



ROYAL NORWEGIAN MINISTRY
OF THE ENVIRONMENT

EFTA Surveillance Authority
Rue Belliard 35, 1040 Brussels Belgium

Your ref
2012/00001

Our ref
200500130-/TSP

Date

31 MAI 2012

Dear Madam/Sir,

Regarding implementation of the Water Framework Directive as regards heavily modified water bodies

The Ministry of the Environment thanks the EFTA Surveillance Authority for the invitation to answer the questions posed in your letter of 22 February 2012 and for the possibility to present any further relevant information with regard to the complaint submitted to the Authority by eight Norwegian Non-Governmental Organizations (NGOs) on 10 March 2011.

The Water Framework Directive (WFD) was incorporated into the Agreement on the European Economic Area (EEA) by Joint Commission Decision No 125/2007 of 28 September 2007. The Directive entered into force in Norway on 1 May 2009. The Directive was transposed into Norwegian legislation through the *Forskrift av 15. Desember 2006 nr. 1446 om rammer for vannforvaltningen* (the Water Regulation).

Due to adaptations when the WFD was incorporated into the EEA Agreement in 2007, the deadlines stated in the Directive for implementing the various obligations, were extended to give the EEA EFTA States the same amount of time to implement the obligations as the EU Members States. Norway, however, chose to follow the same schedule that applies within the EU for approximately 20 % of the Norwegian water bodies, on a voluntary basis. This means that Norway has established river basin management plans (RBMP) for the period 2009-2015 for selected water bodies, although there is no legal obligation to do so yet. The plans were adopted by the Regional Councils who are competent authorities at River Basin District level, and then approved by the Norwegian Government through Royal Decree.

In the letter of 22 February the Authority refers to the responsibilities of the national authority. We would like to point out that the national authority responsible for the

transposition of the WFD into Norwegian law is the Ministry of the Environment, on behalf of the Norwegian Government. Each River Basin District Authority prepares their RBMPs and the Regional Councils are responsible for adopting the RBMPs. The plans must be approved by Royal Decree, thus giving the Norwegian Government the overall responsibility for the plans.

The first part of this letter responds to part one in the Authority's letter regarding the WFD and Heavily Modified Water Bodies (HMWB). The second part of this letter responds to the questions posed in part two in the Authority's letter regarding the national legal basis and the WFD.

Part One

As regards the process for designation of HMWB and the definition of "good ecological potential", the Ministry is aware of the procedure developed by the Common Implementation Strategy (CIS) working group 2A, as Norway participated in this group. This procedure is commonly referred to as "the reference based method".

However, the Ministry would like to point out that the Member States and EEA EFTA States have established an alternative method under the Common Implementation Strategy, the so called "mitigation based method" or the "Prague method". When applying this method, the definition of "good ecological potential" does not depend on the estimated "maximum ecological potential". A workshop and a questionnaire survey with response from virtually all EU and EEA EFTA States in 2009, showed that only a few of the Member States used the reference based method, and only to a sub set of their HMWBs (Workshop report "Information on Designation, Assessment of Ecological Potential, Objective setting and Measures", Common Implementation Strategy Group Workshop, Brussels 12-13 March 2009). Both methods are expected to deliver the same level of ambition for "good ecological potential" and Member States may choose the method most suited to their circumstances (CIS 2006. WFD and Hydromorphological Pressures. Technical Report). In the following, please note that Norway has used the "mitigation based method" to determine environmental objectives, whereas the Authority refers to the "reference based method" throughout its letter.

"Heavily modified water bodies" and "Good ecological potential" are particularly important issues in Norway since virtually all electricity production is generated by hydropower. More than 80 % of Norway's hydropower production derives from regulated reservoirs and such regulation is vital for security of supply from hydropower. This possibility of regulation is an important condition, for the balancing capacity in the years to come. There is an increasing need for balancing the more random production from for instance wind power and small hydro power in the energy system.

Norway is obliged to increase its production of new renewable energy to comply with the Renewable Directive. At the same time, Norway will fulfill its obligations under the WFD and improve the environmental conditions in many watercourses already subject to hydropower development based on assessments of environmental improvements. New hydropower has to be developed in compliance with the requirements of the WFDs Article 4.7.

