Report of the First Stakeholder Group meeting of EVOLTREE
7-8 February 2008, Mandelieu-La Napoule, France

Opening of the meeting and introductory presentations

Jozef Turok of Bioversity International opened the meeting by welcoming the participants and highlighted the purpose of the meeting. He presented the agenda of the meeting and invited the participants to introduce themselves. He then invited Antoine Kremer, the coordinator of EVOLTREE, to provide a general overview of the objectives and structure of the Network of Excellence and to illustrate the scientific challenges and questions that the scientific community of EVOLTREE is addressing. He briefly introduced a new emerging discipline to which EVOLTREE is contributing to, i.e. ecosystem genomics. This new area of science results from the integration of different disciplines and it helps EVOLTREE examine trees and associated organisms such as phytofagous insects and mycorrhyzal fungi.

This presentation was followed by a brief introduction by Barbara Vinceti (Bioversity International) to the dissemination activities undertaken within EVOLTREE, in particular those related to the establishment of a dialogue between the Stakeholders and EVOLTREE scientists. She also explained how Bioversity International is leading the implementation of dissemination activities within EVOLTREE.

Malgorzata Buszko-Briggs then gave an overview of the European forest policy process, i.e. the Ministerial Conferences on the Protection of Forests in Europe (MCPFE). She presented the structure and historical background of the Ministerial Process and highlighted the declaration and two resolutions (Forest, Wood & Energy, and Forest & Water) adopted by the 5th Ministerial Conference held in Warsaw, Poland in November 2007. She also remarked the role of MCPFE in promoting a science-policy dialogue and in developing a new programme of work focusing on sustainable forest management and climate change issues. She concluded reminding that the MCPFE undertakes efforts with the aim to recognize the diverse role of forests and their products in climate change mitigation and adaptation.

Presentation of research findings from EVOLTREE and previous research projects

Several invited scientists from EVOLTREE presented a series of overviews of their specific areas of work. The objective was to illustrate the current level of knowledge acquired in different scientific areas related to forest tree genetics and genomics, highlighting the practical applications of possible interest to the Stakeholders. The topics covered were the following:

- Verifying the origin of timber and forest reproductive material, based on molecular markers: implications for certification schemes and combating illegal logging (Bernd Degen) / DNA fingerprinting of tropical timber (Reiner Finkeldey)
- EVOLTREE's common DNA repository of tree species and other integrated infrastructures (Silvia Fluch)
- EVOLTREE's Intensive Study Sites: a network of sites for long-term research and monitoring of forest biodiversity (Francois Lefevre)
- Use of genomic approaches for bioenergy: the case of poplar (Gail Taylor)

- Adaptation of forest trees to climate change (Outi Savolainen)
- Integrating climate change adaptation into forest management (Reiner Finkeldey / Christian Ammer)

Verifying the origin of timber and forest reproductive material, based on molecular markers. Implication for certification schemes and for combating illegal logging

Bernd Degen (Federal Research Institute for Rural Areas, Forestry and Fisheries, Institute for Forest Genetics, Grosshansdorf, Germany) gave a review on the scientific insight and technical solutions available to address the issue of verification of the origin of timber and forest reproductive material, with a special emphasis on improving forest management and contributing to fight illegal logging. This area of work is central to EVOLTREE research efforts and it is one of the most direct applications of genomic studies undertaken within EVOLTREE and other research projects.

B. Degen presented the consequence of inappropriate use of forest reproductive material and showed the regulatory frameworks existing in Germany to control the movements of forest reproductive materials. He highlighted the need to track the origin of the material and presented the contribution that EVOLTREE can provide in addressing the existing technical constraints, namely a) optimization of DNA-extraction protocols; b) information on genetic differentiation among tree populations in different regions; c) use of microsatellite markers for parentage analysis and species identification, and d) use of SNP-markers and sequence information to distinguish species. He then showed examples of the use of DNA marker approaches and highlighted some promising applications of markers in certification schemes:
http://www.zuef-forstpflanzen.de
http://www.isogen.de

DNA fingerprinting of tropical timber

Reiner Finkeldey (Büsgen Institute, Department of Forest Genetics and Forest Tree Breeding, University of Göttingen, Germany) illustrated how molecular markers were used for wood identification of tropical tree species, specifically dipterocarps from South-East Asia. He showed which methods were adopted, the degree of success in DNA extraction and amplification, as well as the application of molecular markers to determine the origin of the material in a large study covering different regions of Indonesia.

