ECHORD++

European Clearing House for Open Robotics Development Plus Plus

1st call for experiments

Bristol Robotics Laboratory
BLUE OCEAN ROBOTICS - for humans
SEVENTH FRAMEWORK PROGRAMME

Experiments

Small to medium sized **scientific research and/or technology development** projects with a clear focus on generation of impact

- Funding ~ 300k€ per experiment
- Duration up to 18 months
- Small consortia, typically 2-3 partners
- No need for 3 different countries

- Revised scenario definitions
- Optimized timing of all administrative procedures
- Interaction with other instruments
- Total experiment funding: ~ 10 Mio. €

Timeline Call 1 for experiments

3rd March 2014: first call of experiments open

24th March 2014: deadline for pre-proposals

14th April 2014, 17:00 Brussels time: deadline for proposal submission

July 2014: Information about the outcome and start of the accession procedure

October 2014: Formal submission of amendment documents

Types of Experiments

1. Joint enabling technology development
2. Application development and implementation of use cases
3. Feasibility demonstration

Scenarios

1. Cognitive Tools and Workers for Cognitive Factories
2. General Purpose Robotic Co-workers
3. Cognitive Logistics Robots for Industry
4. Medical Robotics
5. Agricultural and Food Robotics

Research foci

1. Key Issues in Practical Machine Cognition
2. Advanced Perception and Action Capabilities
3. Multiple Cooperating Mobile Manipulators
4. System Architectures, Systems and Software Engineering Processes and Tools

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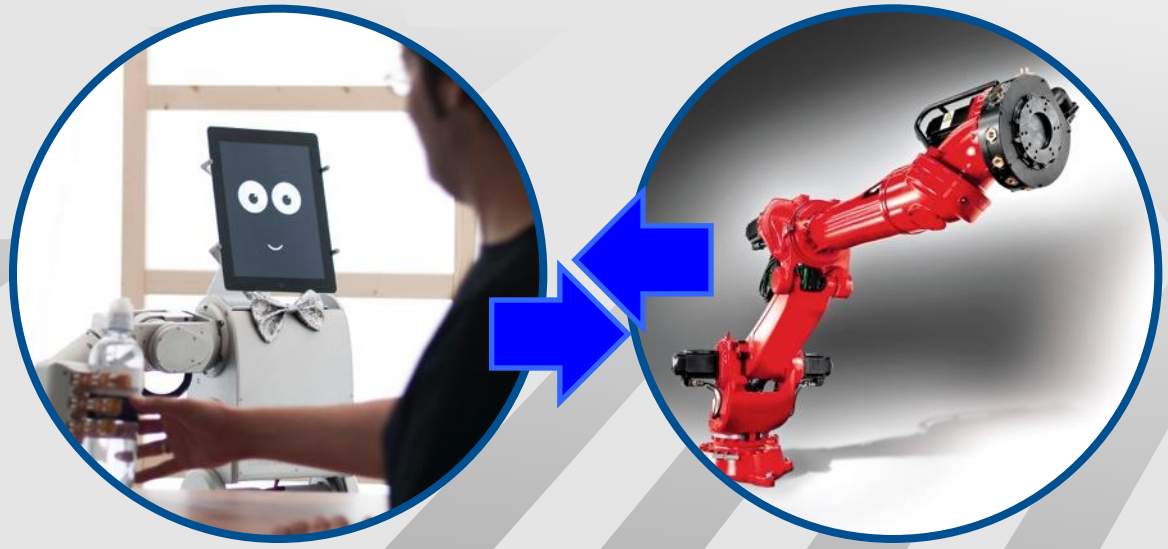
Linking RIFs and Experiments



