Action Plan of the BID-REX Project

From Biodiversity Data to Decisions: enhancing natural value through improved regional development policies

Basque Government
17/05/2019

The main objective of the Action Plan is to establish the rules of the game and a framework that provides stability and security in the medium term to all the stakeholders involved in the collection and use of data and information and in the generation of knowledge useful for the conservation of nature and in the generation of public value.

Content

1. EXECUTIVE SUMMARY

Our well-being and quality of life relies on natural capital, i.e. on biodiversity, including the ecosystems that provide essential goods and services. To reach the European and world goals set for 2020 on biodiversity we must improve our understanding of biodiversity and of the ecosystem services so that we can create the adequate policies. The full commitment of the numerous interested parties is also necessary: **we are all part of the problem and of the solution**.

Creating adequate policies to protect natural areas and biodiversity requires the adequate mobilisation of consistent, relevant and structured biodiversity information aimed at guiding decision-making.

For a real implementation of the Action Plan we need to involved all the stakeholders in the monitoring process and to develop a permanent network in order to achieve real and effective participation of all of them.

Empowering citizens and generating new social relationships is crucial if we want to implement a network of knowledge to support decision making on biodiversity and ecosystem services. Until now the different stakeholders have worked separately across disciplines and institutions. Effective partnership means that all stakeholders can influence and take part in planning, programming, implementation and monitoring the Action Plan. This is a prerequisite for finding the right priorities for funding, setting up an implementation framework which enhances the involvement of the stakeholders with the best competences to address a specific need, and establishing transparent and accountable monitoring arrangements. The capacity building process includes diagnosis, training and enhancing collaboration and responsiveness of all the stakeholders involved.

> *The main objective of the Action Plan is to establish the rules of the game and a framework that provides stability and security in the medium term to all the stakeholders involved in the collection and use of data and information and in the generation of knowledge useful for the conservation of nature and in the generation of public value.*

It is about designing, in a collaborative way, the criteria of investment and public support for the protection of biodiversity so that they have continuity beyond administrative or political changes

and provide a network of security and support for both public and private stakeholders (organized civil society, companies, etc.)

In this way, greater effectiveness and efficiency and higher quality are achieved, guiding the collaborative action to those critical areas of special interest.

2. GENERAL INFORMATION

Project: BID-REX From Biodiversity Data to Decisions: enhancing natural value through improved regional development policies

Partner organization: Basque Government

NUTS2 region: ES21 Basque Country

Contact person: Marta Iturribarria

Email address: hari-berdea@euskadi.eus

Phone number: +34945019801

3. POLICY CONTEXT

The Action Plan aims to impact: ☐   Investment for Growth and Jobs programme

☐   European Territorial Cooperation programme

X   Other regional development policy instrument

3.1. Name and reference of the policy instrument addressed

The strategic context of the Plan is determined by two complementary dimensions that reflect and address both the content framework and the process or relationship model necessary for its implementation. The confluence of these two strategic dimensions (the what and the how) is what brings the Plan anchor points to address the challenge from an innovative and collaborative perspective:

