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5G Fireside Chat Series Network Slicing & Splicing in Industry 4.0 Use Cases

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Host :
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TeckNexus

Agenda

What is 5G network slicing & splicing?

Network slicing - sample use cases & how it works?

- Industry 4.0 (5G-Encode) use cases

- High level architecture with network slicing & splicing

- What network components are sliced & spliced?

- RAN, transport & core slicing components

- Zeetta Networks products for 5G slicing & splicing

Use cases beyond Industry 4.0



What is Network Slicing & Splicing?

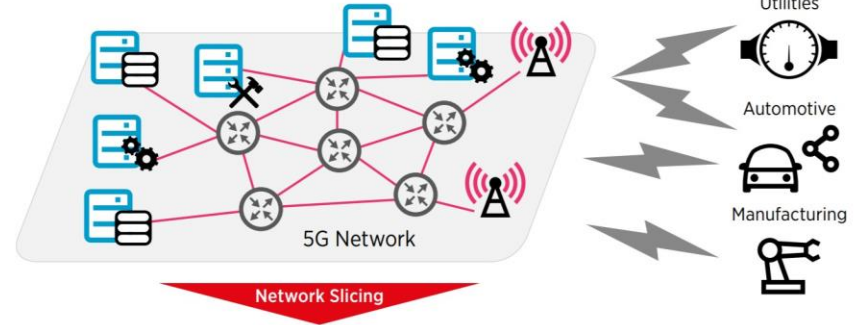
5G network **slicing** is a network architecture enabling

- running of multiple virtualized, isolated & logical networks
- on a common physical network infrastructure

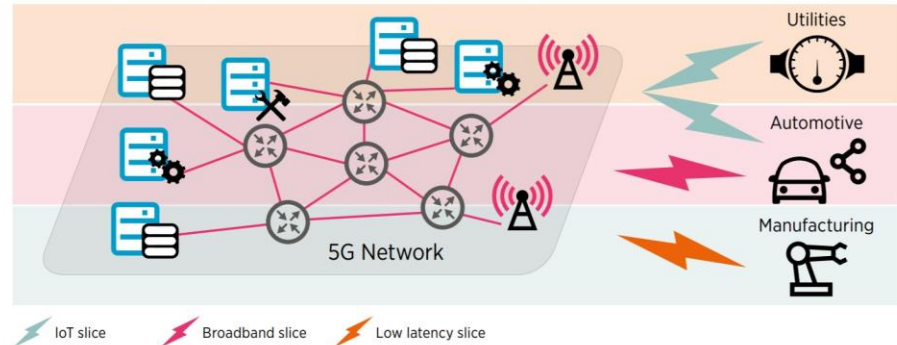
5G network **splicing** is a concept of

- joining together 2 or more network slices to create a new network slice
- for seamless delivery of the network services

5G networks need to serve customers with very different needs



5G networks subdivided into virtual networks each optimised for one business case



Source: [GSMA Introduction to Network Slicing](#)

Network Slicing Use Cases | 5G-Encode Project

In-factory and in-transit asset tracking



PLATAINE
SIEMENS

Business Objective: Improve productivity and reduce costs by providing accurate and live location and condition information of tracked assets

Virtual 360 video training



Business Objective: Improve efficiency and trainee satisfaction of in-house training using immersive and interactive VR 360° platform over a 5G mobile network

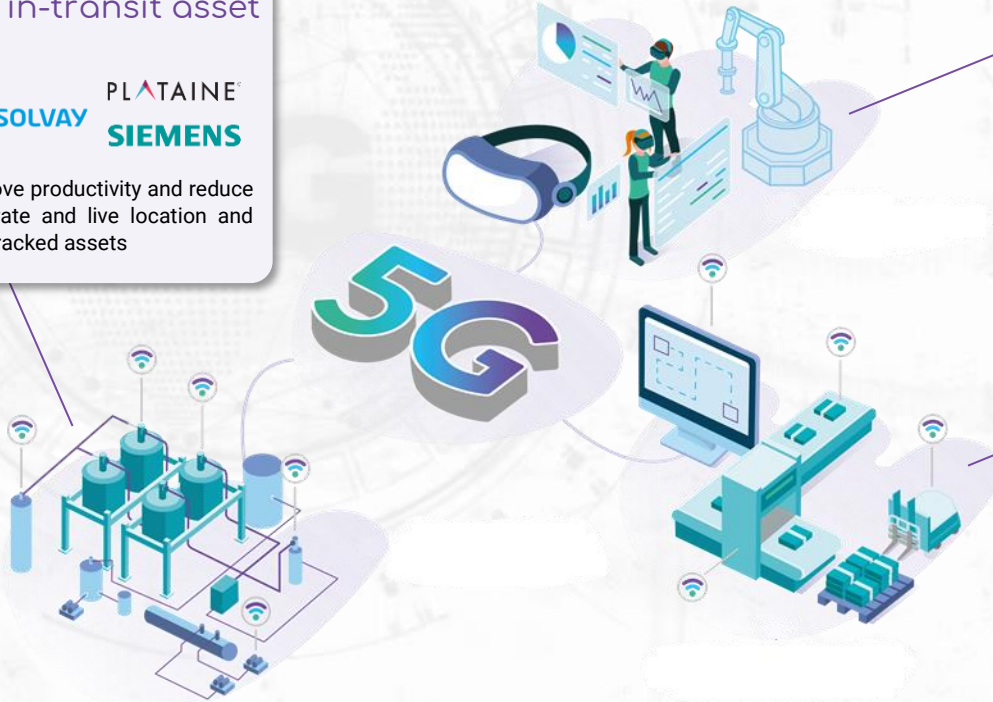
Closed loop manufacturing in Liquid Resin Infusion (LRI)



