

The QA Committee of the PCG - Suggestions

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Introduction

Data Quality (DQ) is essential in forest monitoring. DQ results from a process in which each step of the investigation of concern is properly addressed, from the definition of the objectives to the comparability of the data in space and time, to data storage, processing and reporting. DQ is a cross-cutting issues as it is of concern for all the investigations and for all the various steps within an investigation.

In the past several activities were carried out within the ICP-Forests: for example, the Manual was started in 1987, the crown condition exercises started in 1987, the soil inter-laboratory comparisons started early in the 1990s. Later on, a great deal of activity was developed, with particular emphasis on the analytical aspects and intercomparison, while field sampling has received so far much less attention.

At the PCG meeting held in Hamburg in 2003, the issue of a common approach to some aspects of QA was first discussed and a decision made to put forward a set of QA/QC indicators and a QA reporting. Some EPs submitted proposal, but no common reporting was developed. The point was made again at the PCG 2006 and a meeting was scheduled to address specifically the QA issues.

Objectives of the meeting

Provide an overview of the current QA/QC approach within the ICP-Forests on the basis of Expert Panels and their Manuals with respect to sampling, measurements, data storage and processing. Additional experts (e.g., from JRC) should be considered.

Identification of the most important issues to be covered within the new group.

Group's structure, organization and work programme

Preparation of a draft mandate to be presented at the ICP-Forests Task-Force in Zvolen, Slovak Republic, May 2007.

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Suggested vision

The vision is to set-up a new group based on the chairpersons of the individual EPs (or those persons in charge for QA/QC within a given EP), data managers (central level), data users (e.g., EU, the LRTAP). The group does not aim to replace any of the existing QA/QC groups within the various EPs. Rather, the new group should work at the co-ordination level in order to agree upon a common QA/QC approach, building upon the experience available so far and to be continued in the future. The agreed common QA/QC approach should be the frame within which further work can be carried out at the level of individual EPs and a common reporting system developed.

Suggested areas of interests

Manual and Sub-Manuals

Objectives: formal definition

Attributes: definitions

Sampling and non-sampling errors

Definition of quality in operational terms: Data Quality Requirements (DQR): completeness, consistency with the Manual, Data Quality Limits, Measurement Quality Objectives

What to do when data are of poor quality

Reference standards: definition

Inter-comparison exercises (e.g., ring-tests)

Data storage

Data processing

Envisaged activity

- (i) Promote review: review the objectives, to achieve a formal definition. This will have benefits for other aspects (sampling). Review the Manuals, to identify harmonization needs.
- (ii) Promote co-ordination between QA/QC activities, including: identification of QA/QC needs; common definitions of DQR (in general terms: they will obviously differ in their actual values according to the investigation being considered); promote the definition of QA/QC indicators.
- (iii) Promote co-operation, with other ICPs and programmes (e.g. the U.S. FHM programme).
- (iv) Promote QA/QC: support the EPs in the organization of internal exercises.
- (v) Promote and ensure consistency between data, data quality and data processing.
- (vi) Promote scientifically sound data processing

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- (vii) Contribute to the reporting system: by own product, e.g. the ICP-Forests QA/QC system (this may be a valid option also for a scientific paper on a peer reviewed journal); by contributing to the annual reporting of the programme.

Suggested structure

The group will be active within the PCG of the ICP-Forests. The group will be made by:

- the EPs Chairpersons,
- the leader of the existing QA/QC groups,
- delegates of the PCC of the ICP-Forests,
- delegates from the data managers,
- delegates from the end-users of the data (WGE, EU, ...)
- the chairperson

Suggested time frame for activity and meetings

The suggested time frame is the period May 2007-May 2010. Back-to-back meetings with PCG (December) and editorial meetings (March-April) (if needed).

Suggested mandate

Install the QA Committee within the PCG of the ICP-Forests. The QA-C will be active between 2007 and 2010 with the following terms of reference:

to review the Manual, to identify harmonization needs and to make the objectives of the specific investigation more stringent.

To identify a consistent QA approach valid throughout the various investigations carried out within the ICP-Forests.

To identify an unambiguous set of DQR, to be further developed by the relevant Expert Panels

To identify common QA/QC reporting rules between EPs.

To identify proper data processing options (and rules to be attained in case of poor data quality)

To prepare a series of guidelines to be submitted to the various EPs

To prepare an *ad-interim* Status report to be submitted annually at the Task-Force of the ICP-Forests.

To promote co-operation, with NFCs, other ICPs and monitoring programmes.

To contribute to the reporting system of the ICP-Forests.

At the Task-Force meeting in 2010 the QA-C will prepare a final report, asking for a new mandate if necessary.

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Suggested time schedule

May 2007	obtain the mandate
May-December 2007	install the group; start the review process: objectives and implication; Manual: harmonization needs; inform EPs members and NFCs; contact and inform other ICPs (vegetation, water, integrated monitoring <i>in primis</i>); develop and review the approach.
December 2007	B-t-b meeting with PCG
2008	Finalize the review process; set and test DQRs; set QA/QC reporting rules and guidelines; prepare and submit the ad-interim report for the Task Force
December 2008	B-t-b meeting with PCG
2009	Implement DQRs, QA/QC reporting, and guidelines; contribute to the routine reporting of the ICP-Forests; prepare and submit the ad-interim report for the Task Force.
December 2009	B-t-b meeting with PCG
May 2010	Prepare and submit the final report "The ICP-Forests QA/QC system" (provisional) to be submitted to the Task-Force