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the Third Follow up Report to the Communication on Water Scarcity and Droughts in the European Union COM (2007) 414 final

COM(2011) 133

Follow up of the work of the Member States with respect to the implementation of the measures in the Communication on water scarcity and droughts

1. INTRODUCTION

As announced in the first follow-up report to the Communication[1] the Commission assesses on an annual basis the progress towards implementation of the set policy options at both EU and national levels. The first report was accompanied by a work programme that was also to be monitored regularly. The annex to the third follow-up report presents the progress made by Member States based on the reports they have submitted to the Commission[2] during the last reporting period (May 2009 to May 2010). The sections below follow the structure of the work programme.

2. INTRODUCTION: /WATER SCARCITY AND DROUGHT IN THE RECENT PAST

Over the last reporting period, several Member States reported that they faced mild or relatively strong droughts (ES, FR, PT, HU, UK) and water scarcity situations (ES, FR, RO, SE and NL) although these were sometimes limited to local areas and sometimes had a short duration.

In several countries restrictions were applied in order to limit various water uses (FR), irrigation (ES, RO, SE, CY, HU) and shipping (NL). Others reported that had not taken any measures to mitigate the impact, since the duration of the event was limited (PT) or continued the mitigation actions that had started the year before (IT).

In countries continuously faced with water scarcity (CZ, CY, MT), water conservation measures are a national priority and restrictions (e.g. in irrigation or household uses) were applied in the affected sectors during the past year.

Mediterranean countries were not the only ones affected, as water scarcity situations were also reported in central Europe (CZ, HU) and in the context of over-exploited aquifers in more northern parts of Europe (BE).

3. PUTTING THE RIGHT PRICE TAG ON WATER

In most of Member States **water tariffs** have been applied in order to ensure the cost recovery of water services. Such tariffs are already in place (AT, BG, BE, EE, ES, NL, SE, UK) or their introduction is ongoing (CY, CZ, IE, RO, SK). Prices are established taking into consideration volumetric consumption (AT, HU, LU, MT, RO for domestic users, IE for non-domestic users, ES for irrigation uses) and environmental costs (BG, BE, EE, RO, SK). In CH, it was reported that water is not priced, only the service related to its supply.

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1 COM(2008) 875 final, 19.12.2008

2 21 countries (AT, BE, BG, CH, CY, CZ, DK, EE, ES, FR, HU, IE, IT, LU, MT, NL, PT, RO, SE, SK and UK) replied to the questionnaire for the annual report (sent to the 27 Member State and Norway and Switzerland). The list of MS in brackets within the text of the annex are examples and not an exhaustive list.

In some countries groundwater taxes have been updated according to the quantitative status of the groundwater bodies (BE). These taxes are higher for groundwater bodies in a poor quantitative status, and will increase in the coming years.

In the same context, regarding the regulation of water taxes, PT promotes a water resource levy with different components. One of the components depends not only on the volume of abstracted water but also on the scarcity coefficient associated with the river in question. This will be applied from 2010 on and is collected by the recently created River Basin Authorities.

IT reported a local incentive for the use of storm-water for toilet flushing and washing clothes. Citizens don't have to pay tax for wastewater derived from reusing storm-water instead of drinking water for toilet flushing or washing clothes.

Regarding the efforts to improve the spread of **metering programmes** in the water sector, in some Member States practices and measures have been recently included in water management acts (BE, BG, ES, HU, IR, MT) or water resource management plans (UK) or the introduction of new measures is ongoing (CY). PT reported that no significant progress has been made since last year. In CH the introduction of metering (only for drinking water) is the responsibility of the water supply companies.

Control of surface water (BG, EE, IT, NL) and groundwater (BE, BG, IT, LU) abstractions is reported to be enforced in many countries. Regulatory measures have been included in the programme of measures of RMBPs (BG, CY, IT, RO) and specific acts (IE, SK), although in some local areas these are not fully implemented (CY).

