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REPORT FROM THE COMMISSION TO THE COUNCIL AND THE EUROPEAN PARLIAMENT

on the implementation of Council Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources based on Member State reports for the period 2008–2011

{SWD(2013) 405 final}

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1. INTRODUCTION

Council Directive 91/676/EEC (the Nitrates Directive) aims to reduce water pollution caused by nitrates from agricultural sources and to prevent such pollution through a number of steps to be fulfilled by Member States:

- water monitoring of all water body types (with regard to nitrate concentration and trophic status);
- identification of waters that are polluted or at risk of pollution, on the basis of criteria defined in Annex I to the Directive;
- designation of nitrate vulnerable zones, which are areas that drain into identified waters and contribute to pollution;
- the establishment of codes of good agricultural practices, implemented on a voluntary basis throughout the Member State territory;
- the establishment of action programmes, which include a set of measures to prevent and reduce water pollution by nitrates and are implemented on an obligatory basis within designated nitrates vulnerable zones or throughout the entire territory;
- the review and possible revision at least every 4 years of the designation of nitrate vulnerable zones and of action programmes; and
- the submission to the Commission every four years of a progress report on the implementation of the Directive.

Reports submitted by the Member States under Article 10 of the Nitrates Directive should in particular contain information pertaining to codes of good agricultural practice, designated nitrate vulnerable zones, results of water monitoring, and a summary of the relevant aspects of action programmes drawn up for nitrate vulnerable zones.

Based on these reports, this report fulfils the Commission's obligations under Article 11. It is mainly based on the information submitted by the Member States referring to the period 2008–2011 and is accompanied by a Staff Working Document **(**SEC(2013)xxx**),** which includes maps and tables on indicators of nutrient pressures from agricultural sources, water quality and designated nitrate vulnerable zones, both at EU level and per each Member State.

This is the second time that all 27 Member States have submitted a report. A comparison with the previous reporting period is now possible for all Member States. Reports were submitted in 2012, with additional information submitted in early 2013.

2. EVOLUTION OF PRESSURES FROM AGRICULTURE

Livestock population

Livestock population is one of the main agricultural pressures on the environment. Large numbers concentrated locally or regionally pose high risks to the environment as manure production is out of balance with land availability and crop needs. This imbalance creates a surplus of nutrients, much of which is sooner or later lost to water (nitrates and phosphates) and air (ammonia and nitrogen oxides), if not exported out of the region.

Because not all Member States have submitted comprehensive data on the number of livestock[1], official statistics from Eurostat are presented below.

As regards cattle[2], the comparison between the reporting periods 2004–2007 and 2008–2011 shows a slight decrease in EU-27 (-2%)[3]. Largest relative decreases occurred in Romania (-20%), Malta (-17%), Bulgaria (-13%), and Slovakia (-9%), while an increase was observed especially in the Netherlands (+6%), Poland (+4%) and France (+4%).

In EU-27, dairy cattle numbers decreased by 5% between 2004–2007 and 2008–2011[4]. The biggest relative decreases were in Romania (-18%), Slovakia (-15%), Spain (-14%), Bulgaria and Portugal (-13%), Estonia, Malta and Greece (-12%), Hungary and Lithuania (-11%), while the population increased in Luxembourg (+8%), the Netherlands (+4%) and Denmark (+3%).

Pig numbers decreased by 5% in EU-27 between the reporting periods 2004–2007 and 2008–2011[5]. The largest relative decreases were in Slovakia (-36%), Czech Republic (-33%), Slovenia (-28%), Bulgaria (-26%), Poland (-22%), Hungary (-19%), Malta (-18%), Lithuania (-16%), and Romania (-14%). The population increased in Greece (+10%), the Netherlands (+7%), Luxembourg (+6%), and Estonia (+3%).

For poultry, Eurostat data are only available for years 2003, 2005, 2007, and 2010[6] and show no change on average in EU-27, despite large variations across Member States. Numbers increased significantly in Latvia (+28%), Slovenia (+22%), Austria (+19%), and the Netherlands (+13%), while decreases took place in Cyprus (-21%), Bulgaria (-16%), Estonia (-17%), Finland (-11%), and Ireland (-10%).

