

# Supporting the Implementation of Biodiversity-Related EU Directives in Georgia

## SUMMARIZING REPORT

on achievements in the Emerald Network development in Georgia under GIZ/IBiS  
local subsidy grants #83218165, # 83270708, # 83277367, and # 83292568,  
implemented by NACRES

Tbilisi, 2020



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# 1 Background

Emerald Network is a pan-European ecological network with the goal to preserve the biodiversity of Europe. The Network was established as part of the implementation process of the Convention on the Conservation of European Wildlife and Natural Habitats (Bern, 1979), also known as the Bern Convention. The Emerald Network implies the selection of territories, which are particularly rich in species and habitats protected by the Bern Convention. Such territories are designated as Areas of Special Conservation Interest (ASCI) or Emerald site, and become part of the Network.

Thus, the overarching objective of the Emerald Network is to ensure that all high biodiversity areas of European importance are identified, their ecological inventories completed and their importance recognized legally.

Setting up the Emerald Network at a national level is considered as one of the main tools for the Contracting Parties to comply with their obligations under the Bern Convention. Georgia became a contracting party in 2009. In addition, the development of the Emerald Network is an obligation under the EU-Georgia Association Agreement (2014), according to which Georgia was required to put in place a fully functional Emerald Network by 2020. Therefore, the establishment of the Emerald Network is of a paramount significance for Georgia's efforts toward EU integration.

The association agreement between Georgia and the European Union also includes obligations regarding the implementation of the two EU directives relevant for the conservation of biological diversity:

- Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (so called "The Habitats Directive")
- Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (so called "The Birds Directive")

From the global perspective, the development of the Network should be viewed as Georgia's contribution to the global efforts of preserving the world's biodiversity, and towards the achievement of goals laid out by the Convention on Biodiversity, also known as the Aichi Targets.

Emerald Network development is part of the Biodiversity Strategy and Action Plan of Georgia 2014-2020 (NBSAP). More specifically, the establishment of Emerald Network corresponds to the following NBSAP objectives:

- Objective A 3-o4 - Improve the relevant institutional and regulatory framework;
- Objective C.4-o4.2 - Develop the Emerald Network of Georgia.

The overall purpose of the Emerald Network is to achieve so called "sufficiency" for the majority of the habitats types and species respectively covered by the Bern Convention Standing Committee *Resolution No. 4 (1996) listing endangered natural habitats requiring specific conservation measures* and *Resolution No. 6 (1998) listing the species requiring specific habitat conservation measures*. It is envisaged that this target will be achieved through the following results:

- Each country will have identified all habitats and species listed in Resolutions No. 4 and No. 6 that occur in that country.
- Countries ensure that the designated ASCIs are sufficient for maintaining/achieving a favourable conservation status (FCS) for at least 90% of the species and habitats.
- The majority of officially designated ASCIs have a management plan that adequately reflects all requirements necessary for ensuring FCS of the local species and habitats.
- By 2018, each ASCI has an adopted management plan (only applicable to Georgia based on the obligations set out in the EU-Georgia Association Agreement).
- Monitoring of the species and habitats listed in the Resolutions is in place at each ASCI and results are reported to the Bern Convention secretariat.
- Each ASCI is re-evaluated every 5 years to adapt its management goals and objectives and to ensure that FCS is maintained for the local species and habitats.

## 2 Progress made during 2009-2015

The active process of the development of the Emerald Network in Georgia began in 2009, following a more sporadic process that basically aimed at the introduction of the concept of Emerald Network while entailing little actual work. With the support of the Council of Europe, NACRES began a preparatory phase (Phase I) of the development of Emerald Network in Georgia as part of the *Emerald Joint Programme for EU Neighbourhood Policy East Area and Russia*. During 2009-2011, the process was largely technical and involved a preparatory work such as gathering and analysing all available data and elaboration of first shapes of the network. In parallel, first candidate sites were also identified, for which primary data bases were put together and submitted to the Convention's Secretariat.

