working for the present is to harmonise the management plans of the nature protection with the River Basin Management Plans (RBMP) are the main plans, which should cover all the plans important within the river basins (they are overall plans for the area, management plans for nature protection or management plans for forests should be covered and taken on board by them).

ΕN

In relation to aquaculture, we have to work also together with the Ministry of Agriculture and Rural Development, which is covering aquaculture legislation - in last 3 years we tried to prepare a very ecologically friendly act, but it seems, it will not be approved in near future. But there is a cooperation linked to the protection of those species, which are covered by the EU legislation. From April 2019 we have also new act on invasive alien species, which are covering also invasive species linked to the water habitats.

# Level of application

Jurisdiction

National / Federal

#### **Relevance of National Targets to Aichi Targets**

Aichi Target components

5. Loss of habitats

Sub-Aichi Targets or Target components

6. Sustainable fisheries

7. Areas under sustainable management Areas under aquaculture are managed sustainably, ensuring conservation of biodiversity

# D.7 Ensure the reduction of negative effects of invasive species on biodiversity and ecosystems in Slovakia by 2020

Rationale for the National Target

Aim of this target is to properly implement the CBD as well as the EU legislation on invasive alien species, prepare the legislation for the national level purposes, as well as to reinforce with the concrete practical measures on the ground together with all relevant stakeholders. From April 2019 we have a new act on invasive alien species, which is covering all important issues linked to the IAS - from global, to EU as well as to national level.

ΕN

# Level of application

**Iurisdiction** 

National / Federal

# **Relevance of National Targets to Aichi Targets**

Aichi Target components

9. Invasive Alien Species

Invasive alien species identified and prioritized

Pathways identified and prioritized

Priority species controlled or eradicated

Introduction and establishment of invasive alien species prevented

E.8 Reduce the intensity of negative factors affecting biodiversity; finalize, for this purpose, an effective legal framework and tools ensuring compliance with relevant legislation, and ensure fair and equitable sharing of benefits arising from the utilization of genetic resources

Rationale for the National Target

Main aim of this target was to ratify the Nagoya protocol in Slovakia, as well as to

help with the genetic resources protection, sustainable use as much as possible at the national level and better cooperation is needed also with the Ministry of Agriculture and Rural Development of the SR and its relevant organisations (as this topic requires broader multisectoral measures and activities).

For Aichi Target 16: Slovakia wanted to take all relevant steps towards the accession to the Nagoya Protocol and its proper implementation in Slovakia. This was done also through the act on Nagoya protocol, which set up the most important topics and issues linked to this agenda.

# Level of application

**Jurisdiction** 

National / Federal

# Relevance of National Targets to Aichi Targets

Aichi Target components

2. Integration of biodiversity values Biodiversity values incorporated into reporting systems

Sub-Aichi Targets or Target components

- 3. Incentives
- 4. Use of natural resources
- 16. Nagoya Protocol on ABS

The Nagoya Protocol is in force

The Nagoya Protocol is operational, consistent with national legislation

F.9 Engage a wide range of stakeholders and establish or reestablish partnerships to support the implementation of the national strategy for biodiversity; promote education, training, research and participation

Rationale for the National Target

Aim of this target is to increase the co-operation with all relevant stakeholders and mainstream biodiversity with all relevant sectors and stakeholders.

For Aichi Target 17: Slovakia has adopted a National Strategy and an Action Plan for the implementation of the CBD and achieving Aichi Targets, which cover 9 main goals and

167 activities, which should help to implement them. All Aichi targets were summarised within these 9 goals and were better adapted to the national goals and needs (also within the information flow, we never really used term "Aichi targets", but rather national biodiversity goals.

# Level of application

Jurisdiction

National / Federal

# **Relevance of National Targets to Aichi Targets**

Aichi Target components

#### 17. NBSAPs

Submission of NBSAPs to Secretariat by (end of) 2015 NBSAPs adopted as effective policy instrument

NBSAPs are being implemented

Sub-Aichi Targets or Target components

19. Biodiversity knowledge

# Cross-cutting target and issues: Financing and resource mobilisation

Rationale for the National Target

All national as well as Aichi Biodiversity Targets cannot be fulfilled without proper budget and targeted financial allocations; that is the reason, why this target is cross-cutting and relevant for all targets.

ΕN

#### Level of application

Jurisdiction

National / Federal

# **Relevance of National Targets to Aichi Targets**

Aichi Target components

#### 20. Resource mobilization

Mobilization of financial resources implementing the Strategic Plan for Biodiversity from all sources have increased substantially from 2010 levels

Section II. Implementation measures, their effectiveness, and associated obstacles and scientific and technical needs to achieve national targets

#### Act No. 543/2002 on Nature and Landscape Protection

Measures taken to contribute to the implementation of your country's national biodiversity strategy and action plan

Ministry of Environment of the Slovak Republic as well as the State Nature Conservancy of the Slovak Republic are the main organisations dealing with the nature, biodiversity and landscape protection (including caves) in Slovakia, which are responsible for the tasks and activities covered by the relevant legislations - Act No. 543/2002 on Nature and Landscape Protection and by the Act No. 15/2005 on the Protection of Wild

Fauna and Flora by Regulation of Trade in them (basically implementation of the CITES Convention). Both organisations are the main expert institutions, and they co-operate with other expert organisations, focused on environmental and nature and landscape protection (as for example Slovak Environment Agency), with international organisations (partner organisations in the other countries, mostly on implementation of global, EU, cross-border projects) as well as with all regional and local governments, NGOs and other stakeholders.

ΕN

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes

#### Measure taken has been partially effective

tools or methodology used for the assessment of effectiveness above

As the legislation covers all issues linked to the nature, biodiversity and landscape protection, it is rather difficult to describe, where it works well and where are some limitations, but generally mentioned,

the legislation is prepared well - problems are linked more with the proper implementation or with the weak enforcement of the law in some areas of nature, biodiversity and landscape protection.

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Other relevant information

NBSAP include 9 goals, 167 tasks and actions, which are directly or indirectly linked to the proper implementation of the above mentioned laws and acts and their fulfilment would not be possible without a proper implementation of this main act. If we assess the conclusions and outcomes of all tasks, we always have to mention also the relation to the implementation of the law.

Obstacles and scientific and technical needs related to the measure taken

Problems are rather opposite - scientific and technical needs related to the measures are sometimes further and have no limits, while the legislation and relevant acts yes. Implementation of relevant tasks are then rather limited within the scope of the established legislation.

ΕN

National strategy for biodiversity protection in Slovakia 2011 - 2020 (updated in 2014), action plan for implementation of the strategy (updated in 2014) and list of indicators for status and protection of biodiversity in Slovakia (updated in 2016)

Measures taken to contribute to the implementation of your country's national biodiversity strategy and action plan

NBSAP and the list of indicators cover all necessary tasks, activities and tools, which are necessary for fulfilment and implementation of the CBD as well as the European Union (EU) 2020Biodiversity Strategy.

Slovak NBSAP (with the list of indicators) include all relevant Aichi Biodiversity Targets as well as national goals and aims, targets, which were established and adapted according to the Slovak conditions and requirements. List of indicators cover 64 indicators linked to biodiversity, which are set up in relation to CBD indicators, as well as EU indicators (SEBI) as well as national indicators - some of them are working well, but most of the indicators will need significant improvements esp. in proper collection of data.

ΕN

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes

Measure taken has been partially effective

tools or methodology used for the assessment of effectiveness above

Main outcome of the results for the implementation of aims, targets and goals was the assessment of the NBSAP in 2017 and the outcomes of the list of indicators for the status and protection of biodiversity in 2015 - these assessments were prepared and taken into account by the Slovak Government. Within the assessments, Ministry of Environment and State Nature Conservancy described all 167 activities and it

was visible, how far the implementation of all tasks and activities is in place. Last assessment was done now, in December 2018 - within the assessment is visible all work, which was done uptil now and what is still necessary to be done till 2020. Final assessment of the action plan will be done in 2021, while the new strategic framework will have to be implemented in the same. Positive is that the knowledge from the present NBSAP can be used and new framework can take it into account this experiences and results. This is the reason, why we have to implement the present NBSAP, but on the same time look at the discussions of the Post-2020 plans, which should continue, where the implementation works well and change the direction, where significant improvements are necessary.

#### Other relevant information

NBSAP cover 167 tasks, and it is difficult to describe, how all of them are implemented - some are implemented and fulfilled effectively, some are only partially effective and some are still implemented ineffectively. All depends on the aim of the task, on co-operation with other stakeholders, other ministries, organisations and institutions = basically on how the understanding of the mainstreaming of biodiversity is understood, taken into account, implemented, etc.

Obstacles and scientific and technical needs related to the measure taken

As it was mentioned above, problems are rather opposite - scientific and technical needs related to the measures are sometimes further and have no limits, while the legislation and relevant acts do have some limits. Implementation of relevant tasks are then rather limited to the established legislation as well as to the structure and activities of the NBSAP - often the case is that not all scientific and technical needs are taken into account or the opposite - legislation and tasks are not prepared in line with the scientific and technical needs and projects.

Concept of nature and landscape protection 2006-2015 (update postponed in 2016 and now updated for 2019 - 2030)

Measures taken to contribute to the implementation of your country's national biodiversity strategy and action plan

Slovak concept of nature and landscape protection was already in place, when the NBSAP were not prepared properly and when not all the requirements of the Convention on Biological Diversity were taken into account. Concept was focusing on national nature and landscape protection aims and goals, while the NBSAP are focused also on other and broader issues and topics related to biodiversity

ΕN

ΕN

protection, also beyond the classical nature and landscape protection. For the moment, discussions on future concept demarcation lines are taking place and new concept for 2019 - 2030 should be approved by the Government till summer 2019.

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes

# Measure taken has been partially effective

tools or methodology used for the assessment of effectiveness above

As the concept has rather general scope and framework, it is difficult to assess its effectiveness - but generally it is important to say that the base is coming from the Act 543/2002 on nature and landscape protection,

which was prepared already longer time ago (in 2002) when the situation was different as it is now; at that time the meaning of the concept was more important than at the present, when also other strategies and APs are already in place and which are taking into account also requirements of nature, biodiversity and landscape protection.

ΕN

#### Other relevant information

NBSAP is in line with the Slovak concept on nature and landscape protection - concept is rather more general and it creates a framework for the whole nature and landscape protection in Slovakia, while NBSAP is more detailed and focus on more detailed necessities and problems as well as links to other sectors, which have to be implemented in Slovakia (NBSAP are taking into account also CBD and EU targets and requirements more in details).

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Obstacles and scientific and technical needs related to the measure taken

Slovak concept is rather general document, which is not described in such a details and it does not really take into account detailed scientific and technical needs (but it is automatically respected that the concept covers also general scientific and technical needs).

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# Priority Action Framework (PAF)

Measures taken to contribute to the implementation of your country's national biodiversity strategy and action plan

Priority Action Framework (PAF) was developed in 2012 and later (in 2013 and 2015) updated for a programming period 2014-2020 as a multi-annual strategic planning

tool providing comprehensive overview of measures needed for implementation of European Natura 2000 network and related Green Infrastructure with financial needs for these measures and their relation to relevant EU financial programmes and tools. PAF is allocating EU as well as national financial resources to all necessary measures and actions related to protection of Natura 2000 habitats and species and tries to set up the best available connections and links to other sectors, policies, legislations, etc.

#### National Target(s)

A.1 Stop the deterioration of the status of all species and habitats, especially those covered by EU legislation and achieve a significant and measureable improvement in their condition.

A.2 Ensure that both general public and professionals are aware of the importance of biodiversity and the steps towards its protection and sustainable use

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes

# Measure taken has been partially effective

tools or methodology used for the assessment of effectiveness above

As PAF is mainly linked to the protection of Natura 2000 sites, we have selected those national targets, which are related to EU legislation.

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#### Other relevant information

Previous versions of PAF were also used as a basis for preparation of the national NBSAP and are publically available.

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Obstacles and scientific and technical needs related to the measure taken

PAF is very often taken as a basic document and material for addressing the needs, financial allocations and cooperation for Natura 2000 preparation and implementation and should cover all the aspects, which are necessary for protection of all Natura 2000 sites. For EU countries, where also Slovakia belongs, this is an obligatory document, which have to be submitted to Directorate General for Environment in Brussels - they are using it for their internal purposes, how to set up the EU financial resources for Natura 2000 purposes.