Large variations in sheep numbers were also visible[7], with a strong relative increase between the two reporting periods in Lithuania (+67%) and a strong relative decrease in Portugal (-30%), the Netherlands (-28%), and Poland (-26%).

According to the data reported by Members States, the manure N use decreased between the two reporting periods by more than 10% in Czech Republic, Lithuania, Portugal, Slovakia, Spain, and Northern Ireland, while it increased by more than 10%

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1 Data submitted by Member States are presented in Table 1 of Section I of the staff working document.

2 'Cattle' means all cattle categories.

3 See Table 2.1 of Section I of the staff working document; the change in % was calculated as the change in average number of the period 2008–2011 compared to the average number in the period 2004-2007: [(average 2008–2011) – (average 2004–2007)]/[(average 2004–2007)] x 100.

4 See Table 2.2 of Section I of the staff working document.

5 See Table 2.3 of Section I of the staff working document.

6 See Table 2.4 of Section I of the staff working document.

7 See Table 2.5 of Section I of the staff working document.

in Cyprus, Hungary and Sweden. Not all Member States have reported data on manure N use, hence a total for EU-27 cannot be calculated.

Mineral fertilizer use

According to Eurostat and Fertilizers Europe[8], the mineral N fertilizer use in EU-27 in 2008–2010 decreased by 6% compared to that in 2006–2007[9]. Since 2010, the N fertilizer use remained stable[10]. Annual N fertilizer consumption in the EU is currently about 11 million tonnes – almost 30% below the peak of twenty five years ago. The use of P and K fertilizers was about 2.5 million tonnes in 2010 – almost 70% down on their peaks of the late 1980s[11].

N-balance and N-discharge into the environment

As regards the N-balance, large variations can be observed across Member States. Large variations can be observed also for phosphorus[12].

The information on N-discharge into the environment has not been provided by all Member States[13]. However, according to the available data, a decrease in discharge has been observed. Agriculture remains the predominant source of nitrogen discharged into the environment, as in the previous reporting periods. The relative contribution from livestock manure, mineral fertilizers and other sources of pollution varies among and within Member States, depending on many factors including the population density, especially in some coastal areas.

3. WATER MONITORING, QUALITY AND TRENDS

Monitoring networks

Groundwater

The total number of reported groundwater monitoring stations in EU-27 has increased by around 10%, to 33 493 stations in the reporting period 2008–2011 in comparison to 2004–2007. The average density of the network in the EU is 8 stations per 1 000 km^2 of land area[14]. The highest densities are found in Malta and Belgium with almost 130 and almost 100 per 1 000 km^2 land area, respectively. On the contrary, the lowest densities are found in Finland and Germany with less than 1 station per 1 000 km^2.

The average sampling frequency in the EU is almost 3 times per year and varies between once per year in Latvia, Lithuania and Denmark and 5 times per year in the United Kingdom and Belgium[15].

Surface water

The total number of reported fresh water monitoring stations in EU-27 has increased by around 9%, to 29 018 stations in the period 2008–2011 compared to the period 2004-2007. The average density in the EU is 6.9 stations per 1 000 km^2 land area.

8 Fertilizers Europe is an association of fertilizer manufacturers.

9 See Table 4 of Section I of the staff working document. Table 3 presents data on annual fertilizers and manure N use, as reported by Member States.

10 See Figure 1 of Section I of the staff working document.

11 See Figure 1 of Section I of the staff working document.

12 See Table 5 of Section I of the staff working document.

13 Only 15 Member States provided complete data.

14 See Table 6 and Figure 2 of Section I of the staff working document.

15 See Figure 3 of Section I of the staff working document.

The highest densities are found in the United Kingdom and Belgium. On the contrary, the lowest densities are found in Finland, Greece and Germany[16].

As regards saline waters, the total number of monitoring stations in EU-27 has increased from 2 577 to 3 210 stations between the two reporting periods[17].

The surface water sampling frequency (all water bodies) varies from 3 times per year in Malta and Greece to almost 60 times per year in Denmark[18].

