



Lucas GARVIA
S2R JU Programme Manager

Shift2Rail Info Day

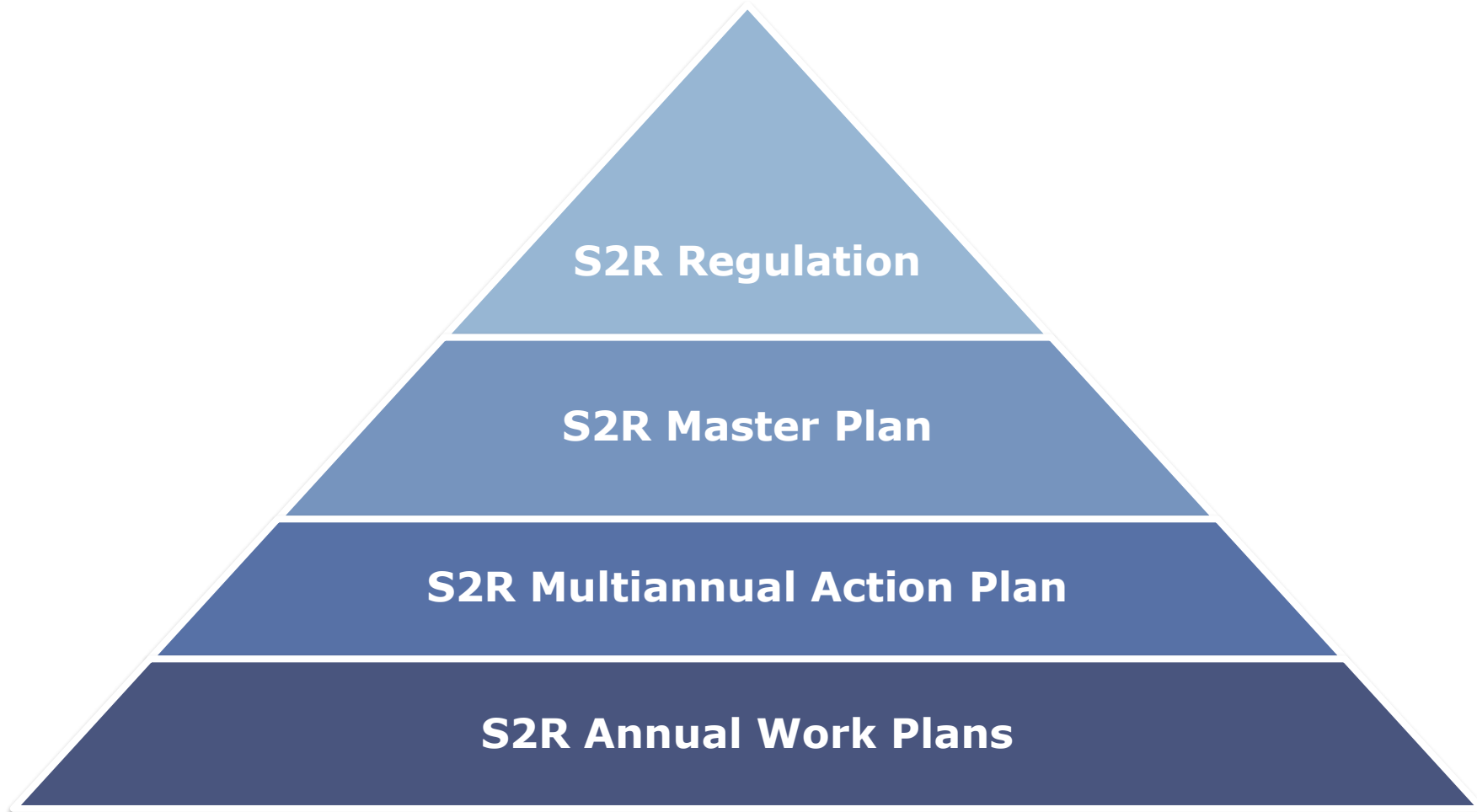
Call for Proposals 2017

Lisbon 9 February 2017

General objectives, structure and procedures

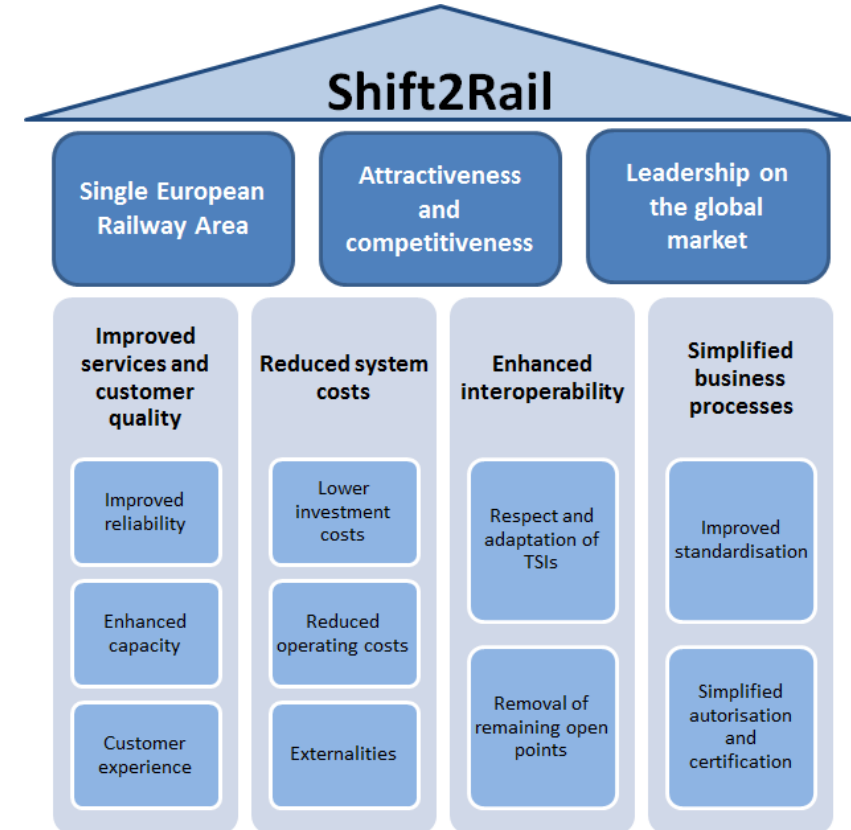


reference framework

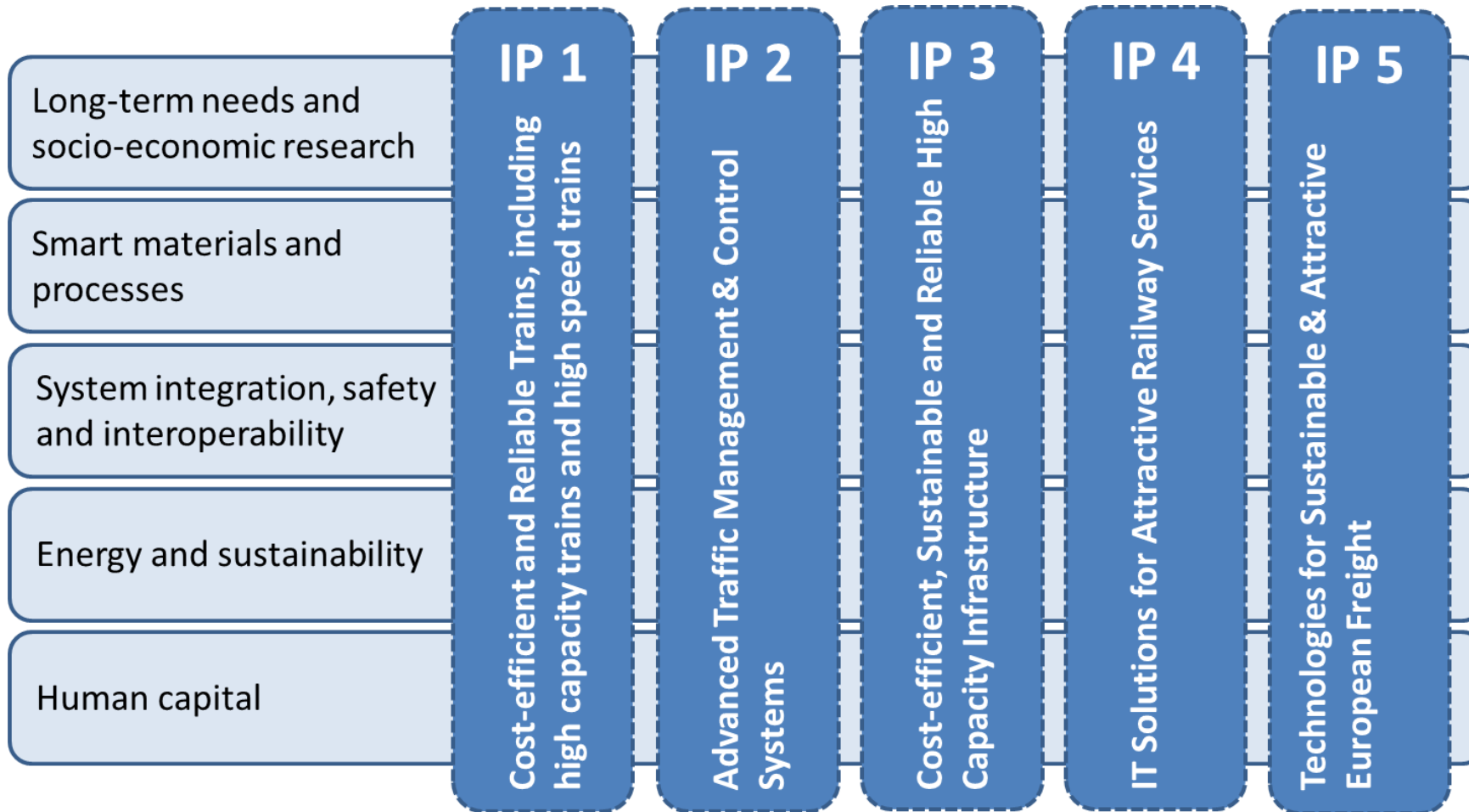


key objectives

- **Single European Railway Area**
- **Attractiveness and competitiveness of the European railway system**
- **Leadership on the global market**



Innovation Programmes



A public-private partnership, a platform for the rail sector as a whole to work together to drive innovation in the years to come.

