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Brussels, 22 February 2012  
Case No: 69544  
Event No: 607006



EFTA SURVEILLANCE  
AUTHORITY

Ministry of the Environment  
Myntgaten 2  
N-0030 Oslo  
Norway

Dear Sir/Madam,

**Subject: Questions regarding the implementation of the Water Framework Directive as regards heavily modified water bodies**

As we informed you in previous correspondence, on 10 March 2011, the EFTA Surveillance Authority received a complaint against Norway concerning the implementation of *Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy*<sup>1</sup> (“the Water Framework Directive”) as concerns regulated water courses.

This complaint alleges that Norway has not correctly implemented the Water Framework Directive in that regulated water courses used for hydropower production, which appear to have been generally classified as heavily modified water bodies, will not be subject to the procedures foreseen by Articles 4 and 11 of the Water Framework Directive 2000/60. They would continue to be subject to autonomous national procedures, which do not comply with the requirements of the Directive.

In light of the discussions and meetings held with the Ministry for the Environment and the Ministry for Petroleum and Energy, the Authority’s Internal Market Affairs Directorate (“the Directorate”) has now undertaken a first preliminary examination of the case. However, in order to finalise the assessment, the Directorate would need certain clarifications regarding the applicable Norwegian legislation, as set out below. The present letter also presents the applicable EEA legislation, in order to put the questions into context.

The Norwegian Government is invited to answer the included questions, clear up any misunderstandings and present its observations and any further information it deems relevant to this case.

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<sup>1</sup> Act referred to at point 13ca of Annex XX to the EEA Agreement.

## 1 Water Framework Directive and Heavily Modified Water Bodies

The Water Framework Directive has been incorporated into the EEA Agreement by Joint Committee Decision No 125/2007 of 28 September 2007. It entered into force on 1 May 2009 for Norway and the other EFTA States, which was also the deadline for the transposition of the Directive by those States.

### 1.1 Purpose of the Directive

As set out in its Article 1, the purpose of the Water Framework Directive is to establish a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwater. This framework is to prevent further deterioration and protect and enhance the status of aquatic and terrestrial ecosystems, promote sustainable water use based on a long-term protection of available water resources and aim at enhanced protection and improvement of the aquatic environment. This framework is to contribute to the provision of sufficient supply of good quality surface water and groundwater as needed for sustainable, balanced and equitable water use.

Those objectives are translated into environmental objectives for the various types of water bodies, set out in Article 4 of the Directive. Those objectives must be achieved by the EEA States within a set deadline. In particular, as concerns surface waters, the overall goal for EEA States to achieve “*good ecological and chemical status*” in all bodies of surface water, at the latest fifteen years after the entry into force of the Directive.

However, the Directive provides for an exemption to this general rule for water bodies they designate as “heavily modified water bodies”, in order to allow for the continuation of certain specified uses (such as hydropower production).

The rules on designation of those heavily modified water bodies are set out in the Directive.

### 1.2 Designation of Heavily Modified Water Bodies

As provided for in Articles 2(9) and 4(3) of the Directive, national competent authorities may identify and designate surface waters as heavily modified water bodies (HMWB) if those bodies of surface water are substantially changed in character and cannot, therefore, meet “*good ecological status*” (GES) without “*significant adverse effects*” on their function<sup>2</sup>.

In other words, national competent authorities may classify a given water body as “*heavily modified*” if the mitigation measures which would be necessary to achieve a good ecological status would have significant adverse effect on the use/function of the water body.

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<sup>2</sup> According to Article 4(3)(b) of the Water Framework Directive, the States must also establish that the beneficial objectives served by the modified characteristics of the water body cannot, for reasons of technical feasibility or disproportionate costs, reasonably be achieved by other means, which are a significantly better environmental option.

The designation and the reasons for it must be specifically mentioned in the river basin management plans and reviewed every six years<sup>3</sup>.

The consequence of such a classification is that, instead of having to achieve good ecological status, Articles 2(23) and 4(1)(a)(iii) of the Directive allow States to only aim for “*good ecological potential*” (GEP) of the water body. This target must be achieved at the latest fifteen years from the date of entry into force of the Directive.

The establishment of the good ecological potential of a given water body must be done in accordance with the process foreseen in the Directive.

### 1.3 Establishment of the good ecological potential

The first step is the “*designation*” of the HMWB in accordance with Annex II<sup>4</sup>. This means that the national competent authority must characterise the water body<sup>5</sup> and differentiate it according to type<sup>6</sup>. On the basis of this characterisation, it must then proceed to the establishment of a type-specific reference condition<sup>7</sup>. For HMWB, the reference condition is the “*maximum ecological potential*” (MEP), as defined in table 1.2.5 of Annex V to the Directive<sup>8</sup>.