Water quality

Groundwater

In 2008–2011, in EU-27, 14.4% of groundwater stations exceeded 50 mg nitrate per litre and 5.9% were between 40 and 50 mg[19]. This is a slight improvement compared to the previous reporting period, in which 15% stations exceeded 50 mg and 6% were between 40 and 50 mg. The lowest nitrates concentrations were found in Finland, Sweden, Latvia, Lithuania, and Ireland. On the contrary, the highest nitrates concentrations were found in Malta and Germany. Among the different types of groundwater bodies, the best quality was found in confined groundwater bodies, where almost 85% of the stations were below 25 mg nitrate per litre[20]. The percentage of stations exceeding 50 mg was higher in phreatic groundwater at a depth of 5–15 m than in deep phreatic water bodies, although the differences between the groundwater levels were small.

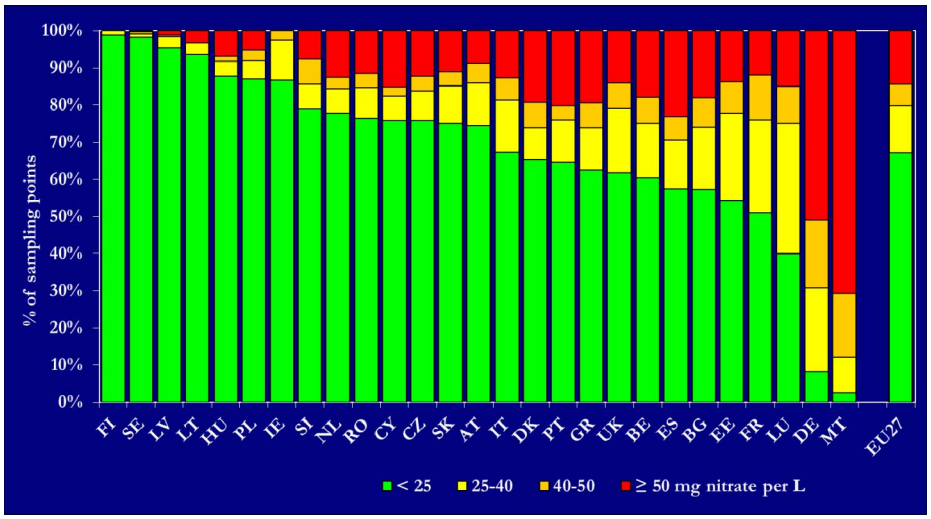


Figure A. *Frequency diagram of groundwater classes (Annual average nitrate concentrations)[21,22]. Results are presented for all groundwater stations at different depths.*

16 See Table 7 and Figure 4 of Section I of the staff working document.

17 See Table 8 of Section I of the staff working document.

18 See Figure 5 of Section I of the staff working document.

19 See Figure 6, Table 9 and Map 1 of Section I of the staff working document.

20 See Figure 7 of Section I of the staff working document.

21 Groundwater stations with long-term low nitrate concentrations were not measured every four years in all cases. As a result, the figure may show a slightly over-populated percentage of stations with high nitrate concentrations.

22 Comparison of Figure A with Figure 2 of the *Commission Staff Working Paper accompanying document to the report from the Commission to the Council and the European Parliament on implementation of Council Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources based on Member State reports for the period 2004 -2007* may be hampered due to substantial differences in the number of the monitored stations (e.g. Austria, since it reported data for all monitoring stations in the period 2008-2011, while aggregated data were reported in the period 2004-2007).

Fresh surface waters

Based on annual averages of all reported monitoring stations in EU-27, 62.5% were below 10 mg nitrate per litre, while 2.4% showed concentrations between 40 and 50 mg per litre and 2.4% exceeded 50 mg per litre[23]. This is also an improvement compared to the previous reporting period, in which 3% stations exceeded 50 mg per litre and 2.9% were between 40 and 50 mg per litre. For winter average values, 2.9% exceeded 25 mg per litre and 2.4% were above 50 mg per litre. The lowest annual average nitrate concentrations in fresh surface water were found in Finland and Sweden, followed by Lithuania, Portugal and the Netherlands, and the highest in Malta, the United Kingdom and Belgium, where a high share of stations exceeded 40 mg nitrate per litre.