4. ALLOCATING WATER AND WATER-RELATED FUNDING MORE EFFICIENTLY

4.1. Improving land-use planning

Attempts have been made to **integrate** water scarcity and droughts into sectoral policies. The issue of sustainable water use was addressed in many Member States (AT, BG, BE, CY, CZ, ES, FR, HU, IT, MT, RO, SK, NL, LU, PT, RO). Most of Member States integrate water scarcity and drought issues into RBMPs (BE, CY, ES, HU, IT, MT, RO, SK, NL) and specific national programmes (BG, LU, UK, PT) concerning several sectors such as industry, agriculture (LU, RO) and households. Consultation with sectors was carried out, e.g. for the implementation of water audits [3](BE).

PT issued a national programme with a specific focus on water efficiency and minimizing water scarcity risks with measures destined for urban, industry and agricultural sectors. Two MS reported that integration of water scarcity and drought into sectoral policies is an issue to be implemented in the future (AT, CZ). CH has several programmes preparing the integration of WS&D into sectoral policies. EE and IE reported not having taken any measures regarding this issue, as there have been no drought occurrences or water scarcity situations in the country.

[3] A water audit is a key tool to assess the breakdown of water losses and to develop a program for water losses reduction.

As far as **Strategic Environmental Assessment (SEA)** is concerned, the procedure was reported as having already been implemented in most Member States. In most MSs the SEA is applied at national level (AT, CY, CZ, EE, ES, HU, IE, IT, MT, PT, NL) and several MS reported that RBMPs were subject to SEA (AT, CY, HU, IT, MT, PT). The SEA was also applied to new water infrastructures (UK), hydroelectric dams (PT) and desalination plants (CY). One Member State reported that the incorporation of the SEA into legislation is ongoing (RO). In other Member States the strengthening of SEA implementation has not taken place yet (BE, BG, LU, SK, SW).

Regarding **biofuel** development and its potential impact on water availability, three Member States reported that this was not an issue (PT, RO, EE), seven Member States have not investigated potential interlinkages (BE, BG, CZ, HU, LU, MT, SE) and two Member States considered no key developments since last year's report (UK, AT). IT reported that it has identified an impact, which needs to be taken into account in planning water resources management and ES adopted technical guidance on net water allocations for crop groups in each river basin district, which includes water intake estimations for biomass. Further research and assessment on the issue is ongoing in CY and FR.

Regarding **water abstractions**, the authorization procedure is a widespread practice among Member States. When abstracting over a specified water volume, water users have to apply for a permit in order to be allowed to withdraw water (AT, BE, CZ, ES, FR, IT, LU, PT, RO, SE, UK, NL, EE). Water authorities are responsible for carrying out the compliance check of water using facilities in most cases. Restrictions on water use can also have a preventive effect (AT): in case of obvious loss of water from irrigation, the quantity of water permitted for use is reduced by the water authority.

In some Member States (MT, IE), within the framework of new Water Framework Directive (WFD) compliant legislation that includes a modernised system of registration, prior authorization requests and tackling unauthorized abstractions are being considered. Several countries adopted prosecution procedures addressing illegal abstractions (PT, AT, RO), others reported that a strategy to enhance controls is still needed (BE).

Strategies to address the **impacts** of **climate change** were reported either as having already been included in RBMPs (AT, BG, ES, IT, UK) and specific national programmes (SK, PT) or are having been planned to be part of national strategy in future programmes (CZ, BE, FR, IE, NL, RO). CH reported that it will address these issues in a National Adaptation Strategy which will be finalized by 2011. Measures to cope with climate change include alternative water supply options such as wastewater re-use and desalination (CY, FR, HU, IT, PT). In some countries water re-use aims at generating water to cover agricultural and industrial demand (IT, CY) as well as groundwater recharge (CY).

4.2. Financing water efficiency

In general, national budgets (BG, EE, ES, FR, LU, MT, PT, SK), EU funds (CY, CZ, HU, MT, SK) and private funds (IT, PT) were used to implement water cycle integration, domestic rainwater management, agricultural sector development, control of water losses, protection of surface and ground water bodies, water supply network and sanitation.

Fiscal incentives with the aim of encouraging the use of water-saving devices will be introduced in some Member States in the near future (CZ, EE, MT, UK). Examples of

possible incentives are the reduction of water tariffs for companies introducing water savings devices and practices (BG, ES), and the use of eco-cheques for buying water saving devices (BE). Subsidies for collecting rain water (in households) were reported as being granted in BE and FR, and in CY the installation of greywater treatment and re-use systems in houses, public buildings, playgrounds, army camps were financed from a national fund for water resources.

