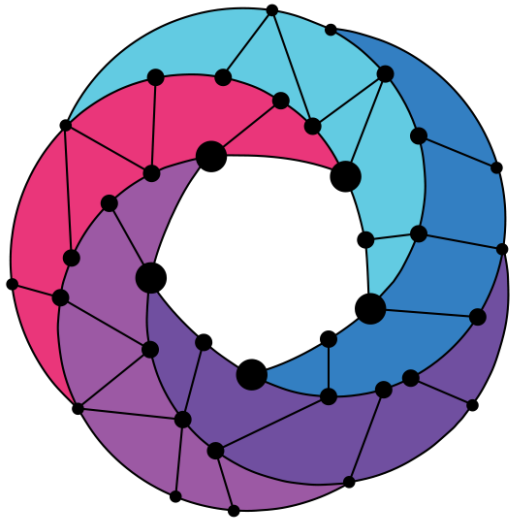


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TEOSM For Differentiated Digital Services

Ramesh Ramanathan

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ETSI

Agenda

- TATA Elxsi and 5G
- TEOSM and digital transformation
- TEOSM Demo Videos
- TEOSM Features and Roadmap

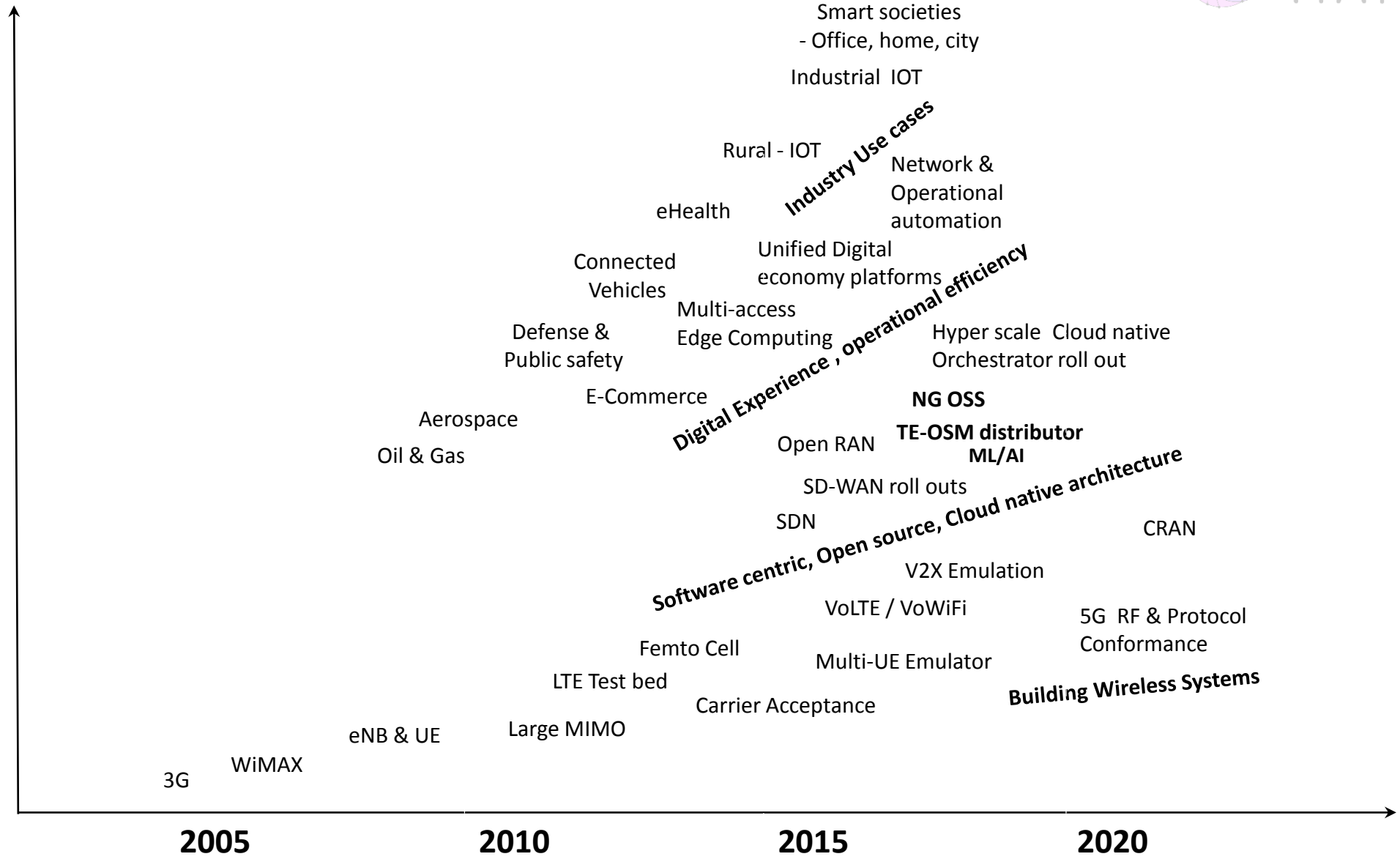


Open Source MANO Hackfest
Madrid, Spain 9 - 13 March 2020

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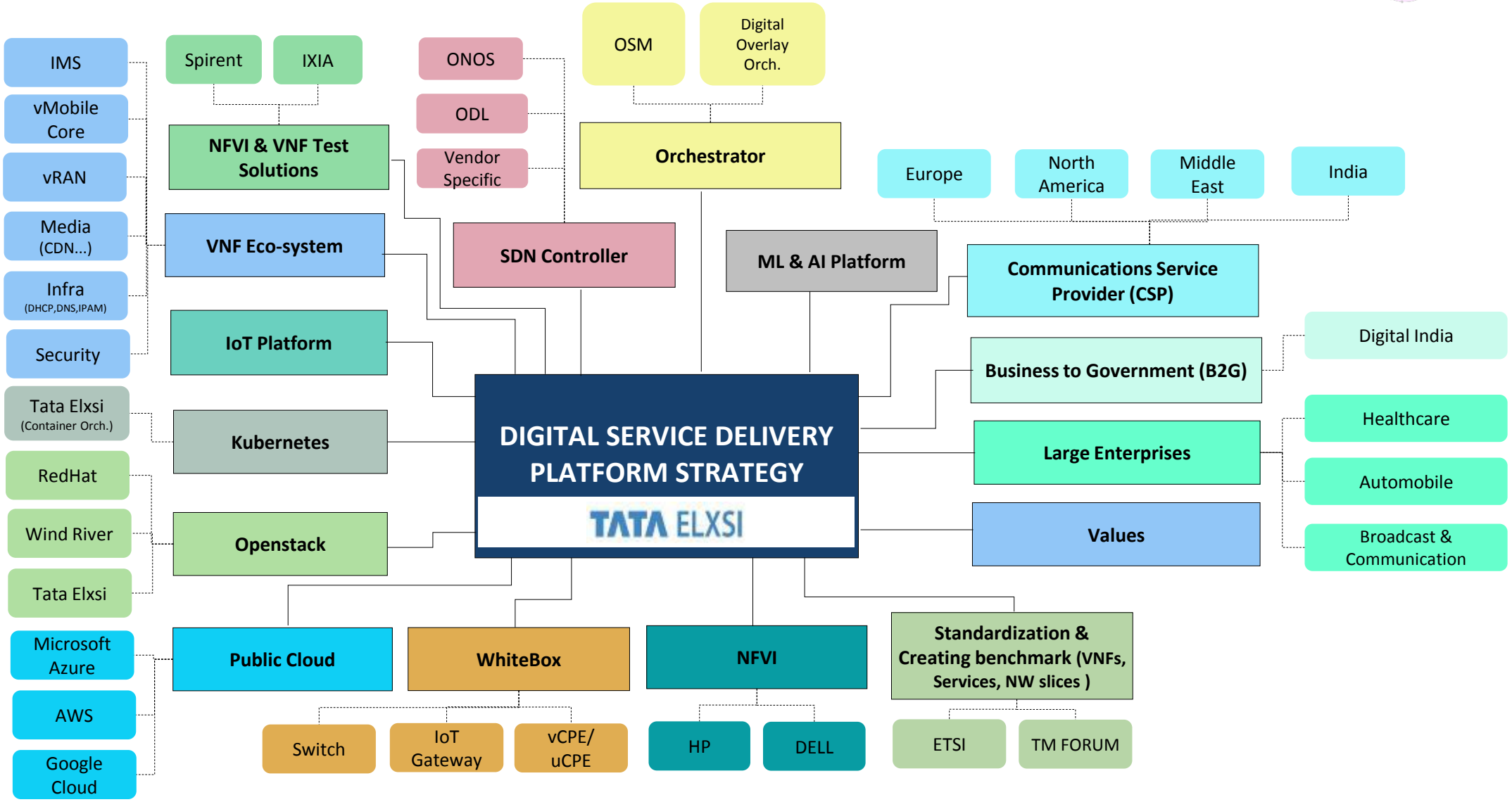
Open SDN/NFV/Digital & Wireless Technologies

