

# Project Coordinators Info Day CFM & OC 2018 December 11<sup>th</sup> 2018

@Shift2Rail\_JU  
#Horizon2020



# 1 - Introduction

# Projects 2018 Overview - CFM

TOPIC	GA number	ACRONYM	COORDINATOR	COORDINATORS' CONTACTS	PROJECT OFFICER	COMPLEMENTARITY
S2R-CFM-CCA-01-2018	826151	PLASA-2	Ying Löschel	<a href="mailto:ying.loeschel@deutschebahn.com">ying.loeschel@deutschebahn.com</a>	Sébastien DENIS	PINTA-2
						SAFE4RAIL-2
						PIVOT
S2R-CFM-IP1-01-2018	826054	PINTA-2	Laurent Nicod	<a href="mailto:laurent.nicod@transport.alstom.com">laurent.nicod@transport.alstom.com</a>	Sébastien DENIS	PLASA-2
S2R-CFM-IP1-02-2018	826098	Connecta-2	Igor Lopez	<a href="mailto:igor.lopez@caf.net">igor.lopez@caf.net</a>	Sébastien DENIS	SAFE4RAIL-2
S2R-CFM-IP2-01-2018	826141	X2Rail-3	Bettina Doetsch	<a href="mailto:bettina.doetsch@thalesgroup.com">bettina.doetsch@thalesgroup.com</a>	Léa PATIES	MOVINGRAIL
						X2Rail-3
						CONNECTA-2
						FR8RAIL-2
						MOVINGRAIL
						GATE4RAIL
						EMULRADIO4RAIL
						X2Rail-1
S2R-CFM-IP3-01-2018	826255	IN2TRACK2	Yusuf Tross	<a href="mailto:Yusuf.Tross@networkrail.co.uk">Yusuf.Tross@networkrail.co.uk</a>	Nikos ATHANASOPOULOS	X2Rail-2
						IN2TRACK
S2R-CFM-IP4-01-2018	826385	MaaSive	Scott Heath	<a href="mailto:scott.heath@networkrail.co.uk">scott.heath@networkrail.co.uk</a>	Lucas GARVIA	IMPACT-2
						Co-Active
						ATTRACKTIVE
						CONNECTIVE
S2R-CFM-IP5-01-2018	826206	FR8RAIL-2	Andrea Mazzone	<a href="mailto:andrea.mazzone@rail.bombardier.com">andrea.mazzone@rail.bombardier.com</a>	Lucas GARVIA	COHESIVE
						M2O
						X2RAIL-1
						X2RAIL-2
						FR8RAIL
						ARCC
						FFL4E
						FR8HUB

# Projects 2018 Overview - OC

TOPIC	GA number	ACRONYM	COORDINATOR	COORDINATORS' CONTACTS	PROJECT OFFICER	COMPLEMENTARITY
S2R-OC-IP1-01-2018	826073	SAFE4RAIL-2	Dr Aitor Arriola	<a href="mailto:s4r2-mngt@technikon.com">s4r2-mngt@technikon.com</a>	Sébastien DENIS	CONNECTA-2
						X2Rail-3
						PLASA-2
S2R-OC-IP2-01-2018	826347	MOVINGRAIL	Prof Rob Goverde	<a href="mailto:r.m.p.goverde@tudelft.nl">r.m.p.goverde@tudelft.nl</a>	Léa PATIES	CONNECTA-2
						X2Rail-3
						X2Rail-1
S2R-OC-IP2-02-2018	826324	GATE4RAIL	Prof Alessandro Neri	<a href="mailto:presidenza@radiolabs.it">presidenza@radiolabs.it</a>	Léa PATIES	X2Rail-3
						X2Rail-2
S2R-OC-IP2-03-2018	826152	EMULRADIO4RAIL	Dr Marion Berbineau	<a href="mailto:marion.berbineau@ifsttar.fr">marion.berbineau@ifsttar.fr</a>	Léa PATIES	X2Rail-3
S2R-OC-IP3-01-2018	826250	Assets4Rail	Fanny Breuil	<a href="mailto:fanny.breuil@eurecat.org">fanny.breuil@eurecat.org</a>	Nikos ATHANASOPOULOS	IN2TRACK2
						IN2TRACK
						IN2SMART
S2R-OC-IP4-01-2018	826172	SPRINT	Stefanos Gogos	<a href="mailto:stefanos.gogos@unife.org">stefanos.gogos@unife.org</a>	Nikos ATHANASOPOULOS	CONNECTIVE
S2R-OC-IP4-02-2018	826252	Shift2MaaS	Dr Guido Di Pasquale	<a href="mailto:guido.dipasquale@uitp.org">guido.dipasquale@uitp.org</a>	Lucas GARVIA	COHESIVE
S2R-OC-IP5-01-2018	826087	M2O	Luciano Cantone	<a href="mailto:luciano.cantone@uniroma2.it">luciano.cantone@uniroma2.it</a>	Lucas GARVIA	FR8RAIL-2
						FFL4E
S2R-OC-IPX-01-2018	826189	FLEX-RAIL	Manfred Ninaus	<a href="mailto:manfred.ninaus@iitf.at">manfred.ninaus@iitf.at</a>	Nikos ATHANASOPOULOS	Connecta-2
						X2Rail-3
						IN2TRACK2
S2R-OC-IPX-02-2018	826055	TER4RAIL	Dr.-Ing. Armando Carrillo Zanuy	<a href="mailto:acarrillo@eurnex.eu">acarrillo@eurnex.eu</a>	Léa PATIES	N/A
S2R-OC-IPX-03-2018	826238	MVDC-ERS	Dr Pietro Tricoli	<a href="mailto:p.tricoli@bham.ac.uk">p.tricoli@bham.ac.uk</a>	Nikos ATHANASOPOULOS	N/A
S2R-OC-IPX-03-2018	826156	B4CM	Prof. Clive Roberts	<a href="mailto:c.roberts.20@bham.ac.uk">c.roberts.20@bham.ac.uk</a>	Nikos ATHANASOPOULOS	N/A

# what is S2R

A public-private partnership, a platform for the rail sector as a whole to work together to drive innovation in the years to come until 2024

The S2R Joint Undertaking has been created in June 2014 to play a major role in rail-related research and innovation, ensuring coordination among projects and providing all stakeholders with relevant and available information on projects funded across Europe. It shall also manage all rail- focused research and innovation actions co-funded by the Union

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

- It has been tasked by the Union “to establish and develop a strategic Master Plan”, which encompassed rail R&I until 2030, it reached autonomy in May 2016 and it is now fully operational

# S2R OBJECTIVES

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**INCREASE** RELIABILITY & PUNCTUALITY **BY 50%**



**DOUBLE** RAILWAY CAPACITY



**HALVE LIFE-CYCLE COSTS** OF RAILWAY TRANSPORTS



CONTRIBUTE TO **REDUCTION OF NEGATIVE EXTERNALITIES**, SUCH AS NOISE, VIBRATIONS, EMISSIONS & OTHER ENVIRONMENTAL IMPACTS



CONTRIBUTE TO THE **ACHIEVEMENT OF THE SINGLE EUROPEAN RAILWAY AREA**

**S2R PROGRAMME, ABOUT € 1BLN and A NEW APPROACH TO R&I IN RAILWAY**

**working together & driving innovation**



**28**  
MEMBERS



**343**  
PARTICIPANTS INVOLVED  
FROM **27** COUNTRIES

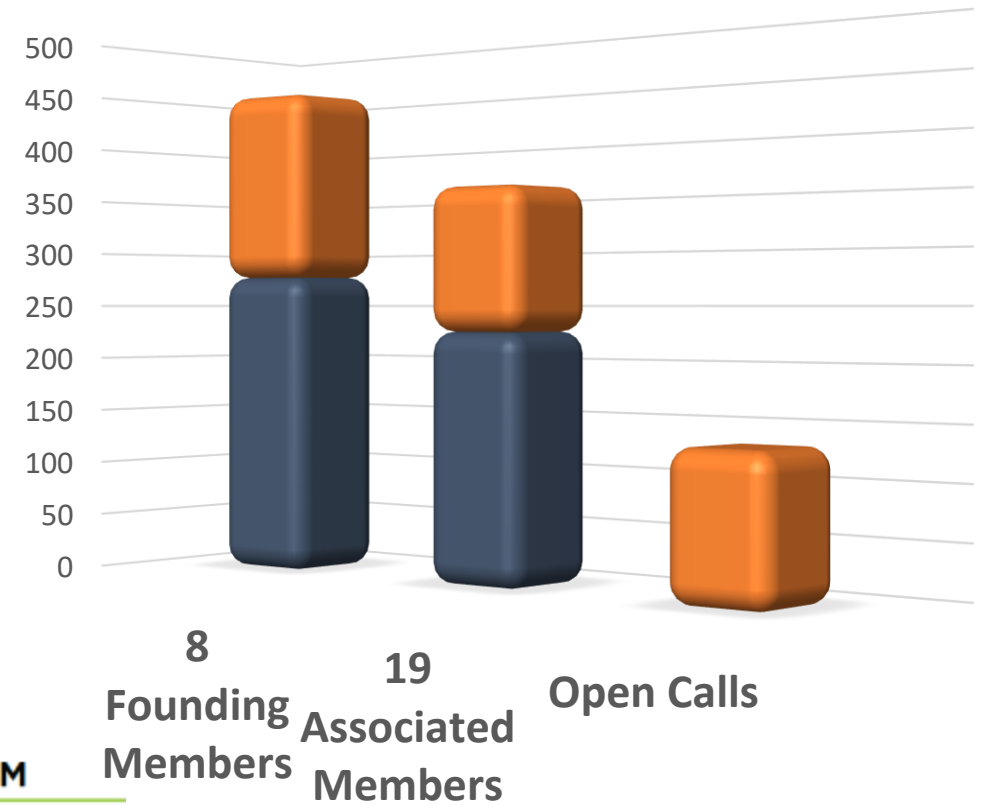


**92**  
SMEs



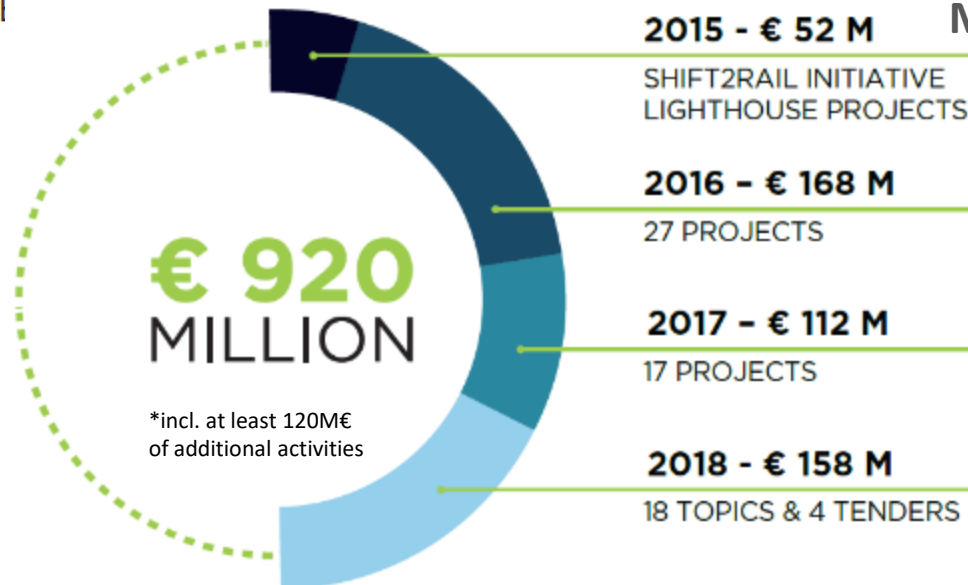
**84**  
RESEARCH CENTRES  
AND UNIVERSITIES

## AN OPEN and ACTIVE ORGANISATION



Values as at 1 Sept 2016 in Million EUR

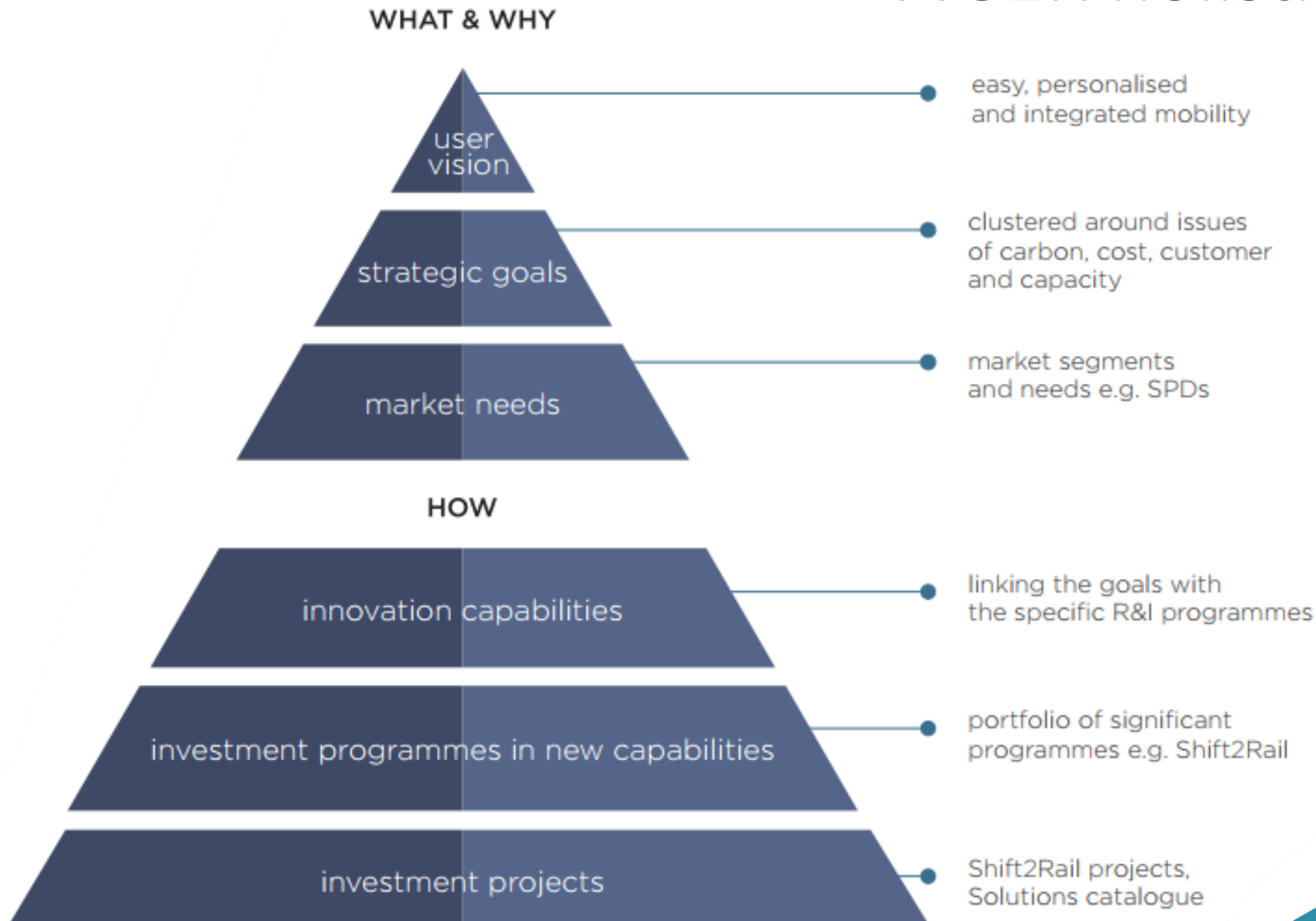
<sup>1</sup>Data extracted from CORDA database in April, 2018

