



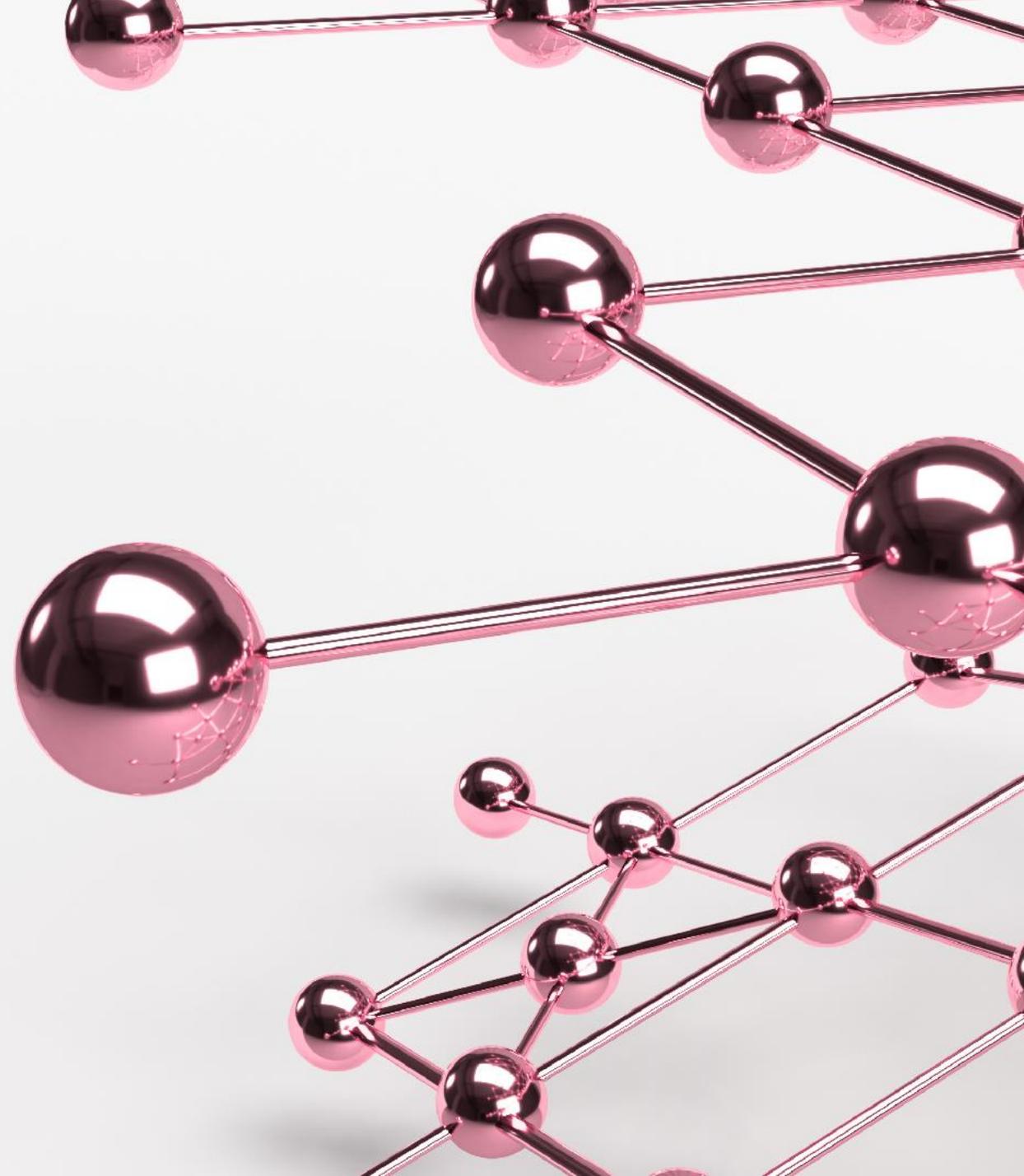
# OVERVIEW AND SYSTEM ARCHITECTURE

Gergely Pongracz (ERI-HU, TC)

