

DRAFT THEMATIC GUIDANCE FICHE FOR DESK OFFICERS

WATER MANAGEMENT

VERSION 2 - 20/02/2014

RELEVANT PROVISIONS IN THE LEGISLATION

<i>Regulation</i>	<i>Articles</i>
<p><i>Common Provisions Regulation (CPR)</i> <i>(N° 1303/2013)</i></p>	<p>Article 8 " Sustainable development"</p> <p>Article 9(6) "preserving and protecting the environment and promoting resource efficiency"</p> <p>Article 96(7) (a) "[Each operational programme [...] shall, [...] include a description of] (a) the specific actions to take into account environmental protection requirements, resource efficiency, climate change mitigation and adaptation, disaster resilience and risk prevention and management, in the selection of operations</p> <p>Related provisions: ANNEX XI, ex-ante conditionality, 6.1. <i>Water sector</i></p>
<p><i>European Regional Development Fund Regulation</i> <i>(N° 1301/2013)</i></p>	<p>Article 5 Thematic Objective 6 "Preserving and protecting the environment and promoting resource efficiency"</p> <p>Article 5 (6) (b) "[The ERDF shall support [...] preserving and protecting the environment and promoting resource efficiency through investing in the water sector to meet the requirements of the Union's environmental acquis and to address needs, identified by the Member States, for investment going beyond those requirements "</p> <p>Related provisions:</p> <p>Article 3 (1) (b), "[The ERDF shall support] investments in infrastructure providing basic services to citizens in the areas of energy, environment, transport, and information and communication technologies (ICT)", and (e) "networking, cooperation and exchange of experience between competent regional, local, urban and other public authorities, economic and social partners, and bodies representing civil society referred to in Article 5 of the CPR, studies, preparatory actions and capacity building."</p>

<p><i>Cohesion Fund Regulation</i> <i>(N° 1300/2013)</i></p>	<p>Article 2 - 1. (a) "[The Cohesion Fund shall [...] support] investments in the environment, including areas related to sustainable development and energy which present environmental benefits"</p> <p>Article 4(c) (ii) "[The Cohesion Fund shall support preserving and protecting the environment and promoting resource efficiency through (ii) investing in the water sector to meet the requirements of the Union's environmental acquis and to address needs identified by the Member States for investment going beyond those requirements."</p>
<p><i>European Territorial Cooperation Regulation</i> <i>(N° 1299/2013)</i></p>	<p>Article 8 (7) (a) "[Each cooperation programme shall [...] include a description of] the specific actions to take into account environmental protection requirements, resource efficiency, climate change mitigation and adaptation, disaster resilience, and risk prevention and risk management in the selection of operations"</p>

This is a draft document based on the new ESIF Regulations published in OJ 347 of 20 December 2013 and on the most recent version of the relevant Commission's draft implementing and delegated acts. It may still require review to reflect the content of these draft legal acts once they are adopted.

1. INTRODUCTION

This guidance explains issues related to thematic objective (TO) 6 “*Preserving and protecting the environment and promoting resource efficiency*” and the related investment priorities for the water sector under the ERDF and Cohesion Fund.

2. STRATEGIC FRAMEWORK

2.1. *Water as a key economic resource*

Water is vital for growth and competitiveness¹. It is the cornerstone of almost all the economic sectors and activity, not least for agriculture, agro-food, fishery, tourism and energy sectors (electricity production being the biggest water usage since power plants as well as dams are dependent on water). In short, the lack of water and/or the lack of qualitative fresh water can be major hurdles to the development prospect of any territory.

Water needs to be considered regarding two aspects: quality and quantity. In terms of regional development both the lack of water (droughts) and too much water (floods) are serious risks while it is 'clean/non-polluted' water which is required for human consumption and economic processes;

2.2. *Links to the River Basin Management Plans*

All actions to be co-financed by the ERDF should come out of the River Basin Management Plans (RBMPs) and the accompanying Programmes of Measures (PoM) which are the key overarching framework plans, along implementation plans for sector specific activities (e.g. provision of drinking water and sanitation). For drinking water, the water supply system (catchment, treatment, transport and distribution) should be designed following option analysis, based on technical and economic evaluation.