When the Norwegian Government decided to incorporate the WFD into the EEA Agreement the Government was of the opinion that the necessary instruments to implement Management Plans and Programs of Measures in accordance with the requirements in the Directive were already in place. This is still the Government's opinion, which will be explained and elaborated on in this letter.

Norway has a well established and comprehensive licensing system that considers the various interests in a licensing process including environmental impact assessments. Interested parties are heard and thoroughly involved in the process. Although the licensing system is well established, the emphasis on the various public interests such as environmental concerns has changed over the years. The revision of terms of licences will be one of a set of needed tools for achieving the objectives of the WFD. Norway is in possession of a sufficient legal toolbox to ensure compliance with the WFD requirements. These tools can be used when needed, and they will be considered in connection with the determination of the environmental objectives every six years in line with the Directive. All legal instruments will be thoroughly described in part two of this letter.

As foreseen in the Directive, Norway will every six years when revising the management plans consider the need for updating the environmental objectives and assess the use of relevant instruments to improve the aquatic ecology. "Significant adverse effect" on use will also be considered in this context every six years. At the same time, it will be assessed whether a water body is still in the category HMWB or not.

Norway will determine the environmental objectives in accordance with the procedures described in Article 4 of the Directive. Water bodies in regulated water courses used for hydropower production have not been generally classified as HMWBs, but have and will be, subject to individual assessments. There will also be water bodies that are not categorized as "heavily modified" in regulated river basins and accordingly have the corresponding environmental objective "good ecological status". The environmental objectives ("good ecological potential") for HMWBs will not be limited due to national legislation. As the Authority states in its letter of 22 February, this type of environmental objectives will depend on what is defined as "significant adverse effect".

When the first, voluntary management plans were approved by the Government in 2010, the following statement was adopted: *"The management plans must be comprehensive and ecosystem based. The management plans may suggest a future environmental condition that modifies the minimum environmental water flow. Environmental objectives for regulated watercourses in the 6 year period of the plan shall be based on existing conditions in the licenses. Amendments of the conditions in the licenses will be decided with binding effect by the authorities setting licenses upon revision of said conditions. The 6-year objectives will be reported to the EFTA Surveillance Authority as binding objectives."*

In this first, voluntary planning phase, this statement was meant as a practical guidance on how to determine the environmental objectives in the RBMP. Hydropower energy depends on precipitation which varies greatly throughout the year and from year to year. As a result of large temperature variations throughout the year, energy demand also varies a lot. Norway is therefore dependent on energy production from large reservoirs in mountain areas. Loss of

this type of balancing capacity was in 2010 considered to give "significant adverse effect" in Norway until this could be further examined case by case. The statement in 2010 was limited to cases where measures would compromise the electricity production resulting from the modification of the water body, e.g. environmental flow and reservoir manoeuvring. Other mitigating measures which did not affect the minimum flow or reservoir capacity could be imposed as a basis for defining "good ecological potential".

Environmental objectives for HMWBs will in the next, mandatory planning phase be defined as follows:

- a) In water bodies where environmental measures consisting of changes in water flow are assessed to give "significant adverse effect" on energy production, the following options for setting environmental goals are relevant:
 - a. Environmental objectives based on improvements that can be imposed by using existing or future standard terms and that can be implemented without loss of production. These standard terms will be made part of all licenses through revision of terms in all licenses.
 - b. Environmental objectives based on the current state of the water body, in those cases where it is assessed that all applicable measures already have been taken. The Ministry does not consider this an "unlikely event" as stated in the Authority's letter. This will apply to licenses where a wide range of mitigation measures have already been implemented.
- b) In water bodies where environmental measures consisting of changes in water flow are assessed to give no "significant adverse effect" on energy production, environmental goals will be based on measures which will be imposed through revision of terms or by other means (see part two). The prioritized water courses determined in the national review (screening) will be the starting point (as described in part two, question 2) for deciding in which water courses such improvements are considered to give no "significant adverse effect".
- c) Less stringent environmental objectives will be set for water bodies which are so affected by hydropower that the achievement of good ecological status or good ecological potential are assessed to be infeasible or disproportionately expensive (Art. 4.5).

Part Two

Revision clauses

In the following the Ministry will clarify the legal basis for all the relevant legal instruments, and explain how these tools will provide for the achievement of the environmental objectives in the Water Framework Directive.