The maximum ecological potential of a given heavily modified water body is defined on the basis of its biological quality potential, its hydromorphological potential and its physico-chemical potential. The determining element will be the hydromorphological potential, since it is the hydromorphological conditions which are impacted by the physical alterations and which will, primarily, dictate the ecological potential of a HMWB.

As defined in table 1.2.5 of Annex V to the Directive, the maximum hydromorphological potential must be “*consistent with the only impacts on the surface water body being those resulting from the artificial or heavily modified characteristics of the water body once all mitigation measures have been taken to ensure the best approximation to ecological continuum, in particular with respect to migration of fauna and appropriate spawning and breeding grounds.*”<sup>9</sup>

So in order to define the maximum ecological potential for a given heavily modified water body, the national authorities must examine what mitigation measures can be taken in order to ensure the best approximation to ecological continuum<sup>10</sup>. The maximum potential

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<sup>3</sup> Article 4(3) of the Water Framework Directive.

<sup>4</sup> Article 2(9) of the Water Framework Directive

<sup>5</sup> Point 1.1 of Annex II to the Water Framework Directive.

<sup>6</sup> Point 1.1(ii) and (iii) of Annex II to the Water Framework Directive.

<sup>7</sup> Point 1.3(i) of Annex II to the Water Framework Directive.

<sup>8</sup> Point 1.3(ii) of Annex II to the Water Framework Directive.

<sup>9</sup> Point 1.2.5 of Annex V to the Water Framework Directive.

<sup>10</sup> The Directive does not provide for a list of potential mitigation, since those will very much depend on the specific water body. However, some mitigation measures which can be considered for a HMWB used for hydropower production can include: minimum water flow, mitigation for hydropeaking and rules on

of the water body will be the characteristics of the water body once those mitigation measures have been taken.

This does not mean that every conceivable mitigation measure must be retained to define the maximum ecological potential. Indeed, table 1.2.5 of Annex V to the Directive must be read in light of the objectives of the Directive. One of the objectives of the Directive is to avoid significant adverse effects on specified uses while ameliorating the ecological quality of HMWB.

Thus, when defining good ecological potential, national competent authorities do not have to include mitigation measures which would lead to a *significant* adverse effect on the specified use of water. On the other hand, they have to include *all* other mitigation measures, even if they may have an adverse effects on the specified use of water, provided it is not significant.

The national competent authority will then need to establish the biological quality potential and the physico-chemical potential for each heavily modified water body. Together with the hydromorphological potential, these elements will constitute the maximum ecological potential of the water body. This maximum ecological potential shall correspond to the best approximation to a natural aquatic ecosystem that could be achieved given the hydromorphological characteristics that cannot be changed through mitigation measures without significant adverse effects on the specified use or the wider environment<sup>11</sup>.

But it remains a dynamic notion, and, according to the Directive, the values for maximum ecological potential for a water body must be reviewed every six years<sup>12</sup>.

The establishment of the reference condition MEP will then allow the establishment of the “*good ecological potential*”, which is the environmental objective for heavily modified water bodies. It is defined in table 1.2.5 of Annex V and is primarily based on a state where there are slight changes in the values of the relevant biological quality elements as compared to the values found at maximum ecological potential.

The good ecological potential will be the reference point in the implementation of the Directive as regards the HMWB.

#### **1.4 Obligations regarding HMWB**

In particular, the good ecological potential will serve as a reference point for the obligation provided for in Article 4(1)(a) of the Directive, according to which States shall implement the necessary measures to prevent deterioration of the status of all bodies of surface water, and shall protect and enhance all HMWB, with the aim of achieving good

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manoeuvring reservoirs, installation of fish passes/fishways/bypass channels/fish ladders, protection against erosion, restoration of habitats, etc.

<sup>11</sup> See, CIS, Overall approach to the classification of ecological status and ecological potential. Water Framework Directive Common Implementation Strategy Working Group 2 A Ecological Status (ECOSTAT), 2003, Rome, p.15.

<sup>12</sup> Point 1.3(ii) of Annex II to the Directive.

ecological potential and good surface water chemical status at the latest 15 years from the date of entry into force of the Water Framework Directive.

In order to reach that objective, the Directive requires that States establish, for each river basin district, a “*programme of measures*”, which must comply with the requirements of Article 11 of the Directive.

