Expert judgement 2011/1

Experts' names	Mr. István Czirok, Mr. Szabolcs Szabó
Date:	24.11.2011.
Experts' background:	Both of them had worked as forest planners for many years before having obtained a position at the central administrative body of forest management. Mr. István Czirok is the head of Department of Forest Planning and Nature Conservation. Mr. Szabolcs Szabó also works at this department. Both of them took part in organization of competitions for forest planners suitable for estimation of precision and accuracy of various sampling methods being applied in the planning practice. This professional background ensures the reliability of expert judgement.
Quantity being judged:	Sampling error of field surveys carried out by forest planners.
Result of expert judgement (uncertainties expressed as ranges):	- Total basal area: +/- 5 % - Height: +/- 0.5 m, 1 m and 2 m m in stands shorter than 15 m, between 15 m and 30 m and taller than 30 m, respectively - Area-specific standing volume: +/- 30 %
Justification	Due to the lack of proper quantitative data, the judgement was based on: 1. professional experiences of the experts; 2. the results of several of the above-mentioned competitions. 1. As a part of their jobs, the two experts regularly check forest planning activities throughout the country. Thus, they often experience measurement and sampling errors and notice especially the extreme situations. So they can estimate the uncertainty (range) of the average per hectare standing volume as assessed by the forest planning. This is a clear overestimation of the real confidence interval. 2. During the competitions, forest planners sampled the same stands and then the results were compared and evaluated. Before the competitions, these stands had been completely tallied. Forest planners were allowed to use various sampling methods that are commonly applied in the planning practice. In this way, both measurement and sampling errors of various sampling methods could be estimated. The resulting expert judgment is an aggregated value of errors measured in many stands.
External review:	28.11.2011.; Zoltan Somogyi, Hungarian Forest Research Institute
Approval:	29.11.2011., National Food Chain Safety Office

Expert judgement 2011/2

Experts' names	Mr. Zoltán Somogyi, PhD
Date:	24.11.2011.
Experts' background:	Mr. Zoltán Somogyi is an author of several methodological guidances of the Intergovernmental Panel on Climate Change. He works at the Hungarian Forest Research Institute. His main research topics are strongly related to the national greenhouse gas inventory. A list of his publications is available at: http://www.scientia.hu/cv/lopubl-ZS.php
Quantity being judged:	Uncertainty of FLU(0) related to category *forest land converted to settlement*.
Result of expert judgement:	A maximum error (expressed as range) of -50/+25 % may occur.
Justification	The default average of the above-mentioned FLU(0) is 0.8 according to Chapter 8.3.3.2 of IPCC Guidelines (2006). This means that "*20% of the soil carbon relative to the previous land use will be lost as a result of disturbance, removal or relocation*". This average value is valid only if the converted area will be concreted over. However, two extreme cases are also possible: either a mine will be opened leading to the total loss of soil carbon (i.e., FLU(0) = 0), or a park/lawn will be established leading to an increase in soil carbon (i.e., FLU(0) = 1). Taking into account that mine opening is very rare in Hungary and that the area of even the largest surface mine is only 12 km2, a range of -50/+25 % is a reasonable estimation for uncertainty of the average FLU(0) value.
Approval:	29.11.2011., National Food Chain Safety Office

Expert judgement 2011/3

Experts' names	Mr. László Mezei
Date:	24.11.2011.
Experts' background:	Mr. László Mezei worked at the Mapping (GIS) Department of the Central Agricultural Office for several years (from the 1990's to 2012). He took part in the coordination and control of forest mapping.
Quantity being judged:	Uncertainty of border line locations of forest stands.
Result of expert judgement:	A random error (expressed as range) of +/- 6 m was assessed.
Justification	The estimated range is a strong overestimation of the real random error since GPS instruments being used in the mapping practice are much more precise than +/- 6 m. Nevertheless, this range was applied as uncertainty value for the sake of conservativeness, which is assumed to also include sources of uncertainty other than measurement errors. Such other sources include for example border lines that are sometimes mapped and digitalized only on screen without any GPS measurements. This may happen when a forest subcompartment is divided into two parts, so two subcompartments are created from one. However, the expert believes errors from such sources are rather limited.
External review:	28.11.2011.; Zoltan Somogyi, Hungarian Forest Research Institute
Approval:	29.11.2011., National Food Chain Safety Office

Expert judgement 2011/4

Experts' names	Mr. Péter Debreceni
Date:	24.11.2011.
Experts' background:	Mr. Péter Debreceni manages the Hungarian Forest Fire Database System. Moreover, he checks in-situ the reliability of data on forest fires gathered by forest inspectors and firemen.
Quantity being judged:	Uncertainty of burned fraction of standing volume as estimated visually by forest inspectors.
Result of expert judgement:	A maximum error (expressed as range) of +/- 20 % may occur.
Justification	The estimated uncertainty is in accordance with the official guide prescription on the assessment of burned biomass fraction written for forest inspectors which allows an uncertainty value of +/- 10 % or maximum +/- 20 %. Due to lack of proper data, it is impossible to check whether these limits are observed, however, the experience based on visual assessment by the expert supports the claim that the uncertainty cannot be larger than +/- 20 %.
External review:	28.11.2011.; Zoltan Somogyi, Hungarian Forest Research Institute
Approval:	29.11.2011., National Food Chain Safety Office