Towards AI

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Intro

Consortium partners are leaders in different Open-RAN areas

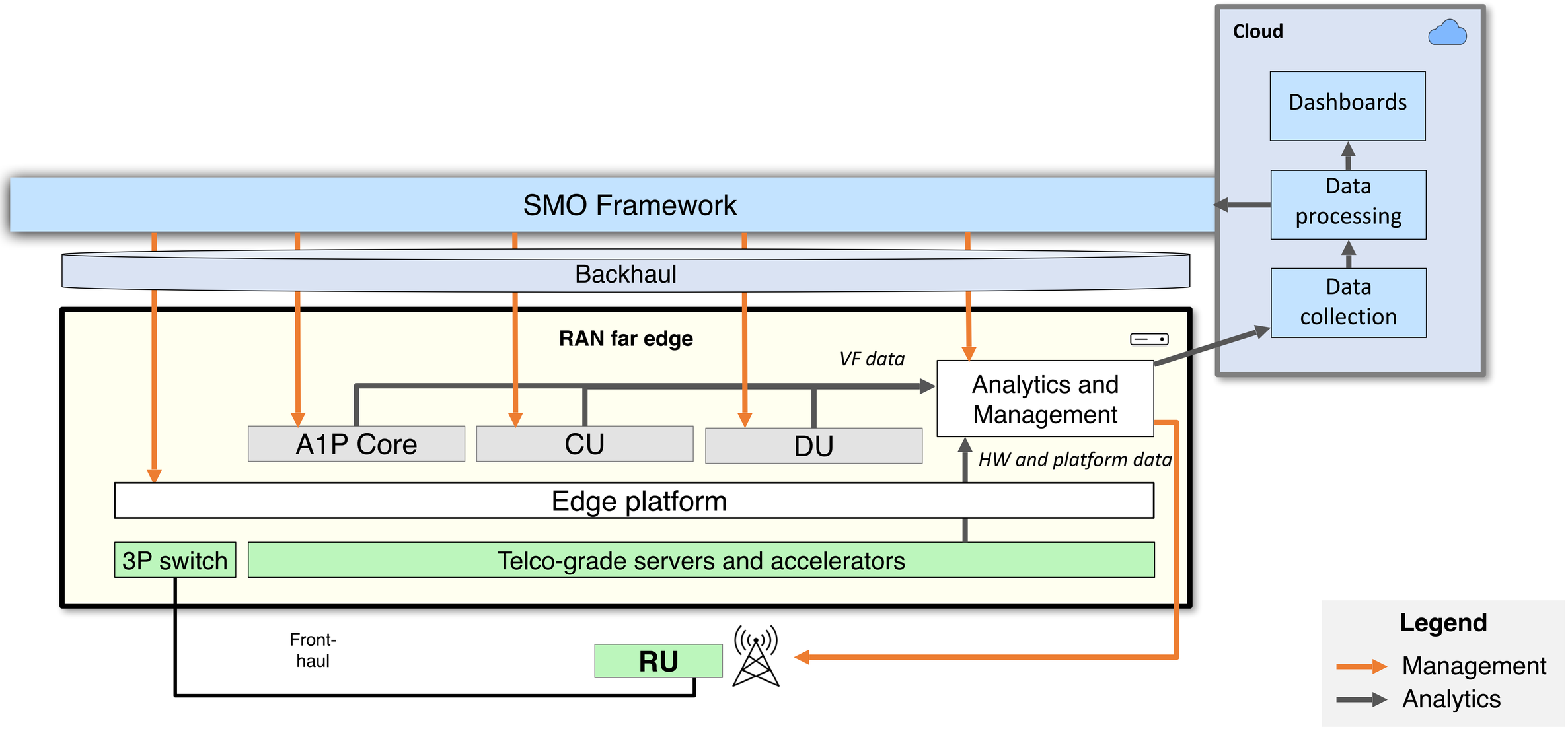
- *Intel:* silicon and signal processing software for 5G RAN (L1)
- *CapGemini:* 5G RAN stack reference design (L2 and L3)
- *Microsoft:* cloud and edge provider, 5G core
- *University of Edinburgh:* research in AI/ML, wireless and 5G

Project goals

- *Open platform:* anyone can deploy any RAN VF on the platform
- *Secure:* secure deployment processes and attack detection
- *Carrier-grade:* scale, life-cycle mgmt., reliability, single pane of glass
- *Efficient:* power, spectral efficiency, management

- Instrumentation and analytics:
  - Detailed RAN and platform instrumentation
  - AI/ML to identify and rectify issues

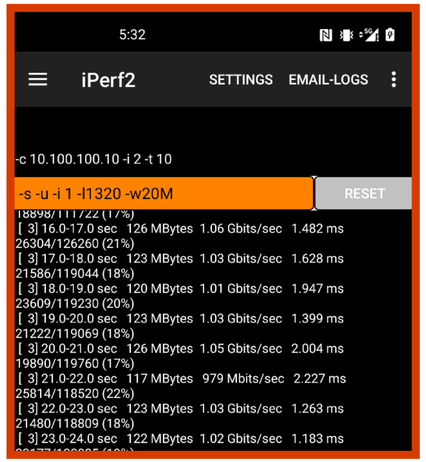
Overall Reference Architecture

