

The background of the slide is a nighttime aerial view of a city, likely Shanghai, with its lights reflecting on the water. Overlaid on this scene are several glowing white arcs and dots, representing a network or data flow. The text is centered over the lower half of the image.

Moving to 'NextG'

Transitioning to a new 'CICD' model

Rob Soni, VP – RAN Technology

Agenda

1 Introduction

2 Evolution versus revolution

3 Key Enabling Technologies

4 An APP for that

A collage of three people using mobile phones. On the left, a man in a suit and tie is smiling while talking on a black flip phone. In the center, a man with glasses is looking down at a smartphone. On the right, a woman with long dark hair, wearing a yellow sweater and a backpack, is smiling broadly while talking on a smartphone. The background is a blurred outdoor setting.

Celebrating 40 years of commercial cellular connectivity

AT&T's view on Connectivity Trends

26%

CAGR mobility network traffic
per subscriber over 10 years

32%

CAGR fixed wireline network
traffic per subscriber over 10
years

3X

More devices in an average
household by 2030

4X

Projected data increase on
our network over
the next five years



5G to 5G Advanced Evolution

Strengthen the end-to-end 5G system foundation



Advanced DL/UL MIMO



Enhanced Mobility



Mobile IAB, Smart Repeater



Evolved Duplexing



AI/ML Data-Driven Designs



Green Networks

Proliferate 5G to virtually all devices and use cases



Boundless Extended Reality



NR-Light (RedCap) Evolution



Expanded Sidelink



Multicast & Other Enhancements



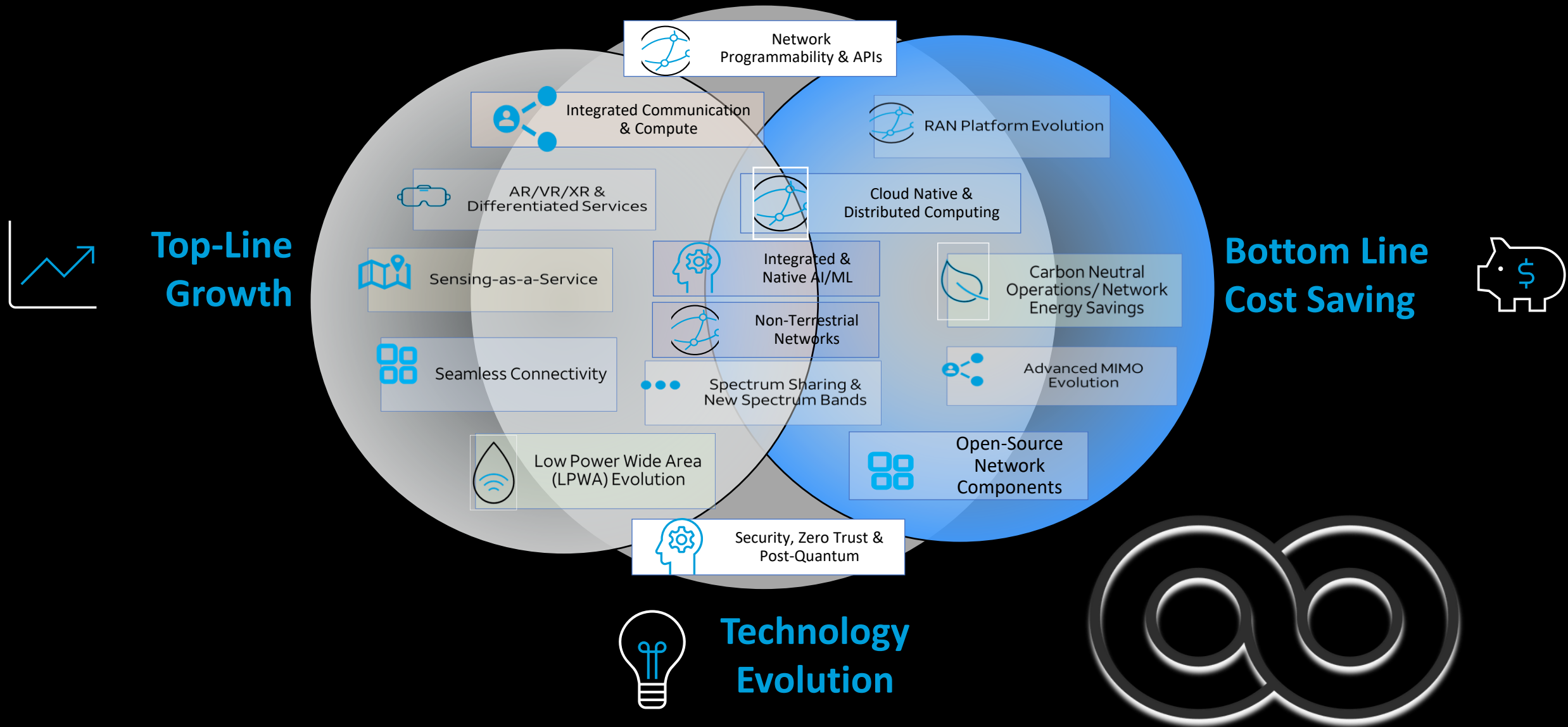
Expanded Positioning



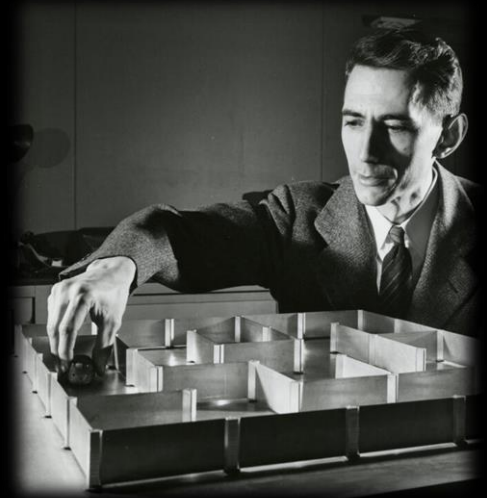
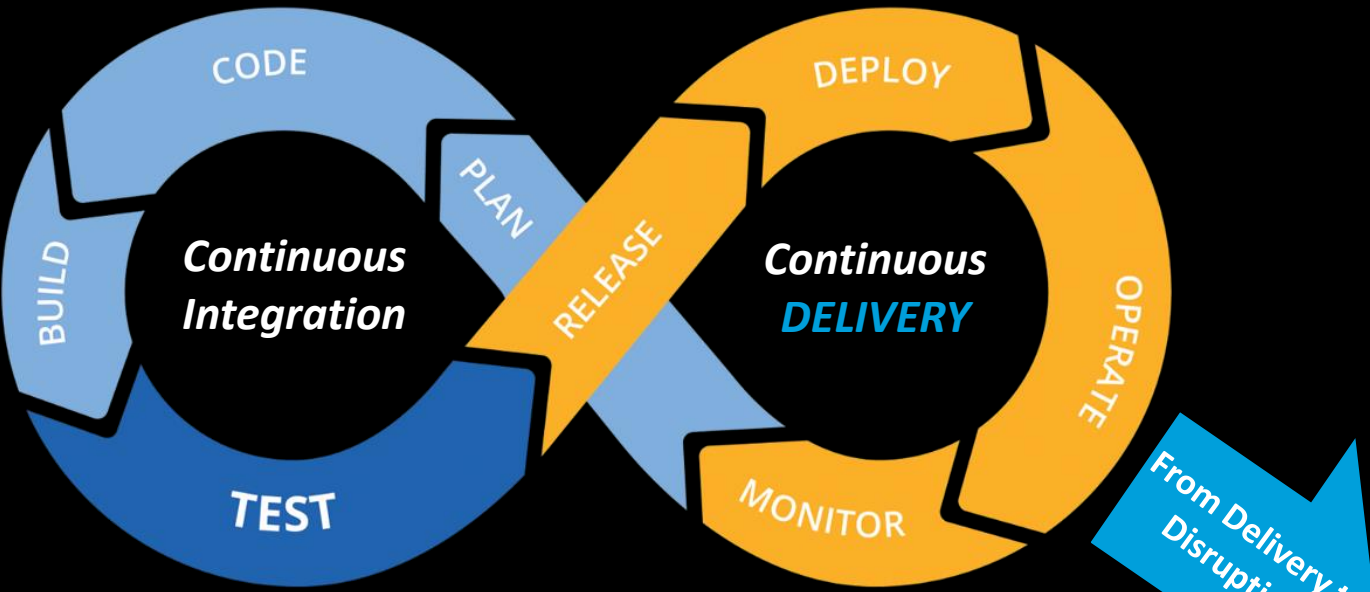
Drones & Expanded Satellites Comm.



