INFORMAL NOTE

Subject: Next steps in preparing inputs on the Gothenburg Protocol Revision for the Working Group on Strategies and Review (WGSR).

To: National Focal Points and other members of the Task Force on Reactive Nitrogen.
From: The co-chairs of TFRN.

17 July 2009

1. In this note we provide guidance for the next stages of the work by TFRN to prepare inputs in support of Gothenburg Protocol revision. In particular, the note aims to help us prepare for EPMAN-3 (September 2009) and TFRN-3 (November 2009).

2. The note contains an overview of: a) the main activities and meetings over the next months, b) specific points we need to consider in developing options for WGSR, and c) a draft template for a document that will eventually go to WGSR.

Main Tasks

3. TFRN needs to provide WGSR three things:
   a. options for the revision of Annex IX,
   b. an updated Guidance Document for the mitigation of ammonia emissions, and
   c. a revised Framework Code of Good Agricultural Practice for the control of ammonia emissions.

   We have agreed that a) and b) are the first priorities, as c) naturally follows once these are agreed. Annex IX is a rather short document specifying just the mandatory measures, where reference is made to the description of details in b).

4. In addition to these three tasks, it is open for us to suggest options for revision of the main protocol text in relation to ammonia and wider nitrogen management.

Schedule of Activities

5. The minutes of TFRN-2, including the Annex on the Gothenburg Protocol inputs, have been finalized and will be used to inform the discussion at WGSR-45.

6. Our current tasks are to develop the draft options for revision of Annex IX, as started at TFRN-2, and to ensure that the relevant Guidance Document sections are updated. Our aim is to develop as much consensus as possible up to September this year, with all possible options for revision of Annex IX are submitted in advance for discussion at the EPMAN-3 workshop.

7. As the focus of TFRN-3 is to finalize the suggested options for revision of Annex IX and the Guidance Document, this meeting will not be the place to present new ideas. All major new proposals should be submitted and discussed at the EPMAN-3 workshop (to which all TFRN members are invited).

8. Draft versions of texts for EPMAN-3 will be available from 1 September on the TFRN website. Any TFRN members wishing to suggest additional options or comments should provide these by 14 September, to be mounted on the TFRN website.

9. The overall schedule of meetings is as follows:
   a. Working Group on Strategies and Review (WGSR-45): Geneva, 31 August-4 September. The TFRN co-chairs will present on the progress to date, including the report from TFRN-2, with emerging messages. The aim will be to present the general framework for consideration of options, and start the discussion with
countries. (The detailed discussion of options will wait until after the report from TFRN-3 is available, see below.)

b. **EPMAN-3**: Dublin, 24-25 September (two full days): The objective is to more or less finalize the list of options for Annex IX, and the supporting text in the Guidance Document, for presentation to TFRN-3. Text will be supplied to TFRN by October 1.

c. **TFRN-3**: Amsterdam, 24-25 November. The sole focus of this Task Force meeting is to finalize the options for revision of the Gothenburg Protocol and the supporting ammonia Guidance Document. For this, the text will need to be sufficiently developed that it is possible to agree texts on screen during the meeting. The output will be a formal report ready in December 2009 that can be translated in advance of WGSR-46 (April 2010).

d. **The Executive Body of the Convention** meets 14-18 December 2009. As this body contains much overlap in membership with WGSR, they may appreciate an informal update on the progress from TFRN-3.

e. **WGSR-46**, Geneva 12-16 April 2010. Our report from TFRN-3 including the Annex IX Options and Guidance Document, will be available as a formal document (English, Russian and French), for detailed discussion by the Party’s delegations. The TFRN co-chairs will present and take feedback.

f. **TFRN-4**: April/May 2010. Location to be confirmed. This will be the full annual meeting of TFRN, including all aspects, and will include discussion of the feedback from WGSR on Gothenburg revision.

g. Depending on the feedback from WGSR and the Executive Body, further TFRN/meetings may be needed during 2010.

