EPNB-24, online, Oct 25, 2026

2:00 – 4:00 p.m. (CEST)

Participants

Markus Geupel (co-chair, MG)
Wilfried Winiwarter (co-chair, WW)
Kazuya Nishina
Ansar Farooq
Ika Djukic
Harald Loishandl-Weisz
Laurence Loyon
Clara Cambay
Alberto Sanz Cobeña
Amauri Prudente
Karin Groenestein,
Elisabeth Gautefall Hiis
Anja Røyne
Monika Suchowska-Kisielewicz
Inga Grinfelde
Bettina Schäppi
Noëmi Elmiger
Ulli Dragosits
Clare Pearson

Welcome

Welcome and short introduction round of all participants

Report from TFRN-21 (Den Haag, NL) and implications for EPNB

Wilfried reports on the contents and topics of the TFRN meeting held Oct 8/9 in Den Hague, NL. TFRN currently deals with supporting the bodies of the LRTAP with their negotiations on the revision of the Gothenburg Protocol. In this context, two issues are relevant:

- Annex IX to the Gothenburg Protocol: This Annex, dealing with measures to abate agricultural ammonia, has not been updated during the last revision 2012. Hence, the current version still reflects the situation of the original GP, before 2000, pointing out the urgency of updates.
- The Ammonia Guidance Document (AGD) describes in detail measures to abate the emissions of agricultural ammonia and provides the supporting evidence to Annex IX. A revision is in progress, aimed for release early 2027.

Within TFRN, both documents are primarily responsibility of another expert panel than EPNB, hence need not be covered here. It is relevant, however, to note that EPNB's ongoing call-for-data and the officially adopted NNB guidance document represent successful TFRN outputs.

For the process of the Gothenburg Protocol revisions, EPNB members note that the current version specifically mentions N budgets (in Art. (7) item 3d) and they recommend to maintain that link also in the future. The results of the ongoing call-for-data may hint towards the usefulness of a higher commitment of parties in the future, such as introducing an obligation to produce such budgets.

Status of Call-for-Data

Markus provides an overview of the responses received regarding participation in the voluntary call-for-data, with submission date July 2027. It is noted that some of the activities have a scientific background and might not lead to an official submission. EPNB will, for their evaluation of the call-for-data, include

all national budgets received, though the upload of data to CEIP (who also maintains the national emission inventories under UNECE on their web site) will be limited by submission endorsed by parties. At this stage, it is not fully clear which of the scientific activities eventually may find national endorsement.

- Currently on hold: Netherlands, Lithuania
- Positive response or expressing strong interest: Austria, France, Germany, Latvia, Moldova, Norway, Poland, Spain, Sweden, Switzerland
- Positive response, though outside convention: Scotland, Japan, Pakistan

Additionally, A UK budget is available (see https://www.wwf.org.uk/sites/default/files/2024-03/UKCEH-UK-Nitrogen-Balance-Report.pdf) Ulli Dragosits will check with DEFRA regarding their thoughts for a UK response and mention the existing UK budget. Norwegian colleagues (Anja and Elisabeth) will find out about their national focal point to the LRTAP convention and explore the possibility to get their efforts submitted as a national result.

Experience of peer-2-peer group

Noëmi reports on the activities of the peer-2-peer group, where experts specifically working on NNBs meet online, to exchange experiences, discuss issues with the guidance document or the templates, and find solutions internally. The group now consists of 7 members from 6 countries, who have exchanged their progress in two meetings so far. Also, a Sharepoint platform has been established to allow the exchange of literature, documents and data. The next meeting is scheduled for November 18, 2:30 – 4:00 p.m. CEST. Participation is limited to members of the peer-2-peer network and requires open sharing of e-mail addresses among that group, to also allow individual connections between partners. EPNB experts wishing to participate should contact the co-chairs, who will forward their e-mail address to Noëmi.

