

Common Framework for Biodiversity-Proofing of the EU Budget

Guidance for the Connecting Europe Facility

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For the European Commission

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In collaboration with



Transport and Environmental Policy Research **Disclaimer:** The arguments expressed in this report are solely those of the authors, and do not reflect the opinion of any other party.

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Guidance on biodiversity proofing Connecting Europe Facility funds in the implementation cycle

Note, this document should be read in conjunction with Medarova-Bergstrom *et al* (2014), which provides the rationale for the Common Framework together with generic guidance on key biodiversity proofing principles and the application of key proofing instruments. This is hereafter referred to as the Generic Guidance document.

1.1 Introduction to the fund

The Connecting Europe Facility (CEF) is essentially an infrastructure development fund within the 2014-2020 Multi-annual Financial Framework (MFF) to provide financial assistance to enable transport, energy and telecommunications infrastructure of EU importance to be prepared and implemented. This guidance covers transport and energy; it does not cover telecommunications infrastructure. The rules governing the CEF for all sectors are set out in the CEF Regulation¹. For both transport and energy, the focus is on 'Projects of Common Interest' (PCI) that meet the respective sectoral objectives, which are set out in the CEF Regulation (see below for more details on the selection of these projects). Additionally, for transport there is a focus on missing links in the network; further objectives for the trans-European transport network (TEN-T) are set out in the TEN-T Guidelines².

The CEF has two main objectives, both of which apply to transport and energy. First, it should "contribute to smart, sustainable and inclusive growth" in line with the Europe 2020 strategy. The latter defines sustainable growth as delivering an economy that *inter alia* prevents biodiversity loss³. Second, the CEF should enable the EU to reach its sustainable development targets, including the 20% reduction in greenhouse gas emissions by 2020. There are also sector-specific targets, including ensuring "sustainable and efficient transport in the long run" and that energy infrastructure PCIs should contribute "to sustainable development and protection of the environment"⁴.

For the 2014-2020 period, the CEF has a budget of €33.2 billion, of which €26.3 billion has been allocated to the transport sector and €5.9 billion for energy infrastructure (the remainder is for telecommunications). The budget for transport includes €11.3 billion that will be transferred from the Cohesion Fund to be spent in line with the CEF Regulation in Member States that are eligible for cohesion funding. The renamed Innovation and Networks Executive Agency (INEA), which was previously the TEN-T Executive Agency, is responsible for the day-to-day management of the CEF budget.

Figure 1-1 sets out the Common Framework for biodiversity proofing the CEF, taken from Medarova-Bergstrom et al (2014).

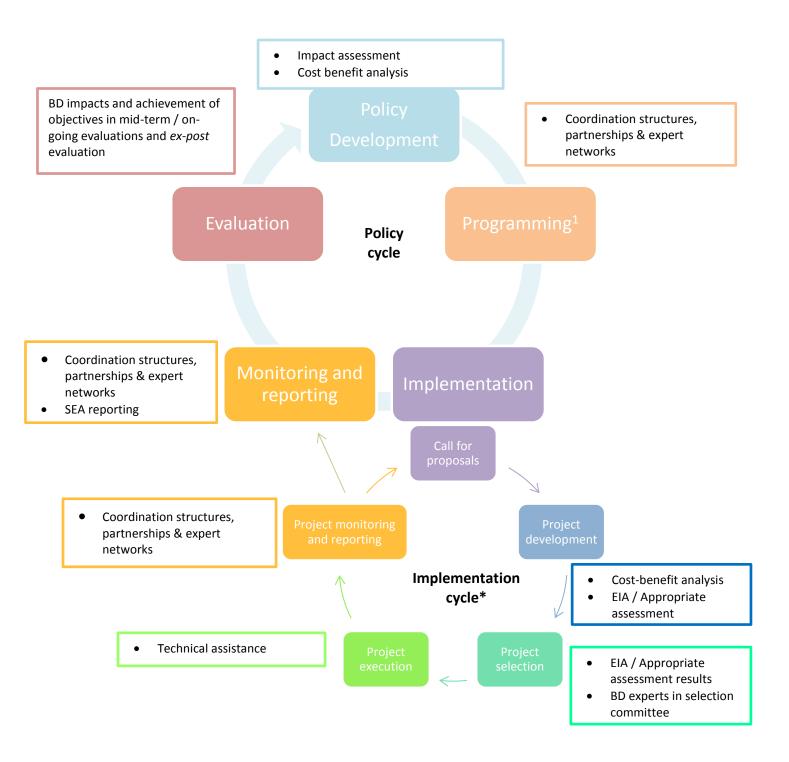
¹ European Parliament and Council Regulation (EU) No 1316/2013 of 11 December 2013 establishing the Connecting Europe Facility. OJL 348/128, 20.12.2013, Brussels

² European Parliament and Council Regulation (EU) No 1315/2013 of 11 December 2013 on Union guidelines for the development of the trans-European transport network. OJL 348/1, 20.12.2013, Brussels.

