



Key Strategies for a Seamless Transition to 5G NTN

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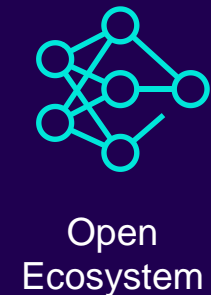
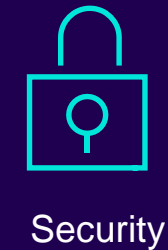
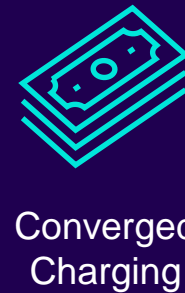
5G Product Line Manager

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What 5G Brings to The Table



Standardization drives larger eco-system of products and systems, interoperability, reduced Capex and Opex



Benefits of 5G NTN



Ubiquitous Connectivity

Extending text, voice, video, and broadband 5G services to remote and underserved areas globally



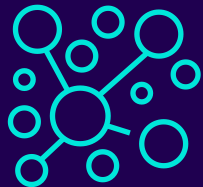
Service Monetization

SNOs can leverage 5G TN monetization systems, allowing quick onboarding of new customers, services, and revenue streams



Operational Efficiency

SNOs can adopt 5G TN Operation systems, reducing Opex and Capex while enhancing customer experience



Standard Interoperability

Eco-system of standard-based hardware and software products allows multi-vendor interoperability and cost reduction



Diverse Use-Cases

5G NTN supports use-cases ranging from Direct-to-Device and IoT to Mobility, Cellular Backhaul and Private Networks



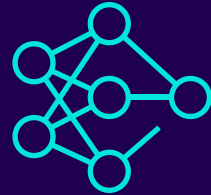
Future Proof

5G NTN standards are forward-looking, allowing for easy integration of future technologies and standards

