

Working Group on Strategies and Review, Fifty-fifth session, 31 May-2 June 2017

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Provisional agenda item 6 (b)
Information sharing by Parties on the implementation of the Convention
Special session on agriculture and air pollution

National advisory code of good agricultural practice to control ammonia emissions

- Responses to the questionnaires circulated in advance of WGSR-55 -
- Prepared by the Task Force on Reactive Nitrogen, in cooperation with the secretariat —

In advance of the special session on "Air pollution and agriculture" held as part of the 55th session of the Working Group on Strategies and Review (WGSR) on 1 June 2017, it was considered necessary to evaluate the status of progress in establishing, publishing and disseminating national advisory codes of good agricultural practice to control ammonia emissions (NACs), to assess countries' implementation of this requirement of the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone (Gothenburg Protocol) and its Annex IX. At its 54th session (Geneva, 13-14 December 2016), WGSR accordingly requested the Task Force on Reactive Nitrogen to collect updated information on the NACs by Parties to the Gothenburg Protocol.

This informal document provides information on the NACs by Parties to the Gothenburg Protocol and other Parties to the Convention on Long-range Transboundary Air Pollution (Air Convention) on the basis of their responses to the questionnaire circulated by the Task Force, in cooperation with the secretariat, in advance of the session.

1. Background information - Legal obligations

Under the original Gothenburg Protocol, which came into force on the 17 May 2005, Parties committed under Annex IX, part A "Advisory code of good agricultural practice", hereafter "National Ammonia Code" (NAC), to the following:

"Paragraph 3. Within one year from the date of entry into force of the present Protocol for it, a Party shall establish, publish and disseminate an advisory code of good agricultural practice to control ammonia emissions. The code shall take into account the specific conditions within the territory of the Party and shall include provisions on:

- Nitrogen management, taking account of the whole nitrogen cycle;
- Livestock feeding strategies;
- Low-emission manure spreading techniques;
- Low-emission manure storage systems;
- Low-emission animal housing systems; and
- Possibilities for limiting ammonia emissions from the use of mineral fertilizers. Parties should give a title to the code with a view to avoiding confusion with other codes of guidance."

The Gothenburg Protocol requires all Parties to reduce ammonia emissions, as specified by the Protocol. In accordance with the Protocol's Articles 8 and 10, the above-mentioned requirements of Annex IX only apply to Parties within the geographical scope of EMEP.

The Gothenburg Protocol, as amended on 4 May 2012, contains the same requirements. With two ratifications of the amendments in May 2017, the amended Gothenburg Protocol is not yet in force.

According to the revised EU National Emission Ceiling Directive,¹ all EU member states "shall establish a national advisory code of good agricultural practice to control ammonia emissions, taking into account the 2014 UNECE Framework Code for Good Agricultural Practice for Reducing Ammonia Emissions..." (Annex III, Part 2).

2. Questionnaire - Overview and responses received

With a view to assessing the status of progress in implementing the NACs, the TFRN Co-Chairs, in cooperation with the Convention secretariat, kindly requested all the Parties to the Gothenburg Protocol to answer a short questionnaire concerning the status of implementation. The questionnaire also allowed the possibility of supplying the link to the NAC when available. Other Parties to the Air Convention, which are not yet Parties to the Gothenburg Protocol, were also invited to provide any relevant information. The questionnaire was circulated to the WGSR Heads of Delegations nominated by Parties to the Air Convention and to the national focal points in Tajikistan and Uzbekistan that are not yet Parties to the Air Convention.

The questionnaire (see annex 1) comprised questions on the establishment of NACs or related plans, their online accessibility, awareness of and reference to the UNECE Framework Code for Good Agricultural Practices (UNECE Framework Code, ECE/EB.AIR/129), the responsible institution(s). It also included a question on whether countries would welcome support by TFRN in establishing a NAC.

The questionnaire was accessible online through a weblink created by the Task Force, both in English (http://www.clrtap-tfrn.org/NAC_questionnaire and Russian (http://www.clrtap-tfrn.org/NAC_questionnaire RU). It was circulated during the period March – April 2017, with several reminders sent to the Heads of Delegation, and information also shared with TFRN members.