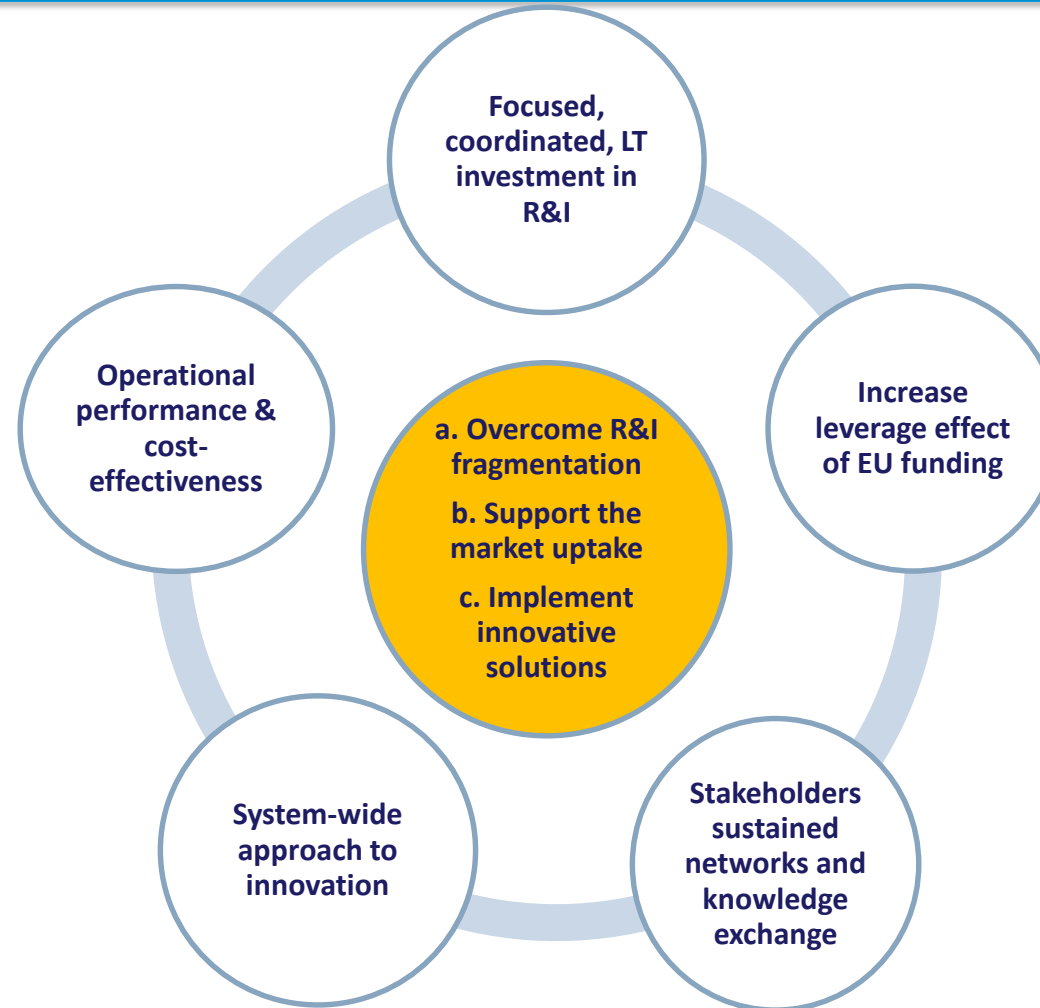
Objectives for 2024:



Council Regulation (EU) No 642/2014 of 16 June 2014 (S2R Regulation)



a new approach to R&I



an open organization

- **8 Founding Members** having committed at least EUR 30 million for the duration of Shift2Rail, to secure substantial industry co-funding from the outset
- **19 Associated Members** selected as a result of a call representing a broad range of actors from the entire rail value chain and from other innovative sectors, including SMEs, research organisations, universities, etc.
- **at least 30%** of the Union contribution through **calls** for non-JU members



BOMBARDIER
the evolution of mobility

DIGINEXT
be visionary

CFW

SmartRaCon

Ansaldo STS
A Hitachi Group Company



amadeus



CAF

SIEMENS

NetworkRail



ALSTOM



THALES

SwiTRACK EN
Switch TRACK and ENergy

kapsch >>>



Talgo



HaCon
Traffic • Software • Service

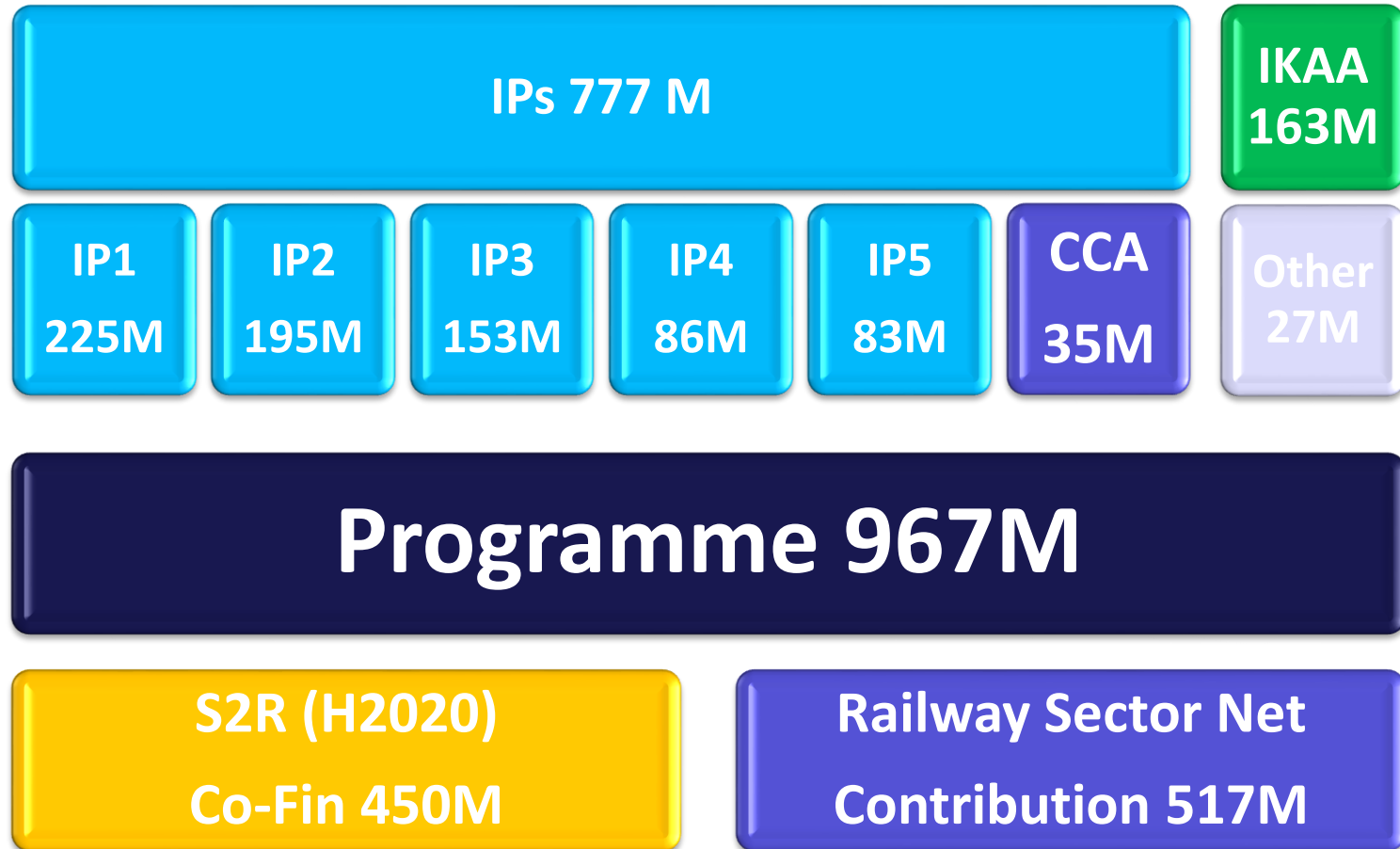


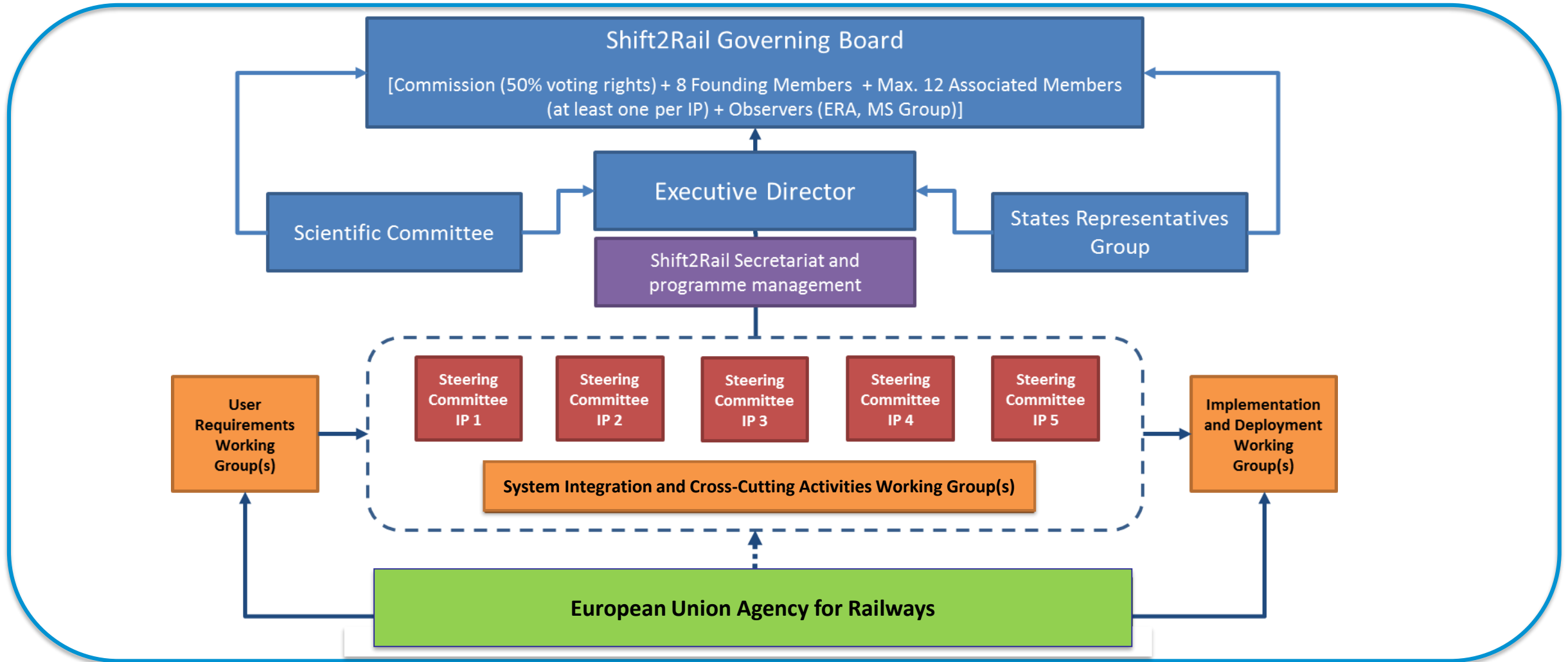
European Union	
8 Founding Members	Alstom, Ansaldo STS, Bombardier, Construcciones y Auxiliar de Ferrocarriles (CAF), Siemens, Thales and infrastructure managers Trafikverket and Network Rail
12 Associated Members (single legal entities)	Amadeus IT Group, AZD Praha, Deutsche Bahn, DIGINEXT, Faiveley Transport, HaCon Ingenieurgesellschaft, INDRA Sistemas, Kapsch CarrierCom, Knorr-Bremse, MER MEC, SNCF Mobilités, Patentes Talgo
7 Associated Members (consortia)	<ul style="list-style-type: none"> • AERFITEC (AERNNOVA Aerospace, FIDAMC, Fundacion TECNALIA) • Competitive Freight Wagon (Contraffice, DLR, Waggonbau Niesky, Centro de Estudios e Investigaciones Técnicas (CEIT), Verband der Bahnindustrie in Deutschland) • EUropean Rail Operating community (Infraestruturas de Portugal, BLS, CP, Finnish Transport Agency, ÖBB-Infrastruktur, Polskie Koleje Państwowe, PRORAIL, Schweizerische Bundesbahnen, Slovenske železnice, Türkiye Cumhuriyeti Devlet Demiryolları) • Smart DeMain (Strukton Rail, ACCIONA Infraestructuras, DLR, Fraunhofer, CEMOSA) • SmartRaCon (DLR, CEIT, Fondation Railenium, Nottingham Scientific Ltd) • Swi'Tracken (Fondation Railenium, Universidade Do Porto, Universidad Del Pais Vasco, Universidade Do Minho, TATASTEEL, VOSSLOH-COGIFER, Institut für Zukunftsstudien und Technologiebewertung, EGIS RAIL, Groupe EUROTUNNEL, TRONICO ALCEN) • Virtual Vehicle Austria consortium+ (Kompetenzzentrum, FCP Firtsch, Getzner Werkstoffe, Kirchdorfer Fertigteilholding, Plasser&Theurer, Vvoest Alpine Schienen, Voestalpine VAE, Wiener Linien, AVL List, PJM Messtechnik, TATRAVAGONKA, AC2T research, Materials Center Leoben Forschung)