Diverse 5G NTN Use-Cases



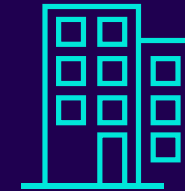
Direct-to-Device



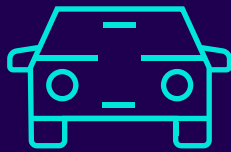
IoT-NTN



Cellular Backhaul



Private Networks



Automotive



Aero

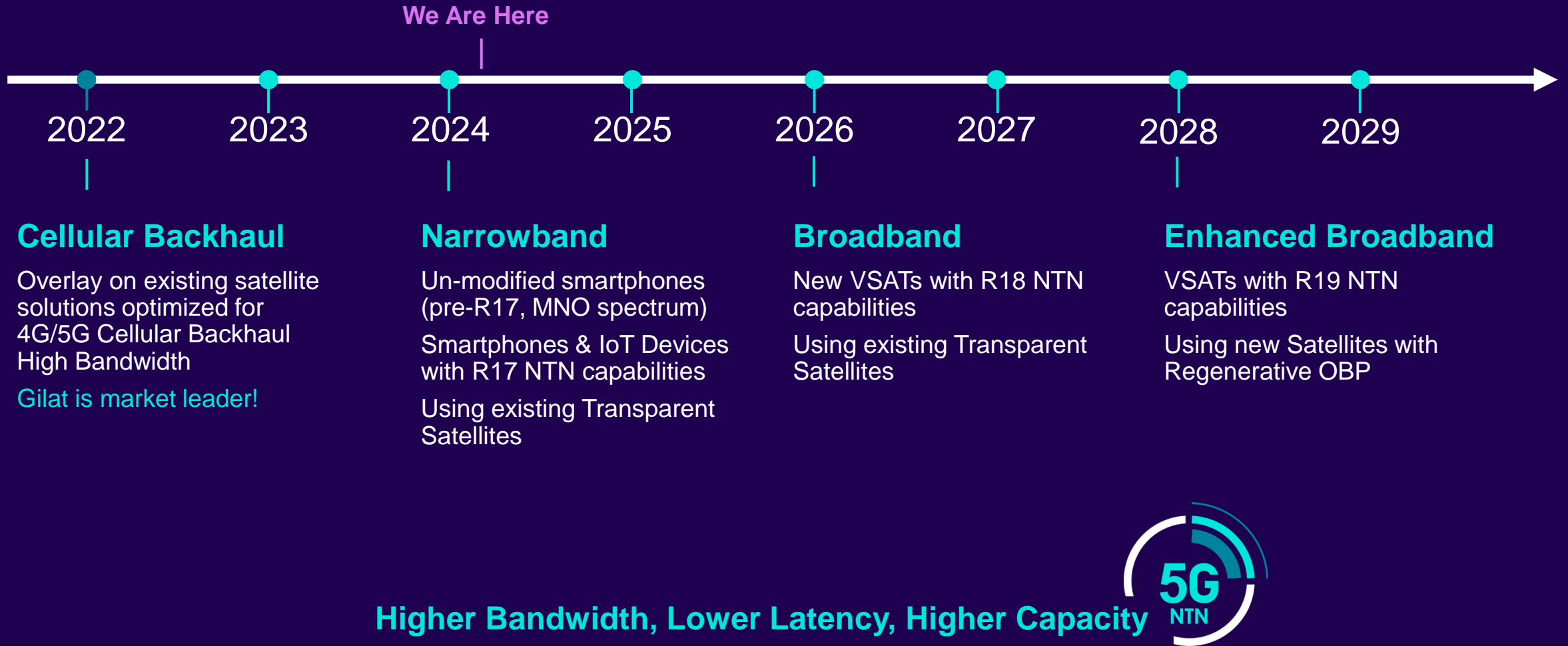


Maritime

