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PART 2/2

Commission notice

Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC

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Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC

3.2.5. CONCLUSIONS OF THE APPROPRIATE ASSESSMENT

An assessment carried out under Article 6(3) of the Habitats Directive must contain complete, precise and definitive findings and conclusions in the light of the best scientific knowledge in the field. It must be capable of removing all reasonable scientific doubts as to the effects of the plan or project proposed on the protected site concerned.

The conclusions of the appropriate assessment must clearly relate to the integrity of the site and its conservation objectives. Where the assessment concludes that there will be adverse effects on the integrity of the site, it should clarify for which aspects, taking mitigation into account, there are residual adverse effects. This will be important if the plan or project is further considered under Article 6(4).

A worked out example of a possible format for recording the results of the appropriate assessment is provided in Table 9 on the next page.

Table 9. Example of an appropriate assessment record

Site 1: SPA Xxx						
Summary description: The SPA contains the largest extent of marsh in Xxxxxx region. The wide diversity of coastal habitats found on the site supports important numbers of water birds throughout the year.						
Potential impact	Feature affected	Conservation objectives	Adverse effect of plan/project alone on the feature	Adverse effect of plan/project in combination with other plans or projects on the feature affected	Possible avoidance or mitigation of adverse effects	Conclusion: adverse effects on the integrity of the site: Yes. No. Uncertain. Long term. Short term
Habitat loss Species disturbance	Birds of coastal habitats: (species names)	Maintain population and distribution of species... (details in relation to the conservation objectives). Maintain structure and functions and supporting processes on which habitats of species rely... (details in relation to the conservation objectives).	Component X of the plan will reduce the area of saltmarsh available to the species. A potential loss of 110 ha has been estimated in the appropriate assessment.	There is the potential for adverse effects in combination with other plans that would increase indirect pressures on the sites. Increased disturbance through a rise in recreational use, associated with other projects, would have adverse effects on the site.	No	Yes – long term
Habitat deterioration	Birds of lowland wet grasslands (species names)	Maintain population and distribution of species... (details in relation to the conservation objectives).	Component Y of the plan could cause a modification in the water flow regime	Not expected	Uncertain	Uncertain (component Y is not defined in detail so effects on flow regime cannot be properly assessed and

		objectives). Maintain structure and functions and supporting processes on which habitats of species rely... (details in relation to the conservation objectives).	that could affect wet grasslands that provide suitable habitat for the species(details in relation to the conservation objectives)			quantified).
.....						

Following the completion of the appropriate assessment, its conclusions should be clearly presented in a report which:

- a) describes the plan or project in sufficient detail for members of the public to understand its nature, scale and objectives;
- b) describes the baseline conditions of the Natura 2000 site as well as its conservation objectives;
- c) identifies the adverse effects of the plan or project on the Natura 2000 site in view of the site-specific conservation objectives;
- d) explains how those effects will be avoided or sufficiently reduced through mitigation;
- e) sets out a timescale and identifies the mechanisms through which the mitigation measures will be secured, implemented and monitored;
- f) draws a duly justified conclusion as to the impact on the integrity of the site.

The appropriate assessment report should be drafted clearly, with: (i) easy-to-follow evidence trails (e.g. leading from activities to pressures and to sensitivities and vulnerabilities of affected natural features); and (ii) an adequate level of evidence or analysis, suitable for consultation with the relevant nature conservation agencies and the public.

For some of the plan's elements or components, adverse effects on the site's integrity may be uncertain or not possible to determine with enough confidence. Such aspects would, however, still require further consideration. Many national strategies comprise key planned investments like new reservoirs or transport corridors which may affect Natura 2000 sites, but whose exact location, design or operation details are not determined yet; such elements must be duly assessed at project level. In such cases, this fact, i.e. the remaining uncertainty, should be recorded in the results of the assessment, and such components/elements of plans must undergo appropriate assessment at project level (see also section 4.2).

The conclusions of the appropriate assessment, together with any agreed mitigation measures or conditions, should also be part of the permit or any other decision taken in relation to the plan or project under consideration.

Making a decision on the basis of the appropriate assessment

It is for the competent authorities, in the light of the conclusions of the appropriate assessment into the implications of a plan or project for the Natura 2000 site concerned, to approve the plan or project. This can be done only after they have made certain that the plan or project will not adversely affect the integrity of the site. That is the case where no reasonable scientific doubt remains as to the absence of such effects.

Where doubt remains as to the absence of adverse effects on the integrity of the site linked to the plan or project being considered, the competent authority will have to refuse authorisation (C-127/02 paragraph 57).

See further details in the Article 6 Guide – section 4.7.3

A specimen report for presenting the outcomes of the appropriate assessment is presented in Box 16 at the end of section 3.2.

If the competent authority determines that adverse effects will occur or cannot be excluded, then the plan or project may not proceed (unless the conditions of Article 6(4) apply – see section 3.3).

3.2.6. Further considerations: consultations, quality of the appropriate assessment, access to justice

Consultations

Consultations with experts, other authorities, NGOs, potentially affected groups or the general public can improve the environmental information available to those carrying out the appropriate assessment and to decision-makers e.g. by identifying environmental effects or designing suitable mitigation measures. Consultations can also help minimise potential conflicts and delays.

Consultation with relevant authorities, experts in biology or ecology as well as with representatives of relevant industries and policy sectors, stakeholders and NGOs during the procedures laid down in Article 6(3) improves the availability of information and the consideration of different points of view.

Nature conservation and sectoral authorities should cooperate during the assessment process to ensure that: (i) the appropriate assessment is based on the best available information and experiences; and (ii) all relevant aspects are properly taken into account.

Public participation in the Article 6(3) procedure

The Habitats Directive does not contain an explicit obligation to obtain the opinion of the general public when authorising plans or projects requiring an appropriate assessment. According to the wording of Article 6(3) this has only to be done if it is 'considered appropriate'. However, the Court has clarified that, on the basis of the requirements of the Aarhus Convention¹, the public concerned, including recognised environmental NGOs, has the right to

¹ Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters. This Convention was concluded in Aarhus, Denmark in June 1998. The EU is one of the signatories since 2005 under Decision 2005/370/EC <http://ec.europa.eu/environment/aarhus/legislation.htm>.

participate in the authorisation procedure (C-243/15 paragraph 49). This right involves in particular, ‘the right to participate “effectively during the environmental decision-making” by submitting, “in writing or, as appropriate, at a public hearing or inquiry with the applicant, any comments, information, analyses or opinions that it considers relevant to the proposed activity”’ (C-243/15, paragraph 46).

See further details in the Article 6 Guide – section 4.7.2

When the appropriate assessment is coordinated or runs jointly with the environmental impact assessment (EIA)/ strategic environmental assessment (SEA), it can also benefit from the necessary provisions regarding public participation under those directives. However, it is important that the results of the appropriate assessment are distinguished and distinct from those of the EIA/SEA. This is required to ensure the correct application of Article 6(3), second sentence (authorisation can only be given after having ascertained that it will not adversely affect the integrity of the site concerned).

The EIA Directive (Article 6) requires the Member States to: (i) ensure consultation of relevant authorities; and (ii) provide for early and effective opportunities to inform the public and allow the public concerned to participate in the environmental decision-making procedure. This includes the setting of reasonable time frames for different phases of participation. Similar requirements are set out in Article 6 of the SEA Directive.

Public participation under the EIA and SEA Directives

EIA Directive

Preamble:

*- Effective **public participation** in the taking of decisions enables the public to express, and the decision-maker to take account of, opinions and concerns which may be relevant to those decisions, thereby increasing the accountability and transparency of the decision-making process and contributing to public awareness of environmental issues and support for the decisions taken.*

- Participation, including participation by associations, organisations and groups, in particular non-governmental organisations promoting environmental protection, should accordingly be fostered, including, inter alia, by promoting environmental education of the public.

- Among the objectives of the Aarhus Convention is the desire to guarantee rights of public participation in decision-making in environmental matters in order to contribute to the protection of the right to live in an environment which is adequate for personal health and well-being. Article 6 of the Aarhus Convention provides for public participation in decisions on activities not so listed which may have a significant effect on the environment.

Article 6(2): In order to ensure the effective participation of the public concerned in the decision-making procedures, the public shall be informed electronically and by public notices or by other appropriate means, of the following matters early in the environmental decision-making procedures referred to in Article 2(2) and, at the latest, as soon as information can reasonably be provided:

SEA Directive

Preamble: In order to contribute to more transparent decision making and with the aim of ensuring that the information supplied for the assessment is comprehensive and reliable, it is necessary to provide that authorities with relevant environmental responsibilities and the public are to be consulted during the assessment of plans and programmes, and that appropriate time frames are set, allowing sufficient time for consultations, including the expression of opinion.

Article 6(4): Member States shall identify the public for the purposes of paragraph 2, including the public affected or likely to be affected by, or having an interest in, the decision-making subject to this Directive, including relevant non-governmental organisations, such as those promoting environmental protection and other organisations concerned.

Ensuring the quality of the appropriate assessment

As stated previously, the appropriate assessment must be based on the best scientific knowledge in the field. Accordingly, the appropriate assessment must be prepared by a person or persons with the requisite ecological expertise and experience. The study should be supplemented as necessary by additional expertise and experience (e.g. geology, hydrology, engineering or planning, environmental law) and produced in a scientifically complete, professional and objective manner.

While the study to inform the appropriate assessment will generally be submitted by those seeking approval for a plan or project, competent authorities should satisfy themselves that it demonstrates sufficient expertise, scope and focus in relation to the ecological or other issues (e.g. hydrological) concerned, and sufficient competence and standards in scientific methodology and impact assessment. In order to comply with these quality requirements, some countries have adopted a certification scheme or qualification/authorisation system for those who undertake the appropriate assessment study (see box 14).

Ensuring quality of the environmental impact assessment report in the EIA Directive

In order to ensure the completeness and quality of the environmental impact assessment report:

(a) the developer shall ensure that the environmental impact assessment report is prepared by competent experts;

(b) the competent authority shall ensure that it has, or has access as necessary to, sufficient expertise to examine the environmental impact assessment report; and

(c) where necessary, the competent authority shall seek from the developer supplementary information, in accordance with Annex IV, which is directly relevant to reaching the reasoned conclusion on the significant effects of the project on the environment.

Member States shall, if necessary, ensure that any authorities holding relevant information, with particular reference to Article 3, make this information available to the developer.

(Article 5(3) and (4) of the EIA Directive)

Box 14 Use of licenced experts for appropriate assessment in Czechia

In the Czechia, only licensed experts are allowed to carry out appropriate assessments (AA). The licensing system is anchored in the Act on Nature Protection and details are specified in a ministerial decree. The first basic criterion for obtaining a license is to have a degree in biology or ecology or state exam in ecology. No derogation from this rule is allowed as experience from the field has shown that knowledge of ecology is an essential prerequisite for correct assessments.

The authorisation exam consists of a written test on ecology, zoology, botany and national law (the latter is linked to AA and EIA/SEA issues) and an oral presentation of a case study. The exams take place approximately twice a year and the standard is set rather high, with a special emphasis on knowledge in ecology. Successful candidates are granted a license by the Ministry of Environment (MoE) for 5 years.

The licensing scheme has had a positive spin-off in terms of making improvements to the overall AA process. The licensed assessors organise regular meetings to share experiences and discuss difficult cases. In view of this the Ministry of Environment commissioned a number of practical guidance documents from them to improve the AAs and ensure a consistent approach.

Regardless of whether Article 6(3) is complied with through existing environmental impact assessment procedures or other specific approaches, the results of Article 6(3) assessments should allow full traceability of the decisions eventually made.