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¹ Directive (EU) 2016/2284 of the European Parliament and of the Council of 14 December 2016 on the reduction of national emissions of certain atmospheric pollutants, amending Directive 2003/35/EC and repealing Directive 2001/81/EC (Text with EEA relevance)

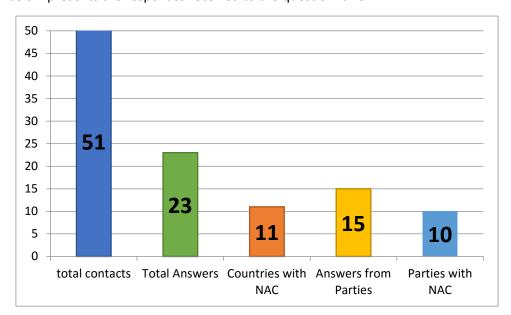


Figure 1 below presents the responses received to the questionnaire.

Figure 1 – Response to the questionnaire from Parties to the Air Convention and the Gothenburg Protocol (NAC – National ammonia code).

From the 51 countries to which the questionnaire was sent, 23 responded. Fifteen of the answers were sent by Parties to the Gothenburg Protocol and 8 additional responses were received from Parties to the Air Convention which are not Parties to the Gothenburg Protocol (Ireland, Kyrgyzstan, Monaco, Poland, Russian Federation, Serbia, Turkey and Ukraine). Only 11 countries, including 10 Parties to the Gothenburg Protocol and Poland (a signatory), claim to have a NAC, although the official document is often a more general guideline on good practices and includes ammonia mitigation practices. It is important to clarify whether the countries having responded positively to having their own NAC in fact have:

- a) clear guidance on what to do about ammonia specifically (NAC) or
- b) integration of the guidance into wider agricultural good practice guidance (what has so far often been provided).

3. Analysis of responses

Among the Parties to the Gothenburg Protocol, only 11 indicated to have a NAC. One Party to the Convention not a Party to the Gothenburg Protocol (Poland, a signatory of the Protocol) also established a NAC. However, although some countries do not have specifically established a NAC, some have established Codes of good practice and/or other related guidelines. Several countries indicated ongoing developments and future plans with regard to the development of NACs.

The following short description of the answers sent by the countries participating in the survey shows the status of implementation of the requirement to establish and publish NACs and the status of future plans. Annex 2 presents an overview of the establishment of NACs by countries (yes/no), the responsible institutions and weblinks to the NAC or other relevant information sources.



Figure 2 – Countries that have ratified the original Gothenburg protocol (blue) and countries with NAC (red flags).

3 a) Countries with established NACs

The countries stating to have implemented the requirement to establish a NAC are the following: Belgium, Czech Republic, Denmark, Germany, Hungary, Poland, Romania, Slovenia, Sweden, Switzerland, and the United Kingdom.

BELGIUM

Belgium implemented the NAC in 2000, through the responsibility of the competent authority in the implementation of the EU Nitrates Directive, the Vlaamse Landmaatschappij (Flemish Land Agency) experienced in abatement of nutrient emissions in agriculture. The Flemish Land Agency is involved in the preparation of ammonium abatement policies in agriculture.

The Code of good agricultural practices is mainly drafted in execution of the EU Nitrates Directive, focusing on fertilisation and losses of nutrients towards surface and ground water. Next to fertilisation planning and nitrogen management, attention is given to low-emission manure spreading techniques. Other aspects of ammonia emissions abatement are not specifically taken up in the Code of good agricultural practices but are integrated in nutrient management legislation (feeding strategies, low-emission spreading techniques,...) and legislation with respect to environmental permits (obligation to build low-emission housing systems).

A new code of good agricultural practices was published in 2014. There is a need for review of this Code, with respect to the implementation of the EU Nitrates Directive as well as ammonia emission abatement.

Belgium indicated that support from TFRN would be welcome on an integrated approach towards nutrient management with respect to soil, air, water quality and climate change mitigation.

CZECH REPUBLIC

The Ministry of Environment / Research Institute of Agricultural Engineering has published the NAC in 2002.

The file from 2013 is linked to the Decree on emission reduction 415/2012 Coll. which requires using one of the emission reduction measures that are listed in this document. Such measures are also subject to the National Emission Reduction Plan issued in 2016.

