

Attending:

Gaston Theis (GT), Jürg Heldstab (JH), Bruna Grizzetti (BG), Alessandra de Marco (AdM), Nick Hutchings (NH), Lidya Moklyachuk (LM), Barbara Amon (BA), Adrian Leip (AL), Julien Hardelin (JH), Ika Djukic (ID), Wilfried Winiwarter (WW), Magdalena Pierer (MP); Ulli Dragosits (UD) joining during the meeting

Chair: WW, notes: MP

Action points highlighted

**Agenda:**

1. Status of annexes & next steps
2. Proposed review procedure
3. Planning for next year: dynamic N budgets; farm N budgets
4. New country budgets

## 0. Introductory remarks

WW: Welcomes all participants, Tour de table

JH: Eurostat update has been implemented recently – needs to be complemented for OECD overall (not just EU); OECD meeting with country delegates will take place end of April (27-29) – OECD does what its member countries want.

WW: collaboration & coordination with international organizations like OECD is very valuable for EPNB. Using existing material in the annexes, but also raising awareness about the annexes, so that they can be used by other organizations, are of high interest.

**ACTION:** EPNB members may attempt to establish contact with national OECD delegates, make them aware of our work

→ WW & Julien will catch up bilaterally to ensure smooth collaboration

## 1. Status of Annexes

### ANNEX 0 – GENERAL

AL: General annex includes issues of importance for all annexes to avoid redundancy and contradictions (nomenclature, N content in different matrices, treatment of uncertainty as a general issue; now also some ideas about the level of detail – which size of flows are to be considered/split/merged?)

very brief and useful overview → ready for review

## ANNEX 1 – ENERGY

Albert Bleeker cannot attend this meeting. Energy is the annex where still most open questions remain, no specific date when this annex will be available. → WW will liaise with Albert in order to find a way to proceed

## ANNEX 2 – INDUSTRY

LM suggests using an ISO standard for uncertainty analysis

WW: quantitative uncertainty assessment may be difficult (at least not for all annexes). In the general annex, uncertainty is now treated in a “semi-quantitative” way – annex authors can decide if they believe a more detailed approach is reasonable and feasible for the respective annex. → WW & LM will talk bilaterally about the standard and possible application to the industry annex.

WW: annex is simple, but complete → ready for review

GT: question regarding completeness of this chapter: Are energy intensive industries (cement, glass, metal) included here or in the energy annex? (Currently, they aren't mentioned in either of them)

WW: The idea is to use the same classification that is used elsewhere (UNFCCC, air pollutants,...) → we need to be careful not to have other nomenclatures than elsewhere, but also not to forget anything.

LM confirms she has checked with the UN-ECE “emission reporting template”, resulting in energy-intensive NO<sub>x</sub> emissions to be accounted under (1) energy. WW will make Albert Bleeker aware of the issue.

## ANNEX 3 – AGRICULTURE

AL: Working together with Wim de Vries and Karin Groenestein. Annex is in medium state of finalization – since the last authors' meeting they mainly discussed the final list of which flows to include (mandatory vs. optional, different tiers).

The annex relies mainly on existing guidelines (IPCC, also OECD-Eurostat handbook on gross N budgets) → the remaining work (compiling specific calculate guidance for individual flows) will be relatively easy. → Authors will provide a next version by March 22<sup>nd</sup>, but not sure whether it will be ready for review by then.

**Where to assign flows?** JH: rule (in Swiss budget) is to describe a flow where it is easier to quantify - how did you handle that?

AL: For the annexes, the rule is to describe a flow from where it comes (e.g. atmospheric deposition – comes from atmosphere); more difficult for fertilizer for instance (should be described in industry pool); But until now, did not discuss that issue intensively.

WW: interaction between different annexes is a crucial and very important issue! Otherwise, we will have to allow the reviewers to check. Maybe also think about reviewing across individual pools.

**Level of detail / Tier 1 – Tier 2?** JH: Different recommendations for Tier1 and Tier2 calculations would be very helpful, and should be mentioned in annex 0.

NH: If the quality standard in the annex is likely to be higher than that by IPCC – there might be situations where IPCC is happy with Tier 2, but the annex aims for Tier 3... If these existing reporting

guidelines should be used as the main source of information, then there will be a restriction to the levels that countries usually use for these reports;

AL agrees. It needs to be made clear that the simpler approaches are sufficient for the moment; but there should be additional guidance for countries that want to go beyond that. The concept is also to compare IPCC and UNECE guidance and which results are expected in terms of N flows.

WW: Country experts for nitrogen budgets may contact national GHG experts to collect information needed – if it was enough to just use CRF-tables, then the whole exercise could also be done centrally, without country experts.

