



Deliverable D.8.05

Presenting Industrial Advisory Board

WP 8 – Openness with other activities, dissemination and exploitation of results

Task 8.4 – Industrial Advisory Board

Revision: Final

Authors: Seppo Huurinainen (MHG Systems)

Dissemination level	PU (Public)
Contributor(s)	MHG, GraphiTech, CNR, Boku
Reviewer(s)	GraphiTech
Editor(s)	GraphiTech
Partner in charge(s)	MHG Systems
Due date	31/01/2016
Submission Date	31/07/2016





REVISION HISTORY AND STATEMENT OF ORIGINALITY

Revision History

Revision	Date	Author	Organisation	Description
1.0	17/5/2016	Seppo Huurinainen	MHG Systems	Draft
1.1	19/05/2016	Daniele Magliocchetti	GraphiTech	Review of content
1.2	08/07/2016	Stefano Penasa	GraphiTech	Annex 2
1.3	11/07/2016	Daniele Magliocchetti	GraphiTech	Final Review

Statement of originality

This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.





Table of content

1	Introduction.....	4
1.1	Purpose of the document.....	4
2	Candidate search and introduction	5
3	Nomination of Industrial Advisory Board.....	6
4	Appendix 1. CVs of Industrial Advisory Board Candidates in Brief.....	7
4.1	Academia candidate 1	7
4.2	Big forest owners candidate 1.....	7
4.3	Forest Industry R&D candidate 1	8
4.4	Internationally operating SME: candidate 1	9
4.5	Internationally operating SME: candidate 2	9





1 Introduction

1.1 Purpose of the document

The final objective of this deliverable is to present an Industrial Advisory Board for SLOPE project, selected from the consortium during the fourth technical meeting. The main objective of this task is to select and involve industrial members from the forestry, agricultural and related logistics and machinery industry into the project. The main activities of the advisory board will be interchange of opinions and knowledge by means of meetings and discussions reported into detailed transcripts as the one reported in the last part of the document. This information will be used as input for the improvement of the tasks defined in the SLOPE project and for the definition of the exploitation strategy.

The remainder of the document is organized as follows: after a brief introduction (section 1), a description of the candidates search process is provided (section 2). Section 3 provides the list of nominated advisors among the detected candidates with a brief overview of their curriculum vitae (section 4). Finally, section 5 provides a transcript of the first feedbacks reported from two of the selected advisors during their visit to the first pilot test performed in Italy during the first week of July.



2 Candidate search and introduction

The partners involved in this deliverable, MHG Systems, Treemetrics, Compolab, BOKU, COASTWAY, and FLYBY mapped out internally from their own networks multiple suitable candidates since the beginning of the project. The final candidates were presented to the consortium during the fourth technical meeting held in January, the 20th, 2016.

The following candidates were introduced for final decision:

1. Prof. Rien J.M. Visser, Director of Studies, Forest Engineering, School of Forestry, Canterbury University, New Zealand;
2. Mr. Erwin Stampfer, CEO, M.Sc. (For.) Austrian State Forest;
3. Mr. Jarmo Hämäläinen, Research Manager, M.Sc. (For.), Metsäteho Oy, Finland;
4. Mr. Jarmo Ylinen, CEO, M.Sc. (For.), Porinilog Oy, Finland;
5. Mr. Paul Dima, Director, M.Sc. (For.), PROFOREST, Romania;

A brief summary of the candidates' experiences is presented in section 4.

The outcome of the meeting has been the selection of three candidates with strong industrial background to constitute the Industrial Advisory Board. The chosen final experts are reported below:

- Mr. Erwin Stampfer (Candidate 2)
- Mr. Jarmo Hämäläinen (Candidate 3)
- Mr. Jarmo Ylinen (Candidate 4)

Mr. Dima (candidate 5), hands on in mountain logging operations was rejected being a representative of Wyssen cable cranes and then a competitor to Greifenberg solutions while Prof. Visser (candidate 1) has been considered too academic for the purpose of the industrial advisory board, missing real entrepreneurial experience.

During the meeting, the consortium discussed about a fourth member originating from North America like British Columbia, rich in mountain forests, however no candidates have been found within the following months. Given the project potential, the consortium remains open for participation and feedbacks from Non-EU experts.