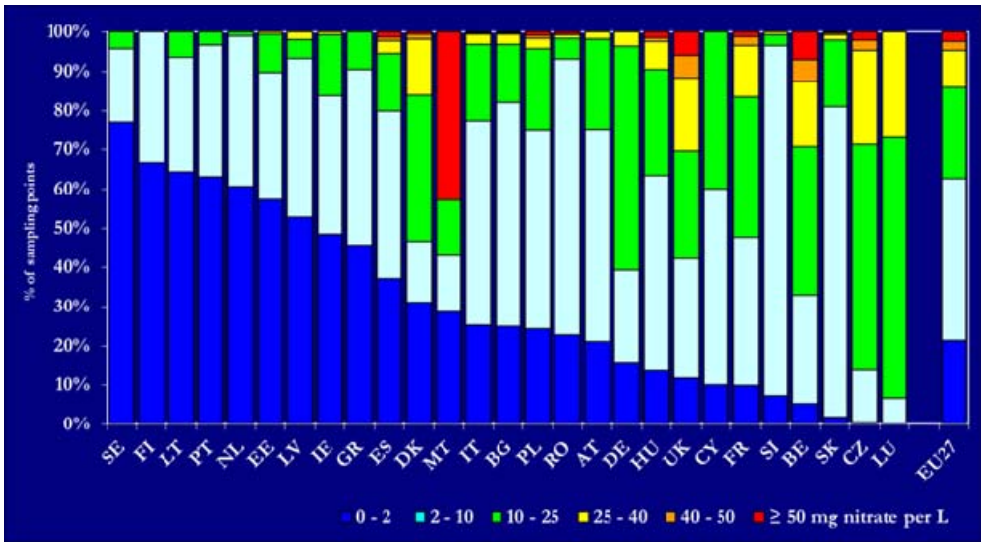


Figure B. *Frequency diagram of average nitrate concentrations in fresh surface water classes (annual average nitrate concentrations).*

The assessment of the trophic status varied widely among Member States, not only regarding the parameters used, but also concerning the methodologies for the definition of trophic status classes[24]. Moreover, some Member States provided no data or incomplete data on eutrophication of rivers (Germany, Denmark, France, Cyprus, Malta, Romania and United Kingdom) and lakes (Cyprus, Czeck Republic, France, Luxembourg, Malta, and United Kingdom).

Of all reported river monitoring stations in EU-27, 16.3% and 6.3% were eutrophic and hypertrophic respectively, while 35.4% and 20.6% were oligotrophic or ultra-oligotrophic respectively. The highest percentage of ultra-oligotrophic stations in rivers was found in Spain, followed by Bulgaria and Slovenia, while the highest percentage of hypertrophic stations were found in Belgium and the Netherlands, followed by Czech Republic and Finland. High levels of eutrophication were also found in Lithuania and Luxembourg[25].

Of all reported lakes monitoring stations in EU-27, 24.1% and 12.7% were eutrophic and hypertrophic respectively, while 36.6% and 2.4% were oligotrophic or ultra-oligotrophic respectively. The highest percentage of ultra-oligotrophic stations in lakes was found in Latvia, followed by Spain, while the highest percentage of

23 See Figure 8, Table 10 and Map 4 of Section I of the staff working document.
24 See Member States summary sheets in Section V of the staff working document.
25 See Figure 10 of Section I of the staff working document.

eutrophic or hypertrophic stations were found in the Netherlands, followed by Denmark, Slovakia, Poland, Bulgaria, and Belgium[26]. In general, the trophic status of rivers is better than the status of lakes[27].

Saline waters

In saline[28] waters, nitrate concentrations are lower than in fresh water concentrations[29], with 1.4% of the stations exceeding 25 mg nitrate per litre and 72.5% of the stations below 2 mg, based on annual average values. Similar figures are shown for winter average and maximum values.

An EU-27 wide evaluation of the trophic status is not possible because of the lack of data from many Member States[30], as well as a large variation in methodologies. For instance, no data was provided by Cyprus, Romania, Germany, Denmark, France, Ireland, Portugal, and Sweden. For the United Kingdom, only Northern Ireland reported digital data. For Belgium, only Flanders reported data. Based on the available information, Belgium reported all its saline waters as hypertrophic, while Bulgaria, Latvia, Lithuania, and the Netherlands, reported all saline stations as eutrophic.

