

Shift2Rail IP3 Projects
IN2SMART / IN2TRACK / S-CODE
Mid-Term Conference

Paris 24 January 2018

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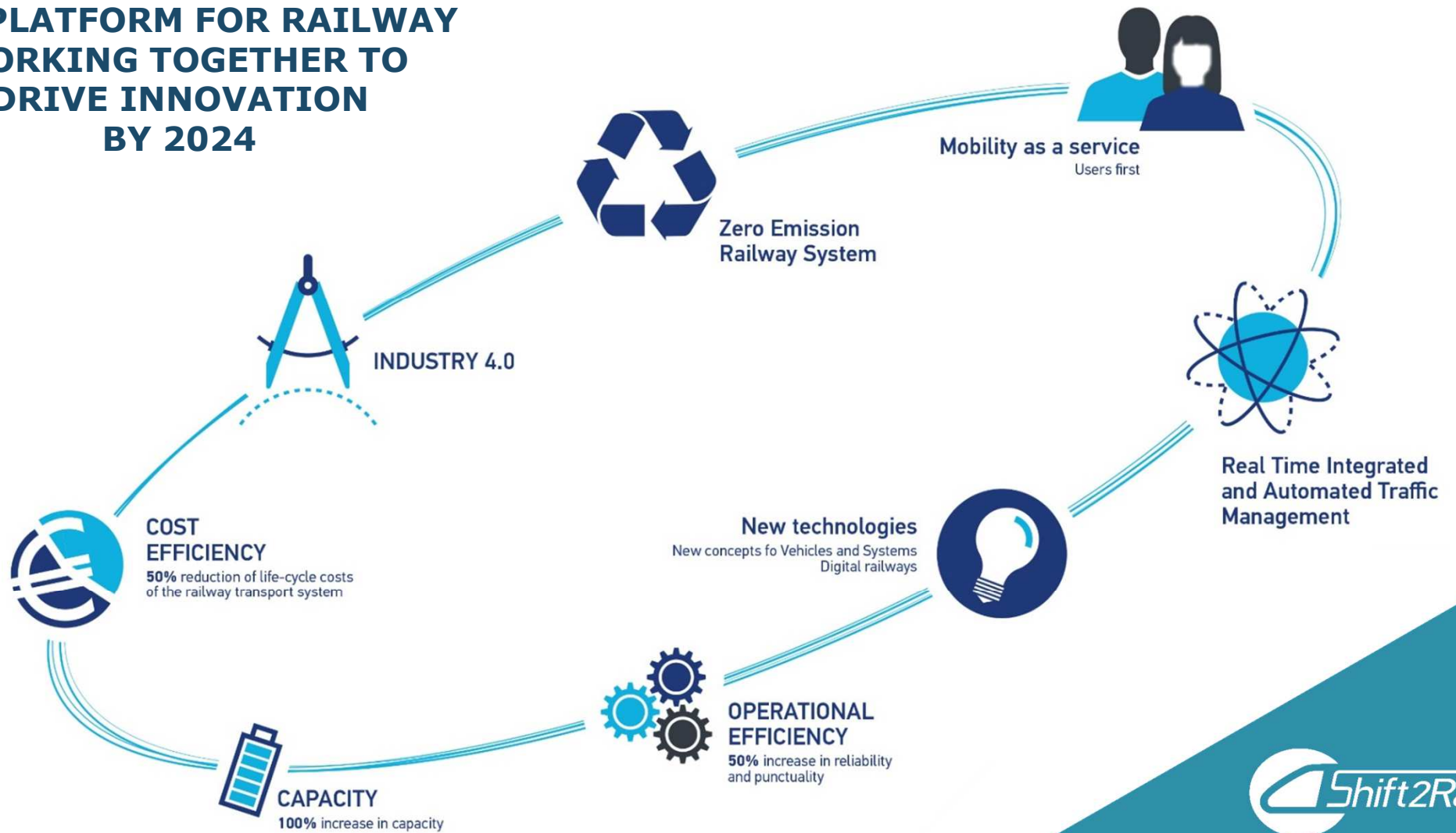
Head of Research & Innovation a.i.