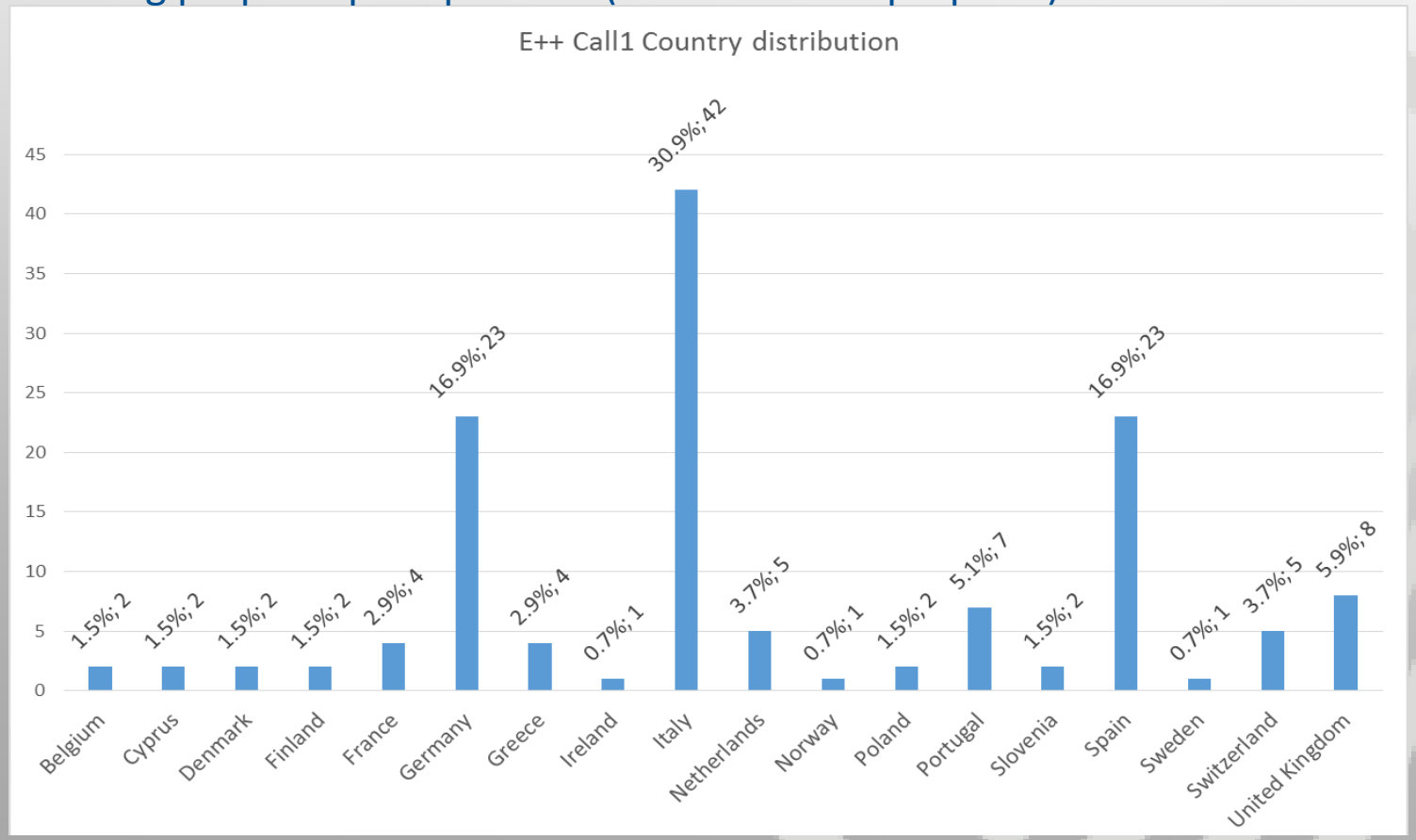
Experiments

Robotics Innovation Facilities (RIF)

- Use RIFs as test beds outside the own lab
- Get access to robotics equipment and experts to support bootstrapping and knowledge transfer
- Show your results and participate in dissemination events

