Connecting EIA and Water Framework Directive (EU): the Spanish approach

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In the European Union, the Directive 2000/60/CE "Water Framework Directive" (WFD) has taken a pioneering approach protecting water ecosystems, setting environmental objectives (EO) for all bodies of water and protected areas. For surface or ground bodies of water, WFD includes the environmental objectives of preventing status deterioration and of reaching good status by 2015. Furthermore, in protected areas WFD also set additional objectives in order to ensure that their conservation objectives are also achieved.

Achieving WFD environmental objectives of every single body of water or protected area is mandatory for Member states since 2015. It means that competent authorities cannot grant the development consent of a project without making sure that the project cannot compromise the achievement of the environmental objectives of the affected bodies of water and protected areas.

Despite these general principles, WFD also provides some exceptions. One of them comes from Article 4(7), which allows Member States to approve projects which may hamper the achievement of the EO, provided that some strict conditions are met. Therefore, an assessment on how the project will affect the environmental objectives is needed. This "applicability assessment", and the subsequent "Article 4(7) condition test", have been considered and developed in the Common Implementation Strategy Guidance Document No 36 of the European Commission.

According to the Directive 2014/52/EU amending Directive 2011/92/EU (EIA Directive), it is up to the Member States the development -or not- of a connection between the Environmental Impact Assessment (EIA) and the applicability assessment and the Article 4(7) test required by the WFD, with a coordinated or joint procedure.

¹ https://circabc.eu<u>ropa.eu/sd/a/e0352ec3-9f3b-4d91-bdbb-939185be3e89/CIS Guidance Article 4 7 FINAL.PDF</u>

Since the amendment of the Spanish of environmental assessment regulation (Law 21/2013) by the Law 9/2018, Spain has marked a step forward mainstreaming both assessments and providing a joint procedure for them, supported by the EIA procedure. This Law 21/2013 already provided a joint procedure for the EIA and the "Natura 2000 Appropriated Assessment" required by the article 6 of the Directive 92/43/CEE "Habitats Directive" for projects likely to have a significant effect in the achievement of the conservation objectives of a Natura 2000 site.

This amendment entails that the environmental impact report should include the assessment of the effects of the project on the environmental objectives of the water bodies and protected areas affected (Applicability assessment), and if the assessment comes to the conclusion that environmental objectives are compromised, it should also include the evidences of meeting the article 4(7) WFD exemption conditions (Article 4(7) test).

In the European Union and Spain, environmental impact assessment has usually considered the impacts of the projects on water (pollution, hydro-morphological alteration, etc.). But the assessment of their effects on environmental objectives of the Water Framework Directive goes faraway and stands for a new challenge.

To face this challenge, in 2019 the Spanish Ministry for the Ecological Transition published a Guidance document addressed to developers and consultants to perform the assessment of the effects of the project on the environmental objectives of surface water bodies, groundwater and protected areas, and to include this assessment in a specific chapter of the environmental impact assessment report. Experts from environmental assessment, river basin management, biodiversity, hydro-morphology, and river restoration fields have contributed to its contents.

This guide is available (in Spanish) in:

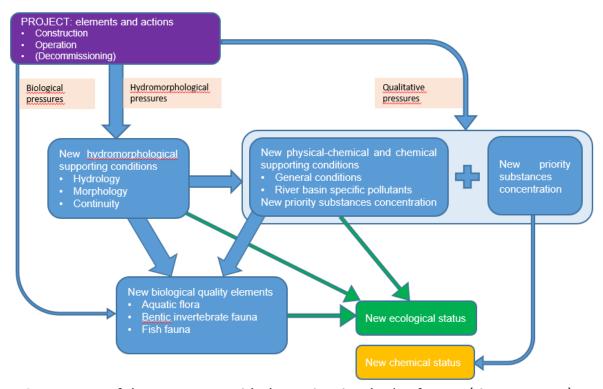
https://www.miteco.gob.es/es/calidad-y-evaluacion-ambiental/temas/evaluacion-ambiental/guiaeiasobreobjetivosambientalesdmaoct2019_tcm30-502890.pdf

The first part of the Guide goes in depth explaining the environmental objectives set by the Water Framework Directive for natural and heavily modified (HMWBs) surface water bodies (article 4(1)(a)) and groundwater bodies (article 4(1)(b)), and the additional environmental objectives for every of the different kind of protected areas (article 4(1)(c)). It is particularly important because of the complexity of the definitions and assessment methodology of the "ecological status" and "ecological potential" in surface waters and "quantitative status" for groundwaters, and the "chemical status" for both types of water bodies. Note that the list of published guidance documents of the common implementation strategy of the Water Framework Directive in CIRCA reaches 37 documents!