Comments to the Authority's introduction to question 1

As a background to the questions posed in the letter of 22 February, the Authority provides its understanding of the Norwegian legal instruments. This description is not accurate and the Ministry would therefore like to provide a precise and comprehensive description of the different clauses contained in the licenses for regulated watercourses.

- 1. The general clause of revision of terms** was included in all licenses for regulated watercourses issued after 1959. This was required by an amendment in 1959 in the Watercourse Regulation Act.
- 2. Test maneuvering programme.** Permanently fixed rules after a preliminary period for testing of different water flows to accommodate environmental concerns.
- 3. Clause in the rules of maneuvering.** In almost every set of rules of maneuvering the following clause is included: "If it turns out that the maneuvering based on these rules leads to significant harmful effects to public interest the Ministry has the power, without compensation to the hydropower producer (...), to make the changes in the maneuvering that are necessary".
- 4. Standard environmental terms.** As far back as 50 years ago, standard environmental conditions have been included in all licenses. These licenses allow the authorities to impose additional conditions such as building sills or fish ladders, measures to prevent erosion, restoration of fish stocks etc.

***Question 1 (Revision clauses):** Norway is invited to indicate whether it is correct that none of the licences issued before 1970 contain such revision clauses, but that all the licenses issued after 1970 contain revision clauses.*

Moreover, the Directorate would need to better understand how these "revision clauses" function.

Firstly, Norway is invited to indicate whether the "revision clauses" are standardised or whether they differ for each licence. If they differ for each license, Norway is invited to provide a brief typology of these clauses.

Secondly, Norway is invited indicate whether all "revision clauses" would allow, for all licences which contain them, the implementation of any mitigation measures mandated by the Programme of measures of a RBMP, and defined on the basis of the scientific and technical process foreseen by the Water Framework Directive set out above.

If not, Norway is invited to indicate which limitations to the implementation of mitigation measures through "revision clauses" would apply (for example, which environmental conditions cannot be changed through the revision clauses, whether any minimum time between revisions applies, etc.); moreover, Norway is also invited to indicate whether any alternative legal mechanisms would allow the implementation

of the mitigation measures in those cases where the "revision clause" would not provide a sufficient legal basis for a change in environmental conditions.

These questions are answered for each type of revision clause (1-4 above).

Type 1) The general clause of revision of terms

All licenses issued in accordance with the Watercourse Regulation Act after 1959 are subject to revision 50 years from the date of the license or at the latest 30 years from the amendment in 1992. For every such license revision is therefore legally possible at the latest within 2022. If the revision is not mandated in the license, it is mandated in the Watercourse Regulation Act. The scope of this instrument is the same whether it is included in the license or required by law. The clause is standardized and new licenses can have their terms revised every 30 years. This type of clause can be used to make changes not only in conditions set for the protection of the environment. This instrument can be used to ensure implementation of any mitigation measures mandated by the Programme of measures as foreseen by the Directive. The system of regular revision is further elaborated below (revision clause imposed by law).

Type 2) Test maneuvering programme

Where there is uncertainty about the effects of the regulation of a watercourse, especially for some of the major regulations, there are rules set for a temporary maneuvering for one or more specific periods (test maneuvering programme). The purpose is to test different rates of flow to provide new knowledge about the effects for the environment. Experience shows that it is difficult to determine which maneuvering rules are best for the environment. These clauses have often been used where appropriate and have been individually set. This instrument is particularly suited to implement measures concerning the maneuvering procedures. The terms of the licence is subsequently updated for the remaining interval before the next revision.

Type 3) Clause in the rules of maneuvering

Such clauses are included in almost every license issued in accordance with the Watercourse Regulation Act. The clause is standardized and can be used to impose changes in the maneuvering at any time. This has in many ways been regarded as a safety valve in the event an amendment is required at an earlier stage than at the time for the regular revision of terms. Authorities may choose to use this instrument if the utility of water for environmental purposes is an argument for doing so. This instrument is applicable for changes in the rules of maneuvering. The clause does not exclusively apply to significant damage and nuisance that was not foreseen at the time of licensing.