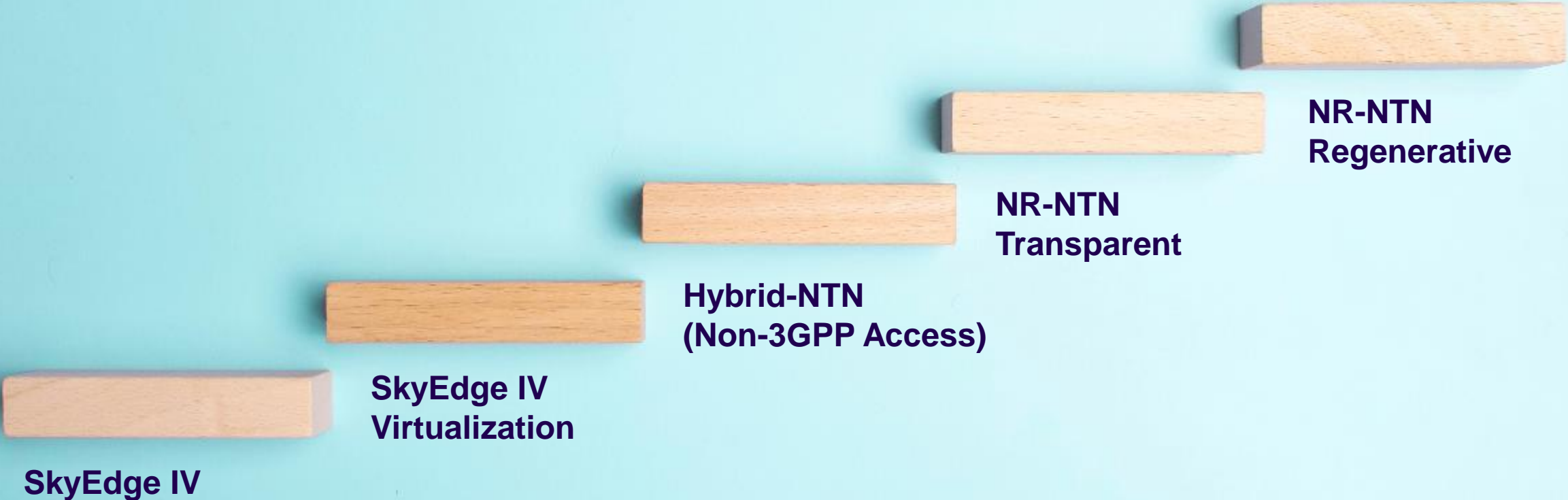


Residential

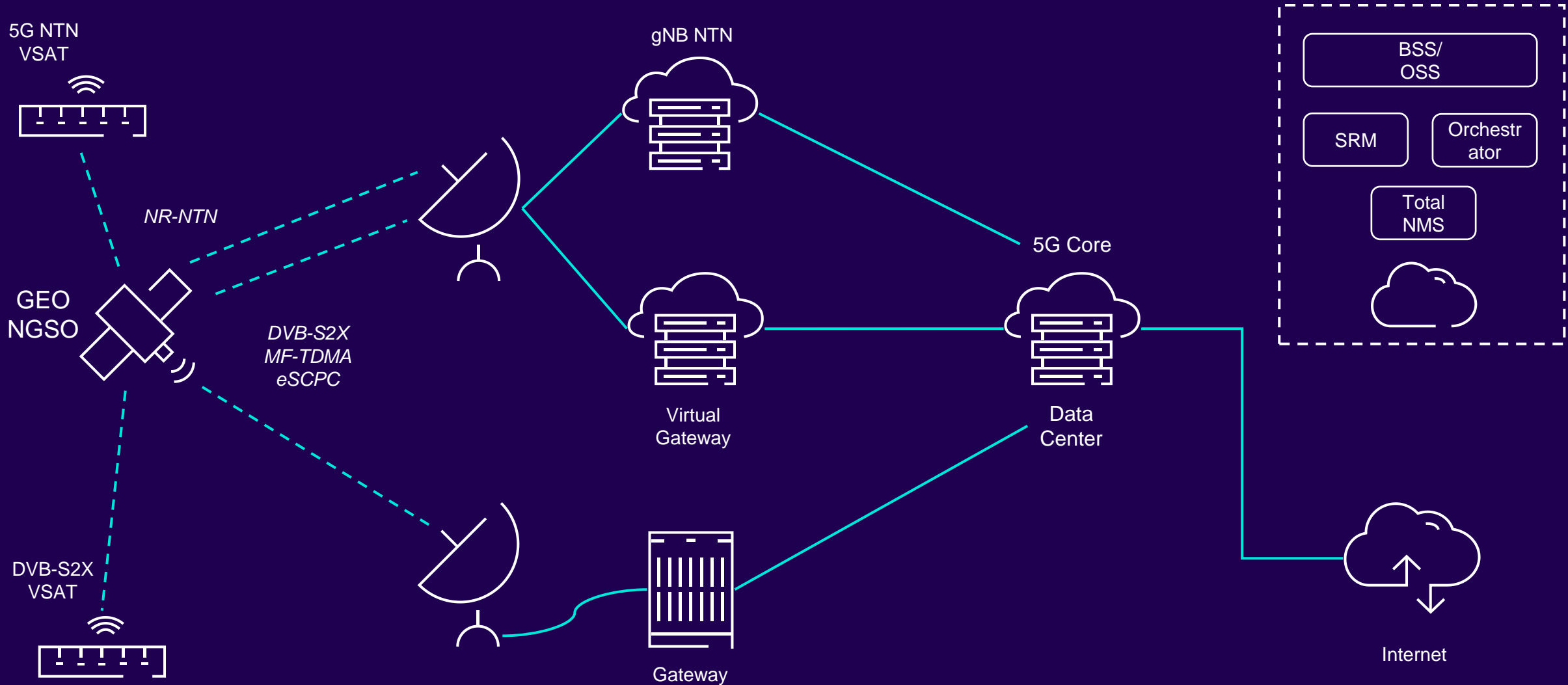
Envisioned Market Evolution to 5G NTN



Empower Satellite Operators to evolve strategically, preserving their current S2X investments and maintaining business operations, with a phased approach

