



The European Coordination Hub for Open Robotics Development

4th Review Meeting Reviewers' Recommendations

Yannick Morel, TUM

Luxembourg – 2018-02-21



Recommendation R1

Consider how to best materialize and communicate the **general learnings** of the project as a whole.

WP6

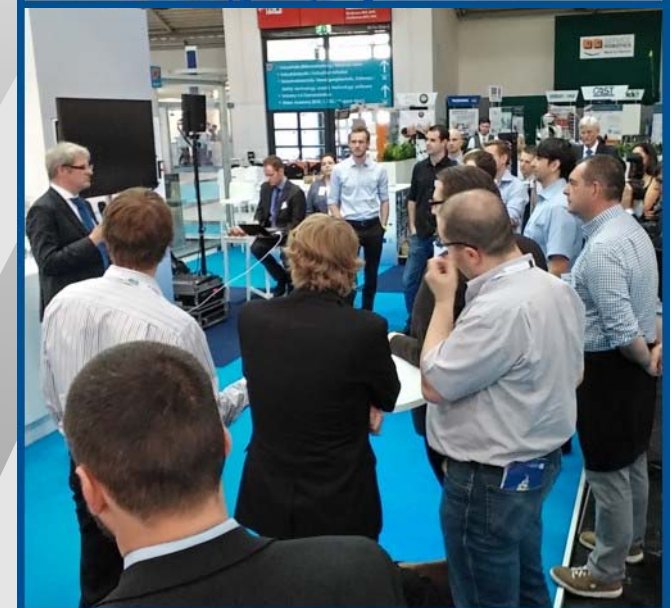
- **Public events:** Workshops ERF18, RIF Forum Automatica18, Smart Regions with Smart Robots (May17), Sustainability of Networks (Oct17), Hubs, Platforms, Pilots in H2020 (Sep17).
- **End-of-project Event:** Focus on lessons learned, best practices in robotics innovation and their dissemination.

WP2

- **Dissemination Booster:** Further engagement of peers through joint dissemination programme.

WP3-5

- **Peers engagement:** Involving peers from other TT projects in robotics within our evaluation procedures.
- **Offering insights:** Concrete propositions, built upon gathered insights, offered to the community; engagements of institutes with possible interest in E++ processes.
- **STS collaboration:** Use case in SCALINGS project, cross fertilization, support in formulating lessons learned.



Recommendation R2

Develop and execute a marketing strategy defining the E++ outputs' value proposition to customer segments. Attempt to secure pieces in quality business press.

WP2-6

- **Work meeting:** June 20th, identification of E++ products, key stakeholders, engagement strategy and objectives,
- **Stakeholder engagement:** Institutes involved in FSTP engaged, discussion ongoing.
- **Press visibility:** Organization of VIP press tour in combination with the Pisa International Robotics Festival (Sept17),

WP4

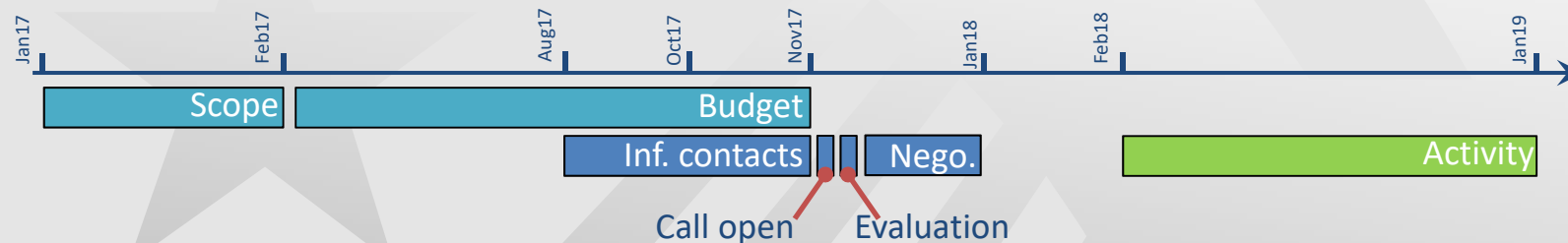
- **Towards RIFs sustainability**
 - **SIIs:** Development of tighter relationships with, System Integrators (e.g. Tharsus, GEBE2),
 - **Due diligence:** The RIF@Bristol exploring due diligence service (NatWest), sharing of best practices with RIFs,
 - **Technical services:** Offer of technical services and support in robotics and automation.
 - **Follow-up project:** TERRInet.