Tata Elxsi's Experience – Evolutionary perspective



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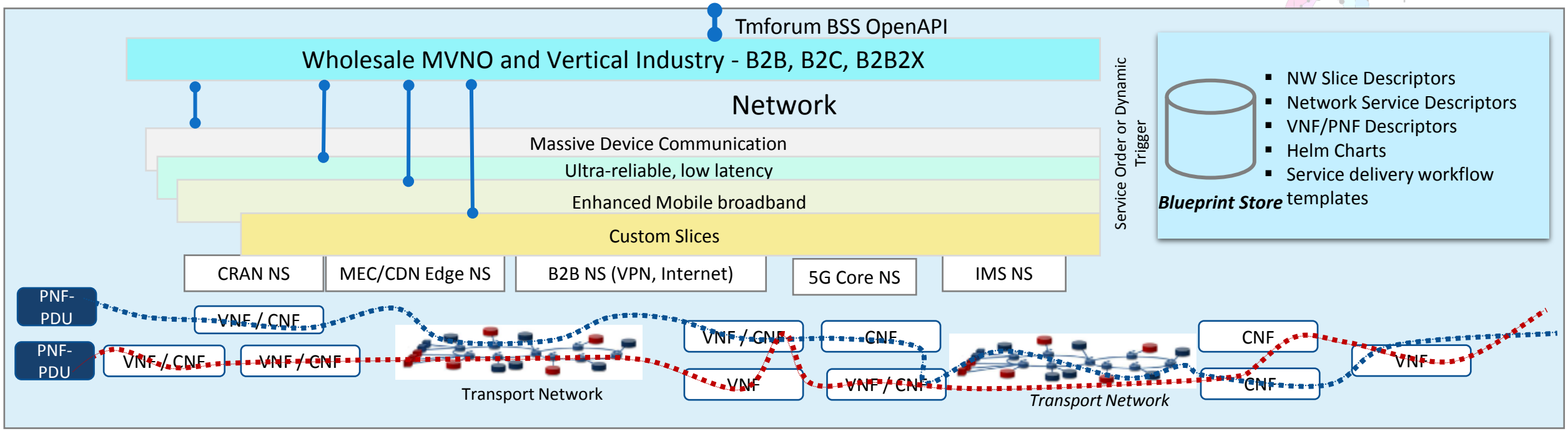
TEOSM Digital Service Delivery Platform Strategy

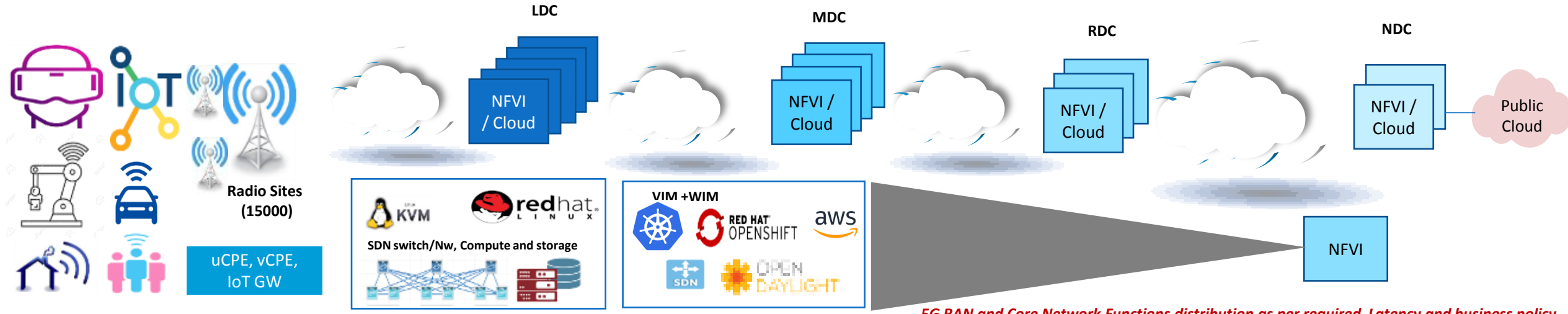


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Network as a Service Reference Architecture