³ Communication from the Commission Europe 2020: A Strategy for smart, sustainable and inclusive growth, COM(2010) 2020, 3.3.2010, Brussels; see page 12 and box on page 14

⁴ Respectively, Article 4(2)(b) and Article 4(3)(c) of Regulation 1316/2013

Figure 1-1: Application of the Common Framework for biodiversity proofing to the CEF



1. For the CEF, this relates to the Work Programmes; for annual Work Programmes, this phase is not a one-off, but an annual process.

* The full implementation cycle applies to major investments in particular, and is likely to be significantly simplified for small grants.

This guidance focuses on the second part of the diagram, ie the implementation cycle. However, for the CEF it is important to note that the 'programming' phase of the policy cycle is not a one-off event at the start of the 2014-2020 period. The CEF requires the Commission to produce Work Programmes, which could be annual or multiannual; these will be used as the basis of calls for proposals in the implementation cycle. Furthermore, each multiannual Work Programmes has to be reviewed at least at mid-term, after which it can be revised, if necessary.

As a result of the existence of annual Work Programmes, the policy cycle for the CEF is more iterative than for other EU funds, and subsequently the implementation of the CEF will develop as experience with the fund grows. However, it is important to note that the process for selecting potential projects under the CEF is fundamentally different than that for the other EU funds, such as the European Structural and Investment (ESI) funds. The projects that might be funded under the CEF are effectively a short-list of a longer list of projects that have been selected in processes outside of the CEF policy cycle.

For transport, between 80 per cent and 85 per cent of the respective CEF budget will be spent on a list of pre-identified PCIs on the core transport network. These projects are listed in Annex I of the CEF Regulation and all have been identified by Member States. The list contains predominantly rail projects, as well as some projects for ports, inland waterways, infrastructure management and telematics; the few road projects focus on cross-border connections⁵.

For energy, the Commission must establish a Union list of PCIs, which is based on regional lists of proposed PCIs, as set out in the respective energy Guidelines⁶. The regional lists have taken account of a longer list of projects that have been set out in the respective 10-year network development plans for electricity and gas that have been drawn up by the respective networks of transmission system operators⁷. The purpose of the development of the Union list is to identify the projects of EU added value from amongst those in the respective 10-year development plans.

⁵ Annex I of the TEN-T Guidelines defines a core network and a comprehensive network. The core network consists of those parts of the comprehensive network that are of the highest strategic importance for the development of the TEN-T. 'Projects of common interest' are identified with reference to the comprehensive network and must contribute to at least two of the objectives of the TEN-T (one of which is sustainability), be economically viable and demonstrate EU added value (Article 7(2) of Regulation 1315/2013).

⁶ European Parliament and Council Regulation (EU) No 347/2013 of 17 April 2013 on guidelines for trans-European energy infrastructure. OJL 115/39, 25.04.2013, Brussels.

⁷ The 10-year network development plans are part of an ongoing process to identify the network development needs for gas and electricity. The Community-wide network development plans are developed every two years by the respective European Network of Transmission System Operators for electricity and for gas. These lists have been drawn up from the perspective of the operators. The selection of the projects for the Union list of projects of common interest is based on the criteria in Article 4 of Regulation 347/2013.

1.2 Opportunities for biodiversity proofing

1.2.1 Minimising detrimental impacts

As the CEF is an infrastructure development fund, there is clearly a risk that any infrastructure that is supported financially by the CEF has an adverse impact on such as those listed in

Table 1-1 for transport and in Table 1-2 for energy. Hence, the main opportunities for biodiversity in the context of the CEF are on minimising detrimental impacts on biodiversity that might result from the development of the respective infrastructure.