Box 15. Elements for ensuring quality of the appropriate assessment

The assessment:

- considers all elements contributing to the Natura 2000 site's integrity as indicated in the site's conservation objectives, management plan (where available) and

Standard Data Form and the importance of habitats and species concerned in the context of network, and is based on best available scientific knowledge in the field;

- considers the role of the site and its function within the biogeographical region and the ecological coherence of the Natura 2000 network;
- includes a comprehensive identification of all the potential impacts of the plan or project likely to be significant on the site, taking into account cumulative impacts likely to arise as a result of the combined effects of the plan or project under assessment with other plans or projects;
- if appropriate, incorporates effective mitigation measures into the plan or project, in order to avoid, reduce or even cancel the negative impact on the site;
- applies the best available techniques and methods to estimate the extent of the effects of the plan or project on the ecological integrity of the site(s);
- includes the robust indicators to monitor the plan or project implementation.

To meet the requirements of the Article 6(3) assessment, the Natura 2000 authorities may draw up formal specifications on the type of information and criteria to follow when carrying out the appropriate assessment.

It is highly recommended that good practice sharing and training be given to all those concerned by the appropriate assessment (e.g. relevant statutory authorities at all levels of government, consultants, project or plan developers).

Box 16. Example of contents of the appropriate assessment report

Description of the plan or project

Aim, scope, location, main activities

Natura 2000 sites likely to be affected and their conservation objectives

Outline of the Natura 2000 sites likely to be affected, the species and habitats for which they are designated and their conservation condition, as well the conservation objectives of the sites.

Assessment of the effects of the plan or project on the integrity of the site

- *Describe the elements of the plan or project (alone or in combination with other projects or plans) that are likely to cause significant effects on the Natura 2000 site (use outcomes of the screening assessment).*
- *Describe how the plan or project will affect species and habitats protected in the site, and the implications for the site's conservation objectives (e.g. loss of habitat, fragmentation, disturbance to species, mortality of species, chemical changes, hydrological or geological changes). Acknowledge uncertainties and any gaps in information.*
- *State whether the integrity of the site will be affected by the plan or project or not.*

- *Acknowledge uncertainties and any gaps in information.*

Mitigation measures

- *Describe what mitigation measures are to be introduced to avoid or reduce the adverse effects on the integrity of the site and demonstrate their effectiveness in reducing the impact below significance.*
- *Acknowledge uncertainties and any gaps in information.*
- *Outline intended monitoring.*

Conclusion

State whether the integrity of the site might or will be affected by the plan or project or that it certainly will not (having regard to the precautionary principle).

Sources used when drawing up the appropriate assessment

Indicate sources of information used

Results of consultation

Name of agencies, bodies or experts consulted

Summary of responses

Access to justice

The Court of Justice of the European Union has also recognised the right of the public, which includes environmental organisations, to challenge the appropriate assessment decisions taken by authorities (case C-243/15, paras 56-61), including on the validity of the conclusions drawn from the assessment as regards the risks of that plan or project for the integrity of the site.

1.3. Stage 3: Procedure under Article 6(4)

Article 6(4) allows for exceptions to the general rule of Article 6(3) but its application is not automatic. It is up to the authority to decide whether a derogation from Article 6(3) can be applied. Article 6(4) must be applied in the sequential order established by the Directive – that is, after all the provisions of Article 6(3) have been undertaken in a satisfactory manner.

See further details in the Article 6 Guide – section 5.2

Plans or projects for which the appropriate assessment could not conclude that they will not affect the integrity of the sites concerned may only be approved by the competent authorities if a derogation is sought in accordance with the provisions of Article 6(4).

These provisions entail three key requirements that must be met and documented:

1. alternatives have been considered and it can be demonstrated that the alternative put forward for approval is the least damaging for habitats and species and for the integrity of the Natura 2000 site, and that no other feasible alternative exists that would not adversely affect the integrity of the site;
2. there are imperative reasons of overriding public interest, including ‘those of a social or economic nature’;
3. all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected are taken.

These three main requirements are discussed in the following sections.

3.3.1. Step 1: Examining alternative solutions

It is for the competent national authorities to ensure that all feasible alternative solutions that meet the plan/project aims have been explored to the same level of detail. This assessment should be made against the species and habitats for which the site has been designated and the site’s conservation objectives.

The absence of alternatives must be demonstrated before examining whether the plan or project is necessary for imperative reasons of public interest (Court ruling in Castro Verde case C-239/04 paragraphs 36-39).

See further details in the Article 6 Guide – section 5.3.1

The first obligation of the Article 6(4) procedure is to examine whether there are alternative solutions to the plan or project. Alternative solutions could refer to an alternative design of the project (e.g. different routing of a road or different number of lanes). They could also refer to broader options to achieve the same overall objective, e.g. a rail connection improvement could be considered as an alternative to a new road, a wind energy development as an alternative to a hydro power plant.

Examining alternative solutions under Article 6(4) involves the following tasks:

- identification of alternative solutions;
- comparative assessment of the alternatives considered;
- justification of the absence of alternatives that are feasible for consideration under Article 6(4) (if applicable).

a) Identification of alternative solutions

The first task is to review possible alternatives that could exist for achieving the objectives of the plan or project. Crucial is the consideration of the ‘do nothing’ scenario, also known as the ‘zero’ option, which provides the baseline for comparison of alternatives.

The alternatives may consist of different:

- ways to achieve the objectives of the proposed development;
- locations that may be available for the development having regard to protected habitats and species, for example, by defining different land transportation corridors in master plans for roads and motorways or different housing development zones;
- scale and size of the development;
- design solutions for the development;
- techniques, methods of construction or operational methods for the implementation of the development;
- timetable of the various activities and tasks at each of the implementation stages, including during construction, operation, maintenance and, if applicable, decommissioning or reconditioning .

Nature-based solutions (as opposed to traditional ‘grey infrastructure’) can often be equally viable and less detrimental to Natura 2000 sites. For example restoring a more natural river bed with adjacent wetlands can ensure similar or better flood protection than artificial dykes and/or reservoirs, while at the same time exerting significantly less impact on protected habitats and species or even improving their condition. Hence such alternatives should be given due consideration during the analysis of available options.

In the case of plans, national or regional policies and strategies, and other documents setting out sectoral policies (e.g. on renewable energy or other infrastructure development) provide a framework for assessing the range and type of possible alternative solutions. The plan-making process is particularly suitable for analysis of alternatives, as it is an iterative process capable of providing solutions that protect Natura 2000 sites and ensure the sustainable development of activities to meet society’s needs.

Alternatives should be considered for all components, activities and operations of the plan which have been identified as adversely affecting the integrity of Natura 2000 site(s).

As discussed in section 3.2.6, in the case of plans, certain components or actions of the plan may be insufficiently defined, placing limitations on the assessment of alternatives. Nonetheless, reasonable alternatives should still be identified, described and evaluated, taking into account the plan or programme’s objectives and geographical scope. This is also required by the SEA Directive (Article 5).

It can be easier to implement Article 6(4) procedures if the plan or project developers discuss possible alternatives with the competent authorities and/or statutory nature authorities at an early stage in the process.

A suitable framework for finding alternatives is provided by the procedures for public consultation such as those laid down in the SEA and EIA Directives.

b) Comparative assessment of the alternatives considered

It is the responsibility of competent authorities to evaluate the relative impact of the alternative solutions with a view to justifying a decision under Article 6(4). The competent authorities must determine whether the alternative put forward for approval is the least damaging for habitats and species and for the integrity of the Natura 2000 site or sites concerned. The assessment of alternative solutions is necessary even if the investment is already justified in advance for imperative reasons of overriding public interest, e.g. through national law.

The various alternatives must be compared in light of their effects on the habitats and species significantly present on the site as well as their conservation objectives, and on the integrity of the site and its importance for the ecological coherence of the Natura 2000 network.

The identified impacts of each alternative must be fully and precisely described and quantified as far as possible in terms of the following (non-exhaustive list) and in view of the site specific conservation objectives:

- Natura 2000 sites affected;
- area of habitat loss and degradation;
- population numbers of affected species;
- deterioration of important functions;
- disturbance;
- displacement of species populations.

This should provide the basis for comparing alternatives and for determining which alternatives are the least damaging for Natura 2000 sites and the species and habitats that are significantly present therein, in view of the site-specific conservation objectives. This needs to be identified based on a set of qualitative and quantitative criteria.

In a second phase, other criteria such as social considerations and the economic cost of the alternatives analysed may be considered in the choice of alternative solutions.

The economic cost of the steps that may be considered in the review of alternatives cannot be the sole determining factor in the choice of alternative solutions. In other words, a project developer cannot claim that alternatives have not been examined because they would cost too much.

(See the Article 6 Guide - section 5.3.1)

Tasks to be carried out in assessing alternatives are summarised in Box 17.

Box 17. How to assess alternative solutions:

- consult relevant agencies and organisations;
- make use of the information gathered to complete the screening and appropriate assessment stages of the Article 6(3) assessments;
- identify and characterise the key objectives of the plan or project, also in broad (strategic) terms²;
- identify all alternative means of meeting the objectives of the project or plan;
- provide as much information as possible, acknowledge gaps in information, and provide sources of information;
- assess the impacts (in a qualitative and quantitative way) of each alternative on the conservation objectives of the site.

A matrix for the identification and assessment of alternatives is presented in Table 10 below. The matrix can also be used to report on the results of the assessment of alternatives.

² The objectives of a plan or project should be analysed not only in relation to one specific technology but rather in relation to achieving a certain goal (e.g. for a hydropower plan or project the objective should be analysed in terms of “producing x MW of renewable energy”, so that the possibilities of using other technologies can be assessed as well (e.g. wind, solar or geothermal energy).

Table 10. Assessment of alternative solutions matrix

<i>Assessment of alternative solutions</i>		
The description and objectives of the plan or project		The 'do nothing' scenario
Predicted adverse effects of the plan or project on the Natura 2000 site based on the appropriate assessment		
<i>Comparison with plan or project</i>		
Possible alternative solutions	Evidence of how the alternative solutions were assessed	Describe the relative effects on the conservation objectives of Natura 2000 (greater or less adverse effects)
<i>Alternative locations/routes</i>		
Alternative 1		
Alternative 2		
Alternative 3		
<i>Alternative size and scale</i>		
Alternative 1		
Alternative 2		
Alternative 3		
<i>Alternative means of meeting objectives (e.g. demand management)</i>		
Alternative 1		
Alternative 2		

Alternative 3

Table 10. Assessment of alternative solutions matrix (continued)

	<i>Comparison with plan or project (cont.)</i>	
Possible alternative solutions	Evidence of how the alternative solutions were assessed	Describe the relative effects on the conservation objectives of Natura 2000 (greater or less adverse effects)
	<i>Alternative methods (construction, operational, decommissioning)</i>	
Alternative 1		
Alternative 2		
Alternative 3		
	<i>Alternative timescales</i>	
Alternative 1		
Alternative 2		
Alternative 3		

Conclusions on assessment of alternatives

Box 18 below summarises examples of alternatives that have been considered in the context of notifications for Commission opinions in accordance with Article 6(4) of the Habitats Directive³.

Box 18. Examples of alternatives considered under Article 6(4) procedure

Case 1. Deepening and widening of the ship fairway of a river

The project involved the deepening and widening of the ship fairway of the River Main along the Wipfeld, Garstadt and Schweinfurt sections in Bavaria, Germany.

The appropriate assessment concluded that there would be significant impact on two Natura 2000 sites and two habitat types would be damaged directly, involving a surface loss of 9 460 m² for priority habitat 91E0* and 6 440 m² for habitat 6510.

Three alternatives were examined in addition to the zero alternative. The latter showed the importance of the river transportation objectives. One of the alternatives was discarded because it would negatively affect another Natura 2000 site and would lengthen both the construction time and the spatial extent of the project. Another alternative was rejected because, although it would have less adverse ecological impact, it would not improve the river's nautical characteristics, which is one of the project's objectives.

The alternative selected would create a continuous navigation channel with uniform minimum width and depths and was mainly limited to the existing riverbed. Although it would affect the two habitat types of Community interest mentioned above, the competent authorities considered that the proposed solution achieved the best balance between ecological and river transportation objectives. The loss of the habitats would be adequately compensated.