Type 4) Standard environmental terms

The standard environmental terms containing additional measures for environmental purposes, has gradually been incorporated into the licenses from 1960. They are based on standardized terms, but contain an open mandate to impose different types and customized improvement measures. These measures may be directed at the conditions of the local, genetically distinct fish population, compensatory measures for recruiting, ensuring that fish can pass physical obstacles etc. Impositions pursuant to these authorizations can be made whenever they are needed. These clauses can implement any mitigation measures mandated by the Water Framework Directive's Programme of measures to mitigate damage resulting from regulation, except changes in the rules of maneuvering.

By using the clause in the rules of maneuvering (type 3) together with standard environmental terms (type 4), all types of relevant measures determined in accordance with the procedures prescribed in the Directive can be implemented.

The Ministry is of the opinion that there are sufficient instruments included in the licenses to make the environmental improvements necessary to meet the requirements of the Directive. In addition, there are other legal instruments in the law and through non-statutory law that may be used to meet the requirements. A description of these instruments is given below.

Comments to the Authority's introduction to question 2

The general revision of terms can legally be initiated for about 340 licenses by 2022. A revision of terms is preceded by a comprehensive procedure, based on new and established scientific knowledge, public participation and estimations of consequences for power production and the environment.

Revision of terms is time consuming and many considerations have to be taken into account. In connection with the first cases (Vinstra and Tesse), several fundamental decisions were made, particularly concerning cultural heritage and economic conditions, topics that are outside the domain of the WFD. The processing time needed in the Vinstra and Tesse cases will therefore not be representative for the future cases. In addition, clear guidelines, the national review (screening) and determination of the environmental objectives will reduce the processing time for the new cases.

A revision cannot alter the lowest and the highest permitted regulated water level, but variations in between this may be changed as a result of revision of conditions. For the environment there is generally more to be gained with restrictions on the maneuvering with respect to certain periods of time of the year and within certain intervals of the regulation width, than by changing the lowest and highest regulated water level. The imposition of such limitations of the maneuvering are, together with minimum flow release, important tools in the revision of terms. When it comes to transfers, this must be considered in each revision. For example, it may be appropriate to re-establish water flow in dried-out rivers and to apply restriction on existing transfers in the stream intakes. Regardless of the revision of terms, it is possible to change any environmental conditions of a license. Revision of terms is not the only way to change the environmental conditions of a license as described in the answers to question 1.

Question 2 (Revision of terms): Norway is invited to explain that screening process, on the basis of which criteria it is being carried out, and how it integrates with the processes and procedures foreseen by the Water Framework Directive. In particular, Norway is invited to explain how the screening process will take into account the notion of good ecological potential, as defined on the basis of the scientific and technical process foreseen by the Water Framework Directive set out above, and how this process will interface with the programmes of measures adopted at river basin level.

Moreover, Norway is invited to explain how it will ensure that the licenses will be reviewable in light of the periodical review of environmental objectives foreseen by the Water Framework Directive.

Finally, Norway is invited to comment on the timing of this process and the ensuing revision process, in light of the deadlines foreseen by the Water Framework Directive, as adapted by the EEA Joint Committee Decision No I 25/2007.

The screening process including criteria and how it integrates with the processes and the procedures foreseen by the Water framework Directive

A framework for a screening process to prioritize upcoming revisions has been established. In this process all water regulation licenses that according to the Watercourse Regulation Act may be revised before 2022 (340 licenses) will be considered.

The purpose of the screening is to:

- Get a comprehensive national overview of rivers where the benefits of potential environmental improvements are expected to exceed the potential negative consequences of lost energy production and in particular lost balancing capacity. It is likely that new conditions/terms will result in reduced energy production in the prioritized river courses.
- Consider the environmental benefits in the context of realistic opportunities for new energy production through upgrading and lenient expansion of existing facilities.
- Provide a national framework to reduce the processing time for individual cases.

Priorities in the screening process will be based on the following criteria:

- The river basin is located in areas of great value for recreational purposes and landscape experience (including criteria in Handbook 25, Directorate of Nature Management).
- The river basin is of great value to fish and fishing activities, or has a great potential. Sub criteria are:
 - National Salmon Rivers
 - Sites with relict salmon
 - River basins with large-sized trout populations
 - Priority sites according to Handbook 15, Directorate of Nature Management
 - River basins with anadromous fish and where there is substantial interest in fishing activities
 - River basins with inland freshwater fish and where there is substantial interest in fishing activities
- River basins which are important for selected habitat types or priority species under the Nature Diversity Act.
- Other threatened or endangered species (Red-Listed) or habitats.
- Endangered habitats (Red-Listed) and habitats according to Handbook 13 and 15, Directorate for Nature Management.
- Reservoirs which have challenges related to erosion problems as a result of the maneuvering regime.

