



The FTP Strategic Research Agenda

Information and communication technology (ICT) perspective



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Motivation

- › Forest-based sector must be in forefront of applying the rapidly developing ICT
 - › Products, production, raw material supply, forests
- › Many Research Themes address same ICT enablers
 - › Find common interests – find coherent solutions
 - › Joint interests with other TPs
- › ICT recognized among the key elements of European progress by the Commission
 - › Economy and society – new wave of technologies
 - › Emphasis in FP7

ICT issues – basis for SRA analysis

- › Sensors and sensor networks
- › Process control and optimization
- › Data handling, simulation and visualization
- › Decision support systems
- › Information flow internally and over company borders
- › Joint design of material, energy and information flows
- › Spatial information systems
- › IT infrastructure

ICT analysis – key findings 1/2

- › Essentially all research themes assume development of new sensors
 - › Forestry, supply of raw material, production processes, embedding in products
- › Development of new business paradigms must consider ICT as an essential building block
 - › All ICT issues to be considered
- › Multi-scale planning and management of forests an area for intense ICT application
 - › Spatial information systems the focal point in short term, but long term challenges/opportunities in sensor networks, decision support systems, optimization, and flow of information

ICT analysis – key findings 2/2

- ⦿ Embedding sensing elements to the consumer products adds value
 - ⦿ But designing the use of information generated is part of the research challenge
- ⦿ Supporting operational decision making – understanding and rational attitude of uncertainties
 - ⦿ Forests, supply systems, market demand,...
- ⦿ Whenever designing business and production systems, flow and handling of information should be considered on equal footing with physical processing
 - ⦿ New paradigm for optimal systems design

The next steps

- IT Task Force report to be released as supporting material for SRA
- The report shall make explicit the common ICT interests of Research Themes
- Task Force shall seek for cooperation with other TPs, when applicable
- Task Force shall assist in setting up research activities