



**EU-TAIWAN 6G
JOINT WORKSHOP**

MEDIATEK

MediaTek 6G Technology R&D

Dr. Alex C.-C. Hsu

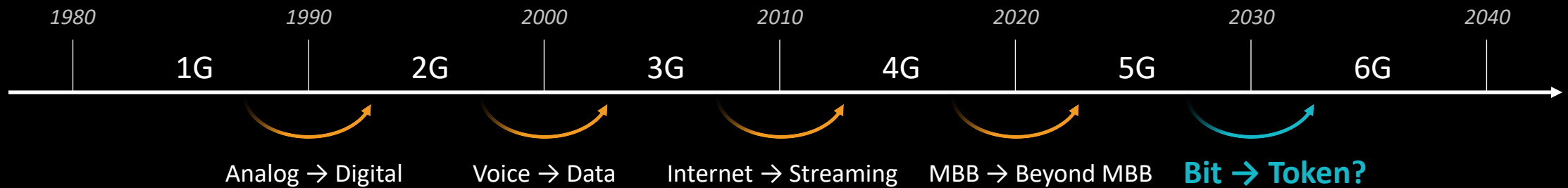
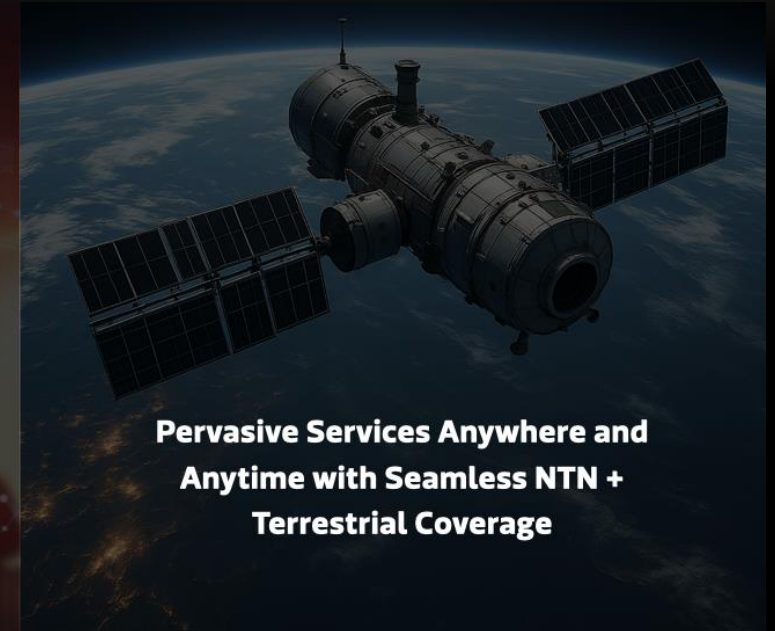


Next Generation Mobile : Enabling Sustainable and Pervasive Intelligence

Sustainable

Intelligent

Pervasive



Paradigm shift of mobile industry

6G Intelligent Systems : Physical AI Enablement

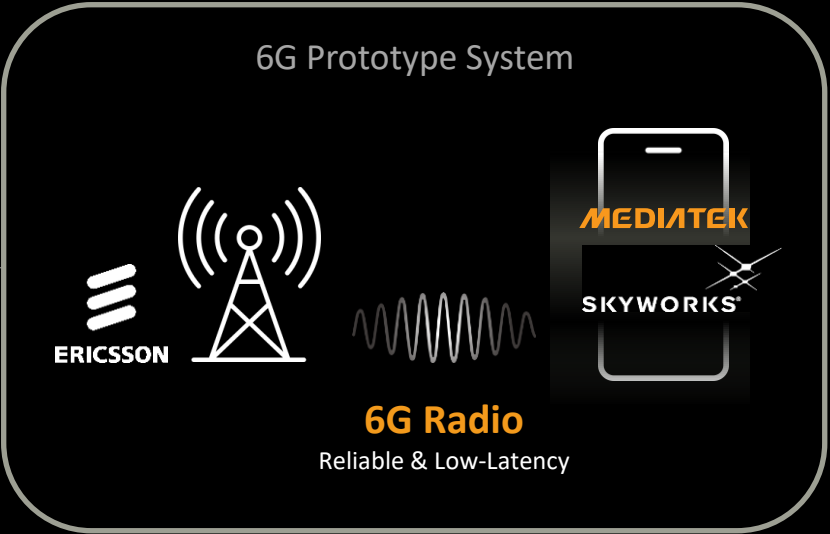
World's 1st 6G Radio (6GR) Interoperability with Ericsson
MWC 2026



