

STRATEGIC RESEARCH CLUSTERS (SRCs): ELECTRICAL PROPULSION & ROBOTICS

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Strategic Research Clusters in H2020

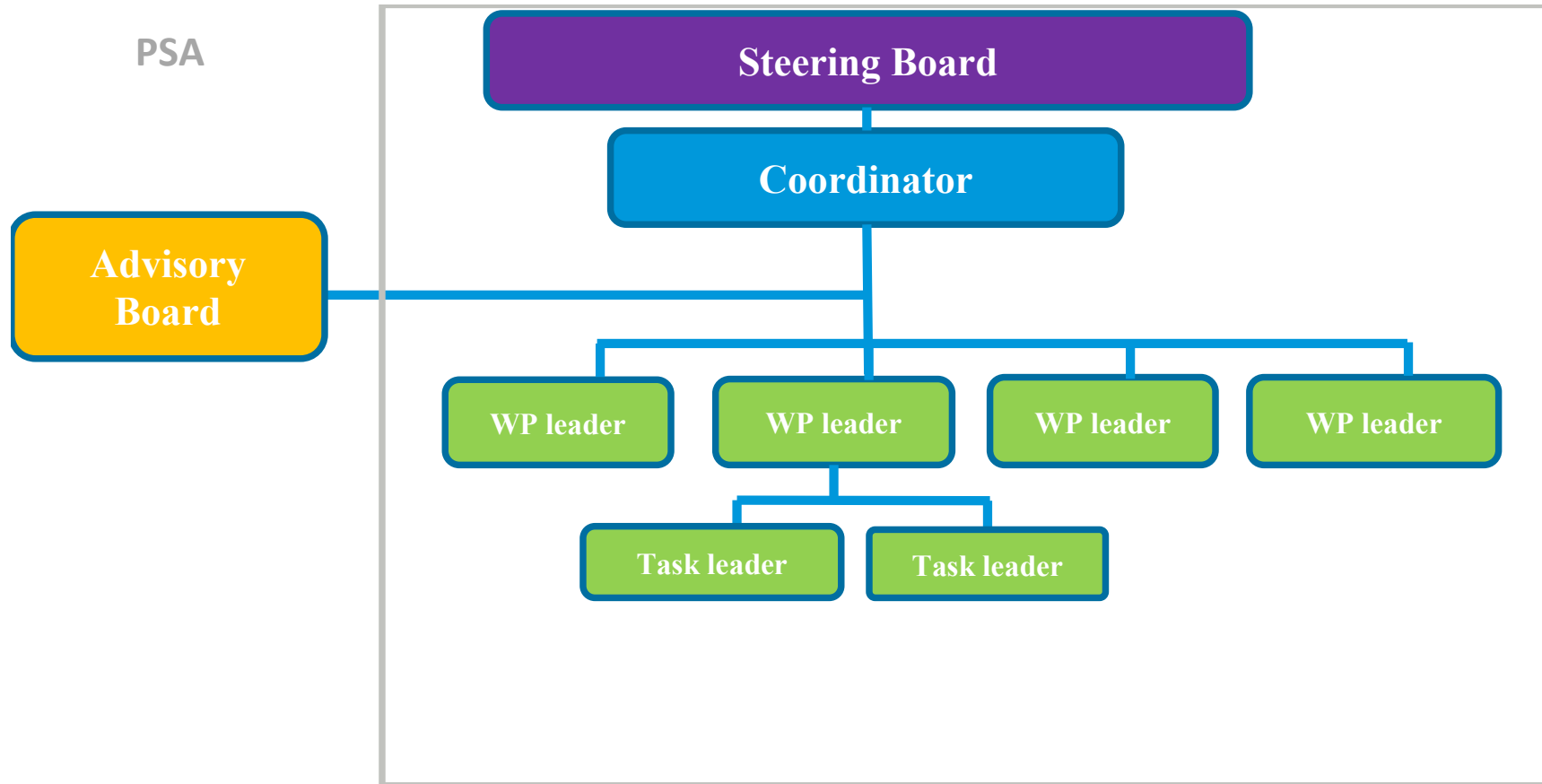
- In response to a request from interested Member States, ESA submitted (26th March), as coordinator, two proposals under the H2020-COMPET-2014 call:
 - **EPIC** (Electric Propulsion Innovation and Competitiveness) for the "COMPET-3-2014: In-Space electrical propulsion and station keeping" topic.
 - **PERASPERA** (Plan the European Roadmap and its Activities for Space Exploitation of Robotics and Autonomy) for the "COMPET-4-2014: Space Robotics Technologies" topic.
- Both calls had as an objective to propose a Programme Support Activity (**PSA**), for the future implementation of a Strategic Research Cluster (**SRC**) in Horizon 2020. Both proposals mainly aim at providing advice to the Commission for their respective SRCs over a 5-year period through preparing Roadmaps, drafting call texts and assessing results of the SRC operational grants with respect to the overall SRC objectives.
- The R&D work for these topics will come in the SRC as a part of future Calls made by the Commission, open to all EU Member States and H2020 participants, and will be selected and supported through the normal Horizon 2020 grant procedures
- PSA EPIC Participants:
 - EPIC – ESA (coordinator), ASI, BELSPO, CDTI, CNES, DLR, UKSA, Eurospace, S4S
- PSA PERASPERA Participants:
 - PERASPERA – ESA (coordinator), ASI, CDTI, CNES, DLR, UKSA