In 2013, NACRES was assigned to lead the second phase of the process in Georgia as part of the *Joint Programme between the European Union and the Council of Europe for the Preparation of the Emerald Network of Nature Protection Sites, Phase II*. This phase began with the critical review of the data collected in Phase I, coupled with the so called biogeographical assessment process, during which the effectiveness of the proposed design of the network was assessed against each feature – species and habitats protected under the Bern Convention. As a result, spatial as well as functional gaps were identified in the network. New Emerald sites were then proposed to fill in some of those gaps and improve the overall effectiveness of the planned network.

In 2014, EU-Georgia Association Agreement was signed which obliged Georgia to officially establish its Emerald Network and the process of the network development significantly accelerated in the country. Parallel to the network establishment, Georgia also had to start to implement EU nature directives and ensure that the national legislation provided for the effective mechanisms of Emerald Network management.

Toward the end of the *Joint Programme between the European Union and the Council of Europe for the Preparation of the Emerald Network of Nature Protection Sites, Phase II*, the biogeographical seminars revealed some important gaps in Georgia's Emerald Network. Because the project supported by the Council of Europe was going to an end, Georgia had to seek other resources to follow up. At this moment, in 2015, GIZ began to support the process first as part of the project: **“Supporting the**

**Implementation of biodiversity-related EU Directives in Georgia**", and later through the **"Integrated Biodiversity Management, South Caucasus"** programme (IBiS).

While Georgia was experiencing major gaps in financial as well as technical capacities, the IBiS programme largely assumed the commitment to support the country in the implementation of the obligations laid out in the EU-Georgia Association Agreement, specifically in the following priority areas:

1. Filling in some of the major gaps revealed by the Biogeographical Seminar and self-evaluations primarily through (i) identification and proposing new Emerald sites, among other things, based on new field surveys, and (ii) improving the Emerald data base.
2. Elaboration of priorities and management principles of Emerald sites and their integration in the national legislation.
3. Introduction into Georgia relevant methodologies and approaches applied in the EU including the classification of Georgian habitats according to the EUNIS<sup>1</sup> and increasing the national expertise in this regard.
4. Increase the awareness about Emerald Network among the general public and decision makers.

This report summarizes the work conducted by NACRES from 2015 through 2019 in the field of Emerald Network development and implementation of EU nature directives with the support of GIZ through multiple local subsidy grants (LSG).

### 3 Identification of Emerald Sites at the national level

As the Emerald Network implies the selection of territories that are particularly rich in species and habitats protected by the Bern Convention, a territory can be designated as an Emerald site if it serves to conserve species and habitats defined by the Resolution No. 4 (1996), 'On listing endangered natural habitats requiring specific conservation measures', and the Resolution No. 6 (1998), 'On listing species requiring specific habitat conservation measures'.

Important gaps were noted in the classification and hence mapping of Georgian habitats as a result of Biogeographical assessments and self-evaluation processes. With the habitat protection being the cornerstone of the Bern Convention, the entire process necessitates the identification and mapping of all habitats respectively, listed in Resolutions No. 4 of Standing Committee and Annex #1 of Bern Convention, according to the EUNIS classification system. Thus, further development of the Emerald Network and identification of new sites could not be achieved without improving our knowledge of habitats i.e. which Resolution No. 4 habitat types are present in the country and what is their distribution. Therefore, it was critical to identify and map Georgian habitats according to the standard European classification system.

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<sup>1</sup> The EUNIS habitat classification is a comprehensive pan-European system to facilitate the harmonized description and collection of data <http://www.eea.europa.eu/themes/biodiversity/eunis/eunis-habitat-classification>

### 3.1 Identification and mapping of Emerald habitats

The first necessary step was to identify all habitat types based on EUNIS classification inside Georgia. Additionally, to fulfil the objectives, it was relevant to compile a checklist of EUNIS habitat types of Georgia.

We created a team of experts from Ilia State University and the Institute of Botany led by Academician Gia Nakhutsrishvili to elaborate the first list of terrestrial and freshwater habitats of Georgia in accordance with the EUNIS classification system. During the process the team carefully considered all available information including data on Georgia's habitats as classified based on the CORINE classification system. The EUNIS habitat interpretation manual was adapted to Georgia and the descriptions were elaborated for all Georgian habitats that are strictly protected under the Bern Convention (Resolution No. 4) so that the adapted descriptions corresponded to the exact versions of those habitats as they are found in Georgia – descriptions include typical plant species for the Georgian versions. The results were presented to key stakeholders and experts in a specially organized workshop.

