14:45 – 15:15

Telefónica's Network evolution: Softwarization and automation as a way to boost monetization and efficiency

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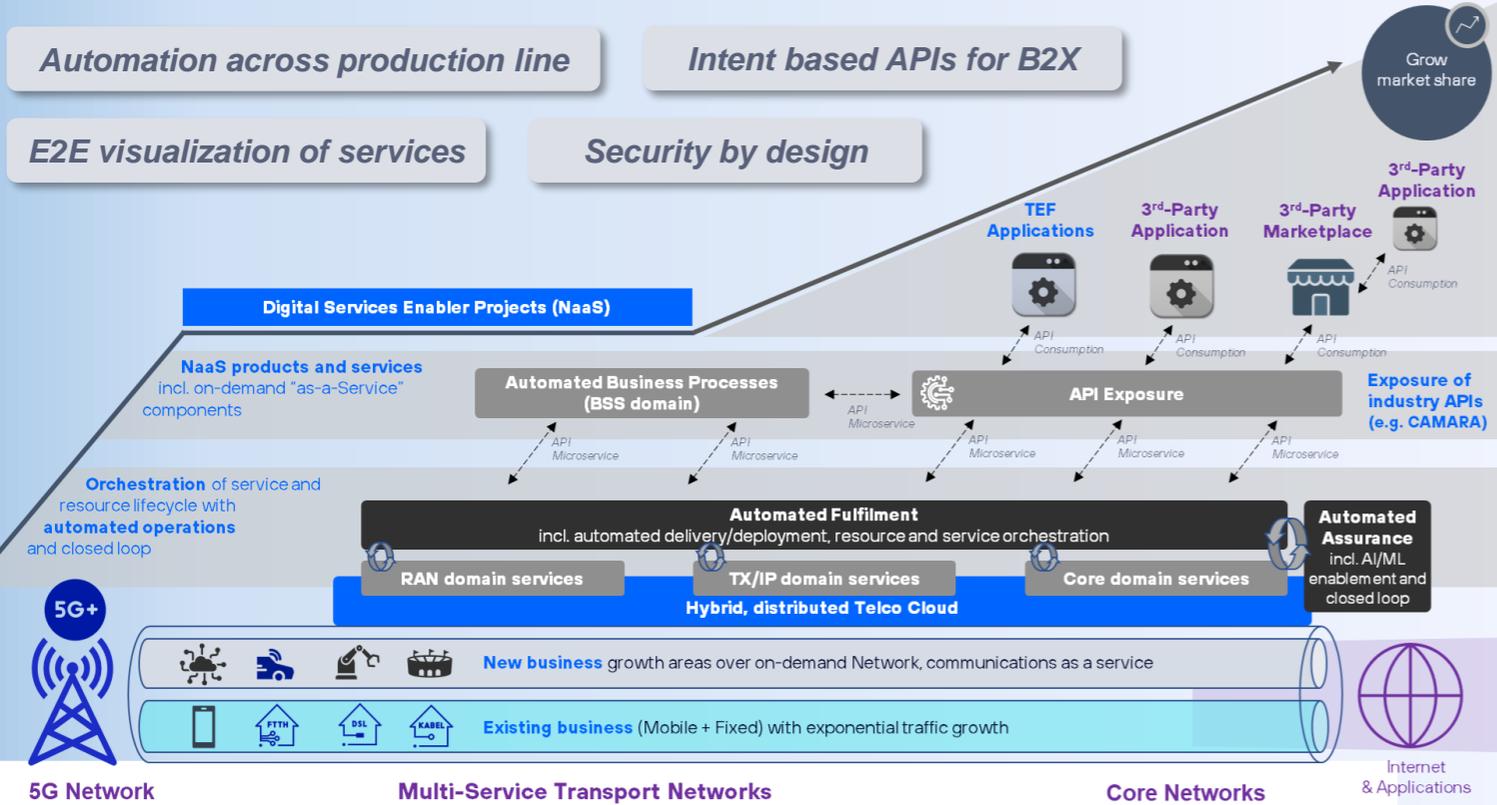
100 Telefónica
desde 1924

Telefónica's Network Evolution

Softwarization and Automation
as a way to boost monetization and efficiency

Telefonica Germany is forging ahead with ´Network of the Future´ Program

Architecture:

Automation across production line

Intent based APIs for B2X

E2E visualization of services

Security by design

Grow market share

Digital Services Enabler Projects (NaaS)

TEF Applications

3rd-Party Application

3rd-Party Marketplace

3rd-Party Application

API Consumption

NaaS products and services incl. on-demand "as-a-Service" components

Automated Business Processes (BSS domain)

API Exposure

Exposure of industry APIs (e.g. CAMARA)

API Consumption

API Consumption

API Consumption

API Microservice

API Microservice

API Microservice

API Microservice

API Microservice

Orchestration of service and resource lifecycle with **automated operations** and closed loop

Automated Fulfilment
incl. automated delivery/deployment, resource and service orchestration

Automated Assurance incl. AI/ML enablement and closed loop

RAN domain services

TX/IP domain services

Core domain services

Hybrid, distributed Telco Cloud

5G+

New business growth areas over on-demand Network, communications as a service

Existing business (Mobile + Fixed) with exponential traffic growth

FTTH   DSL   KABEL

Internet & Applications

5G Network

Multi-Service Transport Networks

Core Networks

Network of the Future

- Reduce **cost to serve**

- Open up **new ecosystems**

- **Faster TTM** with new WoW Plan – Build – Run NW

- **Architecture step change** (Cloudification, Softwarization)

Deliver ´Very good´ network to our customers
- Step up 5G SA & Accelerate 2G refarming
- Commercial customers on cloud based 5G packet core from Q1 24

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Telefonica framework of network transformation with 4 key levers

STATEMENTS

SUSTAINABLE

01 — All legacy switch-off

02 — All in the Cloud [hybrid multi-cloud, managing public clouds]

03 — All Network & Systems functions are disaggregated & softwarized

04 — All software is governed by AI

05 — All processes are automated

06 — All Network and systems are APIfied

07 — Everything is data-driven

08 — Everything exposed as digital ecosystem services

Legacy shutdown and technology cycle management

Go to Cloud

Open Architectures

AI and Automation

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Network cloudification to achieve agility and high level of automation

And this is not a matter (only) of infra…

Network Cloudification & Softwarization
with E2E native AI & Automation

What does mean a Cloud native Network?

- CNF based in microservices over containers
- Automated testing and implementation (CI/CD/CT)
- Auto-scaling and auto-healing
- ISSU. No maintenance window. Canary testing
- All network functions exposed by APIs
- Compatible with E2E orchestration
- Multicloud (always containers K8) with no impact in performance

Public cloud as a possibility to be analysed from technical, regulatory, economical and strategic aspects. Not ready yet

Priorities

- **Hybrid cloud approach.** Today we have VV, Telco cloud and public cloud as implemented alternatives
- So **Multicloud** automation of implementation (CI/CD/CT)
- **Exposition** of network capabilities (network APIs)
- New operational model. **Autonomous Network Journey**
- Increase level of **automation**. Reaching level 4 (TMForum) in 2025

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