This programme must contain “*measures to promote an efficient and sustainable water use in order to avoid compromising the achievement of the objectives specified in Article 4*”<sup>13</sup>, which includes, for HMWB, reaching GEP. Concerning bodies of water designated as artificial or heavily modified, the programmes of measures must also, in all cases, include “*measures to ensure that the hydromorphological conditions of the bodies of water are consistent with the achievement of the required [...] good ecological potential*”<sup>14</sup>.

This means that the programme of measures will have to include the mitigation measures necessary to reach good ecological potential.

In the unlikely event that:

- all potential mitigation measures would have a significant adverse effects on specified uses, or that
  - good ecological potential would correspond to the current state of a HMWB,
- the national competent authority must still “*implement the necessary measures to prevent the deterioration of the status of all bodies of surface waters*”<sup>15</sup>.

Moreover, the Directive requires that “*where monitoring or other data indicate that the objectives set under Article 4 for the body of water are unlikely to be achieved, the Member State shall ensure that relevant permits and authorisations are examined and reviewed as appropriate*”<sup>16</sup>.

This means that, whenever necessary or at least every 6 years, the national competent authorities must be in a position to review relevant permits and authorisations in order to ensure that the objectives of Article 4 of the Directive are achieved. This provision unambiguously establishes that processes under the Water Framework Directive must take precedence over any national licensing scheme.

Finally, it may be mentioned that the programmes of measures must be reviewed every six years and any new measures be made operational three years after that<sup>17</sup>.

The rules and processes described above are those that the EFTA States had to transpose into their internal legal order by 1 May 2009.

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<sup>13</sup> Article 11(3)(c) of the Directive.

<sup>14</sup> Article 11(3)(i) of the Directive.

<sup>15</sup> Article 4(1)(i) of the Directive.

<sup>16</sup> Article 11(5) of the Directive.

<sup>17</sup> Article 11(7) of the Directive.

## 2 The Norwegian measures

**2.1** In its notification of the national measures implementing the Water Framework Directive (“Form 1”) of 23 April 2009<sup>18</sup>, Norway indicated that the Directive had been transposed through the *Forskrift av 15. desember 2006 nr. 1446 om rammer for vannforvaltningen* (“the Water Regulation”), which entered into force on 1 January 2007.

This Regulation appears to provide for the designation of HMWB, their characterisation, the differentiation according to type and the establishment of a type-specific reference condition based on the rules set out in the Water Framework Directive, which will allow, in turn, the establishment of the GEP. The Water Regulation appears to require, in line with the Directive, that the status of HMWB be protected against deterioration and be improved in order for those water bodies to have at least good ecological potential and good chemical status, in accordance with the classification in Annex 5 to the Water Regulation<sup>19</sup>, which transposes Annex V to the Directive. This objective will be achieved through programmes of measures, to be drawn up by 2015 for the various river basins, with the measures made operational within three years after that.

Norway has thus set up a regulatory framework which appears to correctly transpose the Directive.

**2.2** However, in parallel to those rules, certain Heavily Modified Water Bodies, namely those used for hydropower production, remain subject to a pre-existing legal framework.

Indeed, the licences to build, own and operate a hydropower installation, which include the environmental conditions to which such power plants are subjected, remain regulated by four Acts:

- Act of 14 December 1917 No 16 relating to acquisition of waterfalls, mines and other real property etc. (the Industrial Licensing Act)<sup>20</sup>;
- Act of 14 December 1917 No 17 relating to regulations of watercourses (the Watercourse Regulation Act);
- Act of 24 November 2000 No 82 relating to river systems and groundwater (Water Resources Act);
- Act of 29 June 1990 No 50 relating to the generation, conversion, transmission, trading, distribution and use of energy etc. (the Energy Act).

On the basis of those acts, the national competent authorities set out the various conditions under which hydropower plants must operate. More specifically, it is the understanding of the Directorate that environmental conditions are set exclusively on the basis of the Watercourse Regulation Act and the Water Resources Act.

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<sup>18</sup> Event no 516263, Ref. Nr. 200500130-/JLB

<sup>19</sup> Section 5 of the Water Regulation.

<sup>20</sup> *Lov 14. desember 1917 nr. 16 om erverv av vannfall, bergverk og annen fast eiendom m.v. (Industriksesjonsloven).*

These include requirements related to minimum water flows, restrictions on the manoeuvring of reservoirs, maximum and minimum water levels in reservoirs, water temperature and water quality, biological status of the river and of the habitats along the river, requirements for fish ladders to increase ecological connectivity, measures to prevent erosion, restoration of fish stocks and other measures to restore habitats.

Those conditions constitute crucial parameters for the biological, hydromorphological, and physico-chemical status of the water bodies which are harnessed by the licensed hydropower installations. As a result, the status of water bodies used for hydropower production can only be ameliorated, if necessary in order to reach GEP, through the amendment of the conditions set out on the basis of the above-mentioned acts.