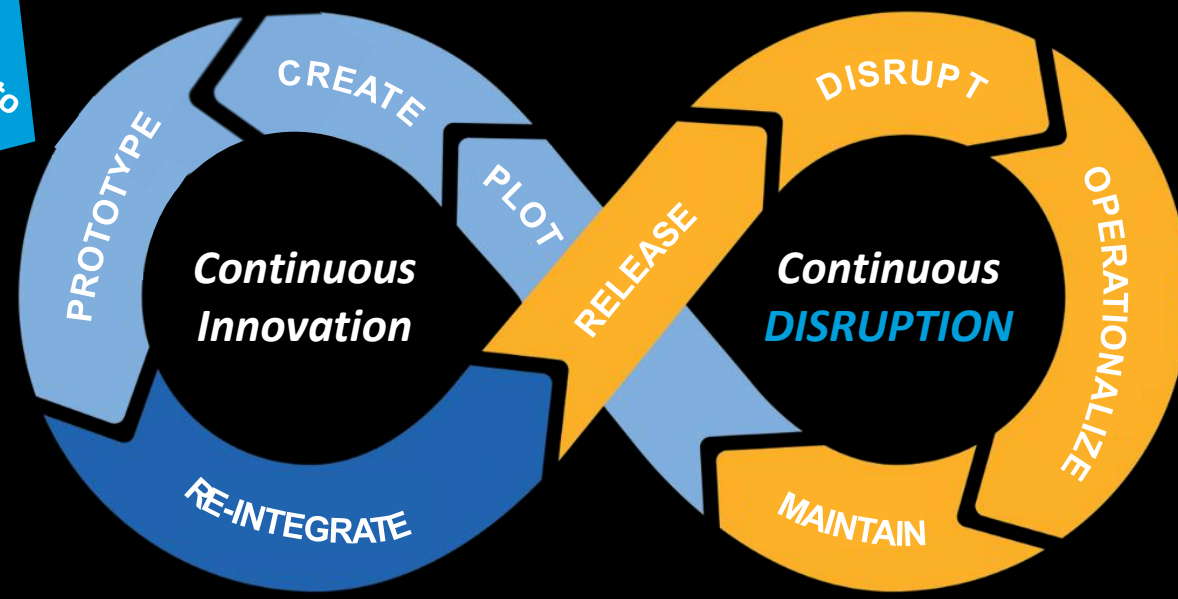
6G: Evolution or Revolution?