EPIC project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 640199

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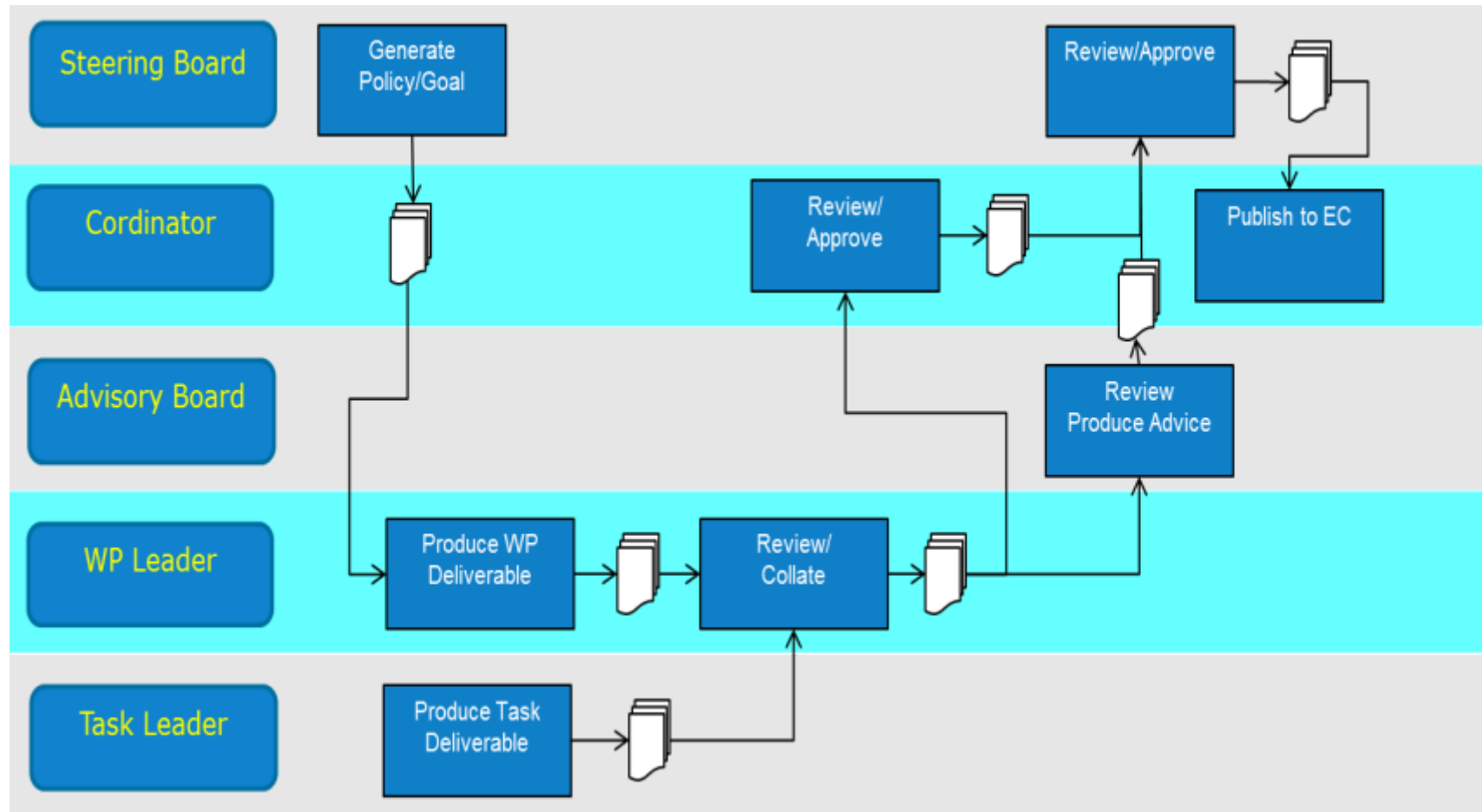
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PSA GOVERNANCE STRUCTURE