Ultimately the habitat checklist of Georgia was finalized. The document consists of two parts. The first part covers all the EUNIS habitat types identified in Georgia based on best available data. Habitat types that are protected under Resolution No. 4 of the Bern Convention are listed in the second part of the publication.

### 3.2 Identification of Additional Emerald Sites

Two municipalities – Akhmeta and Dedoplistskaro – were evaluated to identify new potential Emerald sites. The overall evaluation revealed two suitable potential sites: the Kistauri area in Akhmeta and the territory adjacent to Dalis Mta in Dedoplistskaro. Field studies were conducted on these sites and relevant data were collected and maps were created, all of which was later uploaded to the European Environment Agency (EEA) server.

## 4 Baseline Study of Three New Compensatory Sites

In 2016, Svaneti 1 (GE0000012) candidate site was reorganised and the process resulted in a significant reduction of the total area as well as of the degree of coverage of certain Emerald species and habitats. This alteration was noted in the Biogeographical Seminar held in Tbilisi in November 2017. The Government of Georgia pledged to establish new Emerald sites to compensate for the decrease of the coverage (sufficiency in the network) of the affected species and habitats as a result of the reorganisation of Svaneti 1 (GE0000012) candidate site. Consequently, three new Emerald sites - Samegrelo 2 (GE0000057), Racha-Lechkhumi (GE0000058), Svaneti-Racha (GE0000059) were preliminarily selected in 2018.

The above compensatory sites were first identified and mapped on the basis of specially designed criteria, but no comprehensive desktop analysis or field surveys were conducted. The Standing Committee of the Bern Convention advised Georgia to conduct a more detailed study of those sites.

NACRES carried out a baseline survey (a comprehensive desktop study and rapid field assessment) of the three compensatory sites with the overall objective to support Georgia in fulfilling Bern Convention recommendations to designate three new compensatory sites.

The following activities were carried out:

- All existing data on the sites: Samegrelo 2 (GE0000057), Racha-Lechkhumi (GE0000058) and Svaneti-Racha (GE0000059) were collected and analysed.
- Field surveys in the target sites were carried out to collect data on the presence of the habitats and species respectively listed in Resolution No. 4 and Resolution No. 6.
- Distribution maps for selected species and habitats were created in the GIS format compatible with the Bern Convention standards.
- Standard Data Forms (SDF) were updated for Samegrelo 2 (GE0000057), Racha-Lechkhumi (GE0000058) and Svaneti-Racha (GE0000059) based on survey findings.
- The boundaries of the three sites were corrected and corresponding GIS maps were produced.

We found that Samegrelo 2 (GE0000057), Racha-Lechkhumi (GE0000058) and Svaneti-Racha (GE0000059) had remarkable diversity of Emerald features. They were especially rich in grassland and forest habitat types, many of which were insufficiently covered by or were completely absent from the country's Emerald Network before these sites were added.

Overall, the survey found that, in respect to Emerald features, Samegrelo 2 (GE0000057), Racha-Lechkhumi (GE0000058) and Svaneti-Racha (GE0000059) compensatory sites were at large adequate "compensation" for the unfavourable situation created as a result of the abovementioned reorganization of Svaneti 1 (GE0000012). In addition, the sites had habitat types that had not previously been identified in Georgia.

## 5 Monitoring schemes for Emerald Sites/Reporting to the Bern Convention

Emerald Network monitoring is an ongoing process and systematic reporting across Europe is essential for understanding pan-European trends of species' and habitats' conservation status and for the Standing Committee to evaluate progress towards meeting the Convention's aims. According to Resolution No. 8 (2012) of the Bern Convention Standing Committee, reporting needs to be conducted on a six-yearly basis using a uniform reporting format as closely as possible with the reporting done by EU member states under Article 12 of the EU Birds Directive and Article 17 of the EU Habitats Directive. Reporting under Resolution No. 8 is a standardized process and relevant guidelines were provided by the secretariat.

