

CALL FOR PROPOSALS (2006-2011) in the areas of

**Wood production and properties - basic research
(Sub-Call A)**

and

**New wood-based products, efficient processes and
sustainable forestry – applied and industrial research and
development (Sub-Call B)**



WoodWisdom-Net Programme invites research proposals in the areas of

**Wood production and properties - basic research
(Sub-Call A)**

and

**New wood-based products, efficient processes and sustainable forestry
– applied and industrial research and development
(Sub-Call B)**

The objective of the call is to encourage and fund high-quality research within wood material science and engineering. It should promote transnational cooperation, which shares expertise, synergies and cooperative research activities, increases the efficient use of resources, supports development of the scientific and technological knowledge base, builds synergies of knowledge exchange and technology transfer, provides long-term profitable and environmentally friendly forestry management and forest production, provides raw material supply for specific products or demands, and promotes the development of new wood-based products and efficient processes.

The call includes two theme areas: “Wood production and properties” (Sub-Call A - basic research) and “New wood-based products, efficient processes and sustainable forestry” (Sub-Call B - applied and industrial RTD). These areas address the common priorities identified in the surveys and workshops of the process of collaborative shaping of research agendas during summer 2005 - spring 2006. The themes of the call are in alignment with the national research programmes and with the SRA of the Forest-Based Sector Technology Platform and national research agendas.

The programme is expected to increase synergies between research teams around Europe and build a research platform in the area of wood material science and engineering that will promote the sustainability and competitiveness of the forestry sector and forest-based industry in Europe.



Two-stage call for proposals

The selection process involves two stages: **First-Step Proposals** are welcome **from 1 November 2006 to 31 January 2007**. The WoodWisdom-Net Steering Committee will then perform the evaluation. The **results** will be **available on 28 February 2007**. Proposal submitters that pass the first-step evaluation will be requested to write a full Second-Step Proposal.

Call schedule

Call opened – invitation for First-Step Proposals	1 November 2006
Last date for submitting pre-proposals	31 January 2007
End of evaluation and selection of pre-proposal to be invited to submit full proposal	28 February 2007
Last date for invited full proposals	30 April 2007
National funding decisions published	September-November, 2007
First projects starting (Sub-Call B)	1 September 2007
Projects starting (Sub-Call A)	1 January 2008

Co-operation

Sub-Call A – Wood production and properties – is for basic research projects, i.e. is open to researchers/research groups from academic institutions and research institutes within the participating countries (private/industrial co-operation/co-funding allowed); however, each participant is subject to the national eligibility criteria. ***The consortium should include at least three partners from three WoodWisdom-Net countries.***

Sub-Call B – New wood-based products, efficient processes and sustainable forestry – is for applied research projects including industrial research and development projects, i.e. is open to companies (focusing on research-intensive small- and medium-sized enterprises and their strategic partnerships) and research organisations; however, each participant is subject to the national eligibility criteria. ***The consortium should include at least three partners from three WoodWisdom-Net countries OR in the case of SMEs two SMEs from two WoodWisdom-Net countries.***

NB! All applicants are recommended to contact the national funding organisations for further information on the application procedures.

Table 1. Outline of the Sub-Calls.

Sub-Call A: WOOD PRODUCTION AND PROPERTIES	Sub-Call B: NEW WOOD-BASED PRODUCTS, EFFICIENT PROCESSES AND SUSTAINABLE FORESTRY
Type of research: Basic collaborative and transnational research	Type of research: Applied collaborative and transnational research + industrial research and development
Open to: Researchers/research groups from academic institutions and research institutes within the participating countries (private/industrial co-operation/co-funding allowed), subject to the national eligibility criteria.	Open to: Companies (focusing on research-intensive small- and medium-sized enterprises and their strategic partnerships) and research organisations, subject to the national eligibility criteria.
Consortium: A consortium should include at least three partners from three WoodWisdom-Net countries.	Consortium: A consortium should include at least three independent partners from three countries OR in the case of SMEs two SMEs from two WoodWisdom-Net countries. Consortia including both companies and research organisations are preferred. Partnerships are recommended when the results are shared, otherwise subcontracting is preferred.
Funding modalities: According to national terms, up to 100%.	Funding modalities: According to national terms. Funding rate for companies between 25 and 75%, for research organisations between 50 and 100%.