“Low Latency + UL High Throughput”
to move computing from robot to edge



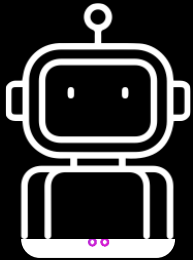
Agent 3



Agent 2

Multi-Agent
Communication

Intent-driven UX



Agent 1



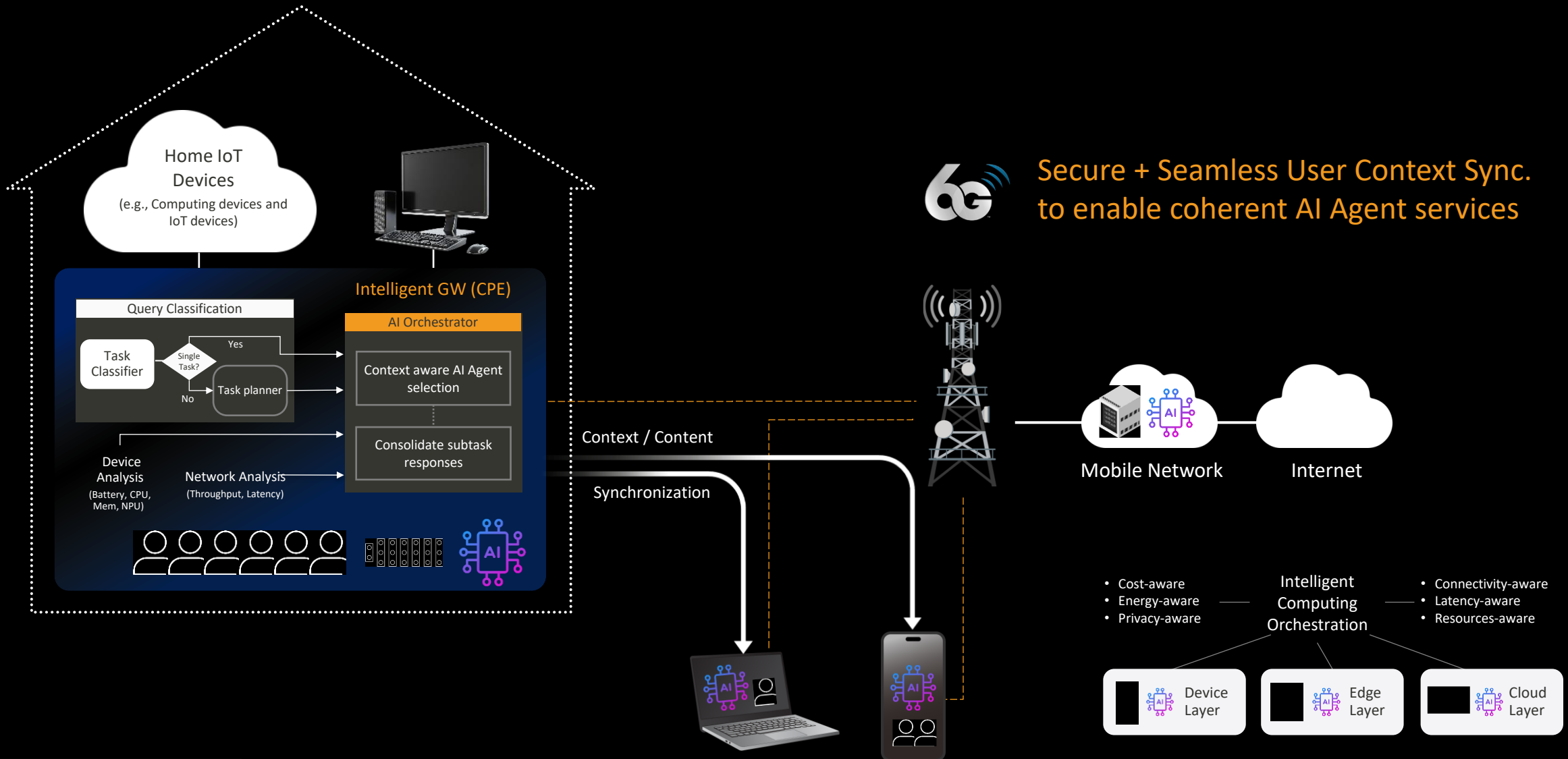
User

Chatting

Face / parcel
recognition



6G Intelligent Systems : Agentic AI Enablement



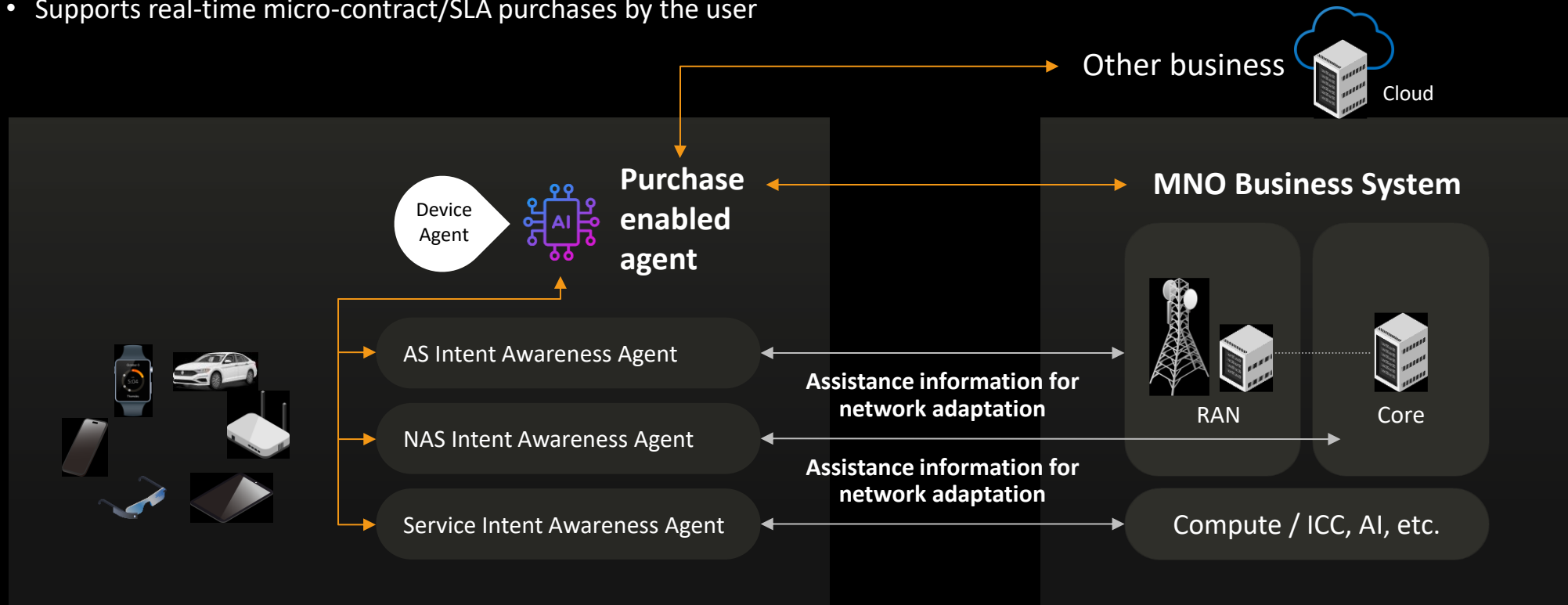
6G Intelligent Systems : Intent-Driven Service w Device Agent

A lightweight device agent that **connects context, application, and intent awareness with network resource**

- Enables on-demand, fast adaptation for an exceptional user experience
- Optimized for resource-constrained or coverage-constrained environments
- Supports real-time micro-contract/SLA purchases by the user



AI Agent to transform user intent into retailed mobile services



6G-enabled seamless AI, with devices serving as user-intent-driven gateways to intelligence

