



Fitness Check Evaluation of the Water Framework Directive and the Floods Directive

Executive Summary - English

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Executive Summary- English

This Executive summary presents the methodology and main conclusions of the study supporting the Fitness Check of the following Directives:

- Directive 2000/60/EC establishing a framework for Community action in the field of water policy¹;
- Directive 2006/118/EC on the protection of groundwater against pollution and deterioration²;
- Directive 2008/105/EC on environmental quality standards in the field of water policy³; and
- Directive 2007/60/EC on the assessment and management of flood risks⁴.

The study has been delivered by Wood together with Trinomics B.V., Wageningen Environmental Research (WENR) part of Wageningen University & Research, and Deltares.

Purpose of the report

The aim of the report is to present our conclusions on the analysis of the effectiveness, efficiency, relevance, coherence and EU added value of the Directives considered as part of the Fitness Check.

Methodology

EU policy evaluation takes place against standard criteria and following a well-defined methodology, which needs to respect the principles outlined in the latest Better Regulation Guidelines⁵. These guidelines provide a common EU framework for conducting all retrospective evaluations and state that evaluations must assess the following criteria:

- Effectiveness: considers how successful the action has been in achieving or progressing towards its objectives;
- Efficiency: considers the relationship between the resources used by an intervention and the changes generated by the intervention (which may be positive or negative);
- Coherence: involves the review of the intervention within the existing legislative framework to consider how well or not different actions work together;
- Relevance: looks at the relationship between the needs and problems in society and the objectives of the intervention and hence touches on aspects of design; and
- EU added value: reviews changes which it can reasonably be argued are due to the EU intervention over and above what could reasonably have been expected from national actions by Member States.

The Fitness Check Roadmap concerning the Fitness Check of the Water Framework Directive and the Floods Directive⁶ identified the need to carry out a Fitness Check to look at the functioning of and relationship between the Water Framework Directive, the Groundwater Directive (GD), the Environmental Quality Standards Directive (EQSD) and the Floods Directive (FD).

1 OJ L 327, 22.12.2000, p.1

2 OJ L 372, 27.12.2006, p.19

3 OJ L 348, 24.12.2008, p.84

4 OJ L 288, 6.11.2007, p.27

5 European Commission, SWD(2017) 350, Better Regulation Guidelines https://ec.europa.eu/info/better-regulation-guidelines-and-toolbox_en

6 https://ec.europa.eu/info/law/better-regulation/initiatives/ares-2017-5128184_en

The evidence for this Fitness Check was gathered from a wide range of qualitative and quantitative sources including:

- **Review of literature:** Numerous literature sources were studied, the majority of which were classified as academic studies, implementation reports, position papers and other Evaluations/Fitness Checks/Impact Assessments. Additional sources included: publications from the European Environment Agency (EEA), Joint Research Centre (JRC) and independent studies, WISE datasets, policy documents, CIS Technical Reports, infringement cases, and, projects funded by the EU. The majority of sources reviewed were released between 2015 and 2018.
- **Open public consultation** through an online questionnaire, including expert consultation as part of the same exercise, using the Commission consultation's website. The questionnaire was made available in 23 EU languages through the EU Survey tool⁷. The OPC was live on the EU Survey portal between September 2018 and March 2019. The consultation received a total of 385,088 responses;
- **Targeted consultations** including:
 - **Targeted online survey:** a survey was made available online for expert stakeholders. The survey was split into ten short questionnaires focusing on the Floods Directive, water body status, environmental objectives, Groundwater Directive, costs and benefits of the Directives, cost recovery and pricing, monitoring, public participation, coherence and EU added value. A total of 205 stakeholders provided a response.
 - **Focus Groups:** a series of focus group workshops were organised to explore in detail topics for which information gaps were identified - this included the Floods Directive and Groundwater Directive and written exchanges on costs and benefits.
 - **Stakeholders' workshops:** three workshops were organised to update stakeholders with progress on the Fitness Check and provide options for inputs and gathering feedback. The workshops involved more than 120 participants including representatives from Member States' competent authorities, industry, NGOs, EU services, academia and international organisations.
 - **Interviews:** a total of 40 interviews were conducted with Member State competent authorities, International River Basin District authorities, NGOs, industry representatives, research organisations and Commission services.