### General Principles in Developing Options for WGSR

10. The guidance we have received from WGSR is for TFRN to provide options representing three levels of ambition for revision of Annex IX. We could interpret this as: High Ambition (A), Medium Ambition (B) and Low Ambition (C) for mandatory measures. We should develop broad definitions of these ambition levels, and a draft proposal is made in the appendix. These ambition levels should be seen only as indicative, and further options may be included, particularly if agreement on some alternatives cannot be reached.

11. It should be emphasized that these ambition levels only refer to the mandatory measures, and not the overall ambition level of a revised protocol. For example, if very ambitious national emissions ceilings were to be combined with option C, this would mean that it is the responsibility of the Parties to decide how they meet the ceilings. The relative role of mandatory measures and national ceilings in defining overall ambition is a matter for discussion by WGSR.

12. For the mandatory measures, there are many ways to vary ambition level, which should be discussed with WGSR. For example, ambition level may be varied as:

   a. **Variation in the required average percentage reduction** achieved compared with the reference for use of technologies, as listed in the guidance document. (e.g., 30%, 60%, 90% reduction etc). For the purpose of Annex IX these percentages apply at the field and farm scale (see Para 18.a below).

   b. **Variation in the way a sentence is written**, affecting the extent to which the Annex implies that a requirement is really mandatory, including:

      i. **Mandatory requirement without exemptions** (e.g., techniques that achieve a specified percentage target, or full prohibition of a certain technology or substance, such as ammonium bicarbonate).
ii. **Mandatory requirement with precisely specified exemptions** (e.g., including use of thresholds, specifications for unsuitable terrain, and alternative solutions).

iii. **Discretionary mandatory requirement** (e.g., as far as a Party considers it appropriate, with loosely specified exemption criteria).

c. **Variation in the target date** by which requirements apply (e.g., immediate or with a delay of several years to allow gradual adjustment by the sector).

d. **Variation between new and existing farms** (e.g., application to a whole sub-sector or only making requirements for new or largely rebuilt farms).

e. **Variation between new and existing technology** (e.g., emission standards relating to the operation of new equipment, sold by manufacturers after a specified date.)

13. Given these different ways to vary ambition level, the TFRN needs to consider where there are scientific/technical reasons for preferring certain approaches. Where the choice reflects a policy decision, this should be presented as a question to WGSR, supported by explanatory information.

14. Recognizing this complexity, at this stage we should not provide WGSR with a simple set of three overall packages of options. To allow the views of WGSR to be taken on board properly, we should provide them with a menu of options that contain items at the A, B and C levels, combined with an explanation of these options. In due course, these options may be grouped into simpler overall packages.

15. It is important to emphasize that it is not the role of TFRN to pre-judge the response of WGSR as regards ambition level. As a technical group within the Convention, the task of TFRN is to identify options based only on their technical feasibility. This necessarily means providing WGSR with a wide range of options from low to high ambition. Personal or institutional views as regards ambition levels should be excluded from the TFRN discussions and left to WGSR to debate.

16. The options suggested by TFRN should be presented in a transparent way, including the appropriate rationale, with information as far as it is available on the costs of measures, the co-benefits and possible drawbacks. To the extent that it is feasible, we should be quantitative in relating co-benefits and drawbacks.

**Preparation for EPMAN-3**

17. We may expect to start discussions in EPMAN-3 with more than three main options, as well as more than one approach to vary the ambition level. The discussions during EPMAN-3 should aim to identify the most suitable approaches based purely on technical considerations:

- scientifically sound (supported by appropriate research),
- practically applicable (that they can be implemented in practice),
- economically feasible (with costs indicated).

