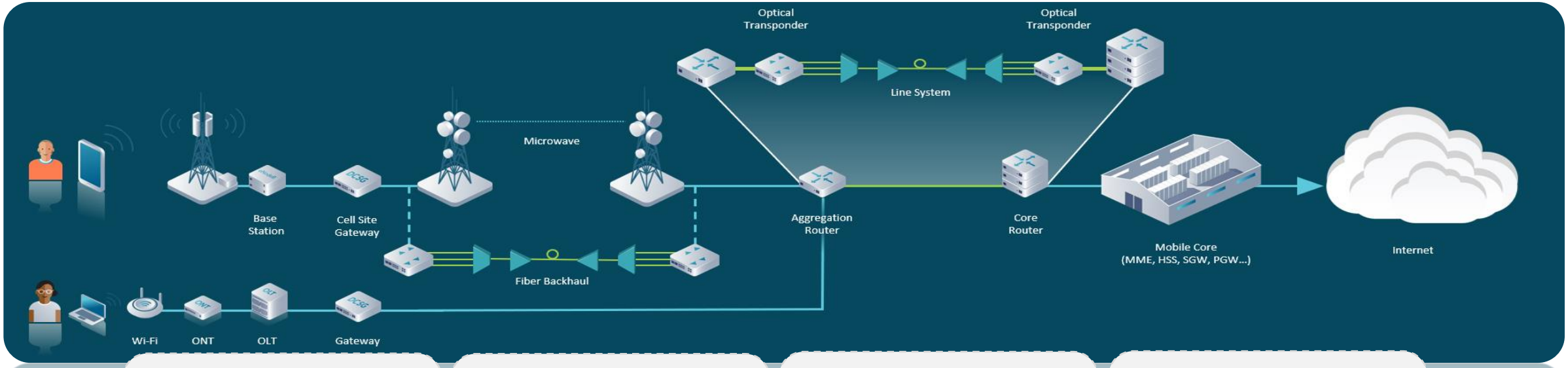
Telefónica Network softwarization

Paving the path to network exposure

Softwarization is happening in all the segments of Telefónica Networks…



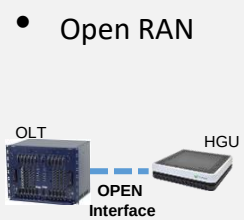
Home

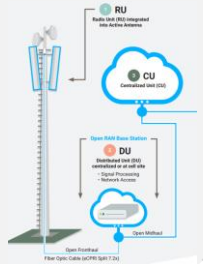
Driven by Single Agent&HaaC platform

- Home gateways
- Baseport / XPORT
- CPE 5G / Base 4G
- Set top boxes
- Movistar Home

Access Network

- Open Broadband (OLT)
- Open RAN





Transport Network

- IP and Optical disaggregation (OpenFUSION)
- SDN (iFUSION)

Core Network

- Telco Cloud Strategy
- Network Virtualization
- Core multivendor + Cloud native + Common core