Case 2. Long-distance and suburban railway connection

The project concerned a long-distance and suburban railway connection from Bad Cannstatt to Stuttgart (Germany). It would significantly affect a Natura 2000 site, which holds an important habitat for the hermit beetle (*Osmoderma eremita*), a protected priority species.

The authorities examined route alternatives covering the entire section, parts of the section and the 'zero' option. The latter would not meet the project criteria of linking Stuttgart and Bad Cannstatt stations and renovating the railway bridge over the River Neckar. All the other alternative solutions would significantly affect the Natura 2000 site, including zones with the priority species, and their comparison showed that some would cover a larger area of the Natura 2000 site than the one selected or would lead to clearing a larger number of trees which provide potential habitats for the species. The proposed solution therefore offered the best balance between ecological and economic objectives.

Case 3. Construction of a new port

The project concerned the construction of a new port in Granadilla, Tenerife, Canary Islands. The project would adversely affect two Natura 2000 sites designated for the loggerhead sea turtle (*Caretta caretta*), a priority species, and for a priority habitat type 2130 (fixed coastal dunes with herbaceous vegetation 'grey dunes').

³<https://ec.europa.eu/environment/nature/natura2000/management/opinionen.htm>

The Spanish authorities studied several alternatives, including the option of not developing more port capacity (the 'zero option') as well as the further expansion and development of the existing port in Santa Cruz. The zero option was discarded because the existing port facilities would not be able to handle the expected increase in maritime traffic and because increased port capacity was necessary for the island's economic development. Expansion of the existing port facilities in Santa Cruz would not be possible for a number of technical reasons. Other alternative locations could not be chosen because of different factors such as the depth of the seabed at the shore, the lack of a quarry close enough to the envisaged site, availability of free adjacent land for handling and logistics operations, adequacy of transport connections with the hinterland and proximity to port users.

c) Outcomes – justification of the absence of alternatives

Once the assessment of alternative solutions is complete, a record should be made of all the alternatives that have been considered, the results of their assessment and the agencies and other bodies that were consulted. The purpose is to determine whether or not it can be objectively concluded that there are no alternative solutions. If alternative solutions have been identified that will either avoid any adverse impacts or result in less severe impacts on the site, it will be necessary to assess their potential impact through an appropriate assessment. On the other hand, if it can be reasonably and objectively concluded that there are no alternatives, it will be necessary to proceed to the next step in the Article 6(4) procedure.

3.3.2. Step 2: Examining imperative reasons of overriding public interest (IROPI)

In the absence of alternative solutions with no adverse effect on the integrity of the Natura 2000 site concerned or in the presence of solutions having even more negative environmental effects on the site, the competent authorities must examine whether there are imperative reasons of overriding public interest, including those of a social or economic nature, that would justify the realisation of the plan or project in question.

The concept of 'imperative reason of overriding public interest' is not defined in the Directive. However, Article 6(4) second subparagraph mentions human health, public safety and beneficial consequences of primary importance for the environment as examples of such imperative reasons of overriding public interest.

As regards the 'other imperative reasons of overriding public interest' of social or economic nature, it is clear from the wording that only public interests, irrespective of whether they are promoted either by public or private bodies, can be balanced against the conservation aims of the Directive. Thus, projects developed by private bodies can only be considered where such public interests are served and demonstrated.

It is reasonable to consider that the 'imperative reasons of overriding public interest, including those of social and economic nature' refer to situations where plans or projects envisaged prove to be indispensable:

- *as part of actions or policies to protect fundamental values for the life of citizens (health, safety, environment);*
- *as part of fundamental policies for the State and society;*
- *as part of the performance of activities of an economic or social nature, fulfilling specific public service obligations.*

It is for the competent authorities to weigh up the imperative reasons of overriding public interest of the plan or project against the objective of conserving natural habitats and wild fauna and flora. They can only approve the plan or project if the imperative reasons for the plan or project outweigh its impact on the conservation objectives.

See the Article 6 Guide – section 5.3.2.

When determining IROPI, a competent authority must consider all of the elements, i.e. whether it is :

- **imperative:** the plan or project serves an essential public interest, rather than private interests;
- **overriding:** the interest served by the plan or project outweighs the harm (or risk of harm) to the integrity of the site as identified in the appropriate assessment;
- **of public interest:** for instance it is a fundamental part of public policies for the State and society.

Public interests can occur at national, regional or local level, but, whatever the level, the other elements of the test must also be met. In practice, plans and projects which are consistent with national or regional strategic plans or policies (e.g. identified within a national infrastructure plan) are more likely to be of public interest. However, consideration would still need to be given to whether, in a specific case, that interest outweighs the harm that will be done to the affected sites and therefore whether IROPI can be demonstrated. Plans or projects that fall outside national strategic plans, including those at a lower geographic scale, may also be able to show IROPI.

IROPI must be assessed on a case-by-case basis in light of: (i) the objective of the particular plan or project; and (ii) its particular impact on the Natura 2000 sites affected as identified in the appropriate assessment.

Weighing up IROPI against conservation objectives

The description of the plan or project objectives may already include elements that can be used to assess the presence of IROPI. This assessment, like the one dealing with the identification of less harmful alternatives, requires a weighing up any IROPI against the damage caused to the Natura 2000 site as a result of implementing the plan or project under

consideration, in view of its conservation objectives and taking into account also the overall importance of the site for the species and habitats for which it is designated.

The more important or vulnerable the conservation values of the site affected, the more restrictive the scope will be for IROPI to be considered acceptable and for the damage to the site, as determined by the appropriate assessment, to be justifiable.

Where a priority natural habitat type or a priority species is affected, the only considerations which may be raised as IROPI under Article 6(4) of the Habitats Directive are those relating to human health or public safety, or to beneficial consequences of primary importance for the environment. If other IROPI are evoked, a Commission opinion is required.

Elements underpinning the case for IROPI can be included to a certain extent in the description of plans or programmes, in particular in the statement of the objectives motivating the development action. Such reasons must also be specified in a formal decision at the appropriate level of government (e.g. regional, national) and be clearly documented.

The consideration of IROPI may be inherent to the strategic planning of certain policy areas (e.g. flood risk management), which are relevant to human health, public safety or the protection of public goods. For activities likely to be justified for IROPI, the need to consider alternatives and compensation can thus be taken into account at an early stage in the planning process (see example in Box 20 below).

Examples of IROPI applied in the context of requests for Commission opinions under Article 6(4) of the Habitats Directive⁴ are set out in Box 19 below.

⁴https://ec.europa.eu/environment/nature/natura2000/management/opinion_en.htm

Box 19. Examples of IROPI under Article 6(4)

Case 1 Deepening and widening of a ship fairway⁵

The River Main is part of the Trans-European Network (TEN) and is the only inland waterway connecting several Member States to the south-east of Europe. It has important functions as a cross-border route for goods connecting Rotterdam (NL) and Constanța (RO) and is therefore of economic importance.

The project is one of the last missing links needed to adjust this fairway to new political and economic developments and to the requirements of an enlarged European Union. Currently, this part of the River Main creates a bottleneck of 30 km where ships are still limited in terms of their width and depth.

Case 2. Long-distance and suburban railway connection⁶

According to the authorities, the project will improve regional and long-distance passenger transport services, creating and strengthening cross-regional links to other development areas. It would be part of a ring system necessary to improve railway transport in the region. It would also involve the rebuilding of a bridge crossing which is more than 100 years old.

Case 3. Construction of a new port⁷

The island of Tenerife (Canary Islands, Spain) is highly dependent on maritime transport and an efficient port system. The main port, currently located in the capital, is experiencing increasing congestion.

The new port would add much needed capacity to: (i) accommodate future growth in maritime traffic, especially in relation to container traffic, which is forecast to increase significantly on the island; and (ii) de-congest the existing port. The new port is expected to generate a sound economic rate of return and will also provide the island with the possibility of attracting international container transshipment traffic.

⁵ Commission Opinion C(2013)1871 final 05.04.2013
<http://ec.europa.eu/environment/nature/natura2000/management/docs/Commission%20Opinion%20Main%20EN%20SEC-2013-1871.pdf>.

⁶ Commission Opinion C(2018) 466 final of 30.1.2018
<https://ec.europa.eu/environment/nature/natura2000/management/docs/C2018466F1COMMISSIONOPINIONENV5P1961037.pdf>.

⁷ Opinion of the Commission in relation to the construction project of the new port of Granadilla (Tenerife), 2006.
<https://ec.europa.eu/environment/nature/natura2000/management/docs/art6/granadillaen.pdf>

3.3.3. Step 3: Identification, assessment and adoption of compensatory measures

Once it has been fully ascertained and documented that there are no alternatives less harmful to the site and that IROPI is justified, all compensatory measures to ensure the protection of the overall coherence of the Natura 2000 network must be taken.

The compensatory measures constitute measures specific to a plan or project, additional to the normal duties stemming from the Birds and Habitats Directives. These measures aim to offset precisely the negative impact of a plan or project on the species or habitats concerned. They constitute the 'last resort' and are used only when the other safeguards provided for by the Directive are exhausted and the decision has been taken to consider a plan/project as nonetheless having a negative impact on the integrity of a Natura 2000 site or when such an impact cannot be excluded.

Compensation should refer to the Natura 2000 site's conservation objectives and to the habitats and species negatively affected in comparable proportions in terms of quality, quantity, functions and status. At the same time, the role played by the site concerned in relation to the biogeographical distribution has to be replaced adequately.

See the Article 6 Guide – section 5.4

a) Main types of compensatory measures

Compensatory measures in the context of Article 6(4) of the Habitats Directive should: (i) be specific to the plan or project under consideration; and (ii) go beyond the measures required for the designation, protection and management of Natura 2000 sites, as set out in the conservation objectives for the site.

The following *cannot* be considered as compensatory measures: (i) the implementation of a management plan for the site; (ii) measures for improving the conservation status of a habitat type on a site that are already planned irrespective of the plan/project; or (iii) the designation as special area of conservation of an area already identified as being of Community importance. Instead, compensatory measures should be additional to the conservation measures that need to be established and implemented in a Natura 2000 site and additional to other protection provisions required by the Habitats and Birds Directives or obligations laid down in EU law.

Examples of types of compensatory measures, along with accompanying measures that can enable and facilitate their implementation, are presented in Table 11 below. It is important to note that all of these **measures have to go over and beyond the normal obligations** under the Birds and Habitats Directives, including those related to the designation, management and restoration of the sites.

Table 11. Examples of types of compensatory measures suitable for Article 6(4)

Compensatory measure	Description
Habitat restoration or enhancement in existing sites	Increasing the habitat area in the site concerned or restoring the habitat in another Natura 2000 site, in proportion to the loss due to the plan or project, if this is not already foreseen in the site specific conservation objectives.
Habitat recreation	Creating or restoring a habitat on a new or enlarged site, to be incorporated into the Natura 2000 network in view of its protection/management.
Designation of a new site for the Natura 2000 network with implementation of accompanying management measures	Designating a new site of sufficient quality under the Birds or Habitats Directives and implementing the appropriate protection and conservation measures.
Species reintroduction, recovery and reinforcement, including reinforcement of prey species	Reintroduction of species into sites where the species have disappeared (provided the scientific soundness of such a reintroduction), or restocking species populations in areas where they are declining, and subsequently protecting and managing those sites for the benefit of the species.
Possible accompanying measures	Description
Land purchase and establishing/implementing the appropriate protection and conservation measures	Acquiring an area of land for nature conservation and establishing/implementing the appropriate protection and conservation measures.
Rights acquisition for nature conservation and establishing/implementing the appropriate protection and conservation measures	Acquiring management rights over an area of land or sea and establishing/implementing the appropriate protection and conservation measures.
Reserve creation	Setting restrictions in the use of an area of land or sea, beyond those required to comply with other provisions of the Birds and Habitats Directives.
Reduction of threats	Reduction in (other) threats, either through action on a single source or through coordinated action on all threat factors.

The possibility of designing and implementing effective compensation measures will vary in function of the different habitats and species concerned and local conditions. While there are many good examples of the successful restoration or creation of new habitats for wetland

birds or for amphibian reproduction, for many species and habitats effective techniques for restoration are still not well-known or available.