2.3. *Treatment of waste water: scale and types of intervention*

For wastewater, the relevant assessment scale is municipal / local agglomerations (with obligation to connect above 2,000 population). Master plans have been designed, prioritising investments stemming from preliminary gap assessment (current situation vs. compliance with the acquis).

A significant number of Member States (MS) and/or regions still have important needs in terms of ensuring the treatment of waste water, inter alia to ensure the achievement of 'good ecological status of all water bodies'. Hence waste water treatment will remain a priority for investments, mostly in EU-13. It is important that the proposed investments are able to meet current and future needs, without becoming oversized, and that operational costs (including maintenance) are considered from the beginning. Alternative innovative solutions should be taken into account where appropriate (e.g. in particular in remote areas/small villages). Wastewater collection and treatment is not compulsory below 2,000 population equivalent. Hence, any public investment there should be duly justified technically and economically, compared to the alternative of individual septic tanks.

2.4. *Focus on water efficiency*

The last years have seen growing problems and hence new needs to address droughts and lack of water. This problem of 'water quantity' can be exacerbated by climate change.

¹ EC Blueprint to Safeguard Europe's Water Resources

As a consequence 'water efficiency', e.g. leakage reduction in distribution networks or water reuse, should become one of the key priorities for investments in the water sector. It helps to preserve the available resources and prevent future droughts and also contributes to improving the competitiveness of an economy. It encompasses in particular leakage reduction in distribution networks and, in areas where water deficit is structural, water reuse systems. Reducing water usage reduces the costs for households, SMEs, public authorities.... Demand side options should be considered first, before additional supply.

2.5. Investment in networks v.s. operation obligations: the need for proper water pricing

Where Cohesion Policy will co-finance investments in water over 2014-2020, the question of the "price" of water has to be seriously considered. By end of 2011 MS had to set up water pricing systems, including 'cost recovery', i.e implement the user-pays principle. In this respect, the reduction of water consumption through progressive water tariffs can be very effective and should be first considered. In addition the 'polluter-pays principle' should be clearly highlighted as well, in relation with affordability.

For investments in water networks there should be a sound economic and financial rationale for rehabilitation in terms of rate of return (investment costs and generated savings). In addition, the border between eligible investments and the operation obligations (not eligible, imputable to the operator) are sometimes thin and should be carefully analysed.

3. REGULATORY SCOPE OF SUPPORT

In line with the results orientation of the new legislative framework for Cohesion policy, the ERDF and the Cohesion Fund regulation distinguish clearly between the scope of support for the ERDF/CF (the activities it may support) and the investment priorities for each thematic objective (objectives to which the ERDF/CF shall contribute)². For an operation to be eligible for ERDF/CF support it must contribute to a specific objective defined for an investment priority and fall within the scope of the fund's activities

3.1. Scope of support

ERDF

The main field of intervention of the ERDF on water are the investments in infrastructure providing basic services to citizens in the area of environment, as provided for in Article 3 (1) of the ERDF Regulation. However, it is also possible to support investments in the development of endogenous potential, through fixed investment and small-scale infrastructure.

The Commission's initial intention was however not to allow support to investments in infrastructure providing basic services to citizens in the area of environment **in more developed regions**, as it is expected that these regions are already sufficiently endowed with this kind of infrastructures, and investments can be financed from user charges and/or national budgets. However, both the European Parliament and the Council have agreed in the trilogues to delete this provision from the regulation.

This scope of assistance is restricted by the generic exclusions: decommissioning and construction of nuclear power stations, tobacco and in undertakings in difficulty.