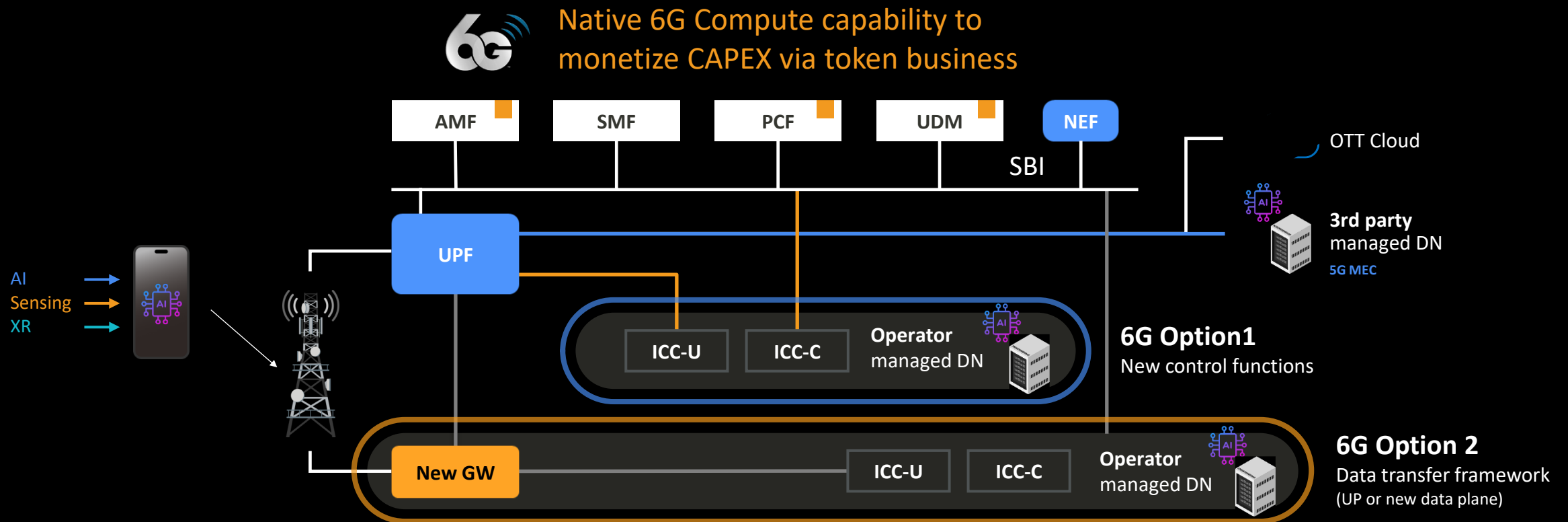
6G Intelligent Systems : Integrating Communications and Computing

5G control/user planes and network virtualized functional nodes

- Mobile Edge Computing and/or OTT Cloud
- Limited cross-system collaboration thru NEF/AF, which is primarily designed for third-party party

Next Gen : **integration of comm., compute and sensing** in control and data plane w/ virtualized functional nodes

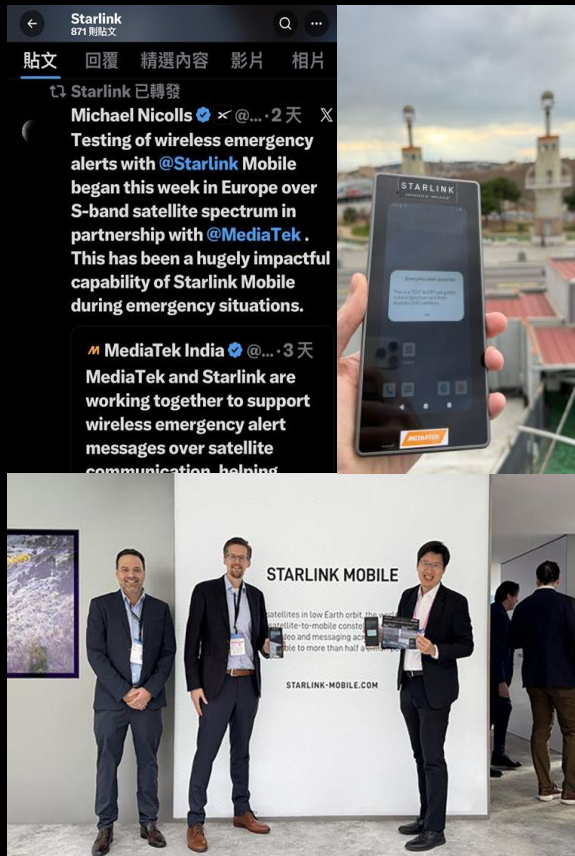
- New Control functions with full access to the core network (CN) and compute resources to support end-to-end QoS
- New routing mechanisms (through the UPF or RAN) for emerging service data, including sensing and AI-related compute