Dimension of CONTENT	•ERDF Operative Programme for the Basque Country 2014-2020 •Biodiversity Strategy of the Basque Autonomous Community 2030	
Dimension of PROCESS	•White Paper of democracy and citizen participation for the Basque Country •Action Plan for Open Government in the Basque Country 2018-2020 •Digital Agenda for the Basque Country 2020	
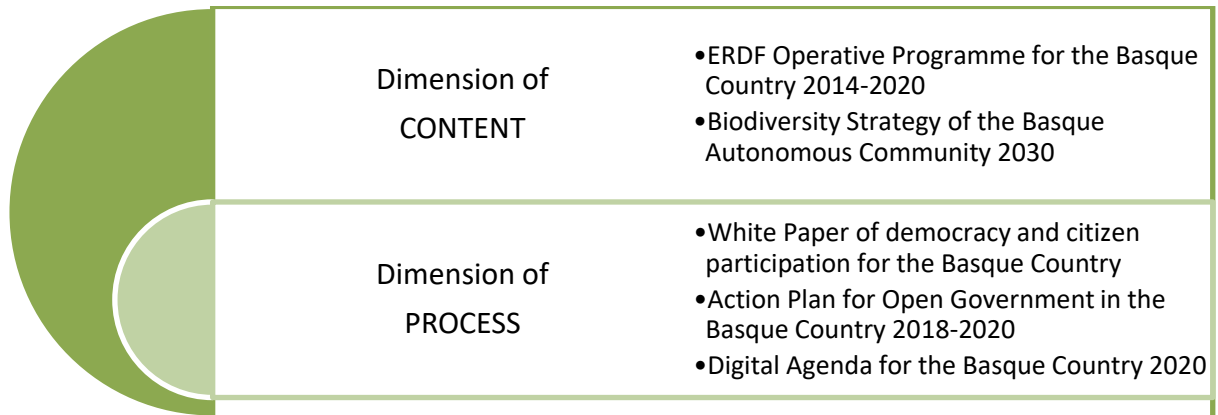
3.1.1. ERDF Operative Programme for the Basque Country (OP) PO6 «Conserve and protect the environment and promote resources efficiency»

PO6 « Conserve and protect the environment and promote resources efficiency» is one of the 7 priorities of the [Operative Programme 2014-2020](#) and is closely related to the objective 1 of the Basque Environmental Framework Programme 2020. The Basque Government has incorporated the environment as a cross-cutting element that decisively contributes to wellbeing, job creation and developing a future-looking and strong economy. To create appropriate policies to protect natural spaces and biodiversity we must understand how the species within the habitats interact, and how they might respond to changes and pressures, natural and manmade, which is directly related with TO1 (Strengthening research, technological development and innovation) and TO2 (Enhancing access to, and use and quality of, information and communication technologies). TO6 should be also synergetic with the other objectives, i.e. promoting nature-based employment opportunities and promoting green infrastructure, developing nature-friendly transport corridors, developing institutional capacity and public administration, creating destinations for educational visits to enhance knowledge on the natural environment, etc. The role of biodiversity objectives and criteria would be to strategically encourage projects providing benefits to biodiversity and/or ensure that possible negative impacts of projects on biodiversity are avoided. The objectives and criteria should be agreed from a regional network of knowledge.

> The role of the objectives and criteria established in the Action Plan will be to strategically promote projects that provide benefits to biodiversity and / or ensure that potential negative impacts on biodiversity of projects financed with ERDF funds are avoided.

3.1.2. Biodiversity Strategy of the Basque Autonomous Community 2030

The [Biodiversity Strategy of the Basque Autonomous Community 2030](#) is the instrument that establishes the priorities and commitments in terms of Natural Heritage for the year 2030. The strategy seeks to comply with the provisions of strategic Objective 1 of the IV Environmental Framework Programme of the Basque Autonomous Community 2020: "Protecting, conserving and restoring our natural capital, by preserving the services that the ecosystems provide us with".

It is an initiative with a regional application but with a global vision that is aligned with the Strategic Plan for Biodiversity 2011-2020, derived from the UN Convention on Biological Diversity, the European Community Biodiversity Strategy to 2020 and also with the United Nations 2030 Agenda for Sustainable Development, adopted in 2015. Vision 2030 has led to 4 Goals that are the priority areas for action for the Biodiversity Strategy: the first two involve the conservation of Natural Heritage, the third relates to the knowledge and culture of Nature, and the last to the system of governance.

> The Action Plan will contribute to the development of Goal 3 "Promotion of knowledge and the culture of Nature". The success in the application of the Biodiversity Strategy of the Basque Country 2030 will depend on the understanding and degree of involvement by civil society, private organizations and public authorities on the importance of carrying out measures aimed at the protection of biodiversity.

