



COST E43 WG2

HARMONISING UNFCCC/KP REPORTING FOR THE LAND USE, LAND USE CHANGE AND FORESTRY SECTOR

Minutes WG 2, Bordeaux 11-12 May 2006

Prepared by Majella Clarke and Hans Petersson

1. Technical matters and opening introductions – Göran Ståhl

The overall schedule for the meeting was to start with country presentations in WG2 “plenary” and then to breakout into two subgroups, one working on questionnaire results and the other on reference definitions.

2. Country Presentations

1. Czech Republic presented by Emil Cienciala

In its latest NIR, the Czech Republic describes its implementation of GPG for LULUCF (IPCC 2003). The reporting on land use areas was based on cadastral information and CORINE datasets from 1990 and 2000. Apart from changes in aboveground biomass carbon pool in forest land use category, the country relies on Tier 1 approaches. The country has not reported any uncertainty assessment yet. In the future, the party will face the challenge of merging different data source for reporting carbon stock change in aboveground biomass, which is currently based on stand-wise inventory of forest management plans. The first cycle of the (new) statistical NFI was completed in 2004. This resource will be used for emission reporting once the second cycle is performed, which will allow the application of stock-change method.

2. Slovakia presented by Tibor Priwitzer

State of the latest LULUCF reporting and implementation of GPG LULUCF 2003 was reported. Slovakia finished sample plot measurements last year. Data from management plans are also available. Concerning the state of LULUCF reporting, a report of the individual review on GHG inventory of Slovakia was submitted in 2005. Slovakia is working on national project on the methodology for estimating carbon pools.

3. Austria presented by Peter Weiss

Forest biomass estimates are satisfactory in Austria. Biomass functions by tree species based on Austrian data functions are available. Before that biomass expansion factors were used in Austria. The

expected output of this change is improved estimates. Austria has data on soil carbon stocks but does not have a method to estimate soil carbon stock changes. So soil carbon stock changes remain a weak point. Austria proposes to get better information on soil carbon stock changes and to improve the information on land use changes.

Discussion: Emil Cienciala – Are the Austrian biomass equations available? They are in print in May, however the biomass functions do not include standing wood. Austrian Journal of Forest Science is a good source to refer to the functions.

Brief discussion about harvesting statistics and estimation. Discussion on this topic will continue.

4. Italy presented by Vittorio Tosi

In Italy ongoing activities include to improve the quality of data in different sectors – LULUCF. Data was used from a variety of projects including InfoCarb and the new NFI. Collection of data is still in process and currently they are collecting data on the ground. Italy used the forest area data from first NFI from 1985 and then the new data from 2002. For intermediate years, the forest area was interpolated.

Concerning biomass, Italy started from the growing stock estimate of 1985 and applied increments to growing stock. Models for each species for aboveground biomass are available. However, deadwood data do not exist. Litter and soil linear functions have been applied.

5. Iceland presented by Arnor Snorrason

In Iceland Agricultural University of Iceland is responsible for LULUCF. First reporting with new tables were delivered for 2004. First assessment for land use classes and first time reporting for emissions from ditched wetlands were included using IPCC defaults. New data and methods made LULUCF a net source instead of earlier reported net sink – 3Mt on CO₂ equivalent emitted. The NFI began in the summer of 2005. Only 126 plots have been measured so far, so the small dataset has not been applied yet. However, first map of forest plantations has been produced. Area estimation of plantation forest in Iceland amounts to 28,900 ha +/-4000 ha. Area of polygons in GIS is 38,900 ha. Old indirect estimation of plantation forest is 28,600 ha.

6. Germany presented by Gerard Kändler

Issue regarding optional reporting on KP was risen. Germany is currently in the process of deciding on whether or not to include 3.4. The emission reduction goal Germany has committed to cannot be achieved by 2012, so it is possible that forest management will be elected for KP accounting. This will make reporting much more complex. Second soil inventory in Germany is in the process.

7. Finland presented by Tarja Tuomainen

Land use class estimates "remained" and "converted" within 20 years are in process. In general the estimation of land use changes will be improved during 2006. The use of map data, activity data and satellite image data will be considered, in addition to NFI. These data are also key sources in KP reporting. We are trying to make it in the same time. Finland has decided to participate in KP test inventory that will be completed in March 2007. Finland has adopted not to use 3.4, but possibly this will be re considered by the government .

8. France presented by Antoine Colin

France is remeasuring carbon stocks. New set of data and a great improvement in the current methodology.

Concerning estimation of carbon stocks for aboveground biomass France is changing inventory design to move from default method to stock change method. It was stated that this will create new challenges. Current studies of carbon pools, but it is not a priority at the moment. A weak point in France is the lack of uncertainty assessment. However, the situation is wished to change. France decided to report on 3.4 of KP. France has little data for land use changes, so currently they are using the default values for the IPCC.