Funding

Funding will be available from national funding organisations only for those participants of the respective countries (see Table 2 below). This means that each project partner needs to apply for funding directly from their respective regional/national funding agencies listed in Table 2. Projects can be funded for a maximum of three years. The national funding organisations will jointly provide public funds of around 20 million Euro to support the call. In addition to this, applicants shall refer to the terms and conditions of their responsible funding agencies and programmes. Within the WoodWisdom-Net call, the funding rules of the regional/national agencies have to be applied. Information about the specific funding rules will be provided via the helpdesk of the respective regional/national agencies. It is recommended that the budget does not exceed the typical regional/national limits for the respective partners.

If a proposal includes any participants from countries outside the WW-Net partner countries, the participants from the non-WW-Net partner countries are required to finance their activities from other sources.

Table 2. Funding.

Participant name	Country	Sub-Calls		Public funding total (million Euro)			Eligible partners	
		A	B ¹	< 0.5	< 1.5	> 1.5	Industry	Research organisation
Finnish Funding Agency for Technology and Innovation (Tekes)	Finland		x			x	x	x
Ministry of Agriculture and Forestry (MMM)	Finland		x	x				x
Academy of Finland (AKA)	Finland	x			x			x
Danish Forest and Nature Agency (DFNA)	Denmark		x			x	x	x
Research Council for Production and Technology Sciences (FTP)	Denmark	x			x			x
Federal Ministry of Education and Research (BMBF) and Project Management Agency Jülich (PTJ)	Germany		x			x	x	x
The Research Council of Norway (RCN)	Norway	x	x		x		x	x
Innovation Norway (IN)	Norway		x	x			x	
Nordic Forest Research Co-operation Committee (SNS)	Nordic	x	x	x				x
The Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (Formas)	Sweden	x			x			x
Swedish Agency for Innovation Systems (VINNOVA)	Sweden		x	x			x	x
Forestry Commission (FC)	United Kingdom	x	x		x		x	x
Ministry of Agriculture/ General Direction for Forest and Rural Affairs (DGFAR) and Technical Centre for Wood and Furniture (CTBA)	France		x	x				x
National Institute of Agronomical Research (INRA) ²	France	x	x	x				x

¹ Tekes, VINNOVA and Innovation Norway are NOT funding the projects in the area of sustainable forestry

² Only French research teams from INRA or associated with INRA (Research Units or Joint Research Units) will be eligible for funding

Sub-Call A

Description of the theme area “Wood production and properties”

The theme area “Wood production and properties” covers the research topics below. For each topic, there are listed some examples of possible research issues that were identified during the process of the Collaborative Shaping of Research Agendas in WoodWisdom-Net.

Please see Table 2 for participating organisations for Sub-Call A.

- ***Tree breeding using traditional techniques or forest biotechnology***, e.g. designing high-value trees; improving wood properties; early selection using genetic markers.
- ***Techniques for measurement and characterisation of the properties of wood and fibres***, e.g. structure and rheology of wood and wood fibres; investigation of properties at the cell-wall level; efficient measurement methods for properties of wood and wood cells.
- ***Natural and man-made factors affecting wood and fibre properties***, e.g. effects of climate change, site properties and silviculture on anatomical, structural, chemical and technical properties.
- ***Creating new functionalities or improved materials/products***, e.g. knowledge about durable wood materials and products with environmental and consumer friendliness; nanostructures for improved stiffness of light products; new functional cellulose derivatives.

Sub-Call B

Description of the theme area “New wood-based products, efficient processes and sustainable forestry”

The theme area “New wood-based products, efficient processes and sustainable forestry” covers the research topics below. For each topic, there are listed some examples of possible research issues that were identified during the process of the Collaborative Shaping of Research Agendas in WoodWisdom-Net.