Tropical tree species are not covered by the EVOLTREE research work but the partners in the Network of Excellence have acquired extensive experience in this field of research and can contribute to further development of technical applications and methodologies. He pointed out that the issue of illegal trade of tropical timber is a major concern for European consumers.

R. Finkeldey showed how molecular genetic tools are in principle suitable to verify the origin of tropical wood and how DNA extraction from wood is feasible. He also showed that the development of informative markers is demanding, and that different taxa pose different technical problems making it often necessary to use different marker types. In addition, he remarked that the development of the

necessary baseline data on the genetic structure of tree species and populations required to undertake this type of identification is costly.

The research work presented showed that dipterocarps are a suitable model group of species to further improve the methods developed and to apply DNA fingerprinting, due to the fact that they are ecologically relevant keystone and endangered species. Dipterocarps are a very important source of timber (both in national and international markets) and some knowledge on their molecular genetic variation is already available. Therefore, genetic markers can already be used in the context of the identification of the origin of dipterocarp timber.
R. Finkeldey reminded that to promote the adoption of the methods presented, stakeholder involvement and local expertise are important elements, both in producer and consumer countries. It is necessary to involve potential users, government agencies, customs offices, nature conservation agencies and the private sector (wood producers, certification agencies, wood trade and consumers).

Potential benefits and practical implications deriving from integration and synergies among European institutions, in the area of tree genomics. EVOLTREE's common DNA repository of tree species and other integrated infrastructures

Silvia Fluch (Austrian Research Centers GmbH – ARC, Vienna) presented part of the shared infrastructures established by EVOLTREE. She highlighted in particular the benefits deriving from the establishment of a joint DNA repository centre and other centralized infrastructures, which are valuable resources of strategic importance to address pan-European research questions and forest management issues. She presented examples of other European large-scale, shared resources and infrastructures, such as BioBanks containing biomedically relevant, quality-assessed samples of human DNA. They are widely considered as a key resource in unravelling the association between disease subtypes and small, but systematic, variations in human genotype, phenotype and lifestyle. The BioBanks are based on the joining of a) biological resources (blood, serum, tissue or other biological samples), b) resource centers on molecular methods for human and model organisms of biomedical relevance, and c) biocomputing centres to ensure that databases of samples in the repositories are dynamically linked.

The research area of forestry presents analogies for what concerns the dispersed nature of existing resources, scattered across research institutions in Europe. Available resources consist of a) distributed biological resources (common garden or provenance experiments, gene banks, physical DNA resources), b) databases from different projects (sequences/annotation, phenotypes, climate data/geology/GIS maps, genetic maps), and c) biocomputing groups, which use different models, statistics and simulation packages.

The establishment of a DNA repository center and a set of Intensive Study Sites, as well as linking gene banks and databases, are all actions that will improve the level of integration necessary to ensure future research advances in the area of forest ecology, genetics and genomics. In particular, S. Fluch explained how the establishment of a centralized plant DNA repository with an automated storage unit for 'mobile' resources (ESTs, gDNA, libraries) will allow the traceability of the material, repeatability of analyses, quality of material, standardization in sample treatment, and access to research results.

As of January 2008, the DNA repository contains 190 000 expressed sequence tags (ESTs). The distributed data platform contains genetic map databases, a database on genebanks, a library and a sequence database, a microarray database, an ISS metadata base, the repository center database and a computing infrastructure.

S. Fluch then highlighted the long term benefits of these research infrastructures, i.e. access to reference material over time, joint standardized resources, accessibility guaranteed for 10 years, open availability to scientific community, interlinked to other data sets (phenotype, genotype, community information), source for transdisciplinary research (modelling and *in silico* prediction). She concluded by illustrating the future perspectives (a long-term reference centre, opening up to international community, expanding on collections, raising awareness).

EVOLTREE's Intensive Study Sites: a network of sites for long-term research and monitoring of forest biodiversity, and for training

Francois Lefevre (Research Unit on Mediterranean Forests of INRA, Avignon, France) gave a presentation on other shared infrastructures, i.e. the Intensive Study Sites (ISSs), which create a network of sites for long-term research and monitoring of forest biodiversity. He emphasized the long-term objectives of the ISSs which aim at relating gene diversity of trees and associated species to environmental factors, ecological processes and patterns of use. These large scale infrastructures combine intrinsic values and offer opportunity for complementary analyses. They also foster long-term integration among partners and are ideal for demonstration and training purposes.