Recommendation R3

Consider how to best support experiments through a Booster program focusing on Business Development training and perhaps based on which experiments will most benefit, and quick to implement since time is short. (**WP3**)

- **Booster schedule**



- **Booster activities**

- **EXOTrainer – Marsi Bionics:** Penetration of German healthcare market, personnel 10 months in Munich,
- **MODUL - ETH:** Product qualification and pre-industrialization for Series Elastic Actuator (SEA), in Zurich,
- **SAGA - Avular:** Reinventing themselves, from drones to processing and automation platforms, re-definition of business plan, in Eindhoven,
- **LINarm++ - CNR:** From rehabilitation robotics to Variable Stiffness Actuators (VSAs), re-definition of business plan, accelerator programme XPRENEUR, in Munich.

Recommendation R4

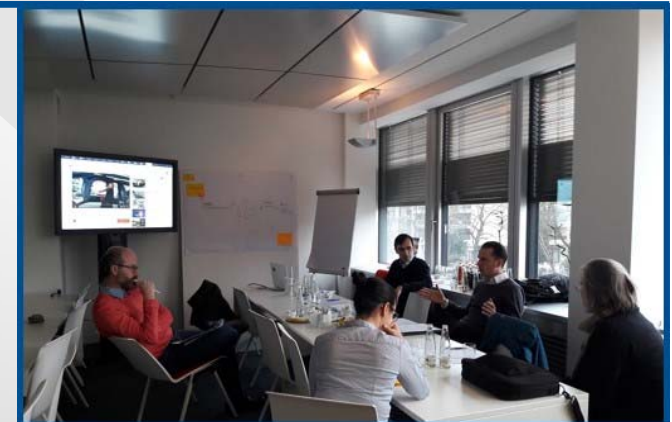
Re-examine TRL changes claimed by experiments, especially those that claim a starting point of TRL1 or 2, to better align with existing practice, credibility and impact when presenting outside the project.

- **Call 2: Experiment Review**

- **TRL evaluations:** Made explicit part of external expert's responsibility at the review,
- **Evaluator support:** Clarification of TRL scale.

- **Call 1 : TRL Workshop**

- **Format:** One-day workshop, access to relevant material, consensus reached for all Exps,
- **Evaluators:** External experts, 2/3 involved in Call 1 reviews, 1/3 involved in other TT project,
- **Outcome:** Consensus reached between all three experts on starting and end TRL for all Exps.



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ECHORD++ Call 1 Experiments Technology Readiness Level (TRL)
Evaluation result summary

Room 1.A.01
Volkswagen Data:Lab
Ungererstr. 69, 80805 München

30/01/2018

Fakultät für Informatik
Lehrstuhl für
Robotik und Echtzeitsysteme

Experiment	Start TRL	End TRL	Comments
2F	3	4	
3DSSC	2	3	
CoHProS	4	6	
DEBUR	4	5	
DexBuddy	3	3	
EXOTrainer	4	7	
GARobots	5	6	
LA-ROSES	2	2	
LiNam++	3	5	
MARS	2	5	
MODUL	4	4	
MOTORE++	6	8	
Pickit	6	7	
SAPARO	3	6	
TIREBOT	2	4	

The undersigned certify that the TRLs reported above reflect the consensus reached on the day between the contracted external evaluators.

A. Müller – External Expert
R. van der Smagt – External Expert
T. Zimmermann – External Expert

M.-L. Netz – Project Manager
Y. Morel – Project Manager