Please see Table 2 for participating organisations for Sub-Call B.

- ***Composites, sustainable material combinations***, e.g. the strength of wood fibre composites; combining fibres with other materials, improvement of dimensional stability and other material properties of wood-plastic composites; long-term durability of wood-plastic composites; wood polymer composites development.
- ***Creating new innovative wood and fibre structures for different end-uses***, e.g. solid wood constructions, pre-fabricated wall- elements from biogene-based materials and timber; wood-concrete composite action for housing; incorporation of smart features into fibre-based materials.
- ***Wood-based biopolymers to composites and biochemicals***, e.g. cellulose-based polymers; wood polymers in coatings, mono-component cellulose materials, wood powder as filler in barrier biomaterials, biorefinery products, etc.
- ***Creating new functionalities or improvements to materials/products***, e.g. delivering enhanced properties through modification; utilising new technologies (such as nanotechnology, biotechnology) in wood protection and to create wood and fibre surfaces with specific functional properties, etc.
- ***Efficient processes***, e.g. building with wood – value chain from the environmental viewpoint; flexible and adaptive manufacturing systems for the production of wooden components; recycling wood products – a new material resource; optimisation of business and process chains for the wood industry; improved coatings for wood; innovative chemicals and polymers from bark.
- ***Techniques for measurement and characterisation of the properties of wood, engineered wood and fibres***, e.g. measuring the wood properties in forest planning, stands, during harvesting or in production including evaluation and grading methods; strength grading of sawn timber and engineered wood products.
- ***Securing and improving raw material supply for conventional and new uses***, such as for biorefinery, e.g. allocation and mobilisation of wood resources; cost-competitive and intensive wood production; afforestation of agrarian marginal sites; innovative land-use concepts; plant breeding including forest biotechnology.

- ***Tailor-made wooden biomass supply - including wood production, harvesting and transportation - for specific products or demands*** (for wood construction, paper and energy production, innovative wood materials and chemicals, etc.), e.g. impact of wood properties on the properties of wood-based materials; optimal selection of wood raw material and its allocation.
- ***Optimisation of forest-wood chain using new technologies, tools and/or sustainable business models*** for the forest-based sector, e.g. forest inventory and planning systems; improving logistics meeting the requirements of forest industries; methods for quality control of wood and fibre properties during harvesting and processing by using new technologies; material flow in case of biotic and abiotic damage; enhanced tracing of logging and wood transport.
- ***Silvicultural methods, procurement and harvesting operations***, e.g. factors affecting wood and fibre properties; development of silvicultural strategies (e.g. regarding climate change; wood and fibre quality); methods meeting timber market and industry needs as well as the requirements of multifunctional forests; risk management regarding biotic and abiotic damage by silvicultural strategies and plant breeding, including forest biotechnology.



Evaluation criteria

The evaluation criteria for the First-Step Proposals will be:

Sub-Call A - Wood production and properties:

- Suitability for national funding
- Relevance to the scope and objectives of the call
- Quality of international co-operation
- Degree of novelty of the research
- Expertise of the consortium leader

First-Step Proposals will be ranked as pass/fail. A written statement will be sent to the consortium leaders.

Sub-Call B – New wood-based products and sustainable forestry:

- Suitability for national funding
- Relevance to the scope and objectives of the call
- Quality of international co-operation
- Innovativeness
- Industrial relevance.

First-Step Proposals will be ranked as pass/pass, but to be improved/fail. A written statement will be sent to the consortium leaders.

It is important to note that there are limitations with regard to the kind of research that the different funding organisations can support. Therefore, the most important selection criteria at the first stage are the suitability for national funding and the relevance to the scope and objectives of the call. Also, the quality of international co-operation is emphasised.

Application and evaluation procedure

There will be a two-stage application procedure (First- and Second-Step Proposals) and accordingly a two-stage evaluation procedure for Sub-Calls A and B.

The First-Step Proposal should be prepared by completing an application form for Sub-Call A or Sub-Call B. The application language is English.