The ISSs were selected based on a set of criteria that reflected the value of the infrastructure (type of land ownership, legal and/or protection status, conservation value for species diversity and genetic resources, relation to other networks such as ALTER-Net, ICP-Forest, interest for local managers, interest for education and dissemination), the existence of adequate technical facilities, and the presence of local expertise.

Another set of criteria adopted for the selection of ISSs defined the scientific value of the chosen locations (e.g. diversity of tree and associated species within a site, temporal and/or spatial heterogeneity to allow comparisons, historical records, environmental variability, past research history and available datasets). Overall, the network was established with the objective to cover a range of terrestrial ecosystems across Europe (5+2 ecosystems) and management regimes: boreal, temperate, alpine, Mediterranean, riparian, untouched, intensively managed. Currently the network includes seven ISSs and four Intensive Study Plots (ISP) spread over eight countries.

Research is actively promoted in the ISSs which are hosting an increasing number of new experiments. Ideally, most experiments would be replicated across the sites to allow comparisons. An information system is being established and it will allow easy access to multiple datasets from different locations. In each site, the responsibility for handling the information system has been given to an ISS correspondent who is also in charge of preparing pre-project protocols and interacting with land managers. The mobility plan established within EVOLTREE is also allocating some resources to allow researchers to work across the sites. The creation of the information system is particularly challenging, due to the heterogeneity of datasets and the structure of

existing databases, the different languages, and the need to cater the needs of the partners.

Genomic approaches to bioenergy: the case of poplar

Gail Taylor (University of Southampton, UK) presented an overview of how genomic approaches can help increase the use of woody biomass for energy purposes. Very good expertise on this subject is available within the EVOLTREE partners and the network can also build on the results of the previous EU-funded research projects (e.g., POPYOMICS). She also presented some insights from genomic studies in relation to strategic needs. The use of woody biomass for bioenergy is of great interest for policy-makers in Europe, as was demonstrated by the last Ministerial Conference on the Protection of Forests in Europe. In addition, she highlighted the content of the recent EC biofuels directive (requiring 5.75 % replacement of liquid transport fuels by biofuels by 2010, and a 10% replacement by 2020) and the importance of second generation lignocellulose, of which some tree species, willows and poplars, would be a significant source.

G. Taylor highlighted that poplar has potential as a bioenergy feedstock crop globally and showed how the previous EU-funded project, POPYOMICS, adopted an approach that uses genetic and genomic insights, linking phenotype, QTL (*) and transcriptome (**) to understand poplar yield and disease resistance, aiming at obtaining an improved bioenergy crop. Genomic approaches are beginning to unravel complex traits such as biomass growth and response to drought. Some of the research work initiated by POPYOMICS will be continued by EVOLTREE (e.g. association mapping for adaptive and yield traits). New bioenergy centres in the USA are investing massively to increase the use of poplars as a energy crop and Europe should also aim to remain competitive in this development.

(*) QTL - quantitative trait loci are stretches f DNA that are closely linked to the genes that underlie the trait in question What are identified as QTL are often not truly single loci in the standard sense, but rather chromosomal regions. (**) the complete set of RNA transcripts produced by the genome at any one time. The transcriptome is dynamic and changes under different circumstances due to different patterns of gene expression

Adaptation of forest trees to climate change

Outi Savolainen (Department of Biology, University of Oulu, Finland) presented some research results on adaptation of forest trees to climate change. She first provided a scientific overview of what is known about the mechanisms that foster adaptation in trees and the way climate change is expected to affect tree populations in the future, based on their biological characteristics and distribution. She then showed how earlier shifts in tree species' range were always accompanied by some genetic changes which have enabled adaptation to new environmental conditions. Trees show high genetic variation and are under strong selection pressure; therefore they have potential for rapid response. The documented genetic responses in long-lived organisms are few and have looked at traits such as timing of growth and reproduction. EVOLTREE can contribute substantially to a) increase understanding the genetic basis of adaptation, b) improve predictive modelling by including not only climate and ecological factors, but also adaptive mechanisms at a genetic level into predictive models, and c) understanding the effects of responses (even phenotypic) of trees on other associated organisms (fungi, insects,mammals and birds).

Integrating climate change adaptation into forest management

Reiner Finkeldey and Christian Ammer (also from University of Göttingen) gave a presentation on the issue of integrating climate change concerns into sustainable forest management practices. These require long-term strategies and tools that give forest managers an opportunity to adapt to the effects of climate change on forests. Adaptive actions will involve determining the sensitivity, vulnerability and adaptive capacity of forests to the change, and the effectiveness of particular management practices aiming at promoting adaptation.