3.1.3. White Paper of democracy and citizen participation for the Basque Country

The [White Paper of democracy and citizen participation for the Basque Country](#) includes principles, proposals and commitments to advance the democratic functioning of our administrations and governance processes from a perspective of shared responsibility between government and civil society. To consolidate and advance into a more participatory culture, The Basque Government is addressing the commitments included in the White Paper in the Government Programme 2016-2020. One of the included actions is Collaborative Biodiversity Policies.

> The Action Plan will promote the development of collaborative biodiversity policies, generating new social relationships and new collaboration models, fostering opportunities for participation and dialogue with civil society and public-private co-responsibility.

3.1.4. 2018-2020 Action Plan for Open Government in the Basque Country

The [Action Plan for Open Government](#) is the first interinstitutional plan to advance in open government in the Basque Country produced as members of the Open Government Partnership. It is a plan co-created with the citizenry that includes 5 commitments that must be able to be materialised in two years and with transforming capacity. Commitments that must be implemented with the cooperation of civil society and in a coordinated way between the three interinstitutional levels in response to key open government challenges.

OGP commitments in the Basque Country:

- Accountability through Mandate Plans
- Open Data Euskadi and Linked Open Data
- iLab for citizen engagement in the Basque Country
- Open eskola (Open school for citizens)
- Basque Integrity System

> The Action Plan has similar objectives to those of the Open Government Plan, especially for commitments 1, 2, 3 and 4, so synergies must be created in both directions.

3.1.5. Digital Agenda for the Basque Country 2020

The digital participation of citizens is a growing trend favored by the increasing use of smart mobile devices that not only do more simple and direct communication, but also enable to generate and publish digital content easily. The use of ICT technologies by citizens and NGOs can increase the knowledge of the natural environment and ensure the environmental awareness.

The project "Nature Information System, Network of Knowledge and Citizen Science" (within the Challenge 6 "Activating the use of technologies and content by citizens in a reliable and safe way") is based on the development of a collective knowledge network of citizen participation, which serves to feed the Euskadi Nature Information System. As a result of this open, collaborative and transversal scenario, the interactions between science-society-

decision-making improve, leading to decision-making based on informed evidences arising from the scientific method, totally or partially, by amateur or non-professional scientists who can act in collaboration with professional scientists. Volunteers, while adding value to research, acquire new knowledge or skills, and a better knowledge of the natural environment.

> The participation of citizens in the digital domain is an unstoppable trend favored by the extension of smart mobile devices and the emergence of tools that make communication easier and more direct, but also by the possibility of generating and publishing digital content easily. The Action Plan will take advantage of this tendency to promote knowledge of our natural environment as a form of personal development and contribution to society.

4. ACTIONS

The Action Plan for the Basque Country establishes 5 focal issues as a basis for the actions that will be developed in these next two years. These actions will contribute to improving the policy instrument:

- Improving the use of knowledge generated, especially for decision-making, in projects financed by ERDF funds and other public funds, through the Nature Information System of the Basque Country (action 4.1)
- Promoting the involvement of local stakeholders and improving governance in establishing criteria for public financing (action 4.2 Network of Knowledge)
- Promoting synergies between the different priorities of ERDF funds (especially TO1 Strengthening research, technological development and innovation and TO2 Enhancing access to, and use and quality of, information and communication technologies), in order to strengthen priority 6 (action 4.3 Create and integrate expert knowledge)
- Improving the quality of projects financed with ERDF funds and other public funds (action 4.4. Criteria for public financing)
- Improving the orientation of projects, especially those based on citizen science, financed by ERDF funds and other public funds to the conservation objectives established in the European strategic and normative documents (action 4.5. Citizen science).

4.1. Nature Information System

4.1.1. Background

The current information system began to be developed in 2006 and was presented in 2010. Although it has a good conceptual and functional design, today there are technological advances and platforms that can improve its quality.