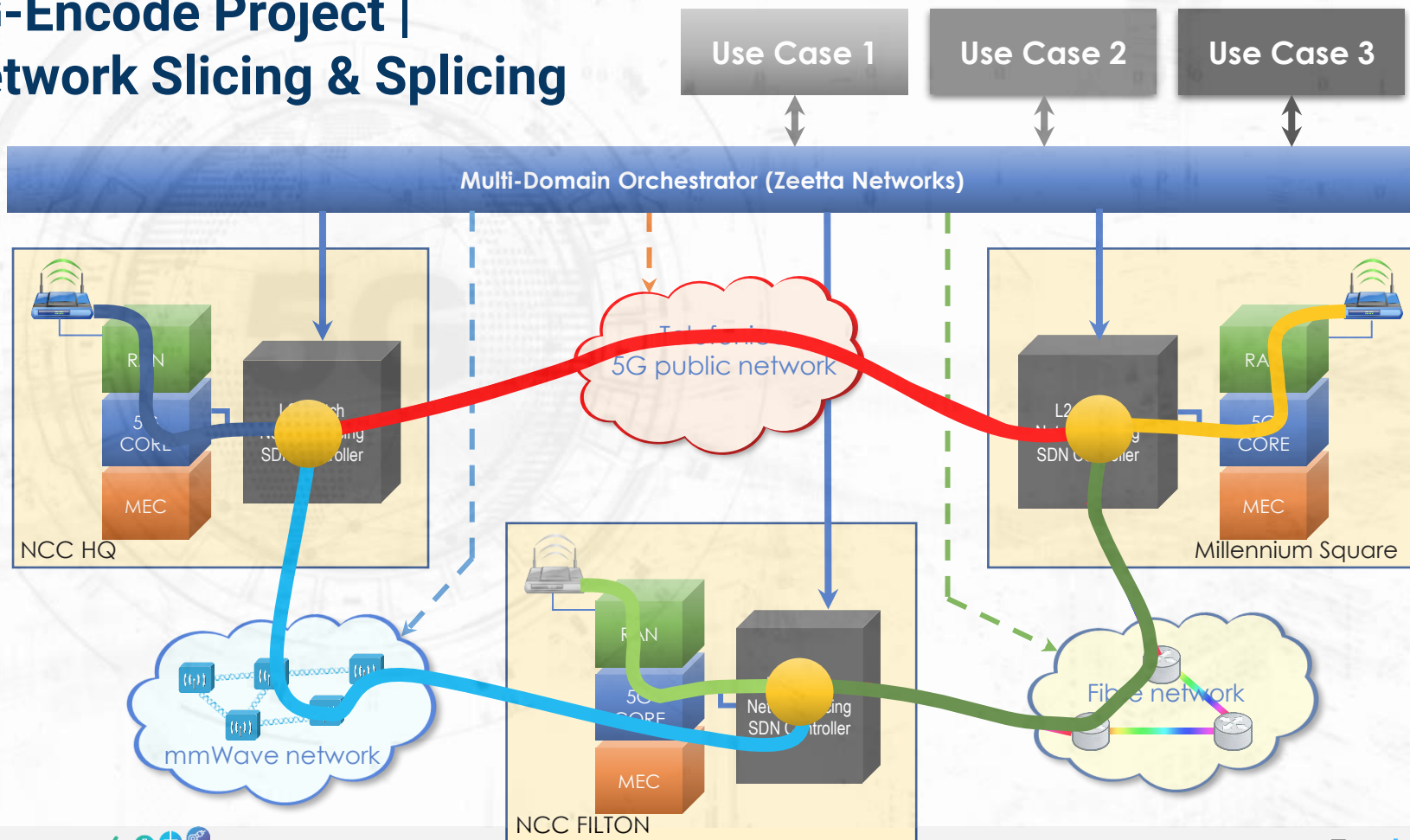
PLATAINE®

Business Objective: Improve efficiency and productivity in LRI composite manufacturing using 5G and digital technologies

5G



5G-Encode Project | Network Slicing & Splicing



Zeetta Network Products - Enabling 5G Use Cases

- **NetOS®** is an SDN-controller and single-domain orchestration platform that is commercially available
- A deployable private network solution, **NetOS Rapide™** will be used to provide the private 5G network and Layer-2 network slicing
- **NetSplicer™ Multi-domain Orchestrator (MDO):** Extends the capability of NetOS to a multi-domain environment



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Thank You

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5G Key Technologies

Watch out for our 5G fireside chat series for more info on 5G technologies

5G Core Technologies	5G RAN	E2E Use Case Support
Network Slicing	5G New Radio (NR)	5G Automation
Service Modeling Orchestration	Radio Access Network (RAN)	5G Security
Edge Computing	Advanced Beamforming	5G & IoT
Multi-Access Edge Computing (MEC)	Spectrum Bands	5G & Artificial Intelligence Analytics
Software Defined Network (SDN)	Multiple-Input Multiple-Output (MIMO)	5G & Augmented Virtual Reality
Network Function Virtualization (NFV)		5G Ecosystem Integration
Virtual Network Functions (VNFs)		
Physical Network Function (PNF) Support		
Network & Service Assurance		