5G PPP

5G-MONARCH

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Invitation to 5G-MoNArch event in Hamburg

The 5G-MoNArch consortium cordially invites you to the project's final dissemination event including the presentation of the core research & innovation results, and the live experience and technical solutions of the award-winning Smart Sea Port testbed and its implemented applications.

The event format will be an exhibition-style with the booths open throughout the event. Two short sessions with introductory talks about the project and the Smart Sea Port will also be given.

When: June 5th, 2019, 10:30 – 15:30

Where: Dialoghaus Hamburg, Alter Wandrahm 4, 20457 Hamburg, Germany

Registration: https://5g-monarch.eu/events-and-publications/

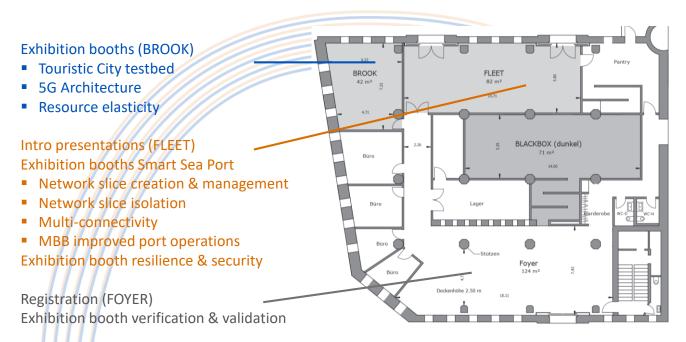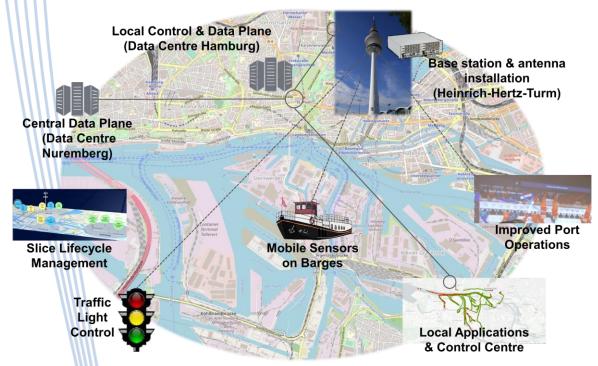|	
10:30	**Participant registration** **Opening of the exhibition**
11:00 – 11:45 **and** **13:00 – 13:45**	**Intro presentations:** 5G-MoNArch – project overview, goals and achievements The Smart Sea Port – challenges and solutions for the future sea port Overview about the exhibition
Exhibition (open during all the event)	**Smart Sea Port testbed demonstrations:** ▪ Network slice creation and management – fast and scalable service-specific networking ▪ Network slice isolation – highly reliable traffic light control ▪ Multi-connectivity – IoT sensors on mobile barges for environmental measurements ▪ New services – eMBB improved port operations using connected AR headsets **Touristic City testbed demonstration** – implementing E2E 5G network slicing and resource elasticity for a new experience in a virtual museum visit at Palazzo Madama, Turin **Research & innovation results:** ▪ 5G flexible and adaptive architecture – functions supporting and enabling a diverse range of use cases and services ▪ Resilience, reliability and security – functions for enabling industrial use cases ▪ Resource elasticity – functions for enabling multimedia & entertainment use cases ▪ Verification of technical results – setup of framework and results for relevant KPIs ▪ Socio-economic validation – what benefits do the solutions provide to ports and industry
15:30	**Closing**

5G-MoNArch focuses on developing a flexible, adaptable, and programmable architecture for 5G mobile networks. Inter-slice control and cross-domain management, experiment-driven modelling and optimisation, and a native cloud-enabled protocol stack are innovative enablers for the sliced network. The concepts and enablers are brought into practice through prototype implementations in two testbeds – the Smart Sea Port in Hamburg representing an industrial environment, and the Touristic City in Turin representing a media & entertainment use case – which instantiate network slices that include the tailored functional innovations of network resilience & security for Hamburg, and resource elasticity for Turin, respectively.

The Smart Sea Port testbed is the first real-world implementation of E2E 5G network slicing in an operational industrial environment. The vertical-defined use cases for implementing a smart sea port – traffic light control as part of Intelligent Transportation Systems, mobile air quality sensors installed on barges for environmental measurements, and AR-based remote support for engineering teams – can be simultaneously run over the same infrastructure, but fully isolated with the requested QoS due to the 5G network slicing solutions.