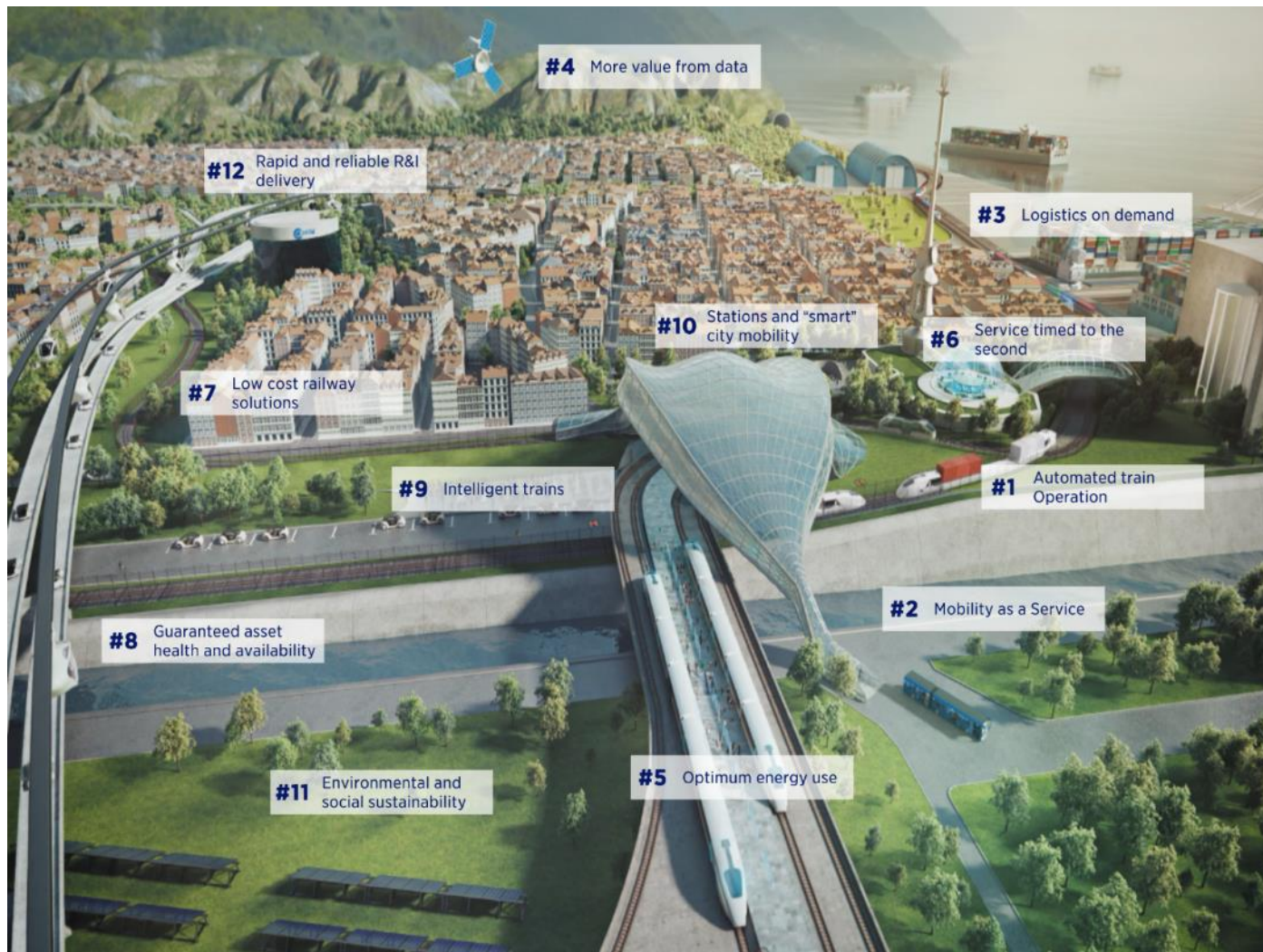


# USER FIRST

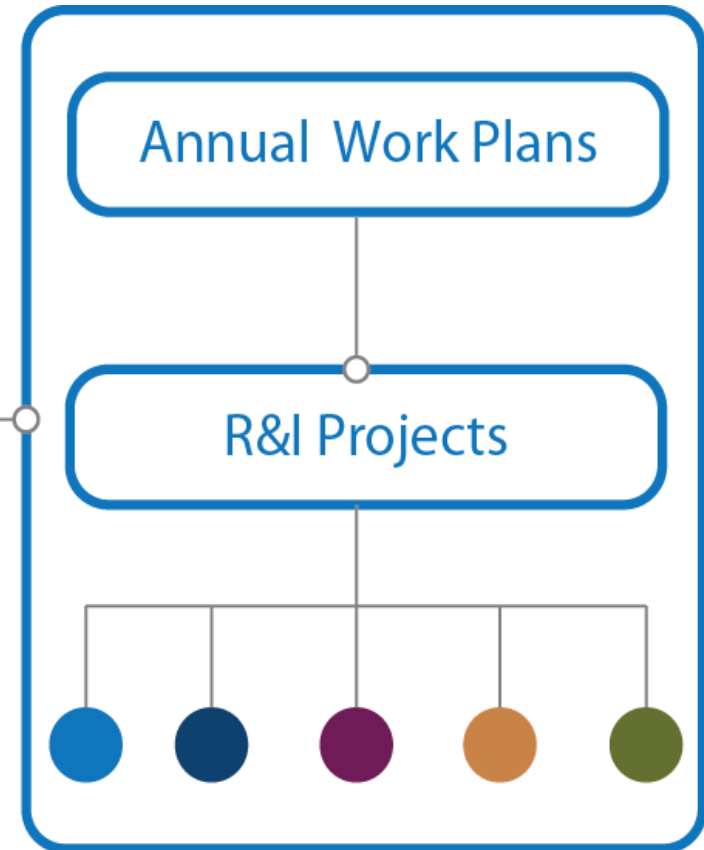
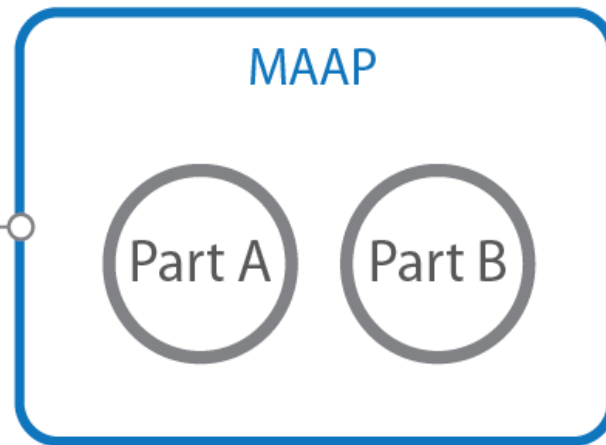


# A S2R holistic approach...

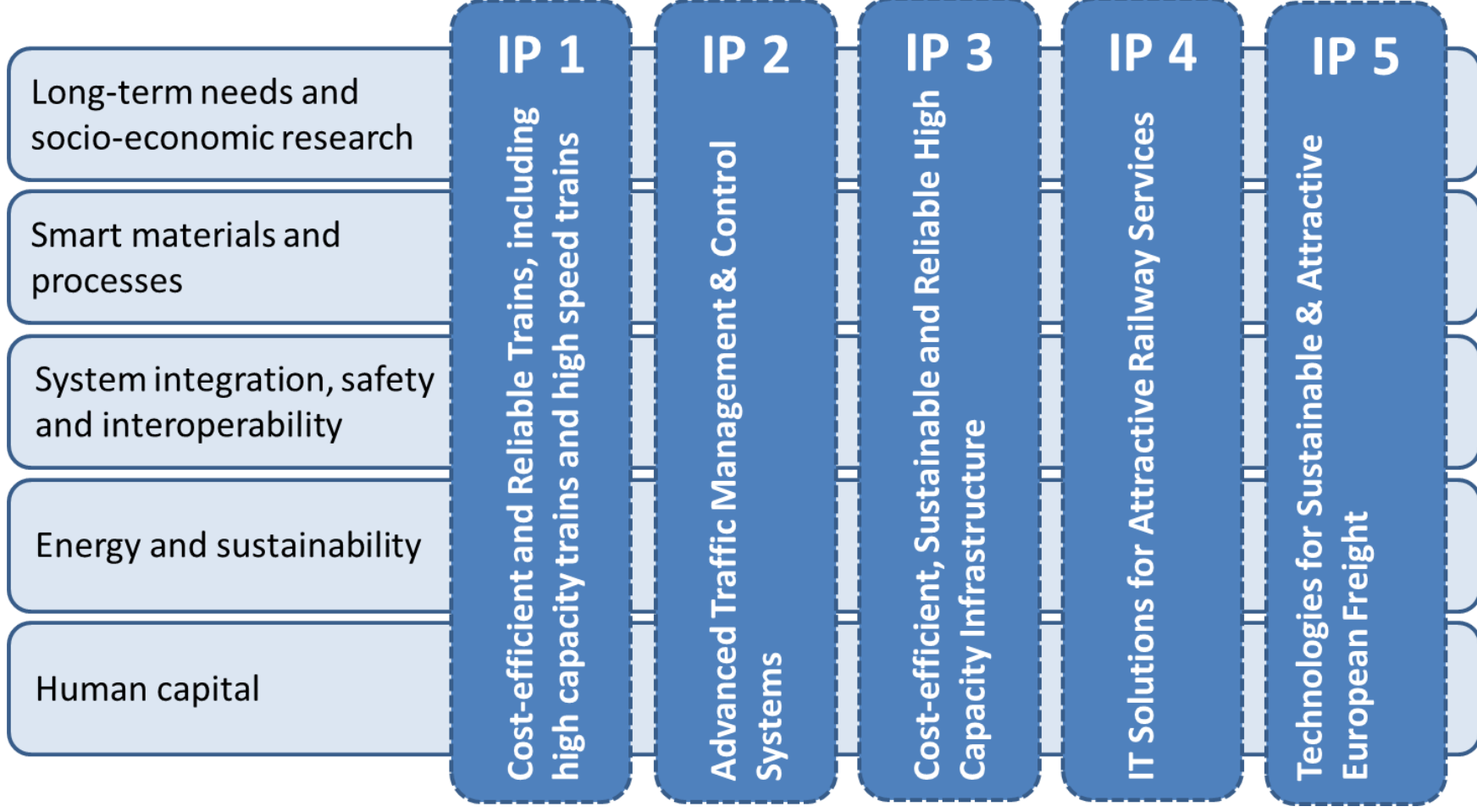




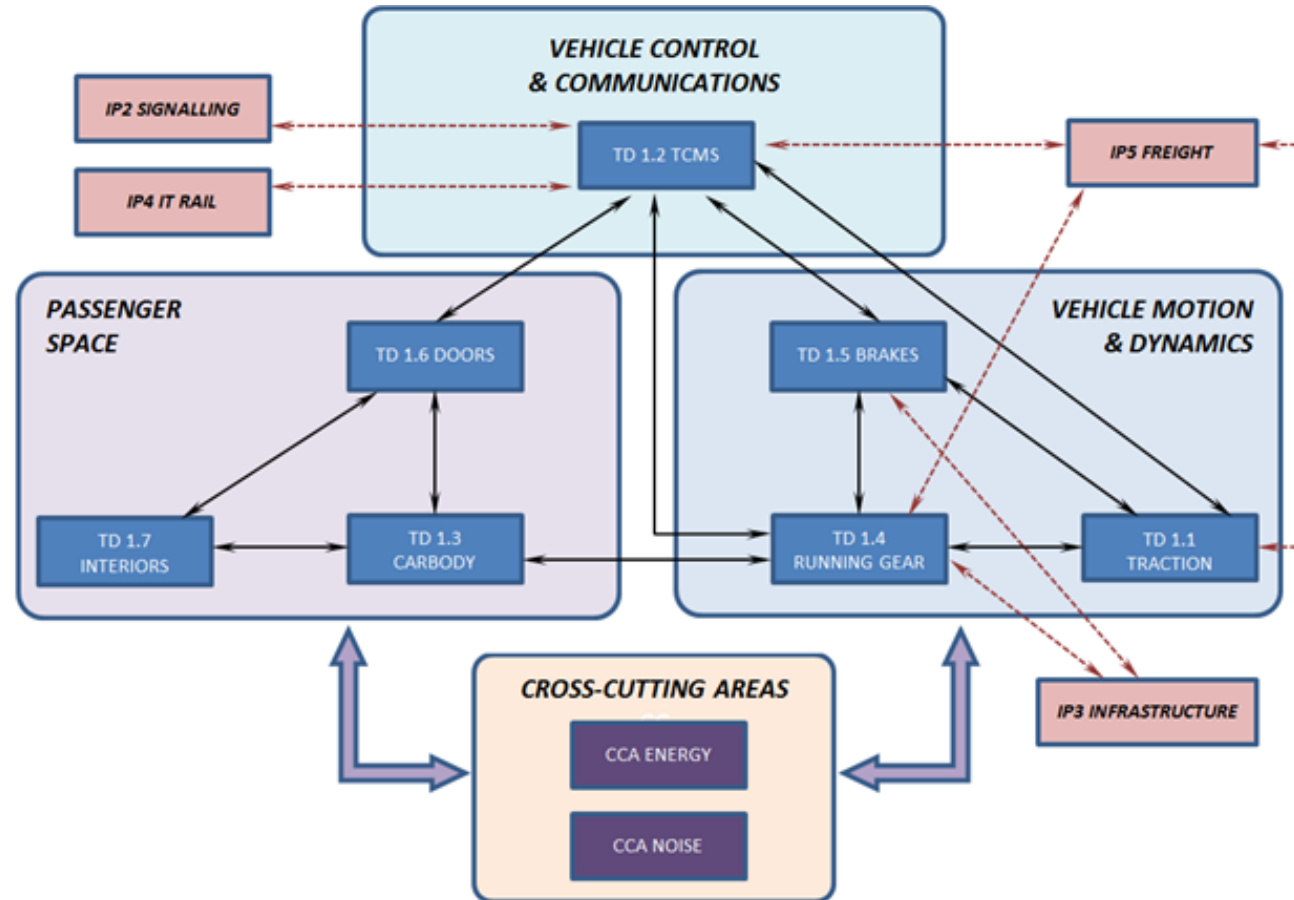
...opening up new Capabilities coming from emerging technologies or concepts!



# S2R PROGRAMME: INTEGRATED CONSISTENT DELIVERY ORIENTED



# Example: IP1

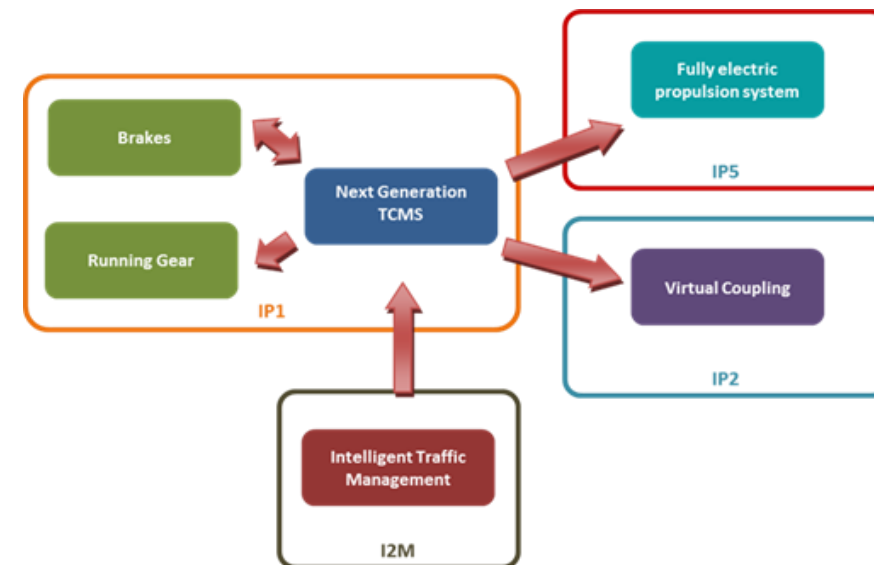


# Example of a Technology Demonstrator

## Final Demos of TD 1.2 TCMS :

Research Area	Specific Techn. objective	Specification Activities	Demonstrator		Focus of activity
			Market	TRL	
Train Control & Monit. System	Wireless TCMS	Radio techn., architecture and protocols	Metro	6/7	Incorporate wireless technologies to the train communication network solutions (i.e. train backbone, consist network and train to ground communication).
			Regional	6/7	
	Drive-by-data	Architecture, protocols	Metro	6/7	Provide a train-wide communication network for full TCMS support including the replacement of train lines, connecting safety functions up to SIL4 (incl. signalling).
			Regional	5	
	Functional distribution architecture	Specification, architecture and interface definition	Metro	6/7	New architectural concept based on standard framework & application profiles, distributed computing to allow execution of compliant functions on end devices distributed along the vehicle meeting different safety & integrity requirements
			Regional	5	
				6/7	Support the Functional Open Coupling
	Virtual Placing on the Market	Technology definition, protocols and procedures	Generic	6/7	Standardised simulation framework in which all subsystems of the train will be simulated, allowing remote and distributed testing including hardware in-the-loop through heterogeneous communication networks.