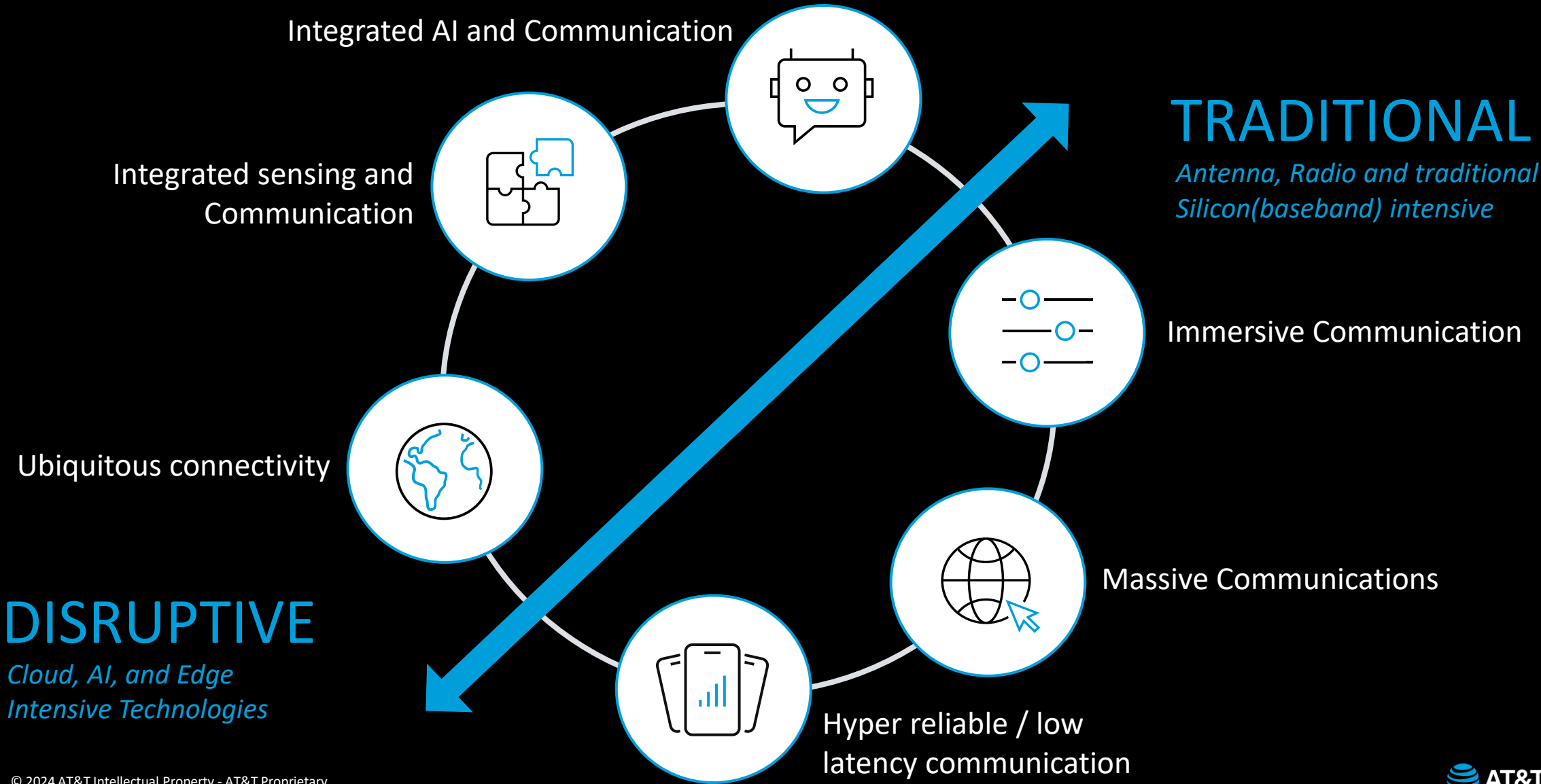
Transitioning to a new 'CICD' model



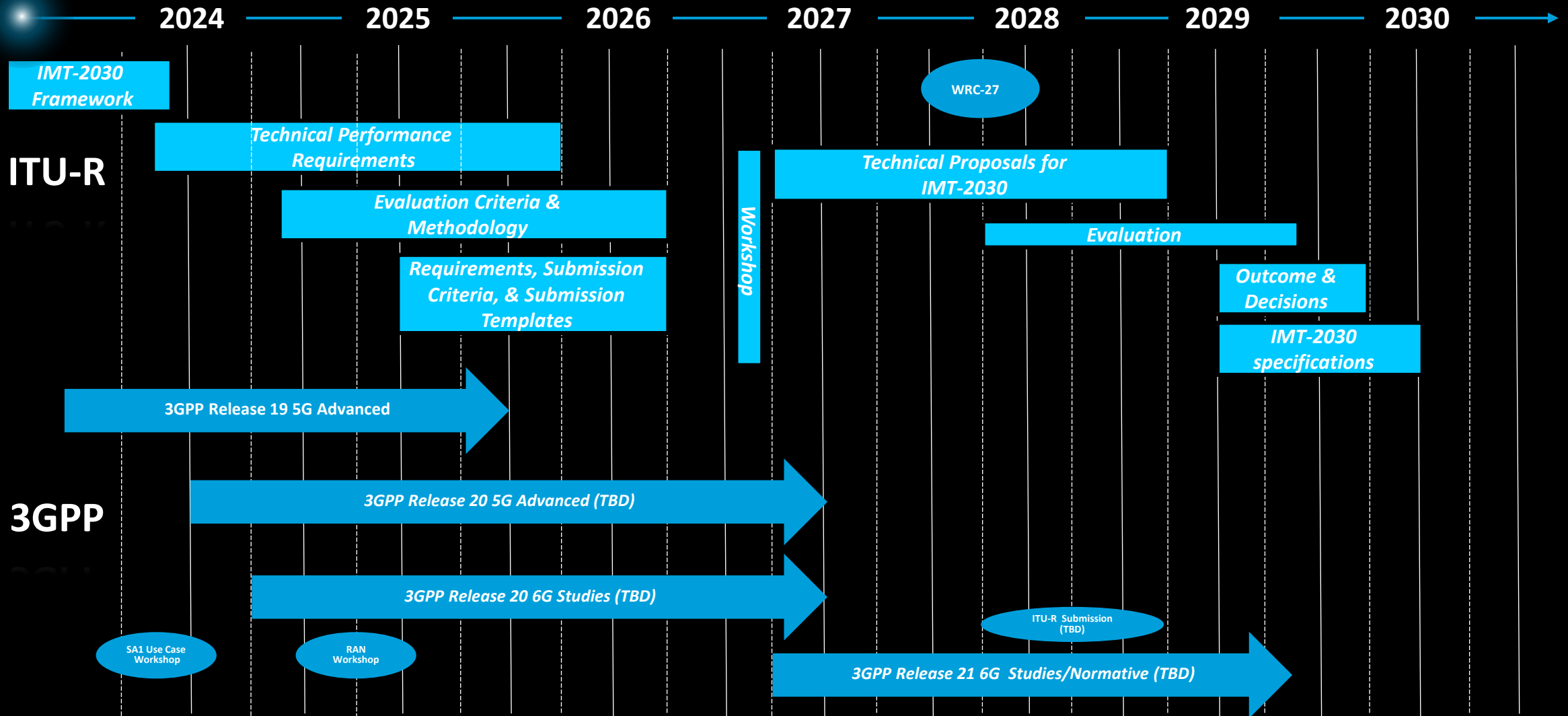
From Delivery to Disruption



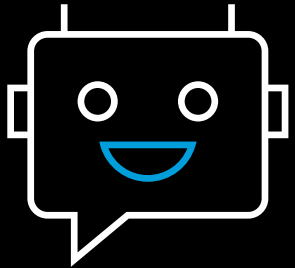
Evolution to Usage Tomorrow



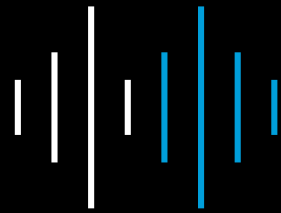
Standards Timeline (Anticipated)



