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Warsaw, 7 December 2015 Item 1207

## RESOLUTION NO. 213 OF THE COUNCIL OF MINISTERS

of 6 November 2015

**on the approval of "The programme of conservation and sustainable use of biodiversity  
along with Action Plan for the period 2015-2020"**

On the basis of Art. 111 passage 3 of the Act of 16 April 2004 on Nature Protection (Journal of Laws of 2015 item 1651, 1688 and 1936) the Council of Ministers adopts the following:

§ 1. Approves "The programme of conservation and sustainable use of biodiversity along with Action Plan for the period 2015-2020", constituting an appendix to the resolution.

§ 2. The resolution shall enter into force on the day following the day of its announcement.

Prime Minister: *E. Kopacz*

Annex to the resolution no. 213 of the Council of Ministers of 6  
November 2015 (item 1207)

# **The Programme of conservation and sustainable use of biodiversity**

**along with**

**Action Plan for the period 2015-2020**

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## 1. Introduction

Protection and balanced use of the whole natural heritage were the main topic of the sessions during the Conference of the United Nations on environment and development held in 1992 (so-called Earth Summit) in Rio de Janeiro, Brazil. The Convention on Biological Diversity (CBD) was adopted and signed at that time, which introduced new standards of conservation and sustainable use of natural resources to the policies all around the world, in reaction to alarming negative trends indicating global loss of biodiversity and functions of ecosystems. Biological diversity is not only the richness of genes, species and ecosystems that we should protect just for cause, it is rather a natural capital, from which quality of social and economic development of each country is dependant. Therefore, loss of biodiversity and functions of ecosystems is perceived as one of the world's largest environmental hazards. In spite of that, there was no appropriate determination in pursuit of stopping the process of deterioration of natural resources under ambitiously set aim which was to be achieved by 2010.

Poland ratified the Convention in 1996 and accepted all the obligations arising from its provisions (Journal of Laws No. 184, item 1532). According to Article 6 of the Convention on biodiversity and with Article 111, passage 1 of the Act of 16 April 2004 on Nature Protection (Journal of Laws of 2015 item 1651), our country should prepare the programme of conservation and sustainable use of biodiversity, along with the action plan in accordance with their specific conditions and possibilities. This Programme meets these requirements and is a continuation of *the National strategy of conservation and sustainable use of biodiversity and the Action plan for the years 2007 - 2013*, as well as the same document covering the years 2003-2006. Implementation of 8 strategic goals, 77 operational goals and 134 tasks was assumed for the period of 2007-2013, which were supposed to result in:

- obtaining complete inventory-taking of the condition of biodiversity;
- creating efficiently operating system of natural monitoring;
- providing reliable and up-to-date information enabling conduct of effective policy of conservation and use of biodiversity;
- preservation and strengthening of the existing biodiversity at the intraspecies, interspecies and supraspecies level, including:
  - preserving the most naturally valuable areas of Poland in an unchanged condition;
  - maintenance of genetic resources of endangered wild plants and animals being important part of scientific studies and breeding in *ex situ* and gene bank conditions of collection;
- development of scientific research and analyses integrating various aspects of biodiversity;
- creating wide access to up-to-date information on importance, condition, hazards as well as principles of conservation and use of biodiversity;
- development of attitudes, beliefs and value systems favouring preservation of biodiversity;
- consideration of nature protection requirements and principles of its sustainable use in all policies and sectoral programmes;
- minimisation of adverse impacts of business activities on the condition of biodiversity;

- raising the standard of living in the areas of high natural value by their prioritisation as regards the access to various sources of financing;
- use of international cooperation for conservation and sustainable use of biodiversity.

Not all goals and tasks assumed have been completed, though financing level of actions related to biodiversity protection in the years 2007 - 2013 increased significantly. Roughly 1 billion euro was allocated on execution of at least 500 projects concerning, among others, protection of nature habitats and protection of species (*in situ*, *ex situ*), shaping of social attitudes fostering environmental protection, including biodiversity in the Natura 2000 sites, increase of permeability of ecological corridors, preparation of plans of protective tasks for more than 400 Natura 2000 sites. The Rural Development Programme 2007 - 2013 supported agro-environmental actions on the area of ca. 250 thousand ha of naturally valuable arable lands<sup>1</sup>. As a result, 16% of the National Strategy's tasks have been realised. Other tasks will be continued; these are continuous activities or activities which were not fully completed in the assumed time. This resulted from limited financing of actions, inadequate integration of biodiversity and sectoral policies or from scale of scheduled activities.

This Programme is intended to effectively limit negative trends of losing biological diversity and to improve sustainable management of nature resources in connection with possibilities created by the EU financial perspective 2014 - 2020. The programme constitutes an extension and tool of implementation of selected tasks included in "*the Strategy for Energy Security and Environment - 2020 perspective*", adopted by the Resolution of the Council of Ministers of 15 April 2014 (M. P. item 469).

## **2. Conditions of the implementation of the Programme**

When preparing assumptions of the Programme, it was required to consider current output of the Convention with regard to global and European strategic indications and directions of activities. A directional document adopted during the session of the Tenth Meeting of the Conference of the Parties to the CBD held in 2010 in Japan is a new global biodiversity strategy for the period from 2011 to 2020 with 2050 vision. So-called Aichi targets were established at that time, included under the five guiding objectives which obligate the Parties of the Convention to:

- eliminate reasons of losing biodiversity by including nature protection activities in the national economic development programmes in all sectors, both on the governmental and social level;
- limit direct pressure on biological diversity and promote permanent and sustainable use;
- improve biodiversity protection by preservation of genetic diversity at the gene, species and ecosystem level;

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<sup>1</sup> Source of data: The priority framework of activities for the Natura 2000 network for the long-term programmes of financing in the years 2014-2020 (the Ministry of the Environment, 2013).

- increase the possibility to commonly use benefits resulting from biodiversity and functions of ecosystems;
- improve the possibility of implementing regulations of the Convention by implementation of planning processes involving various partners, appropriate management of results of scientific studies and strengthening of institutional potential.

In May 2011 the European Commission published main document entitled *Our life insurance, our natural capital: an EU biodiversity strategy to 2020* (hereinafter referred to as: the EU strategy) that transposes global strategy and Aichi targets, obliging the EU Member Countries to implement them as soon as possible. The main goal of this document is halting the loss of biological diversity and degradation of functions of ecosystems in the EU by 2020 and restoring them insofar as feasible, while increasing the EU contribution to averting the loss of global biodiversity. The EU strategy includes six complementary objectives:

- Objective 1: Full implementation of the Bird and Habitat Directive,
- Objective 2: Preservation and improvement of ecosystems and their functions,
- Objective 3: Increasing contribution of agriculture and forestry in preservation and improvement of biodiversity
- Objective 4: Ensuring sustainable use of fish resources,
- Objective 5: Fighting invasive external species,
- Objective 6: Assistance in preventing the loss of global biodiversity.

The global strategy and the EU strategy have become key determinants of this *Programme of conservation and sustainable use of biodiversity with Action plan for the period of 2015 - 2020*, which constitutes a contribution of Poland in fulfilling main objectives of these strategies, especially improvement of the state of biodiversity preservation and more complete connection of its protection and the country's social and economic development.

### **3. Diagnosis of the present situation**

#### **3.1. The state of biodiversity identification**

The richness of biological diversity of our country is due to many variables resulting from location and topography, soil conditions, climate impact, the level of social and economic development, historical conditions. It comprises variety of geographical lands: mountain, lowland, coastal and maritime areas. The country's location on the borderland of Atlantic and continental climates is also favourable. Polish nature incorporates characteristics of Europe's nature, the symptom of which is the presence of many species on the border of their ranges. Poland is the crossroad of numerous European migration routes of birds and bats. Rational forest management and extensive agriculture in many regions of the country fosters richness of biodiversity of natural habitats and species.

According to the previous estimates of the number of species registered in Poland is shaped at the level of 60,000, including, among others: 2,415 spermatophyte species and 35,368 species of fauna.

On the other hand, the number of distinguished plant associations amounts to 485. Mammals are represented in Poland by 105 species, fish by 130, and amphibians and reptiles, accordingly, by 18 and 9 species. Birds constitute a numerous group of Polish fauna, represented by 395 species. Population numbers of the most popular national protected species are as follows: brown bear - 164, wolf - 1.122, lynx - 308, wisent - 1361, chamois - 334, beaver - 96,658, capercaillie - 470, black grouse - 446<sup>2</sup>. The population of porpoise in the entire Baltic Sea is estimated at less than 447<sup>3</sup> individuals, which makes it an extremely endangered species.

In the last two decades, especially after 2004, knowledge on distribution of species and habitats and condition of their protection has significantly improved. As requested by the State Forests, a natural inventory-taking was performed in the period 2006-2007 on the State Treasury lands under administration of the PGL LP, concerning habitats and species from Appendix II of the Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and wild fauna and flora (Official Journal EC L 206 of 22.07.1992, p. 7, as amended ; Official Journal of EU Polish special edition, chapter 15, vol. 2, p. 102, as amended), hereinafter referred to as "the Habitats Directive". A year later, a nationwide inventory-taking was started on the order of the Ministry of Environment, for the purposes of development and implementation for the Natura 2000 network. It covered approx. 90% of the special protection areas of birds, taking care of high quality of inventory-taking works with regard to calculating population of birds and developing methodical standard for this type of studies. Since 2006, on the order of the National Environmental Inspectorate and under its control, the works are conducted under natural monitoring, which covered nearly all species and habitats from the Habitats Directive and birds across the whole country. Regardless of this fact, monitoring research is conducted since 1989 with regard to species in individual programmes concerning, e.g. wisent, spotted and European souslik, wolf, lynx, Polish scurvy-grass, shelters of bats, which all have contributed to preparation of detailed plans of their conservation and restitution. However, a current distribution of many species is still not known entirely. It especially applies to invertebrates (beetles, molluscs), but also to certain vertebrates (fish, bats). Among the plants there are species that once had a relatively large number of known positions, many of which have not been confirmed for years. Observations indicate disappearance of their considerable part (e.g. *Thesium ebracteatum*, Eastern pasqueflower, *Arnica montana*)<sup>4</sup>.

Following the conditions of the Programme implementation it was recognised that its intervention area should be focused on a given group of habitats and species priority for the Programme due to urgent needs of their protection justified by extinction threat on a national or European scale. These are species and natural habitats, protected under the national nature protection system, especially for the Natura 2000 network. They include: 81 types of natural habitats, 40 species of plants, 80 species of animals and 74 species of birds from the Annex of the Directive of the European Parliament and the Council 2009/147/EC of 30 November 2009 on the conservation of wild birds (Official Journal EU L of 20

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<sup>2</sup> Central Statistical Office Environmental protection 2014.

<sup>3</sup> Based on statistical data of SAMBAH acoustic monitoring of Baltic porpoises

<sup>4</sup> Makomaska-Juchiewicz M. and Perzanowska J. 2013. Inventory-taking and valorisation of species and their habitats in Poland - knowledge and protection perspectives. IOP Kraków.

26.01.2010, p. 7, as amended), hereinafter referred to as "the Bird Directive", and 83 species of migrating birds.

### 3.2. The condition of biodiversity preservation

The list of endangered species in our country is extensive and expands constantly. *The Red List of plants and fungi of Poland* (2006) contains 506 species of vascular plants endangered to a smaller or larger extent, extinct or lost, which constitutes 21% of national flora in this group. The number of species of vascular plants which are declining/critically endangered amounts to 144. *The Polish Red Data Book of Animals - Vertebrates* (2001) lists 130 species having different extinction threat or already extinct, including 76 critically endangered species. From among Polish birds the highest threat concerns the order of galliformes, in the case of which 5 species out of 7 can be found on the list of endangered species. Currently, 37 taxons of lampreys and fish are mostly endangered in the fresh waters on the territory of Poland. The highest category of threat concerns two-environment fish: acipenser oxyrinchus, salmon, sea lamprey, twait shad, allis shad, vimba, sichel, river lamprey and huchen.

Maintaining extensive agriculture in Poland has resulted in preservation of many local races of farm animals and old varieties of cultivated plants. Regions of presence of old varieties are mostly found in southern part of Poland and mountain region where, for instance, old backyard or monastery orchards contributed to survival of traditional varieties of fruit trees species. Genetic resources of animals, apart from highly efficient races of international range, includes 90 domestic races, varieties and lines of farm animals covered by the protection programmes. They are kept usually in extensive production systems that provide optimal environmental conditions for these races: free range, natural feeds, pasturing. These are, among others, domestic races of cattle (e.g. Polish red and white backed cattle, black-white and red-white cattle of the old type), horses (e.g. Polish konik, hucul pony or sztumski and sokolski coldblood horses), pigs (zlotnicka spotted, zlotnicka white, pulawska), sheep (e.g. Polish heath sheep, swiniarka sheep) and hens, duck, geese, fur animals, bees and fish<sup>5</sup>.

The new view on the condition of preservation of biodiversity is delivered by complex evaluation of the state of protection of natural habitats and species listed in the Habitats Directive, the results of which are presented in the Table<sup>6</sup> below, with breakdown into biogeographical regions of Poland (continental and Alpine):

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<sup>5</sup> Expert's report on protection of biodiversity in the rural areas. The Ministry of Agriculture and Rural Development, 2012.

<sup>6</sup> Data of the Chief Inspectorate for Environmental Protection, 2013.