An evaluation is only as strong as the evidence upon which it relies. As such, it is important for our analysis to be transparent and clear on the evidence upon which it is based and its limitations. One important limitation is based on the lack of ex-ante impact assessment for the WFD, which did not allow for a clear counterfactual scenario to be developed. The starting points for each Member State were different, and the level of efforts needed to meet the objectives of the legislation also varied based on the state of water at time of adoption of the Directives. Data on costs and benefits were largely missing and, therefore, only 'case studies' could be presented in our analysis.

⁷ <https://ec.europa.eu/eusurvey/home/welcome>

Main findings

Effectiveness

Effectiveness considers the extent to which the objectives have been achieved and the factors that have contributed to the achievement (or not) of the objectives.

WFD and Daughter Directives

Our analysis concluded that the implementation of the Directives has improved over time (i.e. based on implementation reports, overview of the 2nd River Basin Management Plans (RBMPs) and the EEA State of Waters report) and that the non-deterioration requirements of the Water Framework Directive seem to have been well implemented. However, it is also apparent that the objectives pertaining to the achievement of good status under that Directive have not been reached. The delays in meeting the requirements of the Directives are explained in part by an under-estimate of the level of efforts needed and a lack of knowledge on aquatic ecosystems. The reliance of Member States on EU financing mechanisms, and the lack of other funding sources for the implementation of measures needed for the WFD are also contributory factors.

The implementation of the WFD has facilitated the prioritisation of water quality through successive planning cycles, has facilitated transboundary cooperation mechanisms and enhanced those international networks that were in place before. The WFD is noted as a global model for water governance, as outlined by the UN in their analysis of water governance in Eastern Europe.

On the implementation of specific provisions, there were some marked divergence of stakeholders' opinions on the one-out-all-out principle. Whilst it is generally seen as an important element of the WFD and based on scientific principles, there are concerns on the way the principle is used as an indicator to communicate progress, in particular when based only on overall status. Similarly, concerns regarding the use of exemptions have been raised by stakeholders. With nearly 50% of water bodies covered by an exemption, it is questionable that this is a reflection of the expectations of the legislator when drafting the Directive. Additionally, it remains unclear whether full implementation of Article 9, regarding the cost recovery principle, has been achieved.

The analysis considered unintended effects and noted a range of positive unintended effects of the WFD e.g. the raise in hydrological skills within non-water competent authorities, and the 'flagship' role of the WFD in establishing a European governance model. The implementation of the legislation has led to an increase in knowledge that would not have happened in the absence of the Directives. Overall a limited number of unintended negative effects have been identified.

Floods Directive

Overall the implementation of the FD is satisfactory and progressing. The implementation of the FD has been found to support a shift from policies based on flood defence, towards flood risk assessment and is a potential template for best practice disaster management.

The reliance of Member States on EU financing mechanisms, and the lack of other funding sources for the implementation of measures needed for the FD were noted.

It was found that Member States are not evenly considering climate change as part of their implementation of the FD. Similarly, the use of Cost Benefit Analysis to inform the selection of measures in Flood Risk Management Plans (FRMPs) was found to be variable. Private insurance coverage to protect against flood damage is identified as low in the EU, and is identified as a missed opportunity for the

Floods Directive by some parties.⁸ Literature suggests that challenges in land use planning could be reducing the effectiveness of FD implementation in some MS. Furthermore, challenges remain regarding the incorporation of green infrastructure/nature based solutions within FRMPs.

Efficiency

Efficiency considers whether the resources required to create the actions triggered by the WFD, its daughter Directives and the FD are proportionate to the results achieved. Additionally, the aim of the efficiency assessment is to understand the relationship between the costs and benefits of the legislation and how they accrue to different stakeholders (i.e. water companies, European citizens, regional administrations and Member State competent authorities), to identify what factors drive these costs/benefits and to assess how these factors relate to the legislation.