Initially it was intended that we would develop a practical scheme for the monitoring of habitat condition in Emerald sites and this component was led by the Project's international expert (Mr. Ulrich Zeidler) with whom the project team discussed various schemes of monitoring. International practice was studied and the experience of the European countries was shared. Special focus was made on the monitoring of forest habitats. However, in subsequent period of time, this component was taken up by the Project: *Preparation of Georgia's report on the Emerald Network of Areas of Special Conservation Interest* (Contract No. 83305529), which dealt with the assessment of and reporting on selected habitats as part of Georgia's first report to the Bern

Convention and the process was entirely guided by the Bern Convention Secretariat and the methodology provided by them.

In general, the national report should cover all the endangered natural habitat types (EUNIS classification) included in Annex I of Resolution No. 4 (1996) and all the species requiring specific habitat conservation measures listed under Annex I of Resolution No. 6 (1998). However, it was recognized that the country would be unable to monitor and produce such comprehensive reports at that stage. Therefore, the Bern Convention secretariat selected a short list of habitats and species for reporting in the first reporting cycle.

The overall goal of the GIZ supported project was to assist the Government of Georgia with the implementation of the Bern Convention. The specific objective was to prepare Georgia's first report on the Emerald Network of Areas of Special Conservation Interest for the period 2013-2018. NACRES was assigned to prepare Annexes B and D of the above national report.

The guidelines provided on the reference portal for Resolution No. 8<sup>2</sup> were used for the report preparation as well as for the input of information in the reporting format. Limited field studies were carried out, but the majority of the information used in report preparation was based on previously collected data or expert opinion.

The project team gathered preliminary information on the features (species and habitats) to be reported on and clarified any possible taxonomic or classification issues. Then, a comprehensive literature review and analyses was carried out and information gaps were identified and the feasibility of field surveys were assessed considering the limited time and resources of the project. Additional rapid assessments and brief surveys were conducted to fill some of the identified gaps for priority features as appropriate.

A draft report was prepared and presented at the first national reporting workshop, which was attended by representatives of the Ministry of Environmental Protection and Agriculture (MoEPA) and other key stakeholders as well as by experts.

The final reports for the selected habitat types and species were compiled in the Reporting Tool and uploaded to the Central Data Repository of the EIONET portal both as Access database and in xml format. The distribution maps were created for the species and habitats in two separate files with the 10X10 km grid system. The standardized maps were uploaded as ESRI shape files as required.

In the course of the report preparation, we encountered difficulties in meeting some of the reporting requirements for certain species and habitats, due to lack of information. Based on the constraints and challenges that were experienced, we elaborated a number of general as well as more specific recommendations for improving future reporting process.

## 6 Compilation of guidelines for the preparation of Emerald Sites management plan.

The requirements of the Bern Convention with regard to Emerald site management as well other relevant information were reviewed including the document: Resolution No. 8 (2012) of the Standing

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<sup>2</sup> <https://www.coe.int/en/web/bern-convention/reporting-res.-8-2012->



Committee, adopted on 30 November 2012 on the national designation of adopted Emerald sites and the implementation of management, monitoring and reporting measures; This was done in conjunction with existing national practices such as national PA management planning guidelines, to define main aspects and key elements of the management planning processes for Emerald Sites.

Draft outline of the guidelines was prepared and shared with the Project's international expert and then presented at a stakeholder workshop. Additional consultations were also held with key stakeholders to discuss in more detail some of the critical questions that were raised during the stakeholder workshop. Soon, it became clear that, in the given circumstances, it was practically impossible to achieve any higher degree of detail or adaptation to the specific national situation, than already provided for in the above and other explanatory texts prepared by the Bern Convention. When referring to the given circumstances we mean the following: (i) the fact that no Emerald Sites had been yet officially designated, (ii) there were too many uncertainties in the legal aspects of Emerald Site establishment and the responsibilities over its management, (iii) the overall awareness and knowledge of the Emerald Network and its conservation goals were still very limited and, among the stakeholders, there were prevailing prejudices and to some extent overestimation of possible conflicts with different factors, including existing conservation instruments such as the national PA system. Therefore, this component was considered no longer relevant in the given situation and was cancelled in its original form.