The condition of protection according to category	The condition of protection in % of the number of examined objects (as at 2012)					
	Continental region			Alpine region		
	Natural habitats	Plants	Animals	Natural habitats	Plants	Animals
FV	10	22	30	39	50	32
U1	54	53	41	49	45	21
U2	28	25	12	10	5	9
XX	8	0	17	2	0	38

Abbreviations: FV - proper condition, U1 - unsatisfactory condition, U2 - bad condition, XX - unidentified

According to this assessment, best-preserved habitats and species are those of mountains and foothills (Alpine region). Significantly worse results were obtained for lowland areas of the country, classified into the continental region. For 72 types of natural habitats taken into account in the Table only 7 (10%) are characterised by proper condition of protection (FV), while unsatisfactory (U1) or bad (U2) condition concerns remaining 62 habitats. In general, condition of preservation of natural habitats as well as species of priority plants and animals is largely unsatisfactory (U1) or bad (U2). Only 30% of monitored resources have proven proper condition of protection.

### 3.3. Impact of use on the state of biodiversity

The main preserve of biodiversity in the agricultural areas - occupying 59.9% of the area of Poland - are permanent grasslands. They occupy 12.4% of the area of the country and 20.7% of arable lands, which is less than the EU average amounting to 35.6%<sup>7</sup>. Biodiversity and landscape preservation is fostered by high fragmentation of lands forming a rich mosaic of plots with numerous accompanying fields, mid-field trees, hedges and fragments of natural ecosystems in the form of water holes, peat bogs, etc. Approximately 45 plant communities are to be found in the agricultural areas of Poland. Insofar as the fauna is concerned, ca. 700 species of vertebrates live there, including ca. 100 bird species from which 34 are strictly related to agricultural lands. Many of them constitute a significant stock in the entire EU population, e.g.: aquatic warbler 89.9%, white stork 38.4%, great snipe 27.7%, skylark 21.2%, corncrake 19.8%<sup>8</sup>. These data indicate that the use of agricultural habitats is still balanced in terms of nature, despite dynamic changes taking place in agriculture in the field of production and structure of land use. However, evaluation of the condition of preservation of the majority of natural habitats and many species of agricultural lands is unfavourable according to the latest results of the State Environmental Monitoring performed in the years 2007-2012. Unsatisfactory (U1) or bad (U2) condition of preservation predominates in monitored meadow, grass and peat bog habitats. Farmland Bird Index in 2012 and 2013 reached the level lower by 16-18% than the one in 2000, indicating gradual deterioration of population of birds recorded in recent

<sup>7</sup> The Statistical Yearbook of the Central Statistical Office (CSO) - Agriculture 2014

<sup>8</sup> Wilk T., Jujka M., Krogulec J., Chylarecki P. 2010. Poland's important bird areas of international importance. Brands. OTOP (Polish National Birds Protection Association).

years. More detailed analyses show that the dynamic changes of the indicator over the last dozen years were associated with growing intensification of agriculture and with weather conditions in the winter period<sup>9</sup>.

Forest, wooded and bushed areas occupy 9,600 thousand ha - 30.7% of the area of the country<sup>10</sup>. They are least deformed natural formation and are necessary ingredient of Poland's green infrastructure. A characteristic feature of spatial diversity of Polish forests is irregularity of their distribution and substantial dispersion of forest complexes. The greatest share of forests is characteristic for northern, western and south-eastern part of the country. The forestation rate of Poland according to CSO 2012 amounts to 29.4%. Communitated private forests have significant share in increasing landscape qualities of rural areas: there are more than 1.61 million ha of forests in Poland, being property of natural persons, which constitutes more than 5% of the area of the country<sup>11</sup>. Forest management is focused on preservation of durability of forests, continuity of their multilateral use and expansion of their resources. The protected areas cover 41.4% of forests, including 38% of areas under administration of the State Forests National Forest Holding being protected in the Natura 2000 network. 3,267 special protection zones have been designated on the PGL LP lands as at 2014, concerning places of reproduction and regular stay of protected species with total area of 144,705 ha. These zones are created e.g. for the purpose of protecting birds, mammals, reptiles, insects, plants and lichens. The greatest area of all-year protection zones was planned for birds. Forest Bird Index, after dynamic growth observed in the first decade of the XXI century, has remained at a similar level for four years - approx. 25% above the reference value of 2000. Similarly, as on agricultural areas, condition of protection of 15 forest natural habitats covered by monitoring under SEM in the years 2007 - 2013 is largely unsatisfactory or bad. This results, among others, from small resources of dead wood. Dead wood is an important element of forest ecosystem, favourably influencing physical, chemical and biological properties of soil and creating good conditions for development of many organisms. Results of the Large-Scale Forest Inventory in Poland indicate that Polish forests have currently an average of ca. 5.9 m<sup>3</sup>/ha of gross merchantable deadwood, of which on lying deadwood falls 2.6 m<sup>3</sup>/ha, and on standing deadwood - 3.3 m<sup>3</sup>/ha<sup>12</sup>. One of the tasks of contemporary multifunctional forestry, is monitoring of condition of resources of dead organic matter in forest - these resources are growing constantly.

The scope of the Polish responsibility for structure and quality of natural resources extends also on the Baltic sea - 2,005 km<sup>2</sup> of internal marine waters, 8,682 km<sup>2</sup> of territorial sea and 22,634 km<sup>2</sup> of exclusive economic zone. Species of primary ecological importance such as Baltic cod, eelgrass or blue mussel do not have their natural functional doubles, which makes Baltic biocenoses relatively sensitive to various types of anthropogenic impact. The number of salt water species is 5 - 22, freshwater fish 1 - 12 and cosmopolitan fish 2 - 5. Sea algae attached to the bottom, form a group of approx. 20 species in Southern Baltic Sea. The most numerous group of those living in Polish marine areas are crustaceans, comprising more than 200 species. Ecological structure of ichthyofauna is diverse. From more than 100 species recorded only ca. 50 permanently inhabit Polish maritime areas. From among sea mammals four species are regularly observed

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<sup>9</sup> Bulletin of environmental monitoring. Monitoring of Polish birds in 2012 - 2013 no. 11 (2013/1). GIOS, collective work.

<sup>10</sup> Central Statistical Office Environmental protection 2013

<sup>11</sup>CSO. Forestry 2012.

<sup>12</sup> Poland's Large-Scale Forest Inventory results for the period 2010 - 2014 stage 2.5.1.b.

in Polish waters: grey seal, arbour seal, ringed seal and the only Baltic cetacean - porpoise, whose condition of protection has been evaluated as bad. Birds of the Baltic area represents 340 species, mostly migrating between wintering grounds and spring-summer breeding areas. Some species, especially from northern Russia, stop on the wintering grounds of the southern Baltic (i.a. long-tailed duck, tufted duck, mute swan, Canada goose, European herring gull, velvet scoter). Both freshwater and sea birds have their breeding grounds here. 17 Natura 2000 network areas have been established in the coastal and maritime zone, including 8 special protection areas of habitats (OSO), 8 special protection areas of birds (OSOP), as well as one area sharing the status of both OSO and OSOP. The condition of knowledge concerning natural habitats of the Baltic Sea and coastal zones is unsatisfactory.

According to the Prioritised Action Framework (PAF<sup>13</sup>, prepared in 2013) the largest unfavourable transformations of biodiversity are related to natural biotic and abiotic processes caused by changes taking place in the method of agriculture and forestry management. As many as 80% of habitats undergo transformation as a result of natural processes (e.g. succession of vegetation, synanthropisation, eutrophication). The second category of hazards, related to changes in space management (fragmentation and development), in agriculture (intensification or fallowing) and some long - term activities of past forest management implemented 60 years ago, negatively affects as much as 70% of habitats and 61% of species. Adverse impact is also characteristic for fishing and wildlife management, which in spite of their small-scale activities, affect the most valuable species. It has been identified that 31% of species are threatened by actions related to these sectors.

#### **4. Hazards and forecast of trends regarding changes of biodiversity**

An important factor influencing functioning of environment are barriers breaking continuity of ecological corridors. Fragmentation of habitats is assessed as one of the major threat for biological diversity. This weakens the possibility of adaptation of species to climatic changes, changing their distribution and phenology, which reduces the survival rate of species at their limited ability to migrate to the new areas. Barriers having the largest effect include road infrastructure (motorways and expressways along with acoustic screens) and dispersed buildings interrupting the network of ecological interactions. Fragmentation of the environment is also caused by damming structures on rivers, in which fish passes do not function properly. Problems in this respect include also the growing number of water power plants and wind farms.

A hazard for agricultural biodiversity is abandonment of agricultural use most often related to soils of marginal importance for agriculture, yet naturally valuable.

A particularly unfavourable phenomenon is reduction in mowing-pasturing use of meadows and pastures. Poor condition of habitats and species contributes also to expansion of agricultural farms and consolidation of plots, as it results in simplification of landscape structure and cultivation structure, ca. 75% of which are cereal plants<sup>14</sup>. On the other hand, more intensive use of herbicides reduces the number of insects and

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<sup>13</sup> Source - [http://www.mos.gov.pl/arttykul/5343\\_natura\\_2000/21048\\_natura\\_2000.html](http://www.mos.gov.pl/arttykul/5343_natura_2000/21048_natura_2000.html)

<sup>14</sup> Statistical Yearbook 2013.

birds, which are directly or indirectly dependent on presence of weeds in fields of cultivated plants. Particularly hazardous is elimination of pollinating insects, important not only for environment, but also for agricultural cultivations. A phenomenon observed in recent years is progressive specialisation in breeding of animals, which results in the fact that more and more farmers do not have farm animals or have abundance of them in closed breeding. Meanwhile, pasturing is favourable for active protection of areas endangered by secondary succession and for preservation of a proper condition of flora and fauna diversity.

Threats to condition of resources of forest biodiversity result from historical events and past forms of land use. They occur in places where specific composition of stands differs most from the nature of habitats and in places where anthropogenic changes in habitats resulting in simplification of forest stand structure, e.g. as a result of drainage and introduction of single-species stands. Observed negative trends concern single species or habitats and are mostly related to reasons going beyond forest management. Deterioration may concern condition of private forests and tree plantings, due to a growing demand for firewood, caused by high prices of other traditional energy sources, as well as early stage of developing technology of using renewable energy sources.

Factors negatively affecting the condition of freshwater ecosystems include in particular:

- disturbances in continuity of watercourses by the damming devices;
- regulation of rivers leading to standardisation of hydraulic conditions and morphology of beds;
- change of flow regime caused by hydrotechnical activities and changes in management of water catchment area (increased sealed surface);
- excessive water intakes;
- excessive reduction of water level in the river valleys by melioration drainage systems;
- embankment hindering or interrupting connectivity of ecosystems on floodplains and ecosystems of valleys;
- transformations of the coastline - reinforcing, installation and its deprivation of coastal and river bank vegetation;
- excessive or improperly conducted exploitation of aggregates;
- eutrophication triggered by not regulated sewage management and runoff of biogenic substances from fields fertilised in unbalanced manner.

The reason for environmental hazards of the coastal zone is physical degradation of natural habitats caused by anthropopressure. Exploitation of living and non-living sea resources going beyond their self-renewal capacity has adverse impact on natural resources of the Polish part of the Baltic Sea. This relates to over-fishing of some species of fish, excessive exploitation and elimination of macrophytes, excessive extraction of sand, gravel, periodical removal of *Cakiletea maritima*. A similar effect results from by-catch of endangered and protected species of fish, mammals and diving birds. The estimated total number of water birds wintering on coast of the Baltic Sea in the years 2007 - 2009 amounted to 4.41 million, as compared to 7.44 million in the period 1992 - 1993, which corresponds to 41% reduction. Numerous reasons for such a dramatic drop in numbers include by-catch in fishing nets and loss of habitats in

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connection with sea management<sup>15</sup>. Protection of maritime environment, in particular in the coast area began to be in clash with pressure of aggressive forms of tourism and recreation on biological and environmental needs of species and habitats.

Worth noticing is significant and increasing impact of climate changes on the condition of biodiversity. They affect species range, their reproductive cycles, vegetation periods and interactions with environment. Biological diversity undergoes gradual transformations under the effect of these changes. Expected climate warming will result in migration of species, including external invasive ones, mainly from Southern Europe, Northern Africa and Asia, along with simultaneous elimination of those species which are not adapted to high temperatures and summer draughts, and which tolerate harsh winter conditions. Migrations of species, constituting form of their adaptation to climate changes may be, however, prevented by "ecological obstruction" of landscapes significantly transformed by human, including: missing continuity of ecological vegetable formations, obstruction of ecological corridors (both rivers and forests), low saturation with natural elements possibly constituting "environmental islands" of particular species (e.g. small peat bogs, marshes, ponds).

Observed and expected changes in Poland's hydrological regime directly affect biological diversity. A change in the structure of precipitation is observed in the vegetation period, that is more frequent summer and spring draughts and increased number of tempestuous precipitation, including hail. Due to increased frequency of these phenomena, increasing number of extreme situations must be taken into account - floods, draughts, landslides and water erosion in beds of watercourses. Particularly visible effects of these changes will be observable in the upland areas where biodiversity depletion and direct damages may occur. The problem of hydrological regime changes relates also to flowing or standing freshwater habitats. This group is exposed to changes in consequence of increase of tempestuous precipitation, dry periods eutrophication processes and disorders in flows of waters in reservoirs. Furthermore, as a result of forecasted climate changes, small surface water reservoirs will gradually disappear (bogs, ponds, water holes, small shallow lakes, streams and small rivers). It poses a threat to numerous species which indirectly inhabit these areas or use them as reservoirs of potable water and may result in extinction or migration of species.