In all cases, the restoration and recreation of ecosystems and habitats of species for compensation purposes must be based on sound knowledge of restoration ecology⁸.

In some cases, adequate compensation through restoration may not be possible. This can be the case, in particular, in the following situations:

- Where localities crucial for endangered species or habitat types are to be destroyed but cannot be replaced by similar key locations (e.g. suitable locations that play a similar role in the species range than the ones affected).
- Where restoration is not feasible, either because it would require an extremely long time (e.g. a bog would require a few thousand years to be effectively restored), or due to the current lack of knowledge on the restoration ecology of the species or habitat type (e.g. this could be the case for limestone springs or natural alkaline fens).

When there is no guarantee of the effective restoration or reinstatement of damaged habitats and species, compliance with Article 6(4) is not ensured. In the situations described above, however, it may still be possible, as a compensatory measure, to designate, protect and manage a new site hosting a suitable area of the same habitat(s) affected (see above in Table 12).

b) Guiding principles for setting compensatory measures and targets

The main aim of compensatory measures under Article 6(4) is to maintain the overall coherence of the Natura 2000 network. Consequently, two aspects that determine the design and implementation of compensatory measures must be addressed: *proportionality* and *ecological functionality*.

These two principles set the scope and level of ambition of the measures required to compensate the plan or project's adverse effects. Compensation measures should also aim to outweigh the worst-case scenarios of likely adverse effects.

In order to ensure the overall coherence of Natura 2000, the compensatory measures proposed for a project should therefore: (a) address, in comparable proportions, the habitats and species negatively affected; and (b) provide functions comparable to those which had justified the selection criteria for the original site, particularly regarding the adequate geographical

⁸ Relevant sources include scientific journals or dedicated websites (e.g. <http://www.restorationevidence.org/>), as well as restoration projects supported by the LIFE programme (available at: <https://ec.europa.eu/easme/en/life>).

distribution. Thus, it would not be enough for the compensatory measures to concern the same biogeographical region in the same Member State.

The distance between the original site and the place of the compensatory measures is not necessarily an obstacle as long as it does not affect the site's functionality, its role in the geographical distribution and the reasons for its initial selection.

See further details in the Article 6 Guide – section 5.4.2.

Proportionality of the compensatory measures

Maintaining the overall coherence of the Natura 2000 network means ensuring that the compensatory measures proposed address the habitats and species in proportions comparable to the adverse effects caused on the site. The competent authorities must therefore determine the relative importance of the Natura 2000 features affected and the negative impacts on them according to quantitative and qualitative criteria. This sets the baseline for compensation.

Compensation ratios are best set on a case-by-case basis. They must be initially determined in the light of the information from the Article 6(3) appropriate assessment and must ensure ecological functionality. The ratios may then be redefined according to the results observed when monitoring the effectiveness. The final decision on the proportion of compensation must be justified.

There is wide acknowledgement that ratios should be generally well above 1:1. Thus, compensation ratios of 1:1 or below should only be considered when it is shown that with such an extent the measures will be fully effective in reinstating structure and functionality within a short period of time (e.g. without compromising the preservation of the habitats or the populations of key species likely to be affected by the plan or project or their conservation objectives).

See further details in the Article 6 Guide – section 5.5.4

Ecological functionality and location of the compensatory measures

In addition to the need to address, in comparable proportions, the habitats and species negatively affected, compensation must also provide ecological functions comparable to those which had justified the selection of the Natura 2000 site in the first place.

The scope of compensatory measures is determined by the specific requirements for reinstating certain ecological functions and structures that are either likely to be lost or subject to degradation as a result of the plan or project implementation. Special attention must be paid to habitat types or habitats of species that need a long time to reach the same level of ecological functionality.

There is general agreement that the local conditions necessary to reinstate the ecological assets at stake are found as close as possible to the area affected by the plan or project. Therefore, locating compensation within or near the Natura 2000 site concerned where suitable conditions for the measures to be successful seems the most preferred option. However, this is not always possible and a range of priorities should therefore be applied when searching for locations that meet the requirements of the Habitats Directive:

1) Compensation within the Natura 2000 site, provided the necessary elements to ensure ecological coherence and network functionality exist within the site.

2) Compensation outside the Natura 2000 site concerned, but within a common topographical or landscape unit, provided the same contribution to the ecological structure and/or network function is feasible. The new location can be in another designated Natura 2000 site or a non-designated location. In the latter case, the location must be designated as a Natura 2000 site and be subject to all the requirements of the Nature Directives.

3) Compensation outside the Natura 2000 site, in a different topographical or landscape unit. The new location can be another designated Natura 2000 site. If compensation takes place on a non-designated location, this location must then be designated as a Natura 2000 site and be subject to all the requirements of the Nature Directives.

See further details in the Article 6 Guide – section 5.5.5.

Box 20 below provides a simplified example for defining the scope of compensatory measures in relation to ecological functions.

Box 20. Defining the scope of compensatory measures in relation to ecological functions – example in a special protection area

Ecological function affected by a plan or project: resting areas for migratory bird species heading northwards, located in an SPA.

Focus of compensatory measure:

- a) The compensatory measures must provide alternative resting areas for the populations of the migratory bird species.
- b) The new suitable resting areas for the targeted species must be correctly located in the same migratory path.
- c) The new suitable resting areas must be readily accessible to the birds that use the original Natura 2000 site affected by the project⁹. The carrying capacity of the new habitat must be at least equal to the carrying capacity of the site affected. The new resting areas should be protected before that project is implemented.

New resting areas for the same species but in locations out of the migratory path, or within the migratory path but far away from the resting spot affected, would not be a

⁹ The location of the site must be sufficiently close to avoid that the species has to expend extra energy in getting to the new site, which may in turn reduce its resilience and increase its vulnerability.

suitable compensatory measure. This is because the ecological functionality recreated would not be sufficient to ensure the ecological coherence of the network.

A summary checklist of key issues to consider when designing compensatory measures is included at the end of this chapter (Table 15).

c) Timing of compensation

Time is a crucial dimension in the planning of compensatory measures as they should be in place, fully operational and effective before the damage on the site occurs.

Timing the compensatory measures calls for a case-by-case approach. The schedule adopted must provide continuity in the ecological processes essential for maintaining the structure and functions that contribute to the overall coherence of the Natura 2000 network. This requires tight coordination between the implementation of the plan or project and the implementation of the compensatory measures. It also depends on issues such as the time required for habitats to develop and/or for species populations to recover or establish in a given area.

In addition, other factors and processes must also be considered.

- *A site must not be irreversibly affected before compensation is in place.*
- *The result of compensation should be operational at the time the damage occurs on the site concerned. Under certain circumstances where this cannot be fully achieved, overcompensation would be required for the interim losses.*
- *Time lags might only be admissible when it is ascertained that they would not compromise the objective of 'no net losses' to the overall coherence of the Natura 2000 network.*
- *Time lags must not be permitted, for example, if they lead to population losses for any species protected on the site under Annex II to the Habitats Directive or Annex I to the Birds Directive; priority species listed in Annex II to the Habitats Directive merit special attention.*
- *It may be possible to scale down in time compensatory measures, depending whether the significant negative effects are expected to arise in the short, medium or long term.*

Specific measures to outweigh interim losses that would occur until the conservation objectives are met may be advisable. All technical, legal or financial provisions needed to implement the compensatory measures must be completed before the plan or project implementation starts, so as to prevent any unforeseen delays that may hinder the effectiveness of the measures.

See further details in the Article 6 Guide – section 5.5.6.

The time required for upgrading, restoring or reinstating ecological functionality depends on the biology and ecology of the habitats and species. This needs therefore to be assessed on a case-by-case basis and may require investigation or searching for evidence of restoration from similar situations.

An example of the possible time lag taken to restore grassland communities is provided in Box 21 below.

Box 21. Time necessary to restore grassland communities

22 studies from 7 European countries include information on the length of time taken to restore grassland communities. This includes 16 replicated trials, of which 9 were also controlled and 3 were reviews. There were 6 studies that saw positive signs of restoration in less than 5 years, 11 studies within 10 years, and 2 studies found restoration took more than 10 years. Six studies found limited or slow changes in plant communities following restoration.

Source: *Restoration Evidence. Action: Restore/create species-rich, semi-natural grassland.*
<http://www.restorationevidence.org>

d) Evaluation and monitoring of compensatory measures under Article 6(4)

To comply with the obligation to maintain the coherence of the Natura 2000 network, the programme of compensatory measures under Article 6(4) must demonstrate their effectiveness and provide documentation for this.

Geographical location, extent and timing are all determining factors for successful compensation. Adequate compensation ratios are also crucial to ensure effectiveness of compensation before the plan or project impacts appear.

The design and implementation of the compensatory measures must be **comprehensive** and **scientifically sound**, i.e.:

- The conservation objectives, key features and ecological functionality to be compensated are targeted in the correct proportion.
- The accompanying measures required, including technical, administrative and financial, have been incorporated.
- The timetable for implementing the individual tasks within each measure, including provision for maintenance works and monitoring, is sufficiently detailed.
- The scientific basis proving the effectiveness of each compensatory measure is explained and evidenced specifically for the impact it aims to offset.
- The time scale for accomplishing the expected results from each of the proposed measures is stated.
- The prioritisation of the measures' implementation is justified based on the Natura 2000 conservation objectives and scientific evidence.

Some critical elements for effective compensation measures in relation to their location, timing and extent are presented below. Examples of how these elements have been applied in practice are provided in Section 3 of the Annex.

Table 12. Key elements for effective compensatory measures

Location	Must make it possible to maintain the overall coherence of the Natura 2000 network.
	Should host – or be able to develop – the specific features, structure and functions required for compensation according to the results of the appropriate assessment.
	Must give proper consideration to qualitative ecological aspects such as the uniqueness of the features that will be impaired.
	Must be determined through careful analysis of local ecological conditions so that compensation is both feasible and as close as possible to the area affected by the plan or project.
	Must be within the same biogeographical region (for sites designated under the Habitats Directive) or within the same range, migration route or wintering area for bird species (i.e. sites designated under the Birds Directive) in the Member State concerned.
Extent	Is determined by: <ul style="list-style-type: none"> - the extent of the plan or project’s negative effects on the key features and ecological processes, which undermine the integrity of the Natura 2000 site; - scientific evidence of the measures’ capacity to achieve the expected results for maintaining the overall coherence of the Natura 2000 network.
	Is best set on a case-by-case basis, according to the information generated in the appropriate assessment under Article 6(3).
	Is initially set with the aim of outweighing the worst-case scenarios of likely adverse effects.
	Is ascertained by monitoring and reporting on ecological functionality outcomes.
Timing	Must ensure the continuity of the ecological processes essential for maintaining the structure and functions that contribute to the overall coherence of the Natura 2000 network.
	Considers the coordination required between implementing the plan or project and implementing the compensatory measures.
	Is determined by the time required for habitats to develop and/or for species populations to recover or establish in a given area.
	Must include legal safeguards required for long-term implementation and the protection, monitoring and maintenance of the sites to be secured before impacts on habitats and/or species occur.
	May require the application of specific measures to outweigh interim losses that would occur until the conservation objectives are met.
	Requires the establishment of robust and complete monitoring programmes capable of assessing the success of compensation measures.

The delivery of effective compensation should be verified through adequate **monitoring**.

Effective monitoring process may require the following elements:

- a monitoring plan agreed with the competent authority;
- contracting a specialised company or another entity to carry out the monitoring;
- identification of elements to be monitored: features of fauna and flora, water flows, soil quality, etc.;
- agreement on the reporting timeline (annual, biennial, etc.);
- agreement on the monitoring report;
- documentation of the progress of works (pictures, field reports, etc.);
- mechanism for storing and sharing the results;
- cooperation with scientists with a view to publishing the results of compensation in a scientific paper.