## Interaction with other TDs and IPs:



## Planning (budget estimated at 48,8M€):

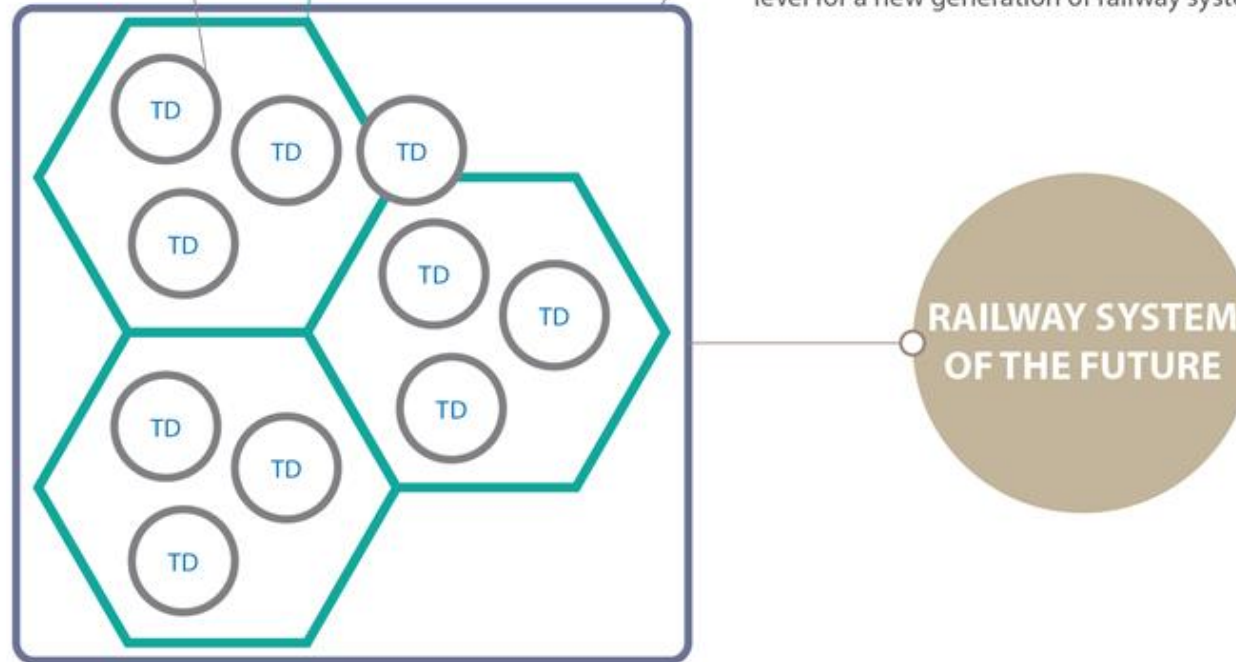
TASKS		TRL	2015	2016	2017	2018	2019	2020	2021
TD1.2	TCMS								
	1.2.0 General specification	-							
	1.2.1 Wireless TCMS	6/7							
	1.2.2 Drive-by-data	6/7							
	1.2.3 Functional distribution architect.	6/7							
	1.2.4 Virtual placing on the market	5							
	1.2.5 Integration, demo & assessment	6/7							
	1.2.6 Technical coordination	-							

# From TRL0 to TRL6/7

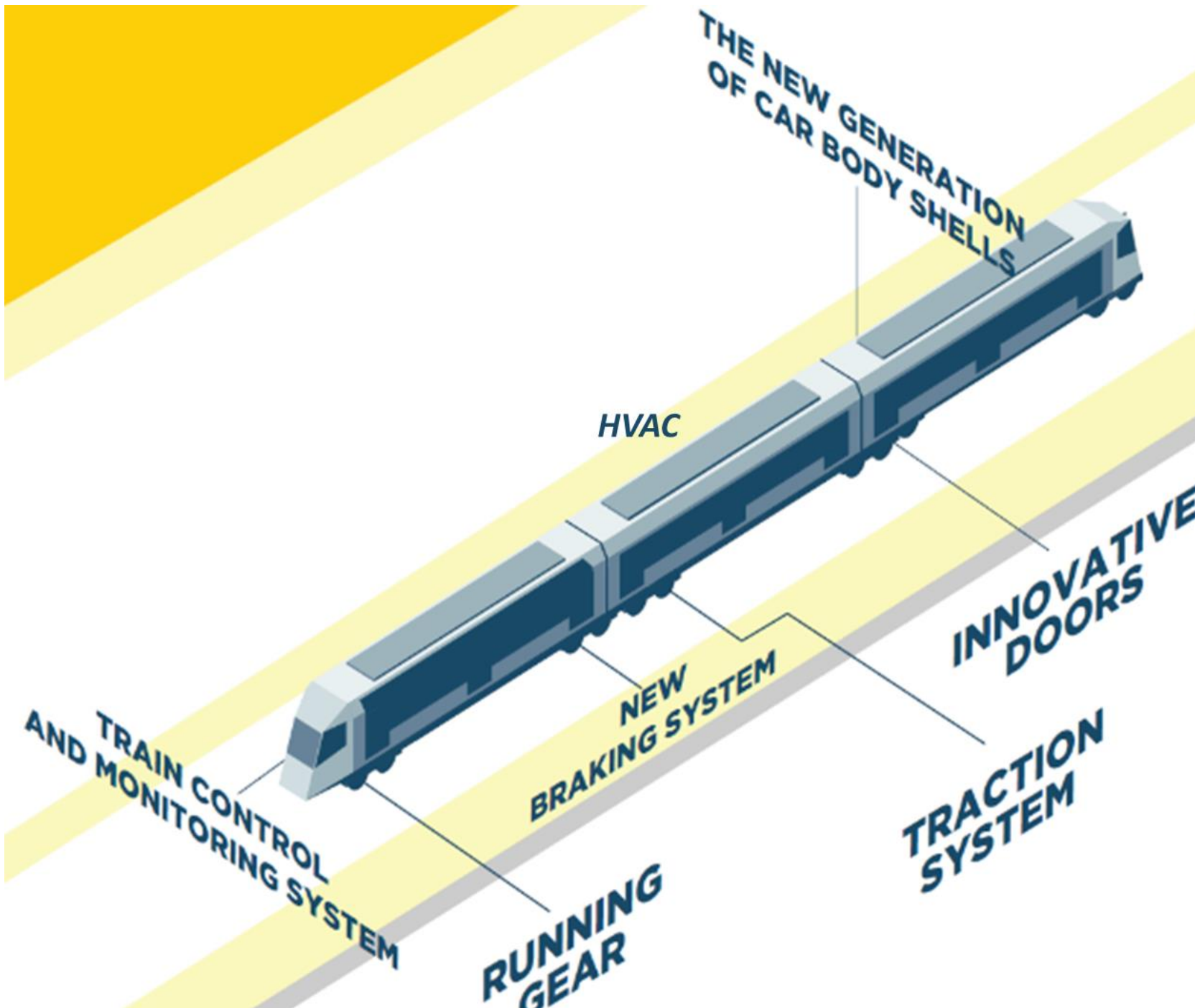
**Technology Demonstrator (TDs)**  
Projects specifying, developing and demonstrating a specific technology resulting in a lab tested and/or simulated prototype

**Integrated Technology Demonstrators (ITDs)**  
Projects integrating/combining TD prototypes at system level (lab and on-site) and testing performance

**System Platform Demonstrators (SPDs)**  
Assessment of the whole systems performance based on the results of TDs and ITDs. SPDs bring S2R innovative solutions to a technology maturity level for a new generation of railway system



## 2 – Programme progress and relation with current call activities



IP1: Cost-efficient and reliable trains, including high-capacity trains and high-speed trains

TD1.1 Traction Systems demonstrator								
2015	2016	2017	2018	2019	2020	2021	2022	...
Finished: Roll2Rail (10/2017), PINTA (11/2018)			Ongoing: PINTA2			Planned activities		

TD1.2 Train Control and Monitoring System Demonstrator								
2015	2016	2017	2018	2019	2020	2021	2022	...
Finished: Roll2Rail (10/2017), CONNECTA (09/2018)			Ongoing: Safe4RAIL, CONNECTA-2, Safe4RAIL-2			Planned activities		

TD1.3 Carbody Shell Demonstrator								
2015	2016	2017	2018	2019	2020	2021	2022	...
Finished: Roll2Rail (10/2017)		Ongoing: PIVOT, Mat4Rail		AWP 2019: CFM, OC		Planned activities		

TD1.4 Running Gear Demonstrator								
2015	2016	2017	2018	2019	2020	2021	2022	...
Finished: Roll2Rail (10/2017)		Ongoing: PIVOT, Run2Rail		AWP 2019: CFM, OC		Planned activities		

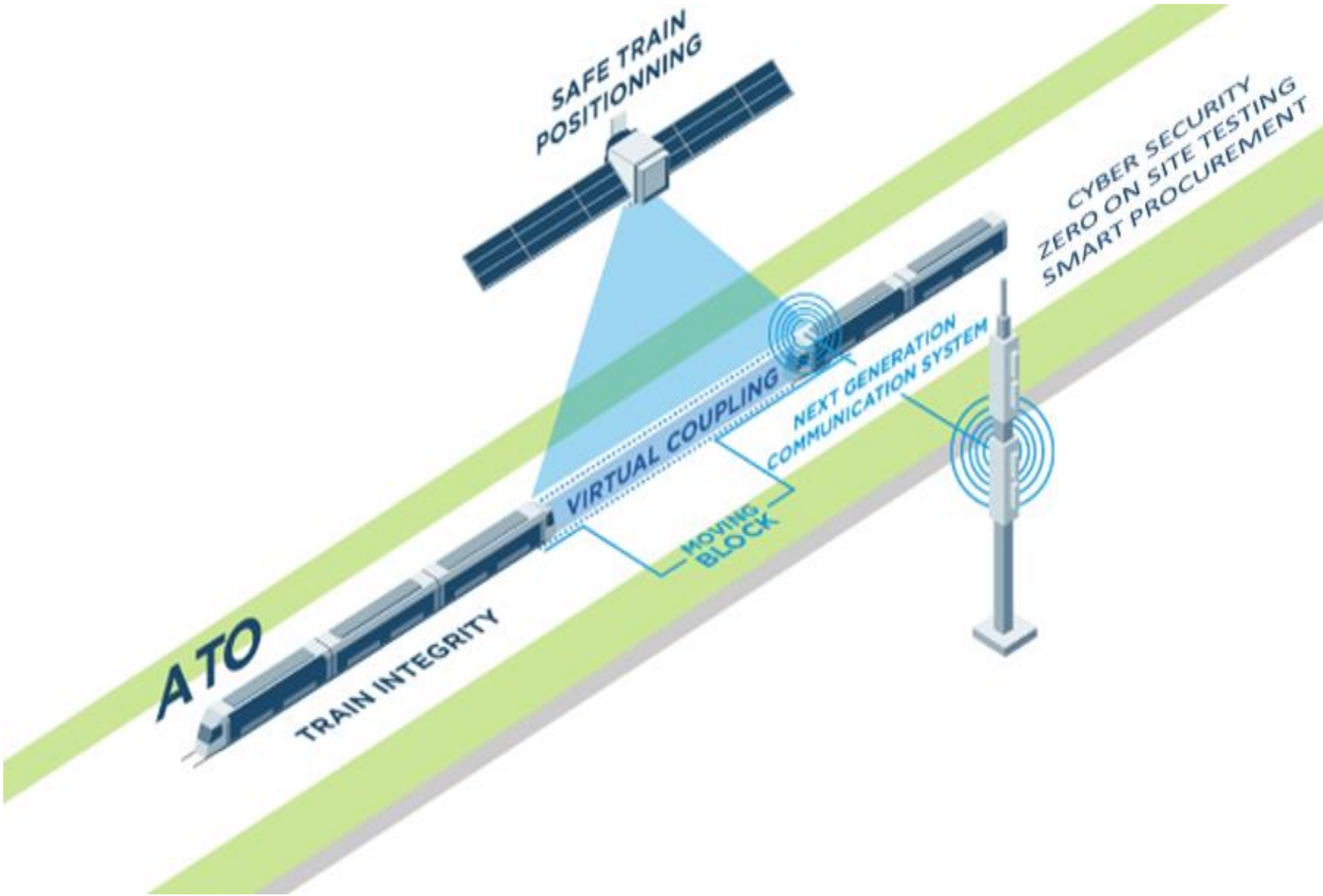
TD1.5 Brake Systems Demonstrator								
2015	2016	2017	2018	2019	2020	2021	2022	...
Fin: Roll2Rail (10/2017), CONNECTA (09/2018)								
		Ongoing: Safe4RAIL, PIVOT, PINTA-2						
					AWP 2019: CFM, OC			
						Planned activities		

TD1.6: Doors and Access Systems Demonstrator								
2015	2016	2017	2018	2019	2020	2021	2022	...
Ongoing: PIVOT, Run2Rail				AWP 2019: CFM, OC				

TD1.7: Train Modularity In Use (TMIU)								
2015	2016	2017	2018	2019	2020	2021	2022	...
Finished: Roll2Rail (10/2017)		Ongoing: PIVOT, Mat4Rail			AWP 2019: CFM, OC			

TD1.8: HVAC								
2015	2016	2017	2018	2019	2020	2021	2022	...
					AWP 2019: CFM		Planned activities	

# IP2: Advanced Traffic Management and Control Systems



TD2.1: Adaptable communications for all railways (quality of service, interfaces to signalling)								
2015	2016	2017	2018	2019	2020	2021	2022	...
		Finished: MISTRAL (10/18)						
		Ongoing: X2Rail-1, X2Rail-3, EMULRADIO4RAIL						
					Planned Activities			

TD2.2: Railway network capacity increase (ATO up to GoA4 – UTO)								
2015	2016	2017	2018	2019	2020	2021	2022	...
		Ongoing: X2Rail-1, ASTRail						
					AWP 2019: CFM			

TD2.3 Moving Block								
2015	2016	2017	2018	2019	2020	2021	2022	...
		Ongoing: X2Rail-1, ASTRail, X2Rail-3, MOVINGRAIL						
					Planned Activities			

TD2.4: Fail-Safe Train Positioning (including satellite technology)								
2015	2016	2017	2018	2019	2020	2021	2022	...
			Ongoing: X2Rail-2; ASTRail, GATE4Rail					
					Planned Activities			

TD2.5: On-board Train Integrity								
2015	2016	2017	2018	2019	2020	2021	2022	...
			Ongoing: X2Rail-2; ETALON					
					AWP 2019: CFM			

TD2.6: Zero on-site testing (control command in lab demonstrators)								
2015	2016	2017	2018	2019	2020	2021	2022	...
		Finished: VITE (10/18)						
		Ongoing: X2Rail-1, X2Rail-3, GATE4Rail						
						Planned activities		

TD2.7: Formal methods and standardisation for smart signalling systems								
2015	2016	2017	2018	2019	2020	2021	2022	...
			Ongoing: X2Rail-2; ASTRail					
					AWP 2019: CFM,OC			
						Planned activities		

TD2.8: Virtually – Coupled Train Sets (VCTS)								
2015	2016	2017	2018	2019	2020	2021	2022	...
			Ongoing: X2Rail-3, MOVINGRAIL					

### TD2.9: Traffic management evolution

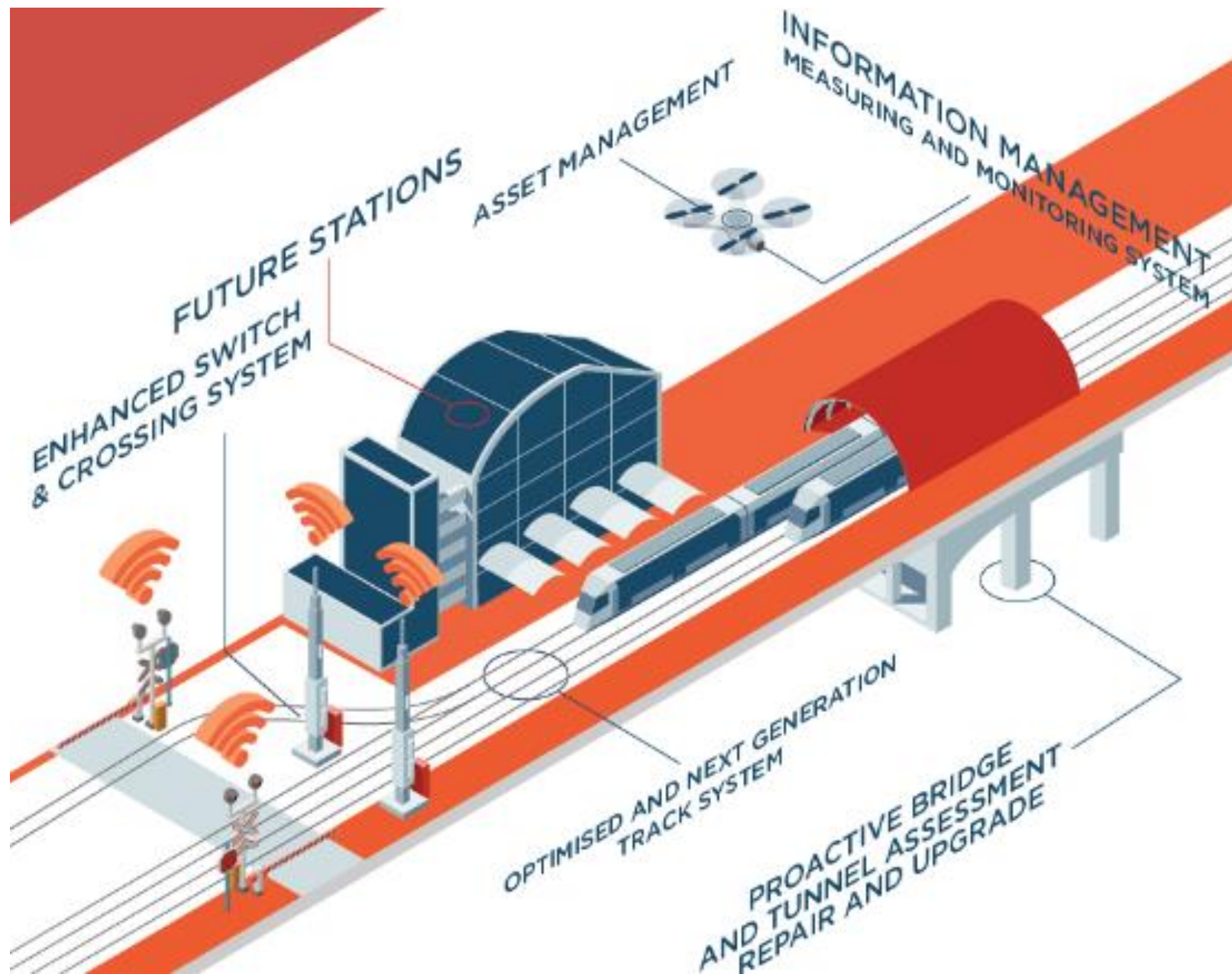
2015	2016	2017	2018	2019	2020	2021	2022	...
		Ongoing: X2Rail-2			AWP 2019: CFM, OC			