Table 1-1: Potential pressures on biodiversity from transport infrastructure projects, and possible intervention measures to avoid, reduce and compensate for impacts

Source of			Impact	type		
potential pressures	Direct mortality	Direct habitat loss (footprints)	Habitat fragmentation	Disturbance	Indirect habitat degradation	Secondary impacts
Roads, railways, ports, airports	Collisions occur especially where roads cross flight-lines animal crossing points; population impacts low for most species, but high for vulnerable species, eg Iberian Lynx	Relatively low, but can be concentrated along biodiverse coastal strips (causing coastal squeeze), lakes and river valleys	Can be significant, especially where new infrastructure occurs in otherwise unfragmented landscapes, and where disturbance sensitive species occur that require large areas of habitat	Often substantial disturbance impacts, especially where new infrastructure occurs in otherwise undisturbed areas, but some species become habituated especially if people are not visible	Hydrological disruption, polluted run-off and air- pollutants (especially the oxides of nitrogen) can disrupt ecosystems and food resources. Invasive alien species tend to be spread by transport networks,	Increased hunting pressures and recreational disturbance if access is improved. Encourages development.
Interventions to a	ddress potential impacts					
Avoidance measures	Avoid areas with sensitive species or known movement corridors	Avoid areas with sensitive species or threatened habitats	Avoid areas with sensitive species or where habitat patches may become too small to support viable populations and ecosystem functions	Avoid areas with sensitive species	Avoid transport modes that lead to pollution levels that cannot be reduced to acceptable levels	Avoid sensitive areas and/or include regulations to avoid secondary development
Reduction measures	Fencing, reflectors, removal of tall vegetation close to roads / railways etc	Reduction of carriageways and associated infrastructure, use of viaducts or tunnels to avoid especially sensitive areas	Maintain some habitat linkages, or if not possible then use wildlife tunnels and green bridges etc – at known key crossing points where ecological benefits are reliable and cost-effective	Sound and light barriers (eg fences, trees) use of low-noise road surfaces, limited use of lighting or screened lighting	Technologies to reduce or capture emissions, barriers to pollution (eg trees), pollution traps in ditches and balancing ponds. Monitoring and if necessary actions to address alien species risks	Limiting access points to adjacent habitats, especially in sensitive areas, eg by absence of joining secondary roads
Compensation measures	Reduction of other sources of mortality eg from alien predators	Habitat restoration or creation, if this is feasible	Strategically placed habitat restoration / creation to link up or increase the area of fragmented habitat patches	Reduction in other sources of disturbance, or habitat restoration or creation, if this is feasible	Habitat restoration or creation, if this is feasible	Habitat restoration or creation, if this is feasible

Table 1-2: Potential pressures on biodiversity from energy infrastructure projects, and possible intervention measures to avoid, reduce and compensate for impacts

	Impact type							
Source of potential pressures	Direct mortality	Direct habitat loss (footprints)	Habitat fragmentation	Disturbance	Indirect habitat degradation	Secondary impacts		
Overhead electricity transmission lines	Collisions occur especially where lines cross flight-lines and sites with large numbers of birds; population impacts normally low for most species, but potentially high for some vulnerable species	Generally insignificant	Generally insignificant effects, but lines can form barriers to movement for some vulnerable species, causing habitat fragmentation	Potential disturbance during construction	Normally no significant impact likely	Normally no significant impact likely		
Underground electricity transmission lines, gas, oil and carbon-dioxide pipelines and storage	Normally no significant impact likely	Impacts are normally low and reversible, but can lead to habitat loss of some sensitive habitats that cannot be restored; this can be significant if they are rare.	Normally no significant impact likely	Potential disturbance during construction	Excavation can lead to pollution of water courses from run-off	Normally no significant impact likely		
Interventions to address pot	ential impacts							
Avoidance measures	Avoid areas with sensitive species or known movement corridors	Avoid areas with sensitive species or threatened habitats	Avoid areas with sensitive species	Avoid construction in areas with sensitive species or times of year when they are present	Use construction techniques that avoids pollution			
Reduction measures	Add reflectors / markers to overhead lines	Use designs and construction techniques that minimise footprint		Avoid working at the most sensitive times of day; use sound and light barriers (eg fences) use of low-noise machinery, reduce lighting at night	Technologies to reduce or capture emissions, eg pollution traps.			
Compensation measures	Reduction of other sources of mortality eg from alien predators	Habitat restoration or creation, if this is feasible	Strategically placed habitat restoration / creation to link up or increase the area of fragmented habitat patches	Reduction in other sources of disturbance, or habitat restoration or creation, if this is feasible	Habitat restoration or creation, if this is feasible			

In terms of minimising the potential detrimental impacts of both transport and energy infrastructure on biodiversity, the best option is to avoid or prevent adverse impacts in the first place. In this respect, the physical position of the route of the infrastructure, whether this is a railway or an electricity transmission line, is of fundamental importance. The alignment of the route of the infrastructure should avoid the bisection of vulnerable habitats, while land take and the disturbance of adjacent habitats, or those in the proximity of the infrastructure, should be minimised.