 Co-funded by  
the European Union

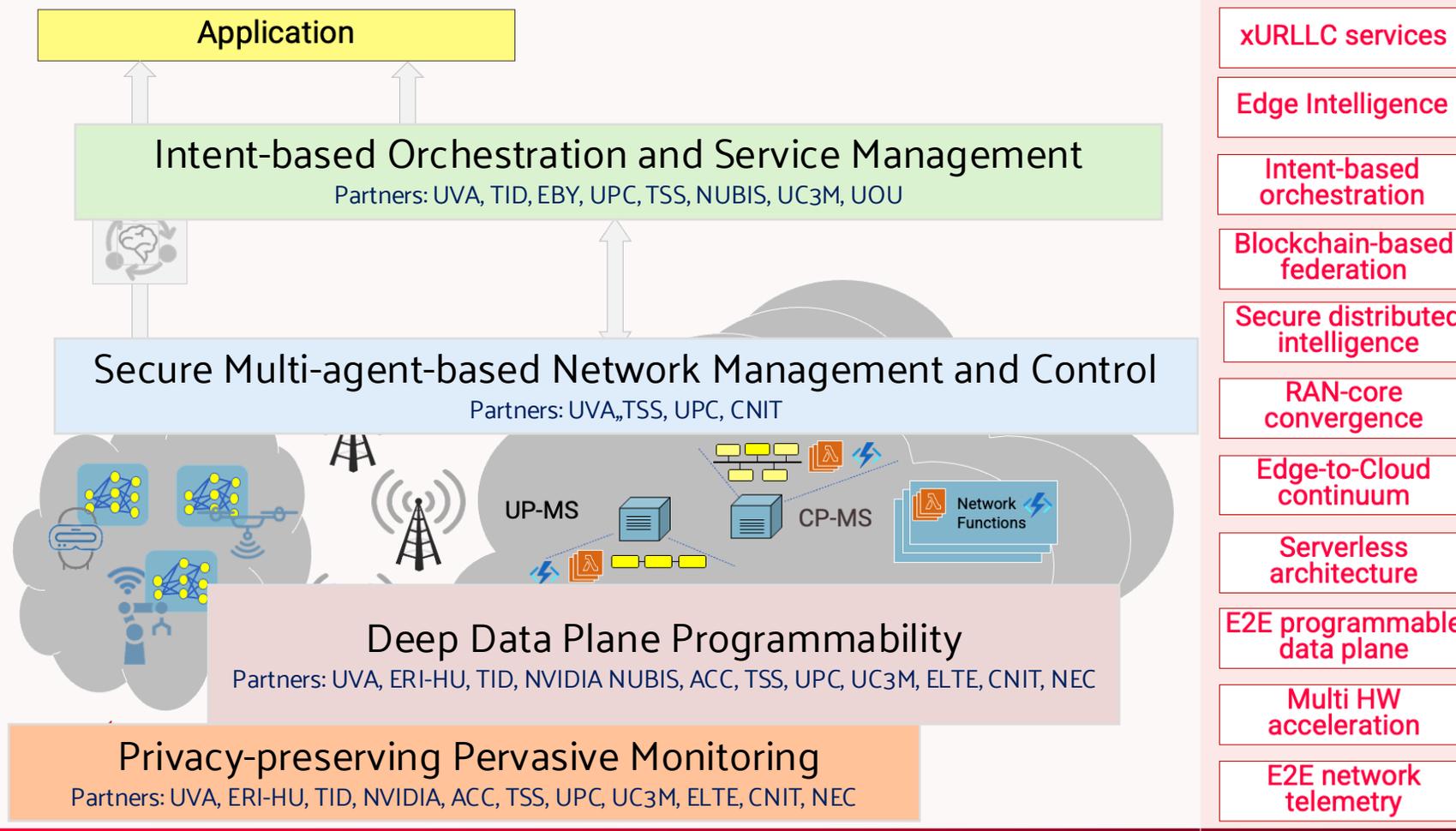
**6GSNS**

25/09/2024

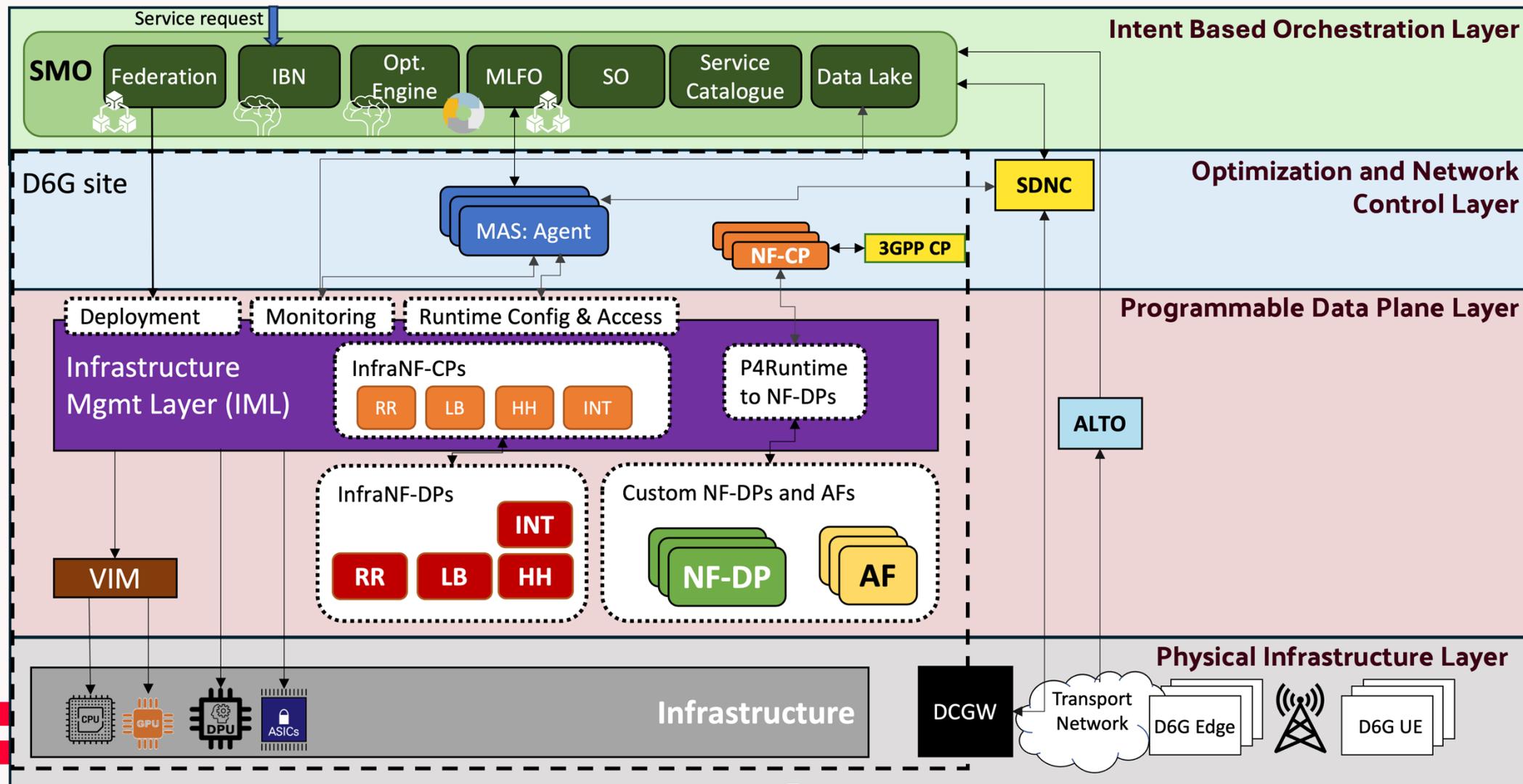




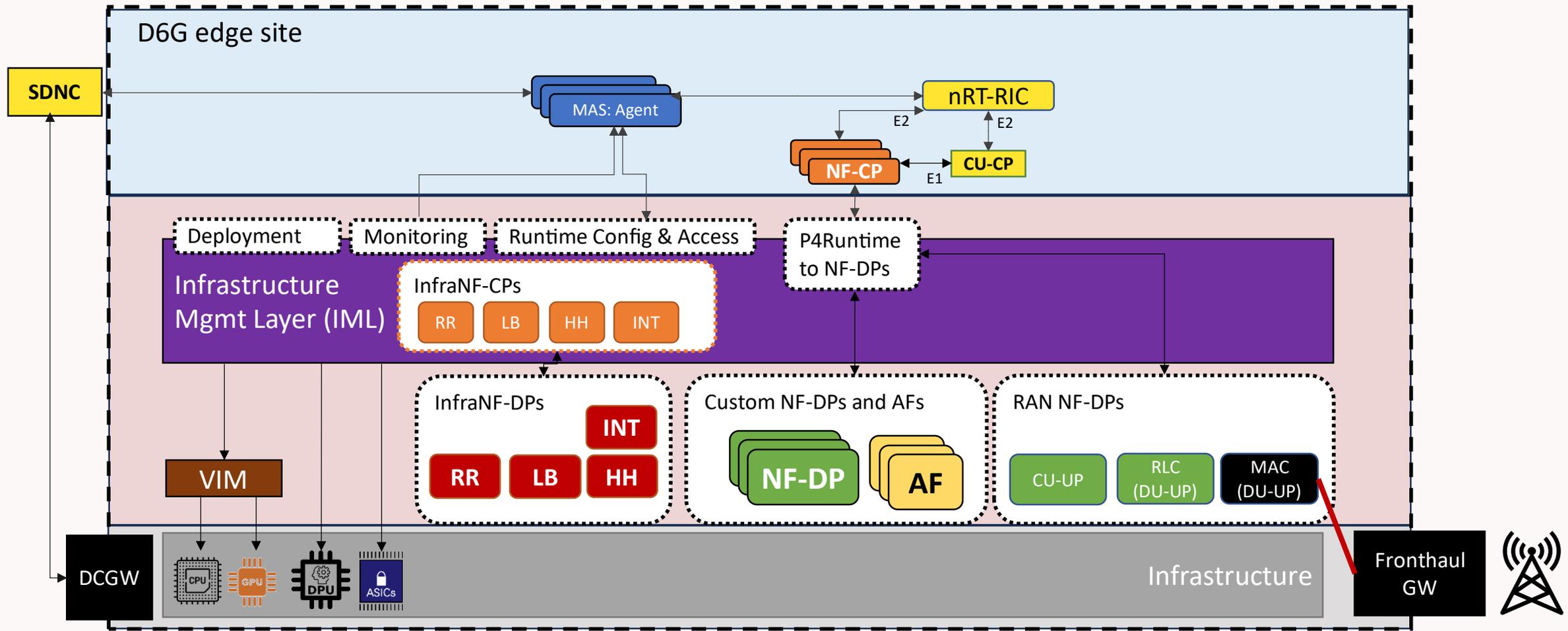