Its initial design focused on a robust architecture, and on providing the system with functionalities, but it was not focused on being a platform that facilitated and promoted collaboration among the data users and data providers.

4.1.2. Objective

Integrate the scientific and technical knowledge available necessary for the proper development of public competencies in the planning, management, monitoring and evaluation processes and make it available to the public by electronic and telematic means.

4.1.3. Actions

- Migrate the System to a new technological platform that responds better to the needs of users, is better integrated with other platforms and is more collaborative
- Approve the norms and criteria that normalize the incorporation of information to the system, in a way that guarantees their shared use and reuse

4.1.4. Players involved

The Basque government is responsible for the construction and hosting of the System in public servers. The definition of the functionalities, norms and criteria will be done according to the needs of all data providers and final users.

4.1.5. Timeframe

2019-2021

The system is structured in several modules: Species, Habitats, Sites, Legal or classification frameworks, References, Cartography, Multimedia, Indicators, Occurrences, Partners, which will be migrated step by step to the new platform. In 2019, the Species module and the Occurrence module will be addressed, taking as a reference the Atlas of Living Australia, EIDOS, Ornitho and GBIF. This year also the integration of the cartographic visualization in the new GeoEuskadi will be done.

4.1.6. Costs

500.000 €

4.1.7. Funding sources

Own funds.

4.1.8. Expected impacts

Improvement of the collaboration and the incorporation of data to the system.

> The Nature Information System of the Basque Country has been identified in the different workshops of the project as a powerful tool for the integration of information that should be enhanced. It has also been identified as a [good practice](#) in the INTERREG learning platform.
>
> [1st Regional Participatory Workshop with Stakeholders. 6th February 2017](#)
>
> The consensus is that this platform can serve as a powerful communication tool capable of guaranteeing the stronger political backing of actions related to biodiversity, as well as greater visibility and involvement by society.
>
> It is a way of channelling data collection towards a holistic model, and in turn, an undertaking to ensure the availability of organised data.
>
> [3rd Local Stakeholders Meeting. 15 November 2017](#).
>
> The potential of the Basque Government's Nature Information System was highlighted as an underutilised tool that could help in the digitisation, and subsequent accessibility of information to improve flows not only among public agents, but also to make better use of the information in the hands of private agents.

4.2. Network of Knowledge

4.2.1. Background

In the Basque Country, we have held an annual meeting forum for providers and users of data since 2014 (Social Forum on Biodiversity). This has helped us to know the local stakeholders interested in collaborating in the collection and use of data and information and in the generation of useful knowledge in decision-making, but we have not yet built a stable medium-term collaboration network.

> The National Biodiversity Network (NBN) and the Association of Local Environmental Records Centres (ALERC) of the UK are good examples to develop a collaborative network to set standards for data exchange, to raise awareness of the importance of biological recording of the Basque Country's wildlife, and to collect and share biological records and information, ensuring information is robust, and make information products and services accessible to a range of audiences including decision-makers, the public, and researchers.

4.2.2. Objective

Improve governance, encouraging cooperation between different stakeholders (public administrations, universities, research centers, companies, social organizations and people involved in nature conservation), expanding and improving the Nature Information System of Euskadi.

4.2.3. Actions

- Approve the rules of structure, accreditation of partners and operation of the Network that guarantee a permanent framework of long-term collaboration, allow to manage competing interests and generate trust among the partners.
- Integration in international knowledge networks (Towards an alliance for biodiversity knowledge GBIC2)

4.2.4. Players involved

Basque Government is responsable of the legal framework and administrative procedures to become a membre of the network.

The members of the network can be, among others, public administrations, universities, research centers, companies, social organizations and people involved in the conservation of nature.

4.2.5. Timeframe

2019-2021.