programme financials

Values as at 1 Sept 2016 in Million EUR





Public Consultation in the context of the Mid-Term Evaluation of the S2R JU.

- is a key element of the evaluation process;
- the overall exercise will be key in shaping the future of the JUs.

The consultation is open till **10 March 2017**, at:

http://ec.europa.eu/research/consultations/interim_joint-undertakings_h2020/consultation_en.htm



Open Calls for Proposals 2017



- Is a collaborative long-term investment planning document
- Translates strategic R&I priorities for the Railway sector – as per S2R Master Plan - into **concrete R&I activities, milestones and deliverables**
- Contains the description of R&I activities worth an estimated **value of about EUR 777 million**
- **is a living document** (ongoing “maintenance”)
- Enables the preparation of result-oriented **Annual Work Plans** and **Calls for Proposals**
- **Grants awarded** for the actions(Projects) should aim to implement part(s) of the MAAP

* multi-annual action plan



structure of the MAAP

Rationale and narrative

GENERAL INTRODUCTION

PART 1:

SHIFT2RAIL: PROMOTING THE MODAL SHIFT
AND THE COMPETITIVENESS OF THE
EUROPEAN RAILWAY INDUSTRY

PART 2:

SHIFT2RAIL PROGRAMME SCOPE AND
STRUCTURE

Technical description

PART 3: DETAILED MULTIANNUAL ACTION PLAN PER IP/CCA

IP1

IP2

IP3

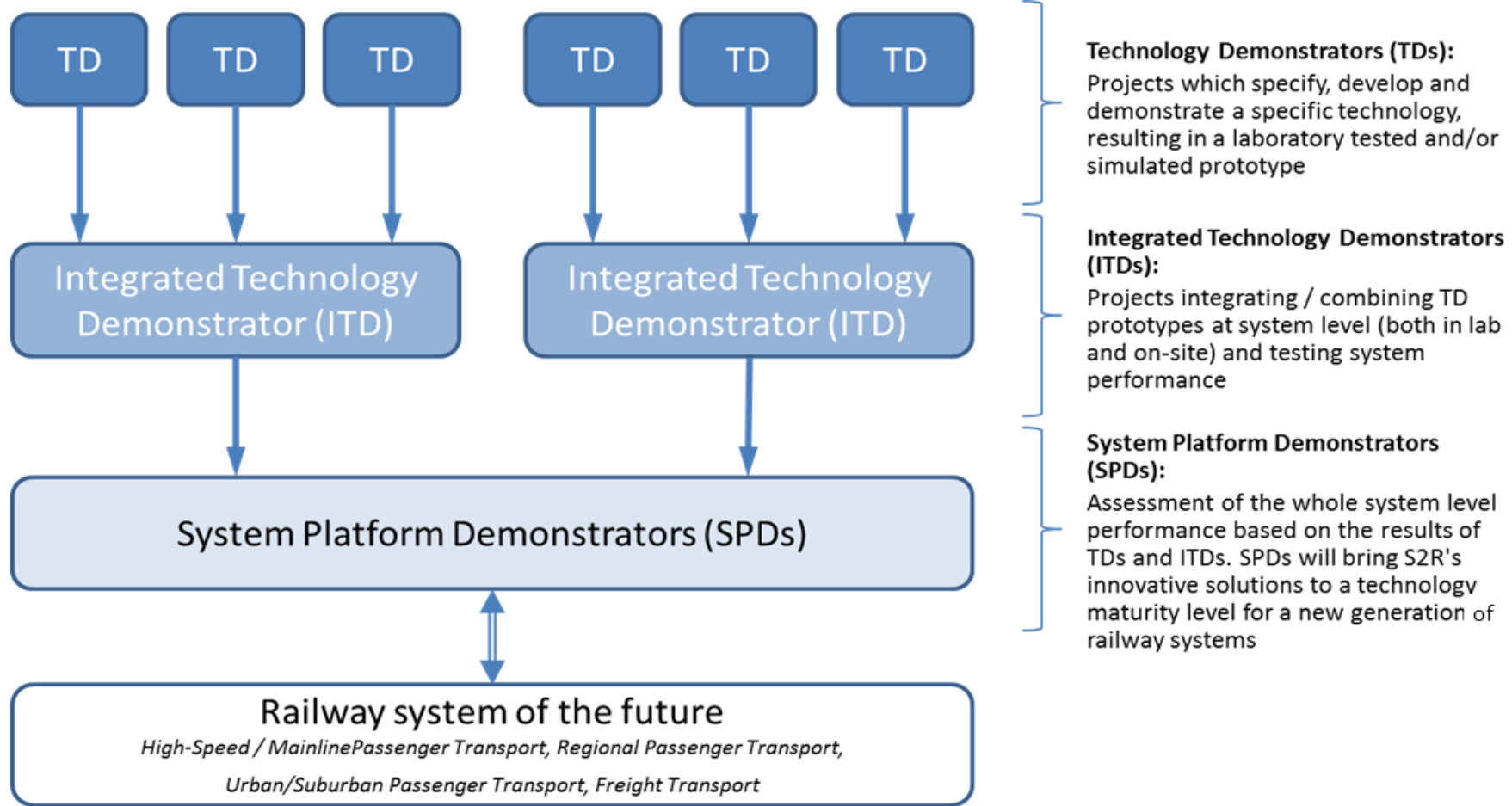
IP4

IP5

CCA



From TRL0 to TRL6/7



Technology readiness levels (TRL)

- TRL 1 – basic principles observed
- TRL 2 – technology concept formulated
- **TRL 3 – experimental proof of concept**
- **TRL 4 – technology validated in lab**
- **TRL 5 – technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)**
- **TRL 6 – technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)**
- **TRL 7 – system prototype demonstration in operational environment**
- TRL 8 – system complete and qualified
- TRL 9 – actual system proven in operational environment (competitive manufacturing in the case of key enabling technologies; or in space)