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

2015	2016	2017	2018	2019	2020	2021	2022	...
	Ongoing: X2Rail-1, ETALON			AWP 2019: CFM				

### TD2.11: Cyber Security

2015	2016	2017	2018	2019	2020	2021	2022	...
		Finished: CYRAIL (09/18)						
		Ongoing: X2Rail-1						
				AWP 2019: CFM, OC				
					Planned activities			



## IP3: Cost-Efficient and Reliable High-Capacity Infrastructure

TD3.1 Enhanced Switch & Crossing System								
2015	2016	2017	2018	2019	2020	2021	2022	...
Finished: In2Rail (04/18)			Ongoing: IN2TRACK, IN2TRACK2			Planned Activities		

TD3.2 Next Generation Switch & Crossing System								
2015	2016	2017	2018	2019	2020	2021	2022	...
Finished: In2Rail (04/18)			Ongoing: S-CODE, IN2TRACK2			Planned Activities		

TD3.3 Optimised Track System								
2015	2016	2017	2018	2019	2020	2021	2022	...
Finished: In2Rail (04/18)			Ongoing: IN2TRACK, IN2TRACK2			Planned Activities		

TD3.4 Next Generation Track System								
2015	2016	2017	2018	2019	2020	2021	2022	...
Finished: In2Rail (04/18)			Ongoing: IN2TRACK2			Planned Activities		

TD3.5 Proactive Bridge and Tunnel Assessment, Repair and Upgrade								
2015	2016	2017	2018	2019	2020	2021	2022	...
Finished: In2Rail (04/18)			Ongoing: IN2TRACK, IN2TRACK2			Planned Activities		

TD3.6 Dynamic Railway Information Management System (DRIMS)								
2015	2016	2017	2018	2019	2020	2021	2022	...
Ongoing: IN2SMART, IN2DREAMS				AWP 2019: CFM		Planned Activities		

TD3.7 Railway Integrated Measuring and Monitoring System (RIMMS)								
2015	2016	2017	2018	2019	2020	2021	2022	...
Finished: In2Rail (04/18)			Ongoing: IN2SMART, MOMIT, Assets4Rail		AWP 2019: CFM		Planned Activities	

TD3.8 Intelligent Asset Management Strategies (IAMS)								
2015	2016	2017	2018	2019	2020	2021	2022	...
Finished: In2Rail (04/18)			Ongoing: IN2SMART		AWP 2019: CFM		Planned Activities	

TD3.9 Smart Power Supply								
2015	2016	2017	2018	2019	2020	2021	2022	...
Finished: In2Rail (04/18)								
		Ongoing: IN2STEMPO						
			AWP 2019: OC					
			Planned Activities					

TD3.10 Smart Metering for Railway Distributed Energy Resource Management System								
2015	2016	2017	2018	2019	2020	2021	2022	...
Finished: In2Rail (04/18)			Ongoing: IN2STEMPO, In2Dreams					

TD3.11 Future Stations								
2015	2016	2017	2018	2019	2020	2021	2022	...
			Ongoing: In2Stempo, FAIR Stations					

# IP4: IT Solutions for Attractive Railway Services



### TD 4.1 Interoperability Framework

2015	2016	2017	2018	2019	2020	2021	2022	...
Finished: IT2RAIL, GOF4R, ST4RT				Ongoing: CONNECTIVE, SPRINT			AWP 2019: OC	

### TD4.2 Travel Shopping

2015	2016	2017	2018	2019	2020	2021	2022	...
Finished: IT2RAIL				Ongoing: Co-Active, MaaSive			AWP 2019: OC	
							Planned activities	

### TD4.3 Booking and Ticketing

2015	2016	2017	2018	2019	2020	2021	2022	...
Finished: IT2RAIL				Ongoing: Co-Active, MaaSive			AWP 2019: OC	
							Planned activities	

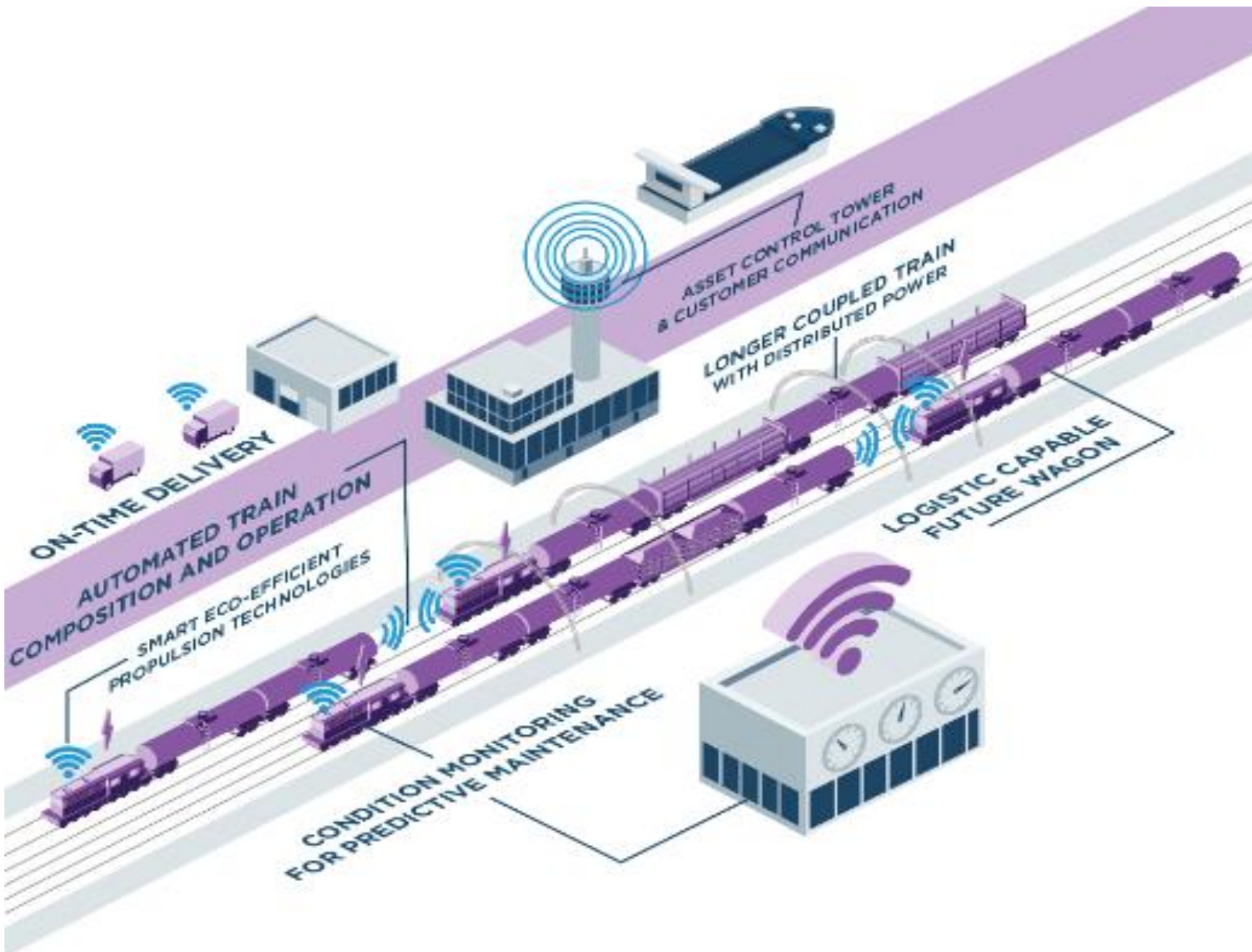
### TD4.4 Trip Tracker

2015	2016	2017	2018	2019	2020	2021	2022	...
Finished: IT2RAIL				Ongoing: ATTRACKTIVE, My-TRAC, MaaSive			AWP 2019: OC	
							Planned activities	

TD4.5 Travel Companion								
2015	2016	2017	2018	2019	2020	2021	2022	...
Finished: IT2RAIL								
		Ongoing: ATTRACKtIVE, My-TRAC, MaaSive						
				AWP 2019: OC				
					Planned activities			

TD4.6 Business Analytics								
2015	2016	2017	2018	2019	2020	2021	2022	...
Finished: IT2RAIL, GOF4R, ST4RT				Ongoing: CONNECTIVE				

TD4.7 Integrated Technical Demonstrator								
2015	2016	2017	2018	2019	2020	2021	2022	...
Finished: IT2RAIL			Ongoing: COHESIVE, SPRINT, Shift2MaaS					



## IP5: Technologies for Sustainable & Attractive European Rail Freight

TD 5.0 – Business analytics and implementation strategies								
2015	2016	2017	2018	2019	2020	2021	2022	...
Finished: SMART-RAIL (04/18)			Ongoing: FR8RAIL, INNOWAG, FR8HUB					

TD5.1 Freight electrification, brakes and telematics								
2015	2016	2017	2018	2019	2020	2021	2022	...
		Ongoing: FR8RAIL, INNOWAG, FR8HUB, FR8RAIL II						
				AWP 2019: CFM, OC				
					Planned Activities			

TD5.2 Access and Operation								
2015	2016	2017	2018	2019	2020	2021	2022	...
		Ongoing: ARCC, SMART, OPTIYARD, FR8HUB, FR8RAIL II				AWP 2019: CFM		

TD5.3 Wagon design								
2015	2016	2017	2018	2019	2020	2021	2022	...
		Ongoing: FR8RAIL, INNOWAG, FR8RAIL II				AWP 2019: CFM		
					Planned Activities			

TD 5.4 Novel Terminal, Hubs, Marshalling Yards, Sidings								
2015	2016	2017	2018	2019	2020	2021	2022	2023
		Ongoing: FR8HUB						
					AWP 2019: CFM			
						Planned Activities		

TD 5.5 New Freight Propulsion Concepts								
2015	2016	2017	2018	2019	2020	2021	2022	...
		Fin: DYNAFREIGHT (06/18)						
		Ongoing: FFL4E, FR8HUB, FR8RAIL II, M2O						
					AWP 2019: CFM			
						Planned Activities		

TD 5.6 Autonomous train operation								
2015	2016	2017	2018	2019	2020	2021	2022	...
		Ongoing: ARCC, SMART, FR8RAIL II, X2Rail-3						
					AWP 2019: CFM + OC			
						Planned Activities		

# Cross Cutting Activities (CCA)

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WA1 Long-term needs and socio-economic research & SPD's								
2015	2016	2017	2018	2019	2020	2021	2022	...
<div> <div>IMPACT-1 (04/18), NEAR2050 (04/18)</div> <div>Ongoing: IMPACT2</div> <div>Planned activities</div> </div>								

WA2 KPI method and integrated assessment								
2015	2016	2017	2018	2019	2020	2021	2022	...
<div> <div>Finished: Roll2Rail (10/17), IMPACT-1 (06/18)</div> <div>Ongoing: Tender KPIs, IMPACT2</div> </div>								

WA3 Safety, Standardisation, Maintenance, Materials, Virtual Certification								
2015	2016	2017	2018	2019	2020	2021	2022	...
<div> <div>Finished: PLASA (08/18)</div> <div>Ongoing: GoSAFE RAIL, IMPACT2, SMarTE, PLASA-2</div> </div>								

### WA4 Smart Planning, I2M

2015	2016	2017	2018	2019	2020	2021	2022	...
Finished: IN2RAIL (04/18), PLASA (08/18)			Ongoing: GoSAFE RAIL, IMPACT2, PLASA-2				AWP 2019: CFM	

### WA5 Energy and sustainability

2015	2016	2017	2018	2019	2020	2021	2022	...
Finished: Roll2Rail (10/17), DESTINATE (10/18)			Ongoing: FINE1, OPEUS		AWP 2019: CFM,OC		Planned activities	

### WA6 Human Capital

2015	2016	2017	2018	2019	2020	2021	2022	...
			Tender HC (12/18)	Ongoing: IMPACT2, SMaRTE				

# **3 - Programme approach: complementarity concept + internal JU processes**

# Programme approach, future/current projects

- EACH PROJECT contributes to the **achievement of the Master Plan and the MAAP objectives**
- EACH PROJECT is part of a programme and **cooperation with other projects** must be ensured
  - Through the **collaboration and input to the JU Members**, EACH PROJECT will support the realization of **long-term S2R technological demonstrations or innovative break-through**
- Particular attention is given to ensure that there is **no duplication of work** between EACH PROJECT and current/future R&I activities
- EACH PROJECT results are taken into consideration for the next annual work plans to ensure sufficient **complementarity** and **coherence**

# Complementarity & Collaboration Agreement

1. Complementary is **defined at topic level**
2. Complementarity between topics is **compulsory established in the Grant Agreement** (need for a Collaboration Agreement)
3. IP/CCA SteCos, high level synchronization points: Project Coordinators may attend the SteeCo meetings as observer and IP Coordinators cooperate with project coordinator to **foster/promote synergies**
4. S2R Programme Managers: Central Contact Point for both projects

# Complementarity & Collaboration Agreement

## Issues to be tackled in the Collaboration Agreement (COLA) (examples/non-exhaustive list)

- Rules for collaboration, “who does what?”; Point of Contacts etc.
- Handling review of documents
- Agreement on action to be performed by both sides + linked timing (e.g. project A provides “user requirements” by M6 to project B; project B provides input by M18 to project A → project A uses input for deliver their deliverable 2.3).
- Participation to restricted meetings (for specific purpose) or to public meetings (including Advisory Groups, etc...).

# Collaboration Agreement

## Tips/lessons learnt:

- COLA establish the relation between OC Projects with CFM Projects, to ensure **alignment**, agreement on **tasks, background and results** and adequate dealing with **know-how** (if any) → Annexes should have meaningful content and ensure OC Projects duly provide to the CFM Projects input when so defined!
- **Start discussions with complementary project(s) as soon as possible**
  - Anticipate as much as possible issues (timing discrepancy, possible duplication, etc...)
  - Inform the S2R PM should any major difficulties encountered
  - However... COLA's signature cannot be a barrier to collaborate!
- **Changes in your own project may be needed as a result:**
  - assess the need for an amendment within the consortium
  - Inform the S2R PM as soon as possible → JU assessment

# IPRs Collaboration Agreement

## 1. Access rights to *background* to beneficiaries of complementary grants

According to article 25.5: The rules on access to background (including conditions and scope of access) are generally the same as for results. *However*, for background there is NO (or a more limited) obligation to give access, if there are restrictions or limits (legal or otherwise) and the beneficiary has informed the others — before acceding to the GA (or immediately when additional background is agreed on) – e.g. a pre-existing agreement (e.g. an exclusive licence) which precludes the granting of access rights.

## 2. Access rights to results to beneficiaries of complementary grants

According to article 31.6: access rights to results must be granted to the beneficiaries of complementary.

# COMMON COLLABORATION AGREEMENT (CCOLA)

*Under development*

@Shift2Rail\_JU  
#Horizon2020



## • CCOLA Objectives

- Simplify and facilitate cooperation/results exchange within the Programme
- Create transparency and common contractual standards
- Ensure coherent IPR rules throughout the program
- Create legal certainty to facilitate future exploitation of results

## • CCOLA Key Points

- Standard process for results and background requests
- NO expansion of shared IPR/background – the extent of sharing will be the same as under the current framework (H2020 rules), except it will no longer require individual contract negotiations each time → time and resources saved to focus on the technical side of the projects
- Creation of a unified IPR protection framework with a license scheme that allows research within the Programme while protecting the commercial interest regarding later exploitation.

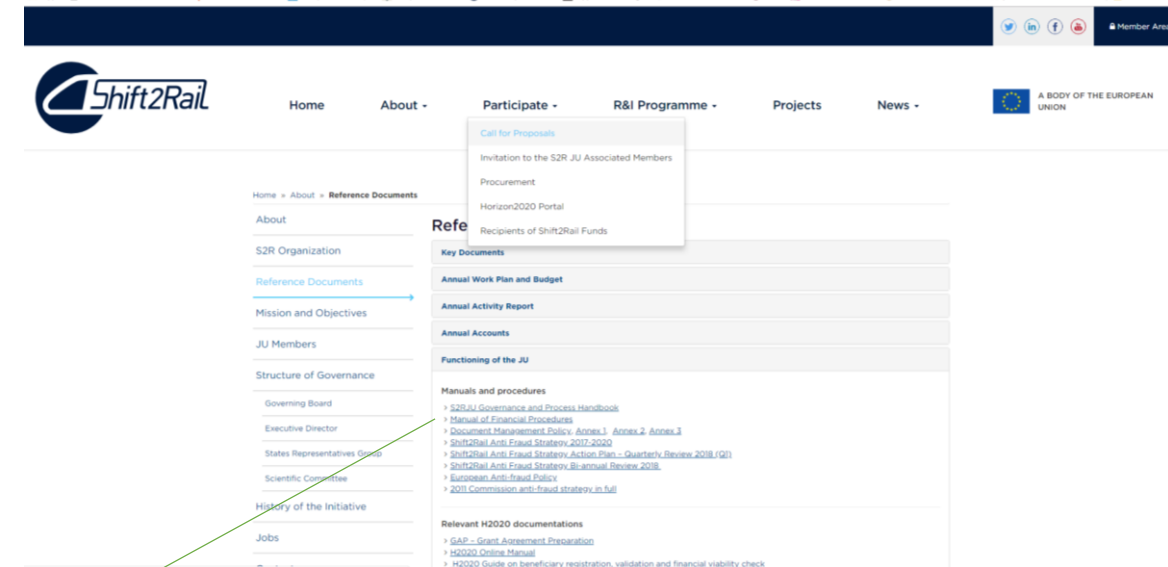
- **Covers principally all kinds of cooperation** between all kinds of projects
- establish a mechanism to automatically supersede previous COLAs between Parties that joined the CCOLA
- **unification and simplification** should result in a **significant decrease in transaction costs** regarding the bureaucratic and legal overhead to focus on the productive side of the programme

# Internal JU processes

Governance and process handbook  
("PM Handbook", available on the S2R website)

- The handbook defines and documents the Programme governance and relevant business processes, including relevant templates and guidelines.