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Greener Slovakia - Strategy of the Environmental Policy of the Slovak Republic until 2030 (so called Envirostrategy)

Measures taken to contribute to the implementation of your country's national biodiversity strategy and action plan

New greener strategy for the whole environment was prepared during last two years and it was approved only at the beginning of the year 2019. This Envirostrategy covers all important environmental topics and issues, including nature, biodiversity and landscape protection.

For this partial sector of environment, description of sustainable use and effective protection of natural resources set up its goals.

Among them belong the following:

- A. Effective protection of nature and landscape
- 1. Stopping the loss of biodiversity
- 2. Reform of the state nature conservation institutions
- 3. Simplification of the system and the maintenance of non-interference in the area with the highest level of protection
- 4. Evaluation and sustainable use of ecosystem services
- 5. Development and implementation of an integraed concept for the protection of nature

ΕN

- B. Sustainable land management
- 1. Supporting more environmentally friendly practices in agriculture
- 2. Protection and restoration of landscape elements on agricultural land
- 3. Addressing the status of white areas
- C. Production of forest environmental services
- 1. Sustainable timber harvesting
- 2. Maintaining the prohibition of the logging in the area with the highest level of protection and near rivers
- 3. Effective control of timber harvesting
- D. The rational use of the rock environment

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes

#### Unknown

tools or methodology used for the assessment of effectiveness above

The Strategy for the Environmental Policy of the Slovak Republic until 2030 was based on international, European and national legislation and applicable strategic documents, as well as from the study of the European Environment Agency that was focused on the analysis of global megatrends, and the follow-up assessment of global megatrends from the point of view of the Slovak Republic. The knowledge from the building of scenarios up to 2020 for biodiversity and climate change was also used.

Current international and national policies and strategy papers are listed in Appendix 1.Envirostrategy 2030 regulates the negative impacts on the environmental compartments, and it should be followed by ministries, private sector and publicsector.EU environment policy is based directly on the articles of the Treaty on the Functioning of the European Union, as well as on its measures and winding-up legislation.

In 2013, the EU adopted the 7th Environmental Action Program (EAP), which governs the EU's environment policy by 2020.

The EAP sets out a long-term vision for the EU's 2050 objectives and includes three priority areas for action:

- 1.natural capital: to protect, conserve and enhance fertile soil, seas, fresh waters, clean air and biological diversity;
- 2.resource efficient economy: ensure full implementation of the EU environmental packageand EU energy package; improve the environmental performance of products and reduce the environmental impact of consumption;
- 3.human health and well-being: to safeguard citizens from environmental impacts and risks to their health and well-being; air and water pollution, excessive noise and toxic chemicals are among the major environmental concerns.

Other relevant information

All relevant strategies, policies and legislation (including NBSAP and those related to nature, biodiversity and landscape protection) were automatically covered by this new strategy, new strategy just covered those aspects, which are rather new, should be improved or changed, should be added within the environmental agenda, etc. When we will discuss the CBD Post-2020 agenda, it will be automatically combined with already approved above mentioned greener strategy.

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Obstacles and scientific and technical needs related to the measure taken

The Ministry of the Environment of the SR is responsible for the preparation and implementation of most of the Envirostrategy 2030 measures. This concerns measures in the field of: water protection and the consequences of floods, nature and landscape protection, biodiversity and protected areas, rational use of the rock environment, climate change and air protection, the circular economy, including waste management, green public procurement or green innovations, environmental assessment and energy impacts, economic instruments for the environment and environmental education. But closer cooperation with other ministries as well as organisations/institutions or other stakeholders will be necessary.

Section III. Assessment of progress towards each national target

A.1 Stop the deterioration of the status of all species and habitats, especially those covered by EU legislation and achieve a significant and measureable improvement in their condition.



# 2018 - Progress towards target but at an insufficient rate

**Targets** 

A.1 Stop the deterioration of the status of all species and habitats, especially those covered by EU legislation and achieve a significant and measureable improvement in their condition.

ΕN

# Category of progress towards the implementation of the selected target

Rate of progresses toward the implementation of the selected target

Progress towards target but at an insufficient rate

Date the assessment was done

13 Aug 2018

Summary of the assessment of progresses toward the implementation of the selected target

In the 5th National Report on the implementation of the Convention on Biological Diversity (CBD), which was prepared by the Ministry of Environment of the Slovak Republic, we used the information published in national Report on the state of the environment in Slovakia (2013 and 2014), as well as the national reporting for the implementation of the 2 EU directives (Council Directive 92/43/EC, referred to as the Habitat Directive and Council Directive 2009/147/EC known as the Birds Directive); both directives established Natura 2000 network in Slovakia and broadly within the EU. Last reporting on the implementation of the EU directives was published in 2013, next one will be done in 2019. From the publishing of the 5th National Report, Slovakia made a significant progress especially in relation to designation of new Natura 2000 sites, preparation of new management plans for protected areas as well as preparation of new management plans and action plans for rescue of endangered animal species.

ΕN

For the designed sites of Natura 2000, several management plans will have to be prepared, which should be the baseline for all activities and measures in those areas (including financial support for the their sustainable management in the future). Several new management plans for protected areas (Special Protection Areas of (SPAs) for birds protection) were prepared from 2015:

- Management plans for these SPAs were prepared: Horná Orava, Kráľová, Sĺňava, Dolné Pohronie, Veľkoblahovské rybníky a Špačinskonižnianske polia (for years 2017)
- 2046); Dolné Považie, Dubnické štrkovisko, Parížske močiare, Košická kotlina,
   Ondavská rovina, Poiplie, and Ostrovné lúky (for years 2018 2047).
- Management plans for the National Park Poloniny in 2016 (for years 2017 2026) and for National Park Slovenský raj in 2015 (for years 2016 - 2025).

By the end of 2018 some 86 management plans have been adopted for Special Areas of Conservation (SACs) for habitats and plant and animal species protection. Another

89 management plans have been elaborated and during 2019 will be submitted for adoption to environment authorities together with designation plans as protected areas. We have mentioned "Progress towards target but at an insufficient rate", because all these management plans are really useful and important, but they are rather still on the paper and their practical implementation is rather question for the future. For their proper implementation involvement of all relevant stakeholders and significant cooperation with them will have to be improved in the future.

#### **Indicators and Activities**

Indicator(s)used in this assessment

For the assessment of the CBD on the national level, we have created a national list of indicators (with 64 indicators), which was updated in 2015. From the assessment it is mentioned, that significant progress has been made also towards improvement of all relevant indicators, but most of the indicators for species and habitats protection are rather used for the reporting of the EU directives. From the updated list of indicators it is visible, that they are not really linked to the implementation of the NBSAP, and more towards harmonisation of all tools will have to be done. Next updating of the national list of biodiversity indicators will be done in 2021.

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Any other tools or means used for assessing progress.

More important and useful tool is the Comprehensive Information and Monitoring System of the State Nature Conservancy of the Slovak Republic (KIMS). This system was established in 2015 within the project financially supported by the EU "Preparation and establishment of the habitats and species monitoring and improvement of the information access for the public", which was realised by the State Nature Conservancy (SNC). Main task was to improve the access to information for general public, nature lovers and watchers, but as well as experts dealing with the occurrence and status of habitats and species of the EU importance. Philosophy is based on the principle "more I am collecting data on protected species and habitats, more I am helping to protect them and the nature". KIMS system is used for the keeping, selection and publishing of public data to the general public and showing the effective work of SNC experts through available and easily accessible data on occurrence and status of protected species and habitats.

ΕN

#### Level of confidence

Level of confidence of the above assessment

Based on partial indicator information and expert opinion

Level of confidence of the above assessment

All information are available - also on the webpages of the Ministry of Environment as well as the State Nature Conservancy.

ΕN

Adequacy of monitoring information to support assessment

Monitoring related to this target is partial (e.g. only covering part of the area or issue)

A.2 Ensure that both general public and professionals are aware of the importance of biodiversity and the steps towards its protection and sustainable use



#### 2018 - On track to achieve target

**Targets** 

A.2 Ensure that both general public and professionals are aware of the importance of biodiversity and the steps towards its protection and sustainable use

ΕN

# Category of progress towards the implementation of the selected target

Rate of progresses toward the implementation of the selected target

On track to achieve target

Date the assessment was done

13 Aug 2018

Summary of the assessment of progresses toward the implementation of the selected target

Within the assessment of the NBSAP in 2017, several activities and tasks were mentioned for the improvement of the awareness raising both for general public as well as for experts. Several events and work especially in 2016 helped to improve this situation also thanks to the Slovak Presidency of the Council of the European Union, which was executed in the second half of the year 2016, when was also organized the 13th Conference of the Parties of the Convention on Biological Diversity as well as its protocols. Sectoral Strategy of the Ministry of Environment on environmental

education and awareness to 2025 was adopted in 2015.

Also thanks to the changes in our society in 2018, general public started to be much more sensitive to environmental issues, as for example forest management. Several public hearings and articles were published also in relation to massive logging of forests, and petition was raised against it, with 50000 people signed under it. This petition and linked articles helped to increase discussion on value of Slovak forests, as well as finding compromises between the level of protection of protected sites (especially national parks) as well as sustainable management of forests. It is possible to mention, that the awareness of the biodiversity importance increased, but there is still not sufficient awareness of what general public can do to protect the nature, biodiversity and landscape better. But also thanks to several other hearings, discussions, exhibitions, etc. public started to be aware of the fact, how biodiversity is important for they daily lives and how biodiversity loss will lead to other economical, as well as social problems in our society. Thanks to the last IPBES Global assessment for biodiversity and ecosystem services, media started to be also very active in biodiversity topic, which helped to look at nature, biodiversity and landscape protection from much broader scale.

#### Level of confidence

Level of confidence of the above assessment

Based on expert opinion

Level of confidence of the above assessment

Information about this special target is coming from the assessment of NBSAP, which was prepared at the beginning of 2017, when the Ministry of Environment together with the State Nature Conservancy as well as with other expert organisations summarised all the tasks and events related to the improvement of awareness raising both for general public as well as for experts. Summary of all activities helped to see the overall picture, which was done to fulfil and achieve this target.

ΕN

Adequacy of monitoring information to support assessment

No monitoring system in place

B.3 By 2020, ensure the preservation of ecosystems and the enhancement of ecosystem services by means of green infrastructure and the restoration of at least 15% of degraded ecosystems



# 2018 - No significant change

**Targets** 

B.3 By 2020, ensure the preservation of ecosystems and the enhancement of ecosystem services by means of green infrastructure and the restoration of at least 15% of degraded ecosystems

ΕN

# Category of progress towards the implementation of the selected target

Rate of progresses toward the implementation of the selected target

#### No significant change

Date the assessment was done

# 13 Aug 2018

Summary of the assessment of progresses toward the implementation of the selected target

Within the NBSAP assessment, also the tasks and activities related to the ecosystem restoration were mentioned, but the 15 % target was definitely not achieved. Several projects on local level helped to restore and protect some habitats and ecosystems (esp. in floodplain, grasslands and peatland habitats), but a prioritised framework for the common restoration of ecosystems was not yet prepared.

ΕN

#### Level of confidence

Level of confidence of the above assessment

#### Based on expert opinion

Level of confidence of the above assessment

Results are coming from the assessment of the NBSAP, which were assessed in the mid-term period of their implementation.

ΕN

Adequacy of monitoring information to support assessment

No monitoring system in place

C.4 By 2020, implement the measures of the Common Agricultural Policy that have positive effects on biodiversity at all cultivated areas so as to measurably improve the condition of species and habitat



# 2018 - Progress towards target but at an insufficient rate

#### Targets

C.4 By 2020, implement the measures of the Common Agricultural Policy that have positive effects on biodiversity at all cultivated areas so as to measurably improve the condition of species and habitat

ΕN

# Category of progress towards the implementation of the selected target

Rate of progresses toward the implementation of the selected target

# Progress towards target but at an insufficient rate

Date the assessment was done

#### 13 Aug 2018

Summary of the assessment of progresses toward the implementation of the selected target

After the accession of Slovakia into EU, several financial periods with special measures of the EU Common Agricultural Policy were prepared. Within the Rural Development Programmes 2004-2006 and 2007-2013, several measures and schemes for protection of natural and semi-natural grasslands as well as for forest land were created and they helped to maintain them in proper conditions.

Within the present Rural Development Programme 2014 - 2020, as well as for the direct payments to farmers, environmental baselines were improved, but the controlling and monitoring system is not well in place and it is difficult to say, what was achieved on the ground - both on agricultural and forested land.

