

# ROBOT@CWE

Advanced robotic systems in future collaborative working environments

## 1 Goal

- Establish a concept for, and develop prototypes of, a collaborative working environment, conceived such as to include robots and, by so doing, to improve productivity and safety.
- Analysis, research and identification of future socially acceptable and beneficial collaborative work scenarios where robotics is necessary
- User centred systems design
- Establishing methods for quantifying the benefit of robot collaborative work by demonstration and evaluation



## 2 Approach

- Investigation of the interaction and interplay between human users and robotic technologies on individual-, group-, and societal level (Social appliance recommendations)
- Elaboration of a human/IST-robotic systems interaction design model and a teleoperator interaction design concept
- Usability and user experience style guide
- Analysis and of and guidelines for technology acceptance in collaborative working environments
- Design, realisation and analysis of a scenario-based user evaluation



## 3 Result



- We already developed a method plan for the evaluation of usability, user experience, social acceptance and societal impact of robots
- We conducted a breaching experiment where we introduced a robot into a public space and investigated the people's reactions by observation and semi-structured questionnaires.
- The findings of the experiment indicate that people generally accepted the evaluated robot as part of a public space.
- It looks like people in general are more excited about new forms of technologies and especially about robots than few years ago.