S2R Joint Undertaking

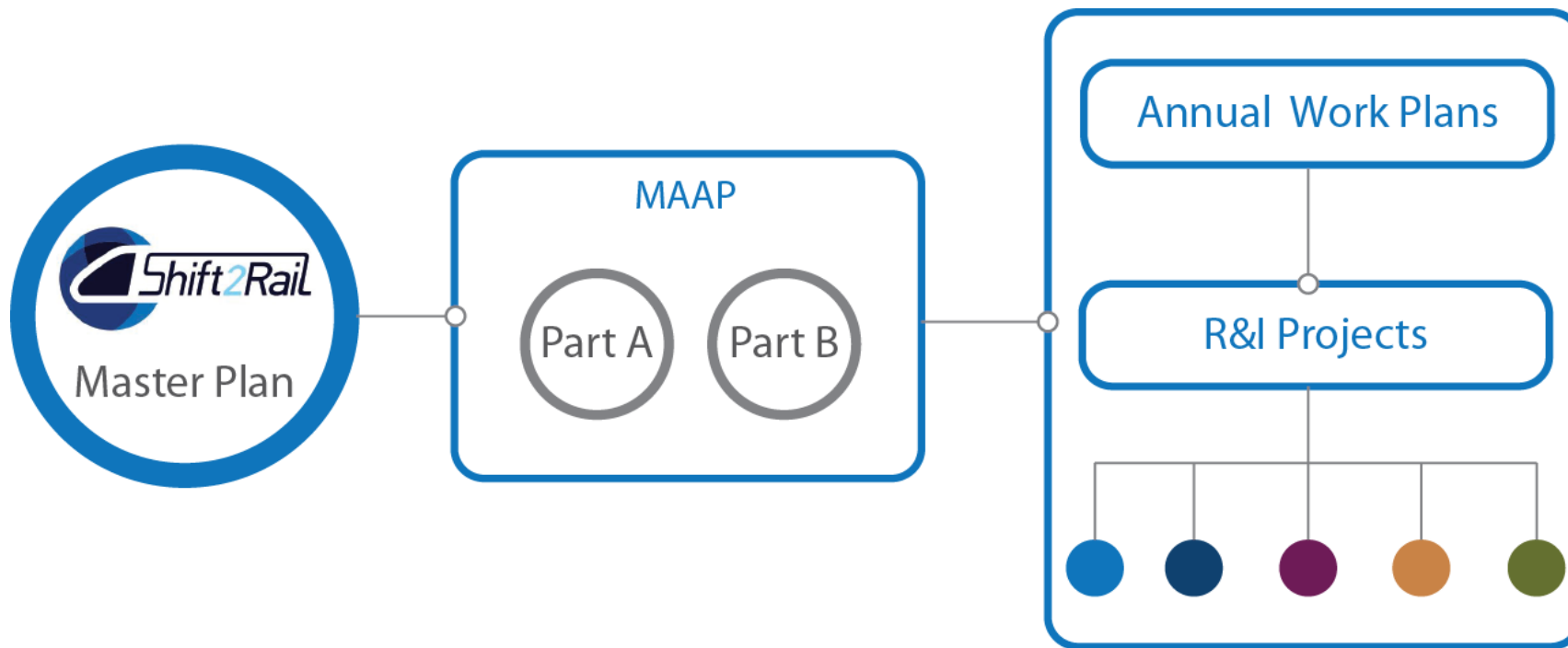
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A PUBLIC-PRIVATE PARTNERSHIP R&I PLATFORM FOR RAILWAY WORKING TOGETHER TO DRIVE INNOVATION BY 2024



The S2R Programme implementation



The S2R MAAP*

- is a collaborative long-term investment planning document, which now also contains an Executive View (**Part A**) providing the **S2R vision and Capabilities**
- 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” for **Part B**)
- enables the preparation of result-oriented **Annual Work Plans** and **Calls for Proposals or Tenders**
- **grants awarded** for the actions(Projects) should aim to implement part(s) of the MAAP