Unlocking Technologies



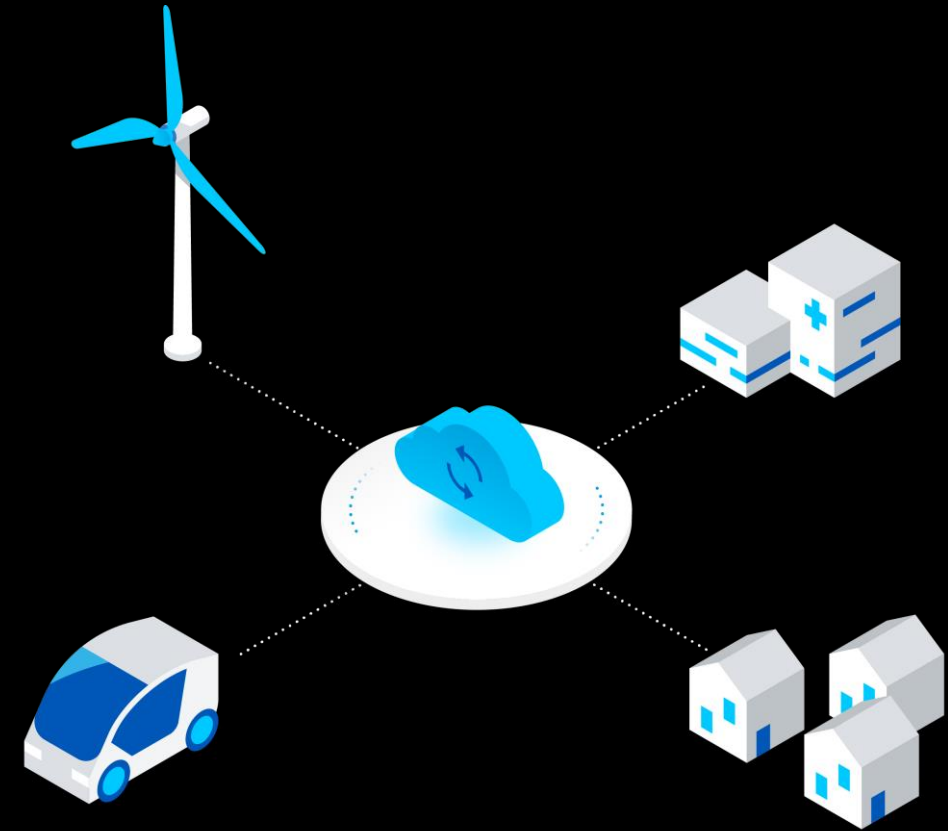
ARTIFICIAL
INTELLIGENCE



SPECTRUM



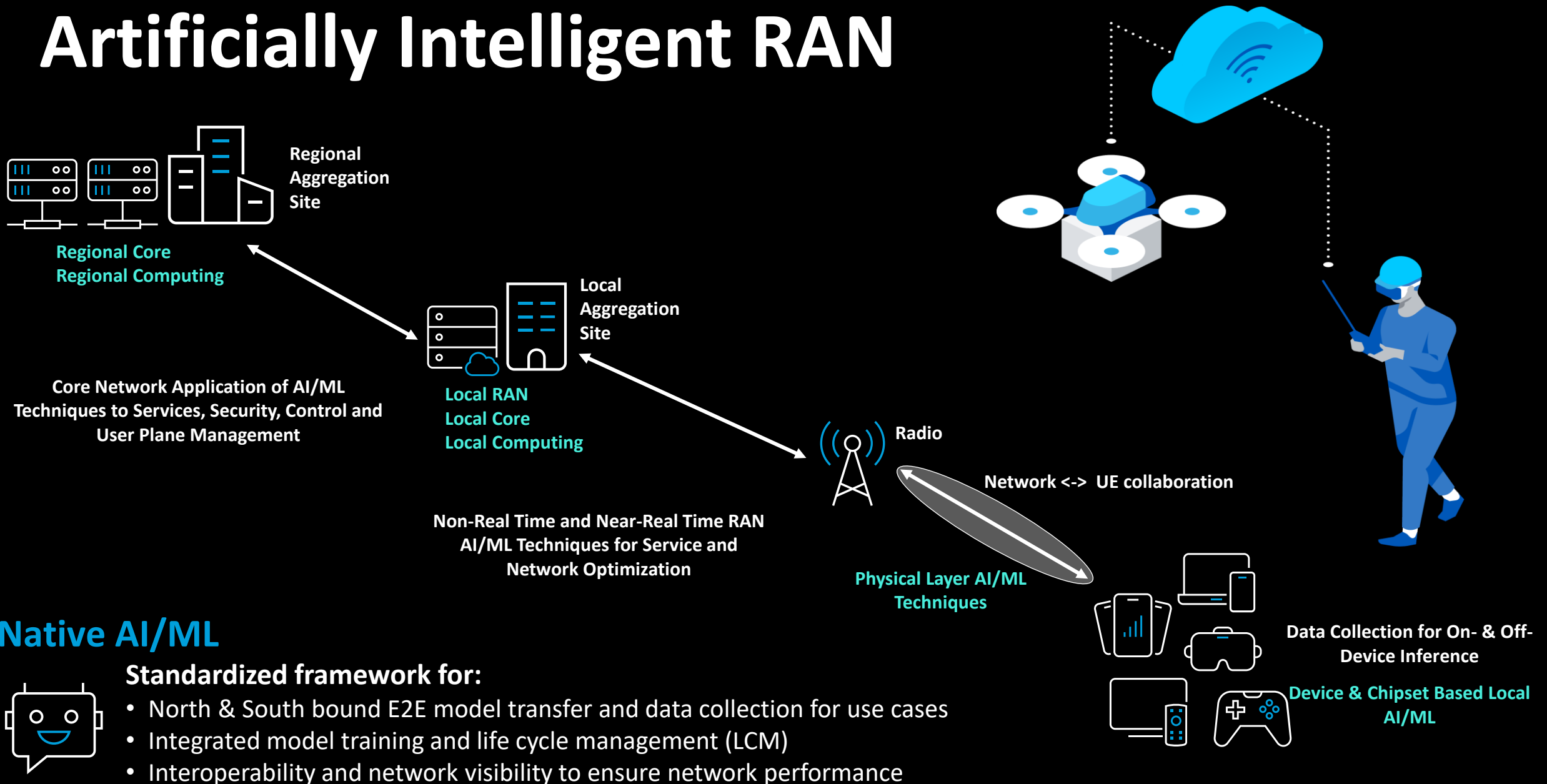
CLOUD
CONNECTIVITY



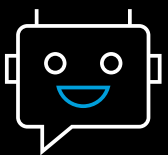
AI/Spectrum/Cloud are not developed on a 10-year horizon.