# D6G KEY INNOVATIONS



# D6G ARCHITECTURE OVERVIEW

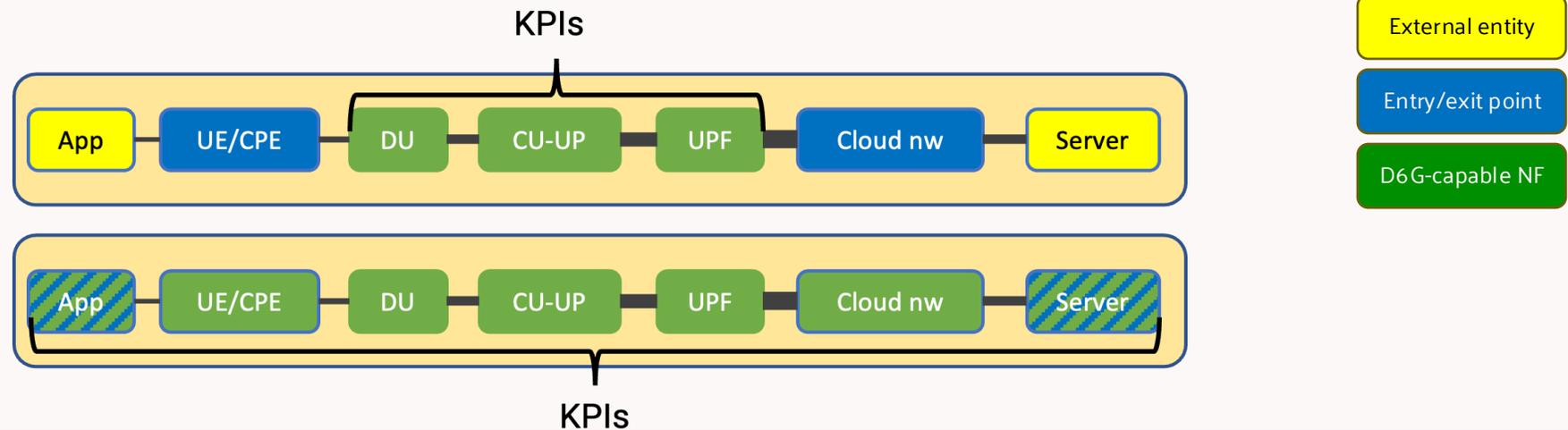


# EXAMPLE: D6G FAR EDGE (RAN) SITE

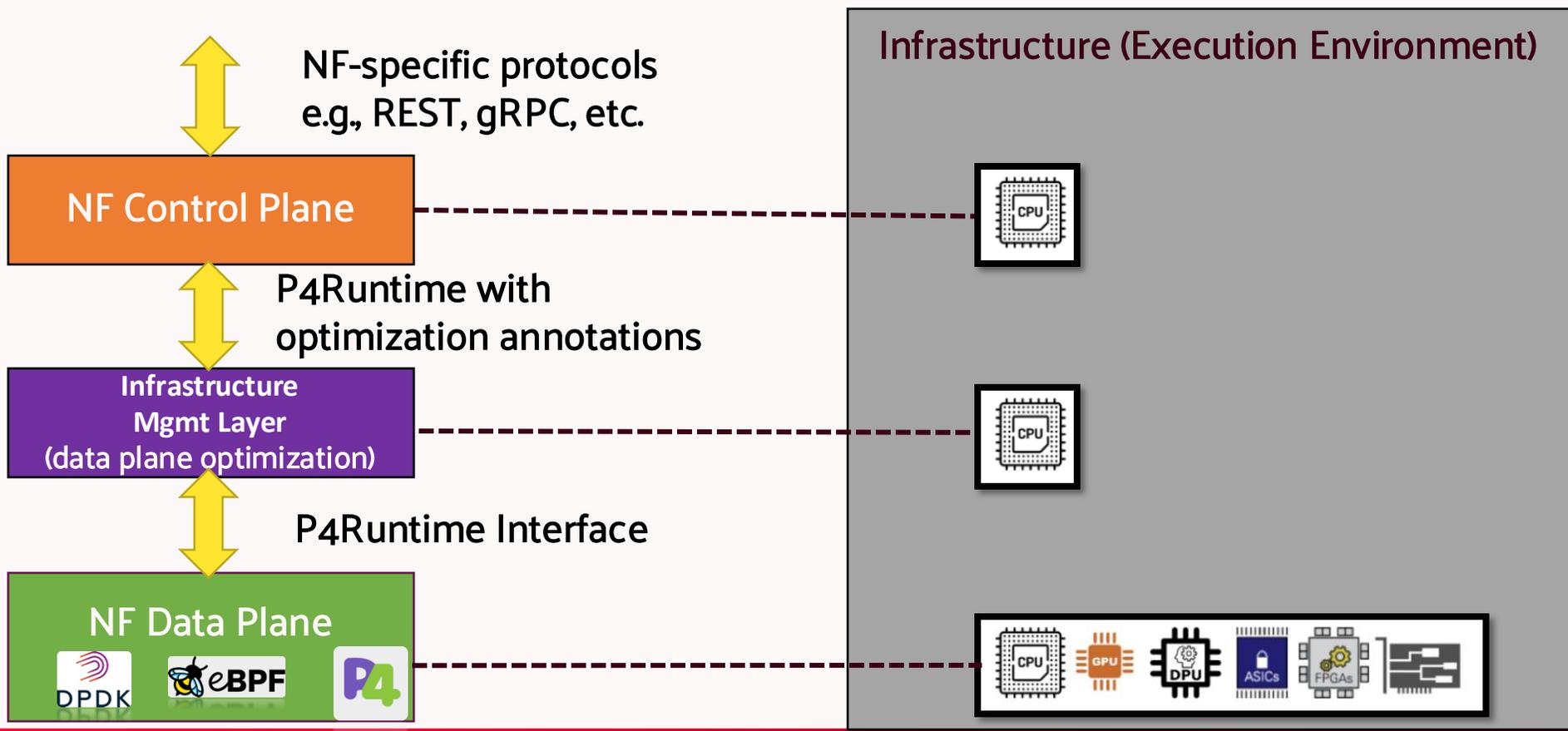


# NETWORK SERVICES, SLICES

- Service = what the system provides to the end users
  - Packet handling (NF graph) + QoS handling → network service = network slice
- Rapid deployment, even dynamic (on request) should be possible
- Two types: edge-to-edge (classic) and end-to-end

