SUBMISSION BY LITHUANIA AND THE EUROPEAN COMMISSION ON BEHALF OF THE EUROPEAN UNION AND ITS MEMBER STATES

This submission is supported by Albania, Bosnia and Herzegovina, Iceland, the Former Yugoslav Republic of Macedonia, Montenegro and Serbia.

Vilnius, 8 November 2013

Subject: **Revision of the UNFCCC reporting guidelines on annual inventories for Parties included in Annex I to the Convention**

Background

The SBSTA identified the need to further consider, at SBSTA 39, the reporting of emissions from urea application and the supplementary guidance on wetlands in relation to the invitation to the IPCC to undertake further methodological work on wetlands, focusing on the rewetting and restoration of peatland, with a view to filling in the gaps in the 2006 IPCC Guidelines in these areas and to complete this work for the thirty-ninth session of the SBSTA. Regarding urea application, the SBSTA encouraged Parties to discuss this issue further during the inter-sessional period, with a view to arriving at a common understanding of where to report the associated emissions. Regarding wetlands, the SBSTA invited Parties to consider how and when to reflect the supplementary guidance on wetlands referred to above in the UNFCCC Annex I inventory reporting guidelines, including the CRF tables. The SBSTA invited Parties to submit their view on these issues by 25 October.

Allocation of emissions from ammonia production

The 2006 IPCC Guidelines changed the reporting practice concerning the allocation of CO_2 emissions from ammonia production/urea. In the current IPCC methodology urea production based on CO_2 emissions captured from ammonia production was considered short term storage. Hence the captured CO_2 was not subtracted and the full CO_2 emissions were reported under ammonia production. In the 2006 IPCC Guidelines this has been changed so that the CO_2 emissions recovered from ammonia production are no longer reported in the IP sector. Instead the CO_2 emissions from the use of urea in agriculture and from catalysts are to be estimated and reported.

A significant weakness in the proposed new approach is that the 2006 IPCC Guidelines only considers two uses of urea. These are fertilizer use in agriculture and catalysts in road transportation. According to the literature, the agricultural use of urea accounts for around 75% of the global use (Glibert et al., 2006). This means that up to 25% of urea has different end-uses. These include many very different processes, either by direct application on lands or in manufactured products:

- Feed additive for ruminants (about 10% of non-fertilizer usage according to Glibert et al. (2006));
- Urea-based herbicides or pesticides;
- In aquaculture;
- De-icing agents at airports and for other de-icing purposes;
- Urea may also be spread on coastal oil spills, to stimulate the growth of natural bacteria populations which break down the oil;
- Manufacture of a wide range of common materials such as urea formaldehyde and plastics; in melamine production, as an ingredient in the manufacture of resins, plastics, adhesives, coatings, textile anti-shrink agents, and ion-exchange resins;

- Urea is an additive in fire retardant paints, tobacco products, and in some wines;
- Urea is also used as ingredient in moisturizing creams;
- Numerous uses of urea in holistic medicine therapies.

The 2006 IPCC Guidelines include a warning about potential double counting of recovered emissions and the reported emissions from the urea use, but no adequate guidance on the completeness of emissions from all relevant urea uses. Whereas the 2006 IPCC guidelines recommend that "all quantity of CO_2 recovered for downstream use in urea production must be subtracted from the total quantity of CO_2 generated", the guidelines only recommend that "emissions of CO_2 from urea use should be accounted for in the corresponding sectors".

The underlying problem is that the 2006 IPCC Guidelines implicitly change the accounting of CO_2 emissions from ammonia production with this modification in the guidance and go beyond methodological and reporting guidance. It creates difficulties for Parties in estimating time-consistent GHG inventories when the underlying accounting principles are changed by the IPCC. Data collection on the urea uses for a full time series since 1990 may not be possible, and would even for the most recent years be unduly resource consuming. Taking the above into account, the EU believes that the best option for reporting CO_2 emissions from ammonia production/urea use would be to retain the current way of reporting.

However, the EU recognizes that it may be confusing in the future, if UNFCCC reporting guidelines and CRF tables deviate in too many aspects from the 2006 IPCC Guidelines. Therefore the EU could accept flexibility in the reporting of ammonia/urea related reporting, provided some conditions are met. The EU suggests to redraft footnote (5) to CRF table Table 2(I).A-Hs1 in the following way to take into account the EU's concerns in a qualitative way:

"Should CO_2 from Ammonia production be recovered for downstream use and be excluded from the reporting in category 2.B.1, the products and the purposes for which the CO_2 is used should be clearly explained in the NIR for the most recent inventory year. The related CO_2 emissions from these products and significant uses shall be accounted in the relevant source categories in the inventory if these emissions occur within the borders of the Party concerned. Parties shall provide an overview in the NIR in which other source categories of the GHG inventory CO_2 emissions from significant uses of urea are reported which are released after short-term storage in products and from the use of such products."