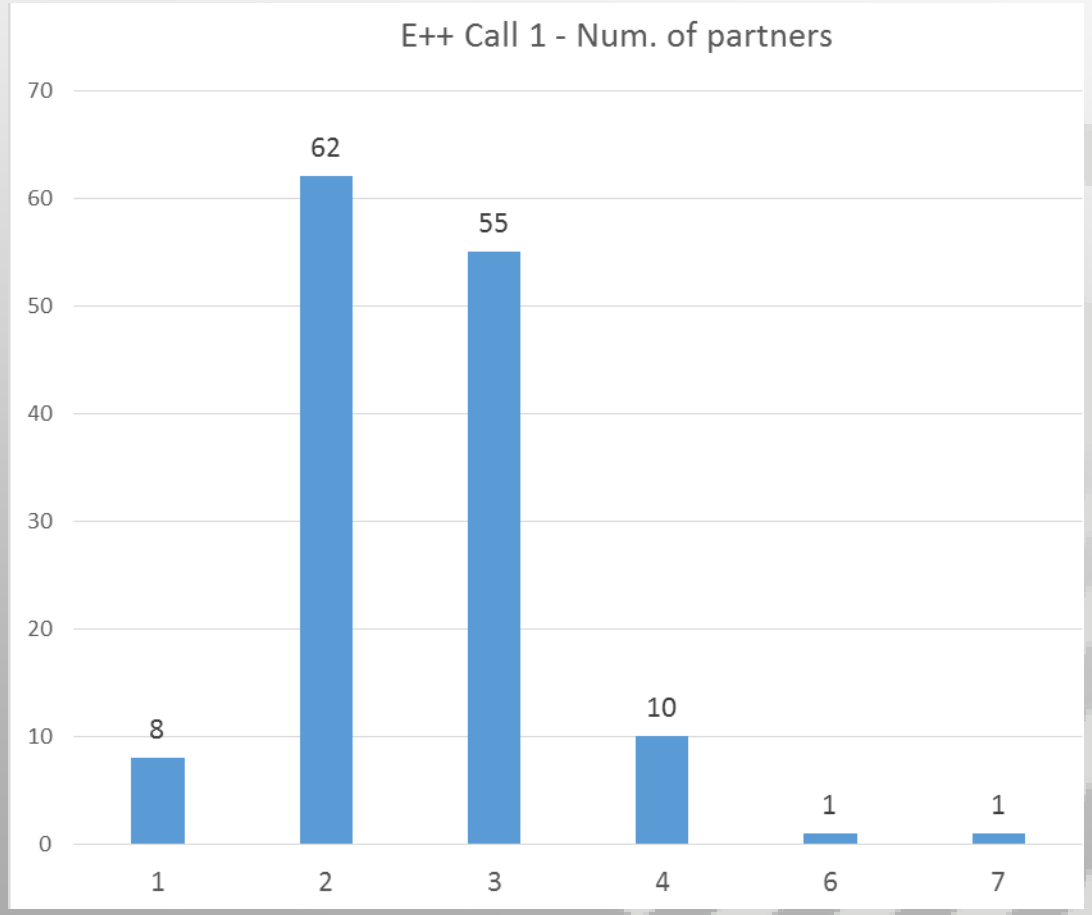
Proposal Submission Statistics

- 137 eligible proposals submitted
- 2 proposals withdrawn after deadline
  - 1 submitted as improved version under different ID/acronym
  - 1 wrong proposal pdf uploaded (same as other proposal)