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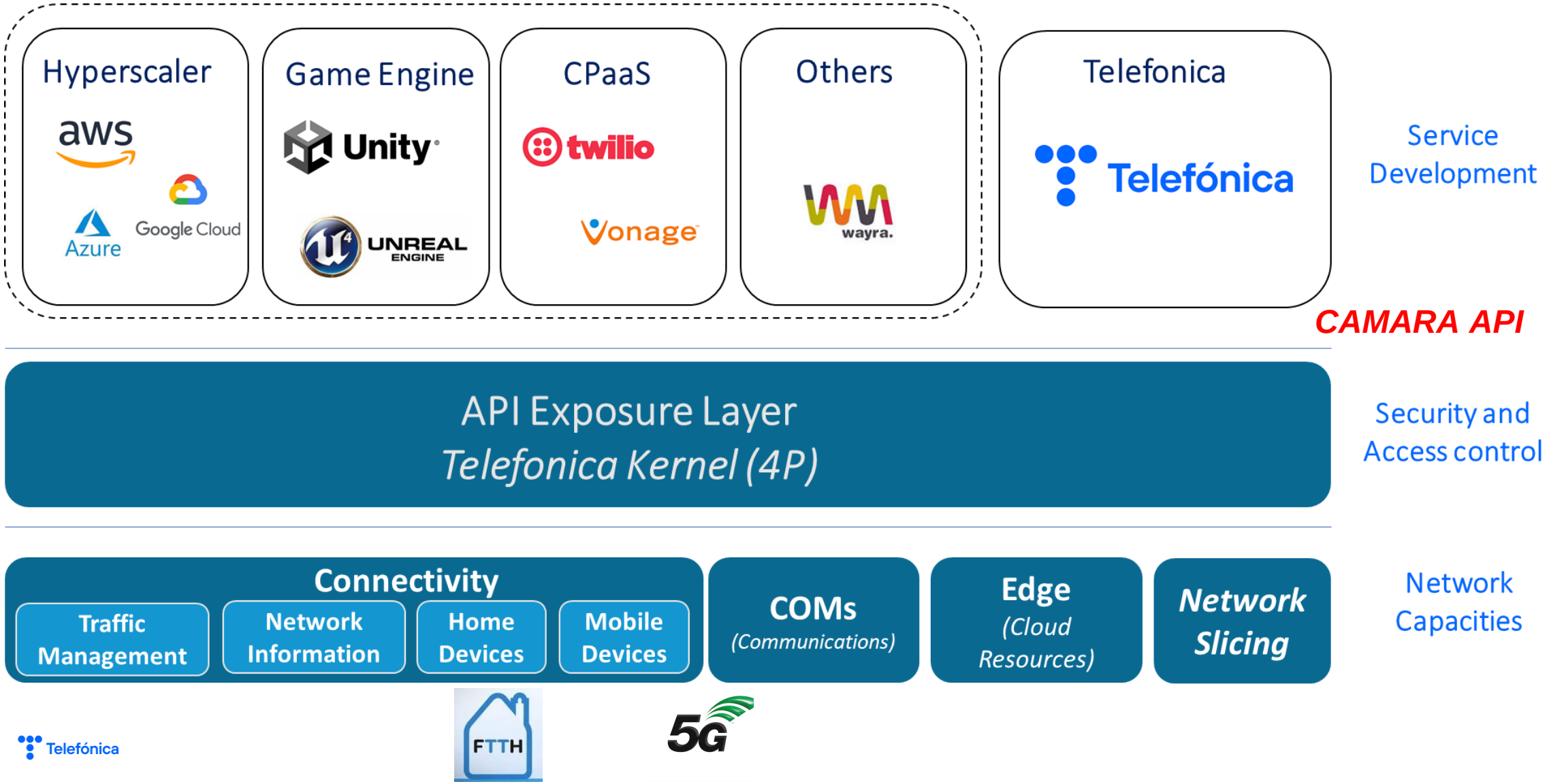