→ Provides the Coordinator with useful reporting templates and guidelines (deliverable template, collaboration agreement, technical report, reporting to the SteCo, etc...)



[https://shift2rail.org/wp-content/uploads/2017/12/S2RJU-Governance-and-Process-Handbook\\_20171010\\_v11\\_Cleanv-nd.v2.pdf](https://shift2rail.org/wp-content/uploads/2017/12/S2RJU-Governance-and-Process-Handbook_20171010_v11_Cleanv-nd.v2.pdf)

# Internal JU processes

S2R  
Projects  
official  
reporting

## Technical reporting

Deliverables and Technical reports must be submitted in the appropriate template given in the PM handbook

## Financial reporting

All project reporting must use the appropriate template

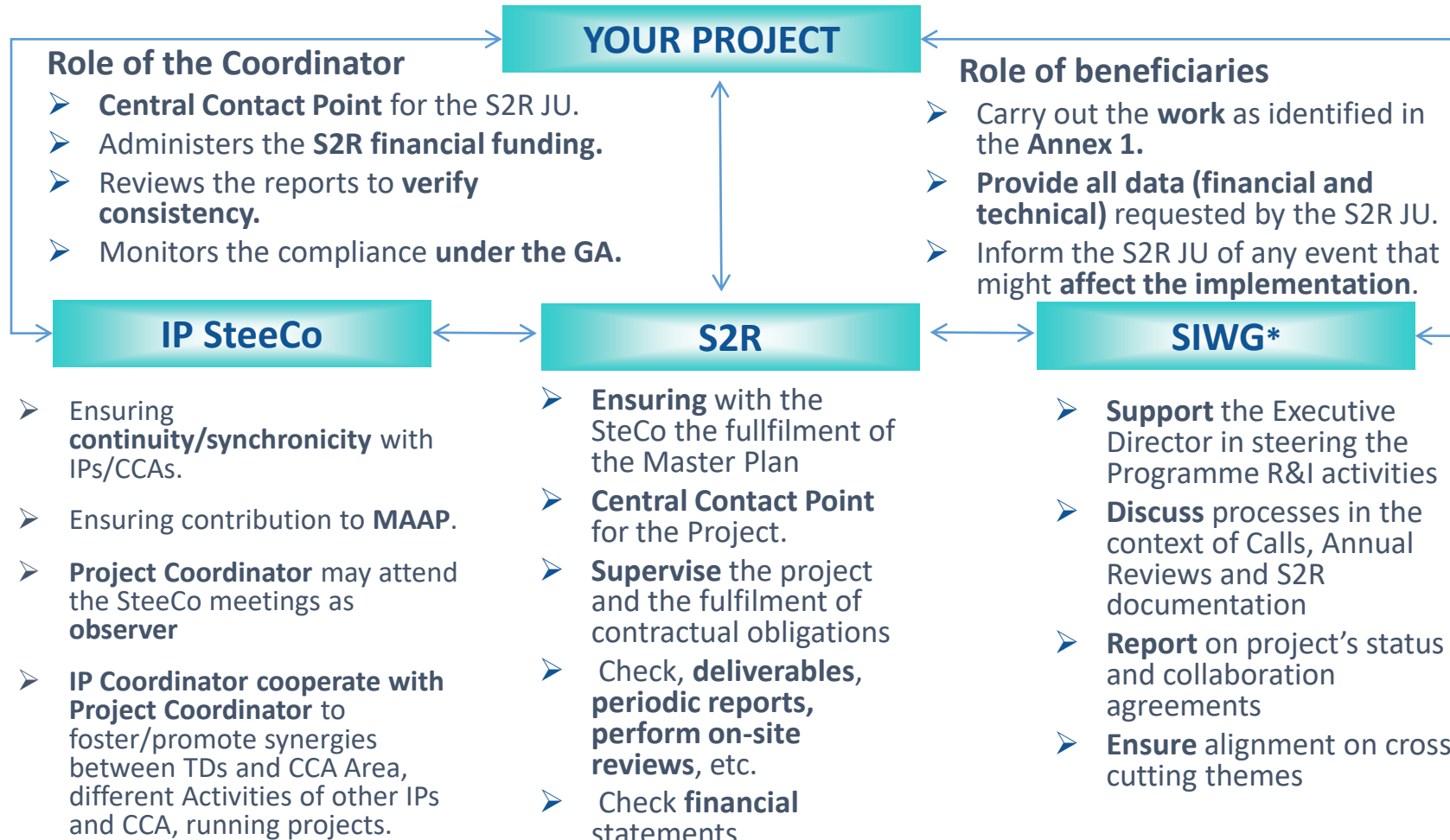
## Project reporting to the Steering Committee

Each Committee meets every three months to handle disputes, propose possible budget re-allocations and check the implementation of detailed plans.

The project coordinators carry out the day-to-day project management, technical oversight and administration of the funded activities related to TDs and ITDs.

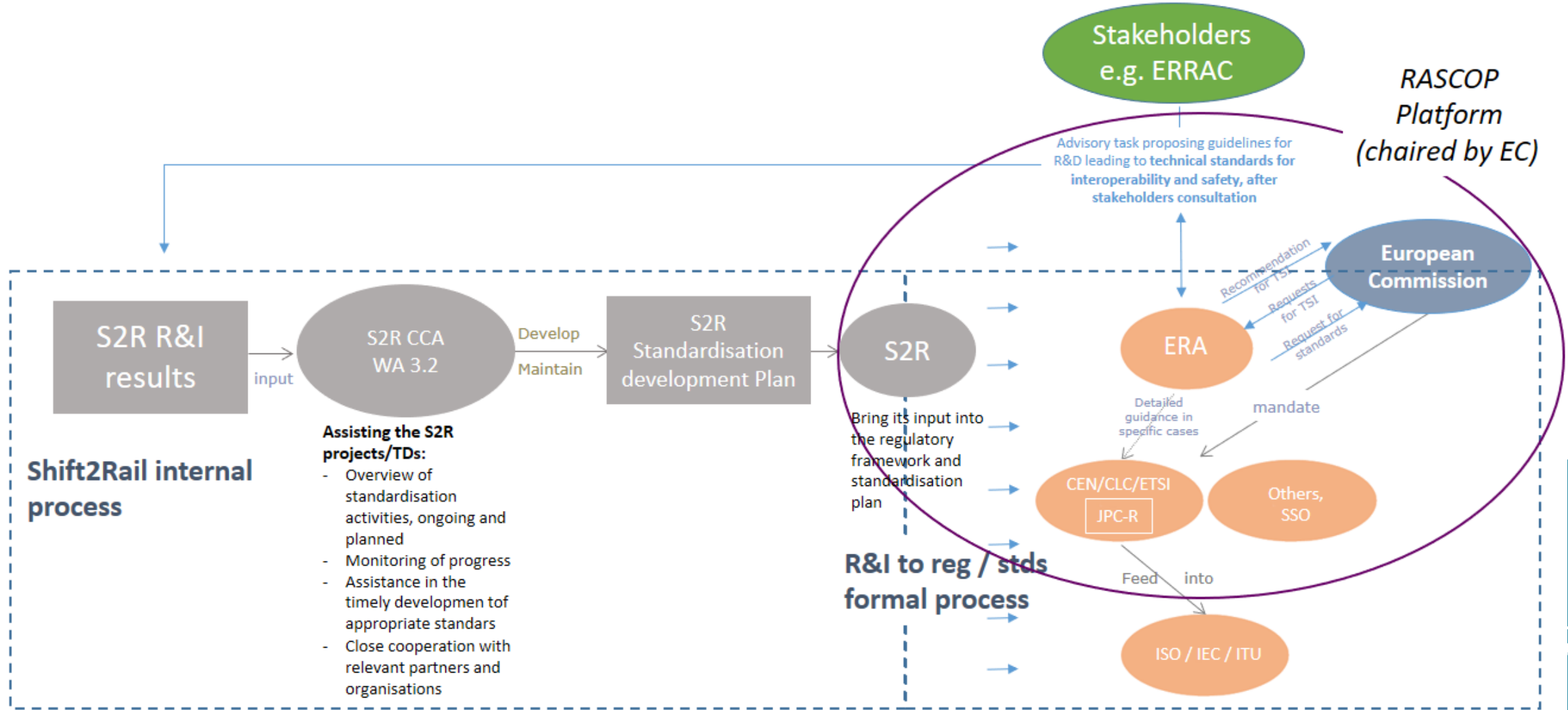
→ The project coordinators are expected to report to the SteCo the status of their project (using the appropriate template: "*Project reporting to the IP SteCo*")

# Interactions & roles



\*Programme management setup

# S2R R&I results and process leading to standards and regulation



# Projects results and process to standards / regulation

## Relation with European Agency for Railways (ERA) relevant to the Projects:

To ensure that successful results do not encounter a regulatory blocking point because of their novelty, the S2R JU has defined with ERA and DG Move a process for collaboration at project level:

1. ERA could attend the evaluation of the call proposals as observer;
2. ERA will provide to the S2R JU the *“the level of desired involvement”* in those projects within the scope of its activities;
3. The S2R JU will discuss the involvement of ERA in the indicated projects with the relevant Project Coordinator to ensure their participation as appropriate. This should be defined during the Grant Agreement Preparation (GAP) phase, as far as possible;
4. ERA will communicate to the S2R JU the name of the ERA representative who will be following up the indicated projects;
5. S2R will provide the possibility to the ERA representative(s) to attend the respective Project Kick-off meeting and may involve him/her as observer during the Review meetings or Projects checks and may request ERA to provide written advice on specific Project deliverables or reports.

# How to ensure that YOUR PROJECT will be successful?

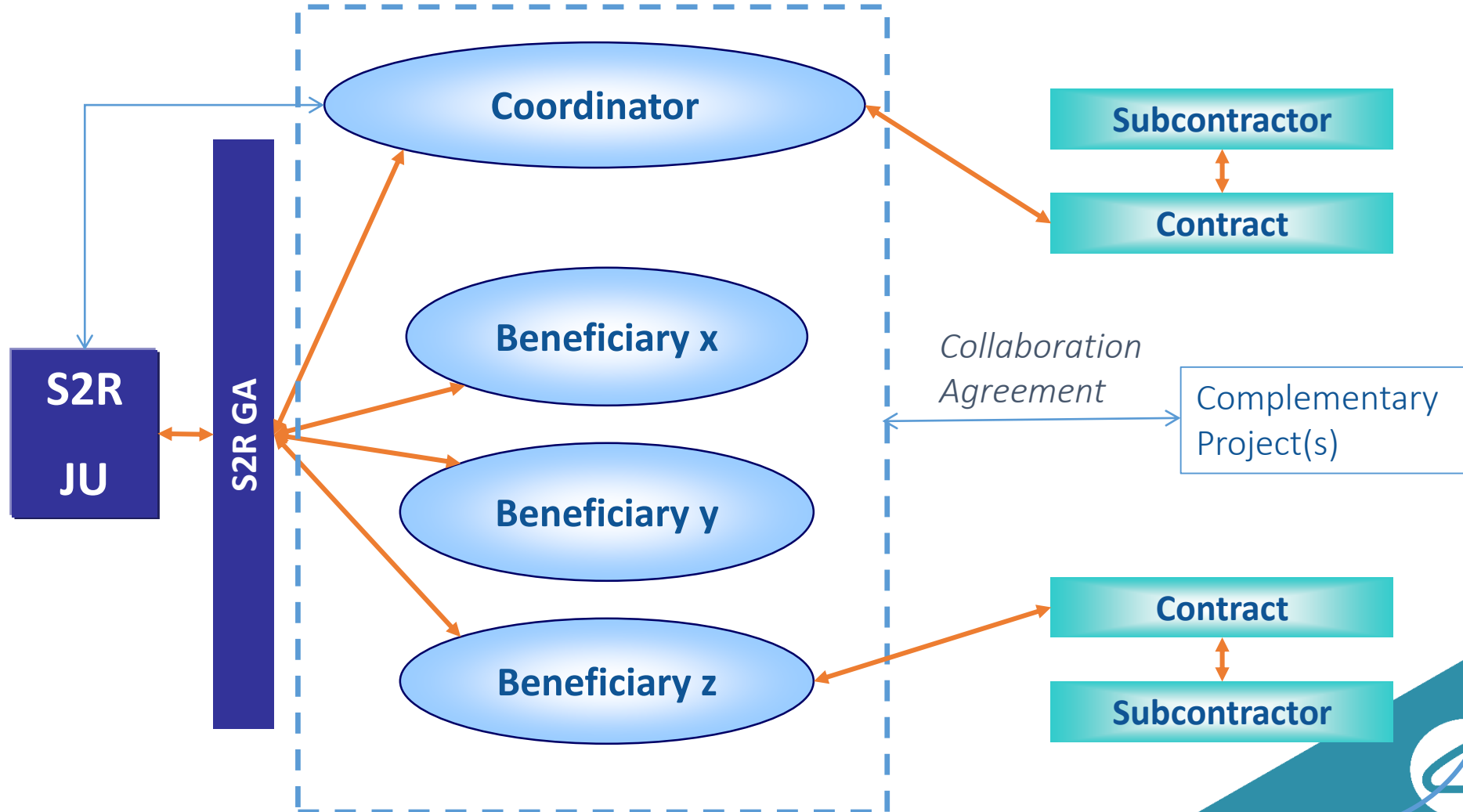
- **Delivering on time** the expected results in accordance to the plan
- **Regular dialogue with the S2R Programme Manager** to ensure a good flow of information about the project and its progress.
- **Collaboration with the bodies of the Joint Undertaking** (in particular the IP Steering Committee or other working groups set up by the Governing Board) will be important.
- **Coordination and cooperation** with the **complementary grants** (and other ongoing research projects) will be essential.
- **Coordination and communication** among the different **WPs**.
- **Collaboration to S2R KPIs and Standardization activity (CCA)**

# 4 - Manage your project: Legal Aspects

**Attention: The Following Sections Apply to**  
**Open Call Grant Agreement**

# Grant Agreement Structure

## Range of Contractual 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

# AMGA V. 5.1December2018

TYPE	CHARACTERISTICS						
	Works on action tasks?	Provides resources or services for action?	What is eligible?	Must be indicated in Annex 1?	Indirect costs?	Selecting the third party	GA articles
Linked third party	YES	NO	Costs	YES	YES	Must be affiliated or have a legal link	Article 14
International partners	YES	NO	N/A	YES	N/A	Must not be eligible for funding	Article 14a
Subcontractor	YES	NO	Price	YES	NO	Must be best value for money, avoid conflict of interest	Article 13
Third party providing in-kind contribution	NO	YES	Costs	YES	YES	May not be used to circumvent the rules	Articles 11 and 12
Contractor (selling, equipment, good or service)	NO	YES	Price	NO	YES	Must be best value for money, avoid conflict of interest	Article 10
Third parties receiving financial support <sup>31</sup>	The third parties participate in the action as recipients.		Amount of support given	YES	NO	According to the conditions in Annex 1	Article 15

# Linked third parties (Art. 14) (1)

Affiliated entities (capital link) are:

- under the direct or indirect control of the beneficiary or
- under the same direct or indirect control as the beneficiary or
- directly or indirectly controlling the beneficiary.

Entities with a legal link:

- Broad and legal relationship not specifically created for the work in the GA (no ad hoc collaboration agreements).

# Linked third parties (Art. 14) (2)

- The beneficiary remains responsible towards the JU for the work carried out by the linked third party.
- Do NOT sign the GA
- Must fulfil the same conditions for participation and funding under H2020 as beneficiaries
- Does not charge a price, but declares its own costs for implementing the action tasks

# Purchases (Art.10)

## Purchases of goods, works or services (Art.10)

- If necessary to implement the action and limited in cost and scope.
- Based the purchase either on the best value for money or the lowest price.
- “Contracting authorities” (2014/24/EU) or “Contracting entities” (Directive 2014/25/EU ) must comply with the applicable national law on public procurement.