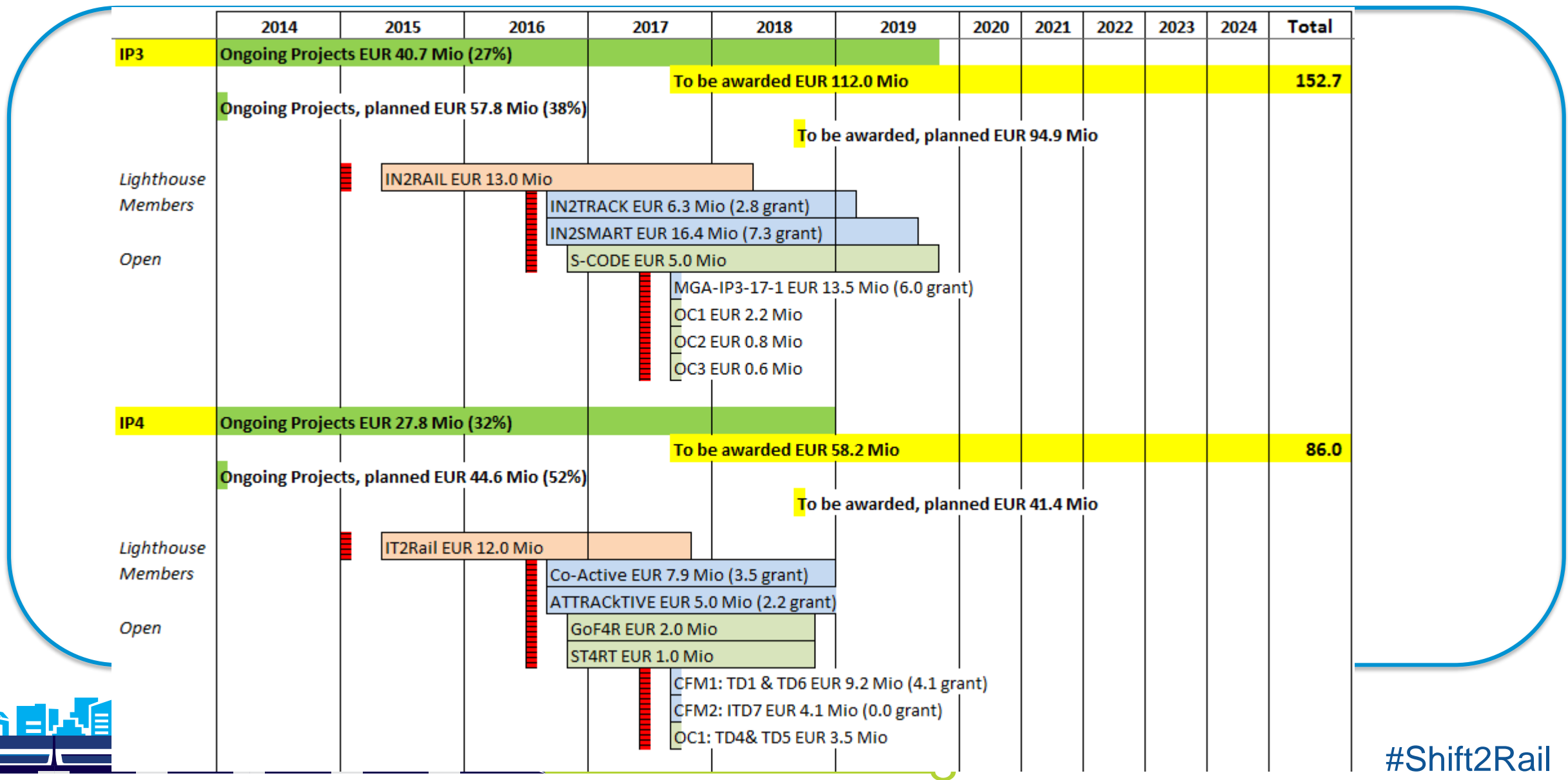
call for proposals 2017

Million of EUR	Total	Members only	Open to non-Members
Value of the Call for Proposals R&I	112.4	92.9	19.5
<i>of which:</i>			
<i>S2R Maximum Co-funding</i>	<i>60.8</i>	<i>41.3</i>	<i>19.5</i>
<i>In-Kind Contribution</i>	<i>51.6</i>	<i>51.6</i>	<i>0</i>
No of topics	17	7	10
Value of Call for tender (pantograph overhead contact line interaction)	0.7	0	0.7

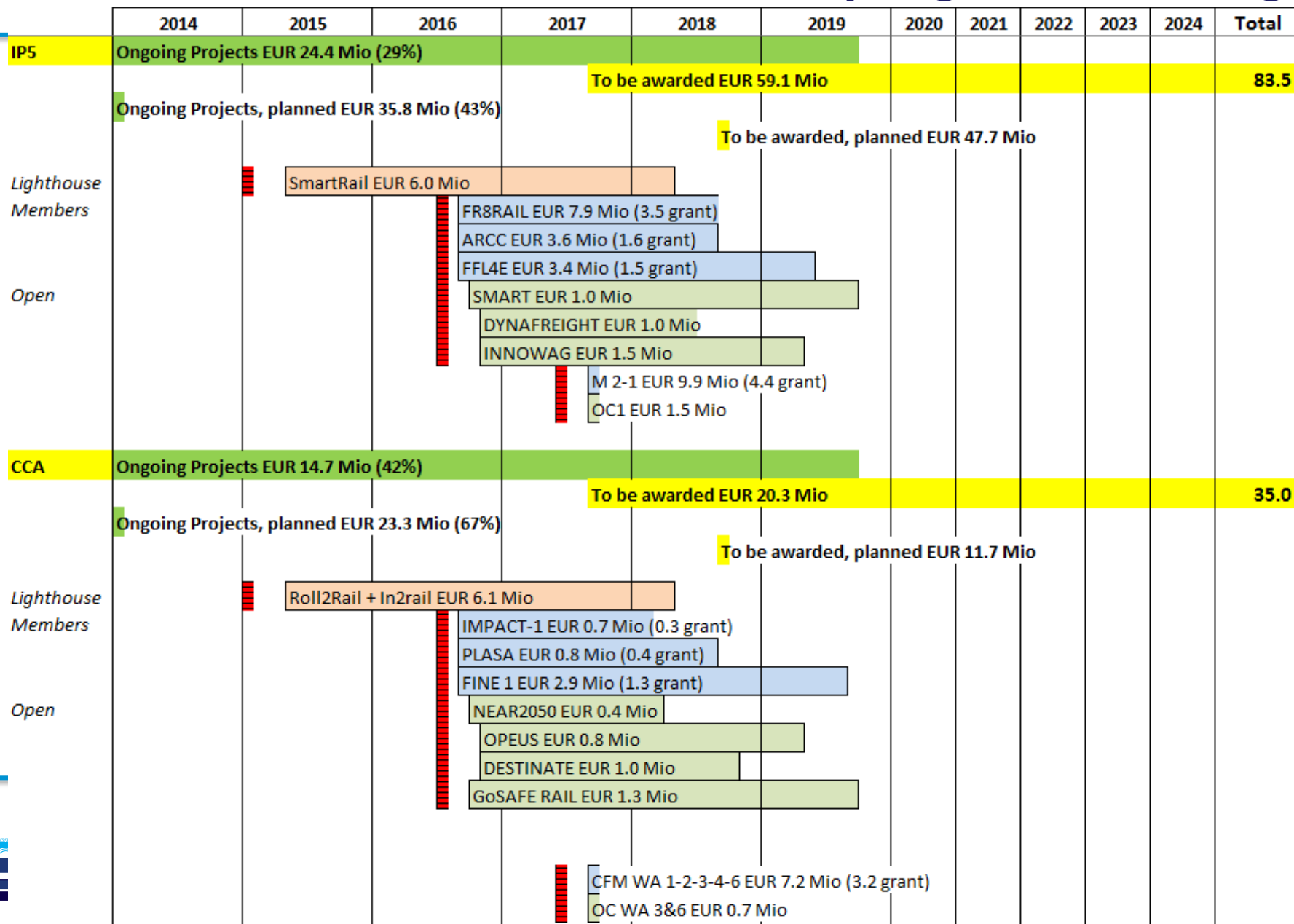
Deadline for submission: 30 March 2017 // **Planned start of activities:** 1 September 2017



S2R overall programme budget status



#Shift2Rail



How to read the call acronyms

Topic number - IP	Topic name	Expected TRL	Type of action	Maximum S2R Co-funding EUR	Complementarity
S2R- OC -IP1-02-2017	Tools, methodologies and technological development of the next generation of Running Gear	2	RIA	2 800 000	S2R-CFM-IP1-01-2017 S2R-CFM-CCA-02-2015



IP1: Rolling Stock

TD1.1 Traction Systems demonstrator							
2015	2016	2017	2018	2019	2020	2021	...
ongoing activities: Roll2Rail and PINTA				planned activities			

TD1.2 Train Control and Monitoring System Demonstrator							
2015	2016	2017	2018	2019	2020	2021	...
ongoing: Roll2Rail, CONNECTA, SAFE4RAIL				planned activities			

TD1.3 Carbody Shell Demonstrator							
2015	2016	2017	2018	2019	2020	2021	...
ongoing activities: Roll2Rail			AWP2017: CFM and OC		planned activities		

TD1.4 Running Gear Demonstrator							
2015	2016	2017	2018	2019	2020	2021	...
ongoing activities: Roll2Rail			AWP2017: CFM and OC		planned activities		



IP1: Rolling Stock

TD1.5 Brake Systems Demonstrator							
2015	2016	2017	2018	2019	2020	2021	...
ongoing: Roll2Rail, CONNECTA, PINTA, SAFE4RAIL							
		AWP2017: CFM					
					planned activities		

TD1.6: Doors and Access Systems Demonstrator							
2015	2016	2017	2018	2019	2020	2021	...
		AWP2017: CFM and OC					
					planned activities		

TD1.7: Train Modularity In Use (TMIU)							
2015	2016	2017	2018	2019	2020	2021	...
ongoing activities: Roll2Rail							
		AWP2017: CFM and OC					
					planned activities		



2017 open call topics

Topic number - IP	Topic name	Expected TRL	Type of action	Maximum S2R Co-funding EUR	Complementarity
S2R-OC-IP1-01-2017	Innovative materials & modular design for rolling stock applications	4/5	RIA	3 500 000	S2R-CFM-IP1-01-2017
S2R-OC-IP1-02-2017	Tools, methodologies and technological development of the next generation of Running Gear	2	RIA	2 800 000	S2R-CFM-IP1-01-2017 S2R-CFM-CCA-02-2015



TD2.1: Adaptable communications for all railways (quality of service, interfaces)							
2015	2016	2017	2018	2019	2020	2021	...
	Ongoing act.: X2Rail1, Mistral						
				planned activities:			

TD2.2: Railway network capacity increase (ATO up to GoA4)							
2015	2016	2017	2018	2019	2020	2021	...
	Ongoing act.: X2Rail1						
		AWP2017: OC					
				planned activities			

TD2.3 Moving Block							
2015	2016	2017	2018	2019	2020	2021	...
	Ongoing act.: X2Rail1						
		AWP2017: OC					
				planned activities			

TD2.4: Fail-Safe Train Positioning (including satellite technology)							
2015	2016	2017	2018	2019	2020	2021	...
		AWP2017: CFM, OC					
				planned activities			

TD2.5: On-board Train Integrity							
2015	2016	2017	2018	2019	2020	2021	...
		AWP2017: CFM, OC					
				planned activities			



TD2.6: Zero on-site testing (control command in lab demonstrators)

2015	2016	2017	2018	2019	2020	2021	...
		Ongoing act.: X2Rail1, Vite					
							planned activities

TD2.7: Formal methods and standardisation for smart signalling systems

2015	2016	2017	2018	2019	2020	2021	...
			AWP2017: CFM, OC				
							planned activities

TD2.8: Virtually – Coupled Train Sets (VCTS)

2015	2016	2017	2018	2019	2020	2021	...
							planned activities

TD2.9: Traffic management evolution

2015	2016	2017	2018	2019	2020	2021	...
			AWP2017: CFM				
							planned activities

TD2.10: Smart radio-connected all-in-all wayside objects

2015	2016	2017	2018	2019	2020	2021	...
		Ongoing act.: X2Rail1					
			AWP2017: OC				
							planned activities

TD2.11: Cyber Security

2015	2016	2017	2018	2019	2020	2021	...
		Ongoing act.: X2Rail1, Cyrail					
							planned activities



2017 open call topics

Topic number - IP	Topic name	Expected TRL	Type of action	Maximum S2R Co-funding EUR	Complementarity
S2R-OC-IP2-01-2017	Operational conditions of the signalling and automation systems; signalling system hazard analysis and GNSS SIS characterization along with Formal Method application in railway field	3	RIA	1 800 000	S2R-CFM-IP2-01-2017 S2R-CFM-IP2-01-2015
S2R-OC-IP2-02-2017	Energy harvesting methodologies for trackside and on-board signalling and communication devices. Adaptation of already existing technologies for developing a purely on-board Train Integrity	4	RIA	1 700 000	S2R-CFM-IP2-01-2017 S2R-CFM-IP2-01-2015