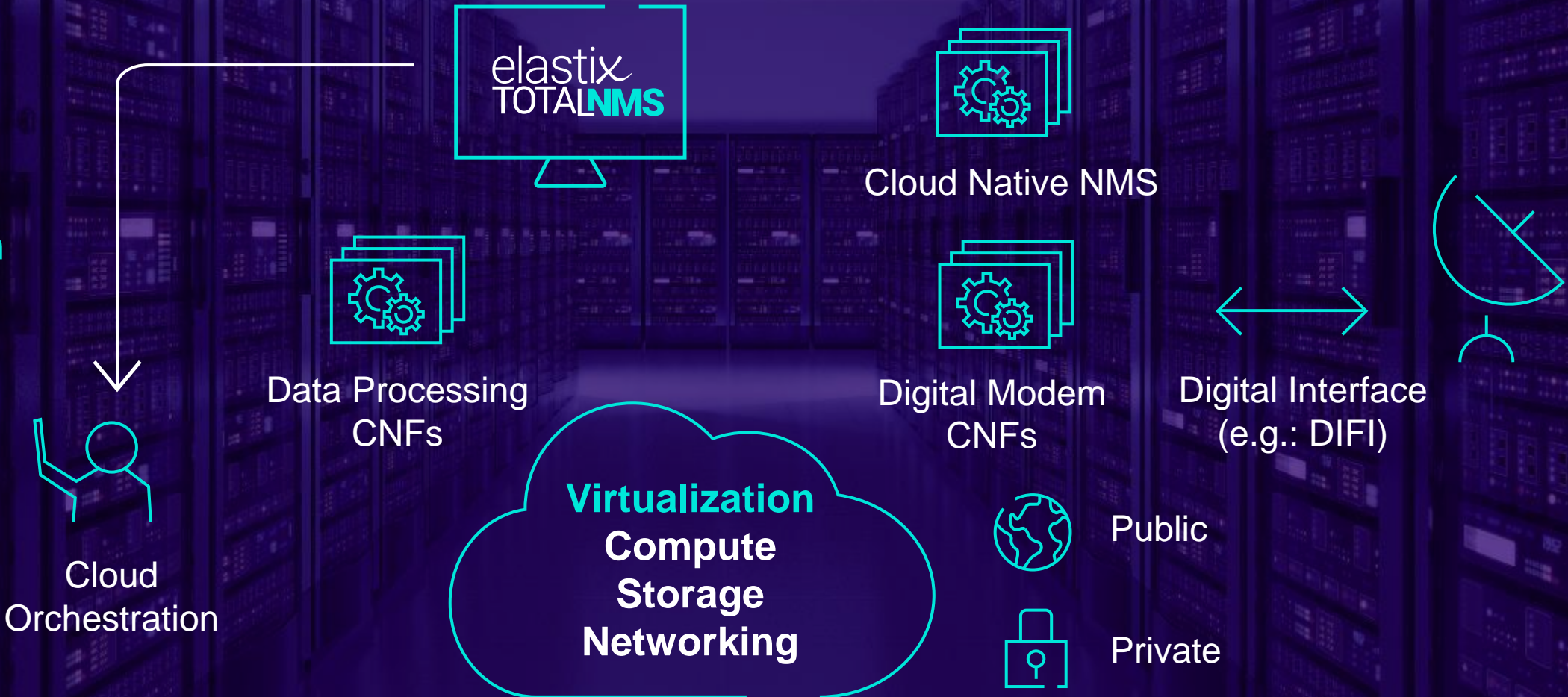


Evolution to Multi-Waveform Architecture



Transitioning to a virtualized all-software digital platform that efficiently operates on standard off-the-shelf hardware

Digital Platform



Hybrid-NTN (Non-3GPP Access)