² Cfr. Recital 7 of the ERDF Regulation: (...) investment priorities should set out detailed objectives, which are not mutually exclusive, to which the ERDF is to contribute. Such investment priorities should form the basis for the definition of specific objectives within programmes that take into account the needs and characteristics of the programme area.

Cohesion Fund

The Cohesion Fund, while ensuring an appropriate balance and according to the investment and infrastructure needs specific to each Member State, shall support investments in the environment, including areas related to sustainable development and energy which present environmental benefits, in compliance with article 177 of the Treaty. The Cohesion Fund has traditionally been used to allow compliance with the EU environmental acquis, in particular in the field of water.

Exclusions are similar to those applying to the ERDF: decommissioning and construction of nuclear power stations, tobacco and investments in undertakings in difficulty.

3.2. Investment priorities

Investments the thematic objective 6 "Preserving and protecting the environment and promoting resource efficiency" shall contribute to the following investment priority: "*b) investing in the water sector to meet the requirements of the Union's environmental acquis and to address needs, identified by the Member States, for investment going beyond those requirements*".

4. KEY MEASURES LINKED TO INVESTMENT PRIORITIES

4.1. Indicative Actions of high European added value for the ERDF and the CF.

The Commission has identified a number of actions³ which can be expected to make a significant contribution to the achievement of the targets and objectives of the Union strategy for smart, sustainable and inclusive growth and which shall act as a reference point in the preparation of programmes.

For the ERDF and the CF these include:

- investment in efficient water supply,
- waste-water treatment and water reuse, including new investment in the reduction of leakage,
- implementation of River Basin Management Plans.

4.2. Why should the ERDF and the CF co-finance this kind of investments?

The underlying principles justifying a support of cohesion policy in the water sector need to be differentiated depending on the fund which is used, ERDF or the Cohesion Fund (CF).

As regards the Cohesion Fund, "investments in the environment" is one of the two focus areas (with transport) underlined in Article 177 of the Treaty and in the CF regulation. This includes the water sector and programmes related to water management. In the framework of the objectives of the CF, the co-financed programmes linked with water should aim at supporting the MS in meeting the objectives with the related EU water directives in those regions and MS that are most lagging behind. Nevertheless this first objective of providing basic water infrastructures and improved services to citizens should not be isolated from the broader socio-economic development perspective. Even for waste water and water supply related priority axes, an integrated approach should be developed to foster synergies with the overall regional development (development of activities that also result into job creation).

³ SWD(2012)61 final Part II, *Elements for a Common Strategic Framework 2014 to 2020*
http://ec.europa.eu/regional_policy/sources/docoffic/working/strategic_framework/csf_part2_en.pdf

As regards the ERDF the central justification for interventions in the water area is linked to competitiveness and resource efficiency on one hand, and on innovation on the other hand. Indeed investments that enable a more efficient use of water can improve the competitiveness of the whole regional economy, including in companies, in particular in Small and Medium-sized Enterprises (SME's). In addition, the water sector is facing enormous challenges worldwide with significant needs for research and innovation to develop and commercialise new technologies, water efficient devices, 'grey-water' re-use, improving sanitation etc... While some EU companies are already leaders in the water sector, the market potential is still huge, in particular outside the EU.

As TO 6 is about 'environment and resource efficiency', the related water programmes and investments should mainly focus on achieving environmental and resource efficiency targets. Conversely, where the 'innovation'/business dimension is the predominant aspect, the programmes should be developed under TO1 or possible TO3 if the aim is mainly about SMEs.

4.3. Where should the money go and how to invest?

The EU water policy is largely based on the Water Framework Directive⁴ that includes the key element of the River Basin Management Plans (RBMPs). They are a detailed account of how the objectives set for the river basin (ecological status, quantitative status, chemical status and protected area objectives) are to be reached within the timescale required. It also includes analysis and estimation of the effect of existing legislation and the remaining "gap" to meeting these objectives and a set of measures designed to fill the gap.