On the other hand, it was agreed with the donor as well as with the beneficiary (the Ministry of Environmental Protection and Agriculture) that instead of developing very general guidelines, it was more appropriate to begin putting ASCI management in practice by piloting the integration of Emerald Network conservation objectives into the existing management system for those sites that would get first designations as ASCI (see more details below). The idea was to clarify some of the difficult questions about site management and learn by the process rather than running the risk of developing management guidelines that would be too general to be of any additional use on top of already existing international guidelines.

In addition, this whole process also demonstrated that extensive awareness raising work was needed. It was critical that ASCI management aspects had to be integrated in the new Biodiversity Law that was under development and more bilateral work had to be conducted with other sectors as well as conservation circles to help the country establish and then begin effective management of its Emerald Network sites. All of this was subsequently successfully taken up by the work (projects) that followed.

***Updating management plans of Lagodekhi PAs, Vashlovani PAs and Batsara Nature Reserve reflecting the goals and objectives of the Emerald Network***

The first official designations as ASCIs were: Lagodekhi PAs, Vashlovani PAs and Batsara Nature Reserve, all three being well-established protected areas with long histories of site management and with approved management plans or equivalent.

First, we identified the priorities for each of the new Emerald sites with regard to Bern Convention requirements i.e. features (species and habitat types) included in Resolution No. 4 and No. 6 and reviewed them with relevant experts. Then a special workshop was organized that was attended by the key management of the target PAs as well as relevant representatives of Agency of Protected Areas (APA) and relevant experts. We had detailed discussions, going through the list of Emerald priorities for each of the PA and planned relevant conservation measures as

appropriate. It was found that not only was there no conflict of conservation interests, but in most cases very little additional effort was needed to make sure that the Emerald species and habitats were adequately conserved on the given PAs. This was possible because the target PAs already have established management according to the relevant national PA categories and zones. On the other hand, we recommended that their management plans should fully acknowledge the fact that the given PAs have now become officially designated Emerald Sites and the document should incorporate relevant conservation objectives in the corresponding programs such as biodiversity conservation and monitoring program. This process will need to be ensured when they next update their management plans according to their management planning cycle.

## 7 Identification of conservation objectives for Emerald Sites

Setting appropriate conservation objectives is the first step toward effective management of any Emerald site. Such objectives need to be based on the features (species and habitats) for which the given site was established. Subsequent site management planning should be entirely based on the recognized and agreed conservation objectives and the management plan should incorporate relevant measures. This applies to every site whether or not it already has a management plan: the majority of protected areas have management plans, while sites that are situated outside the existing PA system have no management plans in place.

The majority of Georgian Emerald sites are rich in species that are protected under Resolution No. 6. Up to 10 species are found on each site on average. However, some sites have as many as 28 species.

While all species included in Resolution No. 6 are equally important, in practice, it may be not feasible for Georgia to implement specific management measures for each of those species on every Emerald site where they occur. Therefore, further prioritization of the Emerald species may be necessary. This is particularly true for those sites that have a relatively high number of species.

Working closely with a wide range of experts and key stakeholders, we elaborated a short list of species – “highest priority species” for each designated and candidate ASCI using the follow criteria/matrix:

	<b>Species</b>	<b>Priority Species of the Habitats Directive (HD spp.)</b>	<b>Georgian Red List species (RL spp.)</b>	<b>Small Range Species (only occurring on three or less sites) (SR spp.)</b>	<b>All other species (Other spp.)</b>
<b>1.</b>	Species A				
<b>2.</b>	Species B				
<b>3.</b>	Species C				
<b>4.</b>	Species D				

Using the above matrix, we identified non-avian highest priority species and elaborated conservation objectives for each of them based on threats and pressures they are subjected to. In certain cases, one and the same species is subjected to slightly different threats and pressures in different places. Therefore, we elaborated different conservation objectives not only for each species but sometimes also individually for each site where they occur.