18. The following points should be considered regarding the different ways to vary ambition level of the mandatory measures:

a. The percentages used in the existing text of Annex IX refer to *field and farm level* average values achieved by techniques according to the Guidance Document. (They do not refer to national percentage targets.) Hence, at Annex IX, para. 6: “ensure that...low-emission ... techniques (as listed in guidance document V...) that have been shown to reduce emissions by at least 30% compared to the reference specified in that guidance document are used.” Here the reference is to the field scale compared with the reference method.

b. A low percentage reduction combined with a firm mandatory requirement may be considered as more ambitious than a high percentage reduction with a discretionary requirement. For this reason, it could be argued that there would little merit for
EPMAN/TFRN to specify a high percentage reduction, if the relevant sentence in the revised Annex IX implies a discretionary mandatory requirement.

c. On the basis of the preceding paragraph, it may be argued that the primary scale in varying ambition concerns the phrasing of whether an option is truly mandatory (Para. 11.b, above).

d. For an option with high percent reduction and a true mandatory requirement (high ambition), it may be necessary to specify clear exemptions, in order to encourage ratification by the Parties. For example, exemptions for the smallest farms may need to be specified.

e. Developing this rationale, a possible ordering of approaches in developing options is given in Figure 1. Feedback is requested now on whether such a flow chart is useful, so that the EPMAN-3 discussion can focus on developing the options.

f. Where there is any doubt, draft wording for options in Annex IX should be accompanied in our material to WGSR with a supporting statement to clarify our intended meaning. This should enable the ad hoc Legal Group of WGSR to ensure that the statements reflect the meaning intended by TFRN.

g. We need to be careful about our description of exemptions, to make sure that we clarify whether a specific exemption is meant (Para. 11. b, ii, above) or a general loosening of the requirement (Para. 11. b, iii, above).

19. All options will need to be backed up by appropriate statements in the Guidance Document for control of ammonia emissions. The intention is that Annex IX is a rather short document, limited to specification of the mandatory requirements, timescales and any exemptions. The supporting information will be placed in the Guidance Document, which will be updated in parallel.

20. To be effective, we plan to divide into three main groups to conduct the work in EPMAN-3: a) Housing and Manure Storage, b) Livestock Feeding Strategies, and c) Land spreading of organic manures and mineral fertilizers. Issues of how to consider possible farm size categories (d) will be dealt with in plenary.

21. In advance of the EPMAN-3, small working teams are engaged in preparing draft texts in the Guidance Document and Annex IX for each of the three areas listed above. Draft documents will be placed on the TFRN website in advance of the EPMAN-3 to encourage discussion. The names of TFRN members contributing to these preparatory discussions will also be posted on the web site. If you wish to be involved in the preparatory discussions for one of these four topics, you should contact Clare Britton at tfrn@ceh.ac.uk. Background documents will be finalized by 1 September.

A Framework for our Reports to WGSR

22. In the following Appendix, we provide a start of how the report of options to WGSR might look.

23. It is anticipated that we provide an updated version of the Guidance Document as an independent document. By contrast, it is not anticipated that we simply provide three draft documents of a fully rewritten Annex IX. Rather, we should provide a single document that contains options for the draft text that could go into a revised Annex IX. This should be structured according to the main sections of Annex IX, including three options and appropriate explanation at each stage. The document should start with a general outline of the principles which we follow and the approach taken.
Figure 1: Flow chart for setting a possible order of approaches to vary ambition levels in identifying options for revision of the mandatory measures in Annex IX.

The % reduction refers to approaches that, when applied at a farm or field scale, achieve this reduction on-average, as specified in the Guidance Document. The aim of the flowchart is to highlight the different ways of scaling ambition level. It is not intended to be restrictive, and should be used to stimulate the development of options.
Appendix: Draft Framework for the planned report to WGSR

Options for mandatory measures and guidance on ammonia as a contribution to revision of the Gothenburg Protocol

Report by the co-chairs of the Task Force on Reactive Nitrogen


2. Summary paragraph of the overall progress in meeting these objectives through certain TFRN and EPMAN meetings.

3. Statement that the priority has been given to the Annex IX and the Guidance Document, since the Framework Code naturally follows from this. Comment that further updating of the Framework Code will be continued pending the feedback on the Annex IX and Guidance Document.