GT: The different tiers should be kept separate. The guidance document will be rather long & complex, and some countries that compile balances for the first time would probably like to start easy and know what are the most relevant compounds and flows. → There is the need to outline this tier approach clearer and make it more readable (improve the structure, aim for consistency throughout the annexes)

**WW: As a general remark, applicable to all annexes: authors need to consider visibility of tier 1 and tier 2 approaches now while revising the annexes.**

**Losses of N as N<sub>2</sub>**. NH: these losses tend to be overseen, but if the N budget should be closed, then you have to deal with it. → AL thinks that IPCC 2006 guidelines consider that. → such information could be either brought into the chapter, or (probably better): add statement referring to IPCC guidelines → AL: NH is more familiar with UNECE guidelines – maybe he might find some time to help/comment on relevant areas.

## **ANNEX 4 – FOREST and SEMI-NATURAL VEGETATION**

ID: Annex is finalized; has already been reviewed by an external scientific reviewer. → ready for TFRN review

## **ANNEX 5 – WASTE**

Clare Howard is not present. WW: Draft of waste annex is available, but not in a status that can be distributed for review. → WW will contact Clare and ask about time schedule of revision.

## **ANNEX 6 – HUMANS & SETTLEMENTS**

MP: Annex is finalized → ready for review

## **ANNEX 7 – ATMOSPHERE**

AdM: almost all the work is done; a few open points will be dealt with during this week, will be ready for March 22<sup>nd</sup> → ready for review after March 22.

## **ANNEX 8 – HYDROSPHERE**

BG: There will be a revised version by March 22<sup>nd</sup>, but not yet sure whether that will be ready for review (depending on the review process – “living document” vs. “scientific review”)

WW: It is not a review in a scientific sense; It must be external readers (users, basically TFRN experts) → let the TFRN know about the documents. Ultimately, the annexes should be adopted by the TFRN.

In addition, WW intends to provide a general overview on the whole thing in a scientific paper (with all authors as co-authors).

**Coordination with other pools.** This is an important point remaining – it should be checked if respective annexes refer to the different connections appropriately (as discussed in last virtual authors' meeting)

## 2. Review procedure

### Timeline

- Next version of documents should be sent to WW by March 22<sup>nd</sup>
- WW will compile them in a document again and make them available to the expert panel.
- Those annexes that are ready for review will be provided to TFRN by March 31<sup>st</sup> to allow TFRN members to get an idea about the document before the meeting in Lisbon. (For the other annexes, the aim is to have them ready for review by end of April)
- Meanwhile: “test” review of at least 2 annexes – the results should be available for the TFRN meeting, to be able to tell TFRN members how the review process works
- Main review phase (involving TFRN as a whole): TFRN meeting & 6 weeks thereafter (June 12<sup>th</sup>)
- Finalizing annexes by authors by September 26<sup>th</sup>

### Review criteria

Ideally, each annex to be reviewed by one “experienced” N-expert and one from a country requiring additional guidance. → this also depends on the response we will get from the TF

Criteria of review should be

- o overall consistency and correctness of statements
- o usability beyond the top-experts

Although this is not optimal, reviews will be focused on the individual pools, not really on comparison of different pools. Suggestions how to include cross-pool view are welcome! Reviewers will also be provided with information on neighboring pools.

### Reviewers

- review volunteers: Jürg, Natalia (tbc), Barbara;
- maybe Julien (depending on work load and exact timing, he cannot confirm yet)
- Some more reviewers will be needed from TFRN, external reviewers who are not members of TFRN can maybe be asked in addition.

WW will contact possible reviewers. (Technical procedure: reviewers will get the files per email.)

BG: The contribution of the reviewers should be acknowledged. → List them next to the authors.

### 3. Planning for next year

- **Finalizing annexes**
  - WW: This remains a top priority for 2015.
- **Dynamic N budgets (Jürg & Adrian)**
  - JH: since last year's meeting in Madrid (training session), not much has happened. But there has been an update in the Swiss N budget, which is now more complete – when results are available, AL could go on with simulations using the existing dynamic tool.
  - AL: used the dynamic tool for a small, more experimental study about how to determine the length of the N cascade – presented that in Lisbon last year.
  - **Feedback** from participants of last year's training session would be very important, but no feedback has been given yet → **WW will remind EPNB participants in the next letter to provide feedback to AL and JH** (questions, recommendations, ideas, how easy/difficult is it?..)
  - AL: can only continue work on dynamic N budgets after annexes are finished (not before September), this is also true for NH
  - WW: It is a very good and useful thing! Keep in mind for the work-plan 2015/16 (although no time pressure)
- **Farm N budget (Nick)**
  - NH already provided some info on underlying theory
  - Things to do next for NH: think about regulatory framework – what is required? And get the time to work on it → **NH would like to discuss that in more detail in Lisbon**
  - AL: Who should use the budgets – farmers on their own farms? NH: (has to remind himself about it). It is an online tool, looking at carbon and N flows at the farm scale. Discussion is needed: What level of expertise to expect from the users? If it's for farmers - what do they understand and what not, what background information is required? → Work on the context in which these tools can be used

### 4. New Country budgets

To report activities to TFRN. (Also: please send proposals for contributions / presentations for TFRN to WW).

- ID: would like to apply annex. This depends on available funding, will be discussed in April with ministry.
- New N budget for Denmark has recently been published
- MP: Applied annex Humans & Settlements to Austria – paper is currently under review.