A serious problem is also the emergence of external species, which by their expansiveness pose a hazard for native species. The share of external species in the Poland's flora is 27%, including invasive and potentially invasive species - 2.5 %. The share of invasive and potentially invasive external species in the national fauna amounts to 0.2%<sup>16</sup>. External invasive species include, among others, free-living raccoon dog and American mink, which have dominated former ecological niche of European mink and currently lives in nearly whole Poland. A growing problem is population of raccoon, significantly increased in numbers and range in the western part of the country, at many places reaching the line of the Vistula river. Individuals of this species

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<sup>15</sup> Bzoma Sz. 2013. Hazards and protection of birds of the Baltic Sea. Waterbird Research Group KULING, Międzyzdroje, 22-25.09.2013.

<sup>16</sup> Solarz W. 2013. Protection of biological diversity of the country in respect of invasion of external plant and animal species. IOP Kraków.

are recorded also in the eastern Poland. Poor condition of ichthyofauna is additionally proven by the presence of over 30 external species introduced to our waters<sup>17</sup>.

## **5. Assumptions of the Programme**

### **5.1. Area of implementation of the Programme**

The programme along with action plan has been designed having in mind natural resources of the whole country. However, the majority of actions will be implemented in protected areas and so-called green infrastructure, part of which are ecological corridors spatially connecting the protected area system.

### **5.2. Priority directions of actions in the Programme**

In the period 2015 - 2020 it is necessary to enhance the nature protection system both in terms of legal regulations, and their adjustment to scheduled tasks. It is required by the system of supervision over the Natura 2000 network, which does not achieve its full functionality, especially in implementation of plans related to protection tasks/protection plans and control actions. It is necessary to supply the network of national parks and reserves in a manner ensuring their representative character in respect of biodiversity of natural resources in Poland and preservation of the most valuable areas. It is necessary to improve organisation of nature protection management in landscape parks, on the areas of protected landscape and in small forms of nature protection administrated by local administration units. Planning process should be continued with regard to protection tasks or creation of protection plans for the requiring forms of nature protection. It is also necessary to improve the system of assessing environmental impact of investments. The aim should be to improve enforcement of nature protection regulations, so as to reduce hazards associated with destruction of habitats, e.g. by improperly located infrastructure investment, ill thought-out water relations regulations and inaccurate forest and agricultural management. Actions should also be aimed at improving enforcement of regulations concerning poaching, illegal acquisition of endangered species for commercial purposes and illegal trade of species protected by CITES and related community regulations. A particularly important issue is introduction and development of exotic wood trade control system and further development of actions aimed at prevention of illegal trade via the Internet.

Implementation of goals of the Programme requires greater social stimulation through popularisation and promotion of development of local partnerships and other forms of social stimulation for the benefit of biodiversity protection. Society activation should engage local governments, which task should be to shape the policy so as to make the region development foster development of entrepreneurship based on good quality of local resources. An information campaign should be addressed to the society, showing that our healthy existence is based on well preserved and well operating natural resources. This will allow to build social support for the protected areas and search for other alternative mechanisms of protective action implementation.

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<sup>17</sup> Witkowski A., Kotusz J., Przybylski M. 2009. Stopień zagrożenia słodkowodnej ichtiofauny Polski: Red list of lampreys and fish - 2009.



An important role in the Programme should also be played by continuation of incorporation of the business sector into biodiversity protection actions. A key element of this direction should be increasing role of the EU Business and Biodiversity (B@B) platform supporting the companies integrating biodiversity issues in their current operations. The initiative of Corporate Social Responsibility (CSR) should be supported as its goal is to promote good practices and encourage private sector to undertake actions/investments leading to reduction of adverse impact the industrial plants and generally understood business activities have on natural environment, also on biological diversity. This will contribute to building the entrepreneurs' awareness that the money spent on environmentally-friendly operations is a good investment in the company's image, yielding measurable business benefits. Support is especially required by the local sector on the protected areas in the scope of development of skills in translating requirements and objectives of protection plans on decisions and actions with regard to adjustment of the existing companies which actions are harmful for qualities of natural protected areas and which must be abandoned for this reason, their further development and extension of business operations, which is positive or at least neutral from the point of view of the objectives, e.g. of Protection Action Plan of the Natura 2000; creation of new environmentally-friendly operations and companies which will in active and dedicated manner fulfil the requirements and goals of protection plans. Such approach will result in the fact that entrepreneurs which exert the greatest impact on nature will pursue strategies of their operation in a responsible manner or treat protection of natural resources and ecosystem services as the basis of their business plans.

The consistency of the country's policy should be enhanced in the context of biodiversity protection at various management levels. There is a need to extend incorporation of biodiversity protection issues to the strategies and development programmes of different domains and sectors of the economy. As a result, the need for undertaking actions will become clearer not only with respect to the protected areas, but also to the whole area within the country and even beyond its boundaries. The same need relates to different distribution accents introducing as one of its priorities an element of mobilisation of the economy sectors, without implementation of which effective protection of natural resources is not possible. It is also necessary to counteract environmental pressure resulting from gradually increasing agriculture intensification, construction of dual carriageways and motorways, as well as growing infrastructural needs of tourism and recreation. The aim should be to maintain the former area of agricultural-environmental-climate support, especially on the protected areas, and to strengthen ecological corridors by targeted forestation of agricultural land, limitation of buildings and equipping transport infrastructure with passages for animals. Thanks to implementation of provisions of the Water Framework Directive ecological condition and biological diversity of inland waters should improve. This should help in settlement of difficult issues related to river maintenance works. This pressure can be reduced by acceptance and effective implementation of respective changes, as well as by conduct of trainings covering the services responsible for issuing decisions.

In connection with the implementation of the Framework Directive concerning the marine strategy into the Polish law in 2013, a competence framework for preparation and implementation of particular elements of maritime strategy has been specified. Balanced approach to management of fish resources in fishery should also be gradually implemented, with regard to, e.g. adjusting fish catches to the level of maximum sustainable yield. Implementation of the Programme should result in successive implementation of effective methods restricting impact of by-catch on biological diversity, which is of great importance for

population of protected fish, seals, porpoises and birds dying in fishing nets. A growing pressure of tourism and recreation and related infrastructure should be counteracted, as it endangers biodiversity resources of the Baltic Sea's coast.

Thanks to the activities aiming at determination of environmental corridors and evaluation of functions of ecosystems a significant progress shall take place with regard to so-called "green infrastructure" which should be linked with gradual arranging of spatial planning issues and with growing awareness of society with regard to flood hazard, which will affect reduction of chaotic buildings phenomena. The aim of green infrastructure will be to balance fragmentation of the environment, caused by construction of network of dual carriageways and motorways where functionality of land ecological corridors is more and more dependent from passages for animals.

## **6. Vision of Poland's biodiversity in 2020**

The main challenge for the Programme will be its contribution to achieving the 1<sup>st</sup> target of the EU Biodiversity Strategy to 2020, i.e. **halting deterioration of the condition of all species and habitats covered by the EU legislation in the field of nature protection as well as achievement of a significant and measurable improvement of their condition.** This means that the plans for 2020 include 100% and 50% increase - as compared to the current assessments<sup>18</sup> - of the number of, accordingly, habitat and species assessments conducted on the EU scale under the Habitats Directive, indicating improved condition of protection. The plans envisage also 50% increase in the number of species assessments conducted under the Bird Directive, indicating safe or better condition of protection.

## **7. The Programme objectives**

### **7.1. Main objective**

Improvement of the condition of biodiversity and more complete connection of its protection and the country's social and economic development.

### **7.2. Specific goals and directions of intervention**

**Specific objective A: Improvement of the knowledge level and increase in activity of the society insofar as biodiversity actions are concerned.**

#### **Directions of intervention:**

A.I. Improvement in the condition of knowledge and availability of information concerning biodiversity.

A.II. Improving quality of decision-making process and effectiveness of law enforcement with regard to protection of biodiversity.

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<sup>18</sup> The reports for the years 2001-2006 prepared according to Article 17 of the Habitats Directive by the Member States and included in the Composite Report on the condition of protection of types of habitats and species, required pursuant to Article 17 of the Habitats Directive and prepared by the European Commission.



A. III. Activation of the society for the benefit of biodiversity protection.

**Specific objective B: Improvement of the nature protection system.**

Directions of intervention:

B. I. Improvement of the network of protected areas to increase effectiveness of biodiversity protection.

B.II. Improvement of the institutional structure of the protected area management system, including monitoring and reporting system.

B. III. Mobilisation of funds on implementation of protective actions in the protected areas.

**Specific objective C: Preservation and restoration of natural habitats and population of endangered species.**

Directions of intervention:

C. I. Improving effectiveness of management of the protected species.

C.II. Limitation of pressure of protected species causing economic damage.

C. III. Protection and restoration of valuable natural habitats.

**Specific objective D: Maintenance and reconstruction of functions of ecosystems being the source of services for human.**

Directions of intervention:

D. I. Assigning a socio-economic value to the ecosystems.

D.II. The implementation of the green infrastructure concept as a tool allowing for maintenance and strengthening of the existing ecosystems and their services.

**Specific objective E: Increasing integration of operations of the economy sectors with the biodiversity protection targets.**

Directions of intervention:

E.I. Incorporation of agriculture into further activities for the benefit of biodiversity protection.

E.II. Incorporation of forestry and hunting into further activities for the benefit of biodiversity protection.

E.III. Incorporation of fishing management into further activities for the benefit of biodiversity protection.

E.IV. Incorporation of water management into further activities for the benefit of biodiversity protection.

E.V. Incorporation of the tourism sector into further activities for the benefit of biodiversity protection.

E. VI. Incorporation of the business/companies sector into biodiversity protection actions.

**Specific objective F: Limitation of hazards resulting from climate changes and pressure of invasive species.**

Directions of intervention:

F. I. Monitoring of the impact of climate changes on the condition of biodiversity.

F.II. Limitation of pressure of invasive species.

**Specific objective G:** Increase in Poland's participation in the international forum with regard to protection of biodiversity.

## **8. Implementation of the Programme**

### **8.1. Responsible and involved entities**

Responsibility for coordination of the Programme, as well as for the implementation of most of its tasks rests with the Ministry of the Environment along with its supervised organisational units, including the General Environmental Protection Administration, the Chief Environmental Protection Inspectorate, the National Water Management Authority and the State Forests National Forest Holding. Practical implementation of the Programme depends to a large extent on the institutional capacities of environment protection services, especially 23 national parks, supervised by the Minister of the Environment, 122 landscape parks and 385 areas of protected landscape administrated by the province marshals. The key role will be played by the services of the General Director of Environmental Protection along with regional directors of environmental protection supervising functioning of the Natura 2000 network, nature reserves and coordinating other forms of nature protection, except for national parks. They are responsible, e.g. for establishment and implementation of plans of protective tasks/protection plans related to conservation and keeping records of data necessary to undertake actions related to their protection. Owing to fragmentation of environment protection services and unfinished process of developing system of functioning of the Natura 2000 network these services require reinforcement in terms of organisation and increase in their institutional capacities, particularly having in mind the scale of protection tasks as stipulated in nature protection related planning acts approved so far.

Owing to horizontal nature of biological diversity the leading role in implementation of specific tasks will be performed also by other departments according to their competences. This is justified by the fact that the system of financing protective actions is integrated with sectoral operational programmes. In addition to the central level units the programme implementation will require cooperation with possibly the widest group of the parties involved, e.g.: local government units, scientific-research units, business, non-governmental organisations and citizens.

### **8.2. Instruments of the Programme implementation**

Achievement of objectives of the Programme requires widespread use of all currently available measures as well as activation of new, when needed. These include:

- legal instruments;
- market instruments such as economic tools, fiscal instruments and voluntary agreements between administration bodies and economic entities;

- horizontal actions such as: scientific research, environmental education, information, sectoral and spatial planning;

financed by, among others: European funds, including LIFE, and other national and foreign measures.

A particularly important instrument determining effective implementation of the Programme is financing of projects concerning conservation and sustainable use of biodiversity. A very important role in this respect has been played for years and will be played by: The National Fund for Environmental Protection and Water Management and provincial funds for environmental protection and water management. The priorities of subsidisation of conservation and restoration of biological diversity from the funds of the National Fund for Environmental Protection and Water Management should be adjusted to the provisions of the Programme. The LIFE Fund will be widely used source of financing of the Programme's tasks, that envisaged, e.g. financial resources for so-called integrated projects.

Significant financial means directly or indirectly enabling execution of tasks related to protection of biological diversity are allocated in the European Funds for 2014-2020, including:

- The Infrastructure and Environment Operational Programme 2014-2020 which provides for, e.g. implementation of strategic goals with regard to restoration of habitats dependent on waters, invasive species, protection planning, ecological corridors;
- The Programme for the Rural Areas Development for 2014-2020 which provides for, e.g. the Agricultural-environmental-climatic action and activities involving afforestation of arable lands;
- regional operational programmes for 2014 - 2020 which provide for, e.g. supporting areas of landscape parks and nature reserves, as well as development of nature tourism.

Implementation of the Programme will also require to take advantage of the possibilities which have been planned in other operational programmes, e.g.:

- The Operational Programme "Fisheries and Sea" 2014-2020;
- The Operational Programme of Intelligent Development 2014 -2020;
- Operational Programme Knowledge Education Development 2014-2020;
- The Operational Programme Digital Polish for 2014-2020;
- The Programme Eastern Poland 2014-2020;
- The European Territorial Cooperation in the years 2014-2020;
- The Programme Technical Assistance 2014-2020;
- The Horizon 2020 Programme.