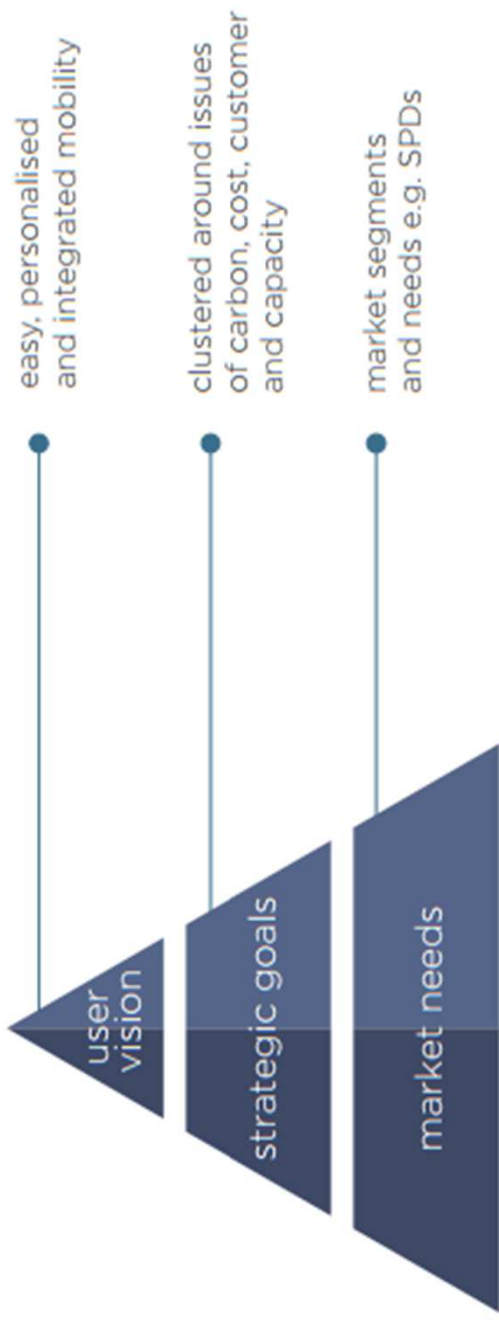
* multi-annual action plan



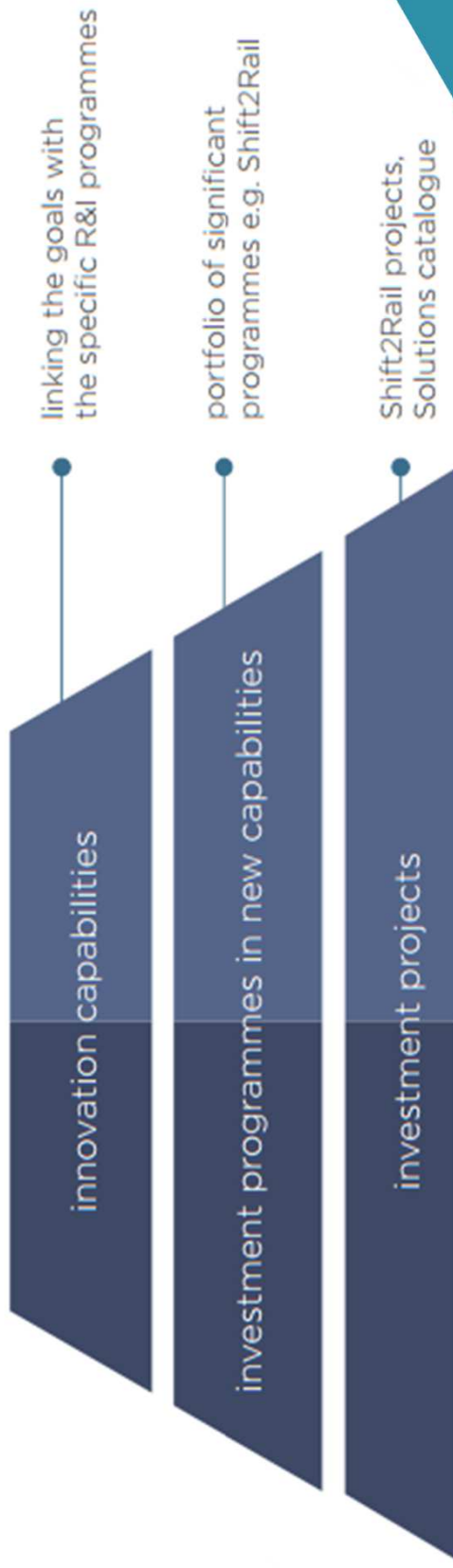
MAAP Part A



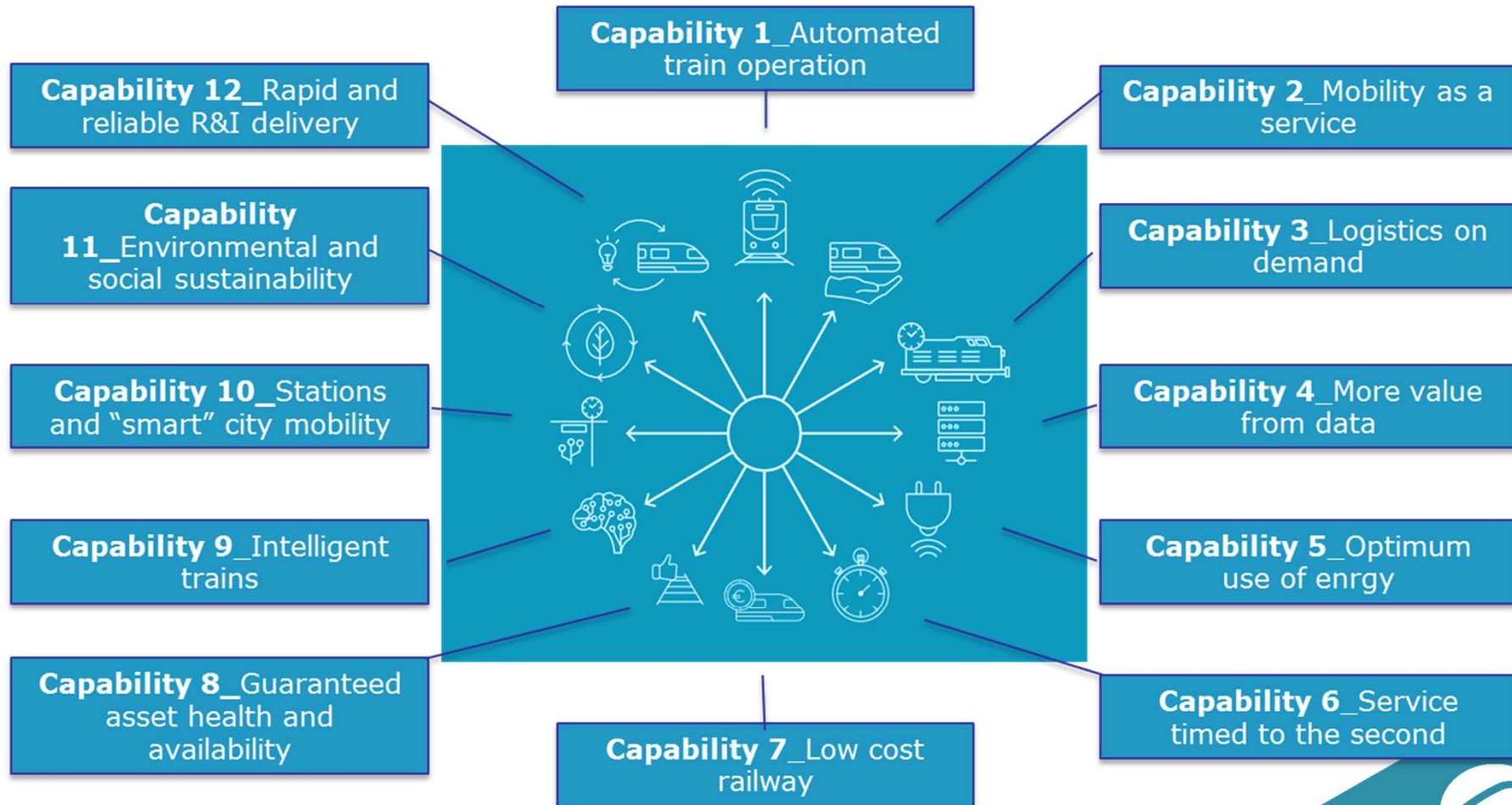
WHAT & WHY



HOW



Innovation Capabilities

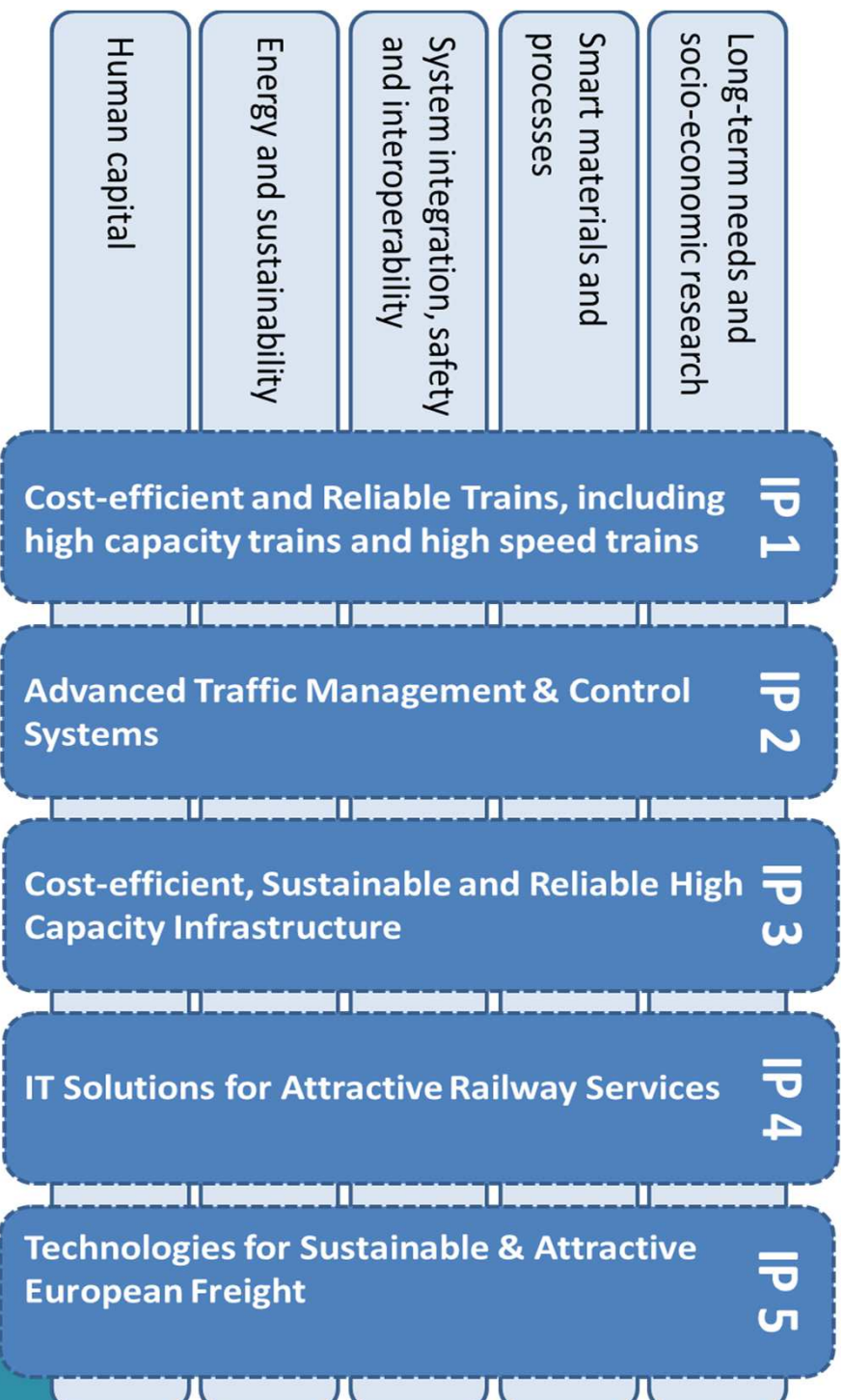


MAAP Part B



R&I FOR INNOVATION CAPABILITIES

S2R PROGRAMME: INTEGRATED CONSISTENT DELIVERY ORIENTED

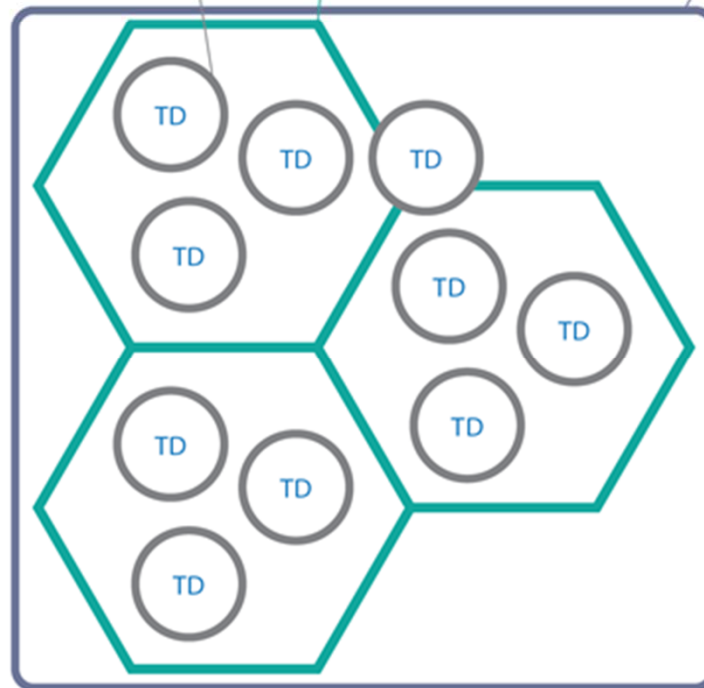


From TRL0 to TRL6/7

