

Minutes of the EPNB-10 meeting, Madrid, 20.03.2014, afternoon

Attended by 24 experts representing 12 countries, the European commission, and CIAM

Wilfried Winiwarter based on notes by Jürg Heldstab and Magdalena Pierer

1. Annexes to the Guidance Document on N Budgets

1.a Showcase annex: Humans and Settlement (Magdalena)

Magdalena presents the latest version of the description of the pool “Humans and Settlement”. The paper is considered in good shape, some specific suggestions of improvement have been provided to the author. Several aspects are discussed which are of more general relevance:

- Internal structure of individual Annex: Recognizing the value of adhering to a harmonized structure as foreseen in the main guidance document, there is agreement that this should not be forced as there may be good reasons to vary the structure a bit, depending on the specific pool described. Some liberty should be taken here if the respective Annex profits in clarity and brevity.
- As each Annex describes an individual pool, there will necessarily be flows between two such pools. Information on the magnitude of such flows will be available from the pool producing them, thus each Annex should provide descriptions of all outgoing flows. An Annex should also provide information on incoming flows, but provide methods for quantification only when importing from another country.
- In order to limit efforts in establishing N budgets, only N flows above a given threshold (annually 0.1 kt N per mio inhabitants, or 100 g / inhabitant) need to be assessed. Annexes should cover all flows potentially exceeding that threshold, but may also report wherever flows are expected to remain below this value. Moreover, Annexes should cover flows of reactive nitrogen (not of inactive N forms – a differentiation ‘active’ vs. ‘inactive’ may require further discussion, potentially even a specific description in an Annex) and the activation/deactivation process only (which, most prominently, covers fixing and release of molecular nitrogen).
- The national N budgets deal with total mass flows (in kt N or Gg N) and not with specific flows per capita, per employee etc., or flows per area (fluxes). This is strictly based on the territorial principle, not on the nationality of persons contributing to such a flow – important as in some countries commuters, ex-pat workers or tourists may contribute significantly. The respective Annex may point out such features if relevant. For the purpose of assessing the exceedance of the threshold (see above), using official Eurostat population figures will be good enough.
- The N content of materials should be provided in the text of the annex. There is a list in the Swiss report on the N budget 2005 <http://www.bafu.admin.ch/publikationen/publikation/01586/index.html?lang=de> available for a large number of materials, but only in German language according to Swiss custom numbers – both not generally helpful. It could nevertheless serve as a basis to integrate with Eurostat classifications.

- Systematic coding of flows is desired. This could be structured following the new Guidelines for reporting under CLRTAP and UNFCCC, also in order to allow for appropriate data storage by CEIP: Wilfried to provide guidance for authors of Annexes.

1.b status of further Annexes

- Atmosphere (Alessandra) has not been updated since EPNB-9. Very important sources for the calculation of N flows are CLRTAP and UNFCCC inventories. As these mostly go *into* the atmosphere (inflows), they basically need to be covered by other Annexes. National results from published inventories clearly are preferable to general models (GAINS). Nevertheless, deposition fluxes are to be assessed from the EMEP model – Wilfried to contact David Simpson regarding availability by land use class. Further discussions (Alessandra, Ilaria, Wilfried, Markus) to be held aside CCE/TF M&M meeting early April.
- Waste (Clare) – material is available, needs to be compiled. A first draft can be produced rather quickly, adhering to an external deadline
- Energy (Albert) – to be discussed in person with Albert, who is in any case still committed
- Agriculture (Adrian/Wim) – needs to follow closely existing guidelines (e.g., OECD or Eurostat)
- Forests and semi-natural areas (Thomas/Ika; Markus) – funding by Germany currently blocked, available only by June, process delayed.

Deadline for the draft version of the Annexes is set to end of June 2014. This will not be possible for Forest/semi-natural areas.

1.c Annexes still open

- Hydrosphere: Wilfried to check with Maren, Bruna, if they might be available. Nick will discuss with a Danish colleague specialized in the Baltic Sea. Alessandra may be able to provide a contact, too.
- “Industry/Materials”: Wilfried to contact Christian Palliere (possibly there exists a European Association of Food Industry? or is Michel Prud’homme still the best contact in industry and might be addressed as an author?). Lydia is willing to support a writing team from an EECCA perspective.

2. Farm Nitrogen Budgets (Nick)

Nick presents several options of budgeting are available, but refers to different ideas of farm budgeting between EPMAN (that intends farm budgets on every farm) and EPNB (which aims at test farms to verify the success of continuous improvement programs). As EPMAN included their approach in an Annex to the Guidance Document on Good Agricultural Practice, a re-assessment of this approach (and coordination with EPMAN) is needed.

3. Dynamic tool

3.a Discussion during EPNB meeting

The dynamic tool is the link of national N budgets towards scientific achievements. Significant progress has been made regarding porting the model to a new platform (GAMS). A workable version is already available. It is recognized that the dynamic tool and the national budgets need to closely interact, i.e. data resolution and format need to allow for easy matching.

3.b Training session on 27 March (Adrian and Jürg)

Attendance of training session: 20 experts, largely as for the EPNB meeting (see Annex)

For the training, a simplified structure of a NNB was developed, on the basis of an example from Switzerland. The idea was to ease 'getting accustomed' to the concept and use of the tool. National data following this format were obtained for four more countries (Russia, Ukraine, Austria, Germany). Other participants (e.g. Spain, Italy, Netherlands, Denmark) worked on the Swiss example.

The training guided step-by-step through the process of installation and set-up of the software (facing multi-operation system and multi-language challenges), in-depth explanation of use of the tool and interpretation of the results. At the end of the training session each participant was able to perform simple 'simulation' on his/her own laptop computer. All participants were asked to provide feedback to the session organizers on their general impression of the tool, and on their experience in applying it to their own simplified budget, or their further needs to be able to do so.

4. Workplan 2014/2015:

TFRN requests the Annexes to be available by their next meeting (spring 2015), in order to be provided to the Working Group on Strategies and Review in summer 2015. This enforces a workplan as follows:

- end of June: Draft versions to the annexes (pool description).
- end of year 2014: Draft versions of "forests" and annexes without authors yet
- final version must be presented on TFRN meeting in spring 2015

- Farm N budgets: currently not high priority. Adjust to EPMAN needs by next meeting
- Dynamic tool: tool available, not high priority for 2014. As more country data become available, priority could increase in 2015.

Next EPNB meeting: following availability of draft annexes. Depending on availability of some of the key participants at the N workshop in Lisbon (June 30-July 2), this may be an opportunity, otherwise a virtual meeting will be called.

5. Nitrogen indicators:

As part of its international cooperation activities, EPNB follows up on the idea of OECD to develop nitrogen indicators. Adrian, Wilfried and Albert will, together with Mark, visit with OECD Mar 31/Apr 1. EPNB may wish to consider suggesting indicators that can be derived directly out of national budgets. Expectations of OECD need to be explored first.

6. AOB

ANNEX: list of participants

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