6G Pervasive Coverage : 5G-NTN Technology Breakthrough

MediaTek Continue NTN Technology Leadership in MWC 2026

Satellite Messaging



Satellite Streaming



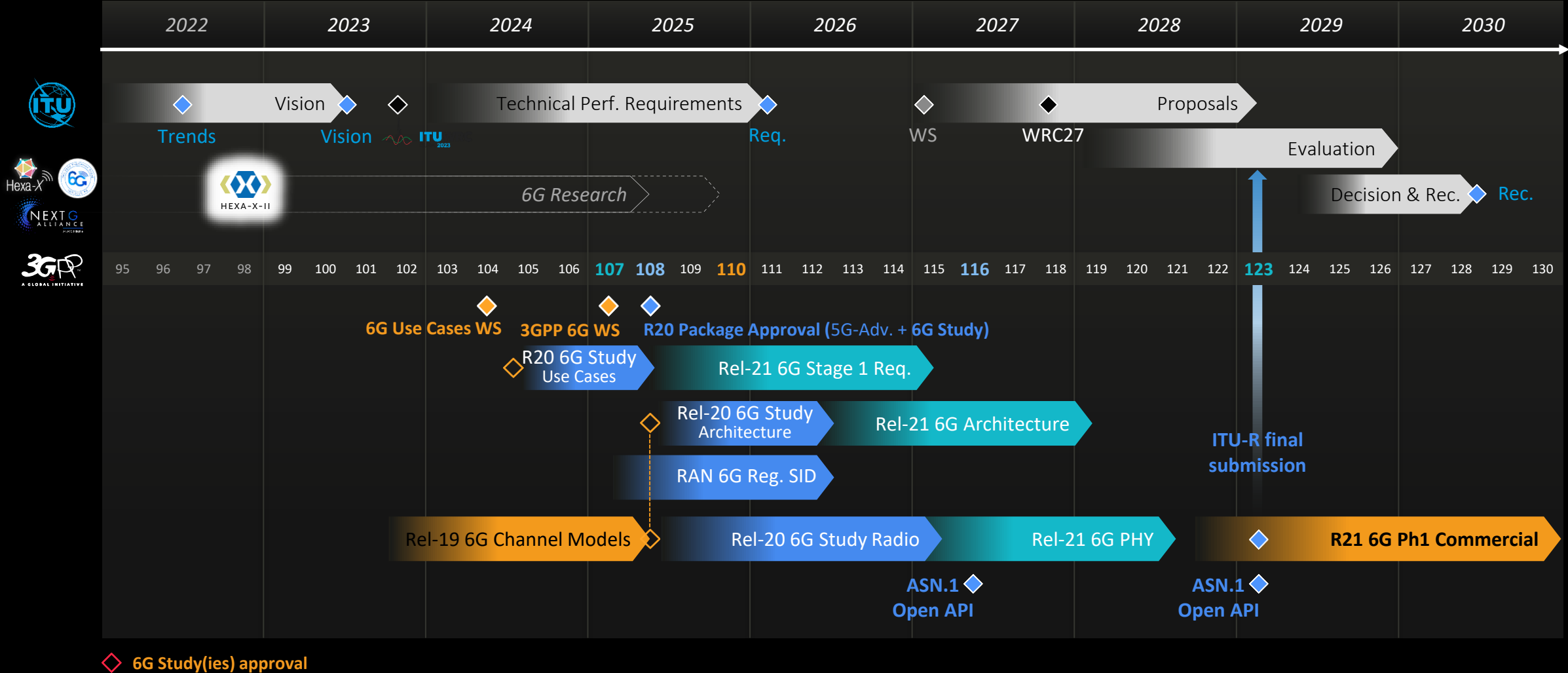
Satellite Broadband

World's 1st Rel-19 5G-Advanced NR-NTN Connection over OneWeb LEO Satellites

Creating a truly connected world



6G Standardization Timeline – ITU and 3GPP Outlook



Summary – 6G to Enable Ubiquitous AI

Human

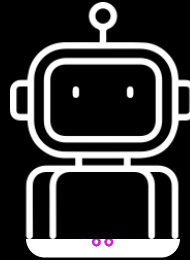
Intend driven dynamic QoS



Micro Contract

Agent

AI OS/CPE



Whole Sale Token

Robot

Critical token QoS



Robot Service

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