

# Manufacturing Engineering Centre, Cardiff Univ., UK

- **Accredited Centre of Excellence**
- **Coordination during FP6 – IST & NMP:**
  - 2 NoEs, 2 STREPs
- **Partnership during FP6 – IST & NMP:**
  - 3 IPs, 3 STREPs, 2 CAs, 1 SSA
- **Over €12.5 million EU funding since 2003**
- **Relevant projects include**
  - REHAROB £135,000
  - RESCUER, £200,000
  - IWARD, £190,000

<http://www.cf.ac.uk>



# Robotic Rescue Teams

Creation of teams of autonomous cooperating robots for search and rescue tasks in hazardous environments or emergency operations. Flexible interface for human alert systems, human supervision or human take-over of critical operations.

## Objectives

- Intelligent highly autonomous robotic agents
- Cooperative behaviour, robot-robot and robot-human interaction
- Possibility of remote human guidance/supervision/control

# Relevance to the Call

- **3.2.1-1: Cognitive Systems, Interaction, Robotics**
- Artificial systems that:
  - can achieve general goals in a largely unsupervised way, and persevere under adverse or uncertain conditions
  - communicate and co-operate with people or each other
  - demonstrators that operate largely autonomously in demanding and open-ended environments ... and for communication and co-operation with people or machines or both.

## Scale

- Duration: 3 years
- Budget: ~ €3million (small & medium scale)
- Consortium: 6 partners circa

- **Additional expertise required:**

- Emergency operations experts
- Mobile robots (water)
- Positioning and navigation
- Human-robot communication

- **Contact details:**

Dr Marco Castellani

CastellaniM@cardiff.ac.uk

tel: +44 (0) 2920 870015