



Appels ouverts transverses (IPX)

Information sur les AAP 2018

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AAP ouverts et transverses (AWP 2018)

- S2R-OC-IPX-01-2018 - Paradigm shifts for railway
Value of the actions (S2R co-funding) : 2,2 M€ RIA up to TRL 2
- S2R-OC-IPX-02-2018 – Transversal exploratory research activities and knowledge transfer
Value of the actions (S2R co-funding) : 0,5 M€
- S2R-OC-IPX-03-2018: Innovative/breakthrough mobility concepts (with rail as backbone)
Value of the actions (S2R co-funding) : 0,5 M€

S2R-OC-IPX-01-2018 - Paradigm shifts for railway

The study (up to TRL 2) should formulate technological concepts tackling all of the following work-streams and their interconnection:

- a) Concepts for the future autonomous railway vehicles “train-centric”
- b) Promising disruptive technologies impacting automation systems and maintenance concepts
- c) Railway 4.0

The S2R JU expect proposals of requesting up to 1.15M and plan to finance at least up to two projects.

S2R-OC-IPX-02-2018 – Transversal exploratory research activities and knowledge transfer

- strengthening the effectiveness of consensual exploratory research building in Europe, through continuous cooperation among the rail community, including decision-makers, to provide an orientation on the future needs and possible collaborative research on future and emerging innovative ideas.
- To assist the rail-related European technology platforms (ETP) = ERRAC and to foster the creation of expertise and knowledge for the benefit of the future evolution of the rail system while supporting the competitiveness of the European rail sector.

This topic should stimulate the learning and exchange of knowledge from academia, research community and industrial partners build upon the S2R R&I results and also stimulating the transfer of new knowledge from other disciplines.

The challenge of this topic is also to consider, incorporate and further elaborate on the results of the complementary topic S2R-OC-IPX-03-2018: Innovative/breakthrough mobility concepts (with rail as backbone), in order to leverage the effect from a broad community of rail stakeholders (represented in the ETP) with transfer of knowledge and specialised PhD research activities.

Strong and focused consortia must be made-up of leading European experts for transport technologies from both sector and research providers. The implementation of this action requires close collaboration with the ETPs dealing with rail transport research and innovation. Cooperation with the S2R JU will be an essential element in this coordination and support action.

S2R-OC-IPX-03-2018: Innovative/breakthrough mobility concepts (with rail as backbone)

Specific Challenge:

Current activities in S2R are developing the fundamental building blocks that will allow the creation of the future railway interoperable system, but new disruptive concepts can accelerate the pace or deviate the path.

This topic aims to challenge the traditional rail approach with innovative and breakthrough concepts from a non-linear approach to existing technological evolution.

Scope:

In order to address the broad challenges described above, *the proposals should foresee PhD research for indicatively a period between 12 to 24 months on the following thematic: Innovative/breakthrough mobility concepts that keep rail as backbone of a sustainable European Transport system.*

The PhD researchers are expected regularly to liaise with the S2R JU and to present their research findings to the S2R events, including those organized with the European rail Research Technological Platform and submit scientific papers to relevant conferences (e.g. TRA, WCRR, etc. but also non-rail related).

This action may be requested to provide relevant inputs to the European rail Technology Platform.

The S2R JU expect to finance four proposals from universities or similar high level institutes covering each at least one PhD student activities.

Expected Impact:

Research results are expected to contribute to future S2R exploratory research and in general to open new possibilities and ideas for the S2R stakeholders and rail research community.

At the same time, the PhD researchers who are part of the S2R activities, are expected to become European ambassadors of the possible bright and innovative future that the rail sector has in the year to come.



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