



Further Development and Implementation of an EU-level Forest Monitoring System (FutMon)

1st Status Workshop
26-27 May 2009 in Saint Petersburg, Russia

Minutes

All presentations cited in the minutes and marked in bold letters are available as pdf files at [http://www.futmon.org/lock_internal/St. Petersburg.htm](http://www.futmon.org/lock_internal/St.Petersburg.htm)

Opening

The 1st FutMon-Status Workshop was attended by 90 experts from 29 countries (see Annex 1). On behalf of the Coordinating Beneficiary, Mr. M. Lorenz (Germany) opened the meeting and welcomed the participants. He expressed his thanks to Russia for hosting the meeting and in particular to Ms. N. Lukina (Russia) for the organisation of the meeting. Mr. A. Bobrinsky (Russia), Head of the Forestry Unit of the North Western District, welcomed the participants on behalf of the host country.

Item 1: Adoption of the Agenda

Mr. Lorenz explained the aims of the meeting and presented the agenda (see Annex 2). The agenda was adopted with Item 9 being moved to Wednesday morning.

Item 2: Report by the Coordinating beneficiary

Mr. Lorenz reported on the successful launch of the project, pointing out that all except two Partnership Agreements had been signed. Lithuania was reported to have stepped back from their project commitments but to participate in FutMon meetings as an observer. Moreover, Mr. Lorenz reported on the meetings held by the time of the 1st Status Workshop, on the submission of supporting documents and financial forms to the Coordinating Beneficiary, as well as on an external audit at the premises of the Coordinating Beneficiary, Johann Heinrich von Thunen Institute (vTI). The Associated Beneficiaries took note of the report.

Item 3: Revision of the monitoring system

Mr. Lorenz summarised the ongoing revision of the monitoring system and explained synergies with ICP Forests. In this context he referred to the links between ICP Forests Level I plots, the

FutMon large-scale plots, and the relevant plots of the National Forest Inventories (NFIs), and stressed the need for developing suitable plot selection criteria within Action C1-HarmonLS-40(IT).

On behalf of the coordinator of Action C1-HarmonLS-40(IT), Mr. M. Ferretti (Italy) reported on the outcomes of the expert meeting in on 19-20 March 2009 in Florence, Italy. He gave an outlook on future activities within this action pointing out that at the end of the project guidelines for network integration will be presented. **(C1-HarmonLS-40(IT))**.

Ms. A. Bastrup-Birk (Denmark) reported on Action C1-NFI-8(DK) also making special mention of the harmonisation of NFIs and their links to FutMon Action L2. She also referred to the above mentioned expert meeting in Florence and announced the distribution of the minutes and relevant documents by end of May 2009. Reference methods will be tested and bridging functions to be applied in NFIs leading to harmonised results on core variables throughout the EU will be developed. NFI field studies will be carried out mainly in 2010 **(C1-NFI)**. Data to be assessed within the above mentioned C1-Actions will not be requested by vTI for submission.

Upon request by Mr. Lorenz, none of the associated beneficiaries stated uncertainties in the implementation of the new large-scale system.

Mr. J. Eichhorn (Germany) provided an overview and presented the aims of Action D1. He reported on the new field protocol as well as on the extended crown condition assessment. With reference to Action C1-Tree-30(NWD) he presented the concepts of LIDAR and of the International Cross-comparison Courses (ICCs). In this respect he made special mention of the course on photo-QA and on biotic damage assessment to be held in 2010 in Belgium **(D1-Tree vitality and adaptation)**.

With respect to Action D1, Mr. P. Roskams (Belgium) reported on assessment of damage causes (C1-Dam-3(FL)) as related to Actions L2 and IM1. He presented the new Field Protocol and the respective amendments of data forms and explanatory items as well as the new concept for removals and mortality. Threshold values are used by several countries, which might cause problems during conversion into FutMon data. Moreover, Mr. Roskams presented an outlook on coming activities on the large-scale plots and intensive monitoring plots until the end of the FutMon Project **(Assessment of damage causes)**.

In relation to Action D1, Mr. E. Beuker (Finland) reported on phenology assessments under Action C1-Phen-10(FI). He presented new FutMon field protocol on phenology which was elaborated at the meetings in Hamburg and Slovenia and thanked the Slovenian colleagues for the organisation and Volker Mues for his help with the field protocols and forms. The question if phenological observations must rely on permanently installed webcams or may be made manually was considered in the context of the principle question to which extent deviations from the field protocols are possible. Whilst this principle discussion was moved to Item 4, all Associated Beneficiaries were strongly recommended to test at least one permanently installed camera system **(D1_phenology)**.