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

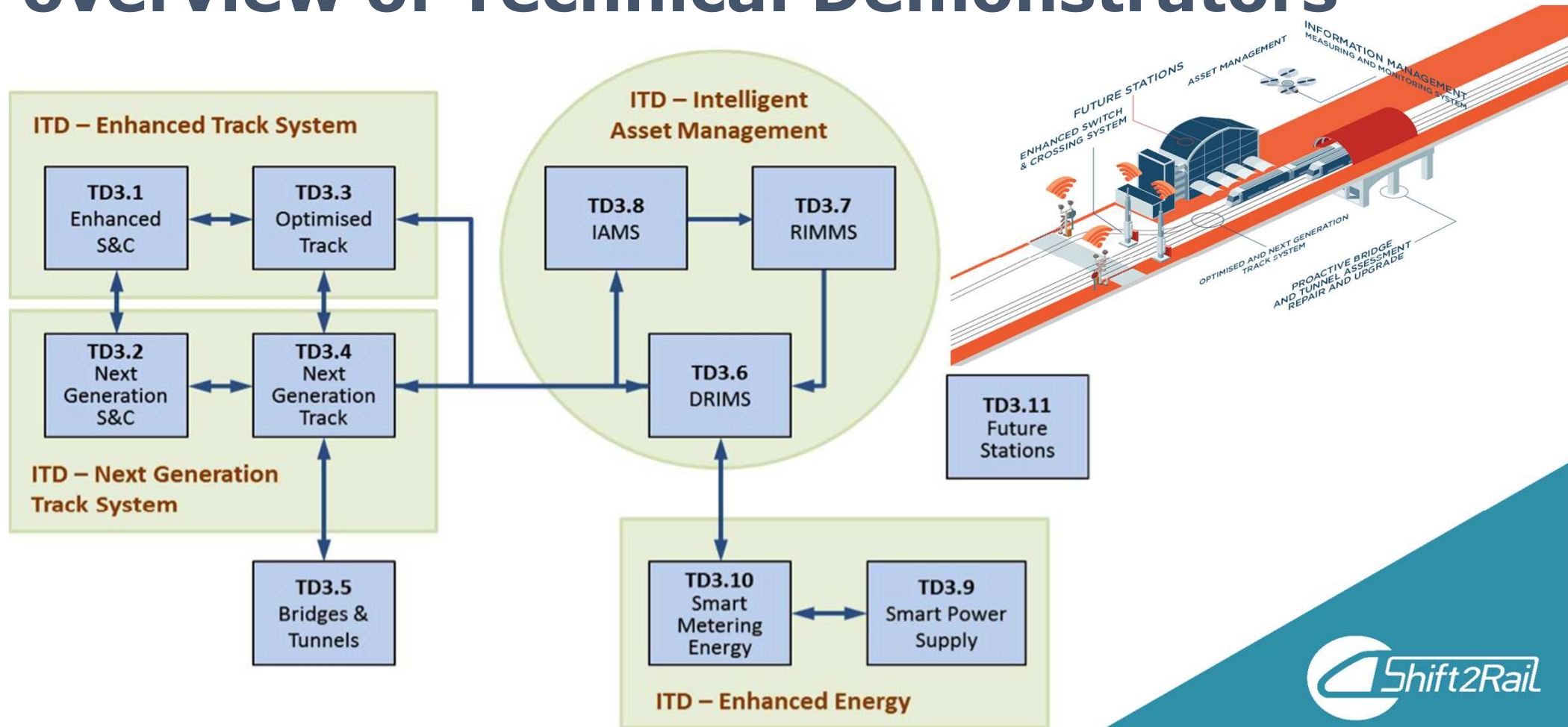
Integrated Technology Demonstrators (ITDs)
Projects integrating/combining TD prototypes at system level (lab and on-site) and testing performance

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



RAILWAY SYSTEM
OF THE FUTURE

IP3 (153M€) overview of Technical Demonstrators



IP3: Planning of activities per TD