The authorities of the Czech Republic plan updating the Code based on the National Emission Reduction Plan and on the requirements of the Directive (EU) 2016/2284 of the European Parliament and of the Council of 14 December 2016 on the reduction of national emissions of certain atmospheric pollutants.

DENMARK

Ammonia reducing strategies are implemented through general binding rules as well as through specific requests (ELVs) when granting environmental permits.

GERMANY

The German NAC was published in 2003 in cooperation with experts from agricultural and environmental institutions.

The new UNECE Framework Code has been translated into German in co-operation between Germany, Switzerland and Austria.

Based on this, the new NAC will be prepared and published in 2018/2019 in the form of a brochure for farmers. An expert drafting group comprising agricultural and environmental experts is being set up. The present NAC of 2003 is available only in its printed paper version (eds. Agrar-InformationsDienst AID); the updated NAC will be publicly available in various electronic media, including government institutions´ websites.

HUNGARY

The Hungarian NAC was published in 2008 by the Hungarian Ministry of Agriculture.

A regulation is under development, more data will be collected from farmers.

There is also Nitrate Guidance for Farmers available online.

Hungary expressed that it would be very useful to receive assistance from TFRN through the participation of TFRN experts in special trainings in Hungary.

POLAND

The NAC / Polish Code for Good Agriculture Practice (2004) s published in 2004 by the Polish Ministry of Agriculture and Rural Development and Ministry of the Environment. It is mainly based on the UNECE Framework Code (2001).

Awareness of the UNECE Framework Code is widespread. Good agricultural practices for reducing ammonia emissions are included in educational programmes in secondary agricultural

schools. Information on the agricultural code and good practices is disseminated by local level authorities and Agricultural Advisory Centres, inter alia, through the internet.

Requirements concerning good agricultural practices are already included in Polish legal acts and regulations which are consistent with EU legislation in place. EU donations are granted to farmers only if they comply with good agricultural practices. Poland indicated that there is no further assistance need from TFRN.

ROMANIA

An initial version of the NAC was established in 2005 (Ministerial Order 1182/1270/2005); a revised version of the NAC was issued in 2015 (Ministerial Order 990/1809/2015) by the Ministry of Environment, Ministry of Water and Forests and Ministry of Agriculture and Rural Development.

SLOVENIA

The NAC was published in 2006 by the Agricultural Institute of Slovenia.

The available NAC is a part of Advisory code to protect water, soil, air and biodiversity. Measures to control ammonia emissions are described in separate chapters. A new Code which is based on the UNECE Framework Code is under preparation stage and about to be published.

SWEDEN

Since 2006 Greppa näringen (Focus on Nutrients) is a project that provides advice and information on environmental and climate issues for agriculture. Focus on Nutrients is the largest single undertaking in Sweden to reduce losses of nutrients to air and water from livestock and crop production. The project also focuses on the safe use of crop protection products. Focus on Nutrients is a joint venture between The Swedish Board of Agriculture, the County Administration Boards, the Federation of Swedish Farmers and a number of companies in the farming business.

SWITZERLAND

The Federal Office for the Environment & Federal Office for Agriculture issued the NAC in 2011 and revised it in 2012.

A German translation of the UNECE Guidance Document has been published and actively distributed to local air pollution authorities.

UNITED KINGDOM

In England there is good industry awareness of England's Code of Good Agricultural Practice for farmers, growers and land managers. However, the authorities understand from industry that few farmers are aware of the UNECE Framework Code.

The institution responsible sits within each of the devolved administrations.

As part of the revised EU National Emissions Ceilings Directive the UK government is required to "establish a national advisory code of good agricultural practice to control ammonia emissions, taking into account the UNECE Framework Code (2015)". The Department for Environment, Food & Rural Affairs anticipates that a document to comply with the requirement of the National Emissions Ceilings Directive will be published by April 2019.

Northern Ireland's Environment Agency has commissioned guidance on ammonia mitigation which is currently in draft. Aside to this, the Minister of the Department of Agriculture, Environment and Rural Affairs asked the Expert Working Group to complete a report on ammonia in agriculture. The group is due to report back in May/June 2017. It is currently taking expert advice on the ammonia inventory and emissions modelling currently in place for Northern Ireland. This will form an annex to a larger report called the Sustainable Agricultural Land Management Strategy which the Group presented to the Minister in October 2016.