## **9. Mechanism of periodical review and verification of objectives**

Implementation of objectives and tasks determined in the Programme shall be subject to systematic review which will enable identification of progress of the Programme implementation and degree of achievement of the assumed goals. Evaluation of actions in the course of the Programme implementation will allow for update of tasks if they are not possible to be performed as a result of, e.g. changing objective conditions of the Programme implementation. During evaluation risk analysis will also be conducted, covering identification of hazards arising during implementation of the Programme along with the specification of methods minimisation of their effects. It is assumed that in the period of the Programme implementation, i.e. from 2015 to 2020, one mid-term evaluation will be conducted in 2018 and one final evaluation after

the period of the Programme implementation, in 2021. The action plan of the Programme suggests indicators for every task. Indicators have been constructed so as to ensure their direct relation to tasks, measurability and verifiability. Measurable indicators adopted in the action plan will constitute the main tool of conducted verification, enabling determination of the degree of tasks execution and achievement of the Programme objectives. The evaluations will include interviews with representatives of entities implementing different tasks and surveys concerning progress of the Programme, conditions of implementation and identification of hazards that may affect achieved results.

We suggest the following measures for objective evaluation of the degree of implementation of specific objectives:

Specific objective	Description of measures	Base and target level	Method of evaluation
Objective A Improvement of the knowledge level and increase in activity of the society with regard to protection of biological diversity	Increased level of the society's awareness to biological diversity	The condition as at 2014 - 35%/10% growth	Conduct of research concerning ecological awareness among the inhabitants of Poland, including government and local government administration bodies
Objective B Improvement of nature protection system	Amendment of regulations of the Act on Environmental Protection	Making an amendment by 2018	These two indicators have crucial importance for improvement of the protected area management system
	The number of Natura 2000 sites having planning documents	Base level 431; target level 987	
Objective C Preservation and restoration of natural habitats and population of endangered species	% of protected habitats, whose condition of protection has improved of protected species, whose condition of protection has improved	24.5% of habitats and 36% of species demonstrate proper condition of protection - base year 2012/assumed target is 10% increase of habitats and species proving proper condition of protection	Research based on data of the State Environment Monitoring
Objective D Maintenance and reconstruction of functions of ecosystems being the source of services for human	Preparation of the detailed concept of green infrastructure implementation along with evaluation of economic value of ecosystem services	The base condition - concept of ecological corridors prepared for the Minister of the Environment in 2012/target	Implementation of measure will be adopted as a publication in the form guidelines of the green infrastructure implementation concept and ecosystem services evaluation

		condition - the green infrastructure concept along with the methodology of ecosystem services evaluation	
Objective E Increasing integration of operations of the economy sectors with biodiversity protection objectives	Level of involvement of sectoral measures on pursuit of biodiversity protection objectives	Base level estimate costs included in PAF - PLN 4 billion /target level - at least 30% of the base amount	Costs calculated in PAF (Priority Action Plan for 2014 - 2020) have been estimated as maximum close to PLN 4 billion. In the period of current perspective it is planned to implement at least 30% needs specified in PAF, namely PLN 1,358 million
Objective F Limitation of hazards resulting from climate changes and pressure of invasive species	Amendment of law with regard to preventing appearance and spread of external invasive species	Making of amendment of law by 2018	Realisation of measure will be approved as preparation of the draft amendment of the Act on Environmental Protection with regard to prevention of appearance and spread of external invasive species
	Amendment of law in the scope of access to genetic resources and fair distribution of benefits	Making of amendment of law by 2018	Realisation of measure will be approved as preparation of the draft amendment of the Act on Environmental Protection in the scope of access to genetic resources and fair distribution of benefits
Objective G Increase in Poland's participation in the international forum with regard to protection of biodiversity	Number of international meetings of working groups in the field of biodiversity with the participation of Polish experts	Target level will be a total number of planned meetings for each year from the period of 2015-2020	Indicator will be calculated as ratio of the number of meetings which was attended by representatives of Poland in relation to all scheduled meetings

## 10. Action plan for the period of 2015-2020

### **Specific objective A: Improvement of the knowledge level and increase in activity of the society insofar as biodiversity actions are concerned.**

According to the National strategy of conservation and sustainable use of biodiversity along with the Action Programme for the years 2007 - 2013, many activities have been realised, aiming at increase of ecological awareness and understanding of the needs of limitations on account of biodiversity protection. Visible progress can be noted in this regard with an approach to the average EU level. Studies on awareness and environmental habits among the inhabitants of Poland conducted in 2014 upon the order of the Ministry of Environment indicate that 35% of the respondents know and understand the term "biodiversity", 32% know

what the Natura 2000 is<sup>19</sup>. It is recommended to undertake actions aimed at development of knowledge concerning natural resources, increase of social activity regarding nature protection and development of skills with regard to undertaking decisions affecting biological diversity. These actions will allow for better use of development opportunities in communes of high natural value by local communities. It is also necessary to continue activities with regard to lifting awareness of society of the objectives related to biological diversity. It requires, except for basic education, targeted programmes and awareness campaigns.

no.	Task	Substantiation	Leading institution	Index
A.I	Improvement in the condition of knowledge and availability of information concerning biodiversity.	Poland's nature protection administration, system of monitoring and reporting and supervision over implementation of species and natural habitats protection objectives requires support of scientific communities, preferably integrated in officially appointed centre, similarly as in other EU countries. System integration in accordance with the INSPIRE Directive is also required by the processes of gathering information on species and habitats, coming from various sources, collected in the distributed databases, e.g.: the Information System of Monitoring of Species and Habitats of the Chief Inspectorate for Environmental protection and Bird Monitoring Home Page, base of habitats covered by the agriculture - environment programme of the Ministry of Agriculture and Rural Development, the National Information Network on Biological Diversity created at the Faculty of Biology, University of Warsaw or the Polish National Moss Field Base of the Institute of Technology-Life Sciences, etc.		
1.	The preparation and implementation of the concept of system scientific support with regard to protection of biodiversity for nature protection administration	Poland's nature protection system, which was expanded by the EU system (the Natura 2000 network), has not relevant scientific support on its use as, e.g. <i>the European Topic Centre</i> at the European Environmental Agency. The lack of scientific facilities weakens position of the Ministry of the Environment in area of nature protection as compared to other ministries, which have such facilities. Scientific support is required at, e.g. preparation and improvement of substantive grounds of monitoring, reporting and restoration of proper condition of protected habitats and species. It is necessary to develop the concept of organisation and principles of functioning of such facilities and then to implement them.	Ministry of the Environment	Approval of the concept of scientific support with regard to biodiversity for nature protection administration

<sup>19</sup> Numeric data for: Awareness and environmental habits research among the inhabitants of Poland. Tracking research- measurement: October 2014. TNS Polska report for Ministry of the Environment, Warsaw 2014 and Flash Eurobarometer 379, Attitudes towards biodiversity. Conducted by TNS Political & Social at the request of the European Commission, Directorate-General for Environment.

2.	Construction of tools and development of the natural inventory bank's resource	The natural inventory bank will be reference and complex source of data from natural inventory-takings performed due to different needs. Uniform standards will be prepared, regarding conduct of natural inventory. Keeping the bank will prevent natural inventory from being conducted on the same areas. The bank will also have a control-monitoring function as it will use tools managing the quality of nature studies and allowing for comparison of data from various sources. For the purpose of the bank it is necessary to develop legal solutions constituting the resource of inventory-taking data which will regulate acquisition, collection and sharing of data acquired by administrative units, as well as entities participating in the process of environmental impact evaluation and integrating results of scientific research concerning natural inventory. Keeping the bank of natural inventory-takings shall fulfil obligation associated with implementation of the INSPIRE Directive and development of spatial information infrastructure with regard to spatial data topics "Habitats and biotopes" and "Species Distribution".	Ministry of the Environment General Directorate for Environmental Protection	Number objects/records in the natural inventory bank
3.	Expansion of the central register of forms of nature protection and increase in interoperability with other reference databases	Keeping the central register of forms of nature protection results from Article 113 of the Act of 16 April 2004 on nature protection (Journal of Laws of 2015 item 1651) the minister competent for environment, on the basis of Article 3 item 7 letter e of the Act of 4 March 2010 on spatial information infrastructure (Journal of Laws, No.76, item 489, as amended) acts as the leading authority with regard to, e.g. topic of spatial data - protected areas - in the part concerning forms of nature protection as defined by Article 6, passage 1, item 1-9 of the Act on nature protection. The central register of forms of nature protection is currently updated and	Ministry of the Environment General Directorate for Environmental Protection	The number of objects/records in the central register of forms of nature protection The number of collections with which the INSPIRE harmonization was conducted



		<p>supplemented, especially with regard to Geoserwis, which is part of the register containing spatial data (<a href="http://geoserwis.gdos.gov.pl">http://geoserwis.gdos.gov.pl</a>). The next stage after reaching completeness of the register is harmonisation of its collections with other reference collections, among others with resources of state records as well as KZGW collections and Forest Numerical Map. It is planned to introduce statutory regulations introducing additional activities motivating competent authorities to submit information to the central register of forms of nature protection. A further development of Geoserwis is planned as well as gradual extension of the information scope of presented spatial data.</p>		
4.	<p>Expansion and maintenance of condition of database resources ensuring up-to-date information under subsystem of nature and waters monitoring of environment monitoring program</p>	<p>Access to information and data for different needs and for various groups of recipients is implemented by numerous portals, information services. The purpose of the task is to ensure harmonisation and interoperability of collections and services within spatial data by means of Geoportal GIOS which meets the requirements of the INSPIRE Directive and the act on spatial information infrastructure. It is necessary to develop and keep existing database resources of GIOS as well as integrate them through network services with other reference resources or systems and constantly ensure access to information on the condition of environment in the course of the concerned programme for the period 2015-2020 and in later years.</p>	<p>Chief Inspectorate for Environment Protection</p>	<p>The number of collections made available by means of Geoportal</p> <p>The number of information services</p> <p>The number of databases</p>



<b>A.II</b>	<b>Improving quality of decision-making process and effectiveness of law enforcement with regard to protection of biodiversity.</b>			
	It is necessary to systematically train administration staff of all levels, involved in decision making related to the protection of biological diversity. This applies not only to environment sector services, but also to other economy departments. A special role in the system of supervision and control of compliance with the nature protection law is played by the services working for maintenance of internal safety of the state. Their effectiveness largely depends on knowledge of legal regulations and adequate level of knowledge related to biodiversity issues. Therefore, there is a need for constant development of system of trainings raising professional qualifications of judges and prosecutors, officers of the Police, Border Guard and Customs Services, but also of regional and local level of administration			
5.	Trainings of judges and prosecutors with regard to interpretation and enforcement of legal regulations relating to protection and use of biodiversity	Effective enforcement of law related to protection of natural resources depends on the knowledge of specific nature of an issue and importance of biodiversity protection. A confidence about small social harmfulness of damages made to the environment must be changed. Educational activities should cover prosecutors specialising in crimes relating to nature protection. In addition, in the National School of Judiciary and Public Prosecution the programmes of courses will be prepared and implemented, concerning protection of resources and sustainable use of biodiversity, which would enable introduction of system of education of candidates for judges and prosecutors in aforementioned scope	Ministry of Justice  General Prosecutor's Office	The number and percentage of persons who have completed from trainings in relation to staff specialising in crimes relating to nature protection
6.	Trainings of services, including the Police, Border Guard and Customs Services, in the scope of interpretation and enforcement of legal regulations regarding protection and use of biodiversity	An important role in the system of supervision and control of compliance with law related to protection of biological diversity is played by the services. Their effectiveness largely depends on knowledge of legal regulations and the level of knowledge concerning biodiversity adequate to the needs. Therefore, there is the need for development of permanent system of trainings improving professional qualifications of services.	The Ministry of Internal Affairs (the Police and Border Guard)  The Ministry of Finance (Customs Services)  The Ministry of Environment national parks (National Park Guard)	The number and percentage of persons who have completed trainings in relation to personnel of particular services specialising in crimes relating to nature protection

7.	Trainings of public administration officials involved in issuing decisions affecting biodiversity resources	To improve the quality of environmental decisions and other decisions concerning environmental protection, issued under OOS procedures (e.g. the permit for removal of trees) it is necessary to constantly improve the qualifications of public officials at regional and local level with regard to both knowledge of law and interpretation of legal regulations, but also regarding substantive knowledge related to the protection of biological diversity.	The General Directorate for Environment Protection	The number and percentage of persons who have completed trainings in relation to personnel specialising in issuing of environmental decisions
8.	Trainings of services responsible for management of water resources, related to the protection of biodiversity	To improve understanding of relations between protection of biological diversity and implementation of regulations resulting from Directive 2000/60/EC the European Parliament and Council of 23 October 2000 establishing a framework for Community action in the field of water policy (Official Journal EU L 327 of 22.12.2000, p. 1, with later amendments), hereinafter referred to as "the Water Framework Directive" it is necessary to constantly improve the qualifications of services which are responsible for water resources management, especially protection of waters with regard to water-environmental programmes favouring protection of biological diversity.	Ministry of the Environment The National Administration of Water Management General Directorate for Environmental Protection	The number of people who have completed trainings
<p><b>A.III Activation of the society for the benefit of biodiversity protection.</b></p> <p>Implementation of goals of the Programme depends on creating relevant conditions for engaging local communities in actions aimed at protection of biodiversity. A good direction of increasing social stimulation is establishment of local partnerships and start-up of voluntary service attractive for the participants. The key recipients of these actions will include the community living in protected areas, local governments with particular focus on local level, school pupils and non-governmental organisations all of which engage in actions aimed at preservation of biodiversity. Activation at the local level will contribute to activation of strategic thinking on the local development with the use of possibilities given by natural qualities, changes in adverse attitude to protected areas, especially the Natura 2000 sites. Taking into account limited financial means allocated on implementation of tasks concerning protected areas - voluntary service and local partnerships may become an indispensable element of the entire system of nature protection. Conducting activities to shape ecological awareness of the society and biodiversity education activities should be continued on the national level, but also at the regional and local level.</p>				

