DT RAN DISAGGREGATION

NGMN ODiN webinar| Franz Seiser, Marc Fiedler et al | 14.10.2021

LIFE IS FOR SHARING.

Confidential

Key Challenges in RAN

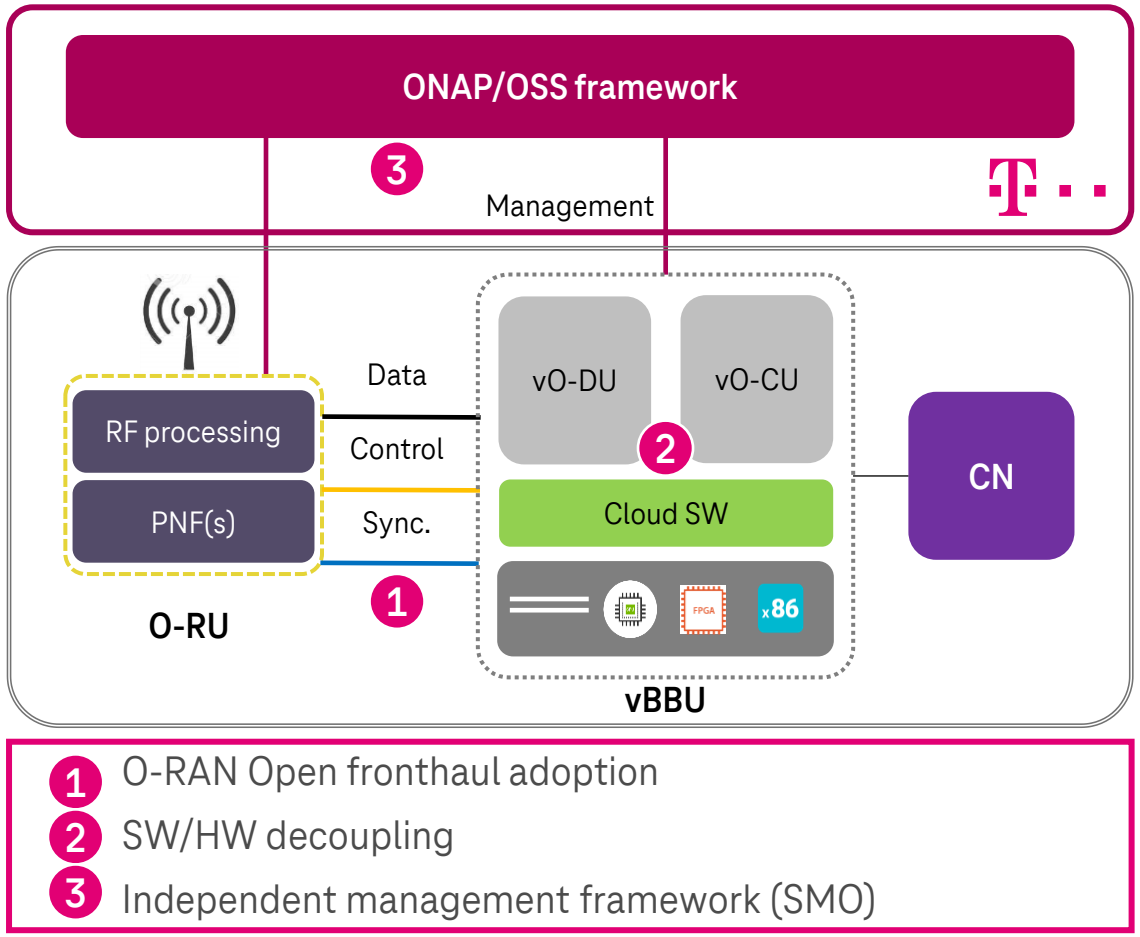
Ecosystem challenge

Deployment cost & flexibility

Cumbersome & costly RAN swap

Low flexibility limits innovative power

What do we expect from RAN Disaggregation/O-RAN



1. O-RAN Open fronthaul adoption
2. SW/HW decoupling
3. Independent management framework (SMO)

- **Enrich the vendor landscape, avoid vendor lock-in effect**
- **Less complex and shorter RAN modernization**
- **New use cases via intelligence and programmability**
- **Lower TCO vs. S-RAN** (to be proven)