Status of NNB for Norway

Anja present on progress made for a Norwegian N budget. This project is organized on a GIThub site, with flows quantified by national statistics and N content data from the GD. Python scripts organize the calculation and the display in diagrams and possibly can be shared when ready. Uncertainties have been quantified using Monte Carlo Analysis and are displayed with sector results. Due to large uncertainty range of N content in fossil fuels, this sector contributes considerably to the overall uncertainty. National particularities also include the feeding of salmon farms. When ready, access to GIThub will be shared.

Tour-de-Table and national feedback

Individual current activities in relation to NNBs here have been reported by country, though allowing all participants to speak when relevant.

- Austria (Ika and Harald), N Budget will be organized by converting existing data (from the previously published exercise) to new data structure of reporting template. Moreover, activities to develop N indicators are ongoing.

- Germany (Markus), N-Budget has been subcontracted, subcontractors will contribute to EPNB
- Spain (Amauri) has started activities and finds a lack of nitrogen in the soil. Relevant inputs derive from N-content of irrigation water.
- Switzerland, Bettina will be happy to support improvements of the reporting template. Noemie will update the Swiss N budget using the new GD and reporting template and independently contributes to the EU project Nitroscope (https://nitroscope.eu/). In Nitroscope, project participants from different countries will establish agricultural N budgets, which may open up opportunities for collaboration and data exchange
- In France, funding has been approved and Clara (CITEPA) starts relevant activities. A supervising board has been established, with Laurence (INRAe) contributing.
- For Latvia, Inga has been contracted to develop the national NNB. She works with a PhD student and intends to also deliver results for Lithuania. It may be possible that she can convince Lithuanian authorities to officially adopt her result.
- A new N budget has been developed for Japan, led by Kazuya, covering the years 1990-2023. A manuscript is currently shared between authors, it is based on the CHANS-model, a correspondence table to match the results to the EPNB approach has been developed.
- For Poland, Monika and Wilfried have started a scientific project focusing on N reservoirs and their importance in regard to N budget. This will allow to establish a NNB. The relevant national organization, the Institute for Environmental Protection (IOS) is informed and considers support for 2027, to enable submission as a national output.
- In Pakistan, Ansar is planning to develop a NNB as a scientific endeavor, understanding the considerable challenges for a country that operates offers statistical data that differ from the EUROSTAT structures. His experience could be valuable to guide some of the EECCA countries under UNECE.

Need for a training session

In order to facilitate the call-for-data, EPNB (via Markus and Wilfried) offers a training session, to be organized in connection with the next meeting of the EPNB (see below). Clearly, the experience differs between experts, hence it will be useful to provide training on two levels:

- Actual training for newcomers (introducing concepts, methods etc.)
- Exchange of experience (achievements, problems solved, problems to be solved) between experts having developed NNBs in the past. This may be seen as an in-person extension of the peer-2-peer network.

With the next E-mail newsletter of EPNB, which also will be used to announce the upcoming EPNB meeting, feedback will be requested on the needs for the training session, and also on the interest for online training.

Next meeting (in person): February 22-24, 2027, in Zielona Góra, Poland

As the ongoing call-for-data requires close interaction, an extended EPNB meeting will be held as an in-person meeting. This will facilitate interaction between participants and candidates for future participation, and it also will allow to organize a training session (see above). Monika and Wilfried invite

EPNB members to join the meeting from Monday, February 22 (noon) to Wednesday, February 24 (noon), 2027, in Zielona Góra, Western Poland. Zielona Góra can be reached in about two hours by train from the cities of Wroclaw, Poznan or Berlin (with some extra time needed for a transfer from the respective airport), it also features its own airport that is served once per day from Warsaw. Practical information (travel, hotel) will be made available by Monika, and an invitation plus agenda will be prepared by the co-chairs (to be sent out by early December).

- AOB

No further issues were reported. Next EPNB meeting: February 22-24, 2027; next TFRN meeting: tentatively spring 2027.

Notes by Markus Geupel and Wilfried Winiwarter (Dessau/Zielona Góra, October 16, 2026)