

5G-MONARCH

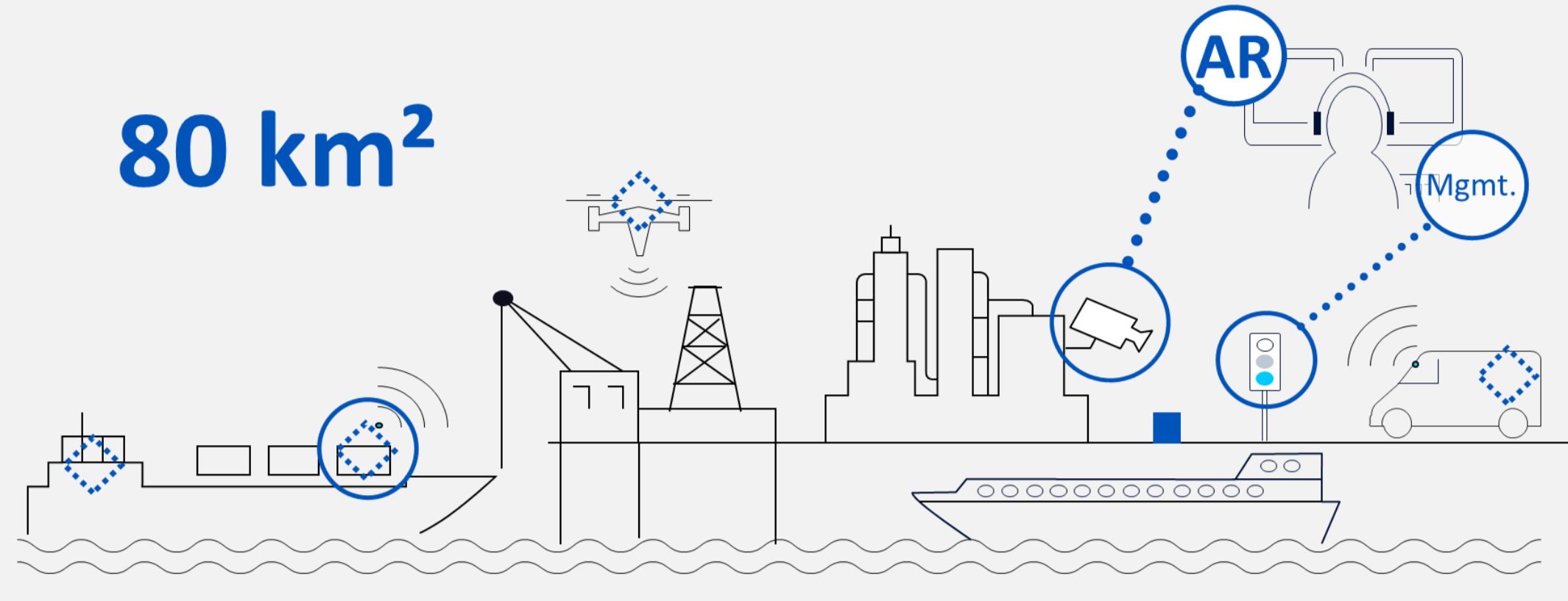
5g-monarch.eu

Hamburg 5G Smart Sea Port

Challenges by 2025

- 18 Mio containers/year
- Several 10K trucks/day
- Self driving/flying vehicles
- 100,000+ sensors