3 Nomination of Industrial Advisory Board

Because efforts to find a fourth eligible candidate by the deadline of 31st of January failed, the decision made in the Cork meeting remained in force. Three experts, Mr. Stampfer, Mr. Härmäläinen and Mr. Ylinen were nominated with one voice for the SLOPE Industrial Advisory Board. All of them also accepted their nomination in February 2016 looking forward to meet Slope partners in Trento technical meeting, taking place in early July 2016.

All of them were keen on work as advisors, participating to the two remaining meetings and to the final conference (November 2016), commenting and contributing with their expertise on the following project topics:

- Timber quality improvement and matching issues (from stump to end-use point);
- Operational level suitability and application issues (hardware & software);
- Business plan and model development (Commercializing SLOPE prototype solutions and services, actions needed to gradually enter a target market);
- Big data (availability, openness, legal issues);

The consortium provided to the advisors all the available material related to the project, especially dissemination material like: brochures, posters, website, videos and invited the advisory board to fill a set of online customer questionnaires¹, usually distributed on our social channels to get their feedback from a commercial point of view.

¹ <http://goo.gl/forms/lIx9puBqo6sGy1w33>

4 CVs of Industrial AB Candidates

The following section provides a brief overview of the candidates' expertise.

4.1 Academia candidate 1

Associate prof. Rien J.M. Visser, New Zealand

Director of Studies, Forest Engineering, School of Forestry, Canterbury University;

Expert in:

- Harvest system planning, productivity and efficiency, modelling and benchmarking;
- Cable logging and helicopter logging systems and training;
- Minimizing environmental impacts of logging operations, codes of practice;
- Woody biomass harvesting and transport logistics for bio-energy;
- Forest engineering (e.g. infrastructure design, construction and maintenance);
- Improving value recovery in harvesting operations;
- Ergonomics, safety and training, including outreach activities such as workshops;
- International collaboration for low impact harvesting projects;

4.2 Big forest owner candidate 1

Mr. Erwin Stampfer, CEO, M.Sc. (For.), Austrian State Forest

Graduated in BOKU 1995, where worked for 2 years. 15+ years at the Forestry Technology Unit inside the ÖBf AG offering harvesting, road construction and maintenance services to its own 12 forest management units and for private landowners (harvesting up to 1 Million m³ per year, 250 contractors).

Since July 1st 2013 working at the Austrian State Forests (ÖBf AG), being a head of the department "Flachgau-Tennengau" and responsible for an area of 61,500 ha

which produces annually 130,000 m³ of timber and revenues of 13-24 Mio Euro.
He is responsible for 51 employees.

Contact info: Erwin.Stampfer@bundesforste.at

4.3 Forest Industry R&D candidate 1

Mr. Jarmo Hämäläinen, Research Manager, M.Sc. (For.), Metsäteho Oy², Finland

Over 30 years of experience in the development of wood supply logistics of forest industry, wood production methods and information management.

Main fields of expertise:

- Wood harvesting;
- Forest resource management;
- Mechanisation of silviculture;

Main responsibilities:

- Analysing R&D needs and new development possibilities concerning wood supply
- Constructing and leading research programmes and projects together with forest industry companies, research organisations, forest machine manufacturers and other actors of forestry.

His focus in these last years has been the digitalisation of wood procurement chain through effective utilization of Big Data and principles of industrial internet. In that context, he is leading a wide national Forest Big Data project, where all the most important forestry actors in Finland are involved. Main target of the project is to produce the basis for next generation forest management systems, in which new methods for forest data acquisition from different sources, data fusion, analysing and utilization have been developed. He has also taken part in planning and execution of several international R&D-projects in Nordic countries

² Metsäteho Oy Finland; <http://www.metsateho.fi/briefly-in-english/>

and EU and is part of the working group Efficient Wood Supply 2025 to produce added value to the value chain while being 30% more cost efficient than today³.