ΕN

Interlinkages between the environmental and agricultural institutions are not well established on the ground and it is difficult to assess the results of all these conditions, measures and schemes.

#### **Indicators and Activities**

Indicator(s)used in this assessment

Indicators are in place for the achievements of the Common Agricultural Policy and also for the environmental and nature protection monitoring, just the results between them are not connected properly yet. Exchange of information must be significantly improved and there are several processes going on also at present. Information and indicators, which have the State Nature Conservancy (SNC SR) are not really covered by the MoA and vice versa - information and indicators of the Common Agricultural Policy are only slightly covered by the SNC SR. Due to this reason, it is very difficult to see and monitori all changes, which are going on on the ground, and how the finances and measures of the CAP are contributing to these changes.

EN

Any other tools or means used for assessing progress.

Rural Development Programmes include several indicators, which cover also those, which are relevant for the nature protection purposes. Exchnage of indicators between nature sector and agricultural sector will have to be improved significantly for the future, while only with good exchange of data, we can monitor the changes on habitats and species.

ΕN

#### Level of confidence

Level of confidence of the above assessment

Based on partial indicator information and expert opinion

Level of confidence of the above assessment

Results for this target are coming from several resources - both from the environmental and also agricultural institutions and sources - their interlinkages have to be improved both for the present as well as for the future.

ΕN

Adequacy of monitoring information to support assessment

Monitoring related to this target is partial (e.g. only covering part of the area or issue)

C.5 Implement national programs of forest management so as to achieve a measurable improvement in the condition of species and habitats dependent on suitable forest environment and those, which are significantly affected by forestry practices, and to ensure a measurable improvement in the provision of ecosystem services in accordance with sustainable forestry practices as compared to the EU reference condition (2010)



# 2018 - No significant change

#### **Targets**

C.5 Implement national programs of forest management so as to achieve a measurable improvement in the condition of species and habitats dependent on suitable forest environment and those, which are significantly affected by forestry practices, and to ensure a measurable improvement in the provision of ecosystem services in accordance with sustainable forestry practices as compared to the EU reference condition (2010)

ΕN

#### Category of progress towards the implementation of the selected target

Rate of progresses toward the implementation of the selected target

#### No significant change

Date the assessment was done

#### 13 Aug 2018

Summary of the assessment of progresses toward the implementation of the selected target

During the years 2017 and 2018, there were several good improvements in forest protection (better legislation, better cooperation between foresters and nature protection experts), but on the other side, lot of questionable logging was done on the ground, including in national parks and protected landscape areas.

ΕN

#### Indicators and Activities

Indicator(s)used in this assessment

Several indicators are in place - for nature protection and CBD implementation, for Rural Development Programme and forestry measures as well as for purposes of the forest management authorities; their interlinkages and connections still need significant improvements.

ΕN

Any other tools or means used for assessing progress.

FN

As mentioned above, several indicators are in place - for nature protection and CBD implementation, for Rural Development Programme and forestry measures as well as for purposes of the forest management authorities; their interlinkages and connections still need significant improvements.

#### Level of confidence

Level of confidence of the above assessment

Based on partial indicator information and expert opinion

Level of confidence of the above assessment

There is difference between the indicators and results coming from them and results coming from the Earth Observations - discussions about the relevance of all results is now going on in Slovakia, with NGOs strong involvement.

ΕN

Adequacy of monitoring information to support assessment

Monitoring related to this target is partial (e.g. only covering part of the area or issue)

C.6 Ensure adequate protection of water and water- dependent habitats and species to achieve a good condition of aquatic ecosystems by 2020, and ensure that the development of aquaculture does not have adverse effects on aquatic species and ecosystems



# 2018 - No significant change

#### **Targets**

C.6 Ensure adequate protection of water and water- dependent habitats and species to achieve a good condition of aquatic ecosystems by 2020, and ensure that the development of aquaculture does not have adverse effects on aquatic species and ecosystems

#### Category of progress towards the implementation of the selected target

Rate of progresses toward the implementation of the selected target

# No significant change

Date the assessment was done

#### 13 Aug 2018

Summary of the assessment of progresses toward the implementation of the selected target

For the water ecosystems and aquaculture there are different situations - where the floodplain restorations were taken place, the ecological situation improved, but where are new hydro-power plants built, the situation for water habitats and species worsened. For the aquaculture, new Act is under the preparation, and it already takes into account also ecosystem services value, which is a significant way forward (but this started only in 2018 and discussions are still ongoing, it is already clear that this new act will not be approved during near future). On the other side, positive is that there is a new act on invasive alien species approved and this act covers also water related species and their eradication from environment.

#### Indicators and Activities

Indicator(s)used in this assessment

Indicator is rather limited to some elements of water habitats and species. As it was already mentioned for forests and agriculture, also in relation to water habitats and species, better cooperation and esp. exchange of information and data with water management authorities would help to improve the situation and management of these habitats and species.

ΕN

ΕN

#### Level of confidence

Level of confidence of the above assessment

#### Based on expert opinion

Level of confidence of the above assessment

Indicators for this target are rather limited.

ΕN

Adequacy of monitoring information to support assessment

Monitoring related to this target is partial (e.g. only covering part of the area or issue)

D.7 Ensure the reduction of negative effects of invasive species on biodiversity and ecosystems in Slovakia by 2020



#### 2018 - On track to achieve target

**Targets** 

D.7 Ensure the reduction of negative effects of invasive species on biodiversity and ecosystems in Slovakia by 2020

ΕN

# Category of progress towards the implementation of the selected target

Rate of progresses toward the implementation of the selected target

# On track to achieve target

Date the assessment was done

# 14 Aug 2018

Summary of the assessment of progresses toward the implementation of the selected target

Main achievement within this target was the preparation of the new act on invasive alien species, which will help to eradicate and control the spread of invasive alien species in Slovakia. It took almost 2 years to prepare and negotiate this act, but it was finally approved by the Government. After new act will be in place, a new strategy will be prepared, which will help to develop new activities, which will be implemented on the ground, with intensive cooperation with all relevant stakeholders.

ΕN

First active elimination of animal species is already going on, where the State Nature Conservancy is already actively involved in catching and killing those animal species, which are invasive in Slovakia.

#### Level of confidence

Level of confidence of the above assessment

# Based on expert opinion

Level of confidence of the above assessment

Preparation of the new act helped to put together all relevant stakeholders and it was a good basis for cooperation in this field; experts understand problems of this topic and also problems, which arise from spreading of invasive species, as well as from positive impacts of eradication of IAS. Once the act will be in force, other concrete measures can start to be implemented - they will be in line with activities mentioned in NBSAP, but might be broader.

ΕN

Here also the monitoring system will have to be put in place - already existing KIMS (Complex indicators and monitoring system) will be probably broaden also in relation to invasive alien species and their identification and monitoring.

Adequacy of monitoring information to support assessment

No monitoring system in place

E.8 Reduce the intensity of negative factors affecting biodiversity; finalize, for this purpose, an effective legal framework and tools ensuring compliance with relevant legislation, and ensure fair and equitable sharing of benefits arising from the utilization of genetic resources



### 2018 - On track to achieve target

#### **Targets**

E.8 Reduce the intensity of negative factors affecting biodiversity; finalize, for this purpose, an effective legal framework and tools ensuring compliance with relevant legislation, and ensure fair and equitable sharing of benefits arising from the utilization of genetic resources

ΕN

#### Category of progress towards the implementation of the selected target

Rate of progresses toward the implementation of the selected target

#### On track to achieve target

Date the assessment was done

#### 14 Aug 2018

Summary of the assessment of progresses toward the implementation of the selected target

Main achievement for this target was that Slovakia ratified the Nagoya protocol in 2016, as well we implemented all relevant legislation and regulations, which covered the international, as well as the common European Union (EU) issues. Our national expert is regularly participating at the EU expert meetings, where they are discussing all necessary issues and topics linked to the proper implementation of the Nagoya Protocol in the EU and as a follow-up also on the national level. In the following years, we still have to improve the implementation of the Nagoya Protocol on the ground, where the cooperation also with other relevant institutions and research organisations will have to be improved.

ΕN

In relation to other genetic resources, especially those related to agriculture and agricultural products, Ministry of Agriculture and Rural Development of the Slovak Republic with its organisations and institutions are regularly informing us on their new activities and projects, esp. related to the evaluation and assessment of NBSAP and goals and activities related to genetic resources. In the future, more detailed cooperation and involvement on genetic resources protection also of the Ministry of Environment of the Slovak Republic and State Nature Conservancy of the SR will be necessary.

#### Level of confidence

Level of confidence of the above assessment

#### Based on expert opinion

Level of confidence of the above assessment

This level of confidence is arising from the common EU approach, as all the EU countries are involved in the implementation of the Nagoya protocol - so Slovakia is more or less on the same track, as other EU countries.

ΕN

Adequacy of monitoring information to support assessment

Monitoring related to this target is partial (e.g. only covering part of the area or issue)

Monitoring system for the target

Slovakia is linked to the DECLARE NAGOYA IT system, where all EU countries are connected - more will have to be done on the national IT systems implementation.

F.9 Engage a wide range of stakeholders and establish or re-establish partnerships to support the implementation of the national strategy for biodiversity; promote education, training, research and participation



# 2018 - Progress towards target but at an insufficient rate

**Targets** 

F.9 Engage a wide range of stakeholders and establish or re-establish partnerships to support the implementation of the national strategy for biodiversity; promote education, training, research and participation

ΕN

# Category of progress towards the implementation of the selected target

Rate of progresses toward the implementation of the selected target

Progress towards target but at an insufficient rate

Date the assessment was done

14 Aug 2018

Summary of the assessment of progresses toward the implementation of the selected target

Ministry of Environment of the Slovak Republic as well as the State Nature Conservancy are strengthening their involvement, cooperation and mainstreaming biodiversity into other sectors and other relevant strategies and legislation. Within the last 2 years, a significant improvement in cooperation was done in the field of agriculture (including aquaculture), forestry, water management, health, urban development, transport, etc. Understanding of the nature and biodiversity protection, as well as protection of ecosystems and their services for sustainable economic, social and environmental development become stronger topic within several discussions towards future (also thanks to the Agenda 2030 and SDGs implementation).

More will have to be done on the ground, with practical measures and proper implementation of all relevant strategies, legislation, etc. - it is more difficult to be involved in other sectors policies and activities, but where the cooperation is working well, results can be seen also on the ground. Some projects, esp. on green infrastructure are helping now to involve more stakeholders, esp. municipalities into better management of our landscape and ecological stability of the whole country. Ministry of Environment of the SR together with the State Nature Conservancy are trying to harmonise all contracts and agreements with stakehoders on proper

implementation of our nature and biodiversity goals and aims, and when all these

tools and mechanisms will be in place, we will have an overview, which can be assessed in the longterm more in details and adapt to the overall needs (including planning of the financial allocations).

#### Level of confidence

Level of confidence of the above assessment

Based on expert opinion

Adequacy of monitoring information to support assessment

No monitoring system in place

Cross-cutting target and issues: Financing and resource mobilisation



# 2018 - Progress towards target but at an insufficient rate

Targets

Cross-cutting target and issues: Financing and resource mobilisation

ΕN

#### Category of progress towards the implementation of the selected target

Rate of progresses toward the implementation of the selected target

Progress towards target but at an insufficient rate

Date the assessment was done

14 Aug 2018

Summary of the assessment of progresses toward the implementation of the selected target

Significant achievements were done in relation to proper implementation and focused and targeted allocation of the ODA (official development assistance (ODA)) and better

cooperation with the Ministry of Foreign Affairs, with their Agency was established. Due to this better cooperation, increase and mobilisation of resources was planned for years 2018, as well as new strategy for ODA 2019 - 2023 was prepared. We still have to be prepared to set up a list of priorities for projects and activities in some countries, as well as for most relevant projects, which Slovakia would like to support. Good step forward is also linked to the better involvement of our Ministry of Finances of the SR, which is also starting to be more involved in this topic.

In relation to the domestic resorce mobilisation, more will have to be done - national and EU contribution are significant, but their amount is still not sufficient, or their implementation is often questionable, so also more on analysing of all these financial tools will have to be done in the future. Finances are usually allocated in the form of projects, but this is still rather random and not very systematic, with a big help of NGOs (state organisations and institutions are simply not able to solve all issues and problems of nature and biodiversity protection alone) - but a systematic overview of all available financial tools and results of all projects on the ground was not yet done.