IP3: Infrastructure

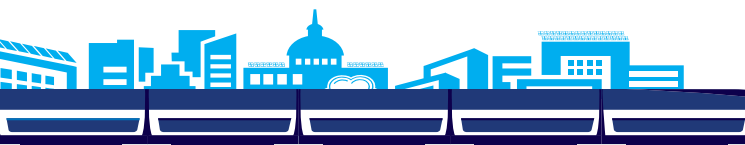
TD3.1 Enhanced Switch & Crossing System							
2015	2016	2017	2018	2019	2020	2021	...
ongoing activities: In2Rail, In2Track				planned activities			

TD3.2 Next Generation Switch & Crossing System							
2015	2016	2017	2018	2019	2020	2021	...
ongoing activities: In2Rail, S-CODE				planned activities			

TD3.3 Optimised Track System							
2015	2016	2017	2018	2019	2020	2021	...
ongoing activities: In2Rail, In2Track				planned activities			

TD3.4 Next Generation Track System							
2015	2016	2017	2018	2019	2020	2021	...
ongoing activities: In2Rail				planned activities			

TD3.5 Proactive Bridge and Tunnel Assessment, Repair and Upgrade							
2015	2016	2017	2018	2019	2020	2021	...
ongoing activities: In2Rail, In2Track				planned activities			



TD3.6 Dynamic Railway Information Management System (DRIMS)							
2015	2016	2017	2018	2019	2020	2021	...
	ongoing activities: In2Smart						
		AWP 2017: OC					
				planned activities			

TD3.7 Railway Integrated Measuring and Monitoring System (RIMMS)							
2015	2016	2017	2018	2019	2020	2021	...
	ongoing activities: In2Rail, In2Smart						
		AWP 2017: OC					
				planned activities			

TD3.8 Intelligent Asset Management Strategies (IAMS)							
2015	2016	2017	2018	2019	2020	2021	...
	ongoing activities: In2Rail, In2Smart						
				planned activities			



TD3.9 Smart Power Supply							
2015	2016	2017	2018	2019	2020	2021	...
ongoing activities: In2Rail							
				AWP 2017: CFM			
				planned activities			

TD3.10 Smart Metering for Railway Distributed Energy Resource Management System							
2015	2016	2017	2018	2019	2020	2021	...
ongoing activities: In2Rail							
				AWP 2017: CFM and OC			

TD3.11 Future Stations							
2015	2016	2017	2018	2019	2020	2021	...
				AWP 2017: CFM and OC			



2017 open call topics

Topic number - IP	Topic name	Expected TRL	Type of action	Maximum S2R Co-funding EUR	Complementarity
S2R-OC-IP3-01-2017	Smart metering and asset management of railway systems	5	RIA	2 200 000	S2R-CFM-IP3-01-2017 S2R-CFM-IP3-02-2016
S2R-OC-IP3-02-2017	Future stations and accessibility (IP1 and IP3)	3	RIA	1 200 000	S2R-CFM-IP3-01-2017 S2R-CFM-IP1-01-2017
S2R-OC-IP3-03-2017	Satellite and autonomous monitoring systems' solution	5	RIA	600 000	S2R-CFM-IP3-02-2016



TD4.1 Interoperability framework

2015	2016	2017	2018	2019	2020	2021	...
ongoing act.: IT2RAIL, GoF4R, ST4RT							
			AWP 2017: CFM1				
				planned activities			

TD4.2 Travel Shopping

2015	2016	2017	2018	2019	2020	2021	...
ongoing act.: IT2RAIL, Co-Active				planned activities			

TD4.3 Booking & Ticketing

2015	2016	2017	2018	2019	2020	2021	...
ongoing act.: IT2RAIL, Co-Active							

TD4.4 Trip Tracker

2015	2016	2017	2018	2019	2020	2021	...
ongoing act.: IT2RAIL, ATTRACKTIVE							
		AWP 2017: OC					
				planned activities			



TD4.5 Travel Companion							
2015	2016	2017	2018	2019	2020	2021	...
ongoing act.: IT2RAIL, ATTRACKTIVE							
		AWP 2017: OC					
				planned activities			

TD4.6 Business Analytics							
2015	2016	2017	2018	2019	2020	2021	...
ongoing act.: IT2RAIL, GoF4R, ST4RT							
		AWP 2017: CFM1					
				planned activities			

TD4.7 Integration and demonstration							
2015	2016	2017	2018	2019	2020	2021	...
ongoing act.: IT2RAIL							
			AWP 2017: CFM2				
				planned activities			



2017 open call topics

Topic number - IP	Topic name	Expected TRL	Type of action	Maximum S2R Co-funding EUR	Complementarity
S2R-OC-IP4-01-2017	Smart technologies for improved travel companion and trip tracking	4/5	RIA	3 500 000	S2R-CFM-IP4-01-2017 S2R-CFM-IP4-02-2017 S2R-CFM-IP4-01-2015 S2R-CFM-IP4-02-2015



IP5: Freight

TD 5.0 – Business analytics and implementation strategies							
2015	2016	2017	2018	2019	2020	2021	...
ongoing projects: SMART-RAIL, FR8RAIL				AWP2017:CFM			

TD5.1 Freight electrification, brakes and telematics							
2015	2016	2017	2018	2019	2020	2021	...
ongoing projects: FR8RAIL, INNOWAG				AWP2017: CFM			
				planned activities			

TD5.2 Access and Operation							
2015	2016	2017	2018	2019	2020	2021	...
ongoing projects: ARCC, SMART				AWP2017: CFM and OC			
				planned activities			



IP5: Freight

TD5.3 Wagon design							
2015	2016	2017	2018	2019	2020	2021	...
ongoing projects: FR8RAIL, INNOWAG				planned activities			

TD 5.4 Novel Terminal, Hubs, Marshalling Yards, Sidings							
2015	2016	2017	2018	2019	2020	2021	...
AWP2017: CFM				planned activities			

TD 5.5 New Freight Propulsion Concepts							
2015	2016	2017	2018	2019	2020	2021	...
ongoing projects: FFL4E, DYNAFREIGHT				planned activities			
AWP2017: CFM							

TD 5.6 Autonomous train operation							
2015	2016	2017	2018	2019	2020	2021	...
ongoing projects: ARCC, SMART				planned activities			



2017 open call topics

Topic number - IP	Topic name	Expected TRL	Type of action	Maximum S2R Co-funding EUR	Complementarity
S2R-OC-IP5- 01-2017	Real-time yard and network management	4	RIA	1 500 000	S2R-CFM-IP5-01-2017 S2R-CFM-IP5-02-2015



WA1 Long-term needs and socio-economic research & SPD's							
2015	2016	2017	2018	2019	2020	2021	...
ongoing act.: ROLL2RAIL, IMPACT1, NEAR2050							
AWP 2017: CFM							
planned activities							

WA2 KPI method and integrated assessment							
2015	2016	2017	2018	2019	2020	2021	...
ongoing act.: ROLL2RAIL, IMPACT1, tender KPIs							
AWP 2017: CFM							

WA3 Safety, Standardisation, Maintenance, Materials, Virtual Certification							
2015	2016	2017	2018	2019	2020	2021	...
ongoing act.: PLASA, GoSAFE RAIL							
AWP 2017: CFM, OC							
planned activities							



WA4 Smart Planning, I2M							
2015	2016	2017	2018	2019	2020	2021	...
ongoing act.: IN2RAIL, PLASA, GoSAFE RAIL				AWP 2017: CFM			
				planned activities			

WA5 Energy and sustainability							
2015	2016	2017	2018	2019	2020	2021	...
ongoing act.: IN2RAIL, Roll2RAIL, FINE1, OPEUS, DESTINATE							
				planned activities			

WA6 Human Capital							
2015	2016	2017	2018	2019	2020	2021	...
	ongoing act.: tender HC						
		AWP 2017: CFM, OC					



2017 open call topics

Topic number - IP	Topic name	Expected TRL	Type of action	Maximum S2R Co-funding EUR	Complementarity
S2R-OC-CCA-01-2017	Smart maintenance and human capital	4	RIA	700 000	S2R-CFM-CCA-01-2017 S2R-CFM-IP4-01-2015 S2R-CFM-IP4-02-2015



- Members and non-members work in similar areas, but the nature of their activity is different.
 - Members are equipment providers, train integrators, operators and infrastructure managers
- A major value of the OCs consortiums comes from bringing in
 - Very specialised knowledge on key technologies
 - Experience in fields other than railways
- Non-members participation possibilities:
 - Open Calls as Beneficiaries, Linked Third Parties and subcontractors
 - Call for Members as Linked Third Parties and subcontractors
- Non-members do not compete with members:
 - the budget and scope for OCs is independent from the budget for CFMs



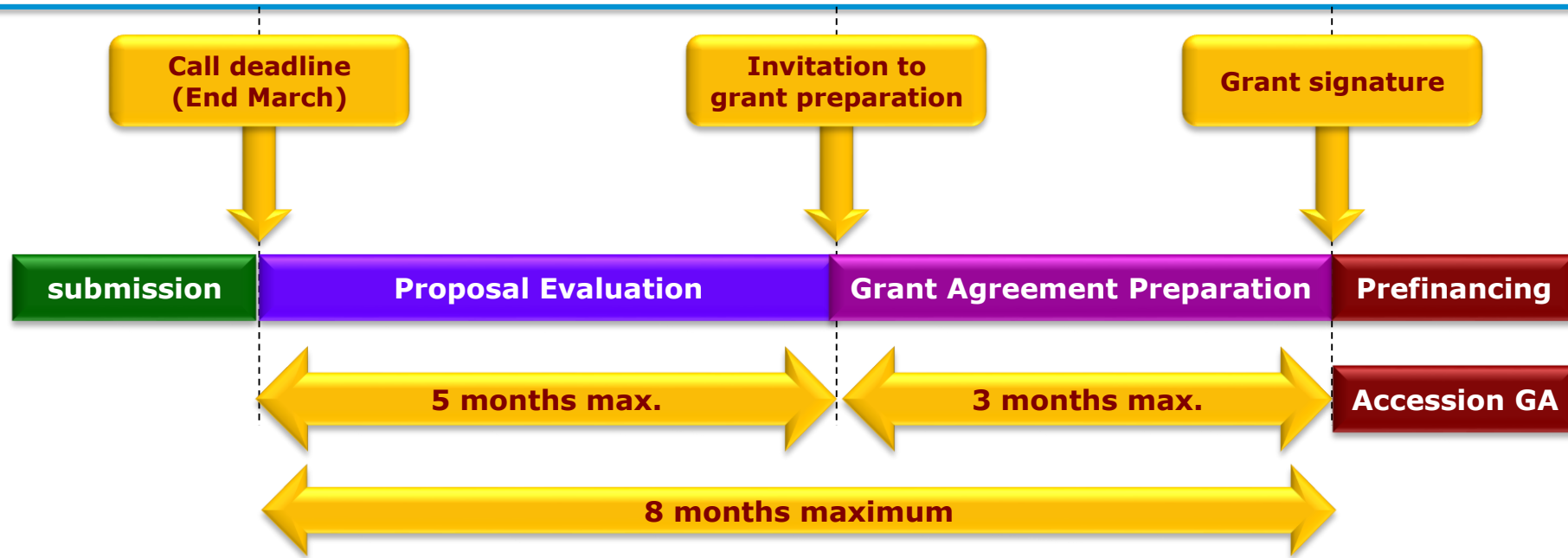
Legal, Financial, and administrative aspects



1 Legal aspects



Overview of the process



H2020 max. duration to Grant signature:

- Maximum **five months** from call closure date to end of evaluation - until the date of informing applicants
- Maximum **three months** to prepare grant agreement from the date of inviting (informing) applicants until the signature of the grant agreement
- Maximum **eight months** from call closure - until the signature of the grant agreement.
- S2R JU will target shorter deadlines and counts on you to help us achieving this objective! Projects are due to start on 1 September 2017.