4.2.6. Expected impacts

Moving towards a common and shared approach (for example, developing an alliance for the knowledge of biodiversity) implies assuming a more active role and a framework of co-responsibility (where there is a declaration of responsibility of the stakeholders that participate in it).

The knowledge network must be articulated as a dynamic scenario that enables the communication, training and co-creation of the stakeholders that participate in it.

Collaboration is a recurring need identified in the different workshops of the project. The Biodiversity information flow in the Basque Country, which focuses on three key aspects: data, relationships and people, has been selected as a good practice of the BID-REX project.

1st Regional Participatory Workshop with Stakeholders. 6th February 2017

The demand for greater coordination and cross-cutting exchange between institutions is constant. Not only between the Basque Government, Provincial Councils and local bodies; there is also a belief in the evident need for improved coordination between the generators, intermediaries and end users of biodiversity data/information.

2nd Regional Participatory Workshop with Stakeholders. 23rd May 2017

Collaborating means being able to make better use of the information existing in the system (knowledge and access), to improve the dynamics of data transmission and to activate the generation of new data. Sharing data with other collectives, and involving them in obtaining data, as well as reducing grey areas (areas where no data is available), permits the generation of synergies and can help in developing new projects.

Interregional thematic workshop. 15th June, 2017

A regional scale network can be a useful tool for regional governments to inform their decision making processes.

4th Local Stakeholders Meeting. November 20 and 21, 2018

This is a key issue to advance and realize a public - social long - term collaboration model, but also to improve coordination between the different public administrations.

4.3. Create and integrate expert knowledge

4.3.1. Background

Traditionally the expert knowledge that has been used is the most directly related to nature

In the BID-REX project we are incorporating aspects of social innovation and public governance with Innobasque within the framework of the PEGIP 2020 (Strategic Plan for Governance and Public Innovation) and the deployment of the White Paper on Democracy and Citizen Participation for Euskadi.

4.3.2. Objective

Integrate different types of knowledge: ground knowledge, ecological, administrative and management, ICT, Big Data, Internet of Things, intelligent specialization, policy evaluation and Open Government and scientific dissemination in order to achieve a greater understanding of ecological processes in a socioeconomic context that allows a better evaluation and communication of public action.

4.3.3. Actions

- Find common spaces and languages that make visible the importance of the different levels and gears of the biodiversity protection system and agree on common guidelines for integration.
- Apply technological innovation in the conservation of biodiversity (ICT, Big Data, etc.) to facilitate the collection of data and to promote a real evaluation that goes beyond the monitoring of actions and allows us to analyze the causalities and the relevance of the indicators.

4.3.4. Players involved

Experts in biodiversity, ecosystems, administrative management, governance, social and technological innovation, policy evaluation, scientific dissemination, etc.

4.3.5. Timeframe

2019-2021

4.3.6. Expected impacts

Integrating knowledge implies, on the one hand, understanding the generation of knowledge in the field of biodiversity as a value chain, where each link has value in itself but multiplies it by connecting with the rest contributing to the efficiency of the system and saving the existing gap between research and management. In addition, the

knowledge of biodiversity in other fields and disciplines is made visible.

It's very important that stakeholders not directly related with biodiversity knowledge get involved as they can discover opportunities in innovation and in creating local job opportunities.

<div style="border:1px solid green; background:green; color:white; padding:10px;">

Interregional thematic workshop. 15th June, 2017

Many new data sources have been developed during the last years, but some of them are still not used to their full potential.

Moreover, occasionally users and policy makers are not aware of the weaknesses and strengths of each source, so some information is lost.

There are new predictive and data processing and interpreting tools that could help with getting the information needed for decision making process.

</div>

4.4. Criteria for public financing

4.4.1. Background

The Global Biodiversity Informatics Outlook (GBIO) offers a framework for reaching a much deeper understanding of the world's biodiversity, and through that understanding the means to conserve it better and to use it more sustainably.