#### **Indicators and Activities**

Indicator(s)used in this assessment

We regularly use indicator for ODA allocation as a tool to assess progress towards this national taget - it is available also from the resources of OECD and we regularly describe this progress also in the CBD financial reporting. Domestic resource mobilisation indicators and other tools will still have to be systematically assessed and monitor.

ΕN

Any other tools or means used for assessing progress.

Systematically we are trying to assess and evaluate also the results and achievements of the EU and international financial resources, which are used for different projects in Slovakia. While there are several financial resources, it is very difficult to assess them in details all (it is timely and also on human resources rather difficult).

ΕN

#### Level of confidence

Level of confidence of the above assessment

Based on partial indicator information and expert opinion

Level of confidence of the above assessment

Indicator on allocation of ODA is systematically used, indicators on other financial

sources are still not set up well and information coming from them are rather scattered.

Adequacy of monitoring information to support assessment

Monitoring related to this target is partial (e.g. only covering part of the area or issue)

Section IV. Description of national contribution to the achievement of each global Aichi Biodiversity Target

# 1. Awareness of biodiversity values

Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target

Within the mid-term review of the NBSAP, we have analysed and reviewed all 167 tasks, from which significant part was dedicated to awareness raising activities of biodiversity values. Ministry of Environment of the Slovak Republic was closely working with the State Nature Conservancy (SNC), Slovak Environment Agency and the Slovak Museum of Nature and Conservation and Speleology in several events, awareness raising activities, etc. NGOs and some companies or individuals were also involved and active in promotion of Slovak beauties and natural values and heritage.

Among most important activities, which were done between 2015 (from publishing the 5th national report) and 2018, we can mention the following:

1. SNC is an active member of the Carpathian Network of Protected Areas (CNPA), it has a network of contact persons, who are updating and give information on activities. They are participating on meetings of the Standing committees of the CNPA. The Slovak national focal point is regularly invited also for the common meetings with the Alpine Network of Protected Areas (ALPARC). In 2016 they were involved in the preparation of the Memorandum on Cooperation between networks of protected areas ALPARC, DANUBEPARKS and CNPA and for the preparation of the action plan for the protection and restoration of ecological

ΕN

connectivity (for the connection of Alpine and Carpathian region an article and brochure was prepared). SNC was involved also in preparation and realisation of the campaign to the Day of Carpathian Parks (briefings, presentations, excursions, information stands, ecological games, creation workshops, etc.). SNC coordinates also the Carpathian Wetlands Initiative (CWI), which is also preparing several activities dedicated to the value and protection of wetlands.

2. SNC realised also several other events and activities for different stakeholders, esp. schools, educational and awareness raising activities (presentations, excursions to protected areas, exhibitions, informational

campaigns and informational stands, ecological games, creation workshops, briefings, cleaning of protected areas, rivers and natural trails, competitions, discussions and articles in media, etc.) dedicated to nature and

biodiversity protection (for example 1 513 presentations in schools and for general public were done, with participation of 53 807 people, 325 excursions to protected areas were done, where 9 372 visitors of different groups participated).

- 3. The SNC and the Slovak Caves Administration (SCA) prepared educational and awareness raising events for different stakeholders and groups and with special contents, with main aim to protect biodiversity and caves, and for different occasions International Earth Day, International Children´s Day, in special anniversaries for caves or for relevant institutions. In 2016 SNC and SAC prepared 25 dedicated events for different groups and stakeholders. SEA prepared expert programme under the name "Ecological Footprint" education to the goals of the sustainable development was prepared for teachers in kindergarten, primary and secondary schools (83 participants finished this programme).
- 4. The Slovak Museum of Nature Conservation and Speleology (SMNCS) opened its restored building and new exposition in January 2016, co-financed by the EU through the project with the budget 9,5 mil Eur was. Within the reconstruction, all exposition facilities were modernised so the environmental education can continue in modern and innovated way. To the opening of the museum was published also a brochure.
- 5. In relation to the intersectoral strategy on environmental education, awareness raising, promotion, several measures and schemes are implemented development of successful activities for environmental education
- and awareness raising. One of them is also a market of environmental educational programmes called Šiška ("Cone"), which is dedicated to the exchange of information and knowledge between teachers of primary and
- secondary schools, and coordinators of the environmental education and awareness raising. This market is organized annually. Other programmes and projects focused on biodiversity protection and for several stakeholders and groups are also prepared like school children, coordinators of the environmental education and awareness raising as well as general public. Between the most active sectoral organisations belong the Slovak Environment Agency with its local Eco-centre Dropie, the State Nature Conservancy (SNC) with its local School of Nature Conservation in Varín, National Zoological Garden Bojnice with eco-school, Slovak Mining Museum with its geopark in Banská Štiavnica and the Slovak Museum of Nature Conservation and Speleology.
- 6. Slovak Environment Agency (SEA) within its awareness of biodiversity activities worked on the school programmes like "Ecological footprint" (www.ekostopa.sk), "On the tour with Natura" (www.snaturou2000.sk), "Envirosis" (www.enviroza.sk), BEAGLE (www.beagle.sk), "Learning by Doing"; on realisation of thematic environmental school competitions on national level; organisation of two annual events (20th and 21st event) of international competition of children and youth paintings called "Green World"; and prepared national events supported by the MoE.
- 7. SNC annually realises events and activities to the special environmental days such as the World Wetlands Day, World Water Day, Day of Forests, International Day for Biological Diversity, European Day of Parks, Carpathians Parks Day, World Environment Day, World Conservation Day, World Migratory Bird Day, Day of Trees, International Bat Night, Energy Day, etc. For the reporting period almost 34 000 people from different stakeholders groups and general public participated on these events.
- 8. SEA and SNC prepare every year also side events to the International Festival of Sustainable Development Films Ekotopfilm/Envirofilm. In 2017 SNC organised also the 14th Trienale of International Competition of Posters with the topic of nature and environment protection "Ekoplagát", "Ecoposter" in Žilina, which is already a well-known international competition.
- 9. Organisations of the Ministry of Environment are realising environmental education programmes also for marginalised and/or vulnerable citizens with special health problems. Their aim is with special form increase the awareness raising in nature and

biodiversity protection. Within this aim experts from nature protection organisations visit social-care institutions, special primary and secondary schools, hospitals, and cooperate with NGOs and associations, which are focused on work with marginalised groups of citizens. Within the reporting period, 19 special programmes in different parts of the country were prepared.

- 10. In SNC and within the national parks and landscape protected areas 15 experts work for environmental education. SNC is working also in awareness raising and protection of the caves through the Slovak Caves Administration. From 2015 the sectoral strategy for environmental education, awareness raising and promotion till 2025 is approved, which covers also tasks and activities, which have to be assessed and evaluated annually.
- 11. SNC within the reporting period published also several promotional and information materials within realisation of several projects (financially supported by European Union, Switzerland, Norway and from other sources) for example about the Natura 2000 sites, brochures and leaflets, book about the values of Carpathians, calendars, posters, guidance, stickers, magnets, etc. They are for distribution to general public, schools, teachers, visitors of protected areas, etc. These materials are distributed to information centres of protection areas, schools, local administrations, different organisations and NGOs, etc. Severa Idocumentary films were made for example on wetlands and Ramsar sites in Slovakia, on areas and species of European importance, on primeval beech forests etc.
- 12. SNC operates 12 information centres in protected areas and also make guided tours at 13 show caves. Most of the facilities are in service during the touristic season and provide information especially for visitors of protected areas (in reporting period more than 76 000 visitors visited these information centres, number of visitors in caves are even higher).
- 13. SNC is regularly publishing an expert-methodological and informational journal "Protected Areas of Slovakia, magazine "Nature Protection", as well as magazine on caves protection "Aragonit". SEA is regularly publishing magazine "Enviromagazín", which is dedicated to broader environmental topics, such as water protection, climate change, waste, environmental education and other. SMNCS prepared a catalogue of photographs "Ekofotografia" on nature protection (2015) and "Speleofotografia" on protection of caves (2016).

Other activities contributing to the achievement of the Aichi Biodiversity Target at the global level

Year 2016 was a special one as the Slovak Republic held the Presidency of the Council of the European Union (EU) (second half of 2016) - within this year a lot of events, media releases, exhibitions and other activities were done either in Slovakia or in Brussels, where all EU experts meet regularly to discuss also topics of the nature and biodiversity protection. These events were linked also to the 13<sup>th</sup> Meeting of the

Conference of the Parties to the Convention on Biological Diversity and its Protocols, as well as to other COPs (CITES, IWC, Bern Convention, etc.) - synergies and links between the national, EU and international organisations and targets were improved significantly. For general public, SNC prepared the travelling exhibition on "Biodiversity and National Parks in Slovakia".

ΕN

But the most important task is the preparation of the Clearing House Mechanism for Biodiversity, which we already started in 2018, but more significant work will have to be done, to make it operational. Through CHM we will try to present all important issues related to biodiversity protection, mainly linked to the implementation of the Convention on Biologicla Diversity and its protocols, but also on other biodiversity-related conventions and all other tools and mechanisms for nature, biodiversity and landscape protection.

# 2. Integration of biodiversity values

Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target

Year 2016 was mainly dedicated to international and EU events and activities, as Slovakia held the Presidency of the Council of the European Union (EU) (second half of 2016) - within this year not that many strategies or legislative documents were prepared at national level. National activities and integration of nature and biodiversity protection were broader part of other EU and international actions.

But the years 2017 and 2018 accelerated the processes and fulfilled the most important gaps in this field. In 2017 and 2018 several important strategies, action plans and other activities were adopted and implemented, where the integration of biodiversity values was supported. Among the most important ones, we can mention the following ones:

- 1. Environmental strategy for Slovakia towards 2030 (so called Envirostrategy) its aim is to replace the old strategies in this field, as most of them are already outdated and new elements, also from the international and EU processes are missing. Nature, biodiversity and landscape protection aims and goals are significant part of this strategy. Within the main goals, we can include practical and achievable nature and biodiversity protection must be in place, and will help to halt the loss of biodiversity; reforms of the state nature conservation authorities will be done; simplify the system for protection of protected areas and strengthen the enforcement of legislation; evaluate and sustainable use ecosystems and their services; create and implement integrated concept of landscape protection; sustainable use of soil; balance in the forest management; floods prevention; environmental education in each age and better use of data in policy-making decisions. In 2018, this strategy was discussed under the Strategic Environmental Assessment (SEA) and will be prepared for intersectoral as well as governmental approval.
- 2. In 2017 an updated strategy for adaptation to climate change was prepared within this preparations, nature, biodiversity and landscape protection actors were strongly involved from the beginning. Thanks to the detailed discussions and explanation of the importance of linking the Paris Agreement goals with the aims and fulfilment of the Convention on Biological Diversity and Aichi Biodiversity Targets, ecosystems and nature-based approaches are the core element of the whole climate change strategy. In 2018 after SEA and intergovernmental discussions the Adaptation Strategy was approved by the Government in October 2018.
- 3. At the beginning of 2018, the Action Plan to combat droughts was approved by the Government. This AP was prepared jointly by the Ministry of Environment and the Ministry of Agriculture and Rural Development again all relevant stakeholders were involved and according to this a balanced document was prepared, where combination of green and blue with grey infrastructure was set up for the future (till 2025) to tackle this problem. It was for the first time, when water authorities and nature protection authorities tried to find a balance between the ecosystems/nature-based solutions and bigger technical and technological structures were discussed. At present, concrete actions and activities are planned to fulfil goals of this action plan.
- 4. In 2016-2018 a new concept on nature and landscape protection was prepared, which

will follow on the previous concept, valid until 2015 - this new concept should establish a new framework for nature protection in Slovakia till 2030, which modern and innovative approaches in all different and important aspects (finances and resource mobilisation, education and awareness raising, expertise and implementation of relevant strategies and legislation, etc.). This new concept should be approved by the Government till the middle of 2019.

- 5. Updated National Wetland Policy till 2024 and updated Action Plan for Wetlands for 2019-2021 were developed, following previous documents prepared for years 2015-2018. The Wetland Policy is the principal strategic document for implementation of obligations of the Ramsar Convention on Wetlands, which includes priorities following from the relevant EU directives and national targets. It is based on three main strategic goals and one operational goal and the draft Action Plan 2019-2021 has more than 60 proposed actions. It will be submitted for approval to the Slovak Government in the beginning of 2019.
- 6. Updated Prioritised Action Framework (PAF) this is a document, which has to be prepared for the EU requirements and needs in relation to the Natura 2000 network and its financing. Natura 2000 network is a network of EU protected areas, which have to be also financially supported through all accessible EU funds and resources and PAF should allocate them according to needs, requirements of relevant stakeholders, and fulfillment of proper management requirements. New PAF should set up, how the financial instruments for the period 2021 2027 will be structured for Natura 2000 protection and management needs. On the intersectoral scale and mainstreaming of biodiversity, we have been working also on strategical documents, which are linked to the National Economical Strategy, National Investments Strategy, Concept for Urban Development (significant part is dedicated to the urban biodiversity and green and blue infrastructure), Strategy and ODA resources mobilisation (2019 2023) and several other documents.