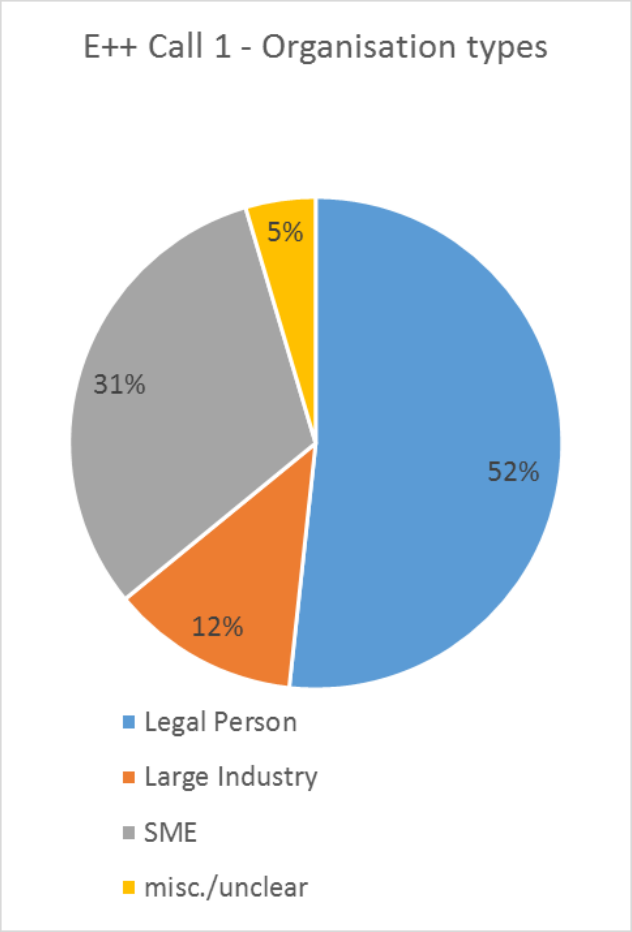


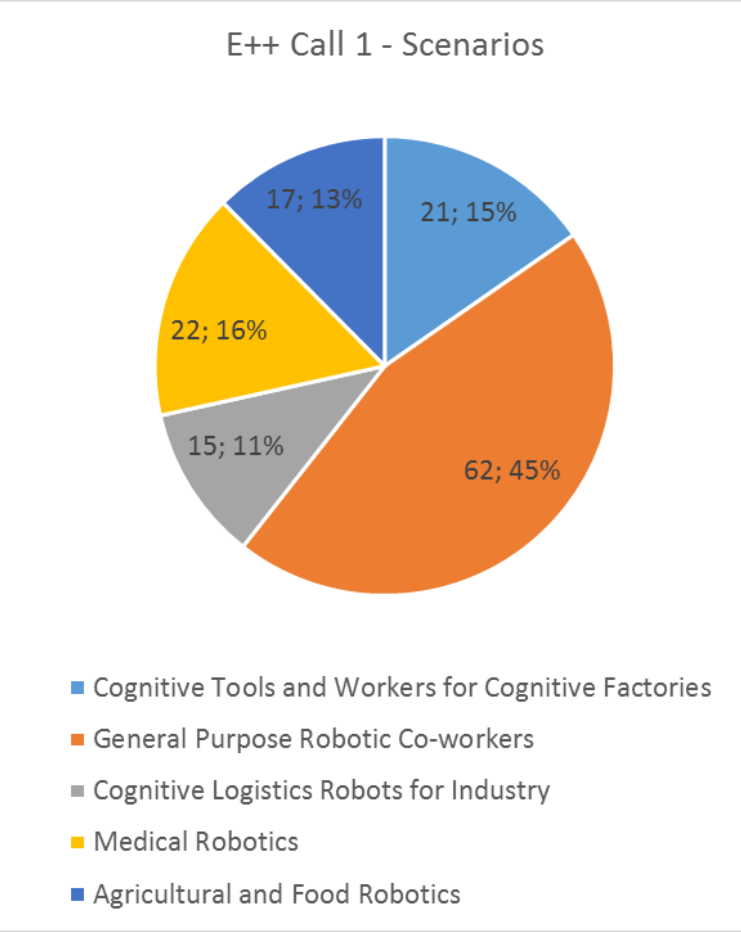
Proposal Submission Statistics

- Number of partners per proposal
  - avg 2.55
  - min 1
  - max 7

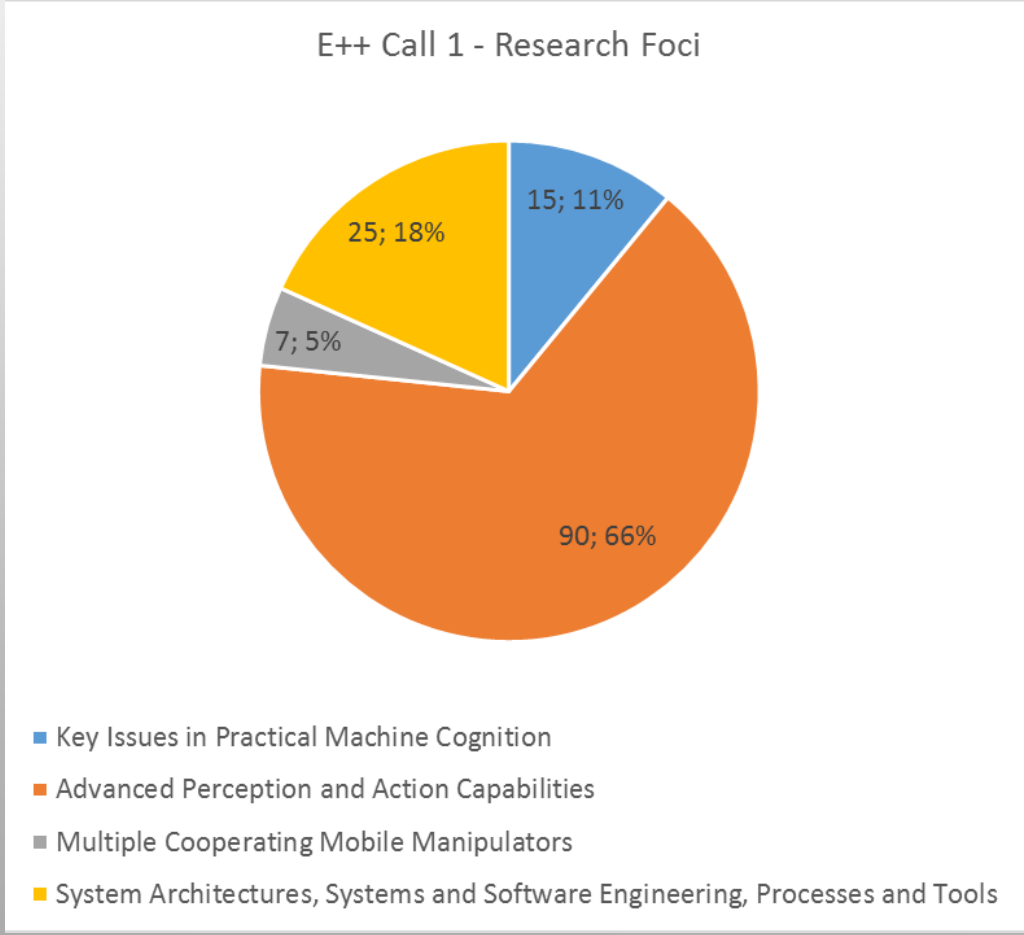


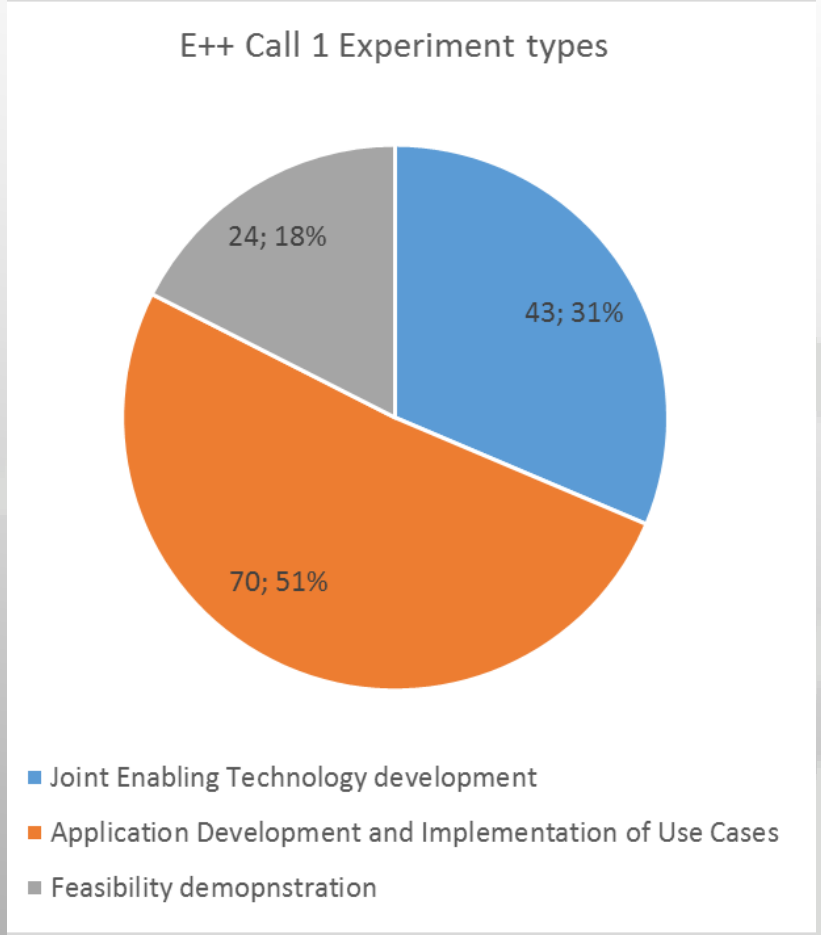
Proposal Submission Statistics





Proposal Submission Statistics





Some important points

- Clear identification of the “added value” from a technical point of view and from use.
- Define how the results will be evaluated and risks controlled
- Transfert to industry and potential impact and integration into services or production process
- Budget limit
- Implication of the experts
- Innovation cost

Evaluation Criteria

1. Scientific and/or technological excellence, relevant to the scenario and research focus. This is intended to measure the degree of innovation.

- Clear Objectives?
- Progress beyond the state of the art? Already existing products? Is the expected innovative?
- Will this research improve the quality, functionality or performance of the products already available in such a way that the proposed effort can be justified or can it – finally – lead to new types of products?
- Match with one of the given scenarios as in the Guide for Applicants? (most suitable one, not necessarily the one chose by the applicant)
- Match with one of the research foci as outlined in the Guide for Applicants?

Evaluation Criteria

2. Quality and efficiency of the implementation and the management. This is intended to measure the appropriate allocation of budget and resources.

- Are the proposers qualified? (past experience and/or reputation)