It is the understanding of the Directorate that there are five instruments<sup>21</sup> which can be envisaged to revise those environmental conditions.

1. The first instrument is the revision on the basis of the revision clauses built into the licenses.

This includes the revision through “standard terms of licences”. Licences issued after 1970 contain a provision which allows for a revision of certain conditions after a certain time. For example, it can foresee the revision of the minimum water flow after ten years. Others apparently contain a more general revision clause.

Some licences also contain, in the rules on reservoir manoeuvring, a provision allowing the licensing authority to make the necessary changes if the manoeuvring of the reservoir causes serious harmful effects which were not foreseen when the licence was issued.

***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.*

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<sup>21</sup> The instruments set out below are, in large part, based on the information included in the draft guidelines for the revision of licenses, prepared by NVE: *Retningslinjer for revisjon av konsesjonsvilkår for vannkraftverk - til bruk for hovedaktørene i en revisjonsprosess (kravstillere, konsesjonærer og NVE)*, 28 August 2010, p.13. Available online at: <http://skjema.nve.no/NVE-saksdokument/200702230-56-647416.pdf>

*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.*

2. The second instrument is the so-called “revision of terms”.

According to Section 10(3) of the Watercourse Regulation Act and Section 5a of the Industrial Licensing Act, the conditions of the licences awarded pursuant to those two acts may be revised after 30 years. For licenses granted prior to 1 January 1993, the conditions of the licences awarded pursuant to those two acts may only be revised after 50 years<sup>22</sup>, and thereafter every 30 years. The revision may be triggered at the request of the municipality, the licensee or by NVE. For time-limited licences granted prior to 1959, no possibility of revision is foreseen prior to the expiration of the licence. Finally, unlicensed hydropower installations cannot be subjected to a revision.

It is the understanding of the Directorate that the revision of terms is a very complex and time consuming process. Until now, only two revision processes have been concluded. The first one concerned the four licences linked to the *Vinstra* river. It took 12 years to complete (1996-2008). The other one concerned *Tesse* and took 20 years to complete (1991-2011). Thirty revisions are currently ongoing, out of 360 licences which are up for revision until 2022, some of them since 1998 (*Årdal* watercourse and *Selbu* lake).

Moreover, some of the conditions of the licence cannot be amended. In particular, a revision under Section 10(3) of the Watercourse Regulation Act and Section 5a of the Industrial Licensing Act cannot affect the lowest and highest regulated water level in the reservoirs as well as the transfer from one river to another river, which are considered to constitute the core of a licence.

It is the understanding of the Directorate that the revision of terms is the only avenue to change the environmental conditions applicable to licenses issued prior to 1970, at least as concerns conditions affecting power production.

According to the Directorate’s information, the Norwegian administration is currently carrying out a screening exercise, in order to determine which licences should be prioritised in the revision process.

***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

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<sup>22</sup> Lov 19. juni 1992 nr. 62 om endringer i vassdragsreguleringsloven m.fl.



*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 125/2007.*

3. The second instrument is the modification of the licence under Section 28 of the Water Resources Act.

This provision allows the competent authorities, “*in special cases*”, to rescind or amend terms and conditions or set new terms and conditions in hydropower licenses, in the public or private interests.

On the basis of the preparatory works<sup>23</sup>, the Directorate understands that the “*special circumstances*” which allow recourse to this provision are exceptional circumstances which, for example, result from an improvement of the knowledge base or from the realisation that the situation was originally misjudged because of the state of knowledge at the time the licence was issued; however, changes in values and social beliefs cannot justify recourse to Section 28 of the Water Resources Act.

Moreover, Section 28 of the Water Resources Act provides that it cannot apply to measures dealt with pursuant to the Watercourse Regulation Act.

***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.*

*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*

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<sup>23</sup> Cf. Ot.prp.nr.39 (1998-1999), p.345.

*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.*

4. Fourthly, Section 66 of the Water Resources Act appears to allow the setting of minimum water flow requirements in certain older hydropower installations.

***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.

5. Finally, there is a non-statutory right for the administration to amend its decisions based on the general principles of Norwegian administrative law.

It would seem that this right can be used whenever the administration lacks a legal basis to enact changes in a decision it had previously adopted but the situation calls for intervention because of a compelling public interests.

***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.

The Norwegian Government is invited to answer the included questions, clear up any misunderstandings and present its observations and any further information it deems relevant to this case, so that it reaches the Authority by 1 April 2012.



Olafur Johannes Einarsson

Director

Internal Market Affairs Directorate