80 km²



Focus on 3 use cases

- Improved port operations
- Better traffic flow
- Improved pollution control

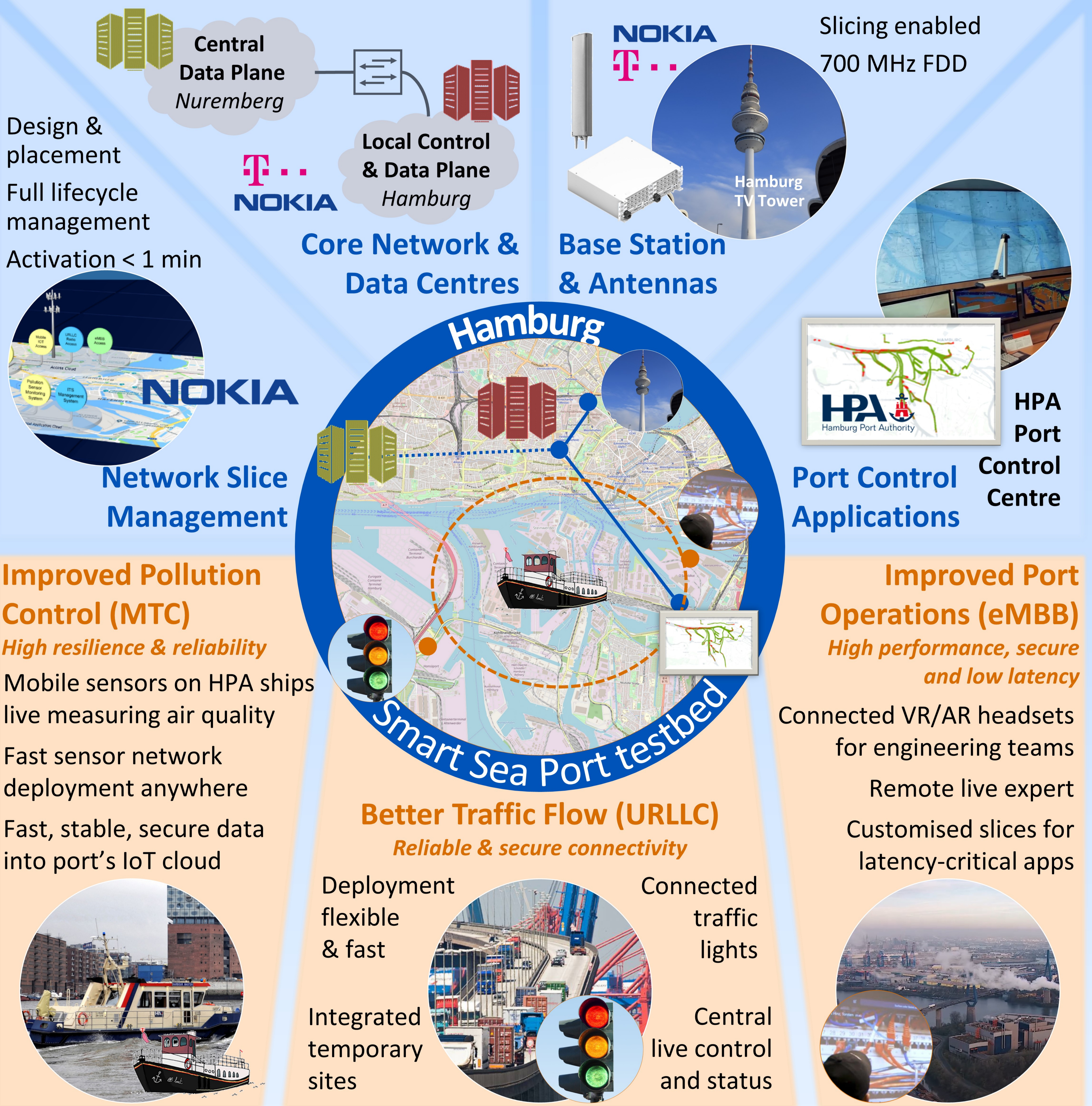
Ensure efficient operations & logistics

Share data between shippers, vehicles, terminals, companies

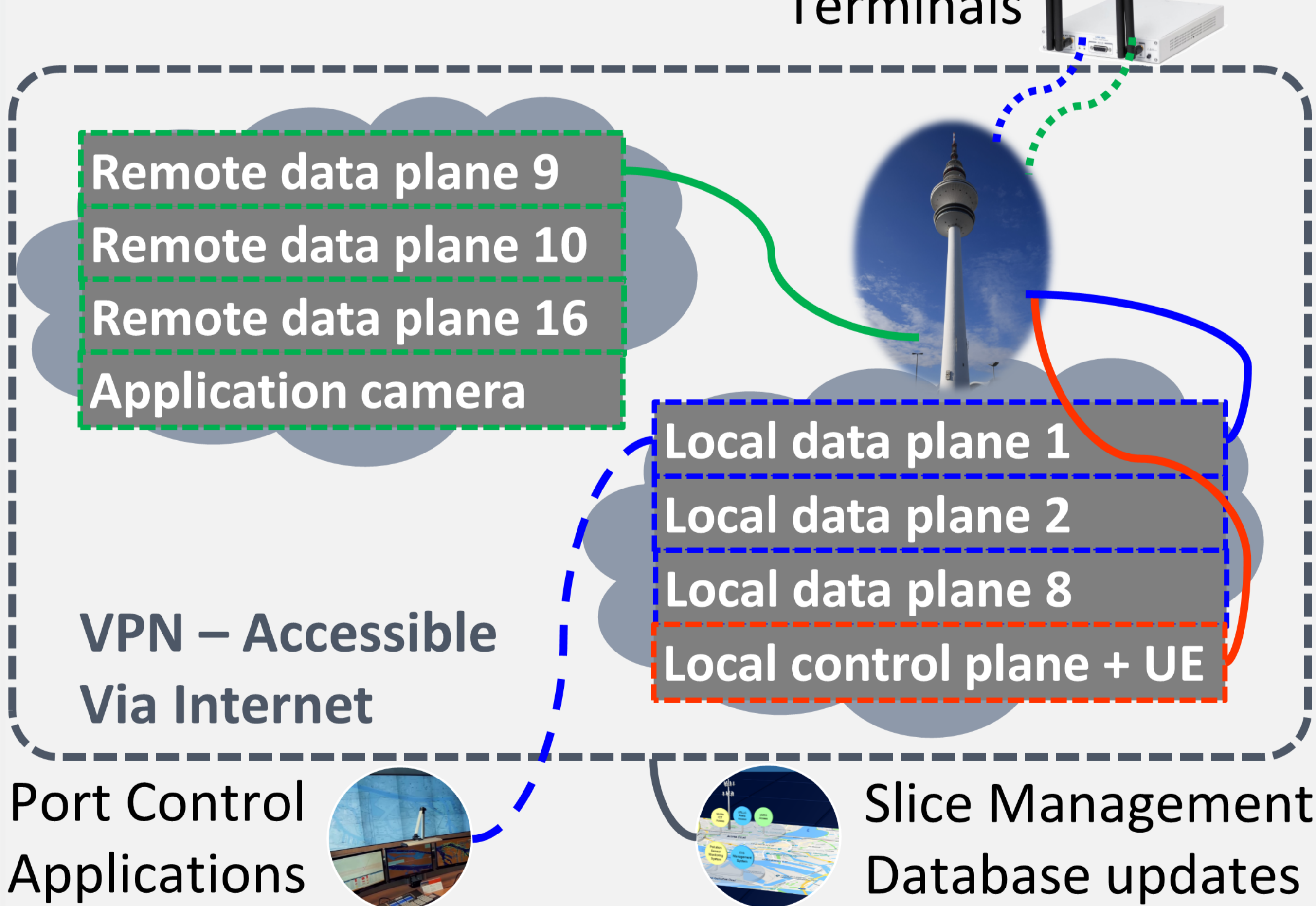