With respect to Action D1, Mr. S. Raspe (Germany) reported on the field course on leaf area index (LAI) assessments in Slovenia (included in several different actions). The first draft of the field protocol on LAI was announced to be presented in the internal section of the FutMon website within a few days after the Status Workshop **(Field Course Phenology / LAI)**.

Also referring to Action D1, Mr. M. Dobbertin reported on growth measurements und Action C1-GRO-2(AT). He stressed that electronic measurements are not mandatory and are intended to provide information relevant for studying cause-effect relationships. The respective field protocol is available for download **(D1-Forest Growth)**.

Mr. P. Rautio (Finland) provided an overview and presented the aims of Action D2. He reported on the field protocols on nutrient budgets of ground vegetation, on a more intensive foliar survey, and on litterfall collection (**D2-Nutrient cycling and critical loads**).

In the context of Action D2, Mr. V. Calatayud (Spain) presented the activities of action C1-O3-24(ES) focusing on the ring test of passive samplers and on the intercalibration course on assessment of visible injuries. For better support and easier communication of ICP Forests and FutMon activities a central web site <http://www.ozoneeffects.org> has been established. (**C1-O3-24**). Mr. M. Schaub (Switzerland) presented the new field protocol on ambient air quality. He stressed the need for more intensive ozone monitoring under FutMon in order to establish a broader database suitable for in-depth evaluations including the flux-approach (**WG Ambient Air Quality**).

Mr. N. Clarke (Norway) presented activities on deposition measurements, related to actions IM1, C1-Dep-22, D2, and D3. The field protocol is identical to the ICP Forests deposition sub-manual. He explained the parallel installation of standardized and national throughfall samplers (**Deposition activities**). Mr. C. Schimming (Germany) pointed at the high uncertainties in modelling total deposition.

Also in the context of Action D2, Ms. N. Cools (Belgium) explained the progress and main tasks of C1-Soil-3(FL). She presented a new field protocol on the determination of the soil moisture retention curve and the new and revised data submission forms for soil and soil solution. She stressed the need to get access to the BioSoil data as soon as possible in order to be able to compile the Forest Soil Condition Report. She explained the soil data needs for actions D2 (nutrient concentrations and stocks; calculations of critical loads) and D3 (water budgets) (**C1-Soil-3(FL)**).

Mr. S. Raspe (Germany) reported on activities within Action D3 including the outcomes of the workshops on leaf-area index (LAI) and soil moisture in 2009. The field protocol on soil water content is available for download. The field protocol on LAI was drafted and the draft is available for download. Mr. Raspe stated that the field protocol on meteorology will be finished in June 2009. He explained in detail the content of these field protocols (**D3**).

The ensuing discussion focused on the ability of all Associated Beneficiaries to conduct all monitoring activities foreseen according to the project proposal and according to the new field manuals.

Item 4: Project management

Mr. Lorenz summarised the outcome of the discussions under Item 3 and the attitude of the Coordinating Beneficiary as follows:

- In the Partnership Agreement the surveys under Action IM1 are only “recommended”, whereas the table in Annex 2 assumes that the respective surveys be conducted on all 303 IM1 plots. This is a clear contradiction and as a result some countries did not budget all the surveys on all of their IM1 plots. The Coordinating Beneficiary will clarify the obligations of the Associated Beneficiaries bilaterally with the LIFE Unit of EC DG Env.
- Other passages of the project proposal and hence of the Partnership Agreement are ambiguous and leave room for interpretation. An example is the above mentioned installation of webcams in the forests. Here the Coordinating Beneficiary has stated in his Circulars to the Associated Beneficiaries that he considers it unlikely that the LIFE Unit will decide in each individual case which interpretation would possibly lead to a reduction of the reimbursement. Instead, the Coordinating Beneficiary recommended to only act in line with such interpretations which are scientifically justifiable. For instance, in dense stands a person walking on the ground can take more informative pictures than a fixed webcam.

- The newly elaborated field protocols do not override the Partnership Agreements. Consequently, Associated Beneficiaries are not obliged to take action foreseen in the field protocols but not in the Partnership Agreements. However, as the project aims at an improvement of forest monitoring, those monitoring activities going beyond the Partnership Agreements should be designated in the field protocols as “expected”. If an Associated Beneficiary is unable to conduct the expected intensification of the monitoring, he could confine his activities to the minimum foreseen in the Partnership Agreements.