The most important management step is the choice between natural versus artificial regeneration, and secondly the choice of appropriate forest reproductive material, considering both future environmental conditions and the adaptive potential of the material used. Other silvicultural practices that influence forest responses to climate change in the present day forest include thinning and changes in the length of the rotation period to obtain different products. With regard to the future, the choice of future tree species composition is fundamental and needs to be supported by scientific findings. Some EVOLTREE research activities are focusing on these management aspects by monitoring regeneration of Norway spruce in stands of different structures and by studying responses in regeneration of beech to different environmental conditions.

Many research results show that local forest reproductive material is not always the best one adapted to a given conditions. Climate change affects the distribution of species and their genetic diversity and, indirectly, evolutionary potential and adaptation. Strategies to mitigate the effects of climate change should take into account the different observed adaptive responses of populations and genotypes. However, the effects of climate change at local scale, such as stand level, are difficult to predict. Therefore, forest management has to deal with high uncertainty regarding future conditions under climate change.

Trees have shown to have large potential for adaptation that may be of different nature (physiological adaptation as well as evolutionary processes), and this may happen through selection as well as other mechanisms (including epigenetic effects). The presentation pointed out that natural regeneration will continue to play an important role in Central Europe, due to both economic and ecological considerations, and that there is an urgent need to explore adaptive responses of the currently most important species (beech and Norway spruce). Far-reaching recommendations concerning species selection and preferred regeneration methods are risky without a sound understanding of adaptation mechanisms of trees in response to climate change.

Presentations and statements by the Stakeholders

During the second day of the meeting the Stakeholder representatives continued the interaction with the EVOLTREE scientists by presenting their expectations in relation to the topics presented during the first day. The Stakeholders contributed with individual statements and short presentations, bringing in the perspectives of different organizations.

Lennart Ackzell (Swedish Forest Agency) highlighted the need to re-examine old provenance trials in order to provide answers on what reproductive material should be used and how the material could be transferred in the face of climate change. He also stressed the need to carry out risk assessment. However, as stated by Antoine Kremer, old provenance tests suffer from limitations: limited number of provenances, poor representation of interesting areas of the natural distribution, drawbacks of old experimental designs. Therefore the reanalysis should be done carefully in regards to the objective of recommendation for population transfers. New tests focusing on juvenile traits might be of interest as well: since the most pressing selection takes place during the early stage of establishment of a stand.

Kurt Ramskogler (LIECO GmbH & Co KG, Austria) presented the expectations of the Austrian forestry and seedlings business. The main concerns of wood producers relate to low growth rates, low timber quality and low resistance against biotic and abiotic pressures (environmental effects, insects and fungi). The main objective of the Austrian forestry and seedlings business is to contribute to the preservation and improvement of the production basis for the main tree species in Austria, especially in the face of climate change. He emphasized that a partnership between Austrian forest industry and forest research is needed to ensure that forest management is based on scientific knowledge on forest biodiversity, including forest genetic resources. The most important management choices regard what reproductive material should be used (natural vs. artificial regeneration) and the species composition to be used. He also noted that there might still be serious problems associated with bark beetle attacks.
It is common that the origin of the material that was used to produce the present-day forests in Austria is unknown for most stands. Molecular markers can help solve the problem and subsequently support the assessment of whether natural regeneration is a feasible option.
K. Ramskogler continued by saying that the expectation from research is to help forest management practices to increase wood productivity and secure the genetic adaptation potential of the main species. He further stressed research should contribute to the maintenance of high level of intra-specific diversity of important tree species and that research results should be applicable and understandable. The Austrian forest industry sector is demanding the following outputs from the research community: a) tools to identify the adaptability of the main tree species to future conditions (e.g. molecular markers); b) information about the potential future development of Austrian forests; c) scientific basis and recommendations for silvicultural treatments, reforestation decisions and seedlings production.

Alain Valadon (Office National des Forêts – Conservatoire Génétique des Arbres Forestiers, France) remarked the importance of recording the origin of the reproductive material used. In France, the present documentation efforts only record whether autochthonous or non autochthonous reproductive material was used but no detailed information on the seed source is kept. He urged that traceability of the material should be promoted and national efforts to develop databases for reference collections should be expanded to a regional level.

