

Working Group on ICT and robotics in agriculture

New EU policies on traceability, food safety, agri-environmental and rural development have renewed the interest in information and communication technology (ICT) and robotics research as a solution to efficient implementation of these policies. The policies are reflected in demand by European agriculture and related industries for technological solutions that accommodate needs and provide competitive advantages in a market with increased consumer requirements and environmental focus. The challenge is to support the emergence of biosystems management technologies capable of meeting environmental and ethical requirements, while promoting efficiency and a healthy work environment.

Through closer cooperation and coordination, the knowledge bases that exist in the implicated research areas will be able to achieve a synergy that can create new innovative solutions in the applied research and production of the sector. The added value will be created through inter-professional networking and the large growth potential of SMEs that can develop high technological solutions in the cross field between biology and engineering.

“The vision of the Working Group is to shape and focus the research and development on ICT and robotics for agriculture and related industries and provide a basis for member state collaboration. The working group brings together existing networks and the technological companies, achieves critical mass, and provides optimal conditions for the European work in ICT and robots for agriculture and related industries.” (Letter of invitation, August 2005)

At present organisations from 11 countries are participating in the CWG. Up to now the group has prepared three documents: a short paper on ICT and robot technology in agriculture and the related industries, a preliminary report on mapping R&D in the area of ICT and robots, and a description of the focus area of the SCAR CWG in ICT and robotics (suggested input for FP 7).

At their next meeting the group will discuss the possibility of developing an ERA-Net.

Agricultural Engineering on the European Road

Summarising the activities described, it can be concluded that agricultural engineering research plays an important role on the way to a knowledge-based bio-economy and will have a better base for collecting research money from FP 7. It is expected that this research will result in a number of innovations that will bring the related European industry into a leading position in the world and stabilise this position. But before there is a need of ideas and activities by many agricultural engineers.

Reiner Brunsch
Kommissarischer Wissenschaftlicher Direktor des
Leibniz-Instituts für Agrartechnik
Potsdam-Bornim e.V.

Jürgen Kern
Vorsitzender des Redaktionsbeirats der
Agrartechnischen Forschung

Ludger Frerichs
Vorsitzender der Max-Eyth-Gesellschaft
Agrartechnik im VDI (VDI-MEG)
Leiter Vorentwicklung der
CLAAS Selbstfahrende Erntemaschinen GmbH

Hermann Auernhammer
Lehrstuhl Technik im Pflanzenbau
Technische Universität München
Department für Biogene Rohstoffe und
Technologie der Landnutzung