Hence the RBMP's provide the overall context for water management in a certain territory including gaps, measures and objectives. In this respect the investments of Cohesion Policy should take place within the context of the relevant RBMPs, including the preparation of programmes of measures at basin level, as well as within relevant implementation plans for the provision of particular services linked to other relevant EU water legislation (e.g. Nitrates Directive⁵ or the Drinking Water Directive⁶).

So, clear and explicit links need to be made between the water related priorities in an Operational Programme (OP) and the relevant RBMPs. The CF, as well as the ERDF, should be used to support the implementation of measures identified in these plans, hence helping the MS/regions to address their needs/gaps. In addition, in water scarce regions it is paramount to engage in a wider systemic reflexion on the overall sustainability of regional water systems. With respect to the monitoring of water bodies, investments need to ensure that the monitoring and data acquisition programmes, as required by the EU water "acquis", are being implemented through the measures proposed in an OP.

Investments need also to be consistent with the water hierarchy (priorities as regards water use). In the "Blueprint to Safeguard Europe's Water Resources"⁷ the Commission recalled its views on establishing a water hierarchy, whereby additional water supply options (e.g. desalination) are only considered after all other improvements in efficiency on the demand side are exhausted. This should be based on a cost benefit analysis and taking into account local/regional contexts, in particular the level of 'water stress' or the existence of a structural water deficit (recurring drought situations). Where additional/new supply is needed, it should be based on best available techniques, taking into account the long-term socio-economic and environmental impacts. Therefore the main focus should be first on demand management options (efficiency, water pricing, leakage reduction etc.).

⁴ Directive 2000/60/EC

⁵ Directive 91/676/EEC

⁶ Directive 98/83/EC

⁷ COM(2012)673

As regards waste water treatment, the standards for investments are provided by the Urban Waste Water Directive⁸. Some recent findings have to be taken into account, in particular conclusions of the Court of Auditor's Special report on waste water⁹. It underlines some of the weaknesses in the support of CP to waste water treatment in the past and calls for:

- a stronger emphasis on 'polluter pays' and on pollution reduction at source (ensuring the adequate pre-treatment of industrial waste water);
- ensuring that urban waste water treatment plants have a strategy for the disposal of sewage sludge;
- ensuring that the financial sustainability of projects is considered at the application approval stage and pertinent information such as proposed tariffs is given due consideration.

As a new and growing development, climate change impacts on waste water treatment should also be given attention, in particular in terms of storm water management.

The consequences of the judgment of the General Court in the Leipzig/Halle case need to be taken into account as well: financing of infrastructure like waste treatment plants falls within the scope of application of the State Aid rules.

4.4. Key implementation principles: recovery and financial sustainability

As a key implementation principle, regional policy supported programmes need to take into account the principle of recovery of the costs of water services, which is mandatory to MS since the end of 2010, and align funding for water projects with an effective implementation of this principle. The economic rationale for support of cohesion policy funding investments should be, in particular, clearly justified. The water utilities or public/private entities or public water agencies that run the water management (through multi-annual concessions) should, in first instance, ensure the financial sustainability of the whole water management system, including investments in maintenance of infrastructure. Therefore the co-financing of schemes linked to tackling leakages and improving water networks should be analysed in this framework: financing should first come through user charges and financing from the water operator. Hence adequate tariffs have to be set up (recovery of costs), taking into account affordability.

Eventually waste water treatment can also be linked with innovative approaches to make the plant more energy efficient or more sustainable, in particular by using the Commission guidance on 'Green Public Procurement for waste water treatment works'¹⁰ or, under very specific local conditions, to address new pollutants (such as pharmaceuticals). Where appropriate (in particular in remote areas, small villages) alternative waste water treatment systems (phytodepuration, lagooning...) should also be further considered: their economic advantages (being less expensive to build and operate as well as requiring less energy or entailing lower maintenance costs) should be carefully assessed.