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PSA GOVERNANCE – DELIVERABLE WORK PROCESS



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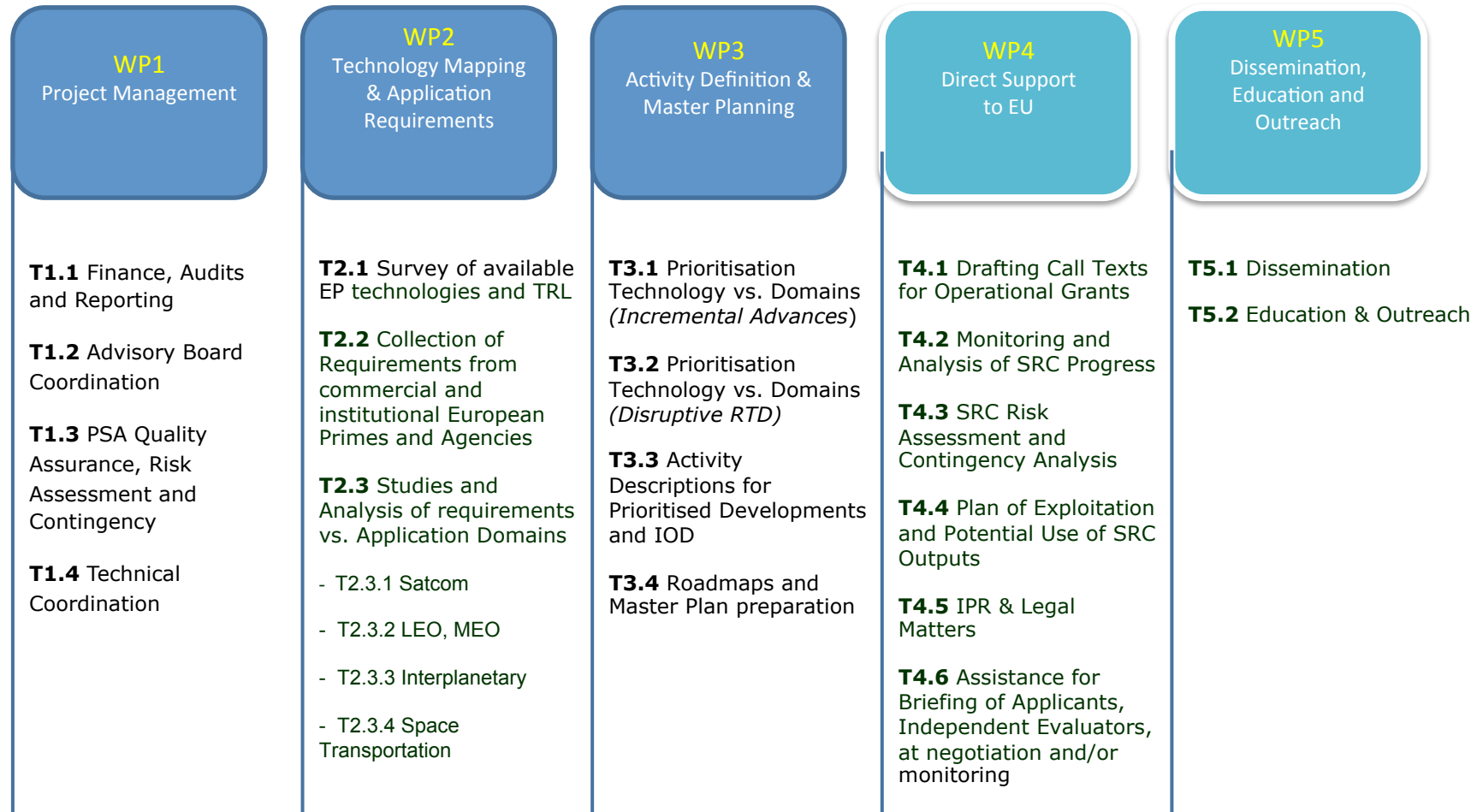
EPIC: consortia