Trends in water quality

Groundwater

Comparing water monitoring results from the period 2008–2011 with those for 2004–2007, in EU-27 as a whole and in many Member States, most stations showed a stable trend (42.7% in EU), while the percentage of stations with a decreasing trend almost equalled the percentage of stations with an increasing trend (30.7% and 26.6% respectively), a situation comparable to previous reporting periods[31]. The highest percentage of stations with a decreasing trend has been observed in Ireland, the most stable in Latvia, and the highest with an increasing trend has been reported by Estonia.

Fresh surface water

In EU-27, a decreasing trend in annual average nitrates concentrations was observed in 42.1% of all freshwaters monitoring stations, of which 12.1% showed a large decreasing trend[32]. 38.7% of the monitoring stations showed stable concentrations and 19.1% of the stations an increasing trend[33]. Fresh surface water quality in EU-27 has improved during the current reporting period. The percentage of stations exceeding 25 or 50 mg nitrate per litre has decreased compared to the period 2004–2007. No trends are available for the trophic status of surface waters because of lack of data for most waters.

4. DESIGNATION OF NITRATE VULNERABLE ZONES

Member States are required to designate as vulnerable zones all areas of land in their territory that drain into polluted waters or waters at risk of pollution if no action is

26 See Figure 11 of Section I of the staff working document.
27 See Figure 12 and Map 7 of Section I of the staff working document.
28 'Saline waters' means transitional, coastal and marine waters.
29 See Figure 9 of Section I of the staff working document.
30 See Figures 13a-d of Section I of the staff working document.
31 See Figure 14 and Map 3 of Section I of the staff working document.
32 A large decreasing trend is defined as a difference in nitrate concentrations higher than -5 mg per liter.
33 See Figure 15 and Map 6 of Section I of the staff working document.

taken. At least every four years Member States are required to review, and, if necessary, revise nitrate vulnerable zones on the basis of the results of water monitoring. Member States may, instead of designating specific zones, opt to apply an action programme throughout the entire territory. Austria, Denmark, Finland, Germany, Ireland, Lithuania, Luxembourg, Malta, the Netherlands, Slovenia, the Region of Flanders and Northern Ireland have followed this approach, ensuring better protection for all waters and not only those fulfilling the criteria of Annex I to the Directive.

Including the area of Member States that apply a whole territory approach, the total EU area to which action programmes apply was about 1 952 086.5 km^2 in the year 2012, corresponding to about 46.7% of the total EU land area.

As compared to 2008, the total area in the EU designated as vulnerable zone has increased, with particular increases in Romania, Belgium-Wallonia, Spain, Sweden, and the United Kingdom[34].

5. ACTION PROGRAMMES

Member States are required to establish one or more action programmes that apply within designated vulnerable zones or to the whole territory. Action programmes include at least the measures referred to in Annexes II and III to the Directive and relating, i.a., to periods when mineral and organic fertilizers application is prohibited, minimum required storage capacity for livestock manure, limitation of land application of fertilisers, and land application near waters and on slopes.

The following 23 Member States have adopted a new or revised action programme during the years 2008–2011: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Estonia, France, Hungary, Ireland, Lithuania, Luxembourg, Latvia, Malta, the Netherlands, Poland, Portugal, Romania, Sweden, Slovenia, Slovakia, the United Kingdom, and a number of regions in Italy and Spain. In the modified action programmes, the periods of land application of slurry and fertilizer and – accordingly – the storage capacity of animal manure have become more stringent in many cases. The same holds for the application of manure and fertilizers during unfavourable climatic conditions, on sloping areas and close to surface waters.

As regards the effectiveness of the action programmes in preventing and reducing water pollution by nitrates, very little information has been reported by Member States, which gives cause for concern. The effects of the action programmes on water quality should be evaluated by the Member States, also in terms of timescale, so that informed decisions can be taken for achieving both the objectives of the Nitrates Directive and of other legislation on water protection. In a wide perspective, it can be noted that in some Member States the implementation of the action programmes has determined an improvement in water quality. For Member States with recently revised action programmes, full impact of the new measures will be increasingly visible in the future. In other Member States, improvement can be hampered by different reasons, not only relating to the inadequacy of some action programme measures, but also to the application of action programmes to small or to fragmented territories (e.g. in Poland, France and Italy) or due to the numerous exceptions which apply to general rules (e.g. exceptions to closed periods in the Netherlands, Germany and Luxembourg).

