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6G connEcted eNvironments for logIstics and mUltimodal tranSportation

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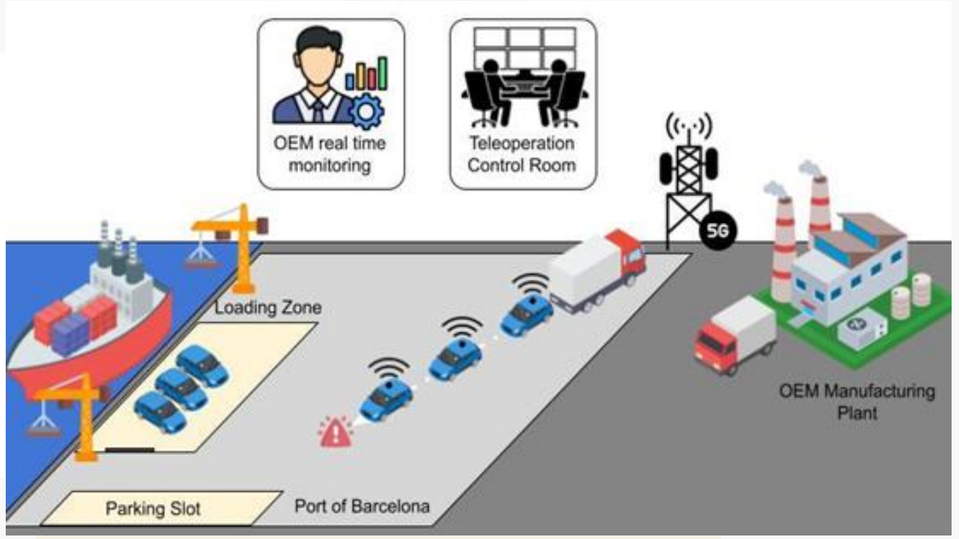


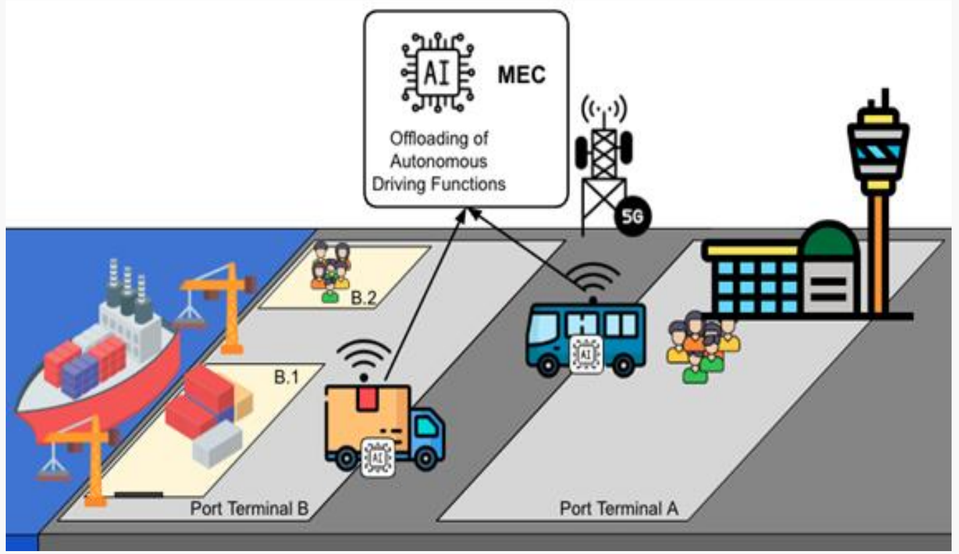
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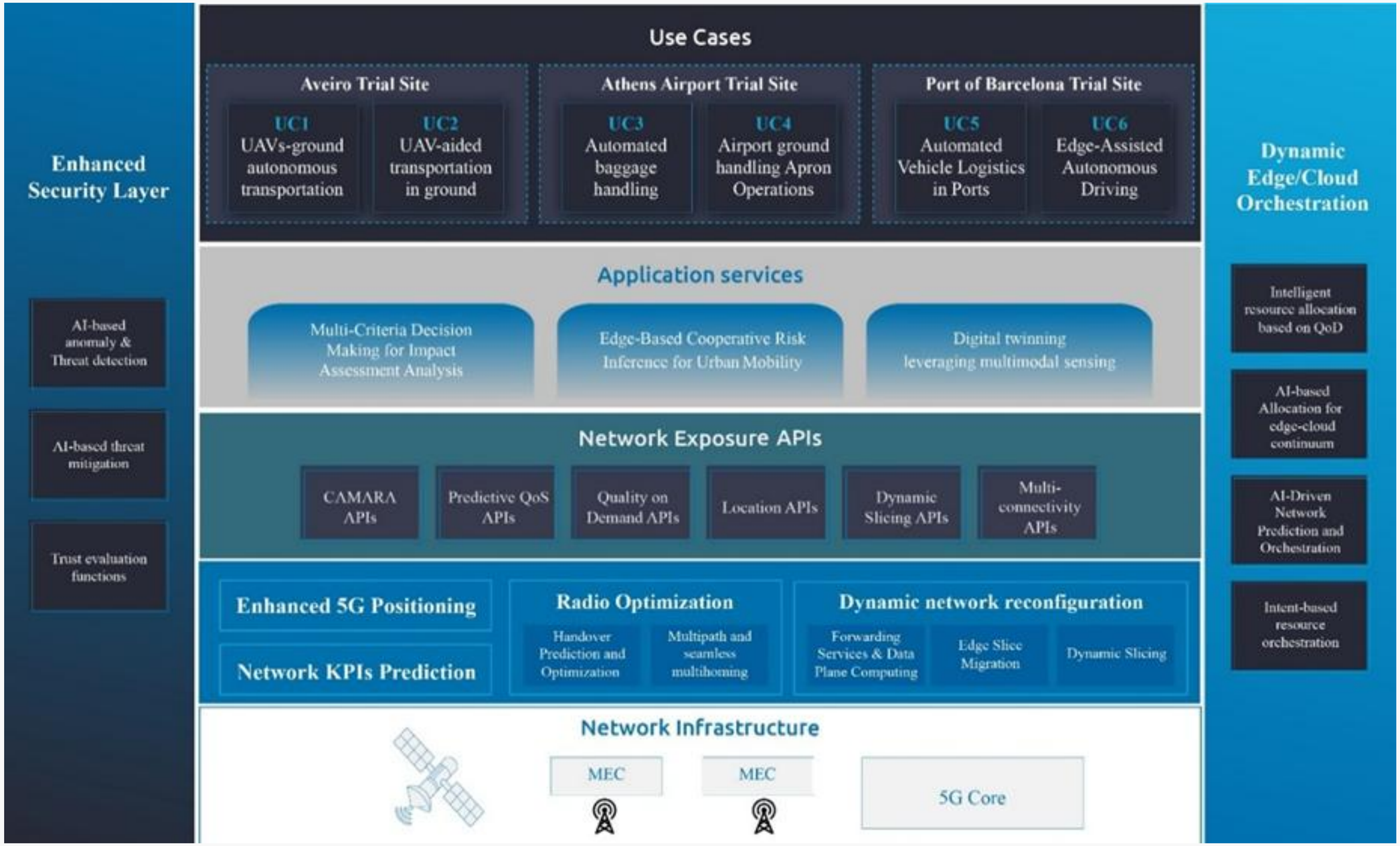
Vision and Objectives