Contact info: Jarmo.hamalainen@metsateho.fi

4.4 Internationally operating SME: candidate 1

Mr. Jarmo Ylinen, Porinilog Oy, M.Sc. (For.), Finland

Worked between 1994 and 2005 as Manager of Business Intelligence Group, the Metsäliitto Concern, today renamed as Metsä Group. Mr. Ylinen carried out feasibility studies for the group's mechanical forest industries division (Finforest), pulp & paper mills division and the Group Headquarters in Finland, Sweden, Norway, Russia, Estonia, Uruguay, Guyana, Trinidad & Tobago, PR China, The Philippines, Malaysia and Indonesia, Sweden and the Baltic countries.

He accumulated experience in organizational development by setting up and running a wood procurement organization for a block board company of Metsäliitto Group's Finforest mill in Romania, developing international forest service and wood pricing models.

He has solid competence in wood procurement logistics, harvesting and transport planning and applications, development and marketing of harvesting and transport machine technology and systems, and is a top expert in forest inventories, harvesting and logistics.

Contact info: jarmo.ylinen@porinilog.com

4.5 Internationally operating SME: candidate 2

Mr. Paul Dima, Director, PROFOREST, M.Sc. (For.), Romania

With a wide international experience, he is specialized in logging operations based on the use of Wyssen cable cranes as well as cable installation in difficult terrains in Romanian forests he is training future operators of cable installations for companies interested to invest in modern harvesting equipment, is responsible for marketing, sales, maintenance and service to logging companies.

Acts as a consultant in forestry for clients focused on Romania and Balkan region and in matters regarding the modernization of the Romanian forest sector, such as:

³ http://www.metsateho.fi/wp-content/uploads/Tehokas-puuhuolto_2025_EN_Efficient_Wood_Supply.pdf



- Efficient utilization of resources;
- Utilization of modern environmentally friendly equipment;
- Training and transfer of know-how, socio-economic analysis, strategy development.



5 Advisory Board Comments Transcript

5.1 Technical Meeting n°5 and visit to the Italian Pilot

Mr. Erwin Stampfer:

The possibility to locate quality parameters during the harvesting process with the prototype harvesting head is very interesting. I believe it is not necessary to begin with dealing with efficiency and productivity issues; it is probably better to look how the functions work. I think the project would highly benefit from this kind of approach.

Another aspect of great importance is that, from what it appears so far, it will be possible to use the processor harvesting head within a few years, in an extensive way.

Mr. Jarmo Ylinen:

There have been extremely good progresses with this very unique project.

Integration of data and information, which is incoming from the six sensors, can be transformed in very different indicators of quality that can be very interesting for the operator. But all these should also be simplified for the operator. Some automation is therefore necessary. The information are useful and can be used in many different ways, but for the direct user on the field they have to be simpler.

The processor head is a very sophisticated unit and with such very complex machine. We can therefore expect it to be quite problematic to use, if we imagine the very hard conditions in which these sensors will work, even if they are protected. This is an area of concern, and a risk that should be assessed and taken into consideration.

The manufacturers themselves will say which functionality they are more interested in, in order to have something more than the competitor. The focus should be on having one sensor tried at the time. This will avoid commercial difficulties.

Regarding the certification system of timber, you have to be able to track the ownership on the wood chain up to the end customer. That is what nowadays the final consumer is asking to the seller of any object with a wooden component. That could be potentially connected to the project, because it is a very interesting aspect, with a potential on the market.



The sensor concerning echoes in the timber is very interesting and I never heard of such use in this field. This is really a step forward and a clear example of new application of technology in a different field.

Maybe the survey of the end users of the product can be useful to manage their perspective of quality assessment. We all know that quality is not globally recognized: every country and every kind of customer has very different quality standards. In this aspect I believe there should be some flexibility in programming the software.

Having this application also on the form of a mobile app is an extremely powerful feature. On the other side the risk related to the use of mobile devices in such circumstances, could be related to the GPRS localization system.

In the final use of the management tool there could be some problems on how to upload different information. In the forestry industry, contracts last generally 6 months: after this period, information can change completely and this does not come automatically. It must come from somewhere else, so that a user should be able to change settings from time to time.

Chain custody requires tracking. From this perspective, barcodes have the same problem of RFID and when needed, they can be unreadable.