9.	Preparation of principles and implementation of voluntary service for biodiversity protection	Increasing social acceptance and social stimulation may be successfully implemented by voluntary service institution bringing together teenagers and involved citizens. Volunteers would participate in activities related to monitoring and active protection, acquiring new knowledge and skills, as well as technical and social support.	General Directorate for Environmental Protection national parks	The number of established centres of voluntary service  The number of volunteers per year
10.	Preparation and implementation of the concept of local partnership focused on protection of natural and cultural heritage	Active participation of local communities in activities aimed at protection of natural and cultural heritage may proceed by establishment of the new partnerships of local communities, local administration and government bodies, non-governmental organisations, operating on the basis of common benefits. The purpose of partnerships will be to prepare and implement local development strategy using possibilities resulting from natural values with due care, support for local initiatives and entrepreneurship, start-up of extension and trainings	regional directorates of environmental protection  local governments  General Directorate for Environmental Protection  national parks landscape parks	The number of established local partnerships
11.	Implementation of educational programmes and campaigns for the society in order to increase their awareness on implemented objectives related to biological diversity	It is necessary to implement these actions continuously in order to lift awareness of society on objectives related to biological diversity. It requires to go beyond basic education, to implement focused programmes and awareness campaigns covering extensive of activities to shape ecological awareness of the society and education actions concerning sustainable development.	Ministry of the Environment national parks  The State Forests National Forest Holding  General Directorate for Environmental Protection  local government units	The number of programmes and campaigns of national range  The number of campaigns of regional range  The number of campaigns of local range

**Specific objective B: Improvement of the nature protection system.**

Poland's nature protection system, which has not achieved target condition, must undergo evolution, accordingly to the new needs and challenges. Implementation of the strategic goal of the Programme requires that all the most valuable and endangered natural habitats and species

and fragments of ecological landscape are protected within the boundaries of protected areas in a manner representative in terms of their ranges and geographic diversity. Spatial scope of implementation of area forms of nature protection did not reach its target shape (this applies to e.g. national parks, nature reserves), despite many attempts made by the Ministry of Environment in this respect. Revision of law is required in the method of establishing new protected areas, but also in the principles of functioning of landscape parks and areas of protected landscape, especially in the context of reinforcement of the role of ecological corridors and constant increase of pressure on protection of landscape qualities. Without these changes it will be difficult to effectively protect land and water ecological linkages between the protected areas. In order to effectively protect biological diversity it is also necessary to enhance the protected area management system according to new assigned tasks.

no.	Task	Substantiation	Leading institution	Index
<b>B.I.</b>	<b>Improvement of the network of the protected areas to increase effectiveness of biological diversity protection.</b>			
12	Establishment of new and expansion of existing national parks along with development and implementation the concept of system of compensations for losses related to the introduction of limitations	It is necessary to establish three new facilities in order to achieve ecological representative character of national parks: Mazurski NP, Turnicki NP and Jurajski NP. On the other hand, it is required to enlarge the boundaries of: Białowieża NP, Karkonosze NP, Babia Góra NP and Tuchola Forest NP. Experience shows that implementation of this task will require legal changes insofar as method of agreement of this type of activities with local communities is concerned. At the same time it is necessary to ensure real social consultations as well as development and implementation of compensation scheme under losses related to introduction of certain restrictions.	Ministry of the Environment	Amendment of law with regard to appointment of protected areas

13.	Assessment of needs and complement to the nature reserves network in terms of their ecological representation	In connection with the acquisition of new knowledge on country's natural resources there are premises, proving that nature reserves network is not representative enough in respect of objects of protection and country's natural diversity. It is necessary to assess the degree of the representativeness of nature reserves network and begin the process of its complementation in accordance with assessment considerations.	General Directorate for Environmental Protection regional directorates of environmental protection	Completed ecological representation assessment of natural reserves
14.	Revision of objectives, functions as well as principles concerning performance of protection in landscape parks and in protected landscape areas	Revision covers legal regulations concerning landscape parks and protected landscape areas. It is necessary to determine their objectives, functions as well as principles concerning performance of protection. With regard to landscape parks it is necessary to consider provisions of Landscape Convention including, among others, identification of landscapes which occur in Poland and indication of most endangered landscapes. Protected landscape areas should be subject to fundamental verification taking into account protection functions for ecological corridors.	General Directorate for Environmental Protection Ministry of the Environment	Amendment of the Act on environmental protection containing revised objectives and tasks for landscape parks and protected landscape areas
15.	Preparation of landscape audit within the area of the voivodeship and identification of priority landscapes	Preparation of landscape audit within the area of the voivodeship consisting in identification and evaluation of landscapes which occur in the voivodeship and identification of priority landscapes results directly from provisions of the Act of 24 April 2015 on amendments of acts in connection with strengthening of landscape protection tools (Journal of Laws, item 774) concerning identification and evaluation of landscapes.	voivodeship governments	Identification and assessment of landscapes which occur in Poland and identification of priority landscapes
<b>B.II</b>	<p><b>Institutional strengthening of protected areas management system including natural monitoring and reporting system.</b></p> <p>Organization of nature protection system in Poland underwent significant changes in 2008 when General Administration for Environmental Protection was appointed along with 16 regional directorates for environmental protection. These institutions are responsible, among others, for supervision over Natura 2000 network which in spite of implementation of many coordination and control mechanisms does not take all functions as e.g.: monitoring of Natura 2000 objectives, prohibition compliance control or implementation of protection tasks. Strengthening of institutional capacities of management system</p>			

	concerning implementation of protected areas objectives in the condition to fulfil the imposed obligations which include planning actions, supervision and implementation of protection actions, control of plans records. It is also required to substantively and institutionally arrange collection, processing and monitoring data sharing issues and create information gathering tools concerning incurred expenses on protection activities.			
16.	Improvement of the control system with regard to compliance with nature protection law and responsibility system for violation of law	Legal regulations concerning biodiversity protection compliance issues are fragmentary and dispersed which have adverse impact on control effectiveness. On the one hand restriction covers number of nature protection bodies having control rights on the other hand, however, there is a number of services controlling narrow scopes of operations. In view of expansion of regulations limiting the use of natural resources it is necessary to review existing control structures and prepare principles of their consolidation. It involves amendment of legal regulations in this respect. In view of low effectiveness of penalties imposed for offences with regard to nature protection it is necessary to analyse the grounds for study and implementation of administrative responsibility system for biodiversity destruction.	Ministry of the Environment	Amendment of law with regard to nature protection compliance control
17.	Preparation of protection plans or protection tasks plans for area-related nature protection forms	Creation of planning documents for area-related nature protection forms including Natura 2000 sites has not so far been resolved. Up to 2020 number of developed plans should be doubled as compared to the condition for 2015.	regional directorates of environmental protection  national parks maritime offices landscape parks/ landscape park complexes	Percentage of areas having plans in relation to the number of plans approved in 2015
18.	Inclusion of protection plans or protection tasks plans indications concerning protected areas to sectoral documents and acts of local law	Indications included in protection tasks plans or protected areas plans should be implemented to sectoral documents and local plans. It is particularly important to integrate planning documents for areas on which forest management is conducted and at the same time covered by Natura 2000 program. It should contribute to improvement of lands management and apart from this it	The State Forests National Forest Holding  local government units	PUL number concerning PZO/PO indications in relation to forest inspectorates PUL number the area of which coincides with Natura 2000 network

		will also foster maintenance of possibly best condition of objects of protection of Natura 2000 sites related to forest communities.		
19.	Strengthening of supervision system over protected areas including Natura 2000 sites	Legal regulations regarding supervision over protection of protected areas including Natura 2000 sites require particularization and details. Supervising bodies require in addition reinforcement of personnel and their potential. Improvement of institutional capacities of bodies involves the need to identify legal regulations, technical improvement as well as investments in personnel training.	General Directorate for Environmental Protection national parks	Amendment of the Act on environmental protection with regard to supervision system over protected areas  Number trained employees of RDOŚ related to nature management
20.	Establishment and implementation of protection actions monitoring including Natura 2000 sites	Establishment and organization covers monitoring of activities implementation stipulated in protection tasks plans and protection plans. It is supervising instrument over protected areas. Monitoring of implementation of Natura 2000 objectives is particularly significant owing to the fact that implementation of protection actions rests on various institutions and private persons (land owners) and as a result information on such activities is dispersed.	regional directorates of environmental protection  General Directorate for Environmental Protection national parks	Number of records in monitoring system concerning completed protection actions
21.	Development of natural monitoring as a part of National Environmental Monitoring	The existing natural monitoring system as a part of National Environmental Monitoring covering species and natural habitats requires completion with regard to maritime areas, fungi, and monitoring, if possible, should cover all breeding species of national avifauna.  Analysis should also cover the possibility to integrate monitoring of protection condition concerning protection objects in Natura 2000 sites from National Environmental Monitoring system subject to costs, expert teams efficiency and sources of financing.	Ministry of the Environment	Launching of natural monitoring of maritime areas and fungi resources  Completed expert's report regarding costs evaluation and PMS integration benefits as well as monitoring of Natura 2000



22	Review of methodologies concerning natural habitats assessment and PMS species	The purpose of the task is to analyse indexes determining condition of habitats and species protection included in Habitat Directive and Birds Directive from the point of view of their updating and possible standardization at the Community level. It is advised to determine principles concerning the use of indexes at the local level, e.g. Natura 2000 site.	Ministry of the Environment	Completed review of methodologies indicating needs with regard to their amendment
23	Ensuring full and current natural inventory-taking in the country	To ensure proper land development, development of representative protected areas network, performance of correct environmental impact assessments and proper use of the Act of 13 April 2007 on prevention and remedying of environmental damages (Journal of Laws of 2014, item 1789, as amended), it is necessary to know natural country's resources in full. For this reason it is necessary to begin national, regional and consistent methodological natural inventory-taking of selected and endangered natural habitats with the use of remote methods and further its gradual and regular update.	Ministry of the Environment General Directorate for Environmental Protection regional directorates of environmental protection local government units	Percentage area of the country where nature inventory-taking was conducted in relation to the area of the country
<b>B.III</b>	<b>Mobilization of funds on implementation of protection actions in protected areas.</b>  The basis for effective biodiversity protection is to ensure proper funds. Growth of financing of biodiversity protection is one of the priorities of the <i>EU Convention of biodiversity protection strategy for the period of 2020</i> . In order to present financial needs concerning implementation of Natura 2000 network and other protected areas at the request of the European Commission the so-called Prioritized Action Framework (PAF) was developed and adopted as strategic document by the Minister of Environment for financial perspective for the period of 2014 - 2020. However, available public funds from domestic sources and from non-returnable foreign aid, including EU funds may be insufficient. It is thus necessary to effectively spend available funds, control granted level of financial aid and seek for innovative mechanisms of financing.			
24.	Establishment of IT tool for collection of data on expenses from various sources for implementation of nature protection tasks (including expenses incurred by GDOŚ and RDOŚ)	The aim of the task is to prepare and implement the concept of digital data exchange and information platform on costs of implemented activities with regard to nature protection. Modern system will be established meeting assumptions of law regulations with regard to access to information as well as taking into account needs of public institutions and other stakeholders forming resources, data and information on	General Directorate for Environmental Protection	Functioning IT tool



		environment and its protection. Implementation of this task requires assessment of possibilities to create such a system.		
25.	Middle-term assessment of the level of expenses incurred from national and European funds for protection of biological diversity in relation to the strategic assumptions of Prioritized Action Framework (PAF)	Strategic document, the so-called Prioritized Action Framework (PAF) prepared for Natura 2000 network for the period of 2014 - 2020 was expected to be the basis for planning measures in operational programs of financial perspective for the period of 2014-2020. PAF is subject to middle-term assessment and verification/update of assumptions. Assessment of effectiveness of mechanisms restricting expending funds from EU funds and national sources in a manner which is detrimental to biodiversity.	General Directorate for Environmental Protection	Completed middle-term assessment along with PAF update
26.	Increase of effectiveness of measures absorption by nature protection bodies under existing funds meant for biodiversity support	Level of funds absorption by governmental administration from available EU funds and national funds for biological protection is insufficient. To increase institutional capacities in this respect it is necessary to prepare personnel and develop consulting system aimed to increase the number and quality of projects being prepared.	Ministry of the Environment General Directorate for Environmental Protection	Level of funds absorption under funds dedicated to diversity protection