TD3.1 Enhanced Switch & Crossing System									
2015	2016	2017	2018	2019	2020	2021	2022	...	
Ongoing: In2Rail, In2Track				AWP 2018: CFM					
					Planned Activities				

TD3.2 Next Generation Switch & Crossing System									
2015	2016	2017	2018	2019	2020	2021	2022	...	
Ongoing: In2Rail, S-CODE				AWP 2018: CFM					
					Planned Activities				

TD3.3 Optimised Track System									
2015	2016	2017	2018	2019	2020	2021	2022	...	
Ongoing: In2Rail, In2Track				AWP 2018: CFM					
					Planned Activities				

TD3.4 Next Generation Track System									
2015	2016	2017	2018	2019	2020	2021	2022	...	
Ongoing: In2Rail			AWP 2018: CFM						
					Planned Activities				

IP3: Planning of activities per TD

TD3.5 Proactive Bridge and Tunnel Assessment, Repair and Upgrade								
2015	2016	2017	2018	2019	2020	2021	2022	...
Ongoing: In2Rail, In2Track				AWP 2018: CFM, OC		Planned Activities		

TD3.6 Dynamic Railway Information Management System (DRIMS)								
2015	2016	2017	2018	2019	2020	2021	2022	...
Ongoing: In2Smart, IN2DREAMS				Planned Activities				

TD3.7 Railway Integrated Measuring and Monitoring System (RIMMS)								
2015	2016	2017	2018	2019	2020	2021	2022	...
Ongoing: In2Rail, In2Smart, MOMIT				AWP 2018: OC		Planned Activities		