# Subcontracting (Art. 13)(1)

Subcontracting (Art.13) versus Purchases (Art.10) (Pag. 126 AMGA):

- Implementation of action task vs necessary to its implementation (auxiliary tasks).
- Need to be indicated in Annex 1 vs No need to be indicated.
- Best value for money/national law on public procurement in both cases.

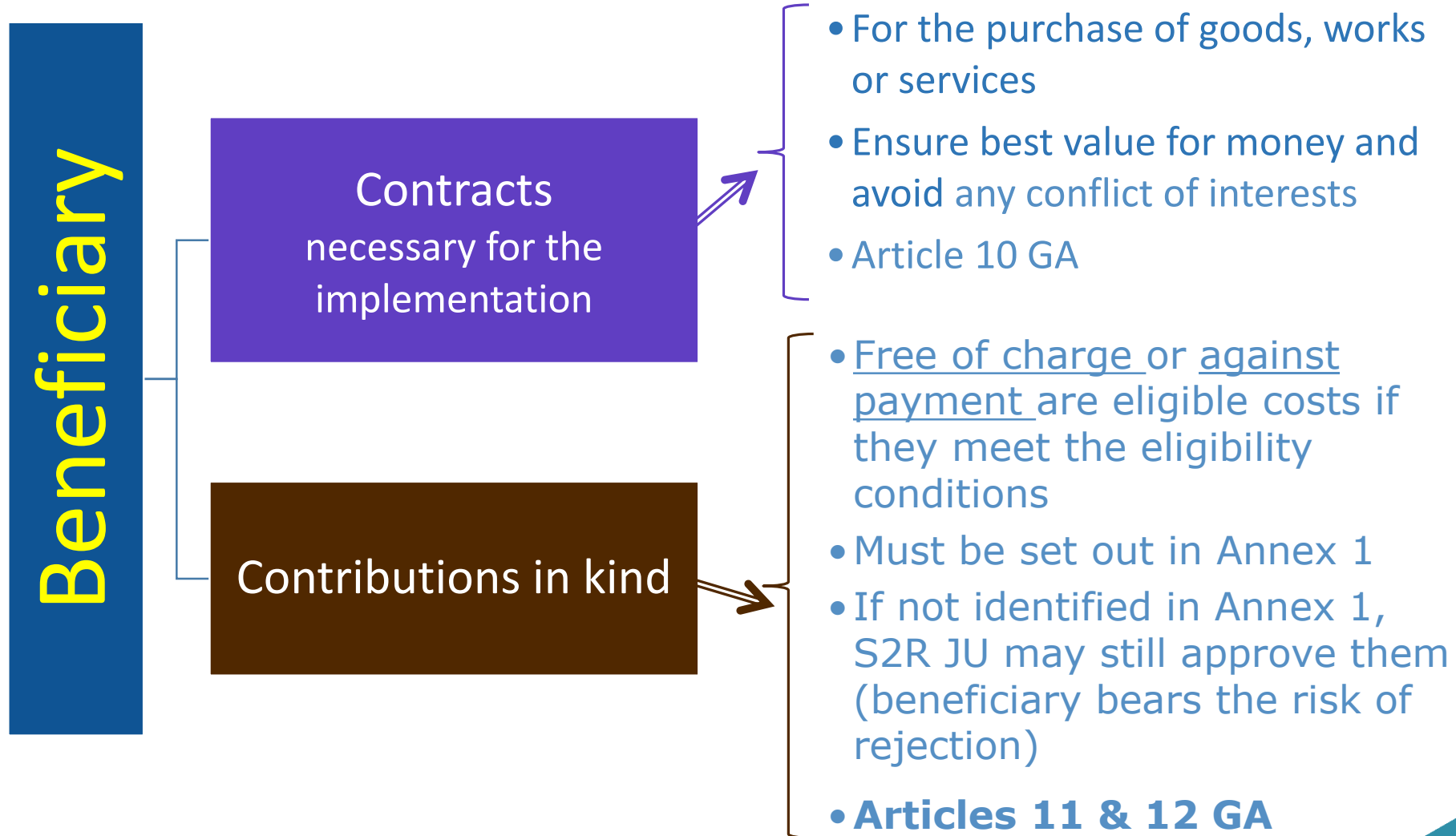
# Subcontracting (Art. 13)(2)

- If necessary to implement the action.
- Only limited to certain tasks and parts of the action.
- Based on business conditions, entailing profit.
- Work without the direct supervision of the beneficiary and it is not hierarchically subordinate to it.
- Responsibility lies fully on the beneficiary.
- Best value for money/national procurement rules.

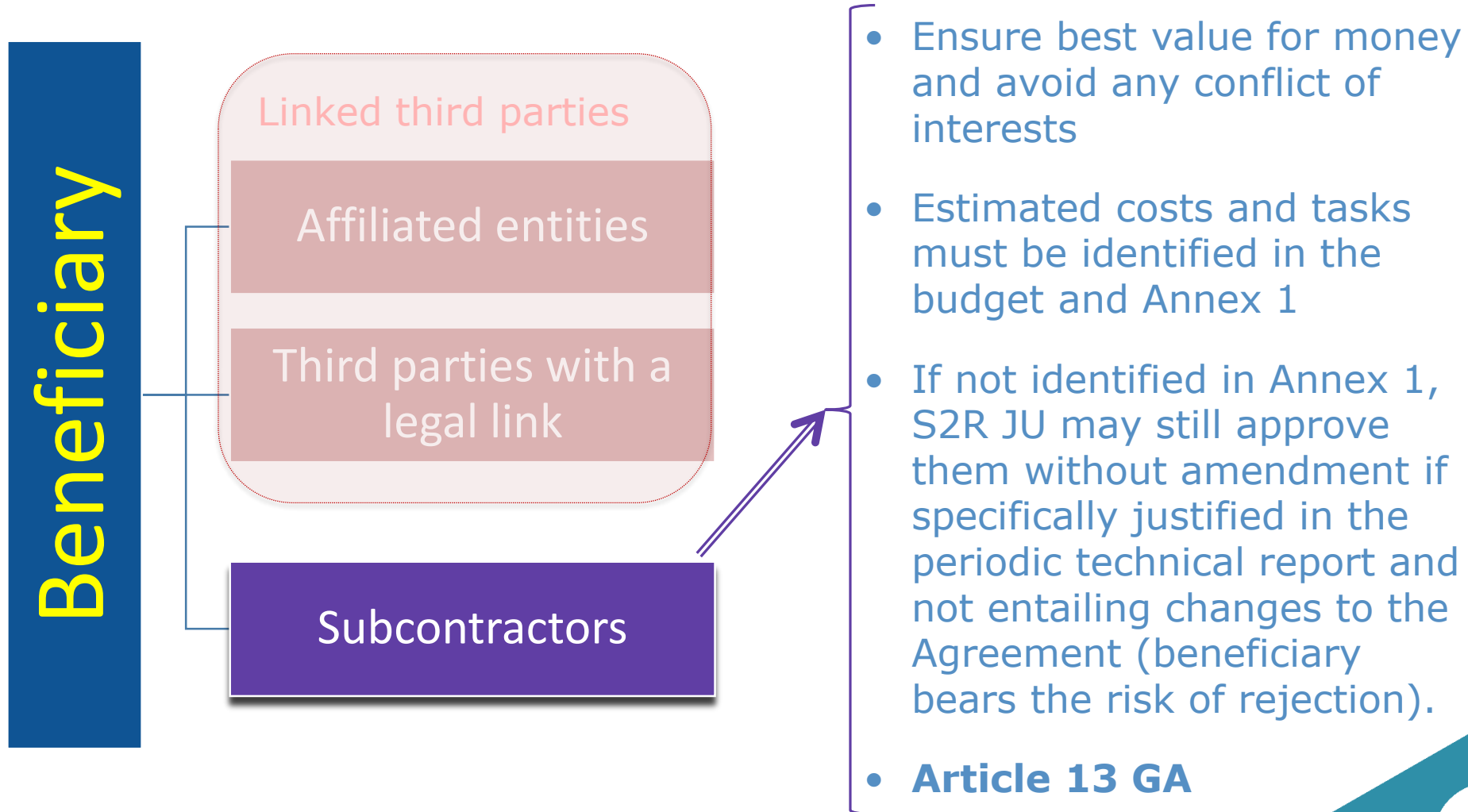
# Subcontracting (Art. 13)

- New subcontracts. If not foreseen at the moment of the signature of the GA, the coordinator must request an amendment. It can be exceptionally approved during reporting time without an amendment.
- Specific cases:
  - Framework contracts (E.g. services, furniture). If this is the usual practice of the beneficiary. Best value for money and no conflict of interest.
  - Coordinator tasks of the Coordinator cannot be subcontracted.

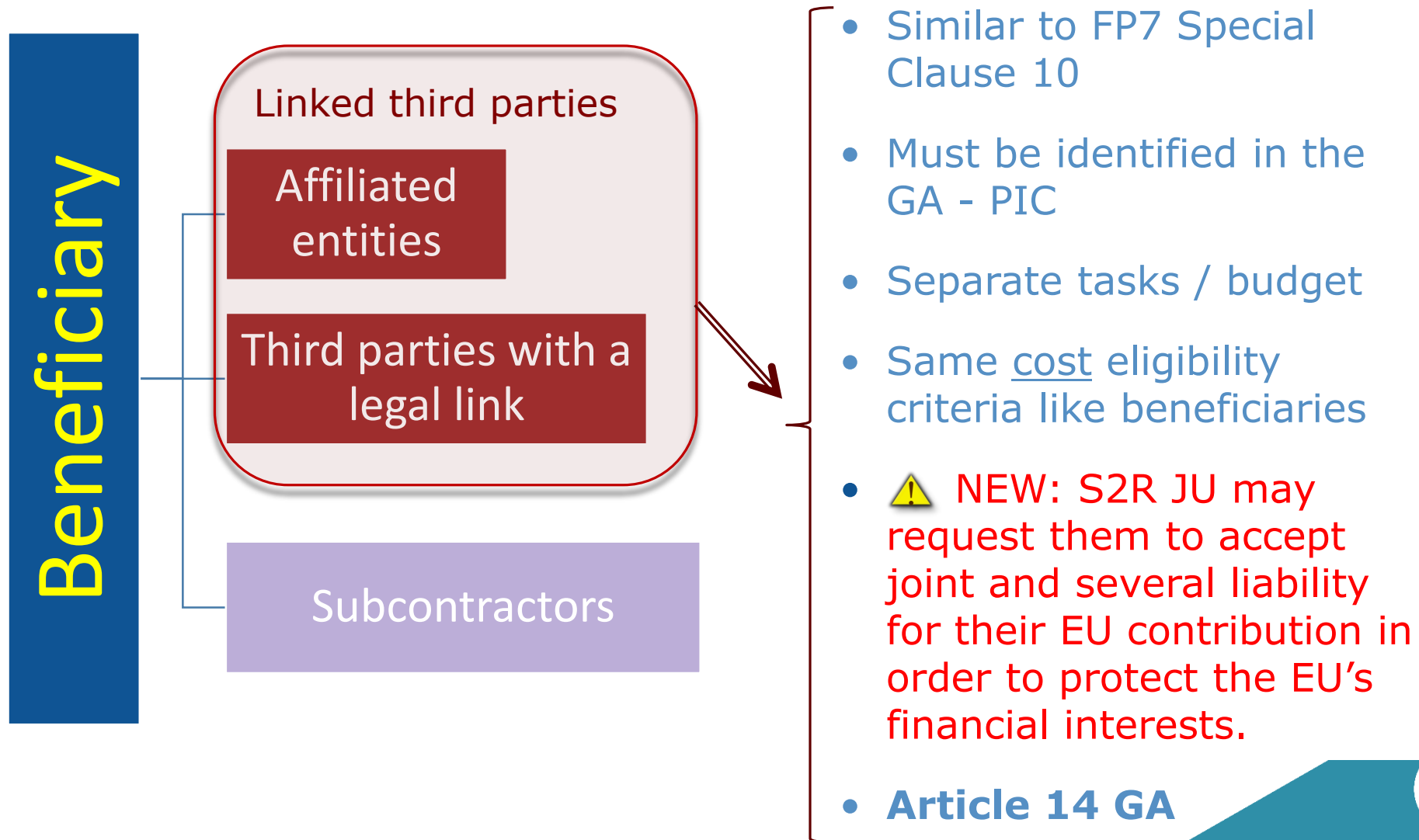
# Summary: Third parties (1)



# Summary: Third parties (2)



# Summary: Third parties (3)



# Consortium Agreement (1)

- The S2R JU is NOT part of it.

## Key issues addressed in the Consortium Agreement (Indicative list):

- Internal organisation of the consortium.
- Management of access to the electronic exchange system.
- Distribution of EU funding.
- Settlement of internal disputes.
- IPR (to be decided before signature of contract)
- Risk management / collective responsibility
- Liability, indemnification and confidentiality arrangements between the beneficiaries.

# Consortium Agreement (2)

- Mandatory unless exceptionally provided otherwise in the work programme/call.
- Must not contradict the GA.
- Should be negotiated and concluded before the signature of the GA (or serious risk that prolonged disagreement jeopardises the action).
- Costs related to the preparation of the Consortium Agreement are not eligible.

# Ethics and Security

- Ethics review is conducted in order not to fund proposals that contravene ethical principles. Proposals that are security sensitive must undergo a security screening
- 1. Self-assessment at the stage of proposals submission
- 2. Ethics review during the selection procedure
  - Clearance
  - Conditional clearance (Ethic issues to be addressed in Annex 1)
    - definition of ethics requirements
    - Ethics deliverables
  - Recommendation for ethics checks. In parallel with GAP
- 3. Ethics checks, review and audits
- **Common ethics issues – (1) participation of humans in research, (2) protection of personal data, (3) participation of third countries, (3) dual use**

## ACCESS RIGHTS TO BACKGROUND

- The beneficiaries must identify and agree on what **constitutes background** for their action.
- The agreement may take any form (e.g. positive list, negative list). It may be a separate agreement or may be part of the consortium agreement (article 41).
- If access to background is subject to **legal restrictions or limits**, the beneficiary must inform the other beneficiaries — before signing the GA
- Access must be given:
  - For the implementation of action tasks: the default rule is royalty-free.
  - For the exploitation of results: under fair and reasonable conditions.

## OWNERSHIP OF RESULTS

- Results normally belong to the beneficiary that produced them.
- **Automatic joint ownership** — If beneficiaries have jointly generated results and it is not possible to establish their respective contribution (or to separate them for protection), the beneficiaries automatically become joint owners. The beneficiaries concerned must conclude a joint ownership agreement.
- The beneficiaries must ensure that they can fulfil their obligations under the GA regarding results, by making arrangements with any third parties that could claim rights to them

## ACCESS TO RESULTS

- The beneficiaries must provide access to results, if it is needed:
  - by another beneficiary, for implementing action tasks or exploiting results
  - by an affiliated entity of another beneficiary, to exploit the results produced by the beneficiary to which it is affiliated — unless otherwise provided for in the consortium agreement.
- Access rights are not automatic; they must be requested (in writing).
- The agreement by the beneficiary owning the results (on the request for access) may be in any form (tacit, explicit, in writing or oral).

# Suspension of the GA

Costs incurred during the suspension period are NOT eligible.

By the beneficiaries(Art. 49.1):

- Exceptional circumstances (e.g "force majeure") makes implementation impossible.

By the JU (Art.49.2 GA):

- A beneficiary has committed or is suspect of having committed substantial errors, irregularities, or fraud, or serious breach of obligations under the GA.

# Termination

## By the beneficiaries(Art. 50.1 & 50.2):

- Notification must include the reason why and the date the termination will take effect.

## By the JU (Art.49.2 GA):

- Only for the grounds listed under Art. 50.3.1 GA.