While the identification of highest priority species was necessary, we stressed the fact that each and every species included in Resolution No.6 is equally important to conserve and the list of highest priority species was created only for management purposes. In all other situations we will still need to consider all the species that are found on a given site. For example, any appropriate assessment should consider all the Resolution No.6 species that are present on the site in question. On the other hand, the identification of highest priority species – hence setting conservation objectives for respective sites – should be considered as a dynamic process, since conservation needs may change over time, while new species may also be added to the Resolution No.6.

## 8 Awareness raising, Capacity Building and Promotion of the Emerald Network

As the creating of Georgia's Emerald Network transitioned from purely technical process (identification and planning of sites purely on the basis of scientific data) to the actual establishment, which is a more practical and somewhat political stage, it was obvious that this initiative did not receive equal support not only from various governmental sectors (such as energy and infrastructure) but also even from certain environmental circles. Additional work had to be done to overcome new challenges through (i) raising awareness of the network not only among the general public but also among the decision makers, conservation circles and the private sector, (ii) assisting the government in increasing its capacity in relation to Emerald Network establishment and management and (iii) promoting and lobbying the development of Emerald Network in Georgia.

### 8.1 A brochure on Emerald network development in Georgia

It was decided to prepare a special publication that would answer the many questions that were put by key stakeholders, decision makers and private sector representative whose activities were related to Emerald network management or whose activities might be restricted or otherwise affected by the ongoing process of Emerald network development. The questions that were often heard were about the nature and purpose of Emerald Network as opposed to those of classic protected areas, why Georgia has to develop it, how an ASCI was selected and then designated, which activities would be restricted, how ASCIs would be managed, would it restrict access to resources by local communities, etc.

We conducted a series of interviews with a wide range of stakeholders and gathered prevailing topics and questions on Emerald Network and the Bern Convention. The draft text for the brochure was prepared based on the regulations, decisions and recommendations of the Standing Committee of the Bern Convention as well as on experiences of other countries. It was then shared with Mr. Marc Roekaerts, project's international expert, for comments.

The brochure with the title: *Emerald Network - Questions and Answers* was published in Georgian and English languages and was widely distributed within the country as well as at relevant international meetings and conferences.

Notably, this publication received a very positive feedback from the Convention experts and the Secretariat and was noted as one of the best publications available on the subject.

Due to a high demand, a new updated edition was published by GIZ in the beginning of 2020. The e-copy of the brochure was also made available on NACRES website.

## 8.2 Capacity building

One of the main focuses of our activities was to assist the governmental agencies and increase their capacity in Emerald Network establishment and management. We worked almost on a daily basis with the Department of Biodiversity and Forestry of the Ministry of Environmental Protection and Agriculture. Project team members as well as international experts regularly updated them about the new data, shared with them project findings and experience as well as provided them with all important materials. We also worked with the National Forest Agency (NFA) who is an important stakeholder since many of the proposed ASCIs are their situated in their land.

In addition, the overall national expertise in Emerald Network establishment and management was significantly improved – both NACRES members and invited national experts improved their knowledge and qualification in such critical fields as habitat identification and classification, species and habitats assessment, etc.

GIZ also organised a study tour to Montenegro and Croatia for the project team members and relevant staff of the MoEPA in order to learn about the Balkan countries' experience and practices in establishing and management of Emerald /Natura 200 Networks and to obtain first hand information from the governmental and non-governmental actors that were directly involved in the process. It was extremely useful for the study tour participants to gain insights of practical aspects of Emerald site management as well as about the lessons that were learned by the national teams and the challenges they had been faced with.

## 8.3 Promotion and lobbying of Emerald Network

We worked with various governmental sectors such as relevant ministries and their subsidiary agencies, with the Georgian parliament as well as with local authorities in order to promote Emerald Network and lobby its establishment. NACRES representatives had meetings at different levels within the Ministry of Environmental Protection and Agriculture, Ministry of Foreign Affairs, Ministry of Energy, Ministry of Economy and Sustainable Development, Roads Department, Agency of Protected Areas, National Forestry Agency, Environmental Protection and Natural Resources Committee of the Parliament of Georgia and the Municipal Administrations of Akhmeta, Borjomi, Lagodekhi.