The applicable rules

- **Shift2Rail model Grant Agreement:**
 - Based on the Horizon 2020 General Model Grant Agreement
 - A single document with all provisions
 - http://ec.europa.eu/research/participants/data/ref/h2020/other/mga/jtis/h2020-mga-multi-shift2rail-ju_en.pdf
- **Annotated Model Grant Agreement** (v. November 2016):
 - User guide that aims to explain to applicants and beneficiaries the General Model Grant Agreement (not covering any S2R specificities)
 - http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/amga/h2020-amga_en.pdf



Who can participate?

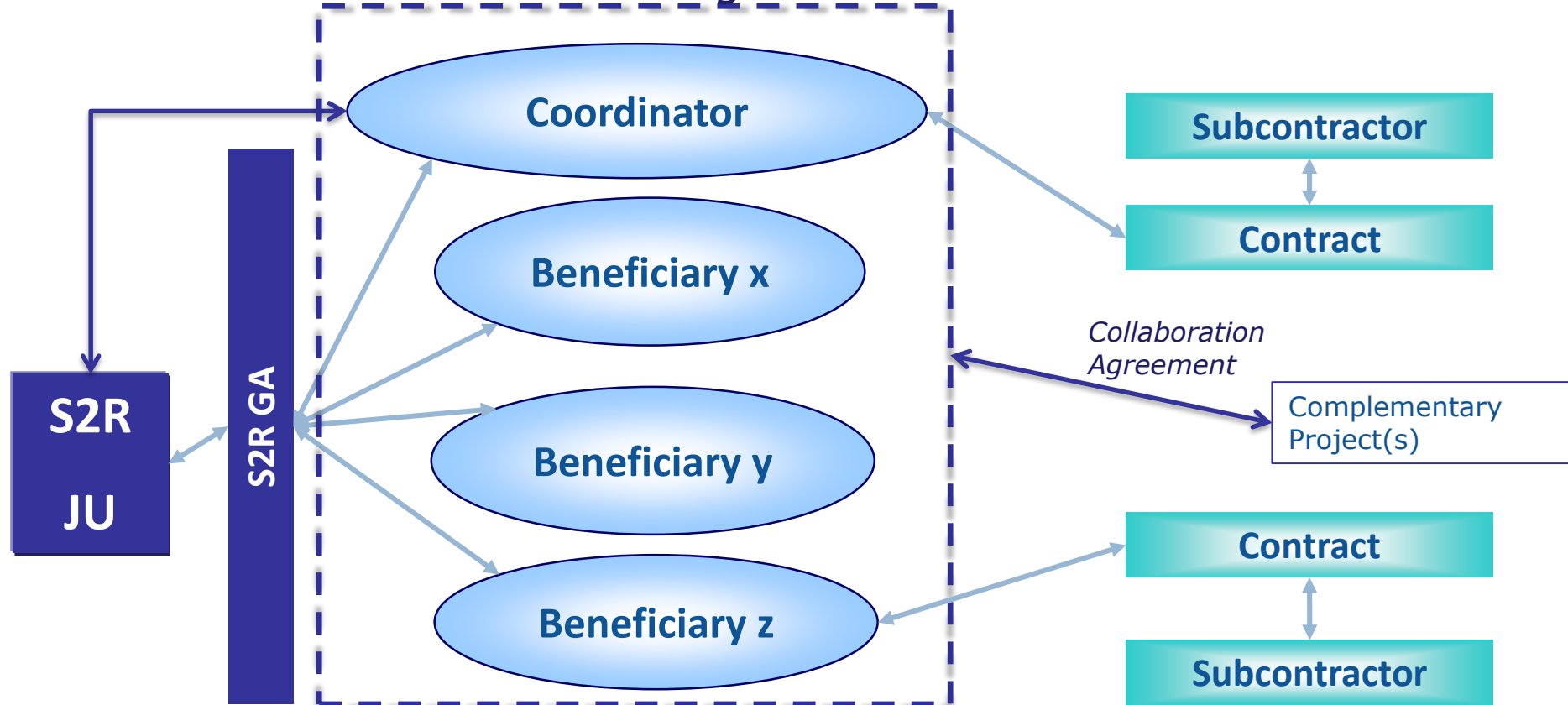
- **Standard H2020 eligibility conditions:**
 - 'Research and Innovation Actions' (**RIA**) and 'Innovation Actions' (**IA**): **Minimum three** legal entities established in **minimum three different Member States or an Associated Countries** (Including Switzerland as from 1 January 2017)
 - 'Coordination and Support Actions' (**CSA**): **one** or more legal entity(ies) established in a Member State or in an Associated Country
- ➔ Entities from other countries than EU Member States or Associated Countries may participate to the open calls, but are, in principle, not eligible for funding.
- **S2R specificities:**
 - Calls for members: open only to members of the S2R JU and their affiliated entities (S2R JU members have already been selected following a competitive procedure)
 - Open calls: open only to entities that are not members or affiliated entities of members of the S2R JU



Grant Agreement Structure

Range of Legal Agreements

Consortium Agreement



Grant Agreement structure

H2020 Grant Agreement

Annex 1: Description of the action part A & B

Annex 2: Estimated budget

Annex 3: Accession forms of beneficiaries

Annex 3a: Declaration joint liability of third parties

Annex 4: Model financial statements

Annex 5: Model certificate on financial statements

Annex 6: Model certificate on the methodology



- The S2R JU is NOT a party to it.
- Must not contradict the GA.
- Conclusion before GA signature highly recommended.

Key issues addressed in the Consortium Agreement (see Art. 41.3 MGA):

- Management
- Distribution of funds
- Internal organisation of work, internal reporting
- Evolution of the consortium
- IPR (to be decided before signature of contract)
- Risk management / collective responsibility
- Decision-making process