The GBIO identifies four major focal areas, each with a number of core components, to help coordinate efforts and funding. The co-authors, from a wide range of disciplines, agreed in 2012 these are the essential elements of a global strategy to harness biodiversity data for the common good.

We can complete this framework with local needs and for decision making. Using this framework in Euskadi allows us greater coordination and integration in existing initiatives, from the local to the global.

4.4.2. Objective

Establish priorities in the allocation of budget and monitor the impact of actions financed by public funds in order to finance those actions that provide relevant information on biodiversity, ensuring that, in addition, the information generated can be reused to provide new public value.

4.4.3. Actions

- Publish a practical Guide
- Promote the use of the Guide as a basis to prioritize and evaluate projects financed with public money

4.4.4. Players involved

Public administrations and local stakeholders that develop projects with public funding.

The guide will be useful to public administrations to prioritize projects, allocate funds and monitor the impact of the actions financed. To the local stakeholders it will be a good tool to design and implement projects that improve knowledge of the biodiversity of Euskadi.

4.4.5. Timeframe

2019-2021

4.4.6. Costs

10.000 €

4.4.7. Funding sources

Own funds.

4.4.8. Expected impacts

The Guide should be a useful and adaptive instrument, both in its design and in its deployment for public and private stakeholders to define a stable framework that regulates the rules of the game and that establishes criteria that allow:

- Not only obtain information, but also promote the culture of nature conservation
- Carry out an effective evaluation of results

> The funding bodies need to prioritise projects with positive impact on biodiversity. This is the main objective of the BID-REX project: Better prioritization of biodiversity conservation efforts using evidence-based methods.
>
> [2nd Regional Participatory Workshop with Stakeholders. 23rd May 2017](#)
>
> Data-based policy calls for data that can be trusted (origin, quality, reliability, methodology, etc.). Objective criteria must be defined and less attention paid to the opinion of experts when selecting data and defining optimum criteria or desirable scenarios. Scientific evidence and agreement are key to defining data indicators and involving new evaluating agents in the process.

4.5. Citizen science

4.5.1. Background

There are a lot of biodiversity study projects where volunteers gather for field observations. These citizen scientific initiatives are a valuable means to collect up-to-date and quality data and at the same time mobilize citizens to participate in biodiversity conservation activities.

Thanks to the contribution of the volunteers, large-scale work can be undertaken for which it would be difficult to find professionals.

Over the past decade there has been a rapid increase in the number of citizen science initiatives, due to the widespread use of smart phones and apps that have made wildlife recording much easier.

In the Basque Country Ornitho.eus was presented in 2015 as a citizen science portal linked to the Information System. Through Ornitho.eus many observations are recorded and incorporated into the Information System.

Ensuring scientific data quality and fit-for-purpose in policy-making are important issues to take into account. To achieve this, we need monitoring programs that are well oriented towards conservation objectives, rigorous but accessible protocols and, above all, that the effort made by thousands of volunteers is oriented towards the objectives of conserving and protecting the environment and promoting the efficiency of resources. That is, we must take the necessary steps to move from casual observations to guided observations.

> In this sense, a reference practice is the Volunteer Training Pathway used by the Field Studies Council, FSC, from UK.

This necessarily implies having well-trained volunteers.

It is very important also for decision makers to be able to trust the information collected by volunteers.

> The ALERC Accreditation, from UK, is a very inspiring experience to take into account.

4.5.2. Objective

Improve the quantity and quality of the primary data collected by volunteers and the fit-for-purpose in policy making.

4.5.3. Actions

Comprehensive design of monitoring programs based on a common model, taking into account the following:

- Well designed according to the conservation objectives
- Well-defined data collection protocols adopted by all volunteers
- Well-trained volunteers
- Certification of training entities

4.5.4. Players involved

Public administrations and local stakeholders involved in data recording.