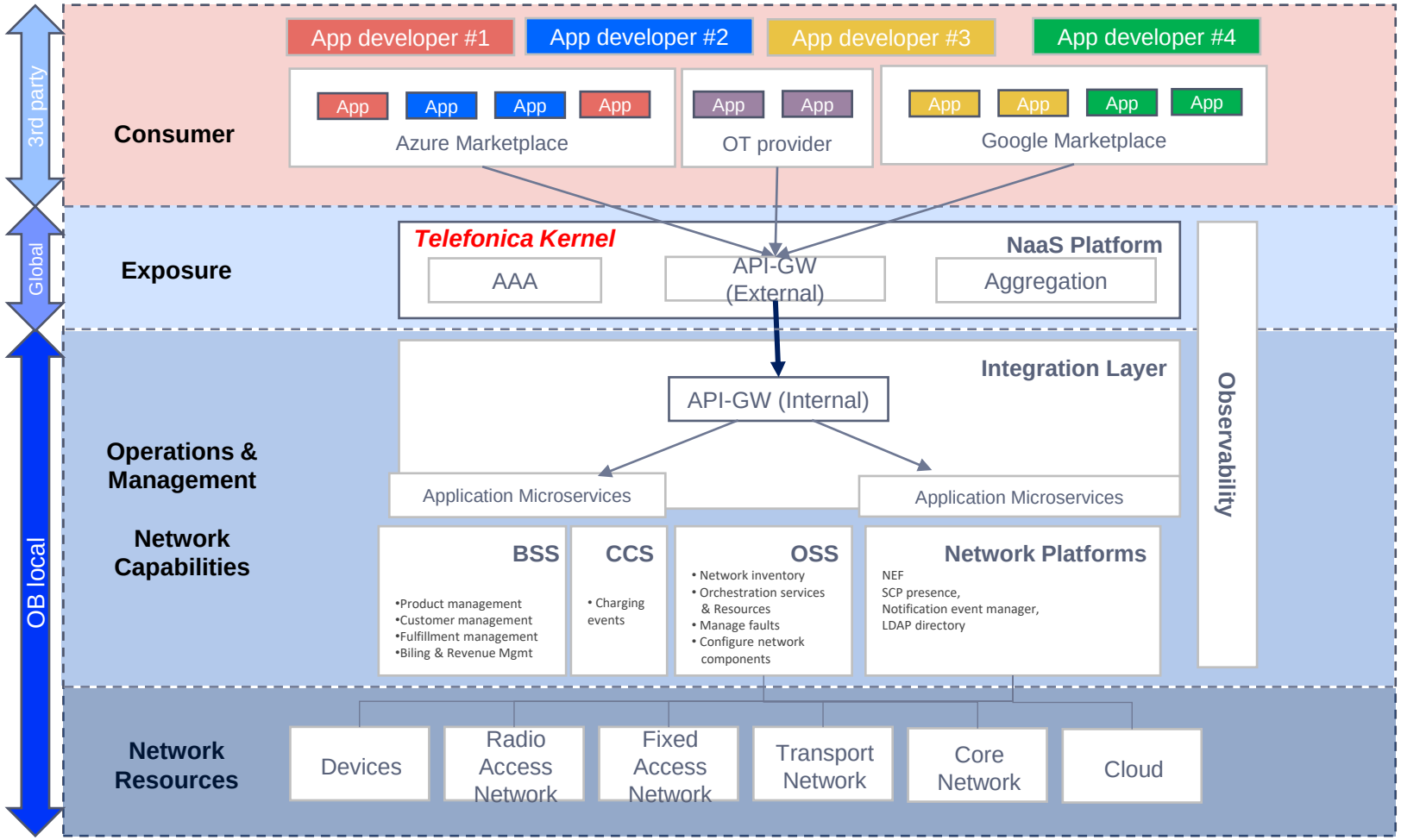
… guaranteeing robustness, flexibility and efficiency, enabling differentiation