DT ambition: O-RAN as a deployable option by 2023

Early hands-on experience: O-RAN TOWN

Gain operational insights and drive feature readiness

5 KEY COMPONENTS ON OUR WAY TO O-RAN

Prepare operations

Define and implement required new operating model

Skill development

Build required skills and resources

DT‘s own SMO/Automation

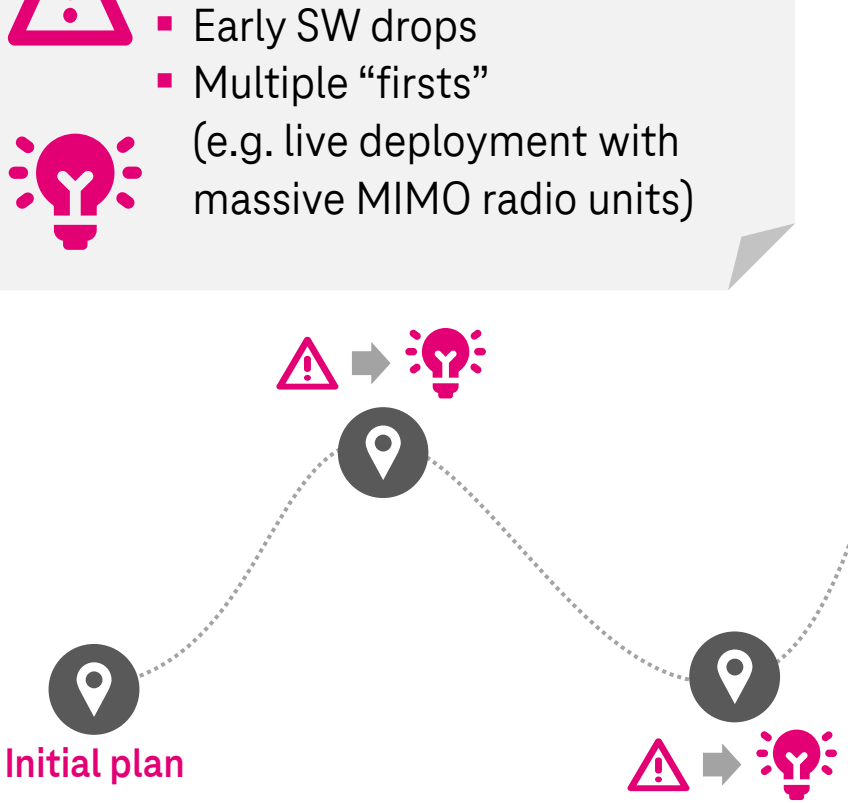
Avoid any vendor lock-in and manage integration complexity

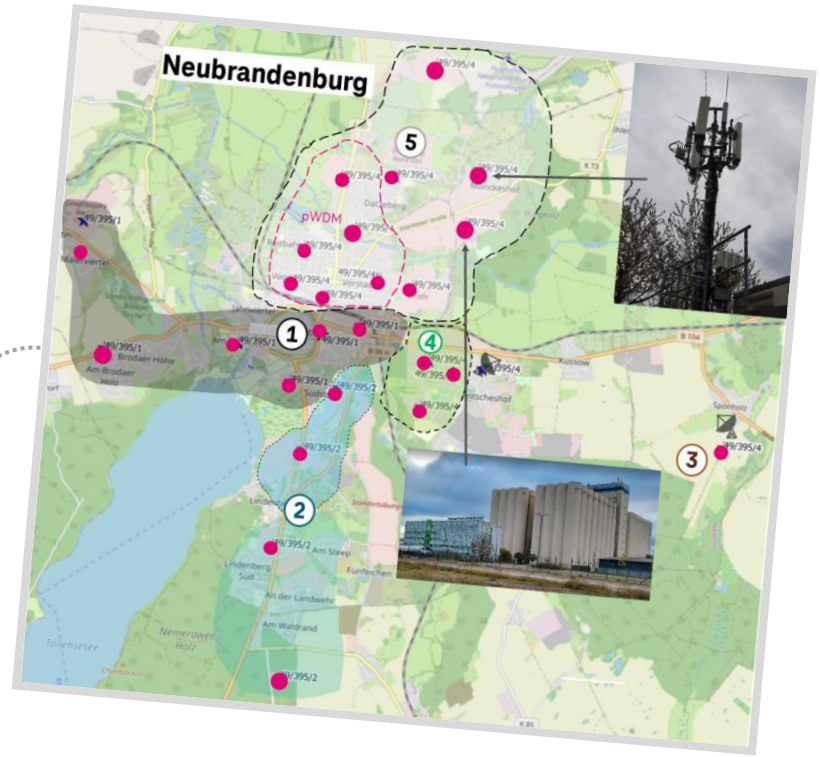
Industry ecosystem

Ensure to have a healthy and sustainable supplier landscape

As expected, the O-RAN Town journey is not a straight path—but provides very valuable learnings

- Early HW versions
- Early SW drops
- Multiple “firsts” (e.g. live deployment with massive MIMO radio units)