Apart from the governmental bodies, the information on Emerald Network was also regularly presented to the representatives of the business sector and investors of large infrastructure or energy projects. Additionally, the business representatives were provided with the information on the Emerald site boundaries as well as restrictions.

We also made special efforts to ensure that Emerald principles and requirements were adequately reflected in the national legislation particularly in the newly developed Forest Code of Georgia and the Biodiversity Law as well as other related legislation. NACRES representatives participated in various workshops and meetings dedicated to the elaboration of the above laws during 2016-2019.

The project implementation team regularly updated key members of the Parliament about the progress in Emerald Network development.

## 9 Bridging gaps in spatial planning

An Emerald Network of any participating country must include sufficient proportions of species and habitats protected by the Bern Convention. The Bern Convention has developed a quality evaluation and control mechanism – an interactive process that implies the evaluation of the database, potential sites, and the entire network to determine their compatibility with the Bern Convention requirements, goals, and objectives. The assessment is based on the intrinsic value of the proposed sites for each species and habitat type, taking into account their potential contribution to the defined conservation goal, i.e. maintaining or restoring the species and habitats to “Favourable Conservation Status”.

In 2015-2018, a comprehensive overview of the national Emerald Network databases of the participating countries was conducted. It implied the evaluation of the database, potential sites, and the entire network to determine their compatibility with the Convention’s requirements, goals, and objectives. The results of the assessment were discussed at the Biogeographical Seminars for the sufficiency assessment of the proposed and candidate Emerald Network sites. Experts of the Paris Topic Centre as well as evaluators, representatives of national authorities, NGOs, independent experts, and observers participated in the seminars. The seminars provided conclusions and recommendations on the Emerald Network or its specific components and ways of addressing specific gaps.

The evaluation of Georgia’s Emerald Network revealed certain gaps including spatial gaps that logically implied designation of new sites to achieve sufficient coverage of certain species and habitats as well as to improve the overall effectiveness of the Emerald Network as an ecological network.

The project team consisting of NACRES specialists as well as invited experts (i) analysed the results and recommendations of the Biogeographical seminars held during 2015-2019 and (iii) reviewed the existing data base and network design against the new or updated classification of Georgia’s habitats and their distribution maps (e.g. completely new Res. No. 4 habitats were identified in Georgia which had to be reflected in the network).

The team then conducted additional desktop and field surveys and identified new potential sites, whose integration into the network would significantly improve the “sufficiency” of previously “insufficient” features (species and habitats). As a result, a total of 12 new potential sites were identified, mapped and respective SDF (Standard Data Form) completed. These sites now form the so-called shadow list of Emerald Sites for Georgia. They include:

CODE	NAME
GE0000061	Pshav-Khevsureti

GE0000062	Samukhi
GE0000063	Sachinkie
GE0000064	Taroklde
GE0000065	Samerckle klde
GE0000066	Urta
GE0000067	Letsurtsume
GE0000068	Jandari
GE0000069	Otter island
GE0000070	Foladauri
GE0000071	Kobuleti
GE0000072	Metekhi

As mentioned above, the designation of the sites of the above shadow list would fill in the spatial and functional gaps revealed by the Biogeographical seminars conducted in Tbilisi during 2015-2017 and in Budapest in 2019 and significantly improve the overall effectiveness of Georgia's Emerald Network

## 10 Summary of Achievements

GIZ-NACRES partnership directly resulted or greatly facilitated an outstanding progress in the development of Georgia's Emerald Network during 2015-2020. The following main milestones are particularly noteworthy:

- **The Emerald Network of Georgia officially established:** The Government of Georgia officially designated first three sites (Lagodekhi, Vashlovani, and Batsara) as Emerald sites in 2017, marking the first precedent in the Caucasus region. Shortly after that, another 43 sites were added to the list of officially designated sites. Thus, the Emerald Network of Georgia was officially established. Several proposed sites are expected to be designated soon and a so called shadow list of potential Emerald sites is also available. The designation of the proposed sites and those of the shadow list will fill in most of the remaining major gaps and will significantly improve the effectiveness of Georgia's Emerald Network.
- **Improved scientific basis for the establishment and effective management of the Emerald Network:** The Emerald data base for Georgia was tremendously improved and the understanding of the country's habitats and species was increased; The EUNIS habitat classification was introduced and Georgian habitats were classified accordingly.
- **Increased national capacity:** Georgia's capacity to develop and manage its Emerald Network significantly increased including the institutional capacity of MoEPA as well as the national expertise in habitat classification, species and habitat assessments and reporting to the Bern Convention.
- **Emerald Network widely recognized and respected:** The recognition and awareness of the Emerald Network was tremendously raised among the decision makers, private sector and the general public.