- **Automated** Transport and Logistics (T&L) sector
- Integration of **logistics, multimodal transport and automation** within the **6G** ecosystem
- Transformative benefits across efficiency, sustainability, and resilience of **supply chains**
- Ultra-reliable **low-latency** communications for continuous monitoring and synchronization of goods across **heterogeneous transport modes**, seamless coordination at hubs such as in a crowded **city**, **ports** and **airports**
- 6G-enabled **digital twins** and **AI**-driven **optimization**
- **Multimodal** networks dynamically adapt to disruptions
- **O-RAN**–compliant multimodal **orchestration**
- **Seamless** integration of **heterogeneous networks** across **ports**, **air**, and **road** transport.





Key Technological Enablers (23+)



Expected Outcomes

OUT1. Demonstrated efficiency and safety of autonomous logistics in urban, port and airport environments

OUT2. Reduced operational costs and increased capacity utilization in port and airport logistics

OUT3. Enhanced coordination and real-time decision-making for complex traffic scenarios

OUT4. Increased public trust and acceptance of autonomous transportation systems

OUT5. Seamless integration of public and non-public network infrastructures

OUT6. Modular and scalable architecture for 6G-enabled logistics use cases

OUT7. Strategic exploitation framework and viable business models for vertical sectors

OUT8. Standardisation alignment reports and position papers for 6G KVIs and use cases

OUT9. Generation of datasets and KVI/KPI benchmarks across diverse trial contexts

OUT10. Defined and validated KPI/KVI frameworks for logistics verticals

OUT11. AI-driven QoS prediction and dynamic resource orchestration prototypes

OUT12. Localization and mobility-aware service placement algorithms tested in controlled environments

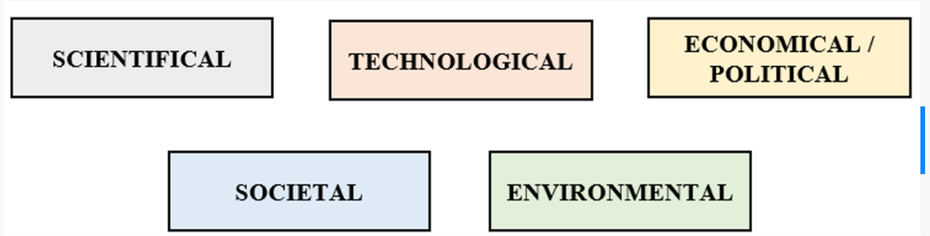
OUT13. Multi-access, multi-path connectivity management validated across heterogeneous links

OUT14. NTN extension capabilities demonstrated for coverage-challenged trial sites

OUT15. Real-time observability and intelligent reporting dashboards for trial performance

OUT16. Demonstrated ESG impact metrics relevant to mobility-centric environments

OUT17. Open-source toolset release and community onboarding events





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THANK YOU

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