**Specific objective C: Preservation and restoration of natural habitats and population of endangered species.**

Preservation and restoration of species welfare and their habitats is the priority both in the national nature protection policy, in EU and at the global scale. Although activities were undertaken the process of loss of population of endangered species cannot be reduced. One of the reasons for these failures, apart from deepening anthropogenic and natural risks, is low ecological effect of performed activities resulting from their high grinding/dispersion and lack of continuation. Species protection system in Poland requires increase of effectiveness of protected species management, completion of state of knowledge on distribution of natural resources, arrangement of issues concerning acquisition of animals from wild and management methods for protected species populations causing economic damage.

no.	Task	Substantiation	Leading institution	Index
<b>C.I</b>	<b>Increase of effectiveness of protected species management system.</b> Species protection should be implemented both in protected areas and beyond these areas. It requires better effectiveness with regard to development and periodical verification of national protection programs of most endangered species and their consistent implementation subject to active protection actions. Introduction of system solutions for problems related to holding of live, alien and dangerous animals which cannot live in natural environment which have not been fully resolved.			
27.	Preparation and implementation of national protection programs for key protected species	It is necessary to continue protection programs for key plants and animal species and implement existing programs. There is a need to prepare new wisent protection strategy in order to improve the condition of protection of these species.	The General Directorate for Environment Protection Ministry of Environment	Number of approved protection programs
28.	Determination of layout of national breeding birds species	The aim of the task is to obtain information on layout, range and trends of all breeding birds species in Poland identified after 2004. This task completes data collected by GIOS with regard to changes in birds population. The implementation of the task will enable diagnosis of the condition and needs to protect bird species and adopt proper policy of their protection in our country.	The General Directorate for Environment Protection	Issuance of the publication on distribution of national breeding birds species in Poland
29.	Organization of shelter system and storage places of live animals of protected, alien and dangerous species	Currently the implementation of provisions governing trade in live animals of protected, alien or dangerous species is strictly limited in connection with the lack of shelters or other units to which they could be transferred. It applies most often to retained, unwanted, found or lost animals. It is necessary to establish shelter system as well as ensure funds to maintain such animals, including contracting their storage by units having appropriate conditions (also private entities).	Ministry of Environment, The General Directorate for Environment Protection	Amendment of law with regard to storage of animals. Number of created shelters and places of animals storage (also beyond shelters)

30.	Placement of dogs under service with regard to detection of live animals smuggling	Owing to the fact that part of Polish boundaries constitute external boundaries of EU especially exposed to protected animals species smuggling it is advisable to increase the effectiveness of detection of such actions by training and use of dogs to detect live animals and other protected species.	Custom Services Ministry of Finance	Number of border crossings on which there are dogs trained to detect protected species  Number of detected smugglings with the involvement of dogs
<b>C.II</b>	<p><b>Limitation of pressure on the part of protected species creating economic damages.</b></p> <p>Legal regulations with regard to restricting the size of damages created by some protected species as European beaver, cormorant which significantly increased their number does not bring desired effects. Such situation generates many social conflicts and exposes State Treasury to higher expenses related to damages. Largest conflicts appear in the context of agricultural economy and fishery as well as water management - digging into levees and weakening of flood banks. In 2011 projects of national management strategy for endangered and conflict species were developed under the project coordinated by Warsaw University of Life Sciences in Warsaw co-financed from POIiS (Operational Program Infrastructure and Environment) 2007 - 2013, among others for cormorant and otter. On the basis of applications resulting from these strategies it is necessary to take actions to settle this problem in legal terms and develop guidelines to manage these species.</p>			
31.	Amendment of the Act on environmental protection with regard to regulations concerning protected species causing economic damages	In the case of some conflict species (e.g. beaver, cormorant) existing ways concerning arrangement of their number do not bring desired effects. It is necessary to develop other legal solutions to manage these populations.	Ministry of Environment  The General Directorate for Environment Protection	Amendment of the Act on environmental protection in terms of improvement of solutions concerning these species
32.	Development and implementation of guidelines in terms of selected protected species management causing substantial economic damage	It is necessary to improve principles of handling with protected species and, at the same time conflict species, causing negative social reception (e.g. beaver, cormorant). Implementation of guidelines involves the execution of informational and educational tasks concerning the way of acting to reduce damages and how to prevent them. The role of such actions is particularly important owing to maintenance of social approval to maintain the number level of protected species causing damage.	The General Directorate for Environment Protection Ministry of Environment	Number of prepared guidelines  Number of trained people

<b>C.III</b>	<b>Protection and restoration of valuable natural habitats.</b>			
	The basis for protection of habitats in protected areas is the implementation of protection plans or protection tasks plans. Their implementation is generally included in sectoral programs, e.g. Rural Areas Development Program. Special protection and restitution programs will be necessary with regard to these habitats the protection of which will not be supported under resort projects and require actions in protected areas at the regional or national scale as e.g. with regard to water-mud areas in order to obtain better ecological effect.			
33.	Preparation and implementation of protection projects and restoration of degraded habitats, particularly water-mud in protected areas	In accordance with PAF it is necessary to prepare and implement protection projects for endangered habitats. They should also focus in particular at the areas performing important function within the ecological structure of the region or in local water circulation system. Apart from implementation of the action at the local and regional level it is necessary to apply nation-wide approach.	General Directorate for Environmental Protection,  national parks  Ministry of Infrastructure and Development	Habitats surface is covered by activities in protected areas

**Specific objective D - Maintenance and reconstruction of functions of ecosystems being the source of services for human.**

Maintenance and restoration of ecosystem functions is the new priority of *EU biodiversity protection strategy for the period of 2020*, which is supposed to be implemented beyond protected areas system, cover the whole country, be based on the assessment of the ecosystem condition and their services resulting from functions performed by ecosystems. It requires development of ecosystem services evaluation system and placement of these values to developmental strategy, planning system, national accounting and reporting systems. Biodiversity shall obtain thus the role of determinant of social and economic development and shall be differently perceived by the society. Inclusion of ecosystem services values to national decision-making process enable proper assessment of the degree of possible loss of biodiversity, application of compromise solutions and improvement of coordination of activities among different sectors and administration levels.

no.	Task	Substantiation	Leading institution	Index
<b>D.I</b>	<b>Assigning socio-economic value to ecosystems.</b>			
	Member States are obliged to identify and assess ecosystems' condition and their functions in the territory of the country as well as to assess economic values of these functions as well as to undertake activities which support inclusion of assessed values to accounting and reporting systems at the EU and at the national level until 2020. Implementation of these tasks requires conduct in accordance with guidelines developed at the EU level and reaching for experience of other member countries			

34.	Identification and assessment of functions condition/ecosystem services in the territory of the country	Typology of ecosystems, development of assessment indexes concerning maintenance of their functions and ecosystem service catalogue in accordance with EU guidelines are necessary to map green infrastructure, i.e. first stage of its implementation.	Ministry of the Environment	Prepared national ecosystem catalogue and their services along with ecosystem layout map
35.	Adaptation of EU methodology for assessment of ecosystem values to Polish conditions	EU has developed ecosystem services assessment guidelines. The possibility of their application in Poland requires examination and particularization, taking into account available data and information sources in the context of ecology and economics.	Ministry of the Environment	Prepared national ecosystem services assessment principles
36.	Preparation of inclusion principles concerning ecosystem services assessment under accounting and reporting systems at the national level	Adoption of activities aimed at dissemination of ecosystem assessment principles is the task resulting from EU biodiversity protection strategy for the period of 2020.	Ministry of the Environment Ministry of Finance Central Statistical Office	Prepared national ecosystem services assessment principles under accounting and reporting systems
<b>D.II</b>	<p><b>Implementation of green infrastructure concept as the tool which enable maintenance and strengthening of existing ecosystems and their services.</b></p> <p>In the light of <i>EU biodiversity protection strategy for the period of 2020</i> there is a need to conduct inspection of the scope of adjustment national spatial planning systems to the needs of biodiversity protection strategy, determine problems and identify recommendations. Establishment of green infrastructure the part of which are ecological corridors as spatial planning element is intended to strengthen planning activities for the development of the country, region, commune, district and city subject to rational spatial use and provide conditions for social and economic development. The concept of green infrastructure is also consistent with spatial planning assumptions such as rational conversion and spatial structures management including natural conditions. At the same time with the maximum integration of green infrastructure with the existing nature protection system in particular protected landscape areas which perform the function of ecological spatial link it is possible to strengthen nature protection system in our country.</p>			
37.	Preparation of national guidelines ensuring assignment to green infrastructure the status of standard element of spatial planning and territorial development	The best implementation instrument of green infrastructure is spatial planning. Implementation of the concept of green infrastructure to spatial planning requires preparation of relevant guidelines taking account of assumptions of management system reform.  Consideration of green infrastructure along with ecosystem services assessment in	Ministry of Infrastructure and Development	Study of national guidelines ensuring assigning to green infrastructure the status of standard element of spatial planning

38.	Inclusion of green infrastructure to planning works at the local level	planning documents at the local level will create better base for risk management, mitigation of risks related to climate change and space fragmentation. Care for green infrastructure in urban environment is the source of benefits related to health of inhabitants.	local government units	Number of planning documents in which green infrastructure is incorporated in accordance with EU standards
39.	Update of the course of ecological corridors along with the identification of management principles	Network of ecological corridors needs to be verified taking into account requirements concerning maintenance of communication between protected areas and plants and animals migration needs. Insufficient protection of ecological corridors in Polish law makes it impossible to fully consider ecological corridors	General Directorate for Environmental Protection Ministry of the Environment  marshal offices	Identification of ecological corridors along with management systems
36.	Preparation of inclusion principles concerning ecosystem services assessment under accounting and reporting systems at the national level	Adoption of activities aimed at dissemination of ecosystem assessment principles is the task resulting from EU biodiversity protection strategy for the period of 2020.	Ministry of the Environment Ministry of Finance Central Statistical Office	Prepared national ecosystem services assessment principles under accounting and reporting systems
<b>D.II</b>	<p><b>Implementation of green infrastructure concept as the tool which enable maintenance and strengthening of existing ecosystems and their services.</b></p> <p>In the light of <i>EU biodiversity protection strategy for the period of 2020</i> there is a need to conduct inspection of the scope of adjustment national spatial planning systems to the needs of biodiversity protection strategy, determine problems and identify recommendations. Establishment of green infrastructure the part of which are ecological corridors as spatial planning element is intended to strengthen planning activities for the development of the country, region, commune, district and city subject to rational spatial use and provide conditions for social and economic development. The concept of green infrastructure is also consistent with spatial planning assumptions such as rational conversion and spatial structures management including natural conditions. At the same time with the maximum integration of green infrastructure with the existing nature protection system in particular protected landscape areas which perform the function of ecological spatial link it is possible to strengthen nature protection system in our country.</p>			
37.	Preparation of national guidelines ensuring assignment to green infrastructure the status of standard element of spatial planning and territorial development	The best implementation instrument of green infrastructure is spatial planning. Implementation of the concept of green infrastructure to spatial planning requires preparation of relevant guidelines taking account of assumptions of management system reform.  Consideration of green infrastructure along with ecosystem services assessment in planning documents at the local level will create better base for risk	Ministry of Infrastructure and Development	Study of national guidelines ensuring assigning to green infrastructure the status of standard element of spatial planning

		management,		
38.	Inclusion of green infrastructure to planning works at the local level	mitigation of risks related to climate change and space fragmentation. Care for green infrastructure in urban environment is the source of benefits related to health of inhabitants.	local government units	Number of planning documents in which green infrastructure is incorporated in accordance with EU standards
39.	Update of the course of ecological corridors along with the identification of management principles	Network of ecological corridors needs to be verified taking into account requirements concerning maintenance of communication between protected areas and plants and animals migration needs. Insufficient protection of ecological corridors in Polish law makes it impossible to fully consider ecological corridors in planning studies as well as environmental impact evaluation procedures. It is necessary to update the location of ecological corridors, assess their permeability and indicate risks resulting from binding planning documents.	General Directorate for Environmental Protection Ministry of the Environment  marshal offices	Identification of ecological corridors along with management systems Amendment of the Act on environmental protection taking account of principles of environmental corridors management
40.	Elimination of barriers on species migration routes	Some technical infrastructure and open areas constitute serious barrier on species migration route, contributing to interruption of ecological corridors' continuity. It is important to unblock ecological corridors through the construction of fish passes, animals passes, forestation of arable land in order to reinforce communication of ecological corridors, buy-out of grounds in order to prevent construction along ecological corridors.	General Directorate of National Roads and Motorways  General Directorate for Environmental Protection  The National Administration for Water Management  local government units  voivodeships  Ministry of Agriculture and Rural	Length of cleared river sections Number built animals passes Surface of afforested grounds in ecological corridors



			Development	
41.	Identification of needs and implementation of priority activities with regard to degraded ecosystems of green infrastructure	One of the priorities of EU biodiversity strategy for the period of 2020 is to restore functions of 15% of degraded ecosystems forming the so-called green infrastructure. For this purpose it is important to diagnose priority ecosystems, estimate needs and specify the possibilities to execute these activities. Activities include both agricultural, forest and water habitats.	Ministry of the Environment The National Administration for Water Management	Percentage of restored ecosystems in relation to listed needs

**Specific objective E: Increasing integration of operations of the economy sectors with the biodiversity protection targets.**

Elimination of reasons for loss of biological biodiversity resources resulting from social and economic activities requires consistent policy and inclusion of biodiversity to the main stream of operations of the whole country, including all sectors, especially such as agriculture, forestry, fishery and water management which directly and indirectly affect the condition of resources biological diversity. Mobilization of sectors of the economy for the benefit of biodiversity protection involves active inclusion of activities to restrict risks of biodiversity to strategy and sectoral programs, adjustment of legislative instruments, provision of appropriate funds for their implementation, effective compensation of losses (nature compensations), increase of the effectiveness of actions and law compliance control. It is important to take actions concerning social communication, education, improvement in social awareness with regard to environmental norms and standards which are applicable in a given economy sector.

no.	Task	Substantiation	Leading institution	Index
E.I	<b>Inclusion of agriculture to further activities for biodiversity protection.</b>			
	According to the report to the European Commission concerning implementation of provisions of Habitat Directive prepared for our country for the period 2007 - 2012 (GDOS 2012) the condition of many valuable species and natural habitats in agricultural areas is insufficient or poor. For this reason agriculture sector is responsible for implementation of program objectives. Agricultural sector for many years, in accordance with Common Agricultural Policy, actively develops and implements specific programs and actions used to preserve or reconstruct biodiversity which should be adjusted to the existing needs. Biodiversity protection in agriculture consists in maintenance or restoration of the extensive use of meadows and pastures and support practices keeping naturally valuable habitats. It is important to conduct activities designed to develop biomass created as a result of mowing meadows of low fodder values for energy purposes. These activities include also active protection of genetic resources being the basis for plant and animal production, especially domestic species of farm animals. Animals genetic resources protection programs including 90 domestic species, varieties, families and line of various farm animals species which constitute genetic reserve and protection for future unknown breeding and agricultural production needs must be continued.			