## 11 Challenges for future

We envisage future challenges in the following main areas, based on lessons learned over the course of the implementation of the projects and considering the constraints and challenges we as well as

other players encountered especially since the actual process of the Emerald Network establishment began around 2014 and 2015.

### *1. Management of Emerald Network/Emerald sites*

It is expected that the management of Emerald network and its separate sites will be to some extent reflected in the new Biodiversity law that is currently being finalized. In addition, other more specific aspects of Emerald site management will need to be officially recognized such as conservation objectives and management priorities, which need to be ultimately integrated in respective site management plans. Another important aspect of Emerald site management is the so-called appropriate assessment process, which is already informally implemented but needs to be put in place as a legal requirement.

While all of the above legal instruments are expected to be provided for in the near future, their enforcement and translation into practical management will be a challenge since, among other things, it will require cooperation and coordinated work of several governmental agencies as well as cooperation from the private sector and the general public.

### *2. Further expansion of the network*

Despite outstanding progress, Georgia's Emerald Network still has both spatial and functional gaps – many species and habitats are still insufficiently covered and further expansion of the network is necessary in order to ensure their long-term survival. It is important that the network expands beyond the existing PA system even more than today. In addition it should also encompass private land where appropriate. As a result of awareness raising activities, it has recently achieved better recognition and support but with today's priorities of rapid economical development, the Network's further expansion (such as establishing new sites) is becoming more and more difficult. Having almost entirely covered the protected areas system, the Emerald Network can only further expand into areas that currently have no legal protection. Hence, conflicts with development sectors is almost inevitable. Pressure and opposition mainly come from such sectors as energy (mainly hydropower), transport and infrastructure as well as agriculture. Striking a balance between Emerald Network (nature conservation in general) and economic development is of course a major challenge. On the other hand, it should be noted that due to its nature and differences from classical protected areas, Emerald sites may be established in areas where it would be difficult or not appropriate to set up a protected area. Thus, in certain circumstances Emerald Network may be the best available site-based conservation tool.

### *3. Lack of information and technical capacity*

Lack of scientific data is likely to remain a major constraint in further development of the Emerald Network as well as in ensuring related activities such as effective management planning, monitoring and reporting. Significant progress has been made in respect of habitat classification. But as far as habitat mapping is concerned, the process still mostly relies on GIS analyses of satellite imagery without sufficient ground truthing. We also still need to identify lower level (more detailed) habitat classes. There is also lack of data in certain groups of animals as well as taxonomic uncertainties.

The national expertise needs to be increased in certain fields such as habitats and invertebrates.

#### *4. Monitoring and reporting*

Up to 2019, Georgia and other East European countries were requested to report on only a fraction of the Emerald species and habitats. This decision was made to enable the countries to gain experience and increase their reporting capacities. In the meantime, the Bern Convention Secretariat developed a special reporting tool and provided technical assistance as well as trainings. As of now, each country will have to report all the listed species and habitats, which in the case of Georgia is at least 200 species and 100 habitats (for those species and habitats that occur in more than one biogeographical region it will be even more complicated, because the report will need to be compiled not at the national level but by biogeographical regions). Georgia has to take action and begin data collection today to be ready for the next reporting in five-years time.

#### *5. Emerald Network and climate change*

Climate change is a potential major challenge for any site-based conservation and Emerald Network is no exception. With the impact of climate change and possible species migration and habitat shifting established Emerald sites as well as entire network may need to be reorganised. At the same time the network should be managed in such a manner that increases the resilience to climate change and other impacts.