- Integration of DVB-S2X Satellite networks with 5G Core network
- Based on BBF and 3GPP specifications for Fixed Mobile Convergence (FMC)
- AGF interworks between satellite access and 5G core domains
- TotalNMS Unified Management for seamless integration



Benefits of Hybrid-NTN



Standard 5G Core

SNOs can use 5G Core access-agnostic (3GPP, Non-3GPP) system to provides standard management and control for users and services



Monetization & Operation

SNOs can use standard BSS, OSS, Management and Orchestration with standard APIs to monetize services and automate their operations



Evolution at Your Pace

SNOs can reduce risk, validate and use 5G Core and BSS/OSS/Orchestration prior to market availability of 5G NTN satellites, hubs and terminals



TN-NTN Mobility

Use standard mobility and roaming capabilities between 5G TN and Non-3GPP NTN for Mobility use-cases (Land, Maritime, Aero)



Preserve Investments

By integrating DVB-based networks to 5G CN, SNOs enjoy the benefits of 5G Core without throwing away their past investments

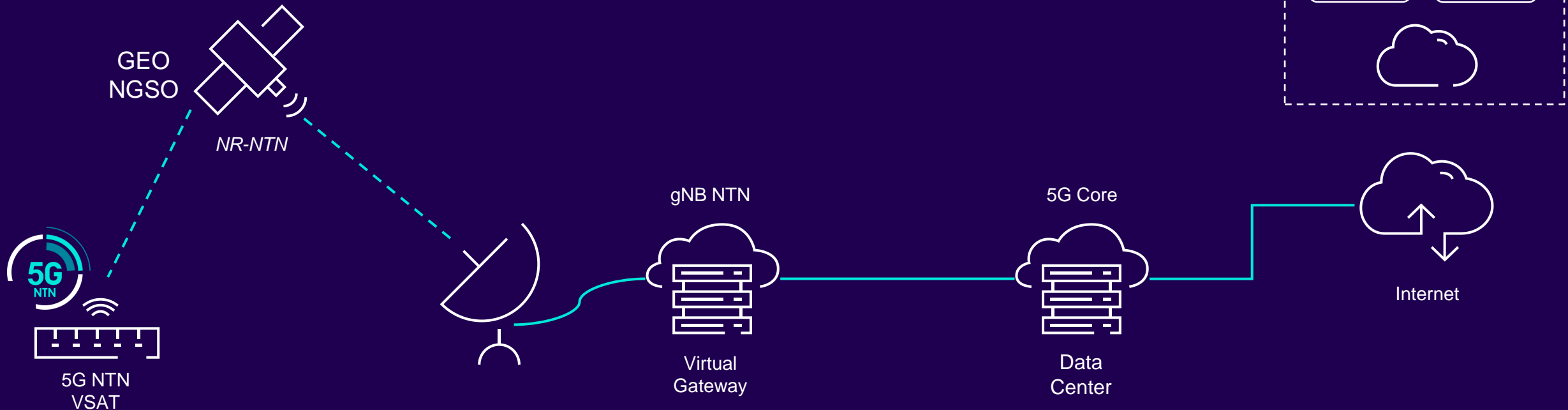


Best Of Both Worlds

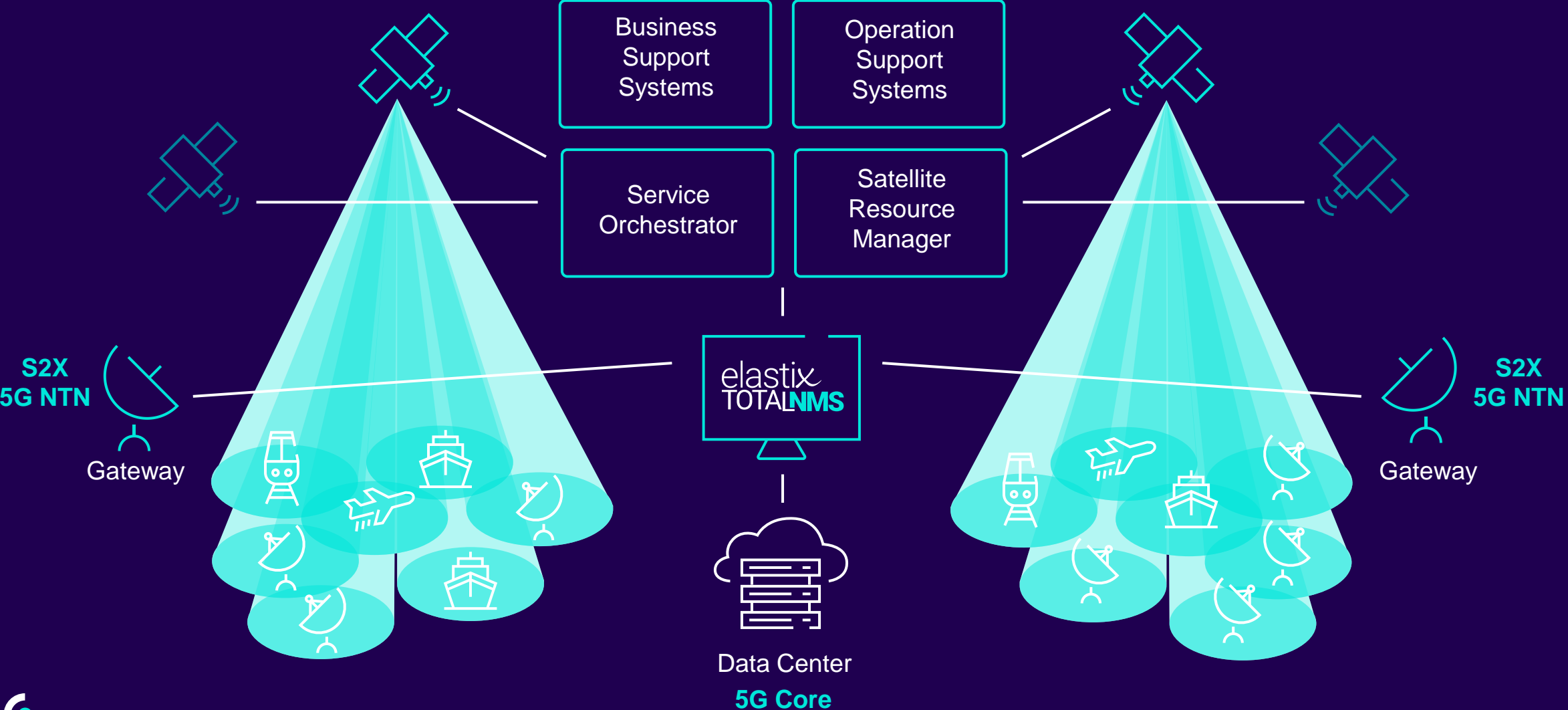
Hybrid-NTN uses best performance DVB-based Satellite access technology together with standard service-based 5G Core technology

5G-NTN

- End-to-end 5G-NTN solution, 3GPP Rel-18/19 compliant
- New 5G-NTN VSATs supporting NR-NTN waveform in FR2 bands
- gNB-CU/DU software upgrade on Virtual Infrastructure
- In case of Regenerative, gNB functions move to Satellite OBP, Edge Compute, OISLs