Lots of documents and strategies are linked to the Agenda 2030 and implementation of SDGs - either on the national level or on the international level to which Slovakia should help to contribute. Nature, biodiversity protection and sustainable use of ecosystems and their services are more and more integrated into those documents, while it starting to be understandable that without the natural resources protection, it will not be possible to achieve Agenda 2030 and SDGs goals.

## 3. Incentives

Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target

Act No. 543/2002 on Nature and Landscape Protection is the main legislation for purposes of the nature, biodiversity and landscape protection. Among several paragraphs there are also § 60 on financial contribution to the management of protected areas or § 61 on financial compensation, when management of areas in protected areas lead to a burden or financial loss. Most of the incentives are linked to the direct payments to farmers in agriculture, which are the basic financial support to all land owners and land users, which are managing the agricultural and forestry land. Additional to the above

mentioned Act and direct payments from the EU Common Agricultural Policy (CAP), there are several other measures and schemes set up mostly as voluntary incentives - these incentives are related to the agricultural land, forestry land as well as for rural development - all these are covered by the EU funds/CAP budget. Similar to the above mentioned act, these incentives are either financial contributions or compensations for several different management requirements and both on agricultural or forestry land. There are several questions open on how these incentives are positively or negatively contributing to the nature, biodiversity and landscape protection - at present, we are discussing, how these incentives and the whole CAP will be structured after 2020 (for the period 2021 - 2027). Similarly to the agricultural and forestry land, there are available also incentives in aquaculture, but Slovakia is not using these incentives properly yet. There are ongoing discussions on future possible use of these incentives also for extensive management of these habitats.

Till present, we did not analysed any other incentives (beyond environmental or agricultural budget) - but it does not mean, there are no any other, which would positively or negatively influence or impact our nature, biodiversity or landscape protection. But for the moment, we are not aware of them.

## 4. Use of natural resources

Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target

This target is one of the most difficult to achieve for the moment. One of the measurable achievements which we can mention here, is in the forestry field, while we are monitoring the management of forests more than in previous years. Results from the Global Forest Watch are not always comparable and harmonised with the official forestry management results and reporting. For the moment comparison of all these forestry and nature protection results is going on, with setting-up the proper monitoring system, where results will be harmonised in the future. These problems are more and more linked to the support of the biomass production and alternative energy support, where the biomass use and production is often pushed towards unsustainable management of forests. Significant changes in forestry as well as in nature and landscape protection acts will help to improve this situation for the future (discussions are ongoing for the moment).

ΕN

Similar situation is linked to the agricultural land and use of those crops, which are important for the use of biomass and biofuels. Enormous pressure on agricultural land is linked to these purposes, which have an impact on landscape management and also diversity of habitats, species and food supplies. Diversified land, as we know it from the past is slowly dissappearing and it has impacts also on management and sustainable use of natural resources.

As a pressure on ecosystems and its services is arising, we will have to carefully monitor the ongoing situation and set up such a suggestions and solutions, which would help both th natural resources use as well as the principles of circular economy. More work and cooperation will have to be done also on awareness raising and promotion of importance of our natural resources, biodiversity, ecosystems and its services for sustainable economic, social as well as environmental development.

#### 5. Loss of habitats

Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target

As mentioned above, some of the forestry habitats are getting lost - results from the Global Forest Watch are not always comparable and harmonised with the official forestry management results and reporting. For the moment comparison of all these forestry and nature protection results is going on, with setting-up proper monitoring system, where results will be harmonised in the future. These problems are more and more linked to the support of the biomass production and alternative energy support, where the biomass use and production is often pushed towards unsustainable management of forests. Significant changes in forestry as well as in nature and landscape protection acts will help to improve this situation for the future (discussions are ongoing for the moment).

Another types of habitats, which have some problems at present, are rivers and water habitats - due to the building of small hydro-power plants. These are in some cases built in still natural and semi-natural water habitats, and they are loosing their value. As a consequence, there are also big losses of fishes and other native animal and plant species, which occur in these types of habitats. There are still significant differences between the view of nature conservationists and water protection authorities on how the water habitats and rivers should be used and managed (these views are even more diversified than with foresters and their economical point of view - but to find the balance with forest managers is easier than with water management authorities, as they still prefer grey infrastructure above the green/blue infrastructure support). So more cooperation and discussions will have to be done also in this field - we will have to work on explanation, why green and revitalised actions and measures for water habitats are more valuable as building of the new and technical infrastructures and solutions.

And as it was also mentioned above, we are slowly loosing also diversified agricultural habitats and species, like orchards, meadows, pastures, solitare trees, etc. as most of the agricultural lands are used for the plantation of fast growing trees and monocultures of oil-seed rapes and corns. Slovak landscape in general is loosing its structure, elements and everything, what is connected with its typical view from the past - on one side we tackle with its intensification (especially on the southern part of Slovakia), but also with abandonment of the land (especially on the northern part of Slovakia) - these two extremes and degradation of land will have to be changed soon, otherwise we will not

manage to achieve any of the Aichi Biodiversity targets, as well as other environmental goals.

#### 6. Sustainable fisheries

Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target

Slovakia is a terrestrial country, so the contribution towards the marine and coastal habitats protection is minimal, but we still have a big amount of inland aquaculture, where the ecosystems approach has to be improved. Till now, the extensive aquaculture was only partially financially supported or compensated, but at present, the new act on fisheries was adopted and the act on aquaculture is under preparation, where ecosystem approaches are being included. From 2004 we had very good tools for financial support and compensation of extensive aquaculture from the EU Common Fisheries Policy (so called aqua-environmental schemes), but they were not used in Slovakia. For post 2020 financial framework, this should be improved - nowadays, only from the Act on Nature and Landscape Protection, some of the financial support/compensation can be used also in aquaculture (when animals like beaver, otter, cormorant or grey heron make significant damages on relevant habitats and fish).

ΕN

Within the new act on fisheries and act on aquaculture also eradication of invasive alien species is being solved, as this is also one of the most important preventive mechanisms, which will have to be improved in several acts and legislations (as well as in the forestry legislation, agricultural legislation is covering this topic partially). New act on invasive alien species will help to contribute also to this topic partially - where it will be connected to the water and wetland types of habitats and species.

## 7. Areas under sustainable management

Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target

Agriculture - Slovakia has to fulfil requirements and obligations of the EU Common Agricultural Policy (CAP), where the basic framework is established and countries can implement them according to their needs. This framework together with the financial allocation gives every country possibilities, how to use them according to their needs, natural conditions, problems, visions, etc. Significant part of these finances and measures is allocated also for nature and landscape protection, as well as for rural development. Measures and schemes prepared for nature protection are allocated for extensive management of grasslands, ecological agriculture, conversion of arable land into grasslands, especially in floodplain areas, etc. From measures and schemes allocated for rural development, several local activities in villages can be supported - establishment of green and blue infrastructure, development of small local biomass power plants, diversification of farms, etc.

Forestry - although the above mentioned CAP is mostly targeting agricultural land and farmers, also foresters and forest land can be financially supported. These measures and schemes are focused on new technology and investments for forestry, support of innovative approaches, as well as support of forest-environmental schemes, which are supporting extensive forest management especially in protected areas. Mainly small forest users and owners can get financial support for their management needs.

For fisheries and aquaculture, the EU Common Fisheries Fund (CFF) include financial support also for extensive fisheries and aquaculture management, unfortunately, Slovakia has not used them properly yet. There is a clear misunderstanding of the mechanisms and tools, which are structured under the CFF.

Additionally, some financial support and compensation payments for all 3 sectors are also part of the Act on Nature and Landscape Protection, these are only additional financial tools to the above mentioned policies and legislation and can be used only in protected areas, or for protected habitats and species. Above mentioned agricultural, forestry and fisheries policies are rather broader and focused on the whole country level.

Other activities contributing to the achievement of the Aichi Biodiversity Target at the global level

Protection of pollinators is rather new topic in Slovakia, as well as in the EU and worldwide, therefore a significant steps forward has to be done. Till now, Ministry of Agriculture supported only domestic bees and bee-keepers, for them also national programmes exist. But due to the new EU Pollination Initiative (2018) - as well as other international commitments (IPBES, Coalition of Willing, FAO requirements, etc.), also other pollinators will have to be protected and broader scale of financial support and national programmes will have to be created. At present, the Ministry of Environment will have to discuss these new mechanisms and tools with the Ministry of Agriculture and Rural Development of the SR and new steps towards future will have to be prepared. More will have to be done also in relation to promotion of pollinators, biodiversity and its importance for the whole society - it seems, not all citizens and stakeholders realised, how important the pollinators and pollination are.

ΕN

## 8. Pollution

Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target

Slovakia till now does not have specific monitoring on how pollutants influence ecosystems and their services. The pollution control is mainly linked to the agriculture, water pollution, air pollution, etc. - there is control for and monitoring managed by agricultural, water, air quality institutions and organisations, which are available, but the additional link towards the ecosystems protection is not available. At present, detailed monitoring on how the air pollution and air quality influence the relevant ecosystems is being established; this is raised from the National Emissions Ceiling Directive, to which

Slovakia will also have to report on both the national and EU level.

In relation to the soil pollution, agricultural organisations and institutions are monitoring them - for the future, better cooperation with them will also have to be established. General, the most important is exchange of data in all relevant fields and their use for the future.

Other activities contributing to the achievement of the Aichi Biodiversity Target at the global level

For the future, we are aware of the fact that more will have to be done also within the agriculture or water management sectors, as well as in other fields, but at present, we still do not have these systems in place.

ΕN

These are point sources of pollution, which are monitored, but without links to the monitoring of how they influence relevant habitats or ecosystems.

# 9. Invasive Alien Species

Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target

As it is already mentioned in the part of progress assessment, in relation to invasive alien species, lot in the past years was done. Main result is the prepared new Act on Invasive Alien Species, which finally approved by the Government. National act is in line with the EU regulation on this topic and also international decision were taken into account. During the preparation of the new act, working group was established with several stakeholders involved and continuation of this working group is expected also after approval of the act. They will continuously work on implementation of this act, as well as on preparation of the new strategy for invasive alien species, on practical implementation of measures, etc.

ΕN

Indicators on IAS are already established for purposes of the CBD implementation, they will have to be corrected according to the new legislation and requirements needed. Later on, broader monitoring will also have to be established on national leve, with EU and global requirements included.

## 10. Vulnerable ecosystems

Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target

As it is mentioned above, one of the main achievements of the biodiversity strategy, is including of ecosystems and nature based-solutions approach into the updated climate change adaptation strategy. The strategy was adopted by the Slovak Government in October 2018, and in next 2 years a detailed action plan will be prepared, where also

reduction of pressures on ecosystems vulnerable to climate change will be included. For the moment, there is only partial monitoring and assessment of the impacts of the climate change on ecosystems (including the vulnerable ecosystems and habitats) in place, but much more will have to be done in relation to vulnerable ecosystems as well as on reduction of pressures coming from the climate change. But the ways forward are improving significantly, also thanks to the Paris Agreement and achievements of these goals on the ground. Cooperation between the climate change and nature protection experts is very efficient and common understanding of both topics is helping to achieve all relevant targets (both for UNFCCC and CBD, but partially also to UNCCD).

On water and wetland types of ecosystems, much more will have to be done in relation to cooperation with our water protection organisations and institutions, as we will need less hydrowater plants buildings as well as other technical infrastructures to be build and more influence and projects will have to be done on revitalisation of wetlands, waters, rivers, etc. Here the knowledge and understanding of these green solutions and ecosystem/nature based approaches are still at the beginning and much more work will have to be done in practice and also on the ground.

In relation to salts and peatlands, a very big project was implemented and several actions and measures for the protection and sustainable use was set up and implemented. We will have to continue in those actions and activities, which were proposed during the project implementation.