4.5.5. Timeframe

2019-2021

4.5.6. Expected impacts

Citizen science must consider factors of quality and quantity, incorporating the geographical variable (extend it where data are needed) and conservation needs (on what species do not have data). Citizen science, moreover, is not just a strategy of approaching citizens committed to the conservation of nature. It is also a useful approach to reach other stakeholders who can provide data to the system (for example: mountain clubs, hunting federations, fishermen, farmers, retirees, ...)

In the Basque Country there is a powerful network for collecting primary data involving a wide variety of local stakeholders (businesses, knowledge and research centres, public administrations, associations and volunteers) which foster the generation of knowledge and its transfer. This has been valued in the regional workshops as a strength that must be promoted.

[1st Regional Participatory Workshop with Stakeholders. 6th February 2017](#)

There is a real opportunity to raise awareness and involve citizens in the processes of collecting/compiling data/information. What is known as "Citizen Science" and its development represent a window of opportunity for the territory.

Citizen science initiatives are a valuable means of collecting updated, quality data; they also mobilize citizens to participate in biodiversity conservation activities.

Insistently and almost unanimously, the participants stressed the need to guarantee good data quality. A suggestion was therefore made to propose the development of a common protocol for collecting, using and pooling data in order to:

- Unify criteria/methodologies
- Establish filters (reliability)
- Share protocols for data capturing, storing and availability
- Guarantee data compatibility and coherence at different scales

This protocol can be used to guarantee the reliability (screening) of data collected and their standardisation, processing and coordination. It can also be used to enhance their visibility and dissemination, since introducing and fostering the use of this type of mechanisms for better grouping and standardisation results in an improvement in their final result.

5. GOOD PRACTICES AND OTHER REFERENCES

- Atlas of Living Australia

https://github.com/AtlasOfLivingAustralia

https://www.ala.org.au/

https://www.ala.org.au/who-we-are/downloadable-tools/open-source-software/

https://living-atlases.gbif.org/

https://assets.ctfassets.net/uo17ejk9rkwj/1SGvHsuXkQi2Y4Kgq2Qea6/f12751fe0517c7962d0b7b3bf6b3a517/ALA_Key_Technical_Documentation_Spanish__1_.pdf

- EIDOS data base

https://github.com/BancoDatosNaturaleza/EIDOS

- Ornitho

https://www.ornitho.eus/

- GBIF

https://www.gbif.org/

- Portal for ArcGIS

https://enterprise.arcgis.com/es/portal/

- National Biodiversity Network (NBN)

https://nbn.org.uk/

https://www.interregeurope.eu/fileadmin/user_upload/tx_tevprojects/library/file_1532341136.pdf

- Association of Local Environmental Records Centres (ALERC)

http://www.alerc.org.uk/

- Global Biodiversity Informatics Outlook (GBIO)

https://www.biodiversityinformatics.org/

- FSC BioLinks Development Plan for Training Provision

https://www.fscbiodiversity.uk/sites/default/files/FSC%20BioLinks%20Development%20Plan%20for%20Training%20Provision%20(22-01-2018).pdf

https://www.interregeurope.eu/fileadmin/user_upload/tx_tevprojects/library/file_1532340627.pdf

- ALERC Accreditation

http://www.alerc.org.uk/alerc-accreditation.html

https://www.interregeurope.eu/fileadmin/user_upload/tx_tevproje
cts/library/file_1532340689.pdf

- Horizon Scanning

https://www.gov.uk/government/groups/horizon-scanning-programme-team

- JNCC (Joint Nature Conservation Committee)

http://jncc.defra.gov.uk

- Evidence Quality Assurance Policy

http://jncc.defra.gov.uk/page-6675

- Partnership for Biodiversity in Planning

https://www.biodiversityinplanning.org/

- Wildlife Assessment Check

https://www.biodiversityinplanning.org/wildlife-assessment-check/

Aitor Zulueta Telleria

Director of Natural Heritage and Climate Change

Department of Environment, Housing and Territory Planning

Basque Government