WFD and Daughter Directives

Overall, the 2nd cycle RBMPs and compliance check assessment reports provided valuable evidence with regard to costs of WFD measures (at least €116 billion in investment costs and €14 billion/year annual O&M costs). However this is based on incomplete data reported in RBMPs. A number of countries did not report cost information, and when reported, in many instances the cost information is aggregated which makes it challenging to draw firm conclusions on cost and cost effectiveness levels.

There has been little evidence identified on the quantified benefits from the adoption and implementation of the legislation. The RBMPs reported qualitative benefit information mostly. Only a few comprehensive CBA studies on water management (assessing benefits of improved water body status) are available including studies in the Netherlands, Belgium, France and the UK. Little evidence was identified from the academic literature which monetised benefits of the WFD. The lack of benefit data has precluded the derivation of cost-benefit ratios.

Despite the above shortcomings in data, it is apparent that the implementation of the WFD has resulted in reduced emissions to the aquatic environment and improved ecological, chemical and quantitative status of water bodies (Effectiveness) leading to wider ecosystem service benefits. The implementation has also resulted in better knowledge of water environments, improved cooperation and better public information. The consultation results supports the conclusion that the costs involved in implementation of the Directives are justified given the benefits that have been and will continue to be achieved in the long term.

Reporting and monitoring are essential in implementing the vision and ambitions of the Directives, although the reporting systems in place appears to be complex (e.g. requiring resources and skills to implement). Consultation results suggest that the majority of the respondents believe that there is no evidence the WFD has imposed a disproportionate administrative burden on authorities (national, regional or local), economic operators (e.g. industries, water companies), individual citizens or other parties. From those who disagree with this (19% - 31% depending on the Directive), the majority of respondents are individual companies and business associations.

⁸ Specifically, the European Court of Auditors, and insurance industry participants themselves.

Floods Directive

The information reported in the FRMPs provided valuable evidence with regard to costs of flood prevention and mitigation measures which has been estimated to be at least €14 billion (2016-2021).

The same challenges for the quantification of the benefits of the WFD are applicable for the FD. The FD has instilled a different way of thinking about flooding, looking to identify and mitigate risk rather than reacting to flooding after it has occurred which is a clear benefit. It has positively contributed to coordination and development of a framework for managing flood risks, raising public awareness about flooding and flood risk management and to climate change adaptation.

The consultation results indicate that the costs involved in implementation of the Directives are justified given the benefits that have been and will be achieved in the long term. Furthermore, the consultation results indicates that the majority of the respondents (including Member States competent authorities) believe that there is no evidence the FD has imposed a disproportionate administrative burden on authorities (national, regional or local), economic operators (e.g. industries, water companies), individual citizens or other parties.

Relevance

The assessment of relevance of the WFD and the FD concerns testing the relationship between the needs of EU society in the field of water and flooding and the objectives and scope of the Directives.

The need for public intervention in the field of water remains high due to economic importance of water to EU industry as well as its importance to ecosystems and citizen support for legislation in the field of water and floods remains strong. Not all waters in the EU are in good condition yet and pressures from various sources presently remain and are unlikely to disappear in the near future.

The objectives of the WFD and FD are comprehensively and ambitiously phrased, while neither of them define specific or time-bound indicators, thus remaining relevant. There is uncertainty among stakeholders about how climate change is dealt with in the WFD and the FD. Water scarcity and quantity issues remain ill-covered in the WFD and stakeholders have stated that all issues relating to water quantity are not fully addressed. This is particularly pertinent in relation to water abstraction and water use, where unclarities regarding the use of exemptions can impact the achievement of reaching good quantitative status. Pluvial flooding in the FD, though officially covered by the FD, is generally underrepresented in FRMPs due to its complexity.