4.5. Synergies and complementarities related to ERDF and EARDF investments

In a broader perspective and given the horizontal nature of 'water', synergies and spill-over aspects linked to water have to be considered and factored in the decision making process (mainstreaming). The design and selection of priorities and measures on water within TO6 should be linked with the possible priorities and measures in other OP's and TO's, especially TO 5 on adaptation to climate change (which is also a water issue) but also TO 1 and 3. The relevant territorial cooperation (European Territorial Cooperation (ETC)) programmes should be considered in order to deal with trans-boundary spill over effects as regards water management.

⁸ Directive 91/271/EEC

⁹ <http://eca.europa.eu/portal/pls/portal/docs/1/8038856.PDF>

¹⁰ http://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/green_public_procurement.pdf

and also http://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/green_public_procurement_tech.pdf

Further, as agriculture is one of the main water users, synergies with the European Agriculture Fund for Rural Development (EAFRD) are crucially important to avoid overlaps in the scope of support or grey areas of 'no-support' as set out in the Common Strategic Framework (section 3.2). For the same reasons, actions financed under this Investment Priority should ensure complementarity and coordination with the EU's LIFE¹¹ programme as well.

5. LESSONS FROM THE PAST AND RESULT ORIENTATION

Under this investment priority, result orientation requires determining the specific objectives in relation to the intended change in the state of environment in the water sector in the region. These should correspond to the objectives laid down in the corresponding River Basin Management Plan(s). Therefore result indicators should correspond to the state for water, focused on a set of appropriate set of water bodies. The key here is to find a result indicator that reflects the change in the quality of environment and is also responsive to the actions supported under the investment priority.

Examples:

- Number of coastal surface water bodies in good global (chemical and ecological) status in the concerned region;
- Number of bathing water at "excellent quality" levels;
- % of surface and groundwater bodies in good chemical status in the concerned region.

5.1. *When the impact on the environment is not directly observable*

In some cases, the improvement of the state of the environment resulting from supported operations by the OP will not be directly measurable and finding result indicators that are responsive enough to the actions might be challenging. In these cases, the specific objective and the corresponding result indicator should reflect an intermediate step of how the outputs of the OP/priority will eventually contribute to the achievement of environmental objectives, including increased water efficiency.

Examples:

- Leakage rate in the drinking water distribution network;
- Population living in settlements where the collection of waste water and/or at least secondary treatment of waste water are fully ensured;
- Number of agglomerations under 2000 population equivalent with collection system and appropriate treatment ("appropriate treatment" as defined by Directive 91/271/EEC).

At the same time, identifying the reasons why operations supported by the OP would fail to bring significant and observable improvements in the state of water bodies is important. This also has to be accompanied by a brief description of the other factors influencing the success of the supported actions.

- If the starting quality of the water bodies are good enough that no further significant improvement can be made, programmers are invited to review the planned operations or their focus to ensure good value-for-money investments;
- If there are other significant sources of pollution that prevent improving water quality status, the OP should briefly list them and the policy actions (not co-financed by the OP) to address them;
- If the water bodies need more time to regenerate and reach a better status after the pollutions stopped, the OP should indicate the expected time and a brief description of further preventive/regenerative actions;

¹¹ <http://ec.europa.eu/environment/life/>

5.2. Integration with regional development

Special attention has to be paid to develop an integrated approach for investments in environment infrastructure. Experience from previous programmes shows that improvement in the state of environment (i.e. water bodies in this case) in itself will not trigger direct socio-economic development. The OP should include a description of:

- How the improvements in the state of the environment or the increased level of compliance with relevant provisions of the EU acquis can contribute to social or economic development (e.g. social welfare and health issues like drinking water and sanitation);
- What actions will be taken to realise these potential developments, especially those that receive Community funding from other sources;
- What actions will accompany the operations supported by the OP/priority, especially those that receive Community funding from other sources;
- What mechanisms will ensure coordination between the operations supported by the OP/priority and the accompanying actions?