[34] See Table 11 and Map 8 of Section II of the staff working document.

The overall limitation of fertilizer application remains one of the most challenging measures to be implemented across the EU. Some Member States have opted for defining limits of total nitrogen (Netherlands, Ireland, Northern Ireland, and Flanders also have limitations on phosphorus) for all crops, which is a simple and clear way to inform farmers about their obligation and to facilitate controls. Others have chosen to apply more complex systems which are less clear and hence likely to be less effective for water protection.

Storage capacity for livestock manure is another important element which requires further attention. It represents an important financial burden for farmers, although this burden is balanced by the reduced use of mineral fertilizers (which also entails less greenhouse gas emissions), due to the increased N efficiency in manure and better working conditions for farmers. Enhanced action is needed in this area, including gathering more information on currently available storage capacities at farm level.

Control of action programmes is a responsibility of the Member States and the use of cross-compliance with Common Agricultural Policy support is an important aspect in ensuring respect by farmers. Among the more noteworthy approaches to control, the Netherlands and Flanders have developed strict manure movement control regimes through the use of GPS tracking systems.

6. DEROGATIONS TO THE LIMIT OF 170 KG N/HA/YEAR

The Nitrates Directive envisages the possibility to derogate from the maximum amount of 170 kg of nitrogen per hectare per year from livestock manure, provided that objective criteria set in Annex III to the Directive are met and that the derogated amounts do not prejudice the achievement of the Directive objectives.

Derogations are granted by means of a Commission Decision, following the opinion of the Nitrates Committee, which assists the Commission in the implementation of the Directive. At the end of 2012, derogations were in force in seven Member States, relative to the whole territory (Denmark, the Netherlands, Germany, the United Kingdom, Ireland) or to some of their regions (Flanders in Belgium; Lombardy, Piedmont, Veneto, and Emilia Romagna in Italy)[35]. The standards of management required of farmers in receipt of derogations need to be higher than those of the action programmes with additional obligations for nutrient planning and extra constraints on land management. The Commission will continue to take appropriate action to ensure the quality of those programmes especially in the context of granting a new derogation or extending an existing one and also in the light of water quality trends.

7. FORECAST ON WATER QUALITY

The methods applied by Member States to assess developments in water quality are mostly based on trend analysis and / or computer simulations, sometimes together with analyses of developments in agricultural practices. Not all Member States have provided this information.

The results of the available analyses indicate that most Member States predict a further reduction in nitrate concentrations in groundwater and surface waters, due to

[35] See Table 12 of Section III of the staff working document.

the effect of changes in agricultural practices driven by the Directive implementation and by several agro-environmental measures contained in the Rural Development Programmes as well as the application of the Cross-compliance. These predictions, however, are hampered by large uncertainties, due to the large variations in climate and soil conditions and their effects on water quality, especially groundwater.

8. INFRINGEMENT PROCEDURES

As of June 2013, ten infringement cases were open against eight Member States (France on nitrate vulnerable zone designation (NVZ); France on action programme (AP); Luxembourg on AP; Greece on NVZ; Greece on AP; Poland on NVZ and AP; Slovakia on monitoring, NVZ and AP; Bulgaria on AP; Italy on AP and Latvia on AP). In addition, seven pilot requests[36] were addressed to seven Member States (Belgium-Wallonia on NVZ, AP and controls; Bulgaria on monitoring and NVZ; Sweden on NVZ; Malta on AP; Cyprus on AP; Czech Republic on AP; Estonia on AP), with the objective to clarify issues linked to some aspects of their legislation implementing the Nitrates Directive.

The cases on NVZ designation are often linked to incomplete identification of eutrophic waters and/or designation of areas which drain into such waters. This is especially true for marine waters.

The cases on action programmes mostly concern insufficient length of closed periods for fertilizer and manure application, insufficient requirements for manure storage capacity, insufficient and/or unclear rules for limiting the overall fertilization, insufficient rules for preventing water pollution through rules on fertilizer application to steeply sloping, frozen or snow-covered ground or near water courses.