However, it is inevitable that the construction of infrastructure will have impacts on biodiversity, so the design of the infrastructure is also important. The alignment of the infrastructure should take account of the local topography and geological characteristics, eg by following natural contours, to minimise habitat fragmentation, and so maximise connectivity both above and below the infrastructure. In the design of any scheme, vegetation can be used to screen the infrastructure, but also to improve the functioning of the infrastructure from the perspective of biodiversity. In this respect, it is important that any new vegetation is consistent with that present in the locality of the infrastructure and that it supports local wildlife.

For transport infrastructure, overpasses and underpasses of various types can be used to enable wildlife to avoid the infrastructure, although care must be taken with respect to the siting of these to ensure that they are both safe for the wildlife to use and do genuinely have a positive impact on habitat connectivity. There are various ways of reducing wildlife mortality, particularly for transport infrastructure, including fences and other design mechanisms that inhibit or deter vulnerable wildlife from straying onto busy infrastructure.

The principles that underlie biodiversity proofing require particular attention to be given checking whether the proposed programmes and projects have the potential to lead to of the impacts summarised in

Table 1-1 for transport and in Table 1-2 for energy. Where such impacts may be likely and significant, measures should be identified, implemented, monitored and reported on that avoid and reduce impacts to acceptable levels. If this is not possible, then remaining residual impacts (after feasible rehabilitation) should be quantified, so that post-proofing measures can be taken to offset these impacts, for example through habitat restoration measures. Such measures should be in accordance with the mitigation hierarchy and the EU's no net loss strategy (ie Action 7 of the EU Biodiversity Strategy), which is still being developed at the time of writing.

1.2.2 Increasing beneficial funding for biodiversity

As no funds will be directly spent on biodiversity (unlike in some ESI funds), the focus of spending to maximise the potential for biodiversity under the CEF is on identifying any opportunities where the construction of the respective infrastructure could be beneficial for biodiversity. For example, it is also possible to design infrastructure to benefit wildlife, eg by including nesting boxes on electricity pylons or bridges, and by managing the respective corridors for the benefit of biodiversity. The latter will also depend on how the infrastructure is used once it has been constructed, particularly for transport infrastructure.

Examples such as those discussed could be included in guidance for project proponents, Member States and other stakeholders.

1.3 Guidance on biodiversity proofing

Key proofing tools for which guidance is provided in Annex 1 of the Generic Guidance on Biodiversity Proofing are highlighted in bold and italic type. When undertaking biodiversity proofing it is important to ensure that relevant actions are undertaken in accordance with the biodiversity proofing principles that are set out in Section 3.3 of the Generic Guidance document.

1.3.1 Introduction

Before discussing the potential mechanisms that could be used in the course of the implementation cycle to avoid and reduce impacts on biodiversity, it is worth highlighting that the projects that could be funded under the CEF often existed in some form prior to being considered for CEF funding. The CEF projects are major infrastructure projects, so most are likely to have been considered by the respective national, regional and local authorities, even if only at the level of initial planning. Hence, even though projects that apply to the CEF have to demonstrate compliance with the EIA legislation, the EIA may have been undertaken at a much earlier stage, ie before the project enters the CEF implementation cycle. This is important, as from the perspective of the protection of biodiversity, early interventions in the lifecycle of a project, including in its routing and design, are important. Indeed, to some extent, the consideration of biodiversity needs to happen in parallel to the early stages of the project, ie where the need for infrastructure to connect point A to point B (on either the transport or the energy distribution network) is being considered. Hence, in order to improve the biodiversity proofing of projects funded by the CEF early engagement in the Member States is important, as afterwards EU-level mechanisms can have only limited impact. This highlights the need for biodiversity-proofing to take place at the national, as well as at the European, level.

This guidance has a relatively narrow audience in that it is the European Commission's DG MOVE and DG ENERGY that are responsible for the policy framework in which the transport and energy elements of the CEF operates, while it is the INEA (an Agency of the Commission) that is responsible for the day-to-day management of the CEF budget. Additionally, DG Environment has an important role to play in the process, as it works closely with the other DGs in the project selection phase in order to ensure that project proposals are in compliance with the EU environmental *acquis*. Each of these DGs has been engaged in the development of this guidance. However, as is noted in Section 1.4, the guidance can also be used by other stakeholders to, for example, engage at the national level and with the Commission.

It is also important to note that the implementation cycle, including the respective Work Programmes, have to be consistent with the CEF Regulation and the respective transport and energy Guidelines, which leaves the Commission with limited scope with respect to what can be included in the Work Programmes. The following guidance outlines where there might be some potential to improve the biodiversity-proofing of the current programming period, as well as of future programming periods, if the stakeholders involved agree. In this respect, it is worth noting again that there is a recurring, annual element to the programming phase of the policy cycle for the CEF, which could result in the implementation of the fund (eg the various elements of the implementation cycle) evolving as experience with the fund increases.