The monitoring and evaluation of compensatory measures must also allow for the possibility to factor in adverse negative effects on Natura 2000 sites that could not be foreseen in the appropriate assessment. Moreover, if the compensatory measures turn out not to be sufficient to outweigh these new impacts, they may need to be amended so that the ultimate aim of ensuring the overall coherence of the Natura 2000 network remains feasible.

Monitoring of compensation measures should be closely coordinated with the overall monitoring of impacts and mitigation measures (see section 3.2.4). This approach is consistent with the requirement in EU policy to coordinate monitoring programmes arising from different pieces of legislation, for an improved efficiency in their administration.

In some cases, adaptive management - which is a systematic approach for improving and adjusting conservation action by learning from management outcomes - may be required and secured through a legal agreement. In this context, adaptive management can be used to improve the implementation of compensatory measures where there may be uncertainties triggering the need for regular evaluation of the measures' actual outcomes. This is particularly relevant where the scale of impact and therefore the scale of compensation is not clear (e.g. when compensating for impacts arising from coastal flood defence development landward of a protected site).

e) Setting compensatory measures for plans

At a plan stage, there may be some limitations to setting the necessary compensatory measures. The assessment and identification of adverse effects of a plan on the target features of certain Natura 2000 sites provides the basis for defining the need for compensatory

measures. If there is enough certainty about the predicted effects on habitats, species or natural processes, and good knowledge about the extent and magnitude of those effects, it may be possible to define appropriate compensatory measures, identify the suitable location and an appropriate timing.

Nevertheless, detailed information about the effects of some of a plan's components may be missing from the plans themselves. In such cases, it may only be possible to define the kind of compensatory measures that will be necessary at the project level, e.g. to compensate the loss of certain habitats, or to provide additional habitats for certain species. As far as possible, a quantification of the needs should be provided, for instance surface area for habitat restoration.

In all cases, provision should be made to ensure that the necessary compensatory measures are defined, planned and implemented at the appropriate level. A provisional definition of the compensatory measures could be included in the plan. This should be accompanied by guidelines, criteria and approaches, which would require a more complete and detailed definition when the development of the plan allows for this task to be carried out.

Table 13 below provides an overview of issues relevant to the design, implementation and monitoring of the programme of compensation measures.

Table 13. Aspects to consider in the programme of compensatory measures for plans

Area of compensation:

- the location and surface areas of compensation (including maps); and
- the status and condition in the compensation areas.

Species and habitats subject to compensation:

- the former status and condition in the compensation areas of the species and the habitats subject to compensation; and
- an explanation of how the proposed compensatory measures are expected to outweigh the adverse effects on the integrity of the site and will make it possible to preserve the coherence of the Natura 2000 network.

Technical performance:

- techniques and methods implemented to put in place the proposed compensatory measures; and
- evaluation of their expected level of effectiveness.

Administrative provisions:

- completion of the administrative measures in place to ease implementation of the compensatory measures (e.g. any planning safeguards); and
- identification of any additional administrative measures that may be required to guarantee implementation of the compensatory measures to their full effectiveness.

Timing of compensation:

- time schedule for implementing the compensatory measures (considering long-term implementation – see the section below on cost), indicating when the expected results will be achieved;
- time schedule to convey monitoring results to the competent authorities; and
- time schedule for takeover of monitoring duties for the programme of compensatory measures.

Cost of compensation:

- real costs of the measures implemented;
 - cost deviations as compared to the cost planned in the programme of compensatory measures; and
 - any differentiation in time between costs depending on administrative coordination action (e.g. land purchase, one-off payments relating to rights on resource use; and/or regular payments towards specific recurring measures).
-

Table 14. Summary checklist of key issues to consider when designing compensatory measures

Action line	Description	Elements to include
<p>Technical</p>	<p>Technical plan The activities to be undertaken with indication of their relevance according to: - the original site’s conservation objectives; and - their relationship to the maintenance of the overall coherence of the Natura 2000 network.</p>	<p>Objectives and target values aligned to the site’s conservation objectives</p>
		<p>Description of the compensatory measures proposed</p>
		<p>Demonstration of the technical feasibility of the measures in relation to their conservation objectives – ecological functionality</p>
		<p>Scientifically robust explanation of effectiveness of the activities in compensating the negative effects of the plan or project</p>
		<p>Prioritisation of activities according to the nature conservation aims – timetable aligned to nature conservation objectives</p>
		<p>Monitoring outline – per activity and overall</p>
<p>Financial</p>	<p>Financial plan The economic cost of implementing the programme of compensatory measures</p>	<p>Budget breakdown by cost category</p>
		<p>Budget breakdown by implementation timetable</p>
		<p>Demonstration of the financial feasibility of the measures according to the timing required and schedule for approval of the funds</p>
<p>Legal and administrative</p>	<p>Safeguards for nature conservation</p>	<p>Feasibility analysis of management rights: per type of activity and per suitable location (purchase, lease, stewardship, etc.)</p>
		<p>Demonstration of the legal and/or financial feasibility of the measures according to the timing required</p>
		<p>Identification of requirements for communication to the public</p>
<p>Coordination and cooperation – public authorities</p>	<p>Roles and responsibilities in implementation and reporting</p>	<p>Consultation, coordination and cooperation needs aligned to the timetable: agreement and approval of the compensatory programme by the Natura 2000 authorities, assessment authorities and the developer</p>
		<p>Monitoring plan based on progress indicators according to the conservation objectives, with reporting schedule and prospective links to existing assessment and monitoring obligations</p>

4. STRATEGIC PLANNING AND APPROPRIATE ASSESSMENT OF PLANS

1.1 Strategic planning

An effective way to prevent conflicts with Natura 2000 sites and EU protected species and habitats is to consider the environmental consequences of new developments early on at strategic planning level. This can be done through a regional or national development plan for sectoral activities (e.g. in the energy sector, transport, extractive activities, aquaculture) or through land-use or other spatial plans. Having a strategic plan makes it possible to integrate environmental conditions and requirements, in particular those related to nature conservation, at an early planning stage so that the risk of potential conflicts later on at project level can be avoided or minimised and to determine the feasibility and means of implementing individual developments accordingly.

In the context of applying Article 6(3) and (4) of the Habitats Directive, strategic planning makes it much easier to consider the possible implications of planned activities on Natura 2000 sites at a broader scale and in a comprehensive way. In this way, the sites' sensitivities are taken into account at an early stage, when more options are available for meeting development objectives while at the same time reducing their potential environmental impacts. This will help, for example, in identifying suitable or unsuitable sites for specific activities and for minimising the risk of potential conflicts with Natura 2000 sites at individual project level.

Strategic planning can:

- promote a more interactive and transparent planning process and encourages early and iterative dialogue with relevant authorities, interest groups etc., which may significantly reduce the overall time required for the permitting procedure;
- provide a broader and more suitable framework for considering potential cumulative effects with other plans or projects, and feasible alternatives;
- help to avoid or reduce the number of potential site-specific conflicts at a later stage in the development process, when financial and legal resources have been committed and there is less room for manoeuvre;
- provide developers with relevant information and legal certainty about environmental concerns that may need to be considered already during the initial project concept;
- be more cost effective in the long run (if possible mitigation measures are factored in at an early planning stage, they are likely to be technically easier and cheaper to integrate);
- analyse broad alternatives, such as deployment of green infrastructure instead of 'grey infrastructure'; lead to the development of new, creative and innovative solutions (including nature-based) and potential win-win situations;
- contribute to improving the public image of the projects and the institutions responsible.

Examples of strategic planning relevant to Natura 2000 are provided in section 5 of the Annex to this document.

1.2 Appropriate assessment of plans

The overall procedural framework for the integration of environmental considerations at strategic planning level is set by the strategic environmental assessment (SEA), as stipulated in the SEA Directive¹⁰. According to Article 3(2)(b) of the SEA Directive, a plan has to undergo an SEA if it is deemed to require an appropriate assessment under the Habitats Directive (i.e. if the plan may have a significant effect on a Natura 2000 site¹¹).

Article 6(3) of the Habitats Directive applies to all plans that are likely to have a significant effect on Natura 2000 sites. As explained above and in the Article 6 Guide, the term ‘plan’ has a broad meaning, including land-use and maritime spatial plans¹², as well as sectoral plans or programmes.

The assessment of such plans under Article 6(3) and their appropriate assessment follow the same steps as described in Chapter 3 of this document. However, there are also certain particularities in the assessment of plans, which are described further below. These particularities pertain to possible limitations and constraints and suitable approaches that can be used to overcome the difficulties and uncertainties linked with a lack of detailed information or insufficient definition of all the elements, components and actions of the plan.

The level of detail of the plan itself will determine the scope and extent of the appropriate assessment, but in all cases the assessment must aim to identify sensitive or vulnerable areas or other potential risks or conflicts with Natura 2000 sites so that these can be taken into account at later stages in the planning process.

For instance, municipal or urban plans may contain sufficient details that make it possible to determine potential adverse effects on Natura 2000 sites with a good level of certainty. On the other hand, for wider spatial or sectoral plans at regional or national level, where the location and design of all their main components are not yet decided, it may only be possible to identify potential effects of certain actions or components of the plan at a general level, without specifying them at site level. Nevertheless, wider plans can orientate further developments to

¹⁰ Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment.

¹¹ C-177/11, paragraph 24, also stating: ‘The examination carried out to determine whether that latter condition is fulfilled is necessarily limited to the question as to whether it can be excluded, on the basis of objective information, that that plan or project will have a significant effect on the site concerned’.

¹² Directive 2014/89/EU of the European Parliament and of the Council of 23 July 2014 establishing a framework for maritime spatial planning

areas where there is a lesser risk of potential conflicts with Natura 2000 (e.g. wildlife sensitivity maps.)

The assessment should be proportionate to the geographical scope, to the plan's level of detail and to the nature and extent of the likely effects. In some cases, it may not be possible to analyse in detail all the possible impacts on individual sites at this stage; however, sufficient analysis must be carried out to identify:

- the main impacts at the level of the Natura 2000 network, including the identification of Natura 2000 sites likely to be affected, as well as possible impacts on the connectivity of the sites, and in light of national or regional conservation objectives for species and habitats protected by the Birds and Habitats Directives, where they exist;
- possible broad mitigation measures such as exclusion of areas with sensitive biodiversity, or application of certain standards and best practices (e.g. minimum density of wildlife passages, use of noise screens, respecting breeding periods);
- possible alternatives, including different locations for projects or different methods to achieve the expected results (e.g. use of different modes of transport or technologies for production of energy);
- potential cumulative impacts, considering other existing or proposed plans, programmes and strategies.

For strategic plans where it is not possible to identify effects on individual sites, the analysis should as a minimum focus on potential impacts and major risks; site-specific effects will then need to be analysed at project level. In such cases, the appropriate assessment should focus at least on determining the Natura 2000 sites that could be adversely affected as well as any EU protected habitats and species that could be affected (also outside Natura 2000), effects on connectivity, fragmentation and other effects at the network scale. This should serve to orientate the scope and focus of the assessment of individual projects.

Where there is uncertainty about adverse effects on relevant features of Natura 2000 sites and their conservation objectives, it may be appropriate to carry out and record a risk assessment, which can consider the following aspects:

- the potential hazards of the plan and their likely consequences for the conservation objectives of the special area of conservation or site of Community importance / special protection area features;
- for each hazard, the probability that the hazard will affect the special area of conservation / special protection area's conservation objectives;
- for each hazard, the magnitude, likely duration and irreversibility or reversibility of the effect (recording briefly the assumptions made or evidence used in reaching that conclusion).

Nevertheless, it should be born in mind that the underlying aim at all times is to avoid or remove any risk of adverse effect on the integrity of Natura 2000 sites, or to remove any reasonable grounds for concern that such an adverse effect may occur when the plan is implemented.

The assessment of the effects of plans under Article 6(3), and the assessment carried out in accordance with applicable SEA procedures, may identify activities or elements of the plan that are certain to harm the integrity of Natura 2000 sites, even if mitigation is carried out; such activities or elements could therefore be excluded from the plan at this point. The assessment could additionally provide an overview of which other activities may be harmful to protected habitats and species and thus better focus the assessment at project level.