- Coordinator: ESA (Jose Gonzalez del Amo) TEC-MPE
- Participants: CDTI, CNES, DLR, UKSA, BELSPO, ASI, Eurospace and SME4Space
- Time frame: 5 years
- CDTI Participation
 - Jorge Lopez Reig: WP & Tasks Leader and Steering Board Member
 - Javier Rodriguez: Steering Board Member
 - Carlos García Sacristan: Steering Board Member

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EPIC: WP Distribution



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EPIC Workshops

- As part of WP2, T2.1 “Survey of Available EP Technologies and TRL”:
 - CNES and BELSPO organizers
 - place: Brussels
 - date: 25-28/11/2014
 - <http://www.epic2014.eu/>
- As part of WP3, T3.4 “Roadmaps and Master Plan Preparation”:
 - “A Workshop will be organized at the final stage of this task, to give the opportunity to present the roadmap to European stakeholders and receive some feedback, to ensure transparency of the roadmap and promote the PSA work.”
 - place: Stockholm
 - date: 11-12/02/2015
 - organized by DLR with the help of the THAG Swedish Delegate

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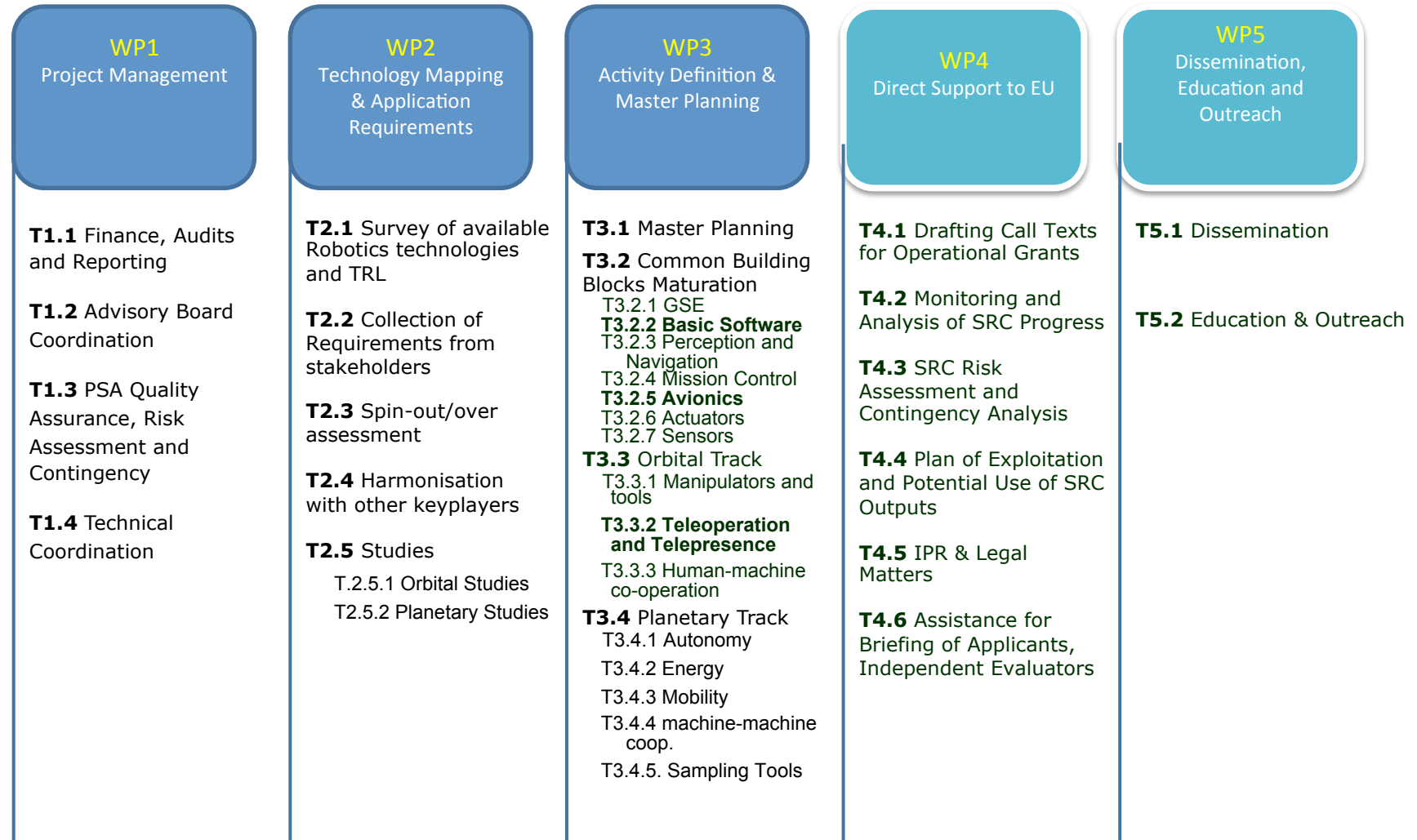
PERASPERA: consortia



- Coordinator: ESA (Gianfranco Visentin)
- Participants: CDTI, CNES, DLR, UKSA y ASI
- Time frame: 5 years
- CDTI Participation
 - Javier Rodriguez: WP & Tasks Leader and Steering Board Member
 - Jorge Lopez Reig: Steering Board Member
 - Kauzar Salem: Steering Board Member

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PERASPERA Workshops

- **1st PERASPERA workshop**