3b) Countries with no established NAC

The countries that have indicated <u>not</u> to have a NAC are Croatia, Cyprus, Finland, Ireland, Monaco, Portugal, Russian Federation, Serbia, Turkey and Ukraine. Some of these countries are Parties to the Gothenburg Protocol, notably Croatia, Cyprus and Finland. Although not having a NAC, the Russian Federation and Ukraine have stated that their NAC is currently under preparation. Serbia refers to the development of a NAC planned to be adopted in 2018.

BULGARIA

A Draft Code of Good Agricultural Practice to Reduce Ammonia Emissions into the Air, Emitted from Agricultural Sources, is being prepared by the Ministry of Agriculture and Food. In view to upcoming coordination procedures, the deadline for approving the Code cannot be fixed. Bulgaria intends to share information immediately after the approval of the NAC.

Bulgaria indicate that it would appreciate an assessment of the Code regarding its completeness before its official approval.

CROATIA

Since 2009, Croatia has the "Brochure on Codes for good agricultural practice for protection of soil, water, air and animal", which is under the responsibility of the Ministry of Agriculture. The brochure is disseminated to all agricultural producers in Croatia, and publicly available on official websites of the Ministry of Agriculture and the Agricultural Advisory Service.

Croatia would welcome support from Task Force on Reactive Nitrogen in preparing a NAC at the national level, namely through the exchange of experience, good practices and help in the identification of available financing sources.

CYPRUS

The national regulation for good agriculture practices has been issued in 2007; it is named "Code of good agricultural practice" which is available online. Those regulations were issued under the provisions of the National Law for the control of water pollution and contain mainly provisions for the protection of the soil and underground water from animal waste.

Any support from TFRN would be welcome. There are plans of the Competent Authority for the implementation of the Gothenburg Protocol to arrange a meeting (mid-April 2017) with all the local services involved with this issue (Department of Environment and Department of Agriculture). Based on the results of this meeting, contact will be made with TFRN and possible requests for support voiced.

FINLAND

Ammonia reduction measures are known to be linked to good agriculture measures in general. Several measures (eg. slurry injection) are implemented under the Rural development Programme for Mainland Finland 2014-2020. Agricultural investment aid is in use in Finland which may be granted e.g. for covering manure stores. Farm advisory services disseminate broad knowledge of good agriculture practices. Also, the Ministries of Agriculture and Forestry and the Environment has recently accepted the Action plan for reducing ammonia emissions in Finland. This plan includes most efficient measures to reduce ammonia emissions from agriculture.

A report on agricultural ammonia emissions in Finland (emission abatement options and costs) of 2014 describes more in detail all possible measures including costs to reduce ammonia emissions.

This task is under the responsibility of the Finnish Environment Institute on behalf of Ministry of Agriculture and Forestry and Ministry of the Environment.

Although quite a lot of information is available, information in English is not very useful for Finnish farmers. The key problem is still the implementation of already known measures, and for this some support from TFRN may however be useful.

IRELAND

There is no code in Ireland, but there is awareness among farmer organisations of the importance of reducing ammonia emissions. Overall, Ireland has a whole territory approach to the implementation of the EU Nitrate Directive - applying nitrogen and phosphorus according to crop demand is a key requirement and the importance of maximising the availability of nitrogen in manure through better timing of application. The Nitrates regulations also set standard for minimum storage periods and the quality of building specification.

Ireland also supports grant investment in low emissions spreading technology under the Regional Development Programme 2014-2020 which is well received to date and has a further measure under AECM to encourage the uptake of low emissions spreading at farm level.

Although there is no competent institution assigned for this task and no NAC is currently foreseen to be developed, the Department of Communications, Climate Action and the Environment (DCCAE) has commenced a public consultation on a national clean air strategy of which ammonia is a component.

Ireland would welcome the help of TFRN, namely through a template on the type of information being received well by farmers.

KYRGYZSTAN

Kyrgyzstan has not provided additional information.

MONACO

In Monaco this is not an issue as there is no agriculture in the country.

PORTUGAL

Portugal's National Strategy for Air 2020 (ENAR 2020) has defined the need to address measures for agriculture sector. Therefore, it has identified a specific measure for this sector which consists in implementing the annex IX of the Gothenburg Protocol.