Operating model: integration responsibility moves towards the operator

1 O-RAN Vendor/Supplier

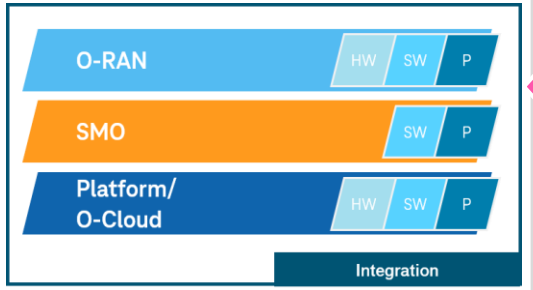
ILLUSTRATIVE

- RU vendor A, B, C, …
- vDU/vCU vendor A, B, C, …
- O-Cloud vendor A, B, C, …
- Server vendor A, B, C, …
- SW xyz vendor A, B, C, …

Demand

Delivery

2 Integration and Testing according to DT requirements



Demand

Delivery

3 NatCo specific deployment scenario/vendor combination

ILLUSTRATIVE

VENDOR

INTEGRATION RESPONSIBILITY TODAY

INTEGRATION RESPONSIBILITY TOMORROW

Integration by Vendor

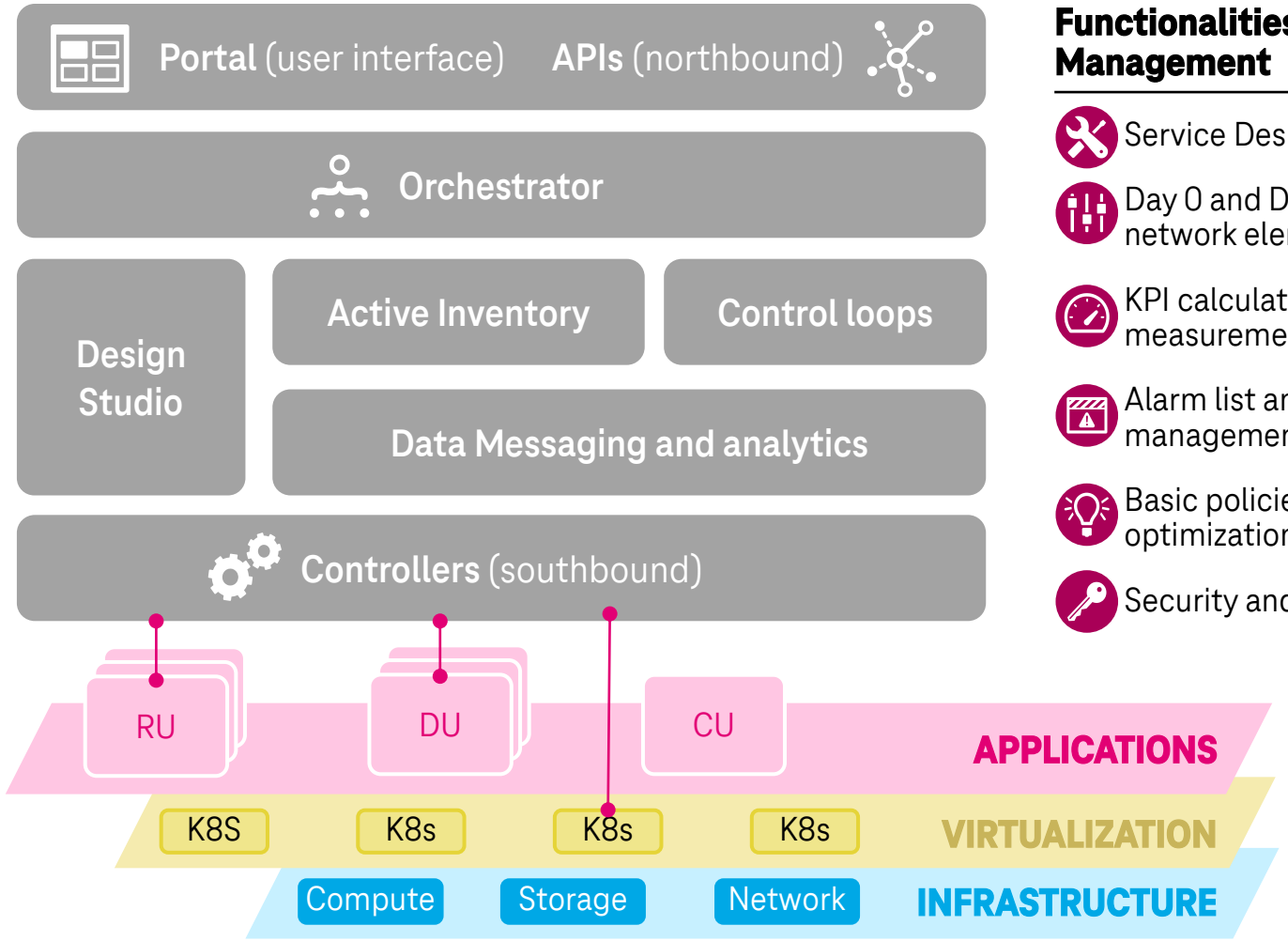
Integration by DT

Piloting of SMO concept @ O-RAN Town

Platform for Service Management and Orchestration (SMO)