TD3.8 Intelligent Asset Management Strategies (IAMS)								
2015	2016	2017	2018	2019	2020	2021	2022	...
Ongoing: In2Rail, In2Smart				Planned Activities				

IP3: Planning of activities per TD

TD3.9 Smart Power Supply								
2015	2016	2017	2018	2019	2020	2021	2022	...
Ongoing: In2Rail, In2Stempo								
					Planned Activities			

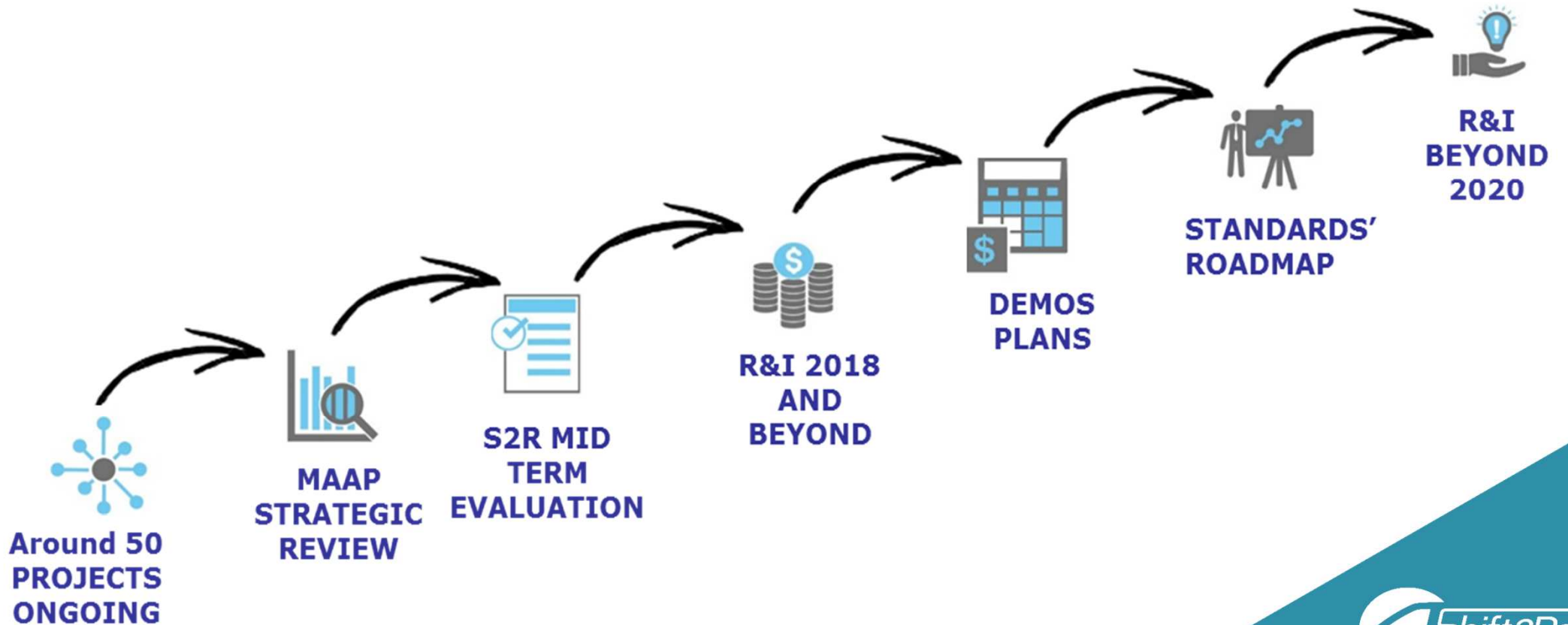
TD3.10 Smart Metering for Railway Distributed Energy Resource Management System								
2015	2016	2017	2018	2019	2020	2021	2022	...
Ongoing: In2Rail, In2Stempo, In2Dreams								

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

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**

What's going on



Thank you for your attention



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