

## **Operations systems centre of advanced research (OSCAR) ([www.skogforsk.se/oscar](http://www.skogforsk.se/oscar))**

**Objectives:** 1) To increase the excellence and critical mass of R&D within the field of operation systems by integrating research resources and expertise, and 2) to promote, initiate and develop efficient, competitive and environmentally friendly forest operation systems on a joint Nordic basis, with special emphasis on technology and support systems.

**Results:** The whole R&D community within OSCAR's field has been reinforced through common project work, application writing, meetings and research conferences.

In OSCAR projects, two proposals of standardized measuring methods have been developed concerning measuring accuracy of scales on timber trucks and whole-body vibration measurement in forest machines. Machine manufacturers are adopting in both cases, providing implementation. At least four project proposals for further processing within EU FP7 and other frameworks have been prepared and submitted. Although the applications have not been granted, the work has provided good opportunities for the researchers to work out common ideas of research work. The biennial NSR/OSCAR research conference was organized in Tartu 2006. The next one will follow 2008 in Copenhagen.

As a consequence of common strategy work ('Environmental and efficient forest technology 2020') projects are being set up. This work has also delivered basic goods to a Swedish-Finnish research school to be started Jan 2009 and to provide open Nordic PhD courses within the OSCAR field.

A Nordic Forum on forest energy research has been organized. Furthermore a seminar on "Profitable forestry in the Nordic and Baltic countries", gathering nearly 50 people from six countries, was organized on commission for the Nordic council of ministers.

Several activities which will start in 2008 have been planned by the working groups, e.g. field demos of equipment and methods to reduce whole-body vibration and impact to the soil, common nomenclature in follow-up, data collection and time studies of forest operations.

One new working group has been set up (Forestry business engineering, which will aim at a Nordic standard for good practice in forest operations).

Several bi-lateral projects have been conducted as spin-offs from OSCAR, especially between Skogforsk, Silava and the State Forestry in Latvia.

**Nordic aspect:** In terms of forest operations the Nordic countries are very different from each other, with Sweden and Finland as the two dominating players logging in total 120-150 Mm<sup>3</sup> per year. Norway, with its under-utilized harvest potential and steep terrain, has its own characteristics as well as Denmark with high importance of forestry in populated areas and near cities. There are however several common components, such as the technology used in forest operations. This technology has a solid Nordic base, and our countries' future competitiveness relies quite heavily on the success of Nordic R&D within the OSCAR field. The Nordic dimension could be described as each country through OSCAR has a good chance to benefit from knowledge in all countries in areas where there are not enough national funding for research on forest operations, i.e. synergies. Work on developing common strategies for R&D to remain competitive have occurred within the OSCAR framework, which coordinates the research.

There are several examples of projects, contacts and intensified collaboration – both bilateral and multilateral – that had not taken place had it not been for OSCAR. In this context, the inclusion of the Baltic countries (especially Latvia) has been extra stimulating.

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**Budget:** Annual budget is 450-700 000 euro, of which c. 55 000 is granted from SNS. The project time is 2005-2009, i.e. 5 years.