- Integration with O-RAN cloud native functions (CNF)
- Integration with O-RAN compliant RUs as physical network functions (PNF)

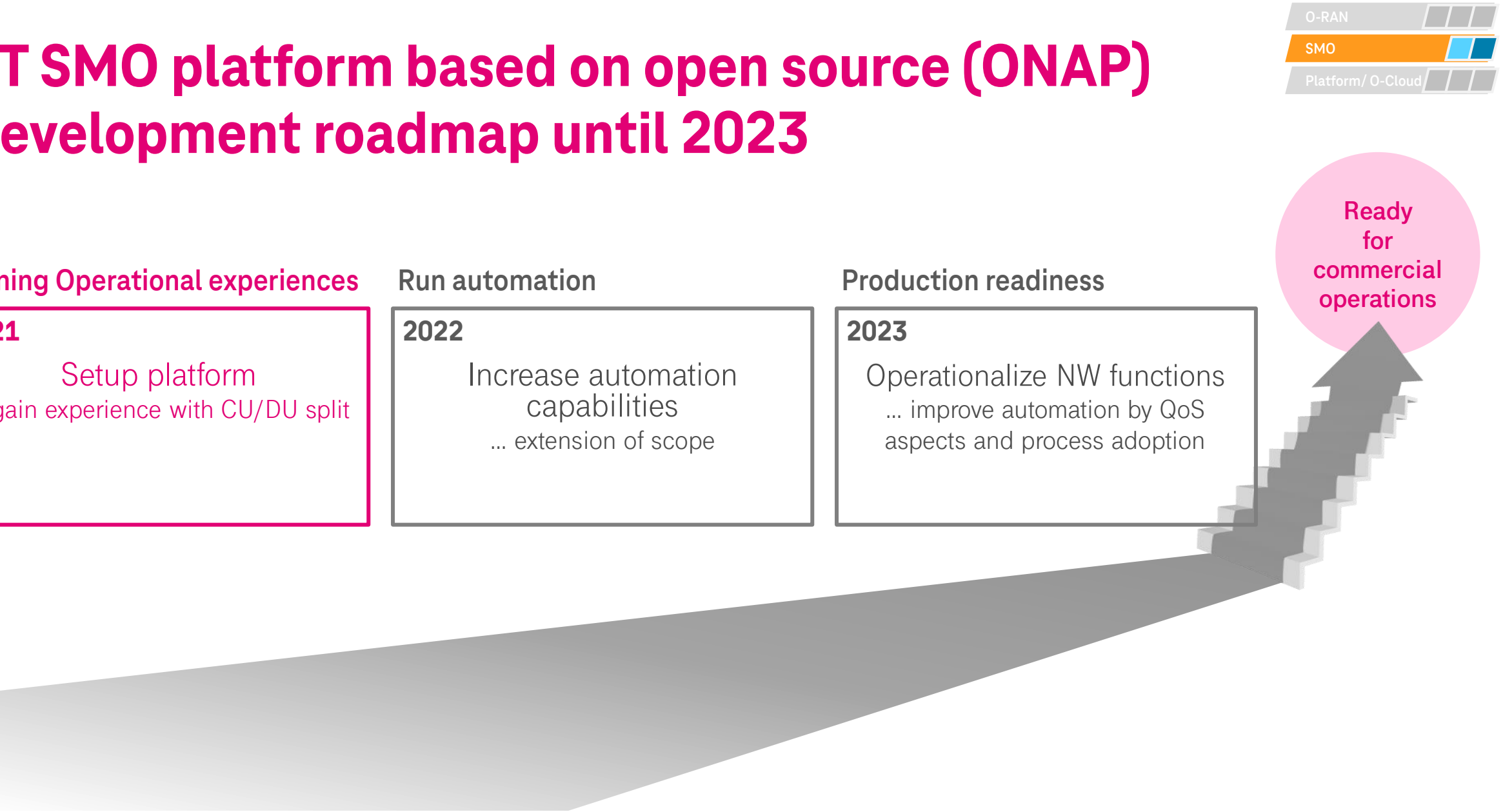
T-NAP



Functionalities for Lifecycle Management

- Service Design 4G and 5G
- Day 0 and Day 1 Configuration of network elements
- KPI calculation and Performance measurement
- Alarm list and dashboard for fault management
- Basic policies for Network optimization
- Security and access management

DT SMO platform based on open source (ONAP) Development roadmap until 2023



Thank you!