- Where maneuvering of the reservoirs causes rapid and adverse changes in water levels on river stretches of great value to fish and fishing activities downstream of the power station outlet.

The screening process will result in a priority list for water courses or groups of priority river basins where reduced power generation might be acceptable. The priorities must explicitly take into account the security of energy supply, potential environmental benefits, flood safety, the need to maintain production and the possibility of new production through upgrading and moderate expansion. The fact that a river is prioritized in this context is an indication that increase in water flow will be imposed in the following revision process.

Water release or reservoir restrictions will be formally decided by the revision of terms or other legal processes. The screening process will not replace the assessments that must be made when processing an individual case. The fact that a certain river is given priority indicates that it could be appropriate to impose minimum flow release and/or reservoir restrictions. The fact that a river is not on the priority list does not preclude the imposition of measures that will lead to ecological improvements. In general, lack of priority entails that the licensee will be imposed "standard terms of licenses" according to the Watercourse Regulation Act. The screening process shall not delay the already ongoing processing of individual cases.

The screening will be integrated in the water management planning. The regional river basin district authorities (there is 11 of them) will assess potential ecological improvements and which of the regulated watercourses that should be prioritized in the respective river basin district. The final priority will be made by national authorities, and will be useful in the regional river basin districts (see the answer to the sub question below).

How the screening will take into account the notion of "good ecological potential" as defined on the basis of the scientific and technical process foreseen by the Water Framework Directive, and how the screening process will interface with the programmes of measures.

Continued national management of hydropower production is essential since the electricity demand in Norway is almost exclusively met by hydropower. The screening process will primarily be undertaken by national environmental- and energy authorities. The process will provide the authorities with important information about what might be "significant adverse effect" in the various water bodies, and will therefore constitute an important basis for setting environmental objectives in the next planning period. As mentioned in the introduction of this letter, the Norwegian approach to setting environmental objectives for "heavily modified water bodies" is based on the "mitigation based method".

All relevant information on ecological conditions in the first phase management plans and the programmes of measures will be used in the screening process.

Regional programmes of measures and management plans will also be an important basis when changes are made in the terms of a license as a result of a revision or use of other legal instruments.

There are a number of important factors that will be considered in the screening process such as outdoor activities, landscape and user interests. These factors go beyond the objectives (ecological aquatic condition) in the WFD.

How Norway will ensure that the licenses will be reviewable in light of the periodical review of environmental objectives foreseen by the Water Framework Directive.

In the revision of the RBMPs every six years, and in particular the assessment of cost-effective measures, the hydropower licenses will be considered with regard to possible environmental amendments. If a measure is assessed to be cost-effective and/or should be basis for re-defining “good ecological potential” according to the “mitigation based method”, the appropriate legal instruments will be available to implement the measure at any time this is called for.

The timing of the screening process and the ensuing revision process in light of the deadlines foreseen by the Water Framework Directive.

The timing of the screening process (intended to be completed within a year) corresponds very well with the deadlines for determining environmental objectives and preparation of management plan for the next planning phase foreseen in the WFD. The deadlines in the Directive also corresponds very well with the opportunity to start revision of the licensing terms in Norway. Taking into account the WFD Article 4.4, the extension of deadlines for maximum two times six years, and the fact that Norway’s first ordinary attainment of the objectives in accordance with Directive is 2021, Norway will be well within the limits for fulfilling its obligations by 2027 or 2033.

3. Modification of the license under Section 28 of the Water Resources Act

Comments to the Authority’s introduction to question 3

As a background to the questions posed in the letter of 22 February, the Authority provides their understanding of Norwegian legislation. The Ministry has no objections to this description. Based on the preparatory document Ot.prp. nr. 39 (1998-1999), the Authority asks the following questions:

Question 3 (Section 28 of the Water Resources Act): *The Directorate would need to understand whether and in how far this provision could be used in the context of the implementation of the Water Framework Directive.*

Firstly, Norway is invited to indicate whether the fact that a programme of measures of a RBMP mandates the implementation of certain mitigation measures, defined on the basis of the scientific and technical process foreseen by the Water Framework Directive set out above, could constitute a "special circumstance", which would justify recourse to Section 28 of the Water Resources Act.