9. Spain presented by Gerardo Sanchez

Spain is working to obtain useful data. At the moment, NFI data are used with 10 -12 year cycles. Spain is trying to transfer this to fulfil the LULUCF yearly data reporting requirement. Biomass expansion factor is defined by the national forest institute. Spain is not sure about the quality of the data. While the NFI is very good, it's difficult to compare the data from different cycles. In 2007 Spain will start a new cycle. Spain will introduce data for biomass and understorey. Emphasis is on the collection of data for understorey biomass. How to manage and compare the data is the challenge for the Spanish NFI. Forest management is not really an important issue at the moment in Spain. The problem is that they cannot provide accurate annual data.

Discussion: Göran Ståhl – Effect may be larger from the CAP as it cancels out the deforestation effects.

10. Slovenia presented by Gal Kusar

Slovenia is preparing a new methodology for forest inventory ready to start for the inventory of 2007. Data exists for stand inventories, but this was not good for KP reporting. Problems include unreliable statistics for harvests and drainage from private forests. Private ownership constitutes 80 per cent of forest area in Slovenia. Challenge will be how to get the accurate amount of growing stock to report. Slovenia opted for 3.4, meaning that forestry is really important for fulfilling the KP.

11. Sweden presented by Hans Petersson

Until last year, Sweden used the default method of reporting and changed to the stock change method as of 2006. If we use the same biomass expansion factors derived from the forest and apply them to the harvest, an overestimation of about 5 to 10 percent can result. Sweden has very good biomass functions, and the use of only three tree species makes the application easy. Can also estimate the sampling error.

3. Subgroup on questionnaire results

Chaired by Emil Cienciala

Status: Updated questionnaire responses as of January 2006 with the aim to get a clear picture of how LULUCF is reported, what is the role of NFI and how are the GPG implemented. The goal is to merge all of the key information from basic questionnaire of 2005, questionnaire update and the current country-specific update. This should reassemble a report on emission estimation and reporting practices and utilisation of NFIs in Europe.

The group agreed to achieve a paper on these issues. Pre evaluation of the questionnaire update was completed by Emil Cienciala. The group went through the major results and outlined a strategy for compilation the review. The ambition is to have a draft product by the end of June and a publishable document by the end of the summer.

Task attribution and responsibility:

- Majella Clarke will take responsibility for the English
Definitions of forest area and forests – **Tibor Priwitzer**
- Landuse conversions– **Gerardo Sanchez**
- Five carbon pools– **Bruno Lasserre**
- UNFCCC and FAO – **Arnör Snorrason**
- KP requirements – **Emil Cienciala**

Emil Cienciala compiles the contributions, Majella Clarke checks English. This draft material will be sent for another revision to the group. Göran Ståhl and Erkki Tomppo will review and complement. Target: submission to Silva Fennica. Note – acknowledgement must include the country-respondents.

4. Subgroup on reference definitions

Chaired by Göran Ståhl

It was decided that the responsible person for each work package (WP) should have a short presentation followed by a brief discussion. Thereafter decisions and identification of remaining issues should be stressed. The last issue was to decide responsibilities regarding to compiling a final report.

General

Background information on each WP was distributed but could also be requested from each WP-leader. Background information on Reference definitions for LULUCF-reporting and from the Freiburg meeting could be provided on the home page. If not specifically specified, all reference definitions refer to forestland. If reference definitions have some connection with the work in WG1 (or WG3) the responsible person for each WP should contact WG1 (or WG3) for harmonisation. If the responsible person is not quite clear on whom to take contact with, discuss this issue with Göran Ståhl.

WP 1) Further identification of areas to be covered with reference definitions

Responsible: *Karsten Dunger (not present), Erkki Tomppo is the new responsible person*

Definitions of controlled fires and wildfires, respectively, have to be decided. This is also valid for fertilization. It was decided that these variables should be stressed in the final report and that Peter Weiss, Erkki Tomppo and Gerald Kaendler should provide input.

WP 2) Definitions of land use categories

Responsible: Vittorio Tosi

Definitions of land use classes, patch sizes and how long to remain in a land use transfer class were discussed. It was decided that Peter Weiss should be responsible for suggesting a distinction between Grasslands and Other land. Peter Weiss, Vittorio Tosi and Hans Petersson are delivering input to the final report.