42.	Development and implementation of legal and financial mechanisms encouraging the use of hay acquired in a manner fostering protection of natural habitats for energy purposes	Maintenance of extensive use of meadows and pastures is crucial for biodiversity protection of rural areas. Considerable part of permanent grasslands is currently mowed involving important European funds, while only part of obtained biomass is used as the source of renewable energy. Popularization of use of biomass as fuel with observance of profitability condition would lead to growth of interest concerning execution of protection actions by increased profitability of such actions. Development of such applications, however, requires further support, among others, through information campaigns, subsidies at the appropriate level for construction of necessary infrastructure and promotion of best techniques. Studies cover also alternative solutions, among others, composting and organic fertilizers production from hay.	Ministry of Environment The General Directorate for Environment Protection National Fund for Environmental Protection and Water Management	Number of financed investments related to the use of hay biomass for energy purposes
43.	Promotion of rational breeding of domestic species of farm animals	Domestic species are less effective as compared to high-producing species. Improvement of profitability of their farm breeding includes search for new directions of use and niche products. Reasonable breeding consists of keeping herd books, conduct of utility and breeding assessment as well as breeding programs.	Ministry of Agriculture and Rural Development IZ-PIB	Number of farm animals of domestic species entered in herd books of particular species of farm animals species

44.	Increase of interest of breeders in the use of domestic species of farm animals	Maintenance of local genetic resources of farm animals is crucial for agricultural development and future breeding because they form a broad genetic base for protection of future, and currently unknown, needs of that sector. Maintenance of in-situ genetic resources requires farmers' involvement. Activities include meetings with breeders implementing protection programs, promotion products of domestic species and promotion of their use for the purpose of the environment (landscape maintenance).	Ministry of Agriculture and Rural Development IZ-PIB	Number of breeders performing protection programs of genetic resources of farm animals
45.	Development of social awareness concerning the importance of domestic species of farm animals	Although social awareness as to the need of protection of endangered species of wild animals grows, the knowledge and social approval of activities concerning protection of domestic species of farm animals is still insufficient. It is necessary to promote domestic species both as agriculture cultural heritage and genetic base for breeding development. Owing to the meaning of the consumers in the creation of product market acquired from this sector segment it is planned to apply education through the organization of shows, expositions and exhibitions of domestic species covered by protection of genetic resources of farm animals and acquired products.	Ministry of Agriculture and Rural Development IZ-PIB	Number of events devoted to presentation and promotion of domestic species of animals and acquired products

46.	Collection and storage of biological material of farm animals in National Bank for Biological Materials	Under protection of genetic resources by ex situ methods biological material coming from cattle, horses, pigs, sheep and goats will be collected and stored in National Bank for Biological Materials created in Animal Production Institute PIB to ensure the correct implementation of activities with regard to genetic resources protection of particular species of farm animals.	Ministry of Agriculture and Rural Development IZ-PIB	Number of portions of biological material collected and stored as of 31 December of a given year in National Bank for Biological Materials including coming from: cattle, horses, pigs, sheep and goats
<b>E.II</b>	<p><b>Inclusion of forestry and hunting to activities of further biodiversity protection.</b></p> <p>Forests constitute more than 60% of protected areas, and are an important area for biodiversity and guarantee continuity of natural functions. Forest management assumes multi-purpose character of forests and aims to balance proper goals. In connection with the above it is important for the forest management to improve principles of sustainable use of biodiversity by inclusion to forest arrangement plans for natural protection pursuant to the Act on nature protection. Planning should apply both to national forests and other forests. It is important to leave forests to the maximum extent, on protected areas, for natural ecological processes of the highest rank. It is also important to implement sustainable use favouring habitats and species protection. Another important issue is development of sustainable acquisition principles for wild animals in hunting. It requires improvement of monitoring system and verification of principles concerning management of wild populations under partial protection as well as game animals. Arrangement and implementation in the legal system and good practices code covers also principles of inclusion of population changes of particular game animals, estimation of their resources and evaluation of impact of species operation on their local populations and other natural qualities.</p>			
47.	Protection of the population of rare domestic species of trees in forest ecosystems	The aim of the task is to prevent decay of important species of trees (elm, ash, great maple, etc.), and protected species (e.g. European yew, sorbus terminalis) and conduct of new plantings of these trees in their natural habitats. The condition of the project implementation is the introduction of relevant orders and instructions to forest management.	The State Forests National Forest Holding Poviat boards	Number of species covered by activities. Number of produced seedlings and renewed surface (ha) or forested

48.	Increase of the contribution of different types of dead wood in forest ecosystems	Leaving part of trees for natural distribution is important for protection of many endangered species as e.g. saproxylic insects, birds nesting holes covered by protection under EU directive. According to the final report of Regional Inventory-Taking of Forest Condition in Poland for the period of 2008 - 2012 thickness of standing and lying dead trees constitute 5.6 m <sup>3</sup> /ha and is not sufficient for species protection.	The State Forests National Forest Holding Poviats boards	Growth of size of m <sup>3</sup> /ha dead wood reporting in Regional Inventory-Taking of Forest Condition
49.	Increase of the retention possibilities in forest ecosystems	Continuation of activities undertaken in 2009-2014 related to the construction of tanks and small water retention equipment in forests, lowlands and mountains. Despite execution of more than 4 000 facilities in the previous years, needs in this respect are tremendous. Continuation of tasks is of critical importance not only to improve forests habitat conditions including those which are protected, but also to mitigate climate change effects.	The State Forests National Forest Holding	Volume retention of water (m <sup>3</sup> ) Number of constructed/modernized small water retention equipment in forests
50.	Protection of forest birds population	Maintenance of value of aggregated index of the number of common forest birds Forest Bird Index FBI at the existing level.	The State Forests National Forest Holding Poviats boards	FBI index at the level of at least 1.2
51.	Shaping, maintenance and promotion of diverse age and spatial and species structure of stands	Stands which do not provide the possibility to execute objectives of sustainable, balanced and multifunctional forest management subject to reconstruction. These actions will be undertaken on the basis of individual assessment. The subject of reconstruction is the stand of complex construction and age structure with species-composition adjusted to habitats containing domestic species consistent with natural-forest regionalisation. In addition where it is justified by habitat conditions in nursing	The State Forests National Forest Holding	The surface of completed restoration cuts, reforestation and the size of supplements and reforestation compliant with habitat

		and restoration cutting diverse stand structure will be promoted.		
52.	Amendment of legislation in terms of adjustment of hunting terms on selected species of game animals to particular reproductive cycle of specified species	There is a need to adjust hunting terms for selected species of game animals, in particular red deer and birds taking into consideration their reproductive cycle (not only game species, but also protected, hatching in the same habitat).	Ministry of the Environment	Issuance of amendment of the Regulation stating hunting terms on selected species of game animals
53.	Improvement of animal inventory-taking methods	Applicable inventory-taking methods do not provide full condition of animal population. Knowledge on the number and sex-age structure of game animal population will enable better game animal management on the basis of hunting plans.	Ministry of the Environment	Adoption and implementation of new game animals inventory-taking method
<b>E.III.</b>	<p><b>Inclusion of fishery economy to further biodiversity protection.</b></p> <p>It is necessary to gradually restrict fishery pressure on the Baltic Sea ecosystem, among others, through the change of legal regulations, development of more environmentally friendly fishing techniques, greater ecological awareness of fishermen and assistance in the identification of other sources of income. It is also important to develop assessment methods concerning the impact of inland fishing and fishery on biological diversity. The impact of aquaculture on biodiversity is very complex. Creation and maintenance of breeding ponds has positive influence and often constitute the condition to maintain biodiversity in the given area. Pond facilities constitute dwelling place and habitat for numerous species of plants and animals including these which are protected, becoming extinct and endangered. Therefore, it is important to maintain extensive pond economy at the same time meeting economically profitable fish production.</p>			

54.	Implementation of regulations aimed at reduction of discards during fishing	Unloading obligation/ban on discards according to Art. 15 of the Regulation of the European Parliament and the Council (EU) No. 1380/2013 of 11 December 2013 on common fishery policy amending Council Regulation (EC) no. 1954/2003 and (EC) No. 1224/2009 and repealing Council Regulation (EC) no. 2371/2002 and (EC) no. 639/2004 and Council Decision 2004/585/EC (Official Journal EU L 354 of 28.12.2013, p. 22) which came into force on 1 January 2015. It applies both to commercial species (cod, salmon, herring and European sprat) and by-catch of protected and endangered species (European plaice). Discards are to be limited by gradual introduction of ban on discards as well as introduction of supplementary measures, for example encouraging to more effective selectivity of fishing tools, obligation to change fishing spots and immediate closure following the urgent procedure of catching areas.	Ministry of Agriculture and Rural Development	Preparation of legal regulations restricting discards during fishing
55.	Preparation and implementation of data recording procedures on by-catch of protected species - birds, mammals, fish and lamprey	Effective protection of protected species requires reliable information on the size of their by-catch especially in Natura 2000 sites and other protected areas. It is necessary to establish and implement procedures concerning transfer of specimen of protected species to research institutions and sick as well as injured specimen of protected species to rehabilitation centres.	Ministry of Agriculture and Rural Development General Directorate for Environmental Protection	Number of fishing units which implemented procedures
56.	Identification of techniques and fishing tools fostering biodiversity protection and their application by fishermen	Fishery should aim at using fishing tools fostering biodiversity protection which reduce undesirable impact on birds, mammals and sea habitats. This task is aimed at identification of previous good	Ministry of Agriculture and Rural Development	Number of fishing units using fishing tools and techniques identified as safe for biodiversity

		practices with regard to limitation of adverse impact of this activity on biodiversity and implementation of best practices and tools.		
57.	Maintenance of endangered species habitats by maintenance or restoration of extensive fishery economy on fishing ponds	Extensive use of fishing ponds constitute habitats for many valuable species. Due to economic conditions maintenance of extensive economy requires financial support which is provided in Operational Program entitled "Fishery and Sea" in the current financial perspective. It is necessary to guarantee that compensation granted to ponds' owners are consistent with nature protection objectives in the given area.	Ministry of Agriculture and Rural Development	Surface of (ha) ponds covered by support from water-environmental activity of OP entitled "Fishery and Sea"
<b>E.IV</b>	<b>Inclusion of water management to further actions of biodiversity protection.</b>			
	Strengthening of activities to achieve and maintain good water condition as well as water ecosystems and dependent waters constitute the condition to maintain biodiversity. It is necessary to take actions to minimize risks resulting from exploitation of aggregate from river-beds, wrong or unnecessary river engineering (sometimes without the analysis of the impact on natural environment), improperly planned and implemented flood protection (construction and maintenance of flood banks instead of creation of polders, construction of great flood banks) etc.			
58.	Preparation and implementation of guidelines (good practice principles) with regard to biodiversity protection in designing, construction and operation of hydrotechnical investments	Hydrotechnical investments significantly affect biodiversity and used design solutions and their implementation is often insufficient and take account of the needs of natural protection. Therefore, it is necessary to prepare and implement respective guidelines to the policy in this respect.	The National Administration for Water Management	Preparation of guidelines for hydrotechnical investments
59.	Preparation and implementation of re-naturalizing principles of small watercourses replaced to simple melioration ditches	Ecological problems associated with melioration works are tremendous, especially consequences concerning straightening of thousand km of small watercourses replaced to ditches for faster water drainage from agricultural lands. The aim of the task is to popularize ecological approach to shape melioration systems.	The National Administration for Water Management local governments	Length (km) of restored watercourses/in relation to the length of canalized watercourses