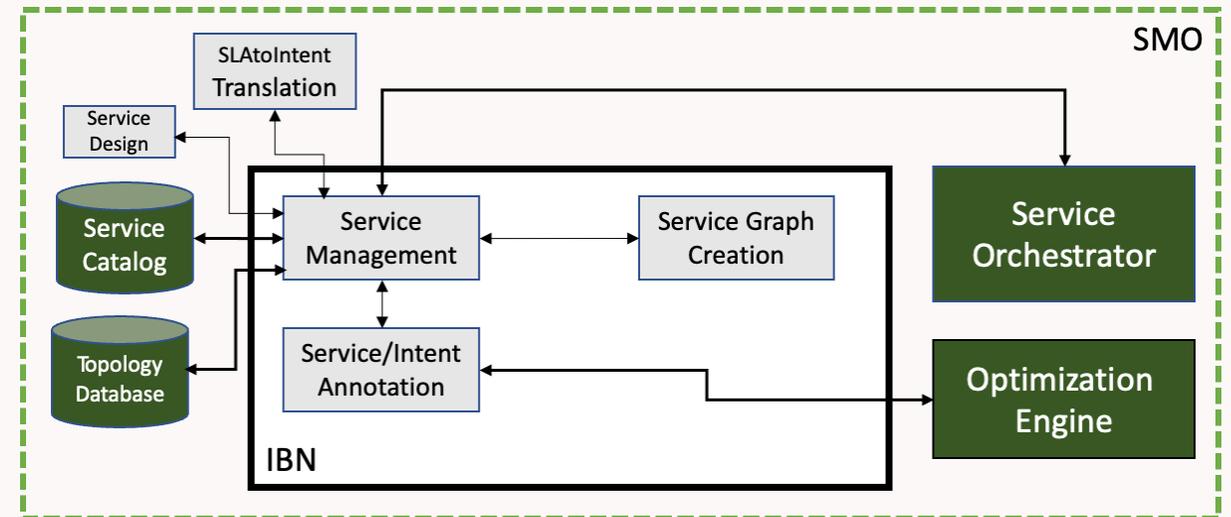


# PROGRAMMABLE DATA PLANE TRANSPARENCY



# SERVICE CREATION (INTENT-BASED)

- Easy description of network services
- (Optional) SLA to intent translation
- Intent to service graph translation



# RAPID SERVICE DEPLOYMENT

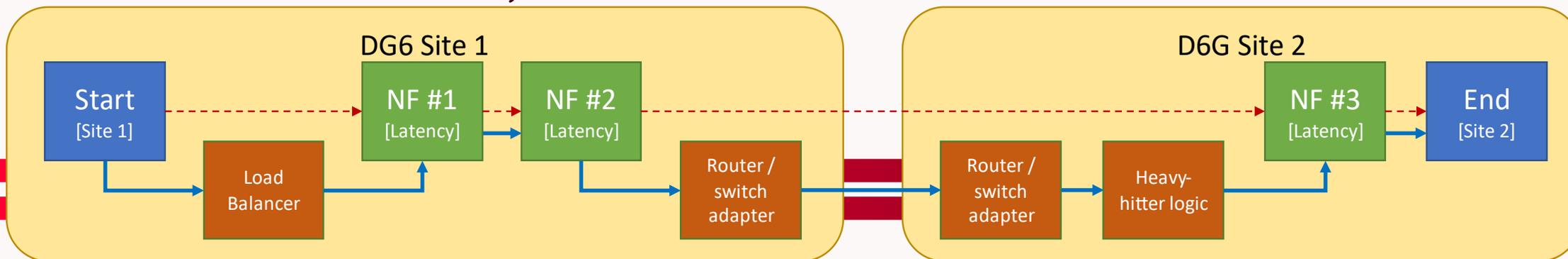
Logical view (service creation time – created by SMO/IBN)



Site allocation (by SMO)

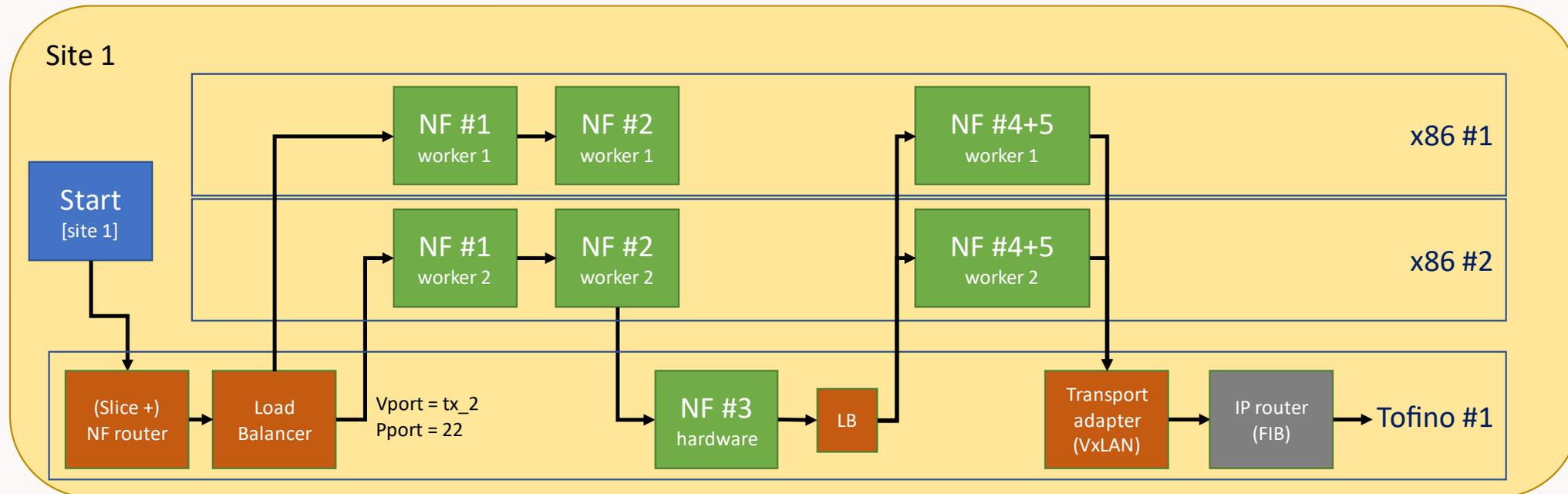


Infra NFs and local connections (by IML)