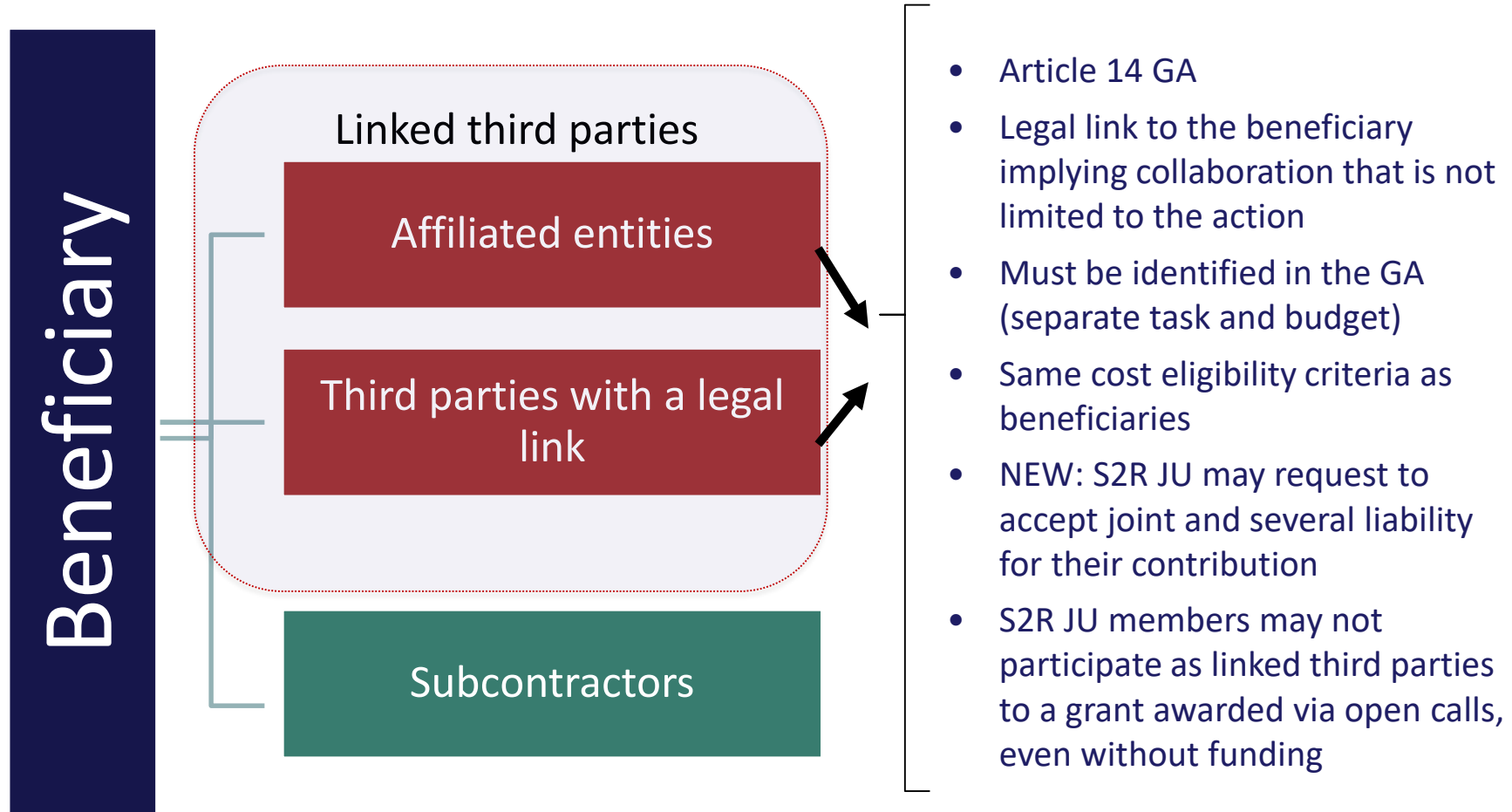


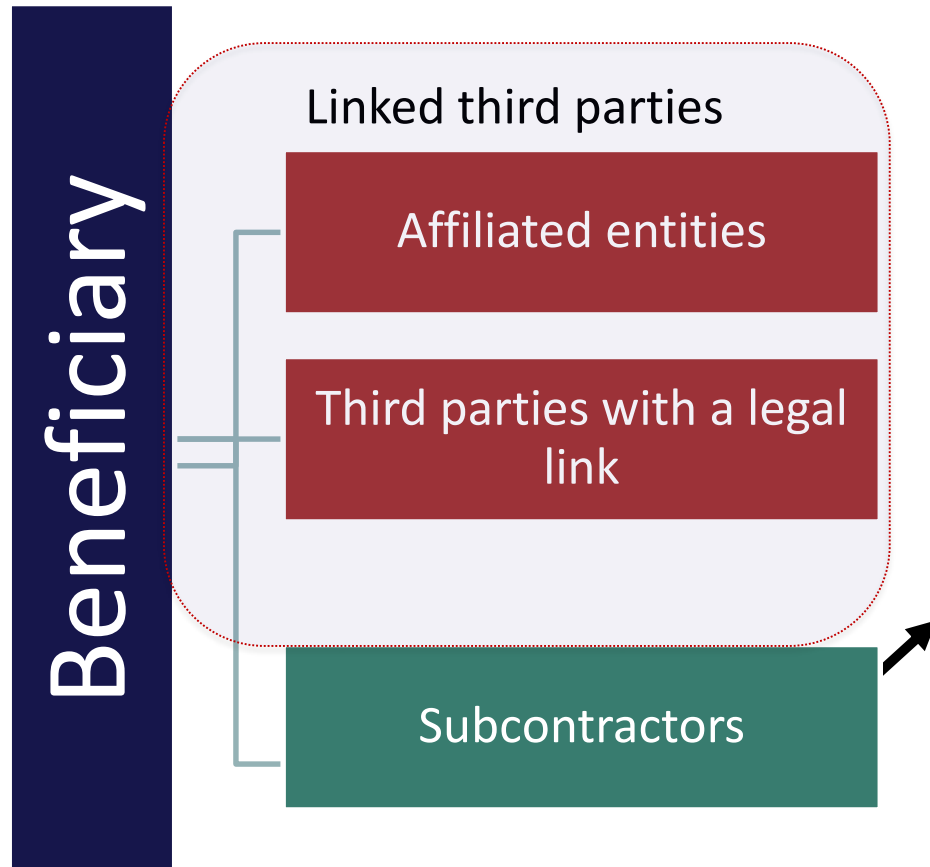
Collaboration Agreement

- **Collaboration Agreement** to be signed between the **complementary** beneficiaries of OC with beneficiaries of CFM (Arts. 2 and 41.4 of the GA): OC projects are implemented in the context of the S2R programme and in relation with a CFM project.
- S2R JU prepared a **Model** Collaboration Agreement that should normally be used as a starting point (fine-tuned by the parties to suit the specific needs).
- If your collaboration entails **changes in your own project**, an **amendment** of your Description of Action may be needed.



Linked third parties





- Article 13 GA
- Covers only a limited part of the action (although S2R JU may allow for increased flexibility on a case by case basis if justified by S2R policy objectives)
- Ensures best value for money and avoid any conflict of interests
- Estimated costs and tasks must be identified in the budget and Annex 1
- NEW: if not identified in Annex 1, S2R JU may still approve them (beneficiary bears the risk of rejection)



Types of third parties	CHARACTERISTICS						
	Does work of the action	Provides resources or services	What is eligible?	Must be indicated in Annex 1	Indirect costs	Selecting the third party	Articles
Linked third party	YES	NO	Costs	YES	YES	Must be affiliated or have a legal link	Article 14
Subcontractors	YES	NO	Price	YES	NO	Best value for money, avoid conflict of interest	Article 13
Third party providing in-kind contributions	NO	YES	Costs	YES	YES	Cannot be used to circumvent the rules	Articles 11 and 12
Contractors	NO	YES	Price	NO	YES	Best value for money, avoid conflict of interest	Article 10
Financial support to third parties	<u>Only if allowed in the call</u> The beneficiaries' activity consists in providing financial support to the target population			YES	NO	According to the conditions in Annex 1	Article 15



IPRs: basic concepts

Access rights:

<i>Within a project</i>	<i>a participant must grant access to its background</i>	<i>a participant must grant access to its results</i>
<i>if needed by another participant to implement project</i>	<i>Royalty-free unless otherwise agreed before accession to the grant agreement</i>	<i>Royalty-free</i>
<i>if needed by another participant to exploit own results [*]</i>	<i>Fair and reasonable conditions (to be agreed and may be royalty-free)</i>	

- **Access rights of affiliated entities:**
 - For background (Article 25.4) and for results (Article 31.4)
 - Under 'fair and reasonable conditions'
- **Access rights of the EU institutions:**
 - For results (Article 31.5)
 - For developing or implementing EU policies/programmes



Background

"A proposal which contravenes ethical principles or any applicable legislation [...] may be excluded from the evaluation, selection and award procedures at any time." Art. 13 – H2020 RfP

Ethics Self-Assessment

- All proposals must describe ethical issues raised & how they will be addressed
- Ethics part: part A in SEP + part B section 6
- Each applicant is responsible for:
 - identifying any potential ethical issues
 - handling ethical aspects of their proposal
 - detailing how they plan to address them in detail

Guidelines

[How to complete your ethics self-assessment guide](#)



2 Financial aspects



Annex 2 – Estimated budget of the action

Estimated eligible* costs (per budget category)							
Form of costs****	A. Direct personnel costs				B. Direct costs of subcontracting	[C. Direct costs of fin. support]	D. Other direct costs
	A.1 Personnel A.2 Natural persons under direct contract A.3 Seconded persons [A.6 Personnel for providing access to research infrastructure]	A.4 SME owners without salary A.5 Beneficiaries that are natural persons without salary					D.1 Travel D.2 Equipment D.3 Other goods and services D.4 Costs of large research infrastructure
	Actual	Unit ①	Unit ②		Actual	Actual	Actual
			XX EUR/hour				
	(a)	Total (b)	No hours	Total (c)	(d)	(e)	(f)
Beneficiary 1	500.000	0	100	3.213	150.000	0	325.000
Beneficiary 2	0	300.000	0	0	0	0	125.000



Funding rates

Applicable funding rates for the open calls:

- Funding rate depending on the type of action:
 - ✓ Up to **100% of eligible costs** for '**Research and Innovation Actions**' (RIA) and for '**Coordination and Support Actions**' (CSA)
 - ✓ Up to 70% for '**Innovation Actions**' (IA), except non-profit organisations (up to 100%)
- **One project = One funding** rate for all beneficiaries / activities in the grant
- **25% flat rate** calculated on the basis of eligible direct costs (excluding direct sub-contracting costs) **for indirect costs and overheads**



Types of payments (Article 21)



One pre-financing



One or several interim payments



One payment of the balance



- Payments will be made to the **coordinator** to the **bank account** established in the grant agreement
- Coordinator must distribute the payments to the beneficiaries without **unjustified delay**
- The coordinator will inform about the **distribution of the payments**: if the JU requires it, in the event of a recovery at payment of the balance, if the participation of a beneficiary is terminated
- If the JU does not pay within the deadline, the beneficiaries are entitled to a **late-payment interest**



At the signature of the grant

One pre-financing payment

When

- Within 30 days from the signature of the grant or 10 days before the starting date, whichever is latest

How much

- Usually = maximum grant amount / number of periods
- Retention 5 % of maximum grant for Guarantee Fund

Characteristics

- It remains the property of the S2R JU until the payment of the balance



Guarantee Fund

- Participant's Guarantee Fund is established amounting to **5% of total funding contribution**
- The Guarantee Fund **belongs to all beneficiaries** of grant agreements under H2020
- **Covers against financial risks**
- The amount contributed to the Fund will be **reimbursed after payment of the balance** at the end of the project



Pre-financing: example

EXAMPLE			
Maximum grant amount (Article 5.1)	Funding rate (Article 5.2)	Reporting periods (Article 20.2)	Guarantee Fund (5 % x 1 000 000) (Article 21.2)
1 000 000	100%	2	50 000

Usual pre-financing = maximum grant amount / number of periods

$$1\,000\,000\text{ €} / 2 = 500\,000\text{ €}$$

Pre-financing Payment

$$\begin{array}{rcl}
 \text{500 000€} & - & \text{50 000 €} \\
 \text{PF (2 periods \& 50\%)} & & \text{Transferred to} \\
 & & \text{the Guarantee} \\
 & & \text{Fund} \\
 & & = \text{450 000€} \\
 & & \text{Transferred to the} \\
 & & \text{coordinator}
 \end{array}$$

Pre-financing rate will be determined according to S2R JU's available budget



After the end of each interim period

Interim payment

When

- 90 days from reception of periodic reports

How much

- EU contribution corresponding to the eligible costs incurred in the reporting period
- Limit = 90 % of the maximum grant amount

Characteristics

- Ineligible costs will be rejected and not taken into account for the payment



After the end of the last reporting period

A payment of the balance

When

- 90 days from reception of final reports

How much

- Reimburses the remaining part of the eligible cost incurred
- Includes the release of the Guarantee Fund (GF)

Characteristics

- If Σ payments made < final grant amount : *payment*
- If Σ payments made > final grant amount : *recovery* → first by offsetting with GF released, if not enough, by a recovery order
- If applicable: receipts & reduction of the grant will be taken into account to determine the final grant amount



After the end of the last reporting period

Final report

⇒ submitted by coordinator 60 days after end of last reporting period

In addition to the periodic report

Final Technical Report

- ✓ summary for publication
- ✓ overview of results and their exploitation & dissemination
- ✓ conclusions of the action and socioeconomic impact

Final Financial Report

- ✓ Summary Financial Statement
- ✓ Certificate on Financial Statements (if needed) →
if total contribution of EU 325 000 or more, as reimbursement of actual costs and unit costs
calculated on the basis of its usual cost accounting practices (see Article 5.2 and Article 6.2, Point A).