Reiner Finkeldey (Institute of Forest Genetics and Forest Tree Breeding of Georg-August-University in Göttingen, Germany) reminded that the EC directive on the trade of forest reproductive material only considered provenance regions, which usually consist of too large areas in case of many tree species. He also reminded that despite the problems with the existing directive, the setting up of a tracking system

would only ensure monitoring of movements of reproductive material for certification purposes. However, it would not provide answers with regard to the adaptiveness of the material used.

Kurt Ramskogler added that only one system should be adopted at EU level for the traceability of forest reproductive material.

Tadeusz Zachara (Forest Research Institute of Raszyn, Poland) highlighted the fact that among the climatologists there is no clarity about the direction of future changes in climatic conditions and the research conducted on tree responses to climate change is providing contradictory recommendations. There has been an encouragement to use more broadleaves than conifers but broadleaves, analogously to conifers, are showing signs of decline. It is not clear which one is more important; selecting tree species or provenances to ensure better and faster adaptation to changing environmental conditions.

Tore Skrøppa (Norwegian Forest and Landscape Institute) reminded that past decisions on moving reproductive material across Europe were based on wrong assumptions on future conditions. Material from high altitudes of southern Europe and cheap seeds from Bavaria and Austria was brought to the lowland conditions of northern Europe, such as those in Scandinavia, for example. These operations were undertaken without scientific knowledge which would have been desirable because the initial assumptions may not be correct.

He then stressed that it is clear nowadays that local material does not necessarily ensure better response and adaptation to climate change. He suggested that research efforts should focus more on trees planted in urban environments which usually offer extreme conditions. This could provide further insight on tree responses to extreme changes in environmental conditions. He also noted that regions of high plasticity should be identified and vulnerability should be determined (e.g. inland versus coastal ecotypes and their sensitivity to temperature translated into timing of bud flushing). Research should be focused on traits that are significant for adaptation (e.g. impact of climate change on wood traits and the effect of climate change on late wood formation). With regard to the introduction of new tree species, he mentioned that there are concerns and limitation on the introduction of exotics which may perform very well but are considered potentially invasive (e.g. Douglas-fir). Their introduction might be in conflict with the framework provided by the Convention on Biological Diversity.

T. Skrøppa concluded that there are unresolved questions also on how to incorporate climate change concerns into long-term breeding strategies (what material should be used to establish seed orchards? Should we plant more diverse material at higher density?) Some solutions may not be feasible from a financial point of view. He also pointed out that issues on access and benefit sharing may become more relevant in the forest sector in the future. These issues have become very important and highly debated in the agricultural sector following a discovery of important genes or plant genetic material more adaptable to changed environmental conditions. He also asked whether seeds of forest trees should be stored the global seed vault, which is currently being established in Svalbard, Norway.
More research is needed on the phenotypic stability of certain provenances. Epigenetic mechanisms may have a significant role and natural selection may not be

the main responsible force to maintain the steep gradients in phenotype that we observe especially in species with large spatial distribution of their range.

Antoine Kremer reacted to the point regarding the concerns on introducing new species into Europe. He noted that forest resilience is maintained over time through appropriate levels of genetic diversity but also through species diversity. In this respect, Europe has a low number of tree species as compared to the past and as compared to other regions of the world. According to fossil evidence, many species that existed in Europe at the end of the Tertiary have disappeared and are present today only in North America or Asia. Subsequently, Europe is facing a bigger risk due to climate change. It has been observed that large changes in climate have created more diversity through evolutionary processes. We can accelerate adaptation of forest trees and help them coping with a new situation. Introduction of new tree species could have positive impacts but it should be done based on scientific evidence.

Risto Paivinen (European Forestry Institute, Finland) confirmed that the institute is very supportive of actions strengthening science-policy dialogue and that the series of policy briefs produced by EFI can be used as an example of dissemination products. The Europe Forest Portal is a channel that can also be used for dissemination of information on EVOLTREE results. He further suggested that EVOLTREE should also play an advocacy role by being more visible within the European Forest-Based Sector Technology Platform (FTP). The role of this platform is to express a common voice towards the European Commission and indicate strategic future directions in different forest-related areas. Finally he noted that EFI may provide future support for the continuation of EVOLTREE but that this needs further discussion.

Malgorzata Buszko-Briggs (MCPFE Liaison Unit Oslo) mentioned that the meeting was a useful and relevant opportunity to learn more about EVOLTREE as it can contribute to many other initiatives in Europe. She noted that numerous forest management questions remain pending despite the progress made in the research field. She also said that EVOLTREE will be brought to the attention of the MCPFE because of its relevance for the implementation of a new MCFE Work Programme which is now being shaped.