*Eg. No accession to the Agreement; implementation of the action is prevented by force majeure; a beneficiary is declared bankrupt; etc.*

# **5 – Manage your project:**

## **Financial aspects -**

### **Reporting, payments, budget and cost categories**

# 5.1 - Reporting & payments

# Technical deliverables

- The S2R JU will undertake regular review for each of the funded project to **ensure the Deliverables are on-track and of the necessary quality**
  - Those “investment gate controls” are set in the GA for Members’ project as Annual → month of April, before payments
  - For OC projects the control will be based on the received deliverables and project review may also happen during the same period

# Reporting Periods OC

**S2R Governance Handbook:** Project awarded through Open Calls, the cycle is in line with the usual practice applied within H2020 projects. Consequently, the reporting period for interim payment ends is not combined with the annual cycle but has been set **every 12 months after the start of the project, for projects between 18 to 24 months, and every 18 months for longer life projects.**

## ARTICLE 20 — REPORTING — PAYMENT REQUESTS

### ARTICLE 20 — REPORTING — PAYMENT REQUESTS

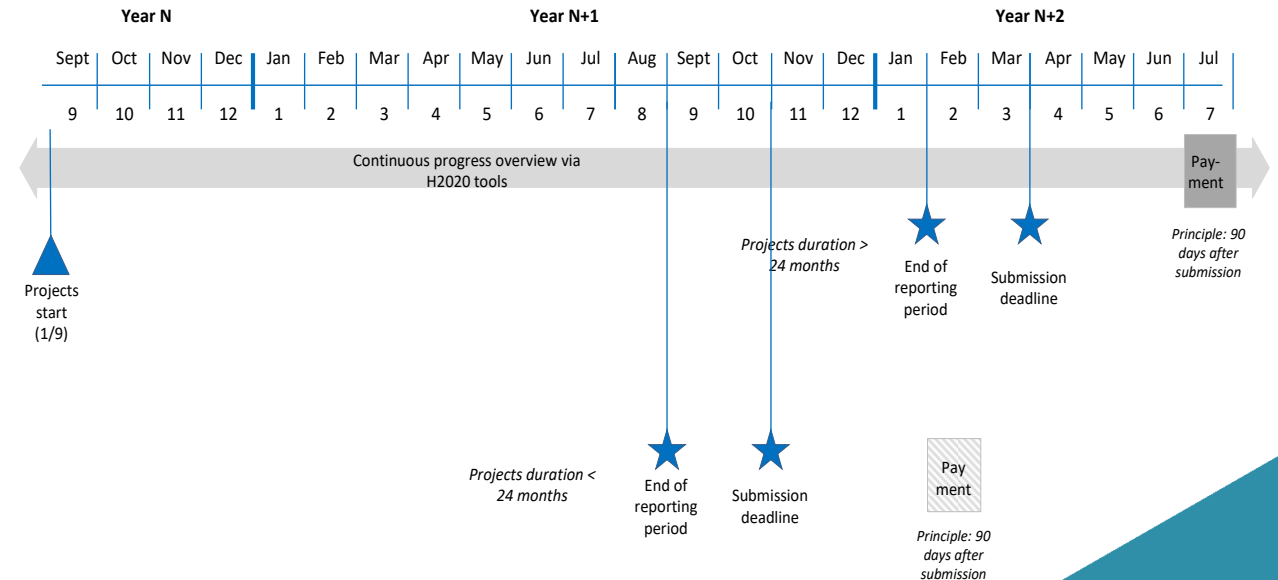
#### 20.1 Obligation to submit reports

The coordinator must submit to the *[Commission][Agency]* (see [Article 52](#)) the technical and financial reports set out in this Article. These reports include the requests for payment and must be drawn up using the forms and templates provided in the electronic exchange system (see [Article 52](#)).

#### 20.2 Reporting periods

The action is divided into the following ‘reporting periods’:

- RP1: from month 1 to month [X]  
*[- RP2: from month [X+1] to month [Y]*
- RP3: from month [Y+1] to month [Z]  
*[same for other RPs]*
- RPN: from month [N+1] to *[the last month of the project].*



# Types of payments (Article 21)



One *pre-financing*



One or several *interim payments*



One *payment of the balance*

# Payments

- 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 S2R JU requires it, in the event of a recovery at payment of the balance, if the participation of a beneficiary is terminated
- If the S2R JU does not pay within the deadline, the beneficiaries are entitled to a **late-payment interest**

# Pre-financing

## *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 EU until the payment of the balance

# Pre-financing

EXAMPLE			
Maximum grant amount (Article 5.1)	Funding rate	Reporting periods	Guarantee Fund (5 % x 1 000 000)
<b>1 000 000</b>	<b>100%</b>	<b>3</b>	<b>50 000</b>

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

## Pre-financing Payment

$$\begin{array}{c} 283\,334\,€ \\ \text{Transferred to the} \\ \text{consortium} \end{array} + \begin{array}{c} 50\,000\,€ \\ \text{Transferred to} \\ \text{the Guarantee} \\ \text{Fund} \end{array} = 333\,334\,€$$

# 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
- Financial interests generated by the Guarantee Fund will serve to **cover against financial risks**
- The amount contributed to the Fund will be **reimbursed at the end of the final payment** after the end of the project

# After the end of each interim period

**Periodic report** ⇒ submitted by coordinator 60 days after end of reporting period

## **Periodic Technical Report**

- ✓ explanation of the work carried out
- ✓ overview of progress (milestones and deliverables)
- ✓ summary for publication
- ✓ plan for the exploitation and dissemination of results (if required)
- ✓ answers to the questionnaire

## **Periodic Financial Report**

- ✓ Financial Statement (individual & summary)
- ✓ Explanation of the use of the resources

# After the end of each interim period

## *An 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 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 Statement (if needed)

# After the end of the last 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  $\Sigma$  payments made  $<$  final grant amount : *payment*
- If  $\Sigma$  payments made  $>$  final grant amount : *recovery*  $\rightarrow$  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

# Final grant amount: example

EXAMPLE				
Maximum grant amount	Approved eligible costs	Funding rate	If Receipts	If Reduction
200	220	100%	30	20

Step 1

Total approved eligible costs X reimbursement rate (100% research actions/70% and 100% innovation actions)

$$220 * 100 \% = 220$$

Step 2

The lower between Step 1 and the maximum amount of the grant

$$\text{Lower between } (220; 200) = 200$$

Step 3

If reduction due to the no-profit rule  
(Profit (only if positive) = Step 2 + receipts - Eligible cost)

$$200 - (200 + 30 - 220) \Rightarrow 200 - 10 = 190$$

Step 4

If reduction due to improper implementation or breach obligations under GA, the lower between Step 3 and the reduced maximum grant

$$\text{Lower between } (190; (200 - 20)) \Rightarrow \text{Lower between } (190; 180) = 180$$

# Reporting: what if...?

(Article 20.8)



## The consortium is late: no reports on time

- ☞ The S2R JU will send a reminder
- ☞ The payment deadline is suspended
- ☞ If still not submitted after 30 days, the S2R JU may terminate the grant agreement !



## One beneficiary is late: its report is not ready

- ☞ The Coordinator may decide to submit the reports without that beneficiary
- ☞ Beneficiary's costs will be considered 'zero' for this reporting period, but it can declare its costs with the next reporting period

# Reporting

The S2R JU analyses the reports and:



The reports are complete and satisfactory, so it pays



The reports are incomplete / further information is needed:



Commission/Agency request information to coordinator



Payment deadline is suspended



In exceptional cases the S2R JU may:



Reject the reports giving justification



Suspend the payments for one or more beneficiaries



Terminate the grant

# Reminders for the financial reports

- **Linked third parties** fill in a separate financial statement but only their beneficiaries can encode it in the IT system
- Don't forget to submit the **Certificate on the financial statements** (for beneficiaries and/or the linked third parties), if needed
  - \* as part of the final report
  - \* when total EU contribution claimed by the beneficiary on the basis of actual costs + unit costs for average personnel  $\geq$  EUR 325.000 (excluding e.g. flat rates !)

## 5.2 - Budget and cost categories

# Budget Transfers

	Estimated eligible* costs (per budget category)										
	A. Direct personnel costs				B. Direct costs of subcontracting	[C. Direct costs of fin. support]	D. Other direct costs	E. Indirect costs	[F. Costs of...]		
	A.1 Personnel		A.4 SME owners without salary				D.1 Travel		[F.1 Cost of ...]		[F.2 Costs of ...]
	A.2 Natural persons under direct contract		A.5 Beneficiaries that are natural persons without salary				D.2 Equipment				
	A.3 Seconded persons						D.3 Other goods and services				
	[A.6 Personnel for providing access to research infrastructure]						D.4 Costs of large research infrastructure				
Form of costs***	Actual	Unit	Unit		Actual	Actual	Actual	Flat-rate	Unit		Unit
			XXX EUR/hour						xxx EUR/unit		
	(a)	Total (b)	No hours	Total (c)	(d)	(e)	(f)	(g)	No units	Total	Total
Beneficiary 1	500.000	0	100	3.213	150.000	0	325.000	207.053	0	0	0
Beneficiary 2	0	300.000	0	0	0	0	125.000	106.250	0	0	0

# Budget Transfers

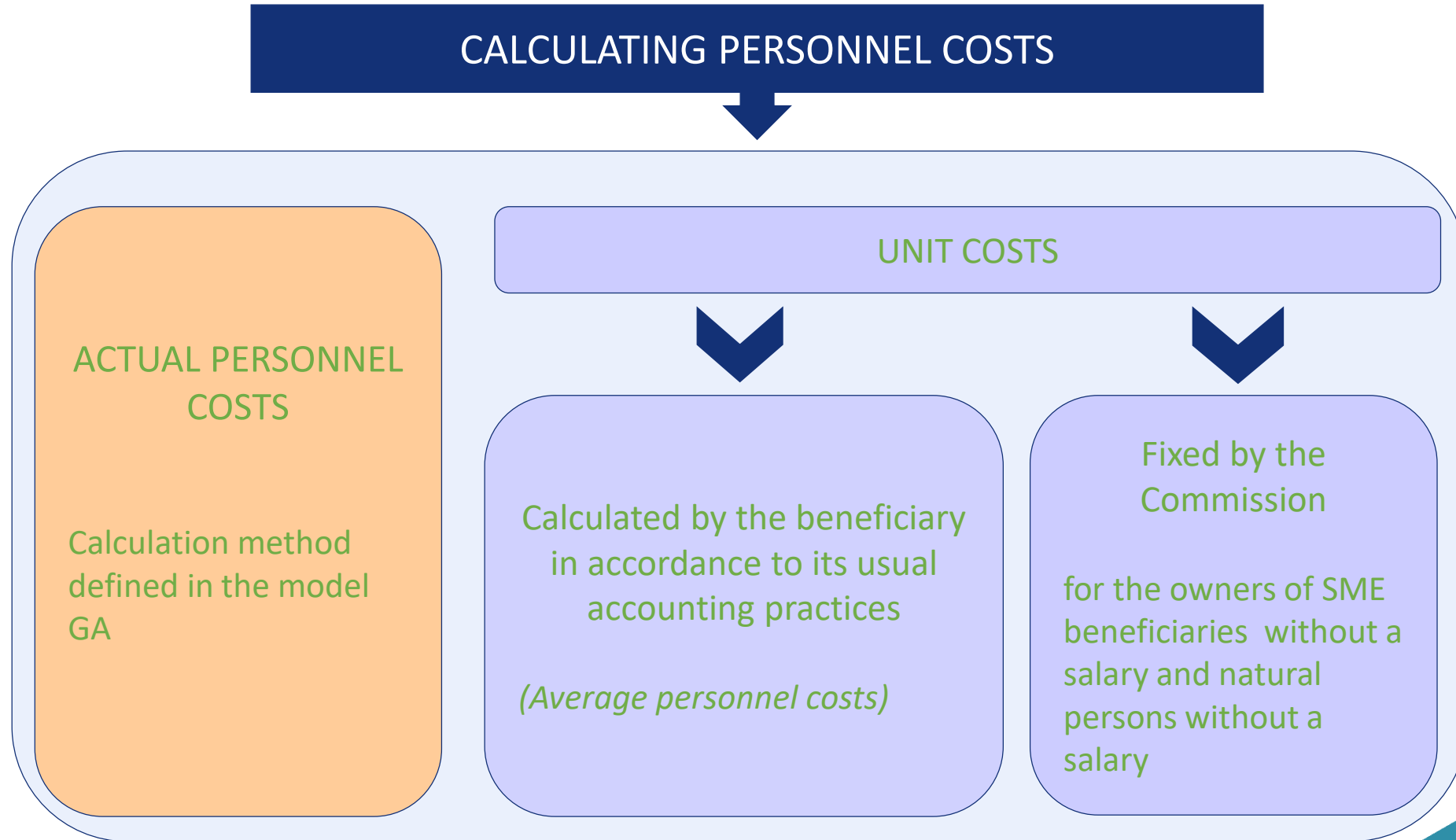
Budget transfers and re-allocation	Amendment needed?
From one beneficiary to another	NO
From one budget category to another	NO
Re-allocation of Annex 1 tasks	YES
Transfers between forms of costs (actual costs, unit costs, etc.)	YES if the 'form' receiving the transfer was not included in the budget (example a new unit cost)
<input type="checkbox"/> Transfers within <i>personnel costs</i>	NO
New subcontracts	YES (strongly advised)

NEW !

# Eligibility

- Staff working on the project must keep time records (hours they spend on the project; regularly (daily, weekly); countersigned by a supervisor
- You must declare costs based on the actual amounts spent (AGA Article 5, Article 6(1)): Personnel Costs based on actual staff costs; Other direct costs based on actual costs for the project (AGA Article 6,2 D); Depreciation costs for assets; Real costs of consumables
- You cannot, under any circumstances, sub-contract to a project partner (AGA Article 13)

# Personnel Costs



# Other Direct Cost

- Cost must be actual, identifiable and verifiable (Art. 6 AGA)
  - *No estimation of costs*
  - *No budgeted costs*
- May include energy and power supply if can be measured and if it is the general practice to include actual cost to a project and not include it to the overheads
- Spare part may be included but only from the portion of actual consumption
- **Contracts when they do not cover the implementation of action task but they are necessary** (audit certificate, translation, consultant, setting up a website if not identified in Annex 1 as a task to the project) – Art. 10 AGA
- Depreciation of equipment only in case directly used in projects, otherwise subject to timesheets (No % approach)

# Subcontracting – Art. 13

- Subcontracts cover the implementation of action task as described in Annex 1 (Website, testing, building a prototype or any other defined in Action tasks)
- Not covered by the flat rate of indirect cost
- Subcontracting between beneficiaries in the same project is not allowed (p. 133 AGA)

# Best Value for Money

Decision tree...  
a possible  
approach  
but refer always  
to the AGA  
principles



# Controls and audits: ex-ante

- Financial viability
  - Most beneficiaries exempt from detailed analysis; only systematic check **for coordinators when requested EU funding for the action is  $\geq$  EUR 500 000**
- Certificates
  - Certificate on the financial statements: Only for final payments when total EU contribution claimed by the beneficiary on the basis of actual costs + unit costs for average personnel  $\geq$  EUR 325.000 (excluding e.g. flat rates !)
  - Certificate on the methodology: Optional for average personnel costs (now under unit costs)

# Controls and audits: ex-post

- **“Ex-post” controls**
  - Audits of the S2R – performed by EC services on behalf of S2R JU – limited to two years after the payment of the balance
  - Audits performed by the European Court of Auditors
  - OLAF Investigations....
- **Extension of audit findings**
  - Former "extrapolation" now included in the AGA
  - In the case of systemic or recurrent errors, irregularities, fraud or breach of obligations

## **6 - Manage your project: Financial Aspects Do's and Dont's**

*Please help us to help you to avoid errors!*

# Consequences of errors

Controls and audits are undertaken by the S2R JU (AGA Article 22) and the European Court of Auditors ... OLAF

Identified errors could lead to:

- Recovery of the undue amount (some time after you have received the money!)
- Penalties
- Reputational damage
- Financial losses
- etc

# GAP checks

- Check that all third parties have been **clearly** declared (AGA Articles 6, 11, 12, 14)
- Check that all sub-contracting of scientific (or other) work has been **clearly** declared (AGA Article 13)
- Using in-house consultants? – please check the rules carefully (AGA Article 6.2 A2)
- Is a partner an interest group without staff? – normally staff costs relate to employees, this may be better declared as sub-contracting (AGA Article 6.2, A1)

# Time records

**You must keep time records!**

Typical errors:

- Staff working on the project and sick or on holiday at the same time
- Hours claimed cannot be supported
- Impossible number of hours claimed

# Actual Costs

**You must declare costs based on the actual amounts spent**

- Typical errors
  - Declaration of the agreed budget for the project – the budget is a maximum amount, not THE amount or a price!
  - Full costs of assets charged
  - Internal charging system with no relation to real costs
  - No demonstrated link of consumables to the project

# Best Value

**You must demonstrate "best value" in purchasing (AGA Article 10) and sub-contracting (AGA Article 13)**

- some level of tendering to demonstrate "best value" – e.g. tender, three offers, market survey ....
- We will normally accept your standard practices, when properly used
- We will normally accept commercial agreements already in place
- Naming the supplier in the contact does not mean that you do not have to demonstrate best value

# Best Value

**You must demonstrate "best value" in purchasing and sub-contracting**

Regular errors

- "best value" not demonstrated – no tender, no offers, no market survey
- Participants own normal practices not applied
- No documentation kept

# 5 most common errors

1. Direct costs apportioned, not measured

2. Time sheets

3. Best value for money (subcontracting and purchase of goods)

4. Basic vs additional remuneration

5. In-house, near off-site, semi-permanent, teleworking consultants

5+. Same old friends: no papers, depreciation "in one shot"

# Direct Cost Examples

- Administrative staff members doing project accounting:  
-> can I charge them to the project?  
Yes, with time sheets...
- I have a big multi-purpose equipment and I use it for several activities and projects:  
-> can I charge its depreciation to an EC project as a % of total capacity based on my experience?  
No. I have to measure its use.