5. IMPROVING DROUGHT RISK MANAGEMENT

5.1. Developing drought risk management plans

At the European level, as well as in CH, restrictions on water use were reported as having been applied to preserve aquatic life and the ecological status of water bodies (AT, CY, CZ, ES, FR, HU, IT, NL, PT, RO, SK, SE, UK). In CY an index of pressures on river ecosystems is calculated in order to monitor the effects of droughts on the environment. Only few Member States reported that the minimum water flow and groundwater level conservation have not been taken into account yet (EE, IE, LU, MT) or are planned but not implemented yet (BE, BG).

With respect to specific drought management plans, several Member States reported not to have separate plans. These are in most cases considered as part of RBMPs or regional plans (AT, BE, HU, NL, RO, SK), emergency management (LU) or specific early warning systems (PT). Three Member States reported that their drafting process for these plans is ongoing (MT, CZ, CY), and in others the need for such a plan is under discussion (EE), or they have regional plans (IT) or do not have such a plan at all (IE, SE, BG). FR, ES and UK are the only Member States who reported that separate drought management plans are already in place.

5.2. Developing an observatory and an early warning system on droughts

Concerning the identification of **areas of water scarcity and drought** over the country, almost all Member States reported that the assessment has been carried out (AT, BE, BG, CY, CZ, EE, ES, FR, UK, NL, IT, RO, SK) or is ongoing (PT). As a result of this assessment, some Member States reported that there are no permanent or quasi permanent water scarcity situations in the country (AT, EE, IE, and NL). CY and MT identified the whole country as an area at risk from water scarcity. In RO a high percentage (40%) of all river basins are affected by water scarcity, while UK and BG identified only local areas being at risk.

Legislative and other measures to tackle poor status of water bodies and to restore sustainable balance in water basins are included in land use planning and restoration programmes (such as adaptation of current permitting system, groundwater taxes, implementation of water audits, incentivizing rational water use, regulating water intakes, or, like in CY, the development of a national drought observatory and a drought index system as well as establishing minimum ecological flow establishment, incentives to reduce irrigation water use, identification of non-authorised abstractions and threshold values of permitted water abstractions). CH reported that the political will to introduce legal measures for the appropriate distribution of water is now in place.

5.3. Further optimising the use of the EU Solidarity Fund

There have been no changes in the applications for aid from the EU Solidarity Fund for drought impacts under the current regulation. The difficulty in applying for funding lies in the 10 week deadline for presenting the application following the first damage and the limitation of eligible operations. The other issues it that in the agricultural sector droughts cause mostly damage to private property and, as private damage is not covered by the fund, the EUSF may not compensate the damage. A Communication on the future of the EU Solidarity Fund is expected to come out in the first half of 2011. It will also address the issue of slowly unfolding disasters.

6. CONSIDERING ADDITIONAL WATER SUPPLY INFRASTRUCTURES

The planning and construction of new water supply networks or reservoirs were considered in several Member States (BG, CZ, EE, IE, MT, RO, SE, SK). In ES four new desalination plants have been built. In CY an additional mobile desalination plant has been completed and two additional permanent desalination plants are in construction or planning phase, in addition to the construction of an off-stream dam. The UK opened a desalination plant in June 2010 and FR will assess the need of new infrastructures requested by some economic actors. PT reported only the planned construction of hydroelectric dams. All these infrastructure developments were reported to have undergone a SEA or/and are regulated by national environmental legislation.

7. FOSTERING WATER-EFFICIENT TECHNOLOGIES AND PRACTICES

Many Member States reported not having introduced legislation in terms of **water efficiency in buildings** (BE, ES, HU, LU, PT, RO, SE) and/or water using devices (BE, EE, ES, HU, LU, MT, PT, RO, SE, NL).

CY reported having introduced general measures on buildings' water performance included in the RBMPs, and FR reported to have adopted of new national measures. In other cases national legislation exists (IE, NL, CZ and SK) and adopted standards are mostly EU ones.