60.	Implementation of instruments to maintain natural habitats of endangered migrating fish species	Bi-environmental species e.g. eel and sea trout going towards breeding grounds require relevant habitats which are destroyed. The issue of maintenance or restoration of spawning grounds involves the need to introduce new legal regulations concerning conduct of coordinated activities to regenerate spawning grounds and ensure spawning grounds for fish to growth. It is necessary to identify places, specify scale of activities and secure funds for their implementation.	Ministry of the Environment Ministry of Agriculture and Rural Development	Length of cleared courses and number and surface of protected spawning grounds
<b>E.V</b>	<b>Inclusion of tourism sector to further activities of biodiversity protection.</b>  To increase social awareness on biodiversity and its importance for social and economic development of the country it is necessary to increase the efficacy and range of activities designed to popularize sustainable principles for tourism development in the areas with high natural values including water ecosystems. It is necessary to change the behaviour in naturally valuable areas and develop entrepreneurship in relation to tourism which will be safe for biodiversity			
61.	Preparation and popularization of development principles for sustainable tourism in naturally valuable areas	Tourism developed in an uncontrolled and chaotic manner creates a significant risk for biodiversity in particular in naturally valuable areas. It is advised to prepare principles which will include, among others, conditions and principles concerning use of natural values of tourism development with simultaneous limitation of adverse effects on biodiversity. Special attention should be paid to areas which are sensitive to increased anthropopressure such as mountain areas, bank zones, including sea coasts, etc.	Ministry of Sport and Tourism Ministry of the Environment national parks General Directorate for Environmental Protection	Publication of prepared principles concerning development of sustainable tourism in naturally valuable areas

62.	Increase of integration of tourist activities for the purpose of nature protection	Strengthening of integration of tourist activities with nature protection objectives including formation of new behaviour of tourists and tourist traffic organizers should include: 1. introduction of sustainable tourism principles to be entered in voivodeships development strategies, 2. promotion of ecological behaviour with regard to commercial trade in endangered species including informing on harmfulness and legal consequences concerning purchase and smuggling of souvenirs related to endangered species.	Ministry of Sport and Tourism  local governments	Number of voivodeships which included sustainable tourism principles in voivodeship development strategies
E.VI.	<p><b>Inclusion of business sector/companies to activities for the benefit of biodiversity protection</b></p> <p>One of the obligations resulting from the Convention on Biodiversity is <i>to improve activities and cooperation to increase the commitment of business community including small and medium enterprises... for the benefit of the implementation of the Convention</i><sup>20</sup> Inclusion of business/companies to activities for the benefit of biodiversity protection is the priority of EU strategy executed through the development of business and biological diversity platform (B@B), especially in Natura 2000 sites. Polish B@B platform constitutes national information exchange forum with regard to business operations concerning nature protection, best practices and financing methods, is in the initial phase of functioning and requires further development towards identification of mechanisms concerning effective integration of biodiversity issues to operations of enterprises, especially micro, small and medium enterprises at the local level. It will ensure effective preparation of the company within Natura 2000 network and other naturally valuable areas, to transmit recommendations of protection plans to business plans.</p>			

<sup>20</sup> 17th decision made by conferences of the Parties (KS) VIII on *private sector commitment*, 26th Decision KS IX on *promotion of business commitment* and 21st decision KS X 10 on *business commitment*.

63.	Development of Polish platform B@B	Polish B@B platform constitutes an important tool to introduce biodiversity issues to business practice. It is necessary to increase the importance of the platform at the local level through the introduction of mechanisms and good practices building partnerships for the benefit of biodiversity protection addressed to micro, small and medium enterprises in naturally valuable areas - especially in Natura 2000 sites.	Ministry of the Environment  General Directorate for Environmental Protection	Percentage increase of the number of new registered companies in B@B platform in relation to 2015 in one year
64.	Support for the preparation of entrepreneurship business plans in protected areas including Natura 2000 network	Implementation of protection tasks plans requires not only transmission of their recommendations and requirements to local development plans, but also their "translation into business language". It will enable development of local micro, small and medium enterprises (SME) on the basis of possibilities resulting from protection tasks plans and protection plans. Preparation of pilot business plans will contribute to determination of connections between good business practices and biodiversity protection objectives, exchange of the best practices with regard to the use of existing economic mechanisms to support proecological companies.	General Directorate for Environmental Protection	Number of developed business plans for protected areas

**Specific objective F: Limitation of hazards resulting from climate changes and pressure of invasive species.**

Impact of climate changes on biodiversity applies not only to particular species, but also entire ecosystems. Climate changes will be connected with increased pressure of stress factors which may result in the breach of existing dependence between species and affect ecosystems. In order to limit and mitigate effects of climate changes in the first place it is necessary to research the impact of changing climate-shaping factors on ecosystems and further on the basis of collected knowledge prepare and take actions which minimize their adverse impact.

Invasive species create important and rapidly growing risk to domestic biodiversity in Europe and Poland, among others, as climate change derivative. Development and implementation of mechanisms concerning effective prevention of their adverse effect is EU priority. For this purpose appropriate strategies were identified and regulations were adopted requiring implementation in our country. It involves the recognition of their occurrence and improvement of prevention methods. For this purpose it is important, among others, to prepare and implement effective monitoring system subject to particularly invasive areas. The next stage is the construction and implementation of legal-procedural system ensuring elimination of invasive species subject to rational priorities balanced in terms of cost effectiveness.

no.	Task	Substantiation	Leading institution	Index
F.I.	<p><b>Monitoring of effects of climate change on biodiversity.</b></p> <p>In order to adapt and prevent against effects of climate change it is necessary to assess and monitor the character of effects of climate change on ecosystem through the preparation and application of suitable research techniques on biodiversity. Establishment of the system will make it possible to trace trends and forecast directions of changes in particular ecosystems nationwide. In 2012 the study was created entitled "Assessment of effects of climate change on biodiversity and resulting guidelines for administrative activities concerning nature protection until 2030 which need to be verified on the basis of data collected in the field".</p>			
65.	Preparation and implementation of assumptions concerning climate change assessment system consistent with National Environmental Monitoring	In order to deepen knowledge with regard to climate change effects on ecosystems and species it is planned to prepare assumptions and methodology which make it possible to state and assess the impact of climate changes on biodiversity. It is important to create climate change effects assessment system on the basis of results of National Environmental Monitoring.	Ministry of the Environment	Preparation of assumptions concerning effects of climate change assessment system on biodiversity

<b>F.II.</b>	<b>Limitation of the pressure of alien invasive species.</b> The purpose of the intervention direction is to implement the requirements of the Regulation of the European Parliament and of the Council (EU) No. 1143/2014 of 22 October 2014 on the prevention and management of the introduction and spread of invasive alien species (Official Journal EU L 317 of 04.11.2014, p. 35). Effective prevention of the pressure on the part of invasive and conflict species requires implementation of legal solutions providing the basis for prevention and early detection of new occurrence and prevention of their effects. It is necessary to change legislation permitting effective limitation of the number of alien wild species. It is necessary to create and implement early detection, monitoring and prevention system. It is also necessary to indicate effective solutions against smuggling, trade and hobby breeding and cultivation of alien invasive species and mitigate the effects of such breeding and cultivation. In the event of entering of alien invasive species on the list of game species it is necessary to assume that the proper, desired condition of population which should be achieved pursuant to the Act of 13 October 1995 -Hunting Law (Journal of Laws of 2013, item 1226, with later amendments) is zero condition.			
66.	Adjustment of Polish legislation and preparation as well as implementation of proper organizational-financial solutions which will allow implementation of EU Regulation concerning invasive alien species	The aim of the task is to implement the requirements of the Regulation of the European Parliament and of the Council (EU) No. 1143/2014 of 22 October 2014 on the prevention and management of the introduction and spread of invasive alien species (Official Journal EU L 317 of 04.11.2014, p. 35). There is a need to adjust the existing national legislation so as to allow effective use of aforementioned Regulation through prevention against penetrating to Poland, elimination or management of spread population of alien invasive species.	Ministry of the Environment The National Administration for Water Management	Amendment of law with regard to prevention against occurrence and spread of alien invasive species.  Establishment of the prevention system against occurrence and spread of invasive species in Poland
67.	Implementation of prevention programs against alien species	Preparation and implementation of prevention plans against alien invasive species.	General Directorate for Environmental Protection	Number of alien invasive species and the area covered by prevention programs
68.	Establishment of supervision and monitoring system covering alien invasive species	Effective prevention of invasive alien species requires access to reliable information on the ways of their inadvertent introduction. There is a need to create a system of gathering and recording data on the presence of alien invasive species in environment in particular highly invasive areas, such as: areas of border crossings, airports and ports, adjacent areas to botanical and zoological gardens, breeding farms, fish	Ministry of the Environment	Launching of alien invasive species monitoring

		ponds and cross-border water courses. Supervision and monitoring system should be also supported by open-access Internet reporting system concerning places of occurrence of alien species.		
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**Specific objective G: Increase in Poland's participation in the international forum with regard to protection of biodiversity.**

Poland, due to significant natural resources in the scale of Europe, age tradition and important scientific centres should play more significant role than now on the international forum with regard to biodiversity protection. It is necessary to reinforce international impact of Poland on solving global problems in this respect, among others, cater to a greater role in international institutions and greater commitment of Polish experts in works of these institutions. It is also advised to initiate, conduct or support scientific research and protection tasks in other countries with weaker economy and high biodiversity - in particular, these natural resources which are used by Poland. It is very important also to increase institutional capacities with regard to implementation and enforcement of international law concerning trade e.g. in endangered species, exotic wood in a manner which shall not lead to depletion in biodiversity resources in the world.

no.	Task	Substantiation	Leading institution	Index
69.	Maintenance and completion of Polish membership in agreements and international organizations	Poland is one of few European countries in which none of government agencies is IUCN member. It requires change especially that Poland participated in IUCN creation.	Ministry of the Environment	At least one of the state authorities becomes IUCN member
70.	Identification of needs and possible international cooperation with regard to protection and management of protected species population and habitats in the scale of cross-border and biogeographic regions	This task is focused on the exact diagnosis of needs as to the functioning of international expert groups involved in cross-border populations of protected species. Currently operates, among others, Polish-Slovakian experts team for protection of large predators. There is lack of international cooperation with regard to protection and management of endangered habitats and species in the scale of biogeographic regions.	Ministry of the Environment General Directorate for Environmental Protection	Number of appointed international groups involving Polish experts

71.	Implementation of Nagoya Protocol and Regulation of the European Parliament and of the EU Council No. 511/2014	Nagoya Protocol and implementing Regulation of the European Parliament and of the EU Council no. 511/2014 of 16 April 2014 on measures ensuring EU users compliance with requirements resulting from Nagoya Protocol on access to genetic resources and the fair and equitable sharing of benefits arising from their utilization (Official Journal EU L 150 of 20.05.2014, p. 59) assumes fair sharing of benefits between the so-called "donors" and "recipients" of genetic resources. Protocol should guarantee greater legal confidence and clarity for donors and users of genetic resources.	Ministry of the Environment	Establishment of the implementation system concerning access to genetic resources and fair and equitable sharing of benefits
72.	Support for research and protection actions outside the borders of Poland	It is advised to initiate, conduct or support research and protection tasks in other countries with weaker economy and high biological diversity (including neighbouring countries and countries where migrate nesting birds), e.g. within various CITES programs, small grants fund EUROBATS AND ASCOBANS. Under measures allocated by Ministry of Foreign Affairs to support foreign projects there should be objectives of biodiversity protection. NFOSiGW may create small grants program to support projects implemented in partnership with foreign entities concerning actions related to nature protection reaching beyond the borders of Poland if it would be connected with ecological safety.	Ministry of the Environment National Fund for Environmental Protection and Water Management The Ministry of Foreign Affairs	Number of launched programs and implemented activities in the international system
73.	Implementation and enforcement of regulations concerning regulation of trade in exotic wood	Illegal logging is the common problem of international importance. Demand for exotic wood, but also paper and some food products (including palm oil) cause that consumption in	Ministry of Environment Chief Inspectorate for Environment Protection	Number of executed controls in accordance with provisions of the EU Regulations no. 995/2010



		Poland has a negative impact on biodiversity in tropical forests. It indirectly affects national species through the change of wintering shelters of some birds. This impact may be limited, among others, through the full implementation of provisions of the Regulation of the European Parliament and of the Council (EU) No. 995/2010 of 20 October 2010 laying down the obligations of operators who place timber and timber products on the market (Official Journal EU L 295 of 12.11.2010, p. 23).		
74.	Preparation and implementation of domestic CITES implementing program	Implementation of CITES provisions require coordinated activities. Therefore it is advisable to prepare domestic program setting main objectives, priorities, methods, responsible units, costs and action implementation dates. Preparation of such program results also from Commission Recommendation of 13 June 2007 stating actions concerning execution of Council Regulation (EC) no. 338/97 of 8 December 1997 on the protection of species of wild fauna and flora by regulating trade therein (Official Journal EC L 61 of 03.03.1997, p. 1: Official Journal EU Polish special edition, chapter 15, vol. 3, p. 136).	Ministry of Environment	Preparation and adoption of the implementing program CITES

## 11. List of abbreviations used in the Programme:

ASCOBANS	Agreement on protection of small whales of the Baltic Sea, North-Eastern Atlantic, Irish Sea and North Sea
B@B	<i>business and biodiversity initiative</i>
CITES	Washington Convention, <i>Convention on International Trade in Endangered Species of Wild Fauna and Flora</i>
EUROBATS	<i>Agreement on the Conservation of Populations of European Bats</i>
GDOŚ	General Directorate for Environmental Protection
GIOS	Chief Inspectorate of Environmental Protection
INSPIRE	Infrastructure for Spatial Information in Europe
IUCN	International Union for Conservation of Nature
IZ-PIB	Animal Technology Institute - State Research Institute
LIFE	LIFE financial instrument
NFOŚIGW	National Fund for Environmental Protection and Water Management
PROW	Rural Development Programme
EU	European Union