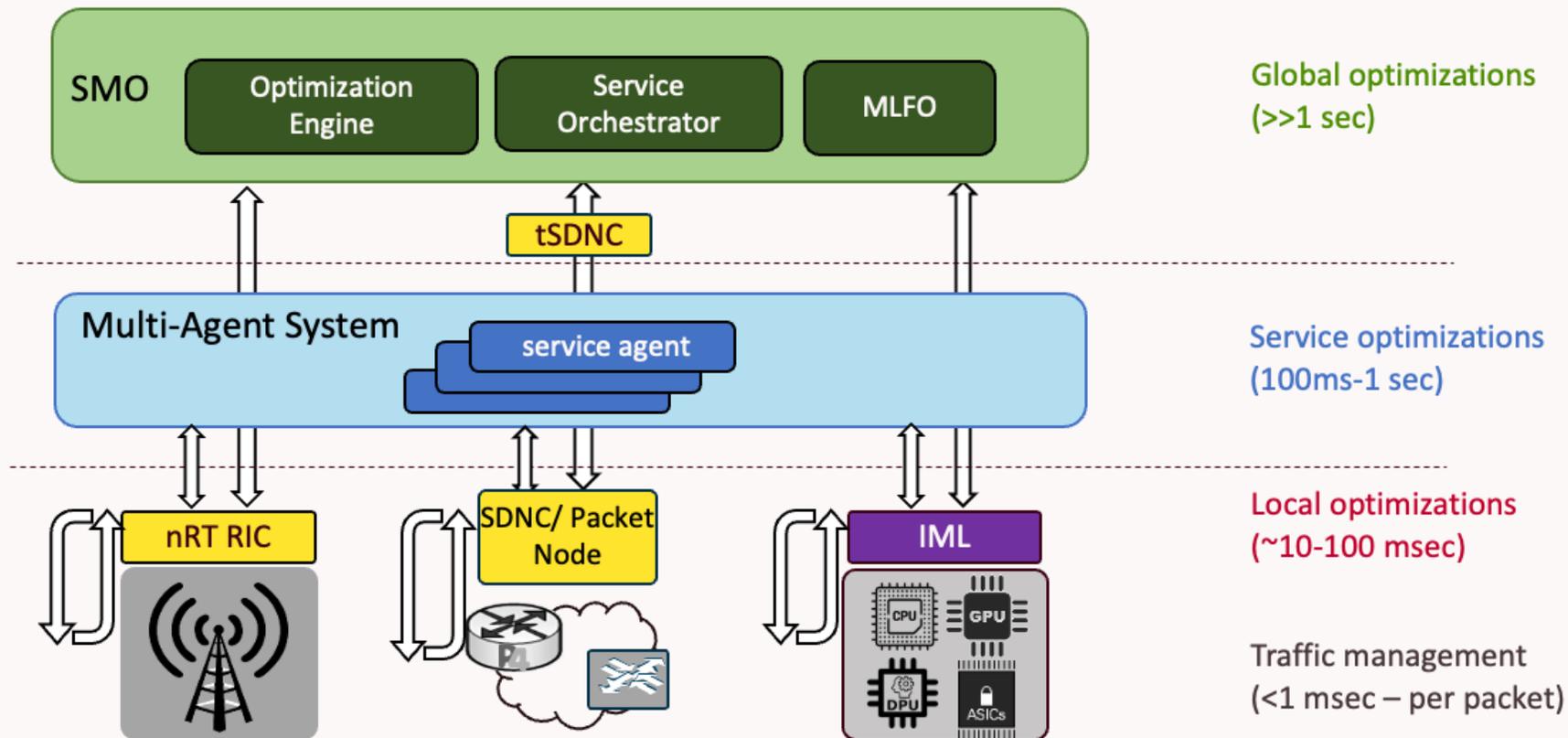


# RAPID SERVICE DEPLOYMENT (2)

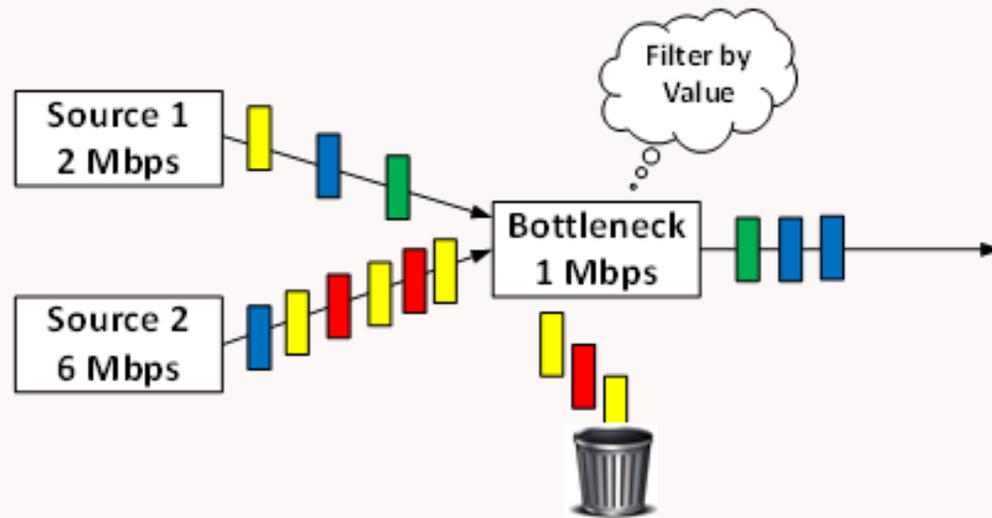
Physical mapping to local resources (IML & VIM)