# Timesheets examples

TIME RECORDING FOR A HORIZON 2020 ACTION																				Month:	05	Year:	2016										
Title of the action (acronym):																				Grant Agreement No:	700127												
Beneficiary's / linked third party's name:																																	
Name of the person working on the action:																				Type of personnel <small>(see Art. 6.2.A Grant Agreement)</small>	Permanent												
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total	
Reference e.g. work package																																	
1	8	6	7.5																													*	
<div style="background-color: #d4edda; padding: 10px;"> <p>- Hours worked on this project only (not on other projects/activities)</p> <p>- Auditable time recording based on Timesheets</p> </div>																																	
Total Hours	*																																
Short description of the activities carried out in the month: Reporting of the project on the H2020 portal																																	
Signed (name of the person working for the action): Date:	 																			Signed (name of the supervisor): Date:	 												

# Timesheets examples

## Electronic timesheet:

1. Electronic signature linking the electronic identity data with the electronic validation data require a password and user name
2. There is a documented secure process for managing user rights
3. An auditable log of all electronic transactions

# Declaration for persons working exclusively on the action:

Model available in the AGA  
(version 19/12/2014)

- ☐ the whole reporting period
- ☐ from ...../...../.....<sup>3</sup> until ...../...../.....<sup>4</sup>  
(This period must cover at least one full natural month)<sup>5</sup>



**Only one declaration can be made per reporting period for each person**

Version 1.1 – December 2014

## Declaration on a person working exclusively on a H2020 action

Action			
Title of the action (acronym)		Grant Agreement number	
Beneficiary's/linked third party's name			
Reporting period covered by this declaration <sup>1</sup>			
Reporting period number	from (date)	to (date)	

This document certifies that .....<sup>2</sup> has worked for the beneficiary/linked third party exclusively on the above-mentioned H2020 action during (chose one below):

- ☐ the whole reporting period
- ☐ from ...../...../.....<sup>3</sup> until ...../...../.....<sup>4</sup>  
(This period must cover at least one full natural month)<sup>5</sup>

Short description of the activities carried out during the period covered by this declaration	
Reference (e.g. work package)	Activities

### SIGNATURES

For the beneficiary/linked third party (supervisor)

Name: .....

Date: ...../...../.....

Signature: .....

For the person working exclusively on the action

Date: ...../...../.....

Signature: .....

<sup>1</sup> Only one declaration can be made per reporting period for each person working in the action.

<sup>2</sup> Insert name of the person.

<sup>3</sup> Insert date.

<sup>4</sup> Insert date.

<sup>5</sup> The person must keep timesheets for any hours worked for the action outside the period indicated herein.

# Hours worked for the action

You cannot declare:

- Budgeted time (what you indicated for the budget)
- Estimated time (e.g. person 'guessing' at the end of the year)
- Time allocation (e.g. x % of the contractual time of the person)



Hours declared to the action must be supported by reliable records and documentation !

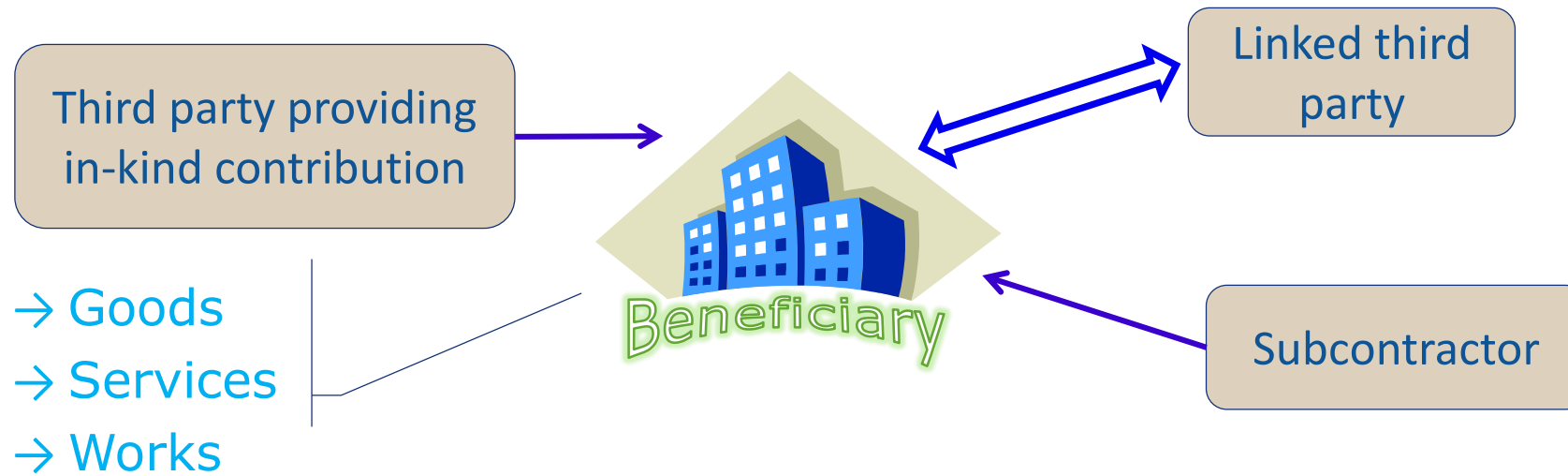
# Best Value for Money Errors...

You must demonstrate 'best value for money' and take measures to avoid 'conflict of interests' in sub-contracting and in Purchase of Goods

## Regular errors

- 'Best value' not demonstrated – no tender, no counter-offers, no market survey.
- Participants' own normal practices not applied.
- No documentation kept.
- Conflict of interests overriding any competition.

# Third Parties' warnings



**The beneficiary retains the sole responsibility for the work and the costs declared !**

If something goes wrong with the third party, the beneficiary will be responsible.

# 7 – Amendments, legal basis



## 7.1 – Legal Basis

# Amendments General (1)

Article 55 AGA

**WHAT ?**

An amendment to the grant agreement is necessary to change GA specific data, GA options, **Annexes 1 and 2**

Consequences

The amended provisions **become an integral part of the GA**

other provisions remain unchanged and have full effect

# Amendments General (2)

- An amendment is necessary whenever there is a need to change the GA
- Amendments may NOT result in changes that would impact the award decision.
- The general terms and conditions of the GA can NOT be changed via amendment.
- The amendment will take effect either on the day of its entry into force or on the specific date(s) indicated in the amendment.

# Amendments: When?

*Requests will be introduced **before the end of the action** (i.e. date set out in Article 3)*

**Exception:** *After the end of the action in exceptional cases (e.g. change of coordinator/bank account to make the payment of the balance)*

*Requests will be submitted **sufficiently in advance** (to allow preparation and proper analysis before the changes are due to take effect)*

# Amendments: Who?

**Coordinator** submits & signs amendments on behalf of the beneficiaries (Annex 3 – Accession Form)

***Exception:** if change of coordinator without his/her agreement, request must be done by another beneficiary (acting on behalf of the other beneficiaries)*

Coordinators must ensure internally the agreement of the consortium based on their internal decision-making processes

*(e.g. unanimity, simple or qualified majority etc. set out in the consortium agreement)*

# Amendments: how?



## **Prepared electronically**

Requesting party will encode the amendment request

- \* Indicate the reasons
- \* Upload the supporting documents
- \* Get validations done before submitting the request

*(e.g. new legal entity, new bank account validations)*

**Submitted & signed electronically** (by PLSIGN)

**Counter signed electronically** by receiving party (by PLSIGN)



## 7.2 - Cases where an amendment is necessary (some examples)

# Beneficiaries - changes

## 1. Removal of a beneficiary whose participation is terminated (Article 50.2 and 50.3)

- If it never became a beneficiary:
  - non-accession to GA, or
  - non-provision of requested declaration on joint and several liabilityBeneficiary is removed from the beginning
- For other reasons set out in Article 50
- Annexes 1 and 2 will be changed.
- If the coordinator is removed, the amendment has to propose a new coordinator.
- LTP participating with the beneficiary will be automatically removed.

# Beneficiaries - changes

## 2. Adding a new beneficiary

- New beneficiary must be validated and have a PIC before the submission.
- New beneficiary and accession date are added to the Preamble of GA. It is possible to choose between the date of the signature of the accession form; the date of entry into force of the amendment or a fixed date (future or retroactive).
- Annexes 1 and 2 will be changed.
- Depending on type of beneficiary (e.g. JRC, IO) and if it was/was not receiving EU funding options will be added/modified/become applicable

# Coordinator - changes

## 3. Change of coordinator

- 'Handover date' will be added in the Preamble of the GA
- There is NO need for an amendment to change the *person* in charge of the coordination of the project.
- Amendment request can be submitted after the end date of the action (e.g. coordinator in bankruptcy)

## 4. Change of bank account for payments

- Banking information must be validated before submitting the request

## 5. Change of the option for 'authorisation to administer'

- Option in Article 41.2 is added/removed/modified (e.g. change of name of the entity with an 'authorisation to administer')

# Action or action implementation - changes

## 6. Change to Annex 1 (description of the action)

- Significant change of the action tasks (e.g. if tasks are added/removed) or their division among the beneficiaries
- Changes concerning in-kind contributions provided by third parties (against payment or free-of-charge) or subcontracts
- Changes concerning the tasks to be carried out by linked third parties and related costs
- Changes to the options in the GA (e.g. options are removed or added)
- Example: adding the options to provide trans-national access to research infrastructure requires normally a modification of Annex 1 and/or Annex 2

# Financial Aspects -Changes

## 7. Change to Annex 2 (estimated budget)

- Budget transfer between beneficiaries or budget categories (or both) due to a significant change of Annex 1
- Budget transfer to a form of costs that is not provided for in Annex 2

*Examples:*                      *from actual costs to the unit costs for SMEs owners*  
                                         *from actual costs to average personnel costs*

## 8. Change of Annex 2a: 'Additional information on the estimated budget'

If the calculation of the unit costs needs to be provided or updated

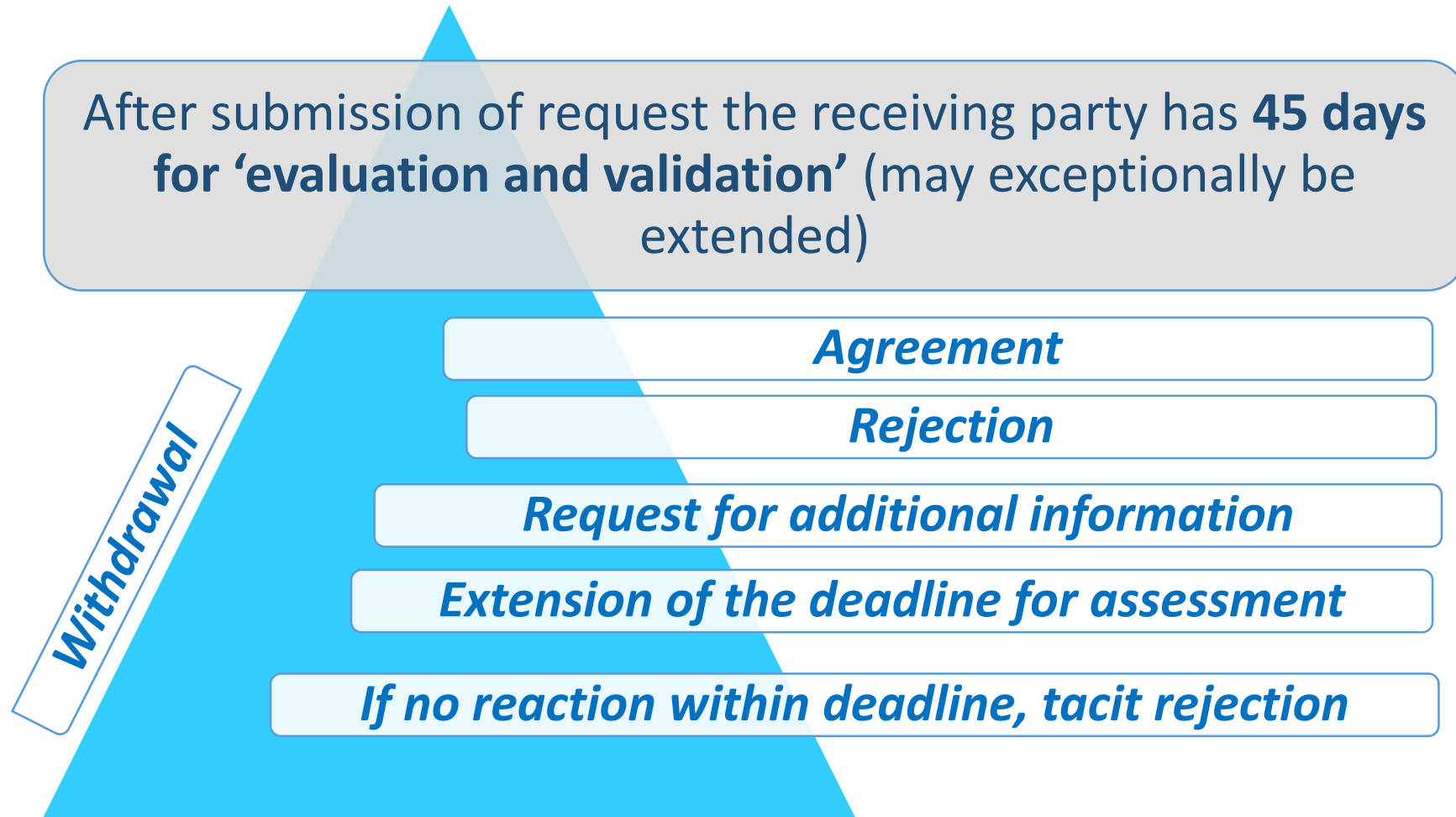
# No Amendment

1. Change of name, address, or other legal entity data of the coordinator, beneficiary, linked third party
2. Change of beneficiary due to universal takeover  
(In FP7: 'universal transfer of rights and obligations')
3. Changes to name of the bank, address of branch and name of account holder  
(validation of this data on the PP by the S2R JU is sufficient)



## 7.3 – Amendment procedure

# Amendment Procedure (1)



# Amendment Procedure (1)

A request containing several changes to the GA will be considered as a **package and:**

- it cannot be divided into several requests;
- request will be agreed or rejected as a whole;
- cannot be modified.

If there is **no reaction** within this deadline the request is considered to have been rejected

There is no tacit approval of amendments (contrary to FP7)

# Entry into force and taking effect

- An amendment **enters into force** and is binding from the moment the receiving party signs it (in the electronic exchange system)
- An amendment **takes effect** (the changes will start to apply):
  - when the amendment enters into force, or
  - on the date agreed by the parties

This date should normally be **after** the entry into force

If an amendment request involves several changes, they could take effect on **different dates** (*e.g. addition of beneficiary and change of bank account*)

Depending on the type of change, the date of taking effect may have an **impact on the eligibility of costs**

# 8 – Communication and Dissemination

# Communications

## ➤ Important for S2R! (and obligation on the GA)

- Communications plan in the proposal and the grant agreement
- Promote your project and its results beyond the project's own community
- Communicate your research in a way that is understood by non-specialists, e.g. to the media and the public
- Inform us in advance of communication activities expected to have a major media impact

## ➤ Communication ≠ dissemination

- Dissemination is a separate obligation (e.g. through scientific articles and conferences)



# Communication and Dissemination

- **See article 29 of the GA**  
**European Union / S2R support shall be highlighted**
  - JU logo and the EU emblem to be displayed
  - Disclaimer to be added on any communication (publicity reflects the author's view and the JU is not liable of any use ...)
- **Right for the S2R JU to publish information on the project**
  - The consortium shall ensure that all necessary authorisations for such publications have been obtained
- **Confidentiality:**
  - During the project and for a period of 5 years after completion

# Communication and Dissemination

- Inform the JU PM and communication unit of any participation in conferences/events, new videos, dissemination action, etc... We can help!
- The planning of mid-term conference and final conferences need to be agreed with the S2R JU, so that we can have a Programme approach
  - Try already to check with your complementary project for synergies in this respect
- If you are planning to develop a project logo (non compulsory for S2R), this needs to contain “a Project of the S2R JU” in the logo itself

→ *Please note that if the dissemination/communication actions foreseen by the Grant Agreement or requested by the S2R JU in the points above are not implemented, the S2R JU will reduce the S2R JU contribution to the project accordingly to art.29.6 of the GA (reduction can reach 100% of GA contribution)*

# Use of S2R Label and Position

## ***Extracts from S2R Governance and Process Handbook:***

Projects documents with the S2R logo **can only represent a S2R position\* if the following conditions are all met:**

- a) There is an agreement within the Project and following the Project decisional procedure
- b) There is an agreement within the respective IP/CCA SteCo
- c) There is an official agreement from the S2R JU, through a written confirmation of the S2R ED

Similarly, any Project beneficiary or S2R Member **can only officially represent a S2R position\* if:**

- the conditions a, b and c above are all met in case of a Project beneficiary
- the conditions b and c above are all met in case of a S2R Member

The Project Coordinator or the concerned S2R Member will need to promptly inform the S2R Programme Manager assigned to the Project or the S2R Head of R&I should such cases arise.

*\*List of official S2R positions available in Annex G*

# Thank you for your attention

@Shift2Rail\_JU  
#Horizon2020



## FOUNDING MEMBERS



**ALSTOM**

Ansaldo STS A Hitachi Group Company

**BOMBARDIER**

**CAF**

**NetworkRail**

**SIEMENS**

**THALES**

**TRAFIKVERKET**

## ASSOCIATED MEMBERS

**amadeus**



**indra**

**kapsch** >>>



Virtual Vehicle Austria consortium+  
(VVAC+)

European Rail Operating  
community Consortium (EUROC)

Swi'Tracken consortium

Smart DeMain (SDM) consortium



AERFITEC

Competitive Freight Wagon  
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Smart Rail Control  
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