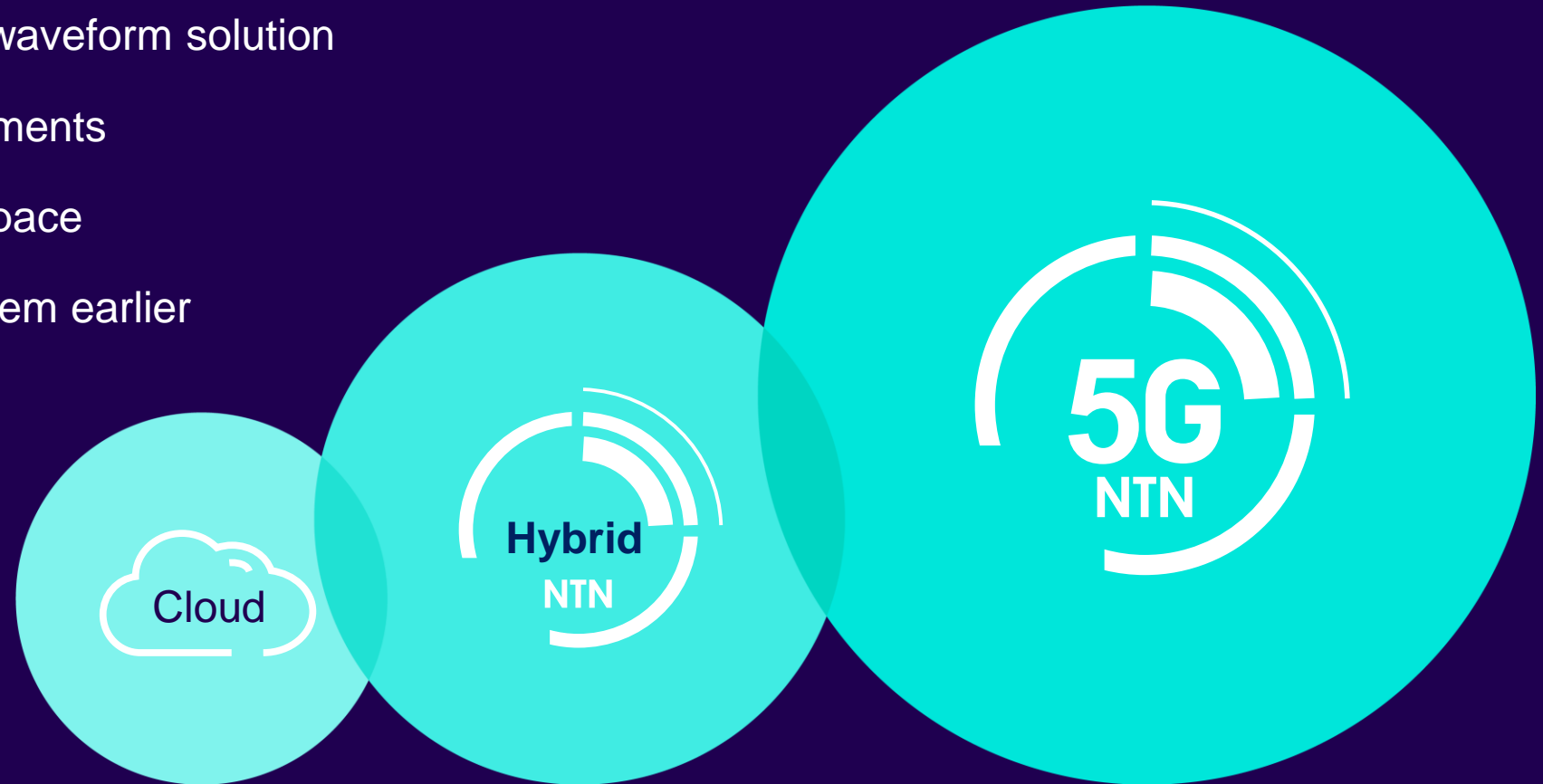
SkyEdge IV's Elastix TotalNMS was designed for both current S2X and 5G NTN platforms



Summary

- ✓ Phased approach evolution to 5G NTN
- ✓ Virtualization is key for multi-waveform solution
- ✓ Hybrid NTN preserves investments
- ✓ Evolution to 5G NTN at your pace
- ✓ Enjoy benefits of 5G eco-system earlier

skyedge **IV**
Evolution



Thank You

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