We need the ability to create or leverage the foundational interface of 5G to integrate new components as they mature and are needed.

Artificially Intelligent RAN



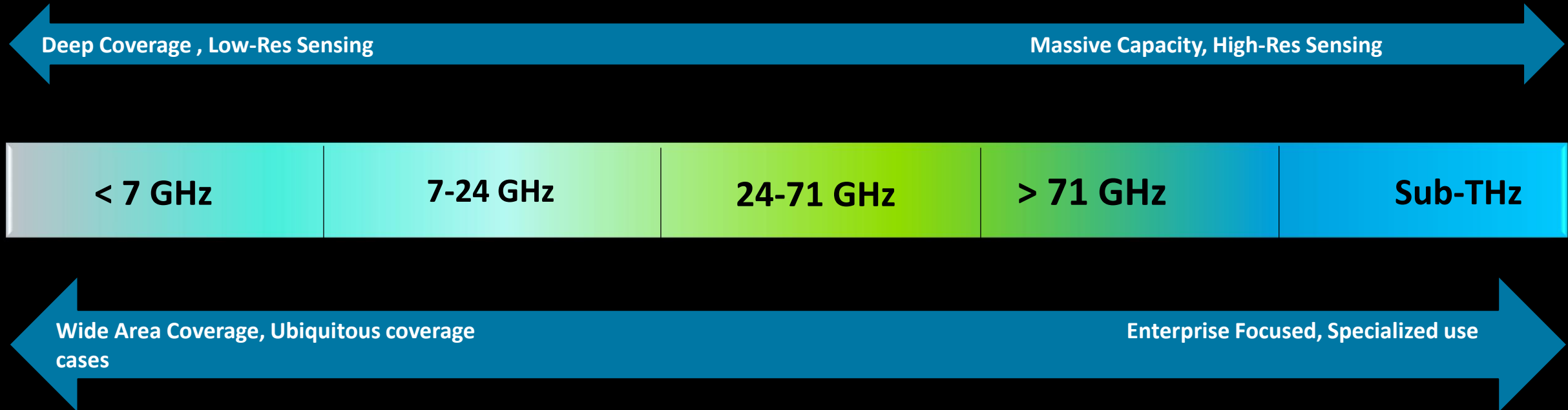
Native AI/ML



Standardized framework for:

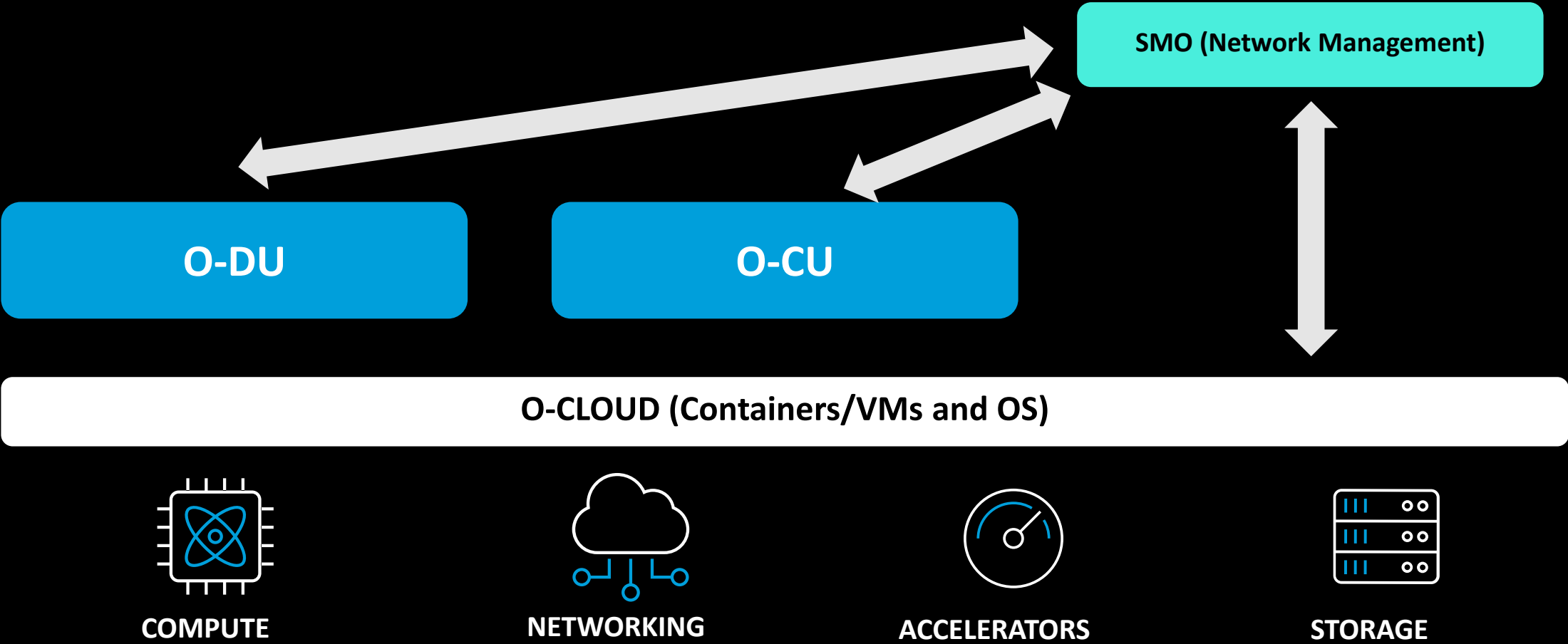
- North & South bound E2E model transfer and data collection for use cases
- Integrated model training and life cycle management (LCM)
- Interoperability and network visibility to ensure network performance