# SERVICE ASSURANCE – 4 CONTROL LOOPS



# PROGRAMMABLE TRAFFIC MANAGEMENT (WP4)

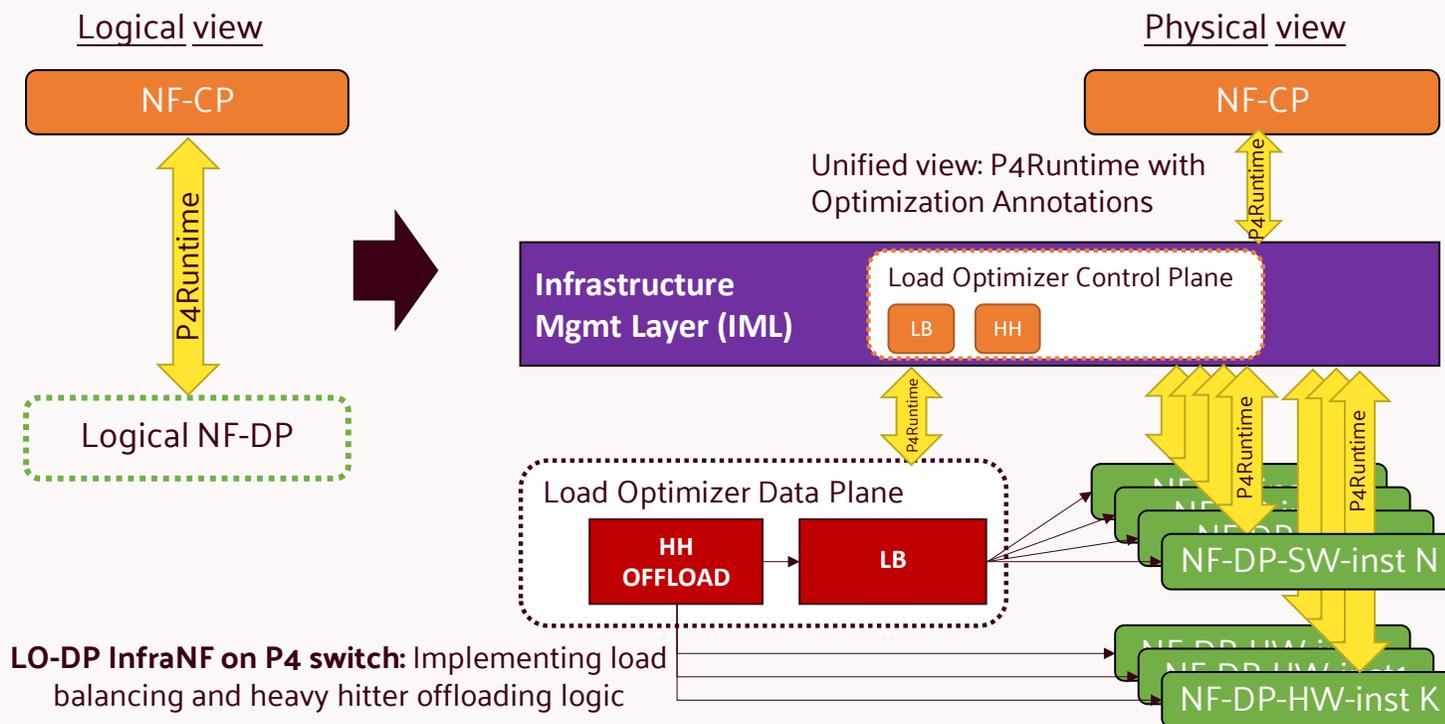


- Supports fair sharing and priorities together
- Based on value-based smart dropping
- Details will be described in Deliverable 4.2 (end-Nov)

