EPNB-16 meeting, May 3, 2018, Berlin

Draft Minutes

Chairs: Markus Geupel, Wilfried Winiwarter

Minutes: as above

Country abbreviations (2-letter-code) according to ISO 3166

<u>Participants</u>: Martin Bach, Gérard Bonnis, Oliver Cencic, Alessandra DeMarco, Ika Djukic, Stephan Fuchs, Friederike Gesing, Jürg Heldstab, Natalia Kozlova, Veronika Makarova, Lidiya Moklyachuk, Filip Moldan, Andreas Prüeß, Judith Reutimann, Till Spranger, Maren Voss, Gabriele Wechsung, Sybille Wendel, Stefanie Wolter

Remote participants: Clare Howard, Adrian Leip, Sergei Lukin

<u>Note</u>: EPNB-16 was organized back-to-back with a meeting of the DESTINO project commissioned by the German UBA (see attached full agenda). While the first day focused on DESTINO (and EPNB's influence), the second day was devoted to EPNB and to the impacts that DESTINO results would have on the EPNB and EPNB work plan.

Participants listed here are those of the second day only (some only part of the day). Remote participants had the opportunity to listen via internet connection, for technical reasons no contributions were possible, and the length/duration of their participation was not recorded.

TOPICS

<u>Discussion EPNB-Guidelines</u>: Practicability for the German Nitrogen Budget and room for improvement (detailed feedback from the DESTINO project)

- *) consistency on nomenclature of flows, sometimes even of pools / sub-pools needs improvement.
- *) pools/sub-pools: more flexibility is desired, specifically in using additional sub-pools or not using sub-pools in case the given structure seems inappropriate.
- *) sources and sinks need to be defined explicitly: even if the elemental flows can be traced, a clear statement is needed that processes like denitrification or burial into sediments need to be regarded sinks, and activation, lightning, BNF or Haber-Bosch are sources with fully unreactive N not being traced in this analysis
- *) Temporal allocation of processes and flows presented in the budget need to be identified in order to distinguish flows reported for potentially different time periods.

Country presentations:

AT: Nitrogen budget in Austria – Ika Djukic

UA: Approaches to the construction of nitrogen budgets in the agriculture of Ukraine – Lidiya Moklyachuk

<u>Final discussion</u>: Conclusions and Work Plan 2018/19 (to be forwarded to TFRN)

- EPNB welcomes the outcomes of the DESTINO-Project and encourages UBA to translate the final report into English language
- EPNB appreciates the DESTINO project team's offer to provide feedback to the practicability of the existing annexes to the EPNB-community
- A second draft of Annex Energy & Fuels is available and will be added to the overall, publicly available Annex-Document, as soon as the inconsistencies with regard to the sub-pool "Biogas Production" are clarified between Annex Waste, Energy (or Agriculture).

Workplan

- Finalization of a draft version of the Waste Annex (Author: Clare Howard) to be sent out for review to EPNB (Plan B: Use English Translation of the DESTINO report with regard to Waste Pool)
- Harmonization of Sub-pools including potential impact on the official UNECE Guidance document, covering experiences from the DESTINO-project for the Guidance Document
- Harmonization of Annexes according to the suggestions from the DESTINO-Project and development of a STAN-template
- Development of a reporting table as an export-file from the STAN-template (reporting to CEIP)
- Development of an additional sheet to the reporting table, including aggregated, most policy relevant flows and information, such as main sources and sinks or emissions of environmental active forms of $N_{\rm r}$.
- The following topics of the workplan defined in Aarhus (EPNB-15) have not been discussed at EPNB-16, but will need follow-up: Continued interaction with INMS and other activities on budget work; Farm nitrogen budgets; Dynamic Tool on N-budgets
- EPNB, in its Annex 0 to the guidance document, will encourage N-budget compilers to also collect information on quantities of stocks where available
- Assessing flow uncertainty: Understanding budgets requires to perform plausibility checks and to develop a communication concept for the remaining overall uncertainty – especially for elements of uncertainty exceeding an order of magnitude. A detailed quantification of uncertainties may allow to identify contradictory information. Improvements will require to identify such contradictions and to reduce at least the elements of largest uncertainty.

Next steps:

- Inform TFRN on the progress and the limitations EPNB faces. Thanks to support from Germany, recent progress has become feasible –the "Workplan" above (including a translation of the German DESTINO report into English), however, requires further resources to be mobilized. Encouragement of TFRN and WGSR to parties of the convention to extend support of budgeting work will be needed urgently.
- Teleconference after the TFRN-meeting in October 2018 (November or December 2018).
- Co-schedule next in-person meeting of EPNB with an INMS A1.1 or an INMS GA (spring 2019)
 or in connection with TFRN-14 in 2019.



Workshop «German Nitrogen Budget» Programme

Funding German Environment Agency (UBA)

Dates and Time 02.05.2018, 12 pm - 03.05.2018, 1 pm

venue Berlin, German Environment Agency, Bismarckplatz, Room 1042

The Workshop takes place within the framework of the 16th EPNB-Meeting and the R&D Project 3716 51 200 0 «DESTINO – DEutsche STickstoff INdikatoren & Objectives» of the German Environment Agency, UBA.

11:45 (30′)	Registration	
12:15 (30′)	Welcome, motivation, framework and objectives of the project DESTINO and relevance for EPNB	Markus Geupel, UBA
12:45 (30′)	EPNB Guidance Document and its annexes	Wilfried Winiwater, EPNB
13:15 (15')	Nitrogen Activities of the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU)	Stefanie Wolter, BMU
13:30 – Coffee	break with sandwiches (30')	
14:00 (5')	Welcome from and introduction of the project team INFRAS, GBG, IWG	Jürg Heldstab, INFRAS
14:05 (45')	 Reactive Nitrogen Flows in Germany 2010-2014 Overview Nitrogen flows in the pools Agriculture, Forest, Materials and Products, Humans and Settlements, Energy and Fuels and Atmosphere 	Martin Bach, University Gießen
14:50 (30′)	Nitrogen flows in the Pools Hydrosphere and Waste management	Stephan Fuchs, Karlsruhe Inst. for Technology KIT
15:20 (40')	Discussion	Participants
16:00 – Short b	reak (10')	
16:10 (20′)	Implementation and visualisation of the German Nitrogen Budget with the software STAN	INFRAS
16:30 (20′)	Software STAN: Principles of STAN (example with time series) Calculation in case of overdetermined situations using uncertainties of flows	Oliver Cencic, TU Wien, Austria
16:50 (10′)	Summary of the day and further program	Markus Geupel, UBA
17:00 – End of	first day.	
19:00 - Dinner	together in town at Restaurant Lubitsch (at one's own expense	

Thursday, 03.05.2018 09:00 – Morning coffee (30')			
11:00 – Coffee	break (20')		
11:20 (5')	Other activities of the EPNB: N-budget in other countries	Chairs: EPNB chairs	
11:25 (10')	Nitrogen budget in Austria	Ika Djukic, Environment Agency Austria	
11:35 (10')	Approaches to the construction of nitrogen budgets in the agriculture of Ukraine (authors: Lidiya Moklyachuk, Igor latsuk, Valeryi Pinchuk)	Lidiya Moklyachuk, Institute of Agroecology and Environmental Management of NAAS, Ukraine	
11:45 (10')	Nitrogen Fluxes in the St. Petersburg Region	Natalia Kozlova, Institute for Engineering and Environmental Problems in Agricultural Production, Russia	
12:00 (30')	Discussion	Participants	
12:30 (30')	Workshop Summary	Markus Geupel, UBA	
13:00 – End of	the workshop. Optional lunch in the cafeteria		