1.3.2 Calls for proposals

The first stage of the implementation cycle under the CEF – the call for proposals – is closely related to the programming stage of the CEF policy cycle, which is where the development of the respective annual and multiannual Work Programmes takes place. The CEF Regulation requires the Commission to adopt separate multiannual and annual work programmes for the transport and energy sectors. For transport, multiannual work programmes will be adopted for the pre-identified list of PCIs, while for energy the focus will be on the Union list of PCIs (see Section 0). The Commission will adopt annual Work Programmes. For energy, the first two annual Work Programmes are to give priority to PCIs that aim to end energy isolation, eliminate energy bottlenecks and to complete the internal energy market⁸. Calls for proposals have to be consistent with the respective Work Programmes and the Regulations.

The respective Work Programmes set out the relevant budget, objectives and priorities, as well as the *eligibility, award and selection criteria*. The criteria have to be in line with the objectives and priorities of the CEF Regulation (see Section 0) as well as those of the respective TEN-T and energy Guidelines⁹.

It could be argued that the inclusion of biodiversity provisions, such as *ex ante* conditionalities or respective criteria, is justifiable in such Work Programmes, as one of the objectives of the CEF is to contribute to smart, sustainable and inclusive growth, which the Europe 2020 strategy defines as growth that delivers an economy that *inter alia* prevents biodiversity loss (see Section 0). However, other than the need for projects to be compliant with the Habitats and Birds Directives, as well as other EU environmental legislation, there is no reference to biodiversity in any of the articles of either set of Guidelines or in the CEF Regulation. Hence, it could also be argued that, as a result of there being no explicit reference to biodiversity in the criteria for selecting PCIs or in those for choosing which projects to support, that the inclusion of biodiversity provisions in the respective Work Programmes is not justified.

At this point, it is worth recalling that the CEF is an infrastructure development fund. Hence, other than the need to comply with EU environmental legislation, the criteria set out in Work Programmes and used in the calls for proposals are based on those set out in the respective Regulations (see above) and on other important aspects associated with the financing and development of infrastructure. Consequently, it would be a significant change in practice if explicit biodiversity conditionalities or criteria were included in Work Programmes. This would also arguably be inconsistent with the fact that other issues, including other environmental issues, would not be treated in the same way. Consequently, there are barriers to the inclusion of biodiversity-related *ex ante* conditionalities and criteria

⁸ Regulation (EU) No 1316/2013

⁹ European Parliament and Council (2013) Regulation (EU) No 347/2013 on guidelines for trans-European energy structure. OJL 115/39, 25.4.2013, Brussels.

in the Work Programmes. However, Member States could promote the inclusion of biodiversity considerations in Work Programmes, as Member State representatives in the CEF Coordination Committee need to approve each Work Programme, even though the protection of biodiversity will not be the main priority for this Committee.

While it might not be a requirement of a Work Programme to better take account of biodiversity, appropriate guidance could be developed and published on how biodiversity considerations should be taken into account in the development of transport and energy infrastructure projects. This would be beneficial to project promoters, but also to Member States. The guidance would need to be developed in association with stakeholders with the necessary biodiversity expertise. It would need to include reference to issues to consider, sources of additional information and expertise, as well as good practice examples as to how transport infrastructure projects have complied with EU biodiversity legislation, including the avoidance, mitigation and, where necessary, compensation for damage to biodiversity (see, for example, Section 0). The guidance could also make it clear which projects that are the target of a particular Work Programme are at risk of damaging sites of European, national or regional importance (eg as identified through an SEA; see also Section 1.3.4). The identification of such projects would also need to draw on relevant biodiversity expertise, but its inclusion in the guidance to project promoters would be important in increasing the awareness of project promoters that a project has the potential to damage biodiversity and therefore will require the necessary assessments to be undertaken.

1.3.3 *Project development*

In response to calls for proposals, project proponents will develop a project proposal although, as noted above, the actual development of a project may have begun much earlier, ie before the CEF implementation cycle began. The main legal requirement relating to biodiversity is the need for the proposed project to be fully in compliance with the EU environmental *acquis*, which includes compliance with EU biodiversity legislation, such as the Habitats and Birds Directives. Of particular importance in this respect, is the Appropriate Assessment required under Article 6.3 of the Habitats Directive when a project is likely to have a significant impact on a Natura 2000 site. However, under Article 6.4 of this Directive, a project is allowed to be taken forward after a negative assessment and in the absence of a suitable alternative for reasons of 'overriding public interest', as long as all necessary compensatory measures are taken to ensure the overall coherence of the Natura 2000 network. The energy Guidelines note that energy PCIs may be considered to be of overriding public interest.