However, future projects to be implemented under a plan should be in line with the outcome of the appropriate assessment undertaken for the strategic spatial/sectoral plan. This does not replace the requirement for an appropriate assessment of future projects stemming from that plan.

There are clear links and analogies between appropriate assessment of plans and strategic environmental assessment, which are covered in the section 5. Coordination of SEA with appropriate assessment is thus recommended. These are parallel but separate processes that usually overlap but which also differ in a number of key aspects. The appropriate assessment is narrower in focus and requires more rigorous tests, with the conservation and protection of Natura 2000 sites at its core. The findings and recommendations of appropriate assessment are mandatory and must be incorporated into and be part of a plan presented for adoption. In other words, the findings of the appropriate assessment must not just be taken into account, they condition the decision over whether or not to approve the plan or project.

It is recommended that a separate appropriate assessment file is maintained throughout the entire process of preparing or reviewing a plan. The file should include copies of all documentation relevant to the appropriate assessment and will be useful to record how environmental considerations were integrated into the plan.

It may be appropriate to plan follow-up and a reassessment of the expected effects and risks throughout the plan's lifetime. This will ensure that the predictions and estimates are realistic and identify any possible new effects that had not been considered due to lack of information or that arise in light of new elements or changes introduced in the plan. The 'final' appropriate assessment of any plan must be based on its final version. If the plan changes significantly at any time before adoption, the changes should be also addressed in the appropriate assessment, in an iterative process.

1.3 Sensitivity mapping

Identifying suitable locations or excluding unsuitable locations can be part of the appropriate assessment of plans. It needs to be based on a proper analysis of how far the EU protected habitat types and species present in the whole area of the proposed development are vulnerable to the planned activities.

Sensitivity mapping is a method often used to identify areas that may be particularly sensitive to development of sectoral activities. It is often used, for instance, to identify sensitive bird and bat areas that may be unsuitable for wind energy developments, or to identify potential conflict areas for industrial activities, or housing developments.

Sensitivity maps can be used at an early stage in the planning process to identify areas containing ecological communities sensitive to a specific influence or activity. They can inform strategic planning decisions during the initial site selection phase of the development process and can operate at a regional, national or transnational scale.

Sensitivity mapping approaches do not replace the need for a site specific appropriate assessment under Article 6 of the Habitats Directive and for environmental impact assessments (EIAs). They can, however, be used during the appropriate assessments /EIAs and after the development consent has been delivered to inform siting and possible management prescriptions.

Sensitivity mapping uses geographic information systems (GIS) to collate, analyse and display spatial and geographic data, which are based on existing spatial biodiversity data relating to species and/or sites; however, sometimes data needs to be collected specifically to aide the creation of a sensitivity map that is relevant for the plan in question.

Sensitivity maps need to be regularly updated. The frequency and scale of these updates is an important aspect to consider in the design of sensitivity maps, as ecological communities are dynamic and their behaviour can be sometimes be difficult to predict. Therefore wildlife sensitivity maps should always be interpreted with caution.

The Commission has produced a *Wildlife Sensitivity Mapping Manual*¹³, a practical guide for developing sensitivity mapping approaches for renewable energy technologies. This manual provides an overview of datasets, methodologies and GIS applications. It focuses on species and habitats protected by the EU Nature Directives, with particular emphasis on birds, bats and marine mammals. It also includes a step-by-step approach for preparing wildlife sensitivity maps, which is presented in Box 22 below.

¹³ Available at https://ec.europa.eu/environment/nature/natura2000/management/guidance_en.htm.

Box 22. Step-by-step approach to sensitivity mapping

- 1) *Identify the types of developments (projects, activities, infrastructure, etc.) to be included and the species and habitats likely to be affected. To do so consider:*
 - species/habitats likely to coincide with development (at any stage of their lifecycle) and consider all life history phases (breeding, migration, etc.)
 - different phases of development (e.g. construction, operational phases) as well as associated infrastructure
 - which species/habitats are sensitive to development
 - which species /habitats are of conservation concern (e.g. those listed within the Birds and Habitats Directives)
 - how species can be affected: e.g. habitat loss and degradation, collision with infrastructure, avoidance, displacement and barrier effects.
- 2) *Compile distributional datasets on sensitive species, habitats and other relevant factors.*
 - Review what data are already available and decide whether additional data should be collected
 - If the datasets are spatially incomplete, consider using modelling based on habitat and landscape predictors to forecast distribution in under-sampled localities
 - It is also important to highlight data deficiencies and other methodological shortcomings.
- 3) *Develop a sensitivity scoring system*
 - Assign sensitivity scores to species and habitats based on relevant characteristics (habitat fragility, conservation status, species behaviour, etc.)
- 4) *Generate the map*
 - Identify what is the most appropriate mapping format, GIS software, mapping unit, etc.
 - Generate a grid based on an appropriate mapping unit and overlay the species distributions (or models) and potentially other useful datasets, including relevant buffer zones
 - Identify the species present within each grid cell
 - For each grid square, calculate a score using the species sensitivity scoring systems.
- 5) *Interpret the map*
 - Group sensitivity scores in categories indicative of their level of sensitivity (e.g. very high, high, medium, low) or that indicate a particular prescription (e.g. no-go vs low risk areas)
 - Develop guidance material that explains what data are used, how the map is generated, how it should be interpreted and what caveats exist regarding the interpretation.

National examples of sensitivity mapping are presented below.

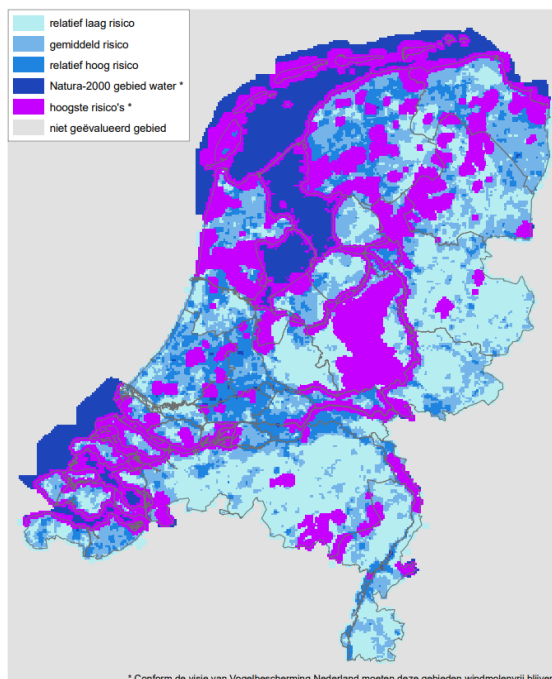
Box 23. The Netherlands national wind farm sensitivity map

The National Wind Turbine Risk Map for the Netherlands is a spatial mapping tool for the early screening of onshore wind farm developments. The tool focuses on terrestrial bird populations and includes sites of ornithological importance such as migration hotspots, high natural value farmland and important roosting sites. The tool measures risk for bird species in terms of their conservation importance. It does not integrate any assessment of species susceptibility to collision.

Data were compiled from a variety of sources, including the national breeding bird census, water bird counts, colonial bird counts, data from a bird airstrike model (BAMBAS, bird biomass of flying birds), Natura 2000 sites and specific rare bird inventories. Migration hotspots were also integrated. Risk maps were generated for specific sensitive bird species or groups of species as individual layers, for example waterfowl birds, meadow birds, swans and geese, Natura 2000 and Red List species foraging areas. The individual layers were used to compile the final risk map.

For each 'layer' of the map, the grid cells in the Netherlands were classified as being of low, moderate or high risk based on the site's importance and/or number of species present. Buffer zones were identified for each species and applied to the maps. The scores from the various grid cells were aggregated in the final map.

This tool has proved to be very useful as a screening tool. While the map has not been formerly adopted within the Dutch planning system, it is still widely used.



Overall risk map illustrating risk from highest (purple) to relatively low risk (light blue)

(Source: Aarts, B. and Bruinzeel, L. (2009) De nationale windmolenrisicokaart voor vogels. SOVON Vogelonderzoek Nederland/Altenburg & Wymenga

https://assets.vogelbescherming.nl/doc/s/e3b4524d-5cc2-4565-a65e-3226a124837e.pdf?_ga=2.19770104.1164016512.1551712082-129991070.1550147440)

* Conform de visie van Vogelbescherming Nederland moeten deze gebieden windmolenvrij blijven

Box 24. A sensitivity mapping tool for hydropower development in Austria

Hydropower developments should follow a strategic approach so that the remaining significant, sensitive and intact stretches of a river can be safeguarded. To support this, the World Wide Fund for Nature (WWF) prepared a master plan to provide a technically sound decision basis for assessing the need to protect Austrian waters (WWF Ökomasterplan, 2009). The study was published in 2009 and assessed, for the first time, the ecological significance of 53 of the largest rivers in Austria with a catchment area larger than 500 square kilometres. It

also presented the official data of the current status analysis of the ministry responsible for implementing the EU Water Framework Directive and providing conservation-related information, such as on Natura 2000 sites and other protected areas.

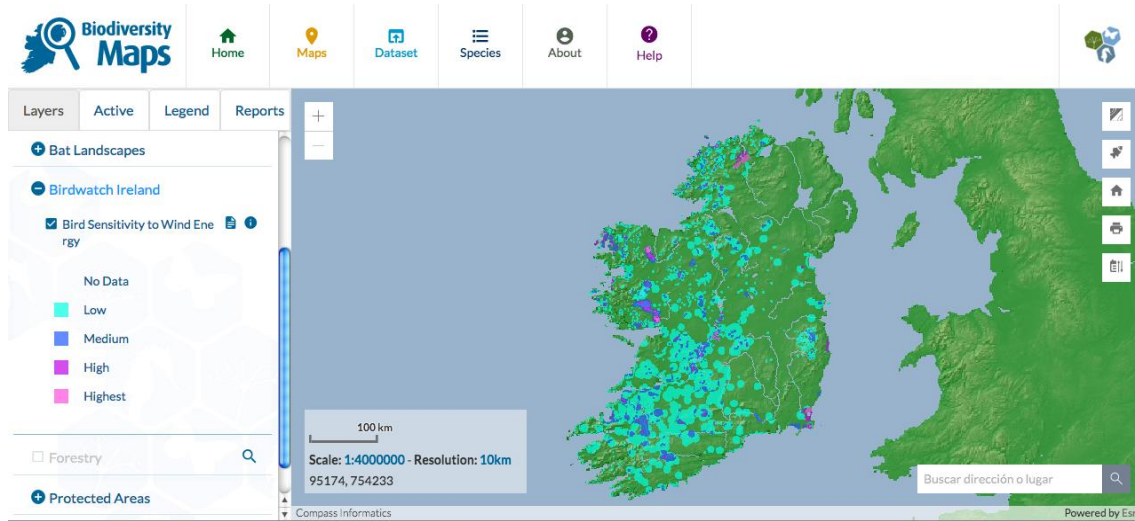
Each of the water stretches was categorised and prioritised in order of importance according to different selection criteria (for example, ecological status, situation in protected areas, hydromorphology, length of contiguous free flow path) and each river stretch was ranked according to the following sensitivity classes:

- Sensitivity class 1: very high merit protection based on the ecological status
- Sensitivity class 2: very high merit protection due to the situation in reserve(s)
- Sensitivity class 3: highly deserving of protection on the basis of morphology
- Sensitivity class 4: highly worthy of protection due to length of contiguous free flow
- Sensitivity class 5: potentially worthy of protection as there is no existing database for environmental condition assessment
- Sensitivity class 6: potentially worthy of protection
- Sensitivity class 7: low merit protection
- Sensitivity class 8: existing energy economic use
- Data deficient (ecological status, hydromorphology)



Box 25. Online platforms to access sensitivity maps in Ireland

A web platform enables rapid and interactive spatial examination of environmental sensitivities and potential for land-use conflicts. These can support strategic environmental assessment and appropriate assessment and, ultimately, informed planning and decision-making. As an example, the Irish Biodiversity Data Centre portal provides access to the bird sensitivity map to wind energy through an online web tool.