- Clearly defined partner roles, given their individual competences?
- Realistic outcome (“value for money”), with respect to 18 months duration?
- Are there risks that the proposers may not be aware of and that may compromise the success of the experiment?
- Is the indicated budget reasonable? Is the project plan clear, are resources clearly allocated and are milestones and deliverables clearly defined?

Evaluation Criteria

3. Potential impact through the development, dissemination and use of project results. This is intended to measure the effectiveness of the technological transfer and the impact on the market created by the experiment when successful.

- Measuring impact and success? Are specific Key Performance Indicators proposed? Is the experiment target coherent with (known) roadmaps of robot manufacturers and/or the SRA? Will this impact be sustainable, given the reputation of the proposers and their “market power”?
- Bi-directional technology exchange between manufacturers and research organizations? Quality of the exploitation plan with economic potential?
- Appropriate work-plan with respect to timing, distribution of work between the partners, tasks, milestones and deliverables?

Evaluation Criteria

3. Potential impact through the development, dissemination and use of project results. This is intended to measure the effectiveness of the technological transfer and the impact on the market created by the experiment when successful.

- Quality of the dissemination plan?
- How widely and openly will the research results be disseminated?
- Adequate dissemination channels?
- Measures should address the full range of potential users and uses.

Evaluation Criteria

3. Potential impact through the development, dissemination and use of project results. This is intended to measure the effectiveness of the technological transfer and the impact on the market created by the experiment when successful.

RIF planning, different cases:

- The proposal fits in one or more RIFs and the proposer is willing to use one of them
- The proposal fits in one or more RIFs but the proposer is not willing to use any. In this case the proposer should indicate in which way same level of impact will be reached;
- The proposal does not fit in any of E++'s RIFs. In this case, it has to be stated that there is no possibility to use a RIF – and why and the proposer should state how the same impact as with RIF usage can be reached.

Scores for the 3 criteria

0 The proposal fails to address the criterion under examination or cannot be judged due to missing or incomplete information.

1 Poor. The criterion is addressed in an inadequate manner, or there are serious inherent weaknesses.

2 Fair. While the proposal broadly addresses the criterion, there are significant weaknesses

3 Good. The proposal addresses the criterion well, although improvements would be necessary.

4 Very good. The proposal addresses the criterion very well, although certain improvements are still possible.

5 Excellent. The proposal successfully addresses all relevant aspects of the criterion in question. Any shortcomings are minor.

Thresholds

- A threshold of 3 must be achieved on each criterion
- An overall score is calculated for each proposal by simple addition
- A threshold of 10 must be achieved on the overall score