More generally, most infrastructure projects will also be subject to an *Environmental Impact Assessment* (EIA), in line with the EIA Directive (as revised in 2014, see the Generic Guidance on Biodiversity Proofing), while national or regional legislation might require other types of environmental assessment. The EIA must *inter alia* explore alternative options to address any significant adverse environmental impact that is expected to result from the implementation of the project, which must (under the revised EIA Directive) *inter alia* include effects on biodiversity. When ensuring compliance with the necessary EU, national and regional legislation, it will be important for project developers to consult with the respective environmental authorities in the respective Member State, as they will be able to assist the project proponent in ensuring that the proposal complies with the necessary environmental legislation. As noted above, the EIA will often have been undertaken before the project enters the CEF implementation cycle, so early engagement in Member States is important.

As the knowledge and understanding of the value of ecosystem services increases, potential project applicants should be encouraged to include the value of such services in any economic analysis associated with the project, including through the **cost benefit analysis** for works projects that are required under both the energy and transport Guidelines. For energy projects, there is extensive guidance on how to undertake the necessary cost benefit analysis, which includes the consideration of biodiversity. This stage is a potentially important intervention point for biodiversity proofing.

1.3.4 Project selection

In the course of the project selection, the use of a scoring system against the agreed award criteria is important. However, as noted above, there are significant barriers to the inclusion of biodiversity criteria in the Work Programmes and in the calls for proposals under the CEF, and thus in scoring systems. Hence, perhaps the most important means of ensuring that biodiversity considerations are appropriately taken into account in the project selection phase is the involvement of DG Environment in the evaluation of the project proposals, as DG Environment has to ensure that the project proposal has been developed in compliance with the EU environmental acquis, including checking the results of any EIA or Appropriate Assessment that has been undertaken. However, the extent to which DG Environment is able to engage with the evaluation of proposals in this respect is dependent on its resources, as well as on its knowledge of the situation in the respective Member State. The latter applies with respect to both the knowledge of the implementation of the respective environmental legislation, and local knowledge about the area in which the project is taking place. Particularly with respect to the latter, it is not likely that DG Environment would have sufficient knowledge to know whether there might be particular issues in relation to a specific proposed project.

In order to address this, the development of a more targeted approach to the engagement of *biodiversity expertise* in the evaluation of individual project proposals would be beneficial. If DG Environment, or relevant national stakeholders, were aware of the transport and energy projects that have the potential to have an adverse impact on biodiversity, relevant project proposals could be subject to more in depth scrutiny by either DG Environment or by biodiversity experts, perhaps funded by DG Environment. (If it is not known which transport and energy PCIs have the potential to have an adverse impact on biodiversity, DG Environment could commission a report to identify the PCIs that pose the greatest risk to biodiversity.) Given the local and impact-specific nature of the evaluation that is required, it is probable that the best approach would be to engage with independent biodiversity experts with access to local knowledge, who would be best placed to support such evaluations. Additionally, as noted above, projects that eventually apply for CEF financial assistance will usually have begun life prior to entering the CEF implementation cycle. In which case, if the PCIs that pose the greatest risk to biodiversity are identified as early as possible, DG Environment and other stakeholders could engage with such projects early in their development in order to ensure that biodiversity considerations are properly integrated into the project design from the outset.

1.3.5 Project execution

In the course of the project execution, it will be the responsibility of the project proponents to implement the project in a way that is consistent with the agreement signed with the Commission. As with the previous stages of the implementation cycle, it will be important for the project to have access to the necessary **technical assistance** from biodiversity experts in the event that issues arise in the course of the implementation of the project. This could be biodiversity expertise within the INEA, national or local experts or stakeholders that have the necessary expertise.

1.3.6 Project monitoring and reporting

The identification of the potential impacts on biodiversity in the course of the development of the project would make requirements with respect to project monitoring and reporting relatively clear. If an EIA has been undertaken properly and if this EIA has identified potential impacts on biodiversity, appropriate *ex post* monitoring of the project's impacts, and the effectiveness of mitigation and compensation measures, should be put in place as a matter of course. Hence, there should be no additional requirements on project promoters beyond that which should be undertaken anyway in the event of there being a potential risk to biodiversity.

While *monitoring requirements* for biodiversity should be applied to all CEF projects, these may be proportionate to the likely risk to biodiversity. Thus, for example, monitoring requirements should be comprehensive and stringent where it was identified that the risk of adverse impacts on biodiversity from a project in a particular corridor was high and/or would affect particularly threatened/important biodiversity. Where monitoring is found to detect adverse impacts contingency measures (eg as identified in the EIA) should be taken to address these and their impact monitored.