Moreover, Mr. Lorenz reiterated several statements which he had communicated to the Associated Beneficiaries already earlier by means of his circulars:

- VAT is considered an eligible cost and will be reimbursed by the LIFE Unit, provided that the Associated Beneficiary has submitted to the Coordinating Beneficiary a legal document stating that he can not recover VAT from another party.
- The Associated Beneficiaries must submit copies of supporting documents to the Coordinating Beneficiary at the end of every second month. Supporting documents are
 - Invoices on purchase and leasing of durable equipment;
 - Internal cost statements for travel and subsistence (tickets and hotel bills must be retained, but not be delivered to the Coordinating Beneficiary);
 - Invoices on external assistance;
 - Invoices for consumables and other costs;
 - Time sheets;
 - Updated financial forms;
- Supporting documents must
 - be identified by the acronym “FutMon”;
 - bear a short English or German language explanation (e.g. “purchase of a sampler”);

Proof of personnel costs (e.g. salary slips) do not have to be submitted before the request for the final payment, i.e. at the end of the project.

Ms. S. Iost (Germany) presented the project website www.futmon.org. All participants were encouraged to deliver documents, links and suggestions regarding the content of the website. It was again highlighted that latest versions of field protocols can be downloaded.

Item 5: Database management

Mr. O. Granke (Germany) explained the database management including the time schedule, the establishment of the database, data submission and data validation procedures as well as data dissemination (**Database Management**). Mr. Lorenz stressed that data assessed under FutMon will be forwarded to EC but that there is no obligation to also forward the data of the years 2007 and 2008.

In the ensuing discussion the Associated Beneficiaries suggested that data validation should go beyond the system employed by JRC. This could include a meta-database including results of ringtests. Mr. Granke took note of the suggestions, but stressed the responsibility of the national data centres to also conduct data validation, in particular with respect to metadata. Moreover, Mr. Granke responded to several technical questions regarding data submission, data validation and the communication with the data centres of the Associated Beneficiaries.

Item 6: Monitoring activities

As examples for the implementation of the monitoring activities in different countries Mr. O. Badea (Romania), Mr. J. Derome (Finland), Ms. P. Gasparini (Italy), Mr. M. Neumann (Austria), and Mr. S. Wulff (Sweden) reported on the status of the work in their countries. Mr. Lorenz acknowledged the progress made and thanked the Associated Beneficiaries for their reports.

Reports were given by the following countries and can also be downloaded under the given link:

(Romania)

(Finland (Implementation))

(Finland (Status))

(Italy (IM1))

(Italy (L1-2, IM1, D))

(Austria)

(Sweden)

(Sweden (NFI))

(Bulgaria)

Item 7: Quality assurance

The coordinators of the Actions on quality assurance reported on their progress and explained quality assurance (QA) procedures with emphasis on the obligations of the Associated Beneficiaries and on future tasks.

Mr. N. König (Germany) presented results of Action C1-QALab-30(NWD) and Action C1-Fol2-2(AT) mentioning that the field protocol on quality assurance in laboratories has been finalised and can be downloaded. Also finalised and available are the new QA forms for all laboratory procedures. They will be part of the coming data submission under FutMon. Moreover, Mr. König presented the system of ring tests, informed on current ring tests and the assistance to laboratories, and announced the meeting of the heads of the laboratories in October 2009 in Warsaw, Poland (**C1-QALab-30(NDW)**).

On behalf of the Chairman of the Forest Foliage Coordinating Centre (FFCC), Mr. König presented the results of the 11th Needle/Leaf Interlaboratory Comparison Test 2008/2009. The report is available as a printed document. Requalification is currently been under way. Mr. König stressed the need of requalification in order to be able to participate in any follow-up project to FutMon (**C1-Fol2-2(AT)**).

Mr. A. Marchetto (Italy) reported on Action C1-Water-40(IT). He presented the results of the water ring test, stressing the significant improvement in comparison to previous ring tests. The requalification process has started and the final report will be available by August 2009 (**C1-WATER-40(IT)**).

Ms. N. Cools reported on the activities under Action C1-Soil-3(FL). She informed on the 6th FSCC Interlaboratory Comparison 2009 and 1st FSCC Soil Physical Ring Test (**C1-Soil-3(FL)**).

Mr. Clarke on behalf of Mr. D. Žlindra (Slovenia) informed on the progress in action C1-Dep-22(SI). He reminded the Associated Beneficiaries that according to the proposal standardized throughfall samplers will be installed on one plot in each country and will be run in parallel with the national throughfall samplers for a period of one year. The production of standardized samplers is running and Associated Beneficiaries are requested to start the sampling as soon as possible. Mr. Clarke pointed out that many participants overlooked Action C1-Dep-22(SI),

as it is part of Action IM1, or misunderstood Action C1-Dep-22(SI) as being solely a task of the Associated Beneficiary 22 (SI) (**C1-Dep-22(SI)**).

Mr. B. Petriccione informed about the progress of Action C1-GV-15(IT). A questionnaire on national methods for Ground vegetation assessment has been sent out. Results will be used for the preparation of the 1st Field Inter-comparison Course at the trans-national level in July 2009 in Italy (**C1-GV_15(IT)**).

Item 8: Data analyses and reporting of results

Ms. Iost presented the draft of the first FutMon layman's report. Mr. Lorenz explained that the layman's report is a mandatory deliverable under FutMon and will be published in cooperation with ICP Forests. The Associated Beneficiaries suggested to make the text even better readable and to make the illustrations even better understandable for the laymen. Mr. Lorenz agreed to the proposal to have the text rewritten by a scientific journalist. Furthermore it was suggested to elaborate another shorter text for public information for example in form of a flyer.

Item 9: Proposal of a follow-up project

Mr. Lorenz announced the intention of vTI to propose a FutMon follow-up project together with the Associated Beneficiaries and with the institutions of those EU-Member States which had been unable to participate in FutMon. He suggested that the proposal should be submitted to EC by the forthcoming deadline under the 2009 call, i.e. by 15 September 2009 and stressed that the follow-up project should apply the system as further developed under FutMon aimed at scientific evaluations and the production of politically relevant information. The evaluations should be based on the evaluation plan still to be developed by the Programme Coordinating Centre (PCC) and by the Programme Coordinating Group (PCG) of ICP Forests. Mr. Lorenz presented the draft evaluation plan submitted by PCC.

In the ensuing discussion Mr. Neumann stressed the importance of linking the follow-up project with the national forest inventories (NFIs). Ms. Bastrup-Birk warned against linking forest monitoring too closely to the reporting under the process of the Ministerial Conference on the Protection of Forests in Europe (MCPFE) as the necessary information is largely gained from NFIs. This view was supported by Mr. P. Neville (Ireland). Mr. Andy Moffat (United Kingdom), however, welcomed the link to MCPFE suggested by PCC as this was a conclusion from the Forest Focus project. Mr. H.-P. Dietrich (Germany) proposed contributing rather than competing with MCPFE. As a conclusion from the discussion, the Associated Beneficiaries recommended to establish links to MCPFE whenever the development of more precise indicators or the assessment of missing data was needed. Mr. Moffat proposed that access to the results of the follow-up project should be made more user-friendly. The Associated Beneficiaries agreed that the follow-up project proposal should – much the one for FutMon – refer to the Forest Action Plan, the EU Soil Directive, the EU Soil Strategy, MCPFE, the Kyoto Protocol, the Convention on Biodiversity (CBD), as well as the Convention on Long-range Transboundary Air Pollution.

It was decided that vTI would prepare a proposal for a follow-up project of three years (2011-2013) and that the editing of the proposal – much as the one for FutMon – should be accompanied by intensive lobbying. This should include contacts with the forthcoming Swedish EU Presidency. Mr. Wulff announced a workshop on Future Forest Monitoring in the EU, to be held at Uppsala, Sweden, in November 2009 (<http://www-conference.slu.se/futforestmon/>).

Item 10: Any other business

Mr. Petriccione informed on the project proposal for the funding of LTER-Europe biodiversity activities under Life+ (EnvEurope).

Ms. S. Augustin (Switzerland) asked the beneficiaries of FutMon to support a close cooperation between Switzerland and the EU-Member States. She stressed the will of Switzerland to participate in future forest monitoring projects.

On behalf of all participants, Mr. Lorenz congratulated Ms. Lukina and her team for the perfect arrangement of the 1st FutMon Status Workshop back-to-back with the 25th Task Force Meeting of ICP Forests. He also thanked Russia for the warm hospitality which all participants had experienced. He regretted that funding under LIFE+ was available only for EU-Member States, but welcomed the more that Russia is increasingly contributing to ICP Forests of UNECE with its forest monitoring at Level I and II.

Mr. Lorenz thanked the workshop participants for their active participation and closed the meeting.

Annex 1: List of participants

Annex 2: Agenda