Source: <https://maps.biodiversityireland.ie/Map>

4.4. Consultation and dialogue in strategic planning

Recognising the benefits of dialogue and consultation, more and more planners are now adopting a more interactive and transparent planning process. This approach encourages early consultation with environmental authorities and stakeholders as an important element in ensuring that acceptable and sustainable solutions are found.

Consultation during strategic planning is equally important in reaching a common understanding of the issues at stake. It also encourages greater cooperation in the search for solutions (i.e. possible alternatives or mitigation measures) to the ecological effects identified in the plan assessment.

Consultation and dialogue with nature authorities from the outset is essential in order to identify possible risks and conflicts with sensitive areas and species, to better understand the vulnerability of habitats and species to the planned developments and to scope and carry out an appropriate assessment. Consultation with other authorities, NGOs, stakeholder groups and the public is also required under the SEA Directive (see box on p. 47 on public participation under the EIA and SEA Directives).

Participation is important in the definition phase of the plan and during the interactive and iterative process of working out realistic alternative solutions for problematic areas. In this respect, it is important to identify stakeholders and involve them in the consultations as this ensures that the strategic planning process takes into account all the relevant knowledge and information about any potential conflicts.

Developers and competent authorities should engage closely at the earliest possible stage if it is anticipated that an Article 6(4) derogation will be considered. This might be in the early stages of developing a proposal, or otherwise as soon as it becomes clear that a derogation may be needed. They should also ensure that the conditions for derogation are fully explored and documented, since this will help avoid delays to the decision-making process and ensure a transparent and robust decision.

5. LINKS WITH OTHER ENVIRONMENTAL ASSESSMENT PROCEDURES: EIA, SEA, WATER FRAMEWORK DIRECTIVE

5.1. Streamlining environmental assessments

Environmental assessment is a procedure that ensures that the environmental implications of decisions are taken into account before the decisions are made. Several pieces of EU legislation contain provisions on environmental assessment procedures. Besides Article 6 of the Habitats Directive, this is in particular the case of the Environmental Impact Assessment (EIA) Directive¹⁴, the Strategic Environmental Assessment (SEA) Directive¹⁵ and Article 4(7) of the Water Framework Directive (WFD¹⁶).

The integration and coordination of the environmental assessment requirements of these directives can greatly contribute to improving the efficiency of environmental permitting procedures. The EIA Directive includes provisions on streamlining the assessment procedures related to environmental issues required under various EU directives, including the Habitats Directive and the Water Framework Directive. It requires specifically that Member States, where appropriate, ensure that coordinated and/or joint procedures fulfilling the requirements of that Union legislation are provided (Article 2(3) of the EIA Directive).

Provisions for coordinated or joint environmental assessment procedures arising simultaneously from the SEA Directive and other EU legislation are also set out in Article 11(2) of the SEA Directive. They aim to avoid duplication of assessments, without prejudice to the specific requirements of each directive.

The Commission has issued a guidance document on streamlining environmental assessments¹⁷.

¹⁴ Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment, as amended by Directive 2014/52/EU.

¹⁵ Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment.

¹⁶ Directive 2000/60/EC establishing a framework for Community action in the field of water policy.

¹⁷ Commission notice 2016/C 273/01, available at:

<http://eurlex.europa.eu/legalcontent/EN/TXT/?uri=OJ:C:2016:273:TOC>.

5.2. Environmental impact assessment, strategic environmental assessment and the appropriate assessment

The EIA and SEA Directives require that projects, and plans and programmes, likely to have significant effects on the environment undergo environmental assessment prior to their approval or authorisation.

The requirement to assess the significant effects of plans or projects may arise jointly under the SEA or EIA Directives and Article 6(3) of the Habitats Directive. In that case the assessment and permitting procedures can run jointly or in coordination, as provided for by the EIA and SEA Directives. However, assessments carried out pursuant to these Directives cannot replace the procedure and obligations provided for in Article 6(3) and (4) of the Habitats Directive, as neither procedure overrides the other.

An appropriate assessment can be reported either within the EIA or SEA report or in a separate report. In either case, the information and conclusions relevant to the appropriate assessment must be distinguishable and differentiated from those of the EIA or SEA. This is necessary as there are a number of important distinctions between the EIA/SEA and appropriate assessment procedures (see 5.2.2 below).

*It is essential that the information relevant to the appropriate assessment and its conclusions remain clearly distinguishable and identifiable in the environmental impact assessment report so that they can be differentiated from those of the general EIA or SEA. This is necessary as there are a number of important distinctions between the EIA/SEA and the appropriate assessment procedures, which means that **an SEA or an EIA cannot replace, or be a substitute for, an appropriate assessment as neither procedure overrides the other.***

See the Article 6 Guide – section 4.6.1

5.2.1. Opportunities for and benefits of streamlining EIA/SEA and appropriate assessment

There are several advantages to streamlining EIA/SEA and appropriate assessments. They can, for instance, help to better understand the relationships between different environmental factors, avoid duplication of assessments, contribute to making more efficient use of resources needed to carry out the assessments, and enable better coordination in permitting procedures.

Key elements for effective streamlining of appropriate assessment and EIA/SEA include:

- close cooperation between responsible authorities;
- adequate scoping, which is a common practice in the EIA and SEA procedures;
- close cooperation and proper information exchange between the experts preparing the EIA/SEA and the experts conducting the appropriate assessment (e.g. information about noise, air, water, soil issues by the respective expert to the expert in biodiversity);
- quality control by the competent authority;
- clear and distinct conclusions for each of the streamlined assessment procedures.

Several provisions of the EIA and SEA Directives are relevant to the Article 6(3) appropriate assessment and can contribute to its quality in the context of streamlined implementation. They include:

Scoping:

‘Where requested by the developer, the competent authority [...] shall issue an opinion on the scope and level of detail of the information to be included by the developer in the environmental impact assessment report’ (Article 5(2), EIA Directive).

The SEA Directive provides for mandatory consultation of the authorities with powers in the field of the environment, aiming to improve the quality of the environmental report: ‘The authorities referred to in Article 6(3) shall be consulted when deciding on the scope and level of detail of the information which must be included in the environmental report’ (Article 5(4), SEA Directive).

Ensuring quality and completeness of the assessment:

‘The developer shall ensure that the environmental impact assessment report is prepared by competent experts; the competent authority shall ensure that it has, or has access as necessary to, sufficient expertise to examine the environmental impact assessment report; and where necessary, the competent authority shall seek from the developer supplementary information, [...] which is directly relevant to reaching the reasoned conclusion on the significant effects of the project on the environment’ (Article 5(3), EIA Directive).

Consultation and public participation:

‘Member States shall take the measures necessary to ensure that the authorities likely to be concerned by the project by reason of their specific environmental responsibilities or local and regional competences are given an opportunity to express their opinion on the information supplied by the developer and on the request for development consent... In order to ensure the effective participation of the public concerned in the decision-making procedures, the public shall be informed electronically and by public notices or by other appropriate means, of the following matters early in the environmental decision-making procedures and, at the latest, as soon as information can reasonably be provided’ (Article 6, EIA Directive).

‘Member States shall ensure that their conclusions [...] on whether plans or programmes are likely to have significant environmental effects [...], including the reasons for not requiring an environmental assessment [...], are made available to the public’ (Article 3, SEA Directive).

‘The authorities [...] and the public [...] shall be given an early and effective opportunity within appropriate time frames to express their opinion on the draft plan or programme and the

accompanying environmental report before the adoption of the plan or programme or its submission to the legislative procedure. Member States shall designate the authorities to be consulted which, by reason of their specific environmental responsibilities, are likely to be concerned by the environmental effects of implementing plans and programmes. Member States shall identify the public [...], including the public affected or likely to be affected by, or having an interest in, the decision-making subject to this Directive, including relevant non-governmental organisations, such as those promoting environmental protection and other organisations concerned.’ (Article 6, SEA Directive).

Monitoring:

‘Member States shall ensure that the features of the project and/or measures envisaged to avoid, prevent or reduce and, if possible, offset significant adverse effects on the environment are implemented by the developer, and shall determine the procedures regarding the monitoring of significant adverse effects on the environment’ (Article 8a, EIA Directive).

‘Member States shall monitor the significant environmental effects of the implementation of plans and programmes in order, inter alia, to identify at an early stage unforeseen adverse effects, and to be able to undertake appropriate remedial action’ (Article 10, SEA Directive).

Information to the public and consulted authorities:

‘When a decision to grant or refuse development consent has been taken, the competent authority or authorities shall promptly inform the public and the authorities [likely to be concerned by the project] thereof, [...] and shall ensure that the following information is available...: the content of the decision and any conditions attached thereto [...]; the main reasons and considerations on which the decision is based’ (Article 9, EIA Directive).

Conflict of interest:

‘Member States shall ensure that the competent authority or authorities perform the duties arising from this Directive in an objective manner and do not find themselves in a situation giving rise to a conflict of interest. Where the competent authority is also the developer, Member States shall at least implement, within their organisation of administrative competences, an appropriate separation between conflicting functions when performing the duties arising from this Directive.’ (Article 9a, EIA Directive)

Transboundary impacts:

Article 7 of the EIA Directive sets the provisions for assessing projects with transboundary impacts, including the requirements to inform another Member State where likely significant effects of a plan or project are envisaged on that Member State. The Member State that may be affected can then participate in the assessment if it so wishes. The EU has signed the Convention on Environmental Impact Assessment in a Transboundary Context (the Espoo Convention). In order to coordinate and facilitate the assessment procedures for cross-border projects, and in particular to conduct consultations in accordance with the Convention, the Member States concerned may set up a joint body, on the basis of equal representation.

Transboundary consultations are also envisaged and regulated under the SEA Directive (Article 7). These provisions on transboundary consultations are also highly relevant in terms of the overall goals of the Birds and Habitats Directives and the Natura 2000 network. This is because they provide an important preventive tool during the appropriate assessment of a plan or project whose adverse effects could jeopardise these goals in a neighbouring Member State.

5.2.2. Specific features of the appropriate assessment and differences with EIA/SEA procedures

While the streamlining of environmental assessments under the Habitats Directive and the EIA or SEA Directives is beneficial and recommended in most cases, it is important to keep in mind the specific features and differences in the scope and focus of the respective assessments. The use of certain terms and the consequences from the assessments can also be different. In particular:

- The appropriate assessment is focused on the protection of Natura 2000 sites, i.e. areas of high biodiversity value of European importance, and therefore requires more rigorous tests. Its conclusions are **binding** in that they determine whether a plan or project can be authorised or not (the competent authorities can agree to the plan or project only *after having ascertained that it will not adversely affect the integrity of the site*). On the other hand, the results of the EIA or SEA *shall be taken into account* in the development consent procedure or in the plan preparation and adoption.
- In the context of coordinated or joint procedures it would make sense to carry out the appropriate assessment earlier in the process. This would avoid a potentially costly and lengthy EIA/SEA procedure if the conclusions of the appropriate assessment are already negative, meaning authorisation cannot be granted in accordance with the Article 6(3) provisions (unless the plan or project can go ahead under the Article 6(4) provisions).
- Under the EIA Directive, mitigation and compensation measures are envisaged to *avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment*, in particular on species and habitats protected under the Birds and Habitats Directives. Thus, compensation measures can also be considered in the context of the mitigation hierarchy to offset residual impacts with the aim to avoid any net loss of biodiversity.

By contrast, in the case of plans and projects assessed under the Habitats Directive, mitigation measures to avoid, prevent or reduce significant adverse effects on the site's integrity are considered under the Article 6(3) appropriate assessment, but compensatory measures to offset residual impacts are used as a last resort only under the procedure of Article 6(4). This would take place if it is decided to proceed with the plan or project despite the negative conclusion of the appropriate assessment. In such case, it must first be demonstrated that no alternative solutions exist that would avoid affecting the integrity of Natura 2000 sites and that the plan or project is justified for imperative reasons of overriding public interest.