Although Portugal has not yet implemented a NAC, it has a National Code for Good Agriculture practice for the protection of water, which addresses exclusively nitrogen.

Portugal welcomes the support of the TFRN for the developing of NAC although we have not yet define the way forward.

RUSSIAN FEDERATION

At the present time, Russian directories of BAT of intensive livestock breeding are being developed. Measures to reduce ammonia emissions, provided by NAC, fully coincide with the requirements of BAT. The Institute for Engineering and Environmental Problems in Agricultural Production could become the institution responsible for the development of the NAC. The Institute actively works in this direction and has been the strong partner of the Task Force on Reactive Nitrogen for many years. The Institute developed about 10 recommendations on the environmental safety of agricultural production and effective management of waste in livestock.

Information on the UNECE Framework Code is known to the Russian scientists in the field of agroecology. A Russian version of the guidance document is available online.

SERBIA

Serbia is in the preparation process for accession to the EU and thus has the obligation to harmonize the national legislation with EU legislation and is under intensive monitoring of transposition and implementation of the EU environmental acquis. In order to facilitate this whole process of accession, the National Programme for the Adoption of the Acquis (NPAA) was prepared in the beginning of 2013. The document has been revised and adopted in November 2016. This document defines development and strategic goals, relevant policies, reforms and measures required to attain these goals, establishes a detailed plan for harmonisation of legislation and defines human and financial resources and other funds required for the implementation of envisaged tasks. The NPAA is one of the key Government documents for the following years.

According to the revised NPAA, by establishing the legal basis for the designation of vulnerable zones for nitrates, the remaining provisions of Nitrate Directive (91/676/EEC) will be transposed into national legislation. The adoption of the Code of Good Agricultural Practices is planned to be completed by the end of 2018.

In designated vulnerable zones, in parallel, an inventory of farms and agricultural land will be established. The development of the methodology for determining the nitrate vulnerable areas and identification of agricultural land with significant contribution to pollution by nitrates, separation of these areas and the catalogue of best practices for the control of pollution by nitrates in agriculture is under way with the support of the project funded by the Swedish Agency for International Development Assistance (SIDA).

A monitoring network for a detailed analysis of pressures and impacts of nitrogen pollution from agriculture and trophic status of surface waters needs to be established. Only a small

percentage of aquifers which are monitored show the concentration of nitrates in excess of 40 to 50 mg/l (data from the Draft plan for Water Protection).

The Competent authority at the national level is the Ministry of Agriculture and Environmental Protection - Directorate for Water.

There are no plans for a NAC preparation and a Code of Good Agricultural Practices is not yet adopted. As a result of the EU Environmental Accession Programme (ENVAP II) project, two documents have been prepared: "Proposal for the designation of vulnerable zones" and "Proposal for the Code of Good Agricultural Practice" in accordance to the requirements of the EU Nitrates Directive. The project was closed in April 2016. Also, as a result of ENVAP II project, the document "Designation of sensitive catchment areas in Serbia" has been prepared. The document provides proposals for the determination of sensitive areas in accordance with the requirements of the EU Urban Waste Water Treatment Directive.

Serbia would welcome the help of TFRN. The involvement of representatives of Serbia in the work of the Task Force and active exchange of information between national experts would be of great importance for further successful implementation of the mentioned obligations. Exchange of experiences with countries that have already developed Codes, through specific workshops or seminars, would be of great importance in order to further strengthen national capacities.

TURKEY

Turkey provided no further information on existing guidance documents, but indicated that it would welcome the help from TFRN.

UKRAINE

The Institute of Agroecology and Environmental Management, within the assignment of the National Academy of Agrarian Sciences of Ukraine developed "Methodological Recommendations for Reducing Ammonia Emissions from Agricultural Sources."

The guidelines were developed on the basis of the UNECE Framework Code. This document has been recommended for use by the Ministry of Ecology and Natural Resources of Ukraine for business entities, reviewed and recommended for implementation by the Scientific and Technical Council of the State Institution "Institute for Soil Protection of Ukraine"; examined and approved for publication by the decision of the Academic Council of the Institute of Agroecology and Nature Management of the National Academy of Sciences. Methodical recommendations are posted on official websites of the Ministry of Ecology and Natural Resources. At the same time, the Ministry of Natural Resources works on the development of documents for permitting emissions of pollutants into the air by stationary sources of the agricultural industry.