The most important part of the Guide focuses on the assessment of impacts on environmental objectives. It should only consider long term effects, usually from

construction (permanent effects) and operation of the project, but even from decommissioning. The Guide provides different methodological tips for surface waters, groundwaters and protected areas, concerning:

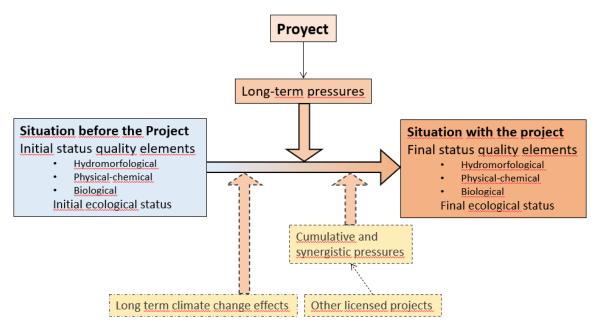
- Identification of the bodies of water affected by the project.
- Information needed about the quality elements of the initial situation.
- Assessment of the pressures generated by the project.
- Assessment of the final situation of the quality elements of the status.
- Identification of significant impacts on the environmental objectives.



Assessment of the new status with the project in a body of water (river category)

Annex B includes a toolbox of quantitative hydro-morphological and physical-chemical models useful for these assessments, for both surface waters and groundwaters. Annex C contains checklists with criteria to identify deterioration or impediment for reaching good status in surface waters.

The Guide also includes the assessment of cumulative effects with other projects and with climate change, which means a systematic and quantitatively important reduction in water resources in Spain.



Consideration of the effects of climate change and other approved projects in the assessment on the ecological status (rivers)

Mitigation measures and environmental surveillance and monitoring have their own chapters in the Guide, because of their importance in environmental impact assessment. Mitigation measures are deducted after an iterative process, considering the mitigation hierarchy. Its Annex D includes a reference to the mitigation measures library of the ECOSTAT group for tree kind of common projects:

- Dam construction /impoundment
- Flood protection measures
- Channelling and drainage measures

A specific chapter is devoted to the exceptions under article 4(7) of the Water Framework Directive. This article allows Member States to authorize projects which may hamper the achievement of environmental objectives of a body of water in some cases (mostly physical/ hydromorphological alterations) if several strict conditions are met:

- a) All practicable steps are taken to mitigate the adverse impact on the status of the body of water.
- b) The reasons for those modifications or alterations are specifically set out and explained in the river basin management plan, and the objectives are reviewed every six years.
- c) The reasons for those modifications or alterations are of overriding public interest, or the benefits to the environment and to society of achieving the environmental objectives are outweighed by the benefits of the new modifications or alterations to human health, to the maintenance of human safety or to sustainable development.

d) The beneficial objectives served by those modifications or alterations of the water body cannot be achieved by other means which are a significantly better environmental option for reasons of technical feasibility or disproportionate cost.

The Guide provides some advice to prove the compliance of these conditions in the environmental impact report, because the Spanish environmental assessment law requires the mandatory participation of the river basin management plan authority in the environmental assessment, whose report (positive or negative) is binding.

Finally, the Guide includes a table of contents for the chapter of the EIA report specifically dedicated to the impacts on environmental objectives of bodies of water and protected areas, a list of bibliography references and on-line resources, and a summary of useful mentions in water and environmental assessment Spanish legislation.

The mainstreaming of the EIA and the assessment of the effects of the projects on the environmental objectives of the WFD has meant an important step forward the full implementation of the Water Framework Directive in Spain, and better results of these mainstreamed assessments are expected, the same as a reduction in the administrative burden. Nevertheless, the acquisition of abilities and expertise by developers, consultants and assessors will still need some time, and some difficulties have arisen, mainly because of the lack of experience and knowledge foreseeing the reaction of the biological quality elements in the presence of the expected changes in hydro-morphological and physical-chemical quality elements. It may be a good subject for future investigations.