9. CONCLUSIONS AND FUTURE CHALLENGES

The pressure from agriculture has decreased, although not uniformly, in the period 2008–2011 compared to 2004–2007 regarding the numbers of cattle, pigs and sheep and remained stable regarding poultry. At the same time, the consumption of chemical fertilizers has decreased, continuing its long-term trend.

Monitoring of water quality has improved, with an increase in the total number of monitoring stations for groundwater and surface water. Of all reported groundwater stations, 14.4% exceeded 50 and 5.9% were between 40 and 50 mg nitrate per litre, indicating a slight improvement compared to the previous reporting period, but at the same time a need for further action to reduce and prevent pollution. The situation is variable across the EU, but in some Member States the action programmes already yield good results.

Fresh surface water quality has improved regarding nitrate concentrations. The percentage of stations exceeding 25 or 50 mg has decreased compared to the previous reporting period. However, no conclusions can be drawn regarding the evolution of trophic status, due to two important factors: (i) different assessment methods used by Member States and (ii) lack of data, especially for saline water bodies. However, transitional, coastal and marine waters in many parts of Europe remain eutrophic (Baltic Sea and its coastline, Black Sea, parts of the North Sea and

[36] The EU Pilot is a system developed in 2008 following the Commission communication *Applying Community Law* [COM(2007) 502 final], with the aim of improving the working method between the Commission services and the Member States' authorities.

of the Mediterranean coastline). Although this is also depending on other pressures (e.g. human pressures especially in touristic coastline areas) additional action is needed in terms of extending NVZ designation and reinforcing action programmes.

The general quality of the action programmes has improved, with tightened measures, improved fertilization methodologies and enhanced enforceability. Awareness of the Directive's obligations is also improving. However, several issues remain, mostly linked to the limitation of land application of fertilizers and the measures relating to the capacity and construction of storage vessels for livestock manure. Other elements, such as the recent development of energy crops and of the biogas industry (notably in Germany), pose new challenges that will need to be adequately covered by the action programmes. Likewise, as milk yields rise in some Member States, it will be necessary to adjust manure production coefficients per dairy cow. On a more positive side, some feeding regimes for non-ruminant animals have been improved with regard to dietary protein and phosphate content, which should further reduce nutrient loads.

Pressures from horticultural crops have not been sufficiently addressed in action programmes, but work with Member States and the scientific community is underway to improve understanding and practice in this field. Considering that in some areas horticultural crops pose significant risks to water, due to the intensity of cultivation and crop characteristics, specific measures will have to be taken.

An issue of continuing concern is that, in the midst of generally improving farm practice and water quality, there remain 'hotspots' where improvements are not yet forthcoming and which need greater attention in future, especially with respect to action programme measures. While some of these hotspots relate to intensive livestock or horticultural production, others are associated with soil and geological formations (e.g. sandy and loess soils, as well as karstic and other porous rocks). Member States will have to address these aspects not least through the requirements and provisions of Article 5(5) of the Directive. In accordance with this article, the Commission will be particularly vigilant in the future to the need for Member States to take additional measures or reinforced actions in the light of water quality trends.

The latest assessments of the Water Framework Directive (WFD)[37] implementation, as well as studies carried out in the framework of international conventions, show that diffuse sources of pollution pose most obstacles in achieving good status in EU waters. For this reason, the recent *Blueprint to Safeguard Europe's Water Resources*[38] identifies the Nitrates Directive as one of the key measures to achieve WFD objectives.

Also, the Nitrates Directive has been shown to contribute to reducing ammonia and nitrous oxide emissions, due to the overall impact on better manure management and optimal fertilizer use limited to crop needs. Extending nitrate vulnerable zones and/or applying the same rules outside designated nitrate vulnerable zones will further decrease these emissions to air.

Further implementation of the Nitrates Directive will also help with the resource efficiency of both manure and mineral fertilizers, in line with the consultative communication on the sustainable use of phosphorus [COM(2013) 517].

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37 Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for the Community action in the field of water policy, OJ L 327, 22.12.2000, p. 1.

38 COM(2012) 673 final.