Spectrum



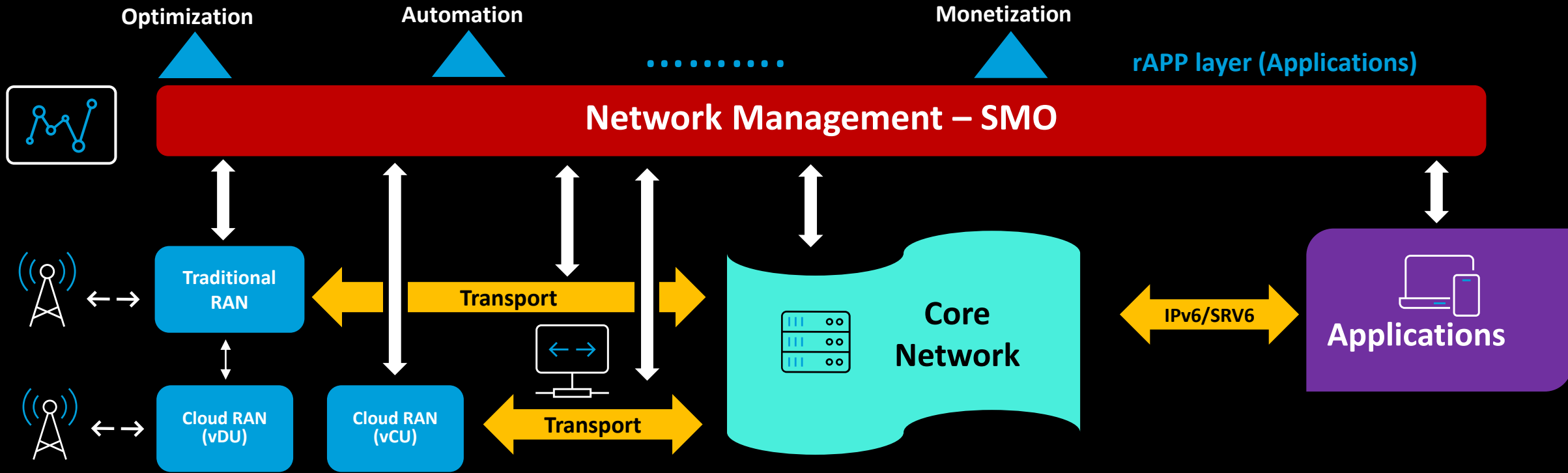
Should spectrum decisions be linked to 'G's' going forward?

Cloud RAN Platform/Architecture

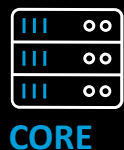
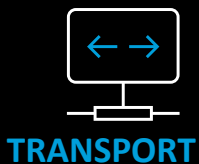


An App for that...

Applications enable new forms of SON, Cloud automation, and even spectrum agility.



Network management evolved to service management and orchestration (SMO) allows for rapid innovation across the end-to-end network with enrichment from:



PERIODS

Security

Thank you!