- "Plan the European Roadmap and its Activities for Space Exploitation of Robotics and Autonomy", on the 11th -12th of February 2015 at the NH Noordwijk Conference Centre Leeuwenhorst in Noordwijkerhout, The Netherlands. <http://www.congrexprojects.com/2015-events/15m12>
- The initial version of the roadmap will use a mechanism of implicit consultation: status of the art, stakeholder needs and spin-in/off opportunities will be derived from existing reports/declarations/statements/reviews. The roadmap will be published for comments and consultation in the workshop.
- The workshop will allow discussions at technology and system level and will focus on three main areas of Space Robotics Technologies:
 - Orbital Robotics;
 - Planetary Robotics;
 - Common Building Blocks.
- The participants can contribute to the workshop also by presenting a poster in a dedicated poster session.

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Conclusion

- The PSAs EPIC and PERASPERA will provide advice to the Commission for their respective SRCs over a 5-year period by, mainly, preparing Roadmaps, drafting call texts and assessing results of the SRC operational grants wrt the overall SRCs objectives.
- ESA executive represents its Member States, and will aim to balance interests and maximise consistency with European Space Technology Harmonisation, and other relevant ESA-led coordination exercises.
- The partners of the EPIC and PERASPERA consortium have been working on these proposals together since November 2013.
- EPIC PSA and PERASPERA PSA consortium will consult with all relevant stakeholders through e.g. Advisory Board, public workshops, etc.

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MANY THANKS FOR YOUR ATTENTION

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