Following the WoodWisdom-Net transnational evaluation of the First-Step Proposals, priority-listed applicants will be invited to submit a Second-Step Proposal. The Second-Step Proposal includes an application form for the joint project plan (to be sent to WoodWisdom-Net Secretariat) and a complete national application for each partner (to be sent to the respective national funding organisation).

After the WoodWisdom-Net transnational evaluation of the Second-Step Proposals the funding organisations will make the final funding decisions. Note! Each project is required to have a signed



consortium agreement between the project participants before the project can start. The first projects may start in September 2007 at the earliest.

All call documents (including different forms and project evaluation and procedure guidelines) are published on the WoodWisdom-Net website at www.woodwisdom.net.

How to apply

First-Step Proposals should be prepared in English using a specially designed form for each of the Sub-Calls. All forms should be submitted by e-mail to the WoodWisdom-Net Secretariat (woodwisdom.office@woodwisdom.fi). **All applications are subject to confidential evaluation.**

First-Step Proposals should be submitted no later than 31 January 2007.

Those who are invited to submit a full proposal after the first phase are asked to deliver a joint project plan which will be attached to each related national funding application.

NB! All applicants are recommended to contact the funding organisations for further information on the application procedures.

For further information, please contact:

Finland

- Finnish Funding Agency for Technology and Innovation (Tekes). www.tekes.fi
Mr Ilmari Absetz Tel. +358 10 605 5837, E-mail ilmari.absetz@tekes.fi
- Ministry of Agriculture and Forestry (MMM). www.mmm.fi
Ms Liisa Saarenmaa, Tel. +358 (0)9 160 533 53, E-mail liisa.saarenmaa@mmm.fi
- Academy of Finland (AKA). www.aka.fi
Ms Jaana Roos, Tel. +358 (0)9 7748 8338, E-mail jaana.roos@aka.fi

Denmark

- Danish Forest and Nature Agency (DFNA). www.sns.dk
Mr Thorsten Søndergaard Larsen, Tel. +45 3947 2702, E-mail tsl@sns.dk
- Danish Research Council for Technology and Production Science (FTP). www.fist.dk
Mr Per Kolbeck Nielsen, Tel. +45 35 44 62 0, E-mail pkn@fist.dk

Germany

- Project Management Agency Jülich (PTJ). www.fz-juelich.de
Ms Kristina Gross, Tel. +49 (0)30 201 99 539, E-mail k.gross@fz-juelich.de

Norway

- The Research Council of Norway (RCN). www.rcn.no
Mr Olav Gislerud, Tel. +47 22 03 70 00, E-mail og@forskningsradet.no
- Innovation Norway (INVANOR). www.invanor.no
Mr Olav Gislerud, Tel. +47 22 03 70 00, E-mail og@forskningsradet.no

Sweden

- The Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (FORMAS). www.formas.se
Mr Jan Svensson, Tel. +46 8 775 4051, E-mail jan.svensson@foras.se
- Swedish Governmental Agency for Innovation Systems (VINNOVA). www.vinnova.se
Ms Eva Esping, Tel. +46 8 473 3153, E-mail eva.esping@vinnova.se

France

- Technical Centre for Wood and Furniture (CTBA). www.ctba.fr
Mr Frédéric Rouger, Tel. +33 1 56 43 63 73, E-mail frederic.rouger@ctba.fr
- National Institute of Agronomical Research, Department of Forest, Grassland and Freshwater Ecology (INRA). www.inra.fr
Mr Paul Colonna, Tel. +33 2 40 67 51 45, E-mail cepia@nantes.inra.fr

United Kingdom

- Forestry Commission (FC). www.forestry.gov.uk
Mr Jim Dewar, Tel. +44 0131 314 6385, E-mail james.dewar@forestry.gsi.gov.uk

Nordic Forest Research Co-operation Committee (SNS). www.nordicforestresearch.org

- Mr Olav Gislerud, Tel. +47 22 03 70 00, E-mail og@forskningsradet.no