QUESTIONNNAIRE on national advisory code of good agricultural practice to control ammonia emissions

Submitted by clare_howard on Wed, 15/02/2017 - 12:27

SHORT QUESTIONNNAIRE on national advisory code of good agricultural practice to control ammonia emissions: INTRODUCTION

At its fifty-fourth session, (13-14 December 2016), the Working Group on Strategies and Review (WGSR) mandated the Task Force on Reactive Nitrogen (TFRN) to collect updated information on the national implementation by Parties of the mandatory requirement to publish and disseminate national advisory codes of good agricultural practice to control ammonia emissions (national ammonia codes (NAC)) well in advance of the special session on "Air pollution and agriculture" to be held as part of the Working Group's 55th session on 1 June 2017.

On the basis of the information collected, a short glossy informal report on the status of progress in implementing the NACs will be published in time for the upcoming 55th session of WGSR, to assess countries' implementation of the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone (Gothenburg Protocol) and its Annex IX.

Regarding this task assigned by the WGSR, the TFRN kindly requests all Parties to the original Gothenburg Protocol to answer a short questionnaire concerning the status of implementation and to forward a copy (pdf or word or alternatively weblink) of their NAC when available. No translation of the NAC is needed. Other countries not Parties to the Gothenburg Protocol are also invited to provide any related information.

In order to include your answer in the publication for the next 55th session of (31May – 2 June 2017), could you please respond to the online questionnaire by the **15th March 2017**. Could you kindly direct any queries directly to the Co-Chair of TFRN and the secretariat, Cláudia Marquesdos-Santos Cordovil, Tommy Dalgaard, Mark Sutton and Clare Howard:.

To: cms@isa.ulisboa.pt, tfrn@ceh.ac.uk

Copy: air_meetings@unece.org, tommy.dalgaard@agro.au.dk				
General Information				
Please provide us with general information about yourself and a contact e-mail.				
Forename *				
Please add your forename (first name).				
Surname *				
Please add your surname (family name).				
Contact e-mail *				

Please add a contact e-mail address - this address will receive a copy of the items entered into the form, for your reference.

Organisation *		

Please and the name of your organisation.				
Country *				
Please indicate which country you are based in.				
Role in organisation *				
Please add your role/job name in the organisation.				
Engagement with NAC				
▼ Image: Control of the control of				
Please add brief information on your engagement with the NAC process in your country.				
Does your conutry have a national code of good advisory practice to control ammonia emissions (NAC) as specified in Article 3 of Annex IX to the 1999 Gothenburg Protocol? *				
C Yes				
° No				
If you answered 'NO' - please ignore Questions 1-5 and now answer Question 6				
If you answered 'NO' to the previous question (i.e. your country does NOT have a NAC), please proceed to Question 6.				
If you answered 'YES' - i.e. your country has a NAC, please answer the questions below				
Question 1: Which was the institution responsible for the establishment and publication of the NAC?				
Question 2: What was the publication date?				
Please indicate the publication date - month and year if possible.				
Question 3: How can end-users access the NAC? Is it available on the world wide web?				
Yes - if so, please provide a weblink/URL below.				
C No				
Access to NAC				
Use this section to provide a link to the NAC on the world wide web and/or upload a copy here.				
Weblink/URL to NAC				
Please add a weblink/URL to your NAC if possible.				

NAC electronic copy

Upload	

Please upload a copy of the NAC if you have one. First click on 'choose file', select the file you want and wait for the name to appear on the screen. Then click on 'upload'.

Further electronic files

Upload

IF you have any further electronic files related to the NAC, please upload here. First click on 'choose file', select the file you want and wait for the name to appear on the screen. Then click on 'upload'.

Question 4: Is the NAC for your country based on the Framework Code for Good Agricultural Practice for Reducing Ammonia Emissions*, with provisions for each of the following elements?

Yes - our NAC is based on the Framework Code
Nitrogen management, taking account of the whole nitrogen cycle
Livestock feeding strategies
Low-emission manure spreading techniques
Low-emission manure storage systems
Low-emission animal housing systems
Possibilities for limiting ammonia emissions from the use of mineral fertilizers YES

Please indicate which provisions are included in the NAC (if they are NOT included, please leave the checkbox blank). *Available on the UNECE website from: http://www.unece.org/index.php?id=41358

Question 5: Any further comments?