However, the responsibility for ensuring that a CEF project is implemented properly, including that it is in compliance with the EIA, lies with the respective Member State authorities. In this respect, local and national stakeholders, potentially with the support of DG Environment, have a role to play in monitoring project implementation and in highlighting non-compliance with the requirements of the EIA. In particular, the monitoring efforts could be focused on the PCIs that pose the most risk to biodiversity, which might involve the engagement of appropriate **biodiversity expertise** to support local and national stakeholders, or perhaps DG Environment, in such monitoring.

1.4 Checklist for biodiversity proofing the implementation cycle

A checklist that can be used to ensure that appropriate biodiversity-proofing of CEF projects is being undertaken can be found in Table 1-3. The checklist contains legal requirements, including those that are included in the CEF Regulation or in other EU legislation, which are highlighted in bold, and other actions that might be applied at various stages for the purpose of biodiversity-proofing CEF transport and energy projects. These other actions are not compulsory, but might be considered to be good practice.

As was underlined in previous sections, the Commission has limited scope with respect to what can be included in the Work Programmes and calls for project proposals, as these all

need to be consistent with the CEF Regulation and the respective transport and energy Guidelines. However, this does not prevent national authorities from requiring project proponents from including (and other stakeholders from arguing for) stronger biodiversity-proofing measures in CEF projects. Hence, the checklist in Table 1-3 can be used by all of these different actors. It should also be noted that more detailed and context-specific lists may need to be developed in consultation with relevant stakeholders and experts to inform the design process along the way.

The legal requirements, ie those questions in bold in Table 1-3, generally fall on project proponents, eg in the project development phase, and on the Commission in ensuring that their Work Programmes and the projects that are funded are in accordance with the EU *acquis*. Of course, other stakeholders will also have a role in these steps: Member States in particular have a role in ensuring that project proposals (and the projects themselves once implemented) comply with the EU *acquis*, such as the EIA, Habitats and Birds Directives, as transposed into national legislation. At the 'call for proposals' stage, Member State authorities, the Commission (eg DG Environment) or other stakeholders could provide technical support, guidance and good practice examples for potential project proponents.

The development of the project proposals will occur within Member States by the project proponents. Hence, the actions in the checklist relating to 'project development' would need to be undertaken by project proponents, with the support of (and oversight from) Member State authorities and other national stakeholders. At the project selection stage, the actions in the checklist are targeted at the Commission, and particularly DG Environment. As was noted in Section 1.3.4, it is DG Environment's responsibility to ensure that project proposals have been developed in accordance with the EU environmental *acquis*, including the EIA, Habitats and Birds Directives. It is suggested that DG Environment could target its efforts in the course of project selection on those PCIs that pose the greatest risk to biodiversity and that it might engage independent biodiversity experts to support it in this task. The questions in the checklist under 'project selection' could be used to guide this process.

The actions listed under 'project execution' and 'project monitoring and reporting' again largely fall to national authorities, as it is their responsibility to ensure that works projects that are undertaken within their national boundaries are in compliance with national law, which would include any biodiversity conditions in the respective permits. It is also important to note that any permits granted by Member States to CEF-funded projects could stipulate additional biodiversity requirements beyond those required by European legislation.

Whilst the Commission will have a role in monitoring projects, this is unlikely to be at the level of possible biodiversity impacts for the reasons discussed in Section **Error! Reference source not found.** However, if the implementation of a CEF-funded project is breaching either EU or national legislation, it will clearly be an issue that should be raised with the Commission and/or the respective national authorities. In this respect, other national stakeholders, such as NGOs and environmental authorities, will have a role to play in monitoring the implementation of projects. Technical support and the respective evaluations could also be provided/undertaken by different stakeholders. Finally, all of the

actions can be used by other stakeholders, such as NGOs and environmental authorities in the Member States, to ensure that the appropriate biodiversity-proofing actions have been undertaken at the appropriate stage of the implementation cycle.

Table 1-3 Check-list for biodiversity proofing the CEF during the implementation cycle

Legal requirements (ie included in the Funding Regulation, or other EU legislation) are highlighted in bold text.

) Ger	eric requirements and principles
t all s	eps:
٠	Have Work Programmes and projects been developed in accordance with the EU acquis?
•	Has the consideration of biodiversity issues, especially those relating to ecological and other technical / scientific issues, been carried out by suitably qualified and experienced biodiversity experts?
•	Is there an understanding of which projects in the core network corridors targeted by respective Work Programmes have a risk of adverse impacts on biodiversity?

2) Implementation Cycle

Call for proposals

Have special advisory groups been created that have expertise on biodiversity that will provide information to stakeholders and possible beneficiaries?

