5G-MONARCH

5g-monarch.eu

Hamburg Smart Sea Port testbed

Slice Lifecycle Management

Life Cycle Management → Integration and Isolation → New Services

Demo
- Fast
- Scalable
- Simple mgmt.

Benefits
- Private share
- Fast activation
- Managed service

Network slices adapt to service requirements - not services to slices
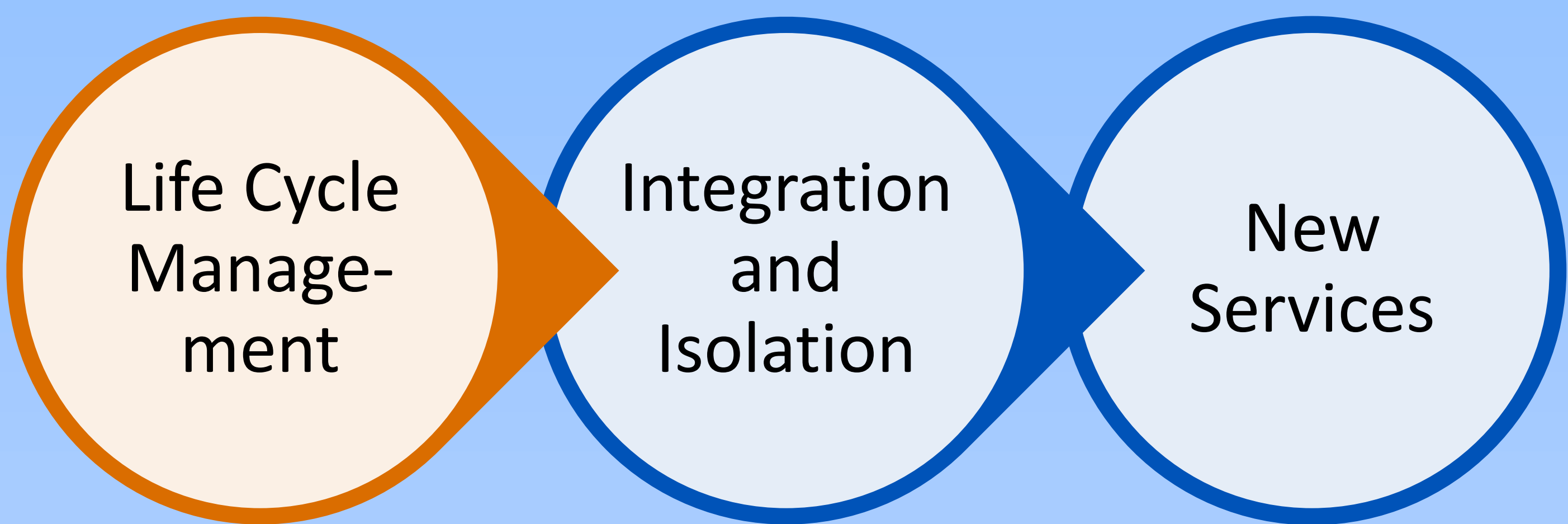
Testbed features:
- ☐ Full GUI-based tooling for slice instance lifecycle management
  - ☐ Slice design & creation tool
  - ☐ Lifecycle management tool covering all phases
  - ☐ VNF manager
- ☐ Allows slice design, creation and activation within few minutes

Single-slice UE
UE 1

Multi-slice UE
UE 2

Base station
PHY | MAC
- eMBB slice policy
- URLLC slice policy
- MTC slice policy

AirScale

Intra-cloud router

MME, HSS, O&M

- PGW + SGW / O&M agent
- PGW + SGW / O&M agent
- PGW + SGW / O&M agent

Dynamically created instances

AirFrame

Lifecycle management

VNF management

Slice design & creation

Lifecycle phases of a Network Slice instance

Preparation
- Design → Pre-provisioning
- Network environment preparation

Instantiation, Configuration, Activation
- Instantiation / Configuration → Activation

Runtime
- Supervision → Upgrade Re-config Scaling
- Reporting

Decommissioning
- Deactivation → Termination