How and when to reflect the 2013 Wetlands Supplement in the reporting guidelines

The IPCC 2013 Supplement to the 2006 Guidelines: Wetlands" (hereafter Wetlands Supplement) was adopted at the IPCC Panel meeting 14-18 October 2013. The Wetlands Supplement is prepared in response to the SBSTA invitation mentioned above. The scope is wider than in the invitation by the SBSTA: in addition to new and updated guidance on drainage and rewetting, new guidance is given for coastal wetlands, inland wetland mineral soil and constructed wetlands for wastewater treatment.

The IPCC Wetlands Supplement covers emissions from complex ecosystems, and updates methodologies mainly for emissions/removals associated with the soil pool. For other pools the methods given in the 2006 IPCC Guidelines are mostly applicable. The IPCC Wetlands Supplement introduces more disaggregation to current categories (e.g. drained organic soils are disaggregated by water level (shallow and deep drained soils) and for the cultivation of inland wetland mineral soils. It also introduces new timing aspects to be considered in the reporting (long-term cultivation of mineral soils). Also some completely new categories are introduced and the geographical area to be considered in the reporting is extended to sea areas (e.g. tidal marshes and seagrass meadows). The uncertainties in estimates calculated using the methodologies will be large. The methodologies are largely activity based (e.g., drainage, rewetting, extractions, wastewater treatment) although the default methodologies apply mostly to lands where the activities have taken or take place.

Due to the short time Parties will have before and in Warsaw to consider the methodologies and their implementation in the reporting, the EU believes that a step-wise consideration and implementation of the Wetlands Supplement in inventory reporting is needed. The focus in Warsaw should be on the implementation of the methodological guidance for drainage and rewetting of organic soils (Chapters 2 and 3 of the Wetlands Supplement) for reporting that will start in 2015. The implementation of the guidance on drainage and rewetting of organic soils is also essential for Parties to the Kyoto Protocol, due to the new activity Wetland drainage and rewetting.

For the other parts of the IPCC Wetlands Supplement, the EU suggests SBSTA initiates a work programme for the further consideration. The detailed scoping of this programme could be initiated at SBSTA 40.

In the sections below, the EU addresses issues in Chapters 2 and 3 as well as the changes to the CRF tables, which would need to be agreed in the Warsaw. Also, some preliminary views on a work programme to consider the other chapters of the Wetlands Supplement after COP 19. In this process, Parties would also consider the timeliness for the implementation of the other chapters into the reporting under the Convention.

Implementation of Chapter 2 Drained Inland Organic Soils and Chapter 3 Rewetted Organic Soils the UNFCCC reporting guidelines

The methodological guidance for drained organic soils and rewetting is updated and complemented in the Chapters 2 and 3 of the Wetlands Supplement.

Chapter 2

The IPCC default emission factors for CO_2 and N_2O emissions from drained soils in all land-use categories and also respective categories in the Agriculture sector (mainly N_2O from cultivation of histosols) are updated in Chapter 2. The methodological guidance covers categories used in current reporting, although for some categories more detailed disaggregation (for grassland in the temperate climate zone, reporting is recommended for shallow-drained and deep-drained grassland separately) is provided. The EU notes that the Wetlands Supplement gives guidance on how to report also in cases where the more detailed disaggregated data is not available.

Chapter 2 provides also guidance for CO_2 emissions from dissolved organic carbon resulting from drainage of organic soils – which has not been included in the reporting so far - as well as for CO_2 and CH_4 emissions from organic soils (peat soils) during fires.

In addition, Chapter 2 provides new guidance for CH_4 from drained organic soils by land-use category and also for drainage ditches. Default values are provided for all parameters needed for estimation of the emissions when the areas of organic soils are known.

Chapter 3

Chapter 3 provides guidance for estimation of CO_2, CH_4 and N_2O emissions from rewetted organic soils. The Tier 1 method for N_2O from rewetted lands however assumes that the emissions are negligible, and no default factors are given. Also Chapter 3 included guidance for CO_2 emissions from dissolved organic carbon and CH_4 from the rewetted lands and ditches.

The default factors given for CO_2 emissions from the rewetted lands are based on flux measurements and include all non-woody vegetation on these lands and are no longer separated into the different pools that are currently used in the CRF tables.

Inclusion of Chapters 2 and 3 in the UNFCCC reporting guidelines

The EU supports the use of Chapters 2 and 3 in the reporting starting in 2015 and including the implementation of these chapters in the decision on the revision of the UNFCCC reporting guidelines for Annex I GHG inventories in Warsaw.