If a project in a watercourse may cause “significant damage or inconvenience to any public interests”, a license is required. A license is always required if the project is planning to take

out more water than the minimum rate of flow permitted in the Act called "alminnelig lavvannføring". The projects will also be adjusted to be in accordance with what is acceptable for the environment. The licenses include the same standard environmental terms that are included in the licenses for regulated watercourses. The standard terms provide the authorities with an open mandate to impose various mitigation measures. If mitigation measures are still needed in order to achieve the environmental objectives set in the RBMP, this could be a "special circumstance" that would justify the use of Section 28.

Secondly, Norway is invited to indicate which limitations would apply to the implementation of mitigation measures decided in a programme of measures through Section 28 of the Water Resources Act, in particular in light of the reference, in Section 28, to measures dealt with pursuant to the Watercourse Regulation Act. In other words, the Directorate would need to understand in how far Section 28 of the Water Resources Act could serve to implement the mitigation measures foreseen by the Programmes of measures, in cases where the "revision clauses" or the "revision of terms" would not allow a timely and appropriate modification of the environmental terms of a hydropower licence.

This provision applies to small run of the river hydropower installations. Hydropower projects involving watercourse regulation is therefore not comprised by this provision. The provision in Section 28 demands a balancing of interests, including negative impacts for energy production and environmental benefits. There are no restrictions in Section 28 with regard to implementing mitigation measures if there is a need for improvement due to the environmental objectives set in a RBMP. Revision of terms may be considered at any time, and is believed to be an adequate instrument to improve the aquatic environment in line with the Directive.

Question 4 (Section 66 of the Water Resources Act): Norway is invited to explain the scope of that provision and, if relevant, in how far it could allow the implementation of mitigation measures mandated by the Programme of measures of a RBMP.

This provision is necessary as an instrument to summon old unlicensed hydropower installations for licensing. It can be used both on old regulated watercourses and on other old installations which operate legally, but without a license. These modified waterbodies may have been established as license-free because they did not need a license pursuant to the Act prior to the Water Resources Act, or because they were established before these Acts came into force. For these power installations the legal instrument to set terms is section 66 of the Water Resources Act.

According to the preparatory documents to Section 66 of the Act, this provision shall be applied only "in special circumstances". It is stated that it will only be appropriate to impose licensing when there are substantial environmental concerns. This may be the case if a measure can not be imposed due to lack of standard terms and lack of rules of maneuvering, and this will prevent the implementation of mitigation measures mandated by the Programme of measures of a RBMP. Imposing licensing according to Section 66 may be considered at

any time and is believed to be an adequate instrument to improve the aquatic environment in line with the Directive.

Question 5 (General administrative law): Norway is invited to indicate in how far this provision could allow the implementation of mitigation measures mandated by the programme of measures of a RBMP.

Non-statutory right to amend its decision

In the Norwegian administrative law, there is a general access to reversal of a decision. Reversal according to the Public Administration Act Section 35 authorizes an administrative agency to change its own decisions regardless of whether there is a complaint. The purpose of this provision is to give the administration an opportunity to correct legal errors in the decision.

Moreover, the administration has a general non-statutory conversion right, which provides the opportunity to change the terms of a license if legitimate public concerns call for doing so. Conversion in these cases is based on the principles of administrative law that gives the authorities the right to intervene if there are unforeseen circumstances or other weighty reasons for changing the licensing terms.

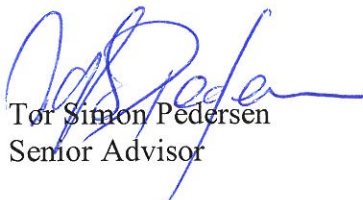
The assessment will depend on a weighing of interests where the amendments that causes inconvenience to anyone affected by the decision must be accorded considerable weight. The administration's non-statutory conversion right will primarily be considered for modification or imposition of certain conditions in a license.

Hopefully this information sufficiently addresses the questions posed by the Authority. The Ministry will of course be happy to provide the Authority with any additional information considered necessary.

Yours sincerely



Lene Lyngby
Director General



Tor Simon Pedersen
Senior Advisor