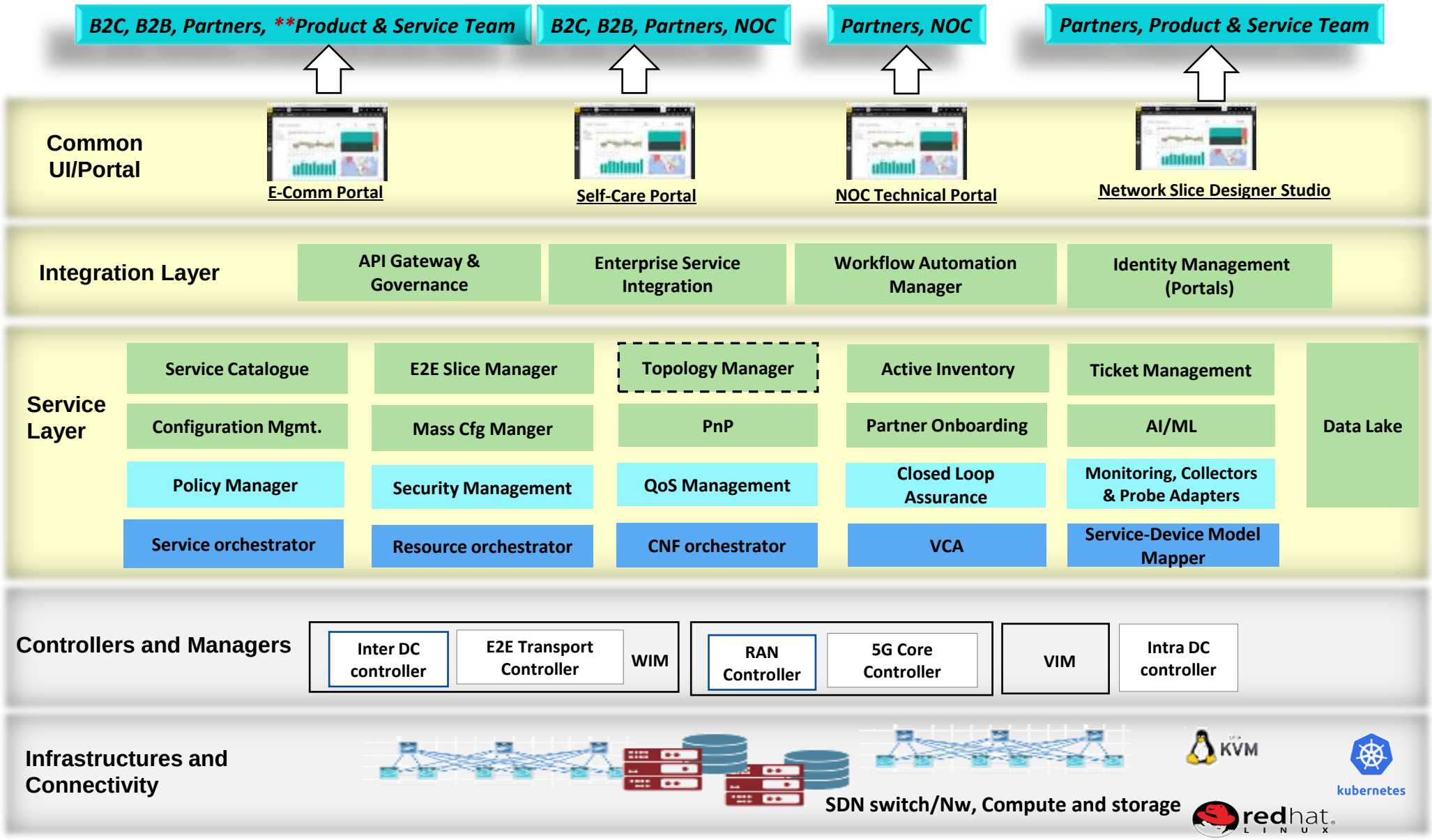
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NG-OSS and TE-OSM Integrated view



** ***Partners*** : Reseller, Distributer, retailer etc

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Distributed Monitoring

National DC

TEOSM

POL

KAFKA

1. MON collects metrics
2. MON evaluates the metric
3. MON notifies Alarm to Centralised KAFKA when metric exceeds threshold
4. POL receives alarm and takes action



Grafana

Metric Visualization through Grafana

State DC

MON-1

VCA

Prometheus

Metric Collection

VNFs VNFs

VIM

Regional DC

MON-2

VCA

Prometheus

Metric Collection

VNFs KNFs

VIM / K8s Cluster

Edge DC

MON-3

VCA

Prometheus

Metric Collection

KNFs KNFs

K8s Cluster

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TE-OSM- Product Highlights

OSM Release 7
Dec 2019

30th Jan 2020

Devi 3.0

- Support for **CaaS and VNFs**
- **Yang based NS and VNF catalog model** for service and topology representation
- Creation, updation, rollback and termination of **network service / slice**
- **Plugin** based architecture
- ClayBot, TE NFVO **test automation framework**

30th Apr 2020

Erai 4.0

- Support for **multiple environment** like development, staging, Production
- **Hierarchical deployment** mode
- **Metrics and alarms** subscription and notification
- **Performance testing** - Benchmark, Stability, Soak, Spike and Robustness test
- Adherence to **security standards** like CIS, NIST, GDPR and OWASP

OSM Release 8
May 2020

29th Jul 2020

Falgu 5.0

- **Multi cluster deployment** with **fault tolerance** for failover, healing and overload protection
- **Geo Redundancy**
- **CNF, VNF, PNF** deployment from **National to local DC** as per placement policy
- **Backup and restore** for business continuity

Sep 2020

Ganges 6.0

- **Service Catalog**
- **Workflow manager** for policy definition

OSM Release 9
Nov 2020

Dec 2020

Hugli 7.0

- Enhanced **closed loop operations** using pragmatic **AI / ML**
- Order reconciliation

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Thank You

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