- Furthermore, as regards the stage of the assessment when 'mitigation measures' are considered, under the EIA Directive mitigation can be taken into account already at the screening stage. Such measures cannot be considered in the 'screening' stage of the Article 6(3) procedure, but only when adverse effects are analysed in the actual appropriate assessment stage.

The measures taken to avoid, prevent, reduce and, if possible, offset significant adverse effects on the environment, in particular on species and habitats protected under Council Directive 92/43/EEC and Directive 2009/147/EC of the European Parliament and of the Council, should contribute to avoiding any deterioration in the quality of the environment and any net loss of biodiversity. [...]

Member States should ensure that mitigation and compensation measures are implemented, and that appropriate procedures are determined regarding the monitoring of significant adverse effects on the environment resulting from the construction and operation of a project, inter alia, to identify unforeseen significant adverse effects, in order to be able to undertake appropriate remedial action.

EIA Directive. Preamble (Directive 2014/52/EU, recitals 11 and 35).

5.2.3 Relationship between SEA/EIA/appropriate assessment and the strict species protection provisions of the Nature Directives

Article 3 of the EIA Directive stipulates that ‘the environmental impact assessment shall identify, describe and assess in an appropriate manner, in the light of each individual case, the direct and indirect significant effects of a project on the following factors: [...] (b) biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC’. Similar provisions are applicable to plans pursuant to Article 5(1) of the SEA Directive.

On this occasion it is important to note that the Birds and Habitats Directives, in addition to site protection regulated by Article 4 of the Birds Directive and Article 6 of the Habitats Directive, also establish a system of strict protection of certain species across their entire natural range within the EU, i.e. both within and outside Natura 2000 sites. These protection measures apply to species listed in Annex IV to the Habitats Directive and to all wild bird species in the EU. The exact terms are laid down in Article 5 of the Birds Directive and Articles 12 (for animals) and 13 (for plants) of the Habitats Directive.

In essence they require Member States to prohibit:

- the deliberate capture or killing of species;
- their deliberate disturbance, in particular during breeding, rearing, hibernation and migration;
- the deterioration or destruction of breeding sites or resting places;
- the deliberate destruction of nests or eggs, or the uprooting or destruction of protected plants.

The implementation of a plan or development/operation of a project can lead to conflicts with these prohibitions. During the appropriate assessment and EIA/SEA the developer together with the competent authority should therefore check if the plan or project is compatible with

these strict species protection provisions. Such a check would require identification of species and their habitats, which could be potentially affected, verification of their presence on the area affected by a plan or project as well as of their breeding sites or resting places, analysis of possible impacts on the species and of suitable mitigation measures. If impacts on the individuals of the species or on their breeding sites and resting places are confirmed, or if it cannot be excluded, the derogations from strict species protection may be required.

However, it has to be noted that derogations are only allowed in limited cases, e.g. in the interest of public health and safety, provided that there is no other satisfactory alternative and provided that the consequences of these derogations are not incompatible with the overall aims of the Directives. The conditions for applying derogations are set out in Article 9 of the Birds Directive and Article 16 of the Habitats Directive.

It is important to note as well that these provisions may also apply to plans and projects which are screened out from appropriate assessment and/or from EIA/SEA. In such cases the analysis of whether derogations under Article 9 of the Birds Directive and 16 of the Habitats Directive are applicable will have to be performed in a separate procedure.

A permit to derogate from strict species protection can be granted as a separate decision or within a single permit resulting from different assessments and authorisation procedures. Either way it needs to clearly specify the reasons for and conditions of such derogation.

Further information on the strict species protection requirements, including latest guidelines, are available on the European Commission website.¹⁸

5.3. Assessments under Article 4(7) of the Water Framework Directive, coordinated or integrated with the Article 6(3) procedure under the Habitats Directive

There are also strong links between the Water Framework Directive (WFD) and the Habitats Directive. They are both applicable, at least in part, to the same environment – that of aquatic ecosystems and terrestrial ecosystems and wetlands directly dependent on them. They also have broadly similar ambitions in that they aim to ensure the non-deterioration of aquatic ecosystems and to enhance their ecological condition. Where appropriate, they should therefore be implemented in a coordinated way to ensure that they operate in an integrated manner¹⁹.

¹⁸ https://ec.europa.eu/environment/nature/conservation/index_en.htm

¹⁹ See the Commission FAQ on the WFD and Nature Directives:

<http://ec.europa.eu/environment/nature/natura2000/management/docs/FAQ-WFD%20final.pdf>

Like the Habitats Directive, the WFD lays down specific provisions for assessing the effects of new developments on water bodies. Under Article 4(7) of the WFD, exemptions can be approved by the authorities for new modifications and sustainable human development activities that: (i) result in the deterioration of the status of the water body; or (ii) prevent the achievement of good ecological status or potential, or good groundwater status under certain conditions²⁰.

Under Article 4(8) of the WFD, Member States are required – when applying Article 4(7) of the WFD – to ensure that the application is consistent with the implementation of other EU environmental legislation. In other words, if the project is granted a derogation under Article 4(7) of the WFD, it must still comply with Article 6(3) and (4) of the Habitats Directive, if applicable.

If the development potentially affects both a WFD objective and a Natura 2000 site, then both the WFD Article 4(7) procedure and the assessment procedure under Article 6(3) of the Habitats Directive must be undertaken. Ideally, this should be done in a coordinated or integrated manner, as also recommended by the EIA Directive. Each assessment has a different focus: the former will assess if the project is likely to compromise the primary objectives of the WFD, while the latter will assess whether the project will adversely affect the integrity of a Natura 2000 site.

However, this does not prevent certain aspects of the assessment being coordinated, e.g. through surveys and consultations. It should be stressed that if the WFD procedure may lead to a licence being granted, but the plan or project conflicts with Natura 2000 requirements, authorisation cannot be granted, except under Article 6(4) provisions.

While the integration of appropriate assessment procedures with procedures under the EIA Directive is mandatory, for the WFD it is discretionary. Nonetheless, a number of Member States have already provided for, or are in the process of establishing, integrated procedures for cases where EIA, appropriate assessment and the WFD 4(7) assessment are all required. Streamlining these assessments is encouraged in EU guidance on the implementation of the WFD²¹.

The similarities between the WFD Article 4(7) assessment and those under the EIA and Habitats Directives mean that certain steps under the different procedures can be carried out

²⁰ For case-law on the application of Article 4(7) see Court rulings in cases C-461/13 and C-346/14.

²¹ See in particular: Common Implementation Strategy for the Water Framework Directive and the Floods Directive. Guidance Document No. 36. Exemptions to the Environmental Objectives according to Article 4(7). Available at: <https://circabc.europa.eu/sd/a/e0352ec3-9f3b-4d91-bdbb-939185be3e89/CISGuidanceArticle47FINAL.PDF>.

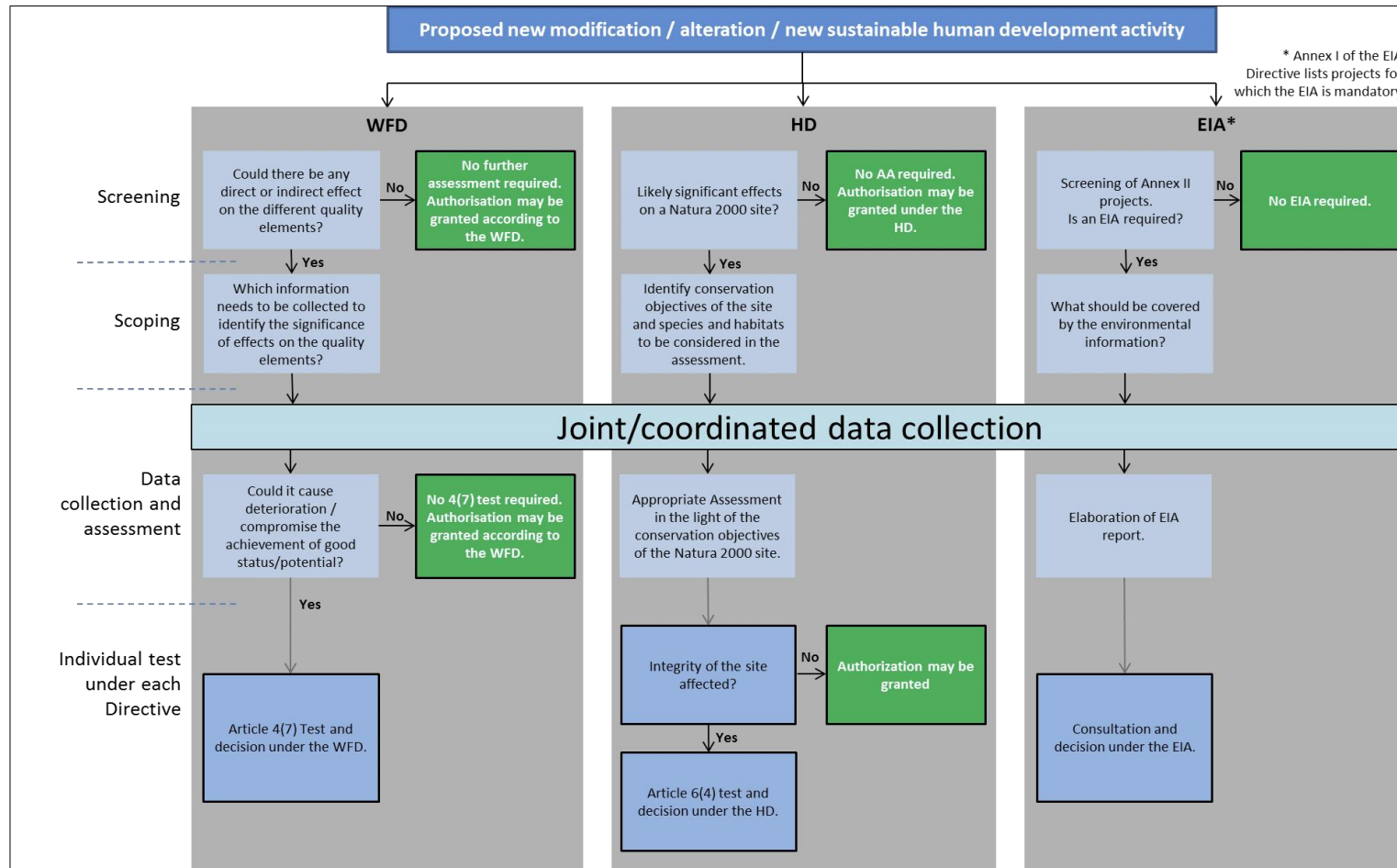
together. This concerns particularly 'screening', 'scoping' and the necessary data collection. Such a streamlined approach can lead to significant cost and time savings, notably in relation to the data collection stage that can be jointly performed once the data requirements under each directive are clarified during the previous steps.

Further synergies can be applied, for instance regarding the search for alternatives or mitigation measures. However, in all cases the distinct focus of the various tests under each directive needs to be fulfilled.

If the conditions of one directive are fulfilled but not the other, then the authorities may not authorise the project because in such a case the project would still infringe EU legal provisions. Instead, it should be examined whether amendments can be made to the project so that it satisfies the requirements of all relevant directives.

Figure 3 outlines similarities and differences across the key steps of assessments under WFD Article 4(7), the EIA and Articles 6 of the Habitats Directive.

Figure 3: Streamlining of assessments under the WFD, Habitats Directive and EIA Directive



Source: CIS, 2017. Common Implementation Strategy for the Water Framework Directive and the Floods Directive. Guidance Document No. 36. Exemptions to the Environmental Objectives according to Article 4(7).

6. KEY REFERENCES

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The European Commission has published several sector-specific guidance documents (on non-energy extractive industries, wind farm development, ports and estuaries, inland waterway transport, aquaculture, etc.). These provide further advice on how to carry out an appropriate assessment in relation to the development of plans and projects in each of these sectors. The guidance documents are available at:

<https://ec.europa.eu/environment/nature/natura2000/management/guidanceen.htm>