The WFD and FD are legally able to deal with emerging contemporary issues, such as emerging substances and climate change. This is due mostly to their flexible nature and the provisions contained therein for dealing with these emerging issues. However, stakeholders are divided about how the WFD is relevant to deal in practice with emerging substances (for example it was raised that the changes in Priority Substances list are slow). New issues, such as invasive alien species, challenge water status indicators in a way that was not foreseen before. Finally, efficiency in monitoring plans could be achieved with more modern monitoring techniques.

Coherence

Coherence analysis aims to understand the extent to which the WFD and its daughter Directives and the FD are in line with wider EU policy and international obligations and to what extent those policies reinforce each other in achieving common goals.

The Directives are mostly seen as coherent internally. The combined action of the WFD and daughter Directives, and the WFD and the FD is seen as coherent and effective.

The WISE system is considered to be providing coherence by being applicable to the WFD and daughter Directives and allowing a more efficient approach to environment reporting. The difference in timing for the reporting of the WFD and the EQSD was raised as a potential issue. However, it was also noted that this allow for the identification of new substances to occur mid-cycle. While unclarity with regard to terminology and definitions were raised, these are largely implementation issues for which the role of CIS has been highlighted as particularly important in their resolution.

The evidence gathered suggests that the interactions of the WFD, EQSD, GWD and FD are positive and lead to synergies. However, more cooperation between the WFD and FD was encouraged in their implementation in order to avoid counter-productive measures (e.g. grey infrastructure measures).

The combined action of the Directives with wider water legislation was also underlined as leading to synergies with many of the legislative instruments (e.g. UWWTD, Bathing Water etc) being basic measures under the WFD.

The areas seen as least coherent include: agricultural policies, transport policies, chemicals policy and climate change.

- On agriculture, the evidence gathered show some challenges to integrate water protection in agricultural practices, including in the use of pesticides and other plant protection products.
- On transport policies, it is noted that most of the EQS failures observed are related to mercury and PAHs which are emitted from the combustion of fossil fuels. Transport emissions are likely to be an important source for these emissions. The evidence gathered show that impacts from inland navigation, including disturbance due to shipping (including dredging of sediments), pollution from shipping, and morphological disturbances are, in some instances, reflected in river basin management plans, but there are opportunities for more consideration, for example on sediments as part of implementation. The inland and wider transport legislation appear to be coherent.
- On chemicals policy, there is a lack of coordination observed between the implementation of the WFD and source control legislation (e.g. REACH). While not an incoherence per se, the difficulty of making use of the information generated as part of the implementation stream limits the effectiveness of the legislative framework.

The action of the Directives is seen as supporting the EU international obligations including the UN Sustainable Development Goals, the regional seas convention and the Sendai disaster risk reduction framework. Doubts were raised on the effectiveness of the Minamata Convention on limiting the impacts from mercury pollution considering the high number of water bodies failing due to mercury pollution.

EU added value

The final evaluation criterion concerns the added value of the EU level intervention, as opposed to intervention by Member States at national level.

The (legal) design of the WFD and the FD exploits a number of significant potential sources of EU value added and thus the potential for EU value added from the Directives is large, in particular through further facilitating transboundary cooperation in international waters, setting a common best practice framework across the EU (catchment-based and lifting standards in a number of European countries) and introducing a number of other innovative policy instruments (in particular the WFD).

Evidence points at significant effects from enforcement actions by EU institutions and the service provided by EU institutions for (potential) dispute settlement between Member States. The need for EU intervention continues to be strong, with the international nature of waters not changing, the pressures on water quality and flood risk not decreasing (if not increasing) due to climate change, economic and population growth and projected concomitant involvement of ‘competing’ policy areas also governed by EU policy (energy, agriculture, chemicals and transport policies).

The potential for EU added value through innovative policy instruments and transboundary cooperation was found to not be delivered in practice to a full extent. There has been limited progress in the implementation of iRBDs between the first and second cycles of RBMPs, yet the extent of transboundary cooperation in shared waters has increased since the adoption of the WFD.

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