5.3. Integration with agriculture and fisheries

Agricultural and fishing activities are hugely connected to the availability and/or quality of water. They are not only using water bodies but are also represent potential sources of pollution. Relationships between actions supported by this OP/priority, EARDF and EMFF should also be described (see Sections 4.1 and 4.2 of the Common Strategic Framework).

5.4. Some horizontal issues, based on the evaluation evidence

Horizontal issues	Evaluations find...	Questions to ask
Demand analysis	Demand analysis is often too optimistic, which results in oversized investments. The optimism bias may relate to demographics, willingness to pay for the improved service, or not taking into account changes in consumer behaviour.	How demographics / migration patterns in the region are expected to develop? Is there any study on affordability, willingness to pay or price sensitivity for the environmental services? What is the water consumption level (disaggregated in industry, urban and agriculture) in the region compared to other regions? Is it following an increasing or decreasing trend? Is the trend expected to continue?
Selection of result indicators and setting of targets	In most cases the environmental impact of a single project cannot be measured, therefore result indicators for specific objectives are different from project level indicators.	Does the specific objective reflect what intended changes in the water sector will take place?
Target setting for	The comparison of indicators and targets used suggests that overly ambitious and	Are the targets realistic given the form of intervention,

output indicators	overly cautious target setting is widespread.	financial input, past performance and targets set for comparable interventions in other programmes? Has the target setting been documented?
Financial Sustainability	In less developed regions the potential to collect revenues to ensure financial sustainability is seriously limited. In some cases the obtainable revenues are not enough to cover even operating costs. The remaining financial needs usually have to be covered by the local or regional authorities that are supervising these facilities.	How the tariffs / user charges will be set? Can affordable tariffs cover operational costs / replacement costs? If not, how the missing amount will be provided? Based on the information provided, can pricing be judged as the right balance between affordability and the polluter / user pays principle?

6. Useful resources

DG Environment resources

- General 'water' webpage:
http://ec.europa.eu/environment/water/index_en.htm
- The Commission's assessment of the 1st River Basin Management Plans (RBMPs) for 2009-2015
http://ec.europa.eu/environment/water/participation/map_mc/map.htm
- Implementation reports of the Urban Waste Water Treatment Directive
http://ec.europa.eu/environment/water/water-urbanwaste/implementation/implementationreports_en.htm
- Water Scarcity & Droughts in the European Union
http://ec.europa.eu/environment/water/quantity/scarcity_en.htm
- Drinking Water
<http://circabc.europa.eu/faces/jsp/extension/wai/navigation/container.jsp>
- European Innovation Partnership (EIP) on water:
<http://ec.europa.eu/environment/water/innovationpartnership/intro.htm>
- Economics in Water Policy: The value of Europe's waters
http://ec.europa.eu/environment/water/water-framework/pdf/water_note5_economics.pdf

European Court of Auditor's:

- Special Report No 3/2009 – The effectiveness of structural measures on waste water treatment for the 1997-99 and 2000-06 programme periods
<http://eca.europa.eu/portal/pls/portal/docs/1/8038856.PDF>
- Special Report No 9/2010 – Is EU structural measures spending on the supply of water for domestic consumption used to best effect?
<http://eca.europa.eu/portal/pls/portal/docs/1/6356724.PDF>

External Documents and Links

- Which Economic Model for a Water-Efficient Europe? Task force work done by the Centre for European Policy Studies (CEPS) in consultation with all main stakeholders:
Final report (11/2012): <http://www.ceps.eu/book/which-economic-model-water-efficient-europe>

Examples of co-funded projects with collection of good practices

- http://www.watercore.eu/documentos/2012/WATER%20CoRe_GoodPracticesHandbook.pdf
- <http://www.wetsus.nl/home/what-is-wetsus> (on research & innovation in the water sector)