Measures regarding water saving devices were reported to be in place in several Member States (BG, IE, SK, CY) and to have been included in RBMPs.

UK introduced new water efficiency targets on water companies and a new building performance standard of 125 litres per person per day for new homes. A detailed calculator provides the means to estimate consumption based on the efficiency of water fittings and average assumptions of duration and frequency of use.

As far as reduction of **leakages** is concerned significant steps ahead have been taken. AT reported that a low level of leakages is ensured by periodical maintenance works, and that the guideline for detection, quantification, and reduction measures for leakages in drinking water supply systems was updated. FR introduced new legislation promoting action plans and multi-annual work programmes to improve the network where leakages exceed a fixed percentage. Other Member States (BG, CY, ES, IE, IT, PT, RO, SK, UK) have integrated measures to restore water networks in RBMPs and National Programmes. In one MS water supply companies are directly responsible for monitoring, improving and restoring obsolete

infrastructure (CZ). In some Member States, network renewals are ongoing (BE, SE, MT) while in others the planning has not started yet (CZ, EE, HU, LU). NL stated that the leakage in the water supply network for drinking water is low (<5%) thus no measures to reduce leakages are necessary.

Most of Member States did not initiate **voluntary agreements** in terms of efficient use of water (AT, BE, BG, CY, CZ, EE, HU, IE, MT, RO, SE, NL). However, many Member States reported that they consider such initiatives useful (CZ, EE, FR, IT, PT, RO, RO, NL, UK). IT reported the implementation of regional measures to restore a sustainable balance and LU reported that it had concluded voluntary agreements with agricultural sector.

Regarding **water markets**, the vast majority of Member States stated that they have not envisaged setting up such markets. During episodes of water scarcity, Member States focused on restrictions on water use rather than on sharing the resource. In ES a decree allows dealers or owners of a water right to temporarily transfer it to another dealer or holder of such a right. UK reported that will consider the creation of water markets for England and Wales.

8. FOSTERING THE EMERGENCE OF A WATER-SAVING CULTURE IN EUROPE

Educational programmes and awareness-raising campaigns were reported to have been initiated across the EU. These covered online information about current status of water bodies and water resources (AT, BG, RO, CZ, EE, IT), special communication platforms addressed mostly to young citizens (AT, CY, CZ, ES, IT), educational programmes focused on schools at various levels (primary and high school, university) (CY, LU, SK, UK, NL) as well as other dissemination tools such as press, “blue phones”, columns, water audits, reports, projects, consultation campaigns or initiatives by NGOs.

9. IMPROVING KNOWLEDGE AND DATA COLLECTION

9.1. Water scarcity and drought information system throughout Europe.

The majority of Member States reported that they have not performed forecasts of water scarcity and drought events for the following year. However, indirect previsions have been performed on the basis of monitored precipitation events, which can lead to an estimation of the current water storage and availability.

Many Member States reported that they are not expecting significant water scarcity situations or drought occurrences until next autumn (AT, EE, FR, IE, IT, NL, PT, UK, RO), while other Member States are aware that a water scarcity problem is possible occurrence during the 2010-2011 period (ES, SK) although, as SE as well as CH reported, this might only be limited to small areas. This information reported by the MS should be seen in relation to the 2010 State of the Environment report from the EEA[4] which states, that "*Except in some northern and sparsely-populated countries that possess abundant resources, water scarcity occurs in many areas of Europe, particularly in the south, confronted with a crucial combination of a severe lack of and high demand for water".*

[4] http://www.eea.europa.eu/soer/europe/water-resources-quantity-and-flows

A drought early warning system aiming to improve preparedness and response to drought situations has been created in PT, and IT reported the elaboration of a regional model for forecasting. FR is setting up a national database of all water abstractions.

9.2. Research and technological development opportunities

Research on best practices and programmes for sustainable water management are ongoing in many Member States (BE, BG, CY, CZ, ES, HU, IT, LU, MT, NL, RO). Most Member States are enhancing this research through research on adaptation strategies to climate change (BE, AT; CZ, UK). CH has several activities and programmes for enhancing research (NFP61, CCHydro and Water Supply 2025). The participation in EU financed projects (i.e. INTERREG, FPs) is one of the tools to enhance these activities.