WP 3) Definitions of ARD

Responsible: Terje Gobakken/Gro Hysten (not present), Gal Kusar is the new responsible person

Definitions of ARD were briefly discussed. The interpretation of Human induced was discussed. Land use conversions between managed lands should always be considered as human induced. If connected with some human intervention as planting, the conversion from unmanaged land to managed Forest land is assumed human induced. A forest fire, a storm, etc followed by the conversion from Forest land to an unmanaged land use class might lead to deforestation but the responsible person will check this in detail in the IPCCs GPG 2003. The time point of a land use change has to be decided. The alternatives are, e.g., i) at the time of reforestation (planting or sowing) or ii) when the new forest is established.

WP 4) Definitions of Carbon Pools

Responsible: Gert-Jan Nabuurs (not present), Peter Weiss is the new responsible person

It was suggested that aboveground living biomass refers to all trees and non-tree vegetation and that belowground living biomass should have a lower threshold limit of 2 mm, excluding fine roots. Other vegetation should not be included in belowground living biomass. The suggestion was that aboveground is interpreted as strictly aboveground. Dead wood includes tree parts with the minimum diameter of 10 cm and the length of 1.3 m. Dead wood could be both aboveground and belowground and could include coarse roots if they are big enough. It was suggested that the soil organic carbon and litter pools should be reported together. The reference depth of mineral/organic soil layers, F and H horizons have to be investigated further. Peter Weiss and Hannu Ilvesniemi provide input to the final report. This WP has a close connection to WG1.

WP 5) Interpolation, extrapolation, and averaging issues

Responsible: Alexandra Freudenschuss (not present), Erkki Tomppo is the new responsible person

Erkki Tomppo made a presentation on the issue. Matching the year of inventory with reporting year and recalculations are examples of areas discussed. Erkki Tomppo and Peter Weiss are responsible for developing the reference methodologies.

WP 6) Biomass expansion/conversion factors and biomass functions

Responsible: Hannu Ilvesniemi (not present), Peter Weiss is the new responsible person

One important issue was to harmonise BEFs for neighbouring countries by compiling research. Peter Weiss and Gal Kusar will provide input to the final report.

WP 7) Managed forests and forest management

Responsible: Göran Ståhl

It was concluded that the definitions should be in line with the FRA2005 definitions. Loose recommendations were suggested since this might be a strictly political issue. Managed forests as well as forest management should refer to all land accessible for timber production even if timber is not utilized/harvested. Göran Ståhl and Vittorio Tosi should provide input to the final report.

WP 8) Harvesting statistics

Responsible: Hans Petersson

A few general methods for reporting harvest statistics will be described and briefly evaluated. Hans Petersson and Gerald Kaendler will provide input to the final report.

WP 9) Uncertainty estimation procedures

Responsible: Gerald Kaendler

Gerald Kaendler and Göran Ståhl will provide reference methods for uncertainty estimating procedures.

Final report

- Göran Ståhl will provide each WP leader a template for the final report as soon as possible.
- The responsible person for a WP should send the contribution of the final report to Göran Ståhl before the end of July.
- Göran Ståhl and Gerald Kaendler will compile the results and resubmit for comments to each member, present at Bordeaux, before the end of August.
- To be considered, comments should be sent to Göran Ståhl and Gerald Kaendler before 15.8.2006.

5. Participants

Name	Country	Institute	E-mail
Göran Ståhl	Sweden	SLU	goran.stahl@resgeom.slu.se
Emil Cienciala	Czech Republic	IFER	emil.cienciala@ifer.cz
Peter Weiss	Austria	WBD	peter.weiss@umweltbundesamt.at
Tarja Tuomainen	Finland	METLA	tarja.tuomainen@metla.fi
Majella Clarke	Finland	METLA	majella.clarke@savcor.com
Erkki Tomppo	Finland	METLA	erkki.tomppo@metla.fi
Thierry Belouard	France	IFN	thierry.belouard@ifn.fr
Remi Tessier Ducros	France	IFN	tessierducros@bordeaux.ifn.fr
Dominique Guyon	France	INRA	guyon@bordeaux.inra.fr
Antoine Colin	France	IFN	antoine.colin@ifn.fr
Gerald Kändler	Germany	BWL	gerald.kaendler@forst.bwl.de
Thekla Tsitsoni	Greece	AUTH	tsitsoni@for.auth.gr
Arnor Snorrason	Iceland	Skogur	arnor@skogur.is
Vittorio Tosi	Italy	ISAFI	vittorio.tosi@entecra.it
Bruno Lasserre	Italy	MNI	lasserre@animol.it
Gheorghe Marin	Romania	FRMI	ghmarin@icas.ro
Tibor Priwitzer	Slovakia	WFC	priwitzer@nlcsk.org
Gal Kusar	Slovenia	SFI	gal.kusar@gozdis.si
Gerardo Sanchez	Spain	DGB	gsanchez@mma.es
Hans Petersson	Sweden	SLU	hans.petersson@resgeom.slu.se