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Aleš Ude
Jožef Stefan Institute, Slovenia

www.trinityrobotics.eu
DIH network TRINITY

Digital Technologies, Advanced Robotics and increased Cyber-security for Agile Production in Future European Manufacturing Ecosystems

**DT-ICT-02-2018** - Robotics - Digital Innovation Hubs (DIH)

EU funding: ~ € 16 000 000

54 months – January 2019 to June 2023

- Improve agility & innovation capability of European manufacturing companies (focus on SMEs) through robotics, possibly supported by IoT and cyber-security technologies
- Build a network of Digital Innovation Hubs beyond the project life-time
- Provide critical mass of use cases to demonstrate new robotic technologies & added-value in different sectors
- Create a digital access point to facilitate access to knowledge, collaboration and networking
Consortium

• Coordinator: Tampere University

• 16 partners from 10 countries:
  • 5 universities
  • 3 Research & Technology organisations
  • 2 companies
  • 4 industry/technology associations
  • 2 technology broker SMEs
Concept and approach for increasing knowledge

TRINITY Target: over 50 modular use case demonstrations, with 150 technical modules by the end of 2022

- Two calls; 2019, 2021
  - 70% funding
  - SMEs and slightly bigger consortiums
  - 50-300k€ for 6-12 months demos
What is in it for you?

- Access to solutions adapted to your needs (modular approach)
- Access to wide network, expertise and knowledge through the TRINITY network and digital access point
- Speeding up the technology transfer and shorten time to market
- Funding opportunities through open calls – help us shape the call topics to meet your needs
Open calls

First open call

2019

Second open call

2021

• Deadline for the 2\textsuperscript{nd} open call: June 1\textsuperscript{st}, 2021
• Up to 30 company demonstrators to be funded
• Proof-of-Concepts in industrial environments
• Up to EUR 200,000 funding per demonstrator (70%)
• Total budget 3,5m€ for 2\textsuperscript{nd} Open Call
2nd TRINITY open call

- TRINITY external demonstrations can be a proof of concept experiments testing the TRINITY technologies or they can be novel solutions innovated by the applying SMEs.

- Inspiration and ideas for external demonstrations can be found from our TRINITY demonstrations catalogue.

- TRINITY technology modules can be used in the proposed applications.

- TRINITY demonstrations & modules can be accessed at

  https://trinityrobotics.eu/catalogue
TRINITY External Demonstrators

**Open Call – 2 tracks**

**TRINITY solutions**
- Implementation of available TRINITY module(s)/use cases
- SME Tech/end-user: Lead – up to 3 partners
- Consortium

**NOVEL solutions**
- New solution contributing to TRINITY objectives
- SME Tech/end-user: Lead – up to 3 partners
- Consortium

**Duration**
- 10 months

**Consortium members:**
- **Technology adopters/ end-users**: SMEs and slightly bigger
- **Technology providers**: Technology SMEs, Competence Centres, Large companies, Research Centres and academia
- EU member states, H2020 associated countries

TRINITY application experiments, also refer as use case demonstrations, can be a proof of concepts testing the TRINITY technologies or they can be novel solutions innovated by the applying SMEs. In total, approximately 20 external demonstrations will be funded in the second open call. Inspiration and ideas to demonstration can be found from our TRINITY demonstrations catalogue that showcase various TRINITY technology modules conducted by the project partners, or exploitable results as they are called. Companies can choose themselves whether to use these results or not.

https://trinityrobotics.eu/demonstrators/

The TRINITY Open Call 2 represents a two-track approach: TRINITY originated solutions and Novel solutions, although the emphasis is on the TRINITY inspired solutions taking concepts, models and experience from published Modules. This means that the proposed application tests, extends and utilises existing ideas and combines these to own development. The proposals can be also from completely novel solutions proposed by the applying consortia to contribute to challenges in agile manufacturing.

Collaboration between old EU countries and EU-13 is recommended.
Submission: https://trinityrobotics.eu/open-calls/
The second TRINITY Open Call will be opened on the 14th of February 2021 at 12:00AM CET and will close on the 1st of June 2021, at 5:00 PM CET. The following phases will proceed the closing of the call: Evaluation, Selection and Contracting. The selected consortia will enter the TRINITY Planning-Implementation-Dissemination programme with the below indicative timeline.

**Timeline**

**Evaluation & Selection**
Jun - Sep 2021

**Application the project**
- **Phase 1**
  - PLANNING
  - Duration: 1 month
  - Allocation: up to 10% of budget

**Application the project**
- **Phase 2**
  - IMPLEMENTATION
  - Duration: 8 months
  - Allocation: up to 70% of budget

**Application the project**
- **Phase 3**
  - DISSEMINATION
  - Duration: 1 month
  - Allocation: up to 20% of budget

**Contracting phase**
Oct 2021

**Application the project**
- Phase 1
  - Application the project

**Application the project**
- Phase 2
  - Application the project

**Application the project**
- Phase 3
  - Application the project
Review process

• Eligibility check
• 3 external evaluators will score and comment each proposal according to the following evaluation criteria
• The possibility to receive extra points
• After evaluation proposals will be ranked. Only the top proposals (double number of expected proposals to be selected) will access the next step of the evaluation process.
• Consensus meeting to decide final score
<table>
<thead>
<tr>
<th>Evaluation criteria</th>
<th>Sub-criteria</th>
<th>Scoring (0-10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact</td>
<td>Industrial relevance and exploitation plans</td>
<td>Overall impact of the proposed prototypes if successful; Industrial relevance of the proposed prototype if successful; Quality of the exploitation plans and market potential; Relevance of the prototype to the objectives of the call. Positive impact in at least 2 countries.</td>
</tr>
<tr>
<td>Concept</td>
<td>Soundness of concept</td>
<td>Feasibility of the proposed prototype and technological contribution; Level of innovation and technological challenges addressed; Quality of the work plan.</td>
</tr>
<tr>
<td>Resources</td>
<td>Partners of the consortium</td>
<td>Quality of the consortium and cross sector check; Clarity of partner roles and completeness of the consortium; Technical capacity and excellence of the proposer and its capability to achieve the deployment of TRL 5-7 services; Justification of the proposed resources.</td>
</tr>
<tr>
<td>Project Plan</td>
<td>Implementation of the concept</td>
<td>Feasibility and Effectiveness of the project plan Clarity of tasks and deliverables Timing of the tasks Risk assessment and mitigation plan</td>
</tr>
</tbody>
</table>
Extra points & eligibility

• There is a female(s) in the lead (e.g. main contact persons in the proposals)
• At least 1 partner is from EU-13 countries (joined EU since 2004)
• TRINITY use-cases or individual modules are used in combination of own development (concept, code, technology, etc)

• All categories have reached the threshold (min 6 points in each category prior the awarding of possible bonus points)
Example TRINITY Modules offered by JSI

1. Hardware & software interface for robot programming by manual guidance

2. ROS hardware and software interface for peripheral elements that are not ROS-compliant

3. Automatic reconfiguration of flexible fixtures
Payment schedule

• The maximum funding rate is 70%, but it will depend on private investment defined by each use case demonstration.

• Each 3rd Party (selected via the open calls) will receive the funding on a lump sum scheme and according to the terms of the contract signed between TRINITY consortium and the selected project representative.

• After each 3rd Party project review and successful evaluation of each deliverable, its cost will become eligible. Deliverables that are not accepted will be re-evaluated at next review. If this is the last review, the cost of these deliverables will not be paid to the 3rd Party project and their cost will be automatically reduced from the subcontract.