Other activities contributing to the achievement of the Aichi Biodiversity Target at the global level

As Slovakia is a terrestrial country, it is very difficult to assess and monitor our impacts on ocean acidification, although, we are aware of the fact, that our contribution to it is also significant. For the moment, we are not able to prepare a system, which would help to reduce pressures on these vulnerable ecosystems - but there are several indirect measures and activities, which generally help to contribute also to achievement of these targets and help to reduce our pressures on coastal and marine ecosystems.

ΕN

## 11. Protected areas

Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target

From the 5th national report, several additional protected areas were established and also several management plans for protected areas were prepared. Most of the new PAs are part of the Natura 2000 network, which is a

network of protected areas according to the European Union (EU) legislation and requirements, and which Slovakia, as a part of the EU has to fulfil.

Summary of all protected areas (to the 31 December 2018) is available at the webpage of the State Nature Conservancy of the Slovak Republic (http://www.sopsr.sk/web/?cl=114).

All relevant information is updated regularly, including the establishment of new Natura 2000 sites (both for Habitats and Birds Directives). In relation to the CBD, main reporting are the national reporting and the reporting on the programme of work on protected areas, in relation to the EU requirements and Natura 2000, reporting is done for all habitats and species according to the Annexes of the Birds and Habitats

Directives and this reporting is done every 6 years (last one was in 2013, next one will be in 2019).

Size of the protected areas under the Natura 2000 network is about 29,34 % - this means also overlap between the sites under the Habitats Directive and also under the Birds Directive. Above Natura 200 areas we have also areas of national importance, but this figure is rather lower.

Other activities contributing to the achievement of the Aichi Biodiversity Target at the global level

Generally we can say that Slovakia contribute to the global amount of protected areas with a figure of about 30% of terrestrial protected areas.

ΕN

# 12. Preventing extinctions

Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target

For the prevention of extinctions, the most important tool was the creation of the biomonitoring system (the Comprehensive Information and Monitoring System), which was set up in the State Nature Conservancy of the Slovak Republic in 2014 (www.biomonitoring.sk). This biomonitoring was established mainly for the purposes of monitoring of Natura 2000 habitats and species, while the results are being reported every 6 years to the European Commission (for all EU Member States). Results from this monitoring system are the main evidence of improvements/degradation (favourable or unfavourable conservation status) of monitored habitats and species.

ΕN

From the 5th national report, there are more threatened species in Slovakia, for example capercailie, one of the indicative species of proper forest management in Slovakia. Data within the biomonitoring are regularly updated and according to the results, preparation of management plans as well as rescue programmes are prioritised. For the most threatened species, rescue programmes were prepared and we are working on their practical implementation on the ground (for 6 animal species).

# 13. Agricultural biodiversity

Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target

According to the Act 215/2001 a Gene bank was established - it is managed by the National Agricultural and Food Centre under the Ministry of Agriculture and Rural Development of the Slovak Republic (in 2015 this bank was renovated). National programme for protection of genetic resources of plant species relevant for food and agriculture 2015-2019 covers all the topics and activities, which are necessary for the protection and

sustainable use of genetic resources. From the last assessment and evaluation of this national programme, the situation is following:

- in 2016, in Gene Bank there were 22 264 seeds of the plant species (plant genetic resources), from which in active form were 18 368 and in the basic collection 3 896 samples;
- from the collected and protected samples of the plant genetic resources 26 679 passport data were processed in 2016;
- in 2016 MoA gave a support of 288 700,00 Eur for the expert activities of the Gene Bank and 237 064 Eur for the capacity building and the integrated work of the Gene Bank;
- an information system of genetic resources in Slovakia was created GRISS (https://griss.vurv.sk/), which is compatible with the international systems ECPGR and EURISCO. Development and implementation of this information system (GRISS) was supported by the financial support of the EU;
- in 2015, EU financially supported also the technological support and innovative techniques (monitoring and freezing system) and equipment (equipment for the picture analysis) used within the protection of the genetic resources according to the international standards, which is linked to other research areas.

National research organisations for the protection of plant genetic resources and the national research centre for the protection of animal genetic resources are strongly involved in national as well as in international projects, which lead to the protection of genetic resources and their sustainable use generally. Projects in the plant protection field are more successful as in the animal protection areas, where the level of the genetic resources decreased under the minimum level. All information are used for the updating of the national databases, which is possible to find at the webpages of the relevant organisations.

For the moment, the problem is rather strong resortism - agricultural genetic resources are mostly managed by the organisations and institutions of the MoA, while nature protection genetic resources are covered by the MoE. Problem is also missing Gene bank for the protected plant and animal species - once they will be extinct, there will not be any genetic database for their genes. Better cooperation, discussion and also relevant practical projects between MoA and MoE will have to be done in the future.

# 14. Essential ecosystem services

Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target

Main activities linked to this topic are also linked to the mapping and assessment of ecosystem services (MAES). From 2014 - 2018 a lot of tasks within MAES were done. Most important was the methodology and creation of the maps of ecosystems, which will be later on used for the methodology and creation of map of ecosystem services in Slovakia. Ecosystem map is almost finalised and next step will be to evaluate it and fulfil the gaps from the terrain monitoring. After the ecosystem map will be finished, it will be the baseline for the methodology of the ecosystems services assessment and evaluation and creation of map of ecosystem services. This map of ecosystem services will be also the baseline for the natural accounting system, which should be part of the bigger accounting system.

Prioritisied action framework for the ecosystems restoration only partially started, but then it was stopped due to the other national issues and tasks (like the Slovak Presidency of the Council of the European Union) - this should establish the baseline for ecosystems restoration plan and financial allocations. As this framework is still not available, it is rather difficult to say, which ecosystems are degradated and need a restoration plan and financial support - but we already know, from the general mapping exercices, that these are mainly wetland, peatland, saline and some forest ecosystems. Several local projects are already dedicated to the sustainable use and protection of these habitats and ecosystems, but it is only a small part within the broader national scale.

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Slovak Environment Agency started with the mapping and assessment of the urban degraded ecosystems, but now it is important to use all these data and information on practical restoration activities and projects. State Nature Conservancy will have to focus on mapping, assessment and restoration of degraded ecosystems within the protected areas and neighbouring areas. One the prioritisied action framework for ecosystems restoration will be in place, it will be much more easier to set up also the list of projects and financial amounts for their restoration and sustainable management.

Other activities contributing to the achievement of the Aichi Biodiversity Target at the global level

Slovakia is definitely not able to fufil the target of at least 15% of degraded ecosystems to be restored by 2020 - we will have to significantly improve the situation after 2020, otherwise we will not be able to achieve even this target till 2030.

ΕN

## 15. Ecosystem resilience

Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target

As mentioned above, the prioritisied action framework for the ecosystems restoration only partially started, but then it was stopped due to the other national issues and

tasks (like the Slovak Presidency of the Council of the European Union) - this framework should establish the baseline for ecosystems restoration plan and financial allocations. As this framework is still not available, it is rather difficult to say, which ecosystems are degradated and need a restoration plan and financial support - but we already know, from the general mapping exercices, that these are mainly wetland, peatland, saline and some forest ecosystems.

Several local projects are already dedicated to the sustainable use and protection of these habitats and ecosystems, but it is only a small part within the broader national scale. The approved strategy for the adaptation to climate change and an action plan, which will follow-up to it, calculate also with the ecosystems and nature-based solutions and they will be more implemented also on the ground - and ecosystem resilience will be automatically taken into account. This is important also in relation to UNCCD and land degradation and restoration plans, which should create the baseline for next steps both for climate change and desertification aspects. Ecosystem resilience will have to be more taken up also by the water policy and flood prevention projects and activities, as the retention of the landscape is the most important for risk preventions; but for this also agricultural and forestry managements will have to be changed and improved significantly.

Short-term action plan for ecosystems restoration will be part of the framework, but we can already mention that the 15 % target on degradated ecosystems restoration will not be achieved by 2020 - and if the progress will not speed up, we will hardly achieve even this target till 2030.

# 16. Nagoya Protocol on ABS

Interim national report on the implementation of the Nagoya Protocol

ABSCH-NR-SK-238615-2 Interim national report on the implementation of the Nagoya Protocol

Other activities contributing to the achievement of the Aichi Biodiversity Target at the global level

Additional information to the interim national report - Slovakia started with the establishment of the Clearing-House Mechanism both for CBD as well as for its protocols (but it is still not publicly available yet).

ΕN

## 17. NBSAPs

Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target

Updated NBSAP for 2011 - 2020 was approved by the Slovak Government in 2014. As a national strategy, NBS is one of the main documents of the Ministry of Environment

of the Slovak Republic, which is used for the mainstreaming of biodiversity into other sectors, preparation of relevant legislations, strategies and documents. NBS and AP are supported by 64 indicators, which were also approved by the Government - and last updating of these indicators was done in 2018. In between the assessment and evaluation of these indicators is going on, with correction of those mistakes, which are necessary and till 2021 we will have to update them according to needs, available data, additional information, relevant links, etc. For the moment, links between the NBSAP and the list of indicators are not always connected and proper interlinkages/synergies will have to be done.

NBS and AP were prepared by the Ministry of Environment of the Slovak Republic together with the State Nature Conservancy of the Slovak Republic as well as with the Slovak Environment Agency (SEA was and still is involved in the preparation of indicators and monitoring system, as they are the main body for the whole environmental monitoring system - biodiversity indicators are only partial element of the whole list of indicators and monitoring system for environment as a whole package).

Other stakeholders were not involved in the preparation, but other ministries were and are involved in the implementation of tasks and activities; working group for biodiversity with all relevant stakeholders was created for this purposes. Mid-term evaluation of the NBSAP was done in 2018, and all relevant ministries, organisations and institutions were involved in assessing and evaluating of all tasks, how they were achieved till now, what is still missing, what will have to be done, etc. - mid-term evaluation of the national NBSAP was linked also to the mid-term evaluation of the EU Biodiversity Strategy. We are already aware of the fact, that in the post-2020 approach, we will need a much more interactive and cooperative way in preparation of post-2020 NBSAP (or similar framework according to the CBD and EU needs). Some of the goals and activities of the NBSAP will have to changed, corrected, added, but a general structure of the present NBSAP would be good to use, as it is. More will have to be done in relation to convention and its protocols linkages between them is not always ideal and will have to be also significantly approved for the future. At present, the most important is to monitor and follow the global and EU discussions, and at the end of the year 2019 we will have to start with the preparation of the new NBSAP post-2020.

Other activities contributing to the achievement of the Aichi Biodiversity Target at the global level

NBSAP is a very good tool, which covers the most important goals, activities and aspects of the nature, biodiversity and landscape protection, and where the Aichi Biodiversity targets are transformed in such a form, which help to solve the national targets first, but which automatically contribute to the EU and global targets. Aichi Biodiversity Targets as well as the structure of the NBSAP should be kept, with few changes necessary.

ΕN

# 18. Traditional knowledge

Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target

Traditional knowledge and indigenous peoples and local communities in the sense of the understanding within the framework of the Convention on Biological Diversity and its Protocols is not acknowledged in Slovakia. Traditional knowledge is also rather known as part of the cultural knowledge - traditional knowledge in the way of work with shepherds or other similar stakeholders is not taken into account from the ecological or landscape protection point of view at present and we acknowledge that this is a problem and should be improved in the future. New Post-2020 NBSAP should cover also this aspect, but rather from our traditional knowledge and indigenous communities aspects - this is a bit different approach.

# 19. Biodiversity knowledge

Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target

Slovakia during the last period improved the data and exchange especially with research institutions and the Slovak Academy of Sciences (SAS) (especially in the field of botany, zoology, landscape ecology, biotechnology, etc.) - several Memoranda of Understandings have been signed by the Ministry of Environment of the Slovak Republic on cooperation, preparation of common projects, implementation of results from several projects, etc. Collaboration especially with the Botanical Institute of the SAS is improving significantly also in relation to the implementation of the Nagoya protocol, active participation in the Global Biodiversity Information Facility (GBIF) and in other tasks and networks. For the future, we will still have to improve the cooperation with botanical gardens, arboreta, and also universities (collaboration with universities was working well in the past, but now it is at the minimal level and should be improved). It will be really necessary to set-up also regular cooperation with the Ministry of Education of the Slovak Republic, as they are planning all the financial tools and mechanisms, plans for projects and also other topics, which are relevant also for us. Unfortunately, up till now, the cooperation on research and science-technology is rather random and activities are not regularly set-up.