If you have any further comments regarding your country's NAC, or relevant information on your experience in its development, please add here.

If you answered 'NO' - i.e. your country does NOT have a NAC, please answer the following questions.

Question 6: Is there a wide awareness of the Framework Code for Good Agricultural Practice** for Reducing Ammonia Emissions in your country, and is it disseminated?



^{**}Available on the UNECE website from: http://www.unece.org/index.php?id=41358

NAC relevant institution	
Question 7: Which is the institution responsible for preparing r	national guidance on ammonia
mitigation?	
Please provide the name of the institution responsible for providing the N	IAC. Please provide further contact

Forename
Surname
E-mail

details below if you have them.

Phone Number

Please provide a phone number if known - especially if an e-mail is not known.

Question 8: Is a national advisory code of good agricultural practice to control ammonia emissions (NAC) currently being prepared for publication?



Please provide information on any NAC which is currently in development, including provisional publication date.

Question 9: Would you welcome support from the Task Force on Reactive Nitrogen in preparing a NAC for your country? If so, please specify what kind of support would be useful.



Please outline whether support would be helpful and if so, in what way.

Question 10: Any other comments?



Please use this space to provide any further relevant information, not already included above.



Annex 2 Establishment of NACs, responsible institutions and weblink/URL

Country	With NAC?	Responsible institution for the establishment and publication of the NAC	Weblink/URL to NAC, or other relevant information
Belgium	Yes	Department of Agriculture and Fisheries, Flemish Government	http://lv.vlaanderen.be/nl/voorlichting-info/publicaties/praktijkgidsen/praktijkgids-bemesting
Bulgaria	No	Ministry of Environment and Water	
Croatia	No		Brochure on Codes for good agricultural practice for protection of soil, water, air and animals: http://www.mps.hr/UserDocsImages/publikacije/Načela%20dobre%20poljoprivredne%20prak se.pdf
Cyprus	No		National regulation for good agriculture practices, named "Code of good agricultural practice:" http://bit.ly/2p3qfLt
Czech Republic	Yes	Ministry of Environment / Research Institute of Agricultural Engineering	http://svt.pi.gin.cz/vuzt/poraden/prirucky/p2004_04.pdf http://www.clrtap-tfrn.org/sites/clrtap-tfrn.org/files/webform/files-english/p2004_04.pdf http://www.clrtap-tfrn.org/sites/clrtap-tfrn.org/files/webform/files-english-additional/OOO-MP-zemedelci-11022013.pdf
Denmark	Yes	Environment Protection Agency (EPA)	http://www2.mst.dk/wiki/Husdyrvejledning.Default.aspx
Finland	No		
Germany	Yes	German Ministry of Env. (BMUB) and German Environment Agency (UBA); (Kuratorium für Technik und Bauwesen in der Landwirtschaft (KTBL), Agrar- InformationsDienst AID eds)	2003 NAC only available in print currently; online availability of new NAC envisaged in 2017/2018.
Hungary	Yes	Hungarian Ministry of Agriculture	https://net.jogtar.hu/jr/gen/hjegy_doc.cgi?docid=a0800059.fvm Nitrate Guidance for Farmers:

			https://www.nak.hu/kiadvanyok/kiadvanyok/135-nitrat-gazdalkodoi-kezikonyv- 1?path=kiadvanyok
Ireland	No		
Kyrgyzstan	No	State Agency for Environmental Protection and Forestry under the Government of the Kyrgyz Republic	
Monaco	No		
Poland	Yes	Ministry of Agriculture and Rural Development and Ministry of the Environment	http://iung.pl/dpr/publikacje/kodeks_dobrej_praktyki_rolniczej.pdf http://www.clrtap-tfrn.org/sites/clrtap-tfrn.org/files/webform/files- english/kodeks_dobrej_praktyki_rolniczej%20publikacja%20z%202004.pdf http://www.clrtap-tfrn.org/sites/clrtap-tfrn.org/files/webform/files-english- additional/Kodeks%20odorowy%2016_09_2016%29.pdf
Portugal	No	Ministry of Agriculture	http://www.drapn.min-agricultura.pt/drapn/conteudos/zv/BPA/CodigoBPA
Romania	Yes	Ministry of Environment, Ministry of Water and Forests and Ministry of Agriculture and Rural Development	http://www.inpcp-campanie.ro/wp-content/uploads/2017/01/CODUL-DE-BUNE-PRACTICI-AGRICOLE.pdf
Russian Federation	No	·	
Serbia	No		
Slovenia	Yes	Agricultural Institute of Slovenia	http://www.kis.si/f/docs/Druge_publikacije/Kodeks_dobre_kmetijske_prakse_1.pdf http://www.clrtap-tfrn.org/sites/clrtap-tfrn.org/files/webform/files-english/PUBLIKACIJA2.pdf http://www.clrtap-tfrn.org/sites/clrtap-tfrn.org/files/webform/files-english-additional/PUBLIKACIJA2.pdf
Sweden	Yes	Swedish Board of Agriculture	http://greppa.nu/, an introductory information page available in English http://webbutiken.jordbruksverket.se/sv/artiklar/god-jordbrukarsed-for-att-begransa-

Switzerland	Yes	Federal Office for the Environment & Federal Office for Agriculture	ammoniakforlusterna.html http://www.clrtap-tfrn.org/sites/clrtap-tfrn.org/files/webform/files-english/jo06_13.pdf http://www.clrtap-tfrn.org/sites/clrtap-tfrn.org/files/webform/files-english- additional/A%2Bdecade%2Bof%2Badvice%2B- %2BFocus%2Bon%2Bnutrients%20%281%29.pdf http://www.clrtap-tfrn.org/sites/clrtap-tfrn.org/files/webform/files- english/NAC_CH_constructions_ruralesetprotectiondelenvironnement.pdf http://www.clrtap-tfrn.org/sites/clrtap-tfrn.org/files/webform/files-english- additional/NAC_CH_elements_fertilisantsetutilisationdesengraisdanslagriculture.pdf Additional information sources: A) N management: https://www.agridea.ch/fr/publications/publications/formulaires-denregistrements-et-de- controles/suisse-bilanz/guide-du-suisse-bilanz/ B) Livestock feeding strategies: https://www.agroscope.admin.ch/agroscope/fr/home/services/soutien/aliments-pour- animaux/apports-alimentaires-recommandes-pour-les-ruminants%20.html & https://www.agroscope.admin.ch/agroscope/fr/home/services/soutien/aliments-pour- animaux/apports-alimentaires-recommandes-pour-les-porcs.html C) Low emission spreading & use of mineral fertilizers: https://www.bafu.admin.ch/bafu/fr/home/themes/eaux/publications/publications- eaux/elements-fertilisants-utilisation-engrais-agriculture.html D) Low emission manure storage and animal housing systems: https://www.bafu.admin.ch/bafu/fr/home/themes/eaux/publications/publications-
Turkey	No		eaux/constructions-rurales-protection-environnement.html
rurkey	INO		Mathodalogical Decommondations for Deducing Ammonia Emissions from Amiguitural
Ukraine	No	Institute of Agroecology and Environmental Management	Methodological Recommendations for Reducing Ammonia Emissions from Agricultural Sources: http://menr.gov.ua/docs/activity-protection/Oxorona_atmosfernogo_povitrya/Zakonodavstvo/Ammonia09.03.pdf , or: http://agroeco.org.ua/images/Documents/Ammonia.pdf .

		The Court of the Court	A) Department for Environment, Food & Rural Affairs in England published their NAC on the
		The institute within each	16th June 2011: https://www.gov.uk/government/publications/protecting-our-water-soil-and-
		devolved administration is	air
		included in the further comments	Scottish Government published their NAC on 11th March 2005:
United	Yes	section below	http://www.gov.scot/Publications/2005/03/20613/51366
Kingdom	163		B) Department of Agriculture Environment and Rural Affairs in Northern Ireland published
			their NAC on the 24th July 2008: https://www.daera-ni.gov.uk/publications/code-good-
			agricultural-practice-cogap
			C) The Welsh Government published their NAC on 19April 2011:
			http://gov.wales/legislation/subordinate/nonsi/epwales/2011/4951580/?lang=en