Emission supervision

Real-time info on cargo temperature, location or humidity

Connect cruise ship tourists coming in "batches"

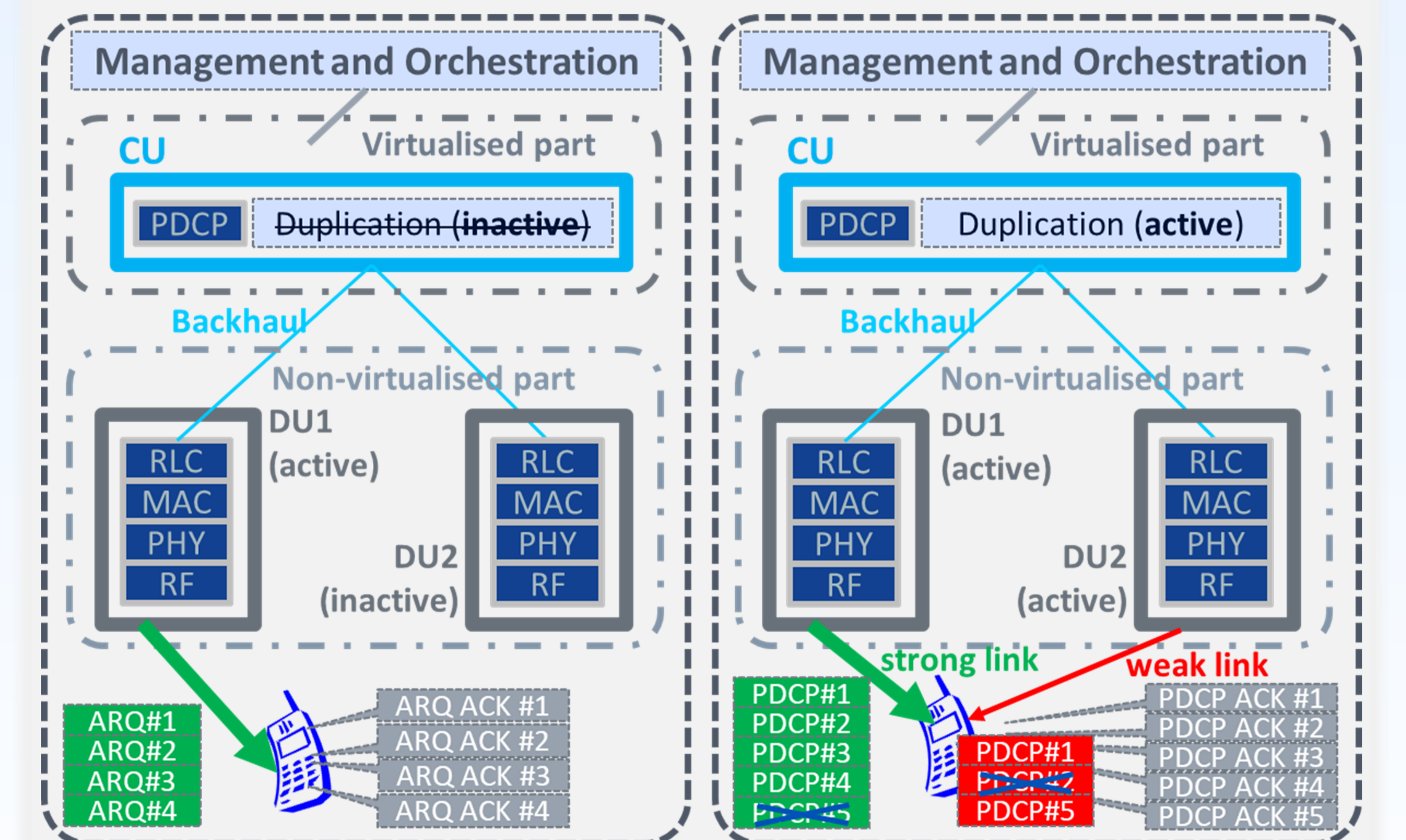


Security Aspects



Dual Connectivity

Increased reliability through data duplication



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