The EU believes this would require including in the decision to be adopted by COP 19 on revision of the UNFCCC reporting guidelines for annual inventories by Annex I Parties:

- adoption of the methodological guidance included in the chapters for use in inventory reporting from 2015
- a grace period of four years during which Tier 1 methodologies could be used for any of the categories reported to allow time for Parties to develop their inventory systems (activity data collection) and to obtain any country-specific data, which may be needed for adopting higher tiers in the reporting
- the reporting of the CH4 emissions from drainage and drainage ditches should be included in the LULUCF sector
- the CRF tables would need to be revised to take the new guidance into account (see attached for a proposal)
- the COP should review the reporting formats (CRF tables) for these chapters at the end of the grace period to take into account experience in the use of the new methodological guidance.

Other methodological chapters of the Wetlands Supplement

Chapter 4 *Coastal Wetlands* gives guidance on emissions/removals related to management of mangrove forest and activities in tidal marshes and sea grass meadows. All these ecosystems can cover areas included in the sea, seagrass meadows are always part of the sea. The IPCC defines coastal wetlands as wetlands near the coast that are influenced by tidal and/or saline or brackish water. They may consist of mangrove, tidal marsh and seagrass vegetation and can have organic and mineral soils. Management practices included in the guidance are aquaculture, salt production, extraction, drainage, rewetting and revegetation, and forest management activities in mangroves.

Chapter 5 *Inland Wetland Mineral Soils* provides guidance for managed inland mineral, including drained wetland mineral soils subject to rewetting; those under long term cultivation; and any other mineral soils that have been wetted by human intervention (e.g.,. inundation for the purpose of wetland creation). The chapter updates guidance default C stock changes values for inland wetland mineral soils. It also provides guidance not contained in the 2006 IPCC Guidelines, including a default stock change factor for land use for rewetted croplands, and methodologies and emission factors for CH4 emissions for mineral soils in any land-use category that have been rewetted or have been inundated for the purpose of wetland creation.

Chapter 6 *Constructed Wetlands for Wastewater Treatment* provides a methodology for CH_4 and N_2O emissions from constructed wetlands that are used for wastewater treatment. Current methodologies for wastewater treatment cover already treatment of all wastewater within a country, wherefore the new guidance can be seen as a further disaggregation of reporting for a specific wastewater management system. The methodology produces emission estimates for CH_4 and N_2O in the same order of magnitude when using the current methodologies.

The EU view is that these chapters require more thorough consideration, before they can be adopted for reporting and suggest that SBSTA39 discusses how this further consideration takes place (aim and timelines). In addition, Annex I Parties could be encouraged to gain experiences in the use of the methodologies, parameters and guidance in these chapters, where appropriate.

Chapters 1 and 7

Chapter 1 Introduction gives guidance on the use of the Wetlands Supplement and generic information on the linkages between the 2006 IPCC Guidelines and the supplementary guidance presented in this document. It includes also definitional issues and a glossary.

Chapter 7 provides general guidance on cross cutting issues for the methodologies provided in Chapters 2 to 6 of the Wetlands Supplement by addressing (i) reporting and documentation, (ii) uncertainty estimation, (iii) key category analysis, (iv) completeness, (v) time series consistency, (vi) quality control (QC) and quality assurance (QA). This chapter provides also worksheet to facilitate the use of the Tier 1 methods provided in the Supplement and reporting tables. The reporting tables are based on the AFOLU reporting tables in the 2006 IPCC Guidelines and are therefore not consistent with the CRF tables used in Convention reporting. Especially, the split made in the IPCC supplements on wetlands between reporting under Agriculture and LULUCF is not consistent with the way the principles used for allocation to these sectors in the CRF tables as agreed at SBSTA session in June 2013.

Chapters 1 and 7 do not provide methodological guidance but introduce readers to the use of the Wetlands Supplement and provide for example, definitions, guidance how to use the Wetlands Supplement together with the 2006 IPCC Guidelines and how to incorporate the new sources/sinks into the key category analysis.

The EU believes that Parties could be recommended to use those parts of chapters 1 and 7 which are relevant to the implementation of Chapters 2 and 3 of the IPCC supplement on wetlands consistent with the general provisions outlined in the revised UNFCCC reporting guidelines for annual inventories by Annex I Parties. The recommendation should exclude the use of the reporting tables and CRF tables should be elaborated by SBSTA in a similar way as followed for the 2006 IPCC Guidelines. The EU has attached a preliminary proposal for changes in the submission, only those tables for which changes are needed are submitted.