4. Reflection of the request to consider options of varying ambition in regard of the mandatory measures, and a general statement about the use of three levels: [Here is a first suggestion to be improved; we can treat these as indicative]

a. **High Ambition (A):** Technically feasible options that reflect a high level of ambition in reducing ammonia emissions, while remaining cost effective, in order to encourage possible ratification by the Parties of any revised Protocol. These options are reflective of the urgent need for action to reduce ammonia emissions, in the light of widespread effects on the environment and human health.

b. **Medium Ambition (B):** Technically feasible options that reflect a moderate level of ambition, as well as being cost effective. These options include decisive action with unambiguous mandatory action to ensure that significant progress is made in reducing ammonia emissions, given its effects on the environment and human health.

c. **Low Ambition (C):** Technically feasible options that reflect a modest level of ambition. These options emphasize ‘discretionary mandatory’ requirements, recognizing that other socio-political constraints may limit the possibility for the Parties to agree more ambitious commitments.

5. Add a statement to highlight that the overall ambition level will depend on the combination of ambition level for the mandatory measures (considered by TFRN) and ambition level for the national emission ceilings. The balance between the two is a matter for WGSR to discuss.

6. Explain if a difference in views, in some cases, required us to provide more than three levels of ambition or different ways in expressing these ambition levels.

7. Explain that the TFRN has focused on what is technically feasible, and that the options for mandatory measures provide a wide range from high to low ambition, as a basis for informing the discussions by WGSR.

8. Explain the approach taken in considering the different ways to vary ambition level, possibly including an updated version of Figure 1. Point out that there are several key points to be considered in varying ambition levels:

   a. Explain the need to set exemptions for certain farm sizes and types when specifying medium and higher level ambition options.
b. Explain that there are several ways to record farm size, including total livestock places, total amounts of nitrogen excreted etc. Explain our intention to provide an approach which is unambiguous, yet fair. Record the decision taken on how to handle animals which are grazing for part or all of the time.

c. Explain the basis selected for defining farm size groupings, between a) large agricultural holdings, b) medium size farms and c) small farm holdings, and report the thresholds approaches developed.

9. Present material on each of the headings of the Annex IX:
   a. Nitrogen management, taking account of the whole nitrogen cycle
   b. Advisory code of good agricultural practice to control ammonia emissions.
   c. Mandatory measures and quantitative emission reduction targets for:
      i. Urea and ammonium carbonate fertilizers;
      ii. Manure application;
      iii. Manure storage on poultry and pig operations;
      iv. Animal housing on poultry and pig operations;
      v. Include a new heading on livestock feeding measures;
      vi. Include a new heading on housing and manure storage in cattle operations.

10. For each of these headings in turn provide the following:
   a. The existing Annex IX paragraph
   b. A brief statement of the rationale behind the approach use by TFRN for the three levels of ambition in the mandatory measures.
   c. Presentation of Option A (high ambition), using bracketed text. [This means that changes compared with the original are specified in square brackets, in each case starting with either “insert:” or “delete:”]
   d. Presentation of Option B (medium ambition), using bracketed text.
   e. Presentation of Option C (low ambition), using bracketed text.
   f. Brief explanatory paragraph where needed commenting on the details of the options.
   g. An explanatory paragraph commenting on the justification of the option, including information on importance of the option for ammonia mitigation, issues related to costs, information on possible co-benefits and relationships to existing commitments, information on possible trade-off effects, and, as far as possible, a clear statement indicating the balance between co-benefits and trade offs.

11. Summary of overall costs information of possible packages of options. For this we should liaise with the Task Force on Integrated Assessment Modelling, and their Coordinating Centre.