New Network functionalities are increasing the possibilities of offering services to our customers

How are we enabling NaaS?



What is our NaaS Architecture?



What is the type of network capabilities we plan to expose?

Traffic Management

- Management of IP Flow in mobile networks
- Differentiation of the traffic of a given device in a WiFi network

Device Management

- Device Location
- Device Status
- Event notifications

Network Information

- Real time perfomance of the network
- Prediction of network performance

Authentication, Security, Privacy

- User identification
- User Consent

Edge

- Edge node Discovery
- Application on boarding in an Edge node

Slicing

- Creation, modification or elimination of a network slice

Comms

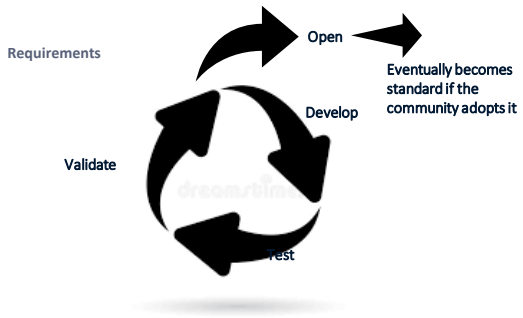
- Web RTC
- IMS Data Channel
- New services Voice and messaging

Relevant topics for network exposure

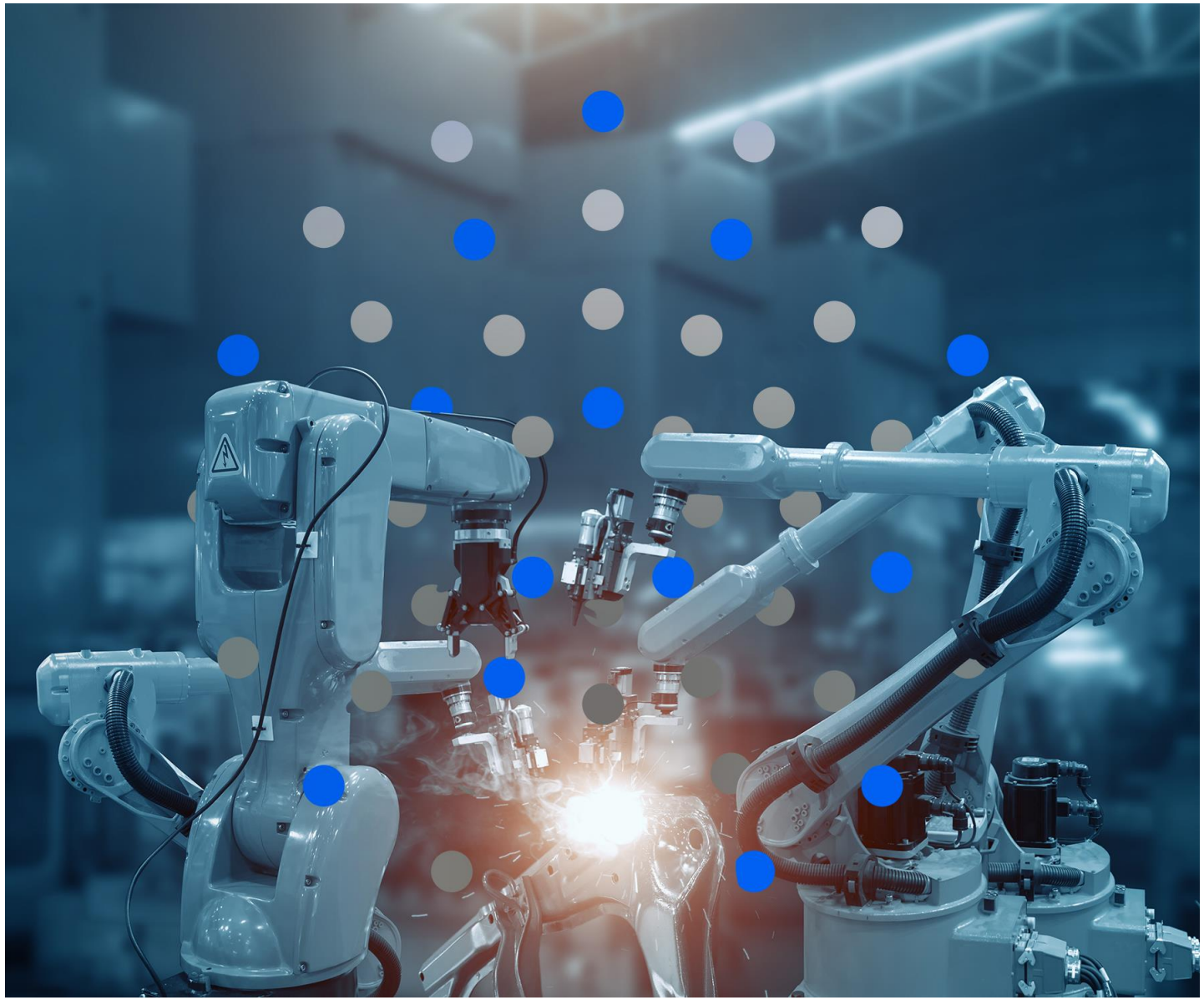
- Service APIs MUST be standardized
  - Camara as Standardisation tool
  - OpenGW MoU as a key catalyser for implementation
- Network API should follow the standardised implementation, for instance NEF
- 5G will be the main source of exposed capabilities. Industry should speed up in exposure interfaces (mainly NEF interfaces)
- Network Security is a must. Some API misused could represent a serious issue
- Strict implementation of the service fulfilling net neutrality regulation
- In summary, a proper industrialization of our exposure capabilities us needed

What is relevant for developers?

- We should implement APIs, test them with developers and then standardise.



- Telefónica Early Adopter Program key in the dialogue with developers



NaaS may be a key disruption.
Telefónica is ready to take advantage of it

Telefónica