ΕN

Other activities contributing to the achievement of the Aichi Biodiversity Target at the global level

Slovakia participated also at the roundtable for Bio-Bridge Initiative (BBI) in Eastern Europe and Central Asia and with several other countries and based on the discussions held in the meeting, several countries prepared a draft of BBI seed funding project entitled "Integrating Biodiversity and Climate Change through ecosystem based adaptation". Project is looking to support the regional communication and networking and will be a starting point for next larger projects in the region (BBI projects, including the above mentioned, were approved in November 2018 during the CBD COP 14).

ΕN

## 20. Resource mobilization

Financial Reporting Framework

https://chm.cbd.int/database/record/207672 Financial Reporting Framework: Reporting on baseline and progress towards 2015

Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target

Slovakia made a significant step forward in relation to clarification of all financial resources, which we provide for national, EU and international biodiversity protection. More systematic approach is being done also in relation to ODA (use of the OECD methodology, preparation of the new strategic plan towards the ODA implementation, targeted ODA support, etc.). For the national and EU financial resources, we systematically monitor, assess and evaluate the use and implementation of financial resources, as well as projects, etc., but also other steps on national level were done to improve the situation on resource mobilisation.

Slovak Government approved also a new detailed strategy on ODA for 2019-2023 and biodiversity aspects are also a significant part of it - we tried to doubled our biodiversity resources and set-up also such projects, which would help to improve the biodiversity worldwide.

ΕN

There is a big amount of financial resources as well as types of resources, but the allocations are rather scattered and not all information are available. Clear knowledge on types and amount of financial resources will be more transparent through the new Clearing House Mechanism, which is under the development. This CHM should cover all domestic, EU as well as global financial resources and how they are used for national, EU or global targets. This task will need enormous amount of work, but will be also a strong element also of the new Post-2020 NBSAP.

Other activities contributing to the achievement of the Aichi Biodiversity Target at the global level

Till 2015, financial reporting framework reported on the baseline and progress especially of the ODA allocations (we assessed the already allocated projects and financial allocations), but this should be changed from 2020 onwards. Additional financial report will be prepared for the years 2016, 2017 and 2018.

ΕN

Description of country's contributions to the achievement of the Aichi Biodiversity Targets, please describe how and to what extent these contributions support the implementation of the 2030 Agenda for Sustainable Development and the Sustainable Development Goals:

Agenda 2030 and SDGs is rather a new topic and Slovakia is slowly preparing for description of the national contributions to their achievements - both on internal as well as on external level. Ministry of Environment of the Slovak Republic is very active in this field and we prepared an internal document on how the environmental legislation and practical work help to both in implementation and achievement of the Aichi Biodiversity Targets, as well as to the Sustainable Development Goals. We are already aware of how

Aichi Biodiversity Targets as well as other environmental targets help to contribute to Agenda 2030 and SDGs, but this will have to be visible also to the other stakeholders, as well as other ministries and government; much more work will have to be done also on improving the understanding of interlinkages of environmental work to other sectors and promote them among all, including to general public.

New proposed Environmental Strategy till 2030 was prepared and approved to support implementation also of the Agenda 2030 and SDGs in Slovakia, including in the nature, biodiversity and landscape protection related goals. The Slovak Republic supports implementation of SDGs, it is coordinated by the vice-prime minister and the governmental office. In March 2016 the Slovak Government approved the "Scope for implementation of the 2030 Agenda for Sustainable Development". Following plan for introduction of the goals into practice adopted the Government in January 2017 with the vision of the role of Slovakia in the international efforts. In July 2017 was approved the process of national implementation of the 2030 Agenda with frameworks for better coordination and effective facilitation of complex cross-sectoral challenges. National priorities were proposed in consultation with different stakeholders and approved by the Government in June 2018. The strategic targets for biodiversity with national indicators and relevant implementation tools are under preparation. Preliminary National Investments Plan for 2018-2030 was adopted also in 2018, where the biodiversity priorities are based on the national Environmental Strategy. In 2019 we continue with different consultations and discussions for practical implementation of Agenda 2030 and SDGs - lasst meeting was prepared by the Vice-Minister office and the Minister of Foreign Affairs and European Union of the SR as a common Visegrad group conference (together with Czech Republic, Hungary and Poland), but also with the invitation for UN representatives.

Section V. Description of the national contribution to the achievement of the targets of the Global Strategy for Plant Conservation

# Slovakia does not have national targets related to the GSPC Targets

Information on any active networks for plant conservation

Protection and conservation of endangered and rare plant species is managed according to other EU and national legislation and in the scope of the national net of protected areas. State Nature Conservancy of the Slovak Republic (SNC) is reponsible for the management of all protected areas; SNC has 25 regional centres for 14 protected

landscape areas and 9 national parks, at each centre is minimally one botanist. SNC has a close co-operation with the Botanical Institute of the Slovak Academy of Sciences, which is the main research institution for the botany and botanical research in Slovakia. Botanical Institute also supports the voluntary botanical society - Slovak Botanical Society. Main botanical gardens in Slovakia, mostly university botanical gardens have their regional programmes for ex-situ conservation. Co-operation and work with SAC and university botanical gardens is working well, but in the future it will have to be more systematically planned, bth for research projects, as well as for regular financial support.

Major measures taken by your country for the implementation of the Global Strategy for Plant Conservation

Measures for the implementation of the Global Strategy for Plant Conservation are implemented in the scope of the updated National Strategy for Biodiversity Strategy 2011 - 2020 (NBS) and followed Action Plan for Biodiversity Protection 2011 - 2020 (AP). There is no other separated document and/or legislation dedicated only to the Global Strategy for Plant Conservation in Slovakia.

# 1. An online flora of all known plants

Category of progress towards the target of the Global Strategy for Plant Conservation at the national level

Progress towards target at national level but at an insufficient rate

Explanation on category of progress towards the target of the Global Strategy for Plant Conservation at the national level

Plant list – called Checklist exists for the whole territory of Slovakia. Detailed publication "Flora of Slovakia" is not finished, some families are missing, but publication "Flora" in the form of enlarged key for determination exists from the time of Czechoslovakia. It means the knowledge about the flora of Slovakia is very well known. On-line flora for Slovakia does not exist; most of taxons are in the European online flora. Botanical Institute of Slovak Academy of Science works hard on finishing of publication "Flora of Slovakia", and on revision of checklist and new key for determination of Slovak plant species. Vegetation of Slovakia (only the volume about forest units is missing) contributes also to the knowledge about plant distribution in Slovakia.

ΕN

ΕN

2. An assessment of the conservation status of all known plant species, as far as possible, to guide conservation action

Category of progress towards the target of the Global Strategy for Plant Conservation at the national level

On track to achieve target at national level

Explanation on category of progress towards the target of the Global Strategy for Plant Conservation at the national level

Actual red list of plant species from October 2014 of Slovak flora exists. It is the  $5^{th}$  revision of plant species red list. Next revision is planned in the scope of the revision of the Checklist of Slovak Flora.

ΕN

3. Information, research and associated outputs, and methods necessary to implement the Strategy developed and shared

Category of progress towards the target of the Global Strategy for Plant Conservation at the national level

No significant change at national level

Explanation on category of progress towards the target of the Global Strategy for Plant Conservation at the national level

For the moment, we have no Slovak GSPC on national level, so there are no information, research and associated outputs, and methods necessary to implement the Strategy developed and shared.

ΕN

4. At least 15 per cent of each ecological region or vegetation type secured through effective management and/or restoration

Category of progress towards the target of the Global Strategy for Plant Conservation at the national level

On track to achieve target at national level

Explanation on category of progress towards the target of the Global Strategy for Plant Conservation at the national level

Protected area net covers the 23,39% of the Slovak area – they are covering also plant species and their management and conservation. According to the climate conditions, they are divided into two biogeographical regions – Alpine, with more mountainous types of plant species and Pannonian, where more lowland types of plant species occur.

ΕN

5. At least 75 per cent of the most important areas for plant diversity of each ecological region protected with effective management in place for conserving plants and their genetic diversity

Category of progress towards the target of the Global Strategy for Plant Conservation at the national level

Progress towards target at national level but at an insufficient rate

Explanation on category of progress towards the target of the Global Strategy for Plant Conservation at the national level

Protected area net covers 57% of designated Important Botanical Areas (IBAs). IBAs in Slovakia are not very well established, they need some corrections according to the recent knowledge. The overlapping seems to be higher after these corrections.

ΕN

6. At least 75 per cent of production lands in each sector managed sustainably, consistent with the conservation of plant diversity

Category of progress towards the target of the Global Strategy for Plant Conservation at the national level

Progress towards target at national level but at an insufficient rate

Explanation on category of progress towards the target of the Global Strategy for Plant Conservation at the national level

This target is still in progress and we will have to negotiate with several other sectors, especially with agricultural and forestry; we do not fulfil the target of 75 % of production lands in each of these sectors managed sustainably, consistent with the conservation of plant diversity. The new Environmental Strategy till 2030 is now covering also this target, but more difficult negotiations are needed.

ΕN

7. At least 75 per cent of known threatened plant species conserved in situ

Category of progress towards the target of the Global Strategy for Plant Conservation at the national level

On track to achieve target at national level

Explanation on category of progress towards the target of the Global Strategy for Plant Conservation at the national level

By the experts estimation the target is fulfilled.

EN

8. At least 75 per cent of threatened plant species in ex situ collections, preferably in the country of origin, and at least 20 per cent available for recovery and restoration programmes

Category of progress towards the target of the Global Strategy for Plant Conservation at the national level

Progress towards target at national level but at an insufficient rate

Explanation on category of progress towards the target of the Global Strategy for Plant Conservation at the national level

Collections in botanical gardens will have to be broadened and improved, collecting seeds for Millenium seed bank is not finished, as it was planned according to the experts of the State Nature Conservancy of the Slovak Republic.

ΕN

9. 70 per cent of the genetic diversity of crops including their wild relatives and other socioeconomically valuable plant species conserved, while respecting, preserving and maintaining associated indigenous and local knowledge

Category of progress towards the target of the Global Strategy for Plant Conservation at the national level

Progress towards target at national level but at an insufficient rate

Explanation on category of progress towards the target of the Global Strategy for Plant Conservation at the national level

Research Institute of Plant Production, which belongs under the Ministry of Agriculture and Rural Development of the Slovak Republic maintains their own seed bank with more than 20.000 samples. This Institute has an active participation in European Cooperative Program for Genetic Resources in working groups: Avena, Barley, Forages, Grain Legumes, Malus/Pyrus, MAP, Potato, Prunus, Wheat, Vitis.

ΕN

Slovak Agriculture University has again their own rescue program targeted on fruit species with ex situ collections in special orchards.

10. Effective management plans in place to prevent new biological invasions and to manage important areas for plant diversity that are invaded

Category of progress towards the target of the Global Strategy for Plant Conservation at the national level

Progress towards target at national level but at an insufficient rate

Explanation on category of progress towards the target of the Global Strategy for Plant Conservation at the national level

Slovakia has its own list of invasive species according to the legislation from 2012. SNC organize the invasive species occurrence mapping (opened for public also by special application for mobile phones). Eradication of selected invasive species is in Slovakia compulsory, implemented in Act of Nature Protection. Realisation of the action plan is waiting for implementation of EU regulation No. 1143/2014. Invasive alien plant species are controlled and eradicated mostly in protected areas, mostly LIFE projects, supported by the EU funds for this are used.

ΕN

11. No species of wild flora endangered by international trade

Category of progress towards the target of the Global Strategy for Plant Conservation at the national level

Progress towards target at national level but at an insufficient rate

Explanation on category of progress towards the target of the Global Strategy for Plant Conservation at the national level

Slovakia has instruments for effective control of international trade in the scope of CITES. There is the effective cooperation of customers, police, scientific authority in the scope of the act about CITES. Some of the problems raised for this issue are rather linked to the inappropriate and weak enforcement of law and legislation.

ΕN

12. All wild harvested plant-based products sourced sustainably

Category of progress towards the target of the Global Strategy for Plant Conservation at the national level

Progress towards target at national level but at an insufficient rate

Explanation on category of progress towards the target of the Global Strategy for Plant Conservation at the national level

Effective rules for sustainable use exists in the scope of the Common Agricultural Policy (CAP), which is the common policy for agriculture within the European Union, with its detailed implementation on the national level, as well as within the forest management planning. More difficult communication with another sectors for improving CAP and forest management planning is needed for the future – several measures and activities are very well drafted and set up on the paper, but their implementation on the ground is worse.