# CLOUD DP OPTIMIZATIONS (WP4)

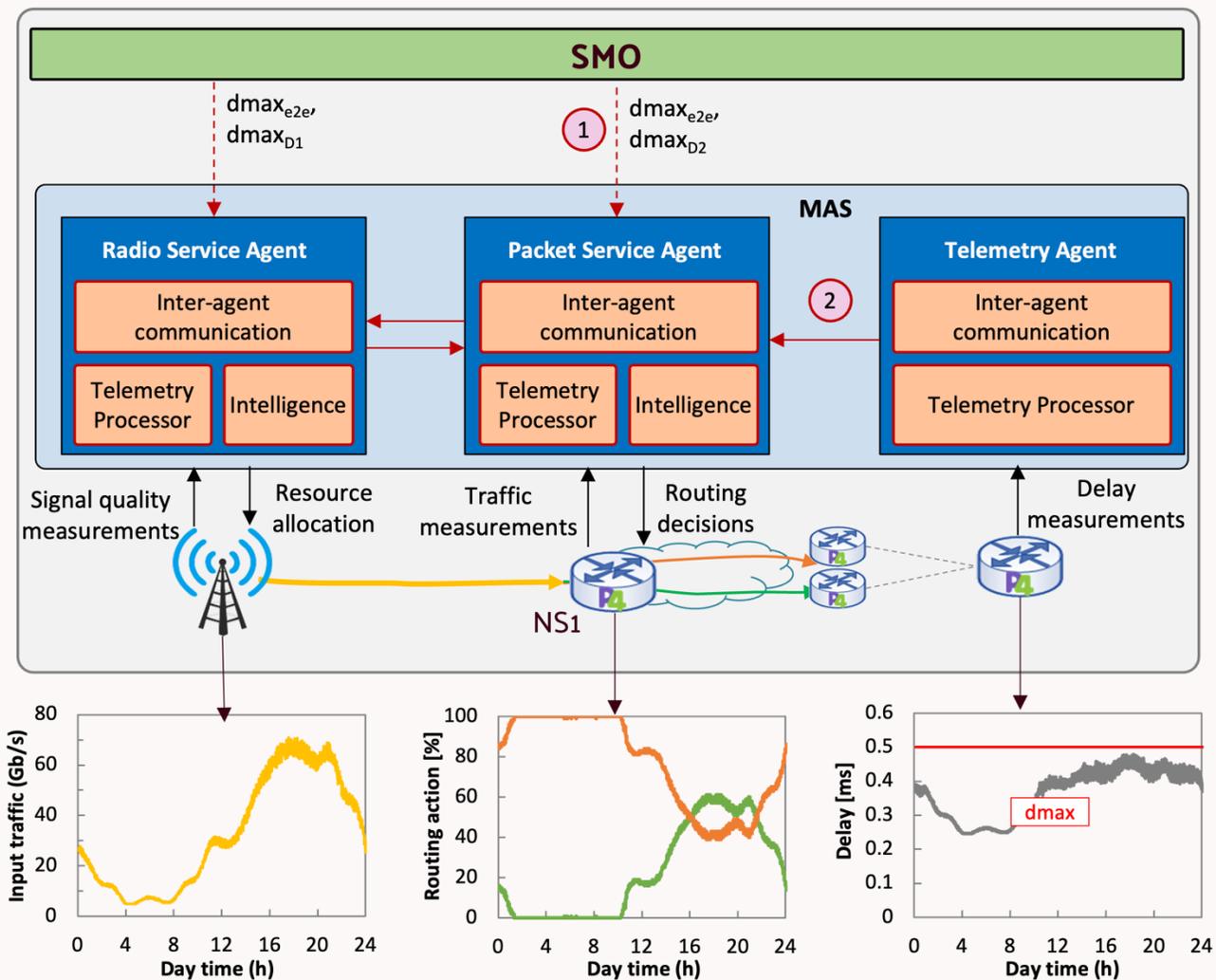
EXAMPLE, L2

- Load optimizer
  - Offloading heavy hitters to HW entities
  - Balancing load between SW entities
- Details are available in Deliverable 4.1



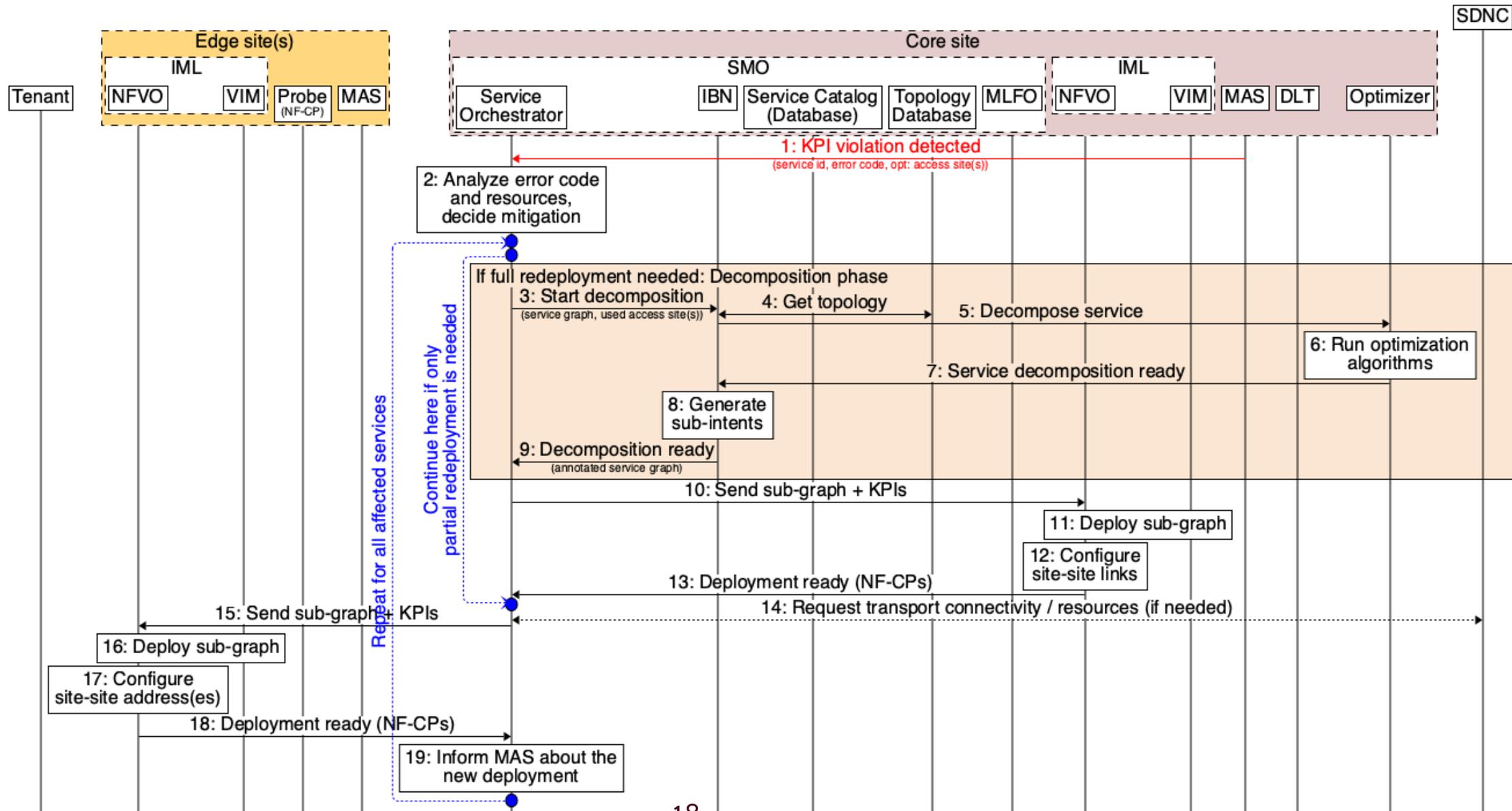
## MAS (WP3)

- MAS control loop
- Example: intelligent routing
- Details are available in Deliverable 3.1



# SERVICE REDEPLOYMENT (SMO-WP3)

DETAILS, L4





# THANKS!

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