3 Administrative aspects (Proposal submission)

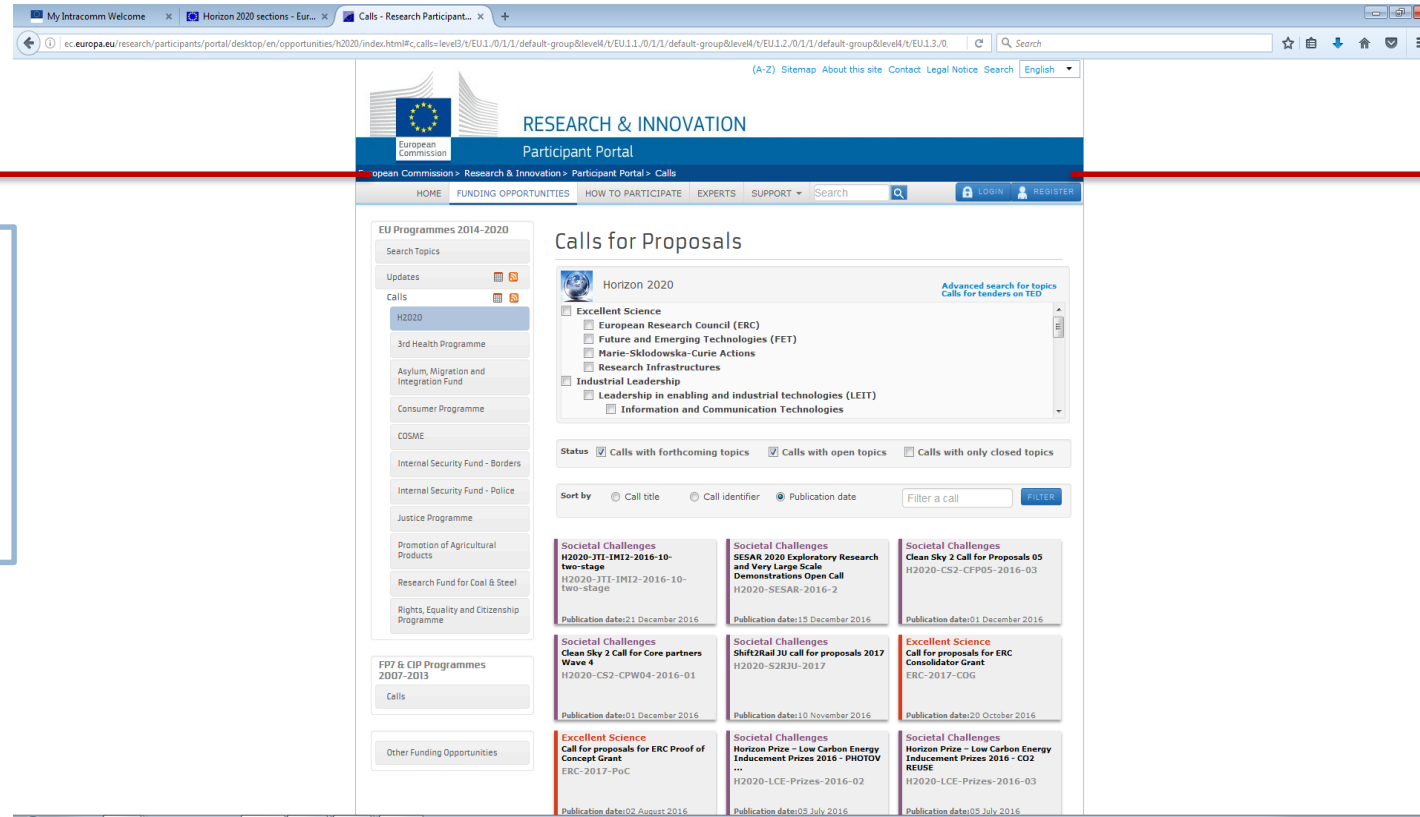


Register an organisation

- If you want to submit a proposal, this must be done through the **Electronic Submission System** accessed from the call page:
 - You will need an **ECAS password**
 - Your organisation must be registered in the Participant Portal **Beneficiary Register**. If not, you can start the registration process on the same page. You will need to provide information on the legal status and the finances of your organisation.
- Once the registration is completed, you will get a **PIC number** (Participation Identification Code) to be quoted in your proposal and in any correspondence with the Commission
- Parallel to the validation of your organisation in the beneficiary register, you must appoint a Legal Entity Appointed Representative (**LEAR**). The LEAR must be appointed by the legal representative of your organisation and will be authorised:
 - to manage the legal and financial information about his/her organisation on the Participant Portal
 - to manage access rights of persons in his/her organisation
 - to appoint representatives of his/her organisation to electronically sign grant agreements or financial statements via the Participant Portal.



Calls and all necessary documentation are published on the Participant Portal:
<http://ec.europa.eu/research/participants/portal/desktop/en/home.html>



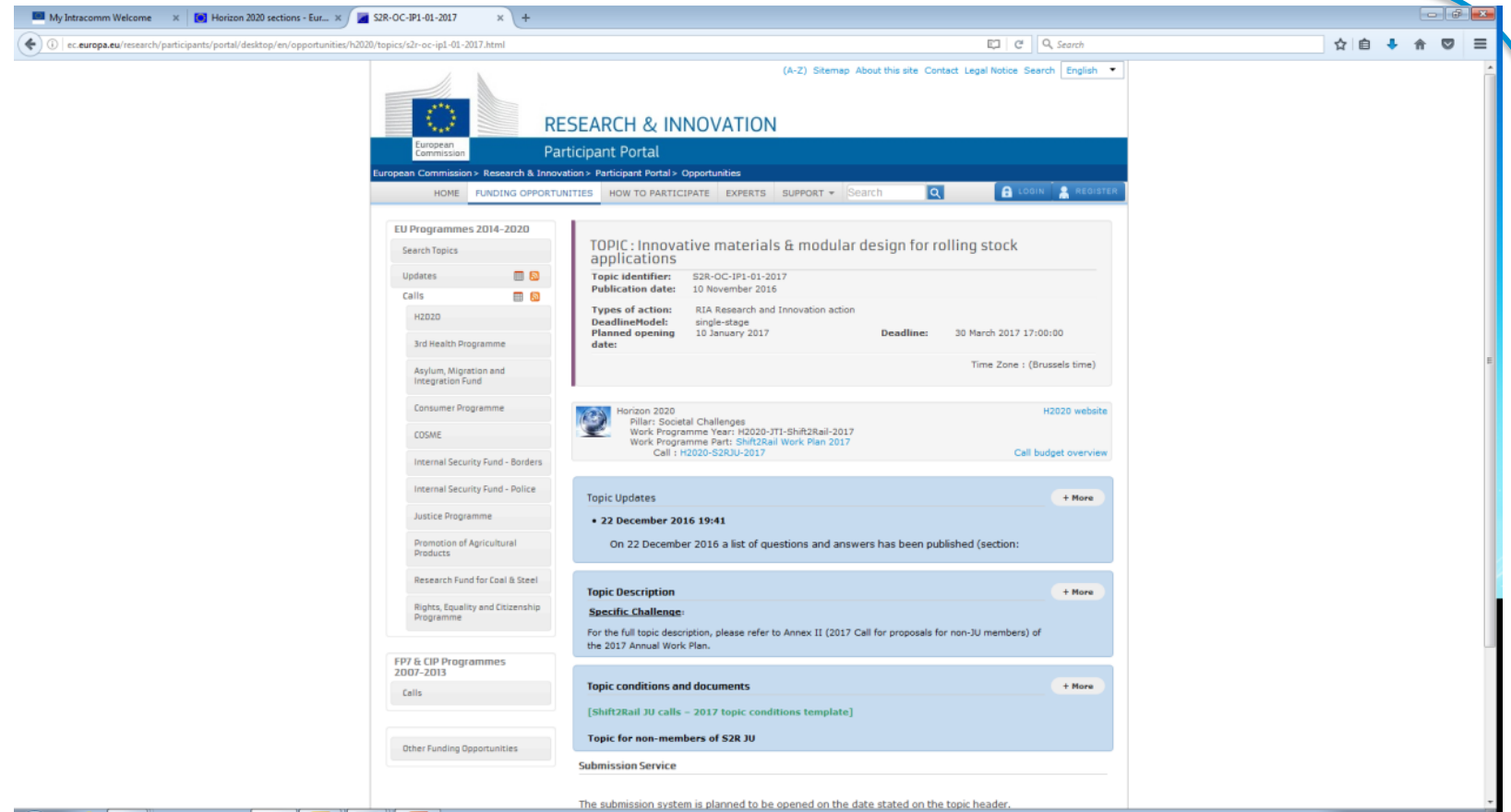
Calls and submission service (available without login)

Register or login



Beware!

- Each call is split between calls for members (**CFM**) and calls for non-members (**OC**)



Submit your proposal

- Prepare proposal:
 - On-line for structured part - **Part A**
 - Upload non-structured part – **Part B** - pdf file(s)
- Complete submission before the deadline (30/3/2017; 17h00 Brussels time)
- After submission (but before the deadline): you can still re-edit the proposal, or withdraw it!



Tips for a successful application

- Start **preparing** your proposal as early as possible
- Check **FAQs** on the Participant portal
- A successful proposal is expected to address all three **H2020 award criteria: Excellence, Impact, Implementation**
- A successful proposal is expected to contribute to the overall **objectives of the S2R JU** as described in the S2R Regulation and Master Plan, and to the realisation of the **MAAP**
- Bear in mind that might be an **obligation for complementarity** with other projects



Tips for a successful application

- Ensure that outputs really answer the **needs**
 - Check with final users if the expected results really answer to their needs
 - Present clearly the expected impacts on each stakeholder
- Demonstrate why your project has **added value**
 - How is your idea different? Why you and why now?
 - Does your project have EU added value?
- Be **clear** and realistic with the objectives and results of the project



Tips for a successful application

- Involve all the relevant **stakeholders** for a systems approach
 - Ensure that your consortium is complete
 - Justify the participation and expertise of participants in the consortium
- Show capacity to deal with unexpected issues and manage **risks**
 - Identify potential risks and show possible mitigation means
 - Process for monitor and control risks during the project
- Do & **Communicate**
 - Include clear dissemination and publication plans
 - Include plans on how IPR will be exploited



- **MAAP:**

http://shift2rail.org/wp-content/uploads/2013/07/S2R-JU-GB_Decision-N-15-2015-MAAP.pdf

- **AWP2017:**

http://ec.europa.eu/research/participants/data/ref/h2020/other/wp/jtis/h2020-wp17-shift2rail_en.pdf

- **Q&A OC 2017:**

http://shift2rail.org/wp-content/uploads/2016/02/Call2017_QA_20170111_en.pdf

- **S2R Model Grant Agreement:**

http://ec.europa.eu/research/participants/data/ref/h2020/other/mga/jtis/h2020-mga-multi-shift2rail-ju_en.pdf

- **On going projects:**

<http://shift2rail.org/projects/>



Thank you for your attention!

<http://shift2rail.org/>

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S2R JU Programme Manager