ΕN

13. Indigenous and local knowledge innovations and practices associated with plant resources maintained or increased, as appropriate, to support customary use, sustainable livelihoods, local food security and health care

Category of progress towards the target of the Global Strategy for Plant Conservation at the national level

No significant change at national level

Explanation on category of progress towards the target of the Global Strategy for Plant Conservation at the national level

Generally, Slovakia does not cover the topic of indigenous knowledge and local communities in the sense of the CBD, but for the future we will have to work with this topic as well – at least with the scope of the east European knowledge and experiences, which partially cover also these topics, but we did not understood it correctly.

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

Category of progress towards the target of the Global Strategy for Plant Conservation at the national level

# Progress towards target at national level but at an insufficient rate

Explanation on category of progress towards the target of the Global Strategy for Plant Conservation at the national level

Botany is the subject of regular education at elementary schools, as well as some high schools. Slovak Botanical Society is very active in its work, organizes annual flora courses and regular lectures (organized by regional departments). Publications enabling this work are published – determination keys, flora, vegetation volumes, etc. More voluntary website exists, where photos and descriptions are placed. SNC manage the website (www.biomonitoring.sk) collecting the occurrence data on plant species for monitoring, management and reporting purposes. This website is opened for public, adding data is possible also by cell phones application.

ΕN

15. The number of trained people working with appropriate facilities sufficient according to national needs, to achieve the targets of this Strategy

Category of progress towards the target of the Global Strategy for Plant Conservation at the national level

Progress towards target at national level but at an insufficient rate

Explanation on category of progress towards the target of the Global Strategy for Plant Conservation at the national level

According to new challenges, which include climate change mitigation, land management, wildlife habitat restoration, management and control of invasive species, recovery of rare species, ex situ collections and some other, there is lack of full time staff and capacities. MoE as well as SNC is partially involved in most of the above mentioned themes and experts are working on it, but for the future the situation will have to be significantly improved.

ΕN

16. Institutions, networks and partnerships for plant conservation established or strengthened at national, regional and international levels to achieve the targets of this Strategy

Category of progress towards the target of the Global Strategy for Plant Conservation at the national level

Progress towards target at national level but at an insufficient rate

Explanation on category of progress towards the target of the Global Strategy for Plant Conservation at the national level

National GSPC and partnership in the scope of Slovakia is not yet established for this topic. SNC plans to establish the board for plant conservation to connect all relevant subjects in Slovakia. for international cooperation usually sources and capacities are missing.

ΕN

Please describe how and to what extent your country has contributed to the achievement of this GSPC Target and summarize the evidence used to support this description

As Slovakia does not have national GSPC and it is covered mainly by the NBSAP and other strategical documents, legislation and materials, it is difficult to describe how and to what extent our country contributed to the achievement of GSPC. Our national strategy and action plan, as well as the EU strategy for biodiversity protection 2011 - 2020 are reviewed regularly, and within these reciews we are assessing all activities and actions related also to the plant protection. Last review and assessment of NBSAP was done in December 2018 and results will be available at the webpage of the Ministry of Environment of the Slovak Republic.

ΕN

Section VI. Description of the national contribution to the achievement of the targets of indigenous peoples and local communities

Slovakia does not contribute on this topic - we do not have agenda/policy/legislation for indigenous peoples and local communicaties in such a way and understanding, as it is meant by the Convention on Biological Diversity and its Protocols. But in the future more will have to be done in relation to local communities and their ecological knowledge (partial use of the IPLCs will be necessary to be implemented).

ΕN

## Section VII. Updated biodiversity country profile

Biodiversity facts: Status and trends of biodiversity, including benefits from biodiversity and ecosystem services and functions:

Slovakia's geographical position, in the centre of Europe and on the boundary of the Carpathian Mountain and Pannonian lowland areas, allows for a rich diversity of flora and fauna, as well as for diversified landscape with a lot of species, including endemic ones. The biodiversity identified in the country consists of approximately 11,323 plant species

(including algae), more than 28,800 animal species (including invertebrates) and over 1,000 species of protozoa.

In addition, there are a wide range of land and water habitats, although their natural distribution has been significantly altered by land use changes since the onset of intensive settlement. Partial monitoring of selected plant and animal species indicate that most species suffer from a decrease in population size and area of distribution, but also from the conservation status, which is very often not favourable. As a result of the extensive use of natural resources, some plant and animal species are now extinct, and others have become rare or endangered. Of the total 3,124 species of higher plants, 1,135 are listed in the National Red List of Angiosperms and Gymnosperms. Endangered species comprise 45% of fish species (including lampreys), 100% of amphibian species, 100% of reptile species, 32% of bird species and 65% of mammal species.

Declining status trends have been recorded, in particular, for aquatic and wetland species (e.g. fish, amphibians, reptiles) and habitats that depend on regular mowing and grazing (e.g. Spermophylus citellus, order Maculinea, and some plant species). Halophyte habitats are the most endangered ones, caused by the fall of groundwater level, abandonment of traditional management and secondary succession. The most favourable status is indicated for rocky habitats due to their inaccessibility, and forest habitats because of the relatively sensitive forest management on such sites.

The integrity of landscapes and natural ecosystems is considered an essential instrument for increasing Slovakia's competitiveness in the tourism sector. The potential, which Slovak nature, biodiversity and landscape have as a contribution to the overall tourism sector is still not used properly and significant changes would have to be done in the near future in this field.

Main pressures on and drivers of change to biodiversity (direct and indirect)

The most significant threats to biodiversity and associated trends are:

- (i) habitat fragmentation caused by a significant increase in the construction of transport and also industrial infrastructure:
- (ii) reduction in the use of arable land, particularly regarding permanent grassland (meadows and pastures), resulting from a reduction in livestock farming and the unprofitability of agriculture, thereby putting habitats of rare species of flora and fauna at risk; pressures on arable land and production of big monocultures (esp. of those crops, which are useful for biomass and biofuels production), pressures raising also from the plantations of fast growing trees, etc.

- (iii) invasive species whose impact is increasing in intensity due to permanent changes caused by agricultural activity, forestry, rearing of farm animals, intensive construction of buildings, including transport infrastructure;
- (iv) acidification of soil and water;
- (v) climate change and the higher incidence of extreme weather events (e.g. flooding,

drought, wind storms);

- (vi) industrial pollution in spite of a significant reduction in atmospheric industrial pollutants in recent years;
- (vii) mineral extraction (e.g. natural gas, magnesite, wall stone, calcite);
- (viii) agricultural pollution, esp. in intensive agricultural areas and on the other side abandonment of agricultural land (where there is more extensive way of land management);
- (ix) forestry and pressures on forest land, intensified management of forest land and massive logging;
- (x) tourism (several national parks are counted among the most endangered territories as a result of activities, such as mountain tourism), unbalanced pressures on some protected areas.

Implementation of the NBSAP

The first strategy document for the implementation of the Convention on Biological Diversity was the National Biodiversity Strategy of Slovakia (NBS), which was adopted by Government Resolution No. 231/1997 and endorsed by Parliamentary Resolution No. 676/1997. The NBS reflected the national ambition to achieve a comprehensive and balanced implementation of the Convention. It does not defined definite priorities, however set 24 objectives for strengthening the protection of biodiversity and sustainable development of elements of biodiversity, and 126 strategic directions for achieving these objectives. Nearly all the tasks set out in the 21 strategic goals and the 82 strategic directions for the 2003-2010 period have been completed (a few tasks have not been completed due to a lack of funds or staff in the participating bodies). The NBS was implemented through action plans that applied to it for a given time period. The first Action Plan (1998–2010) was developed using material and proposals from each government department and adopted under Government Resolution No. 515/1998.

ΕN

As a follow-up, in 2014 a new NBSAP was approved, with 9 main goals and 167 concrete activities for nature, biodiversity and landscape protection. NBSAP is supported by 64 indicators, which were also approved by the Government - both NBSAP and set of indicators were assessed and evaluated in 2018 and due this assessment, we are trying to implement relevant activities during 2019 and 2020. In between, we are trying to follow the global as well as EU discussions on Post 2020 and we will have to prepare a new national NBSAP for Post 2020 as well.

Overall actions taken to contribute to the implementation of the Strategic Plan for Biodiversity 2011-2020

The share of protected areas rose almost up to 30% during last years, mainly due to the proper implementation of the Natura 2000 network. Forest area increased to almost 40% of countryside and Slovakia has one of the highest levels of forest land in Europe, even exceeding the increasing rate of timber extraction. Up to December 2018, we have

9 national parks and 14 protected landscape areas; the List of Internationally Important Wetlands under the Ramsar Convention, has the total number of Ramsar sites in the country up to 14; 642 sites in the Alpine and Panonnian biogeographical regions were approved by the as Areas of Community Interest under the Habitats Directive; and 41 Special Protection Areas have been declared under the Birds Directive.

Positive trends have already been recorded as a result of the EU policy and legislation. Slovakia has notably implemented several activities for controlling the impact of invasive alien species, including the approval of the new act on IAS. A sharp decline in agricultural pollution has also been evidenced in recent years due to a reduction in land area given over to agricultural use, a fall in animal husbandry and decreased use of artificial fertilisers and pesticides. The involvement of local and indigenous communities in CBD implementation processes is also promoted through a number of related projects (e.g. Project on Village Renewal; Framework Convention on the Protection and Sustainable Use of the Carpathians; European Landscape Convention; National Strategy for Rural Development; National Programme for the Protection of Plant Genetic Resources for Food and Agriculture; National Sustainable Development Strategy).

Finally, a number of projects are being implemented focused on environmental education for different levels of stakeholders, including schools and children. Also, several specialized educational facilities for nature and landscape protection have been created, as information and advisory centres. Other initiatives include permanent representative expositions, regular workshops for different stakeholders, discussions with foresters and farmers especially in relation to update of the act on nature and landscape protection, etc..

Support mechanisms for national implementation (legislation, funding, capacity-building, coordination, mainstreaming, etc.)

Significant attention has been given to biodiversity mainstreaming in the strategies and programs of other government policies, strategies. legislations, etc, supporting implementation at the sectoral level: Agriculture (National Forest Program, National Strategy for Rural Development, National Programme for the Protection of Plant Genetic Resources for Food and Agriculture); Economy (Strategy for Economical Development up to 2030 and several principles of the cirfcular Economy); Education; Health (National Environmental Health Action Plan); Culture (UNESCO).

Along with state sectoral facilities, Slovakia fully involves a number of non-governmental organizations (Daphne - Institute of Applied Ecology, WWF Slovakia, SOS/Birdlife Slovakia, NGO Vlk/Wolf, and others). Involvement of the private sector has been minimal so far, except on very specific issues (e.g. working with the Slovak Electrical Companies in installing elements on electrical columns, which help to avoid bird killings) or in fulfilling tasks on environmental impact assessment (EIA). In spite of this relatively developed legal and policy framework, implementation has been constrained by a lack of cooperation and coordination at all levels of activity, as well as inconsistency

among different national, regional and local strategies and planning documents on issues related to the conservation and sustainable use of biodiversity. Tasks in the NBSAP are financed through the state budget, Environmental Fund, and from various EU funds and programmes. However, since its 2004 accession into the EU, Slovakia has no longer qualified for GEF funding, for some transition period, GEF small grants funding was still possible also in Slovakia, but it is not possible anymore.

Mechanisms for monitoring and reviewing implementation

Environmental monitoring is based on a monitoring system that covers the country's entire territory, designed to assess the condition of the environment as a whole, using information on the status and trends of each of its component parts, including biodiversity. Implementation of the environmental monitoring system and the integrated environmental information system was sanctioned by Government in 1993. In addition, subordinate monitoring systems (ČMS) have been developed in the form of ČMS centres for promoting methodology and coordination in monitoring activities. A Monitoring Coordination Council has also been constituted. The Environmental Monitoring and Information System was expanded and completed in 2004 and is regularly updated. Environmental monitoring is undertaken at three overlapping levels (national, regional and local levels) in the following areas: air quality, meteorology and climatology, water, flora and fauna, geological factors, waste, radioactivity, contaminants in food and animal feed, soil quality, forests.

ΕN

As a follow-up to proper implementation and reporting on the EU policy and legislation, new Comprehensive Monitoring and Information System (KIMS) was established at the State Nature Conservancy of the Slovak Republic, which is focusing mainly on the implementation of the Birds and Habitats Directives and which aim is to monitor species and habitats under both directives. Thanks to this KIMS system, more systematic and regular mapping and monitoring is going on on national level, and more additional elements will be set up soon to fulfil all the needs, which nature, biodiversity and landscape protection require.