Have guidance and resources on biodiversity mainstreaming been provided for applicants?

Have examples of good practice in the area of biodiversity mainstreaming been provided?

Project development

Has it been ensured that the project will not potentially have adverse impacts on a Natura 2000 site (eg by avoiding such sites)?

If the project may have an adverse impact on a Natura 2000 site, has it been ensured that an 'appropriate assessment' has been carried out?

Has an EIA been carried out if this is necessary under the EIA Directive, or, if it is not, some other form of proportionate environmental assessment?

Have biodiversity issues been fully assessed in the EIA / environmental assessment, including the assessment of impacts on all EU and nationally threatened habitats and species, taking into account all possible significant direct, indirect and secondary on-site and off-site impacts, as well as cumulative impacts from similar projects?

Does the EIA identify clear actions (and contingency measures) that must be taken to avoid impacts (including project alternatives), reduce impacts and compensate for residual impacts in order to achieve no net loss of biodiversity in accordance with the mitigation hierarchy?

Does the EIA set out clear SMART biodiversity targets (with appropriate indicators) for mitigation and compensation measures (and thresholds that trigger contingency measures), and related monitoring and reporting requirements?

Have biodiversity and ecosystem services been adequately taken into consideration in any costbenefit analysis that has been undertaken of the project?

Has assistance been offered to project applications to help them properly consider and address biodiversity impacts within their project proposals?

Project selection

Has the project proposal demonstrated that the potential impacts on biodiversity have been assessed, eg as part of the EIA? What evidence has been provided? Is this convincing?

Has the project application demonstrated that there will be no significant impact on Nature 2000	
sites and other sites of importance listed in the respective national biodiversity action plans?	
In the event that a significant impact has been identified, has the project application demonstrated	
that the 'appropriate assessment', in accordance with Article 6 of the Habitats Directive, has been	
undertaken? What conclusions have been presented? Are these convincing?	
Has consultation with the appropriate environmental authorities been confirmed? Have the	
conclusions of these consultations been presented? Are they clearly favourable to the development	
of the infrastructure?	
Have actions been taken – eg changing the route, design of the infrastructure – to avoid adverse	
impacts on biodiversity?	
If adverse impacts on biodiversity cannot be avoided, have adequate mitigation measures been	
designed?	
If adverse impacts on biodiversity cannot be avoided or mitigated, have adequate compensation	
measures been proposed?	
Is there sufficient biodiversity expertise involved in the selection of projects to be able to evaluate	
the proposed actions taken by projects with respect to biodiversity?	
Project execution	
Project execution Is specialist support available to help projects where there is a significant risk of a significant impact	
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2 **REFERENCES**

Damarad, T and Bekker, G (2003) COST 341 - Habitat Fragmentation due to Transportation Infrastructure: Findings of the COST Action 341. Office for official publications of the European Communities, Luxembourg; see <u>http://www.iene.info/wp-</u> <u>content/uploads/COST341 final report.pdf</u>

EirGrid (2012) Ecology Guidelines for Electricity Transmission projects: A Standard Approach to Ecological Impact Assessment of High voltage Transmission Projects; see http://www.eirgrid.com/media/Ecology%20Guidelines%20for%20Electricity%20Transmissio n%20Projects.pdf

Energy and Biodiversity Initiative (2013) *Integrating Biodiversity Conservation into Oil and Gas Development,* The Center for Environmental Leadership in Business, Washington DC; see http://www.theebi.org/pdfs/ebi report.pdf

Iuell, B, Bekker, G, Cuperus, R, Dufek, J, Fry, G, Hicks, C, Hlavác, V, Keller, V, Rosell, C, Sangwine, T, Tørsløv, N, Wandall and le Maire, B (Eds) (2003) *Wildlife and Traffic: A European Handbook for Identifying Conflicts and Designing Solutions*; see <u>http://www.iene.info/wp-content/uploads/COST341 Handbook.pdf</u>

Medarova-Bergstrom, K, Kettunen, M, Rayment, M, Skinner I, and Tucker, G (2014) *Common Framework for Biodiversity-Proofing of the EU Budget: General guidance*. Report to the European Commission, Institute for European Environmental Policy, London.

Vervack, G and Jaussaud, E (2012) LIFE Biodiversity: Using electricity transmission networks as active vectors for positive developments in biodiversity. *Implementing the European Grid Declaration* Renewable Grids Initiative workshop, 3 October 2012, Paris; see http://renewablesgrid.eu/fileadmin/user upload/Files_RGI/RGIWS- Implementing the EGD-3 Okt 2012-Gaelle Vervack-ELIA-Elodie Jaussaud-RTE.pdf