Andrey Filipchuck (Russian Research Institute of Silviculture & Forest Mechanization, Moscow) informed that several Russian organizations are working on forest biodiversity and the coordination of their activities is improving. He also noted that the Russian forest research institutions would be keen to establish linkages to EVOLTREE.

Bruno Petriccione (Corpo Forestale dello Stato, Italy) presented the inputs of the Italian national forest service to the CONECOFOR Forest Monitoring Networks, which is an initiative for the long-term monitoring of forest ecosystems across a network of plots in which monitoring efforts are implemented by different projects (National Forest Inventory, UN-ECE ICP-Integrated Monitoring of Ecosystems sites (core plots, extended plots), LTER-Europe). Genetic information is not being collected as part of these monitoring efforts. In addition, he presented the results of a pilot project on climate change effects on forest biodiversity. The project, BioRefugia, focused on the main tree species in the long-term monitoring plots of Central Italy. The results illustrate the predicted future range of beech based on the future climatic

scenarios in the study area. Shifts in the range of the species are considerably limited due to the lack of continuity in suitable soil conditions and due to forest fragmentation. Signs of impact of drought were observed in the summer 2007 and the dominant species presented signs of damage above the usually observed thresholds. Oaks and beech lost on average 25-35% of their leaves (first event in the 20 years of monitoring activities).

Alain Valadon remarked that EVOLTREE, through its structure and scientific objectives, should also promote linkages between the community of forest practitioners and those working on environmental issues. EVOLTREE creates an interesting synergy between different groups of experts who, usually, do not operate jointly. This type of collaboration across disciplines should take place not only in the scientific context but also in the work carried out in the field. At the moment, conservation of forest genetic resources is not among the concerns of those working in protected areas.

Christian Ammer suggested that the community of stakeholders represented at this first EVOLTREE Stakeholder Group meeting should be extended to include people from forest services and administration who have the possibility to leverage the dissemination efforts and liaise with policy-makers. In order to reach the private sector, he recommended including representatives of forest landowners in future interactions and presenting scientific outputs in a very simple format.

Tomasz Oszako (European Commission, DG Research, Belgium) pointed out that the European Forest-Based Sector Technology Platform (FTP) is an ideal platform to increase awareness on EVOLTREE outputs and to influence the content of future calls for research project proposals. He suggested that the chair of the FTP should be informed and become a member of the EVOLTREE Stakeholder Group. The scientific results of EVOLTREE should be properly translated to reach the policy-makers. Some aspects of the research component of EVOLTREE are extremely relevant for the European Commission, especially the issues related to forest biomass and energy production.

Conclusions and closure

It was recommended to enlarge participation to next EVOLTREE Stakeholder Group meeting, including participants representing more organizations. The results of the discussion should be summarized into short briefs which could be then translated into different languages and widely distributed. A calendar of key events for the promotion of awareness and dissemination of EVOLTREE outputs should also be finalized and provided on the EVOLTREE webpage. These efforts are already ongoing and regular updates are necessary.

The Pan-European Forest Week which will be organized in October 2008 is an example of a very good opportunity to raise awareness about the important issues addressed by EVOLTREE. In addition, it was recommended that EVOLTREE should continue operating in close association with EUFORGEN and other relevant networks and projects that generate and disseminate knowledge on forest genetic resources in Europe. Specifically with regard to EUFORGEN, regular updates on EVOLTREE activities are provided to the members of the Forest Management Network and the species networks.

The stakeholders also recommended that EVOLTREE should take note of the global initiatives on forest genetic resources. FAO is currently planning the process of preparing a report on the State of the World on Forest Genetic Resources. Furthermore, the CBD is reviewing its Extended Programme of Work on Forest Biodiversity. There are also other opportunities to make an input to the preparation of strategic documents. Therefore, it was suggested that the role of the different initiatives on forest genetic resources (e.g. EVOLTREE, EUFORGEN, EUFGIS, etc.) and past and present research projects on tree genomics (e.g. POPYOMICS, TREBREEDEX, etc.) could be described and their objectives illustrated on a specific page of EVOLTREE website.

It was agreed that the next meeting of the enlarged EVOLTREE Stakeholder Group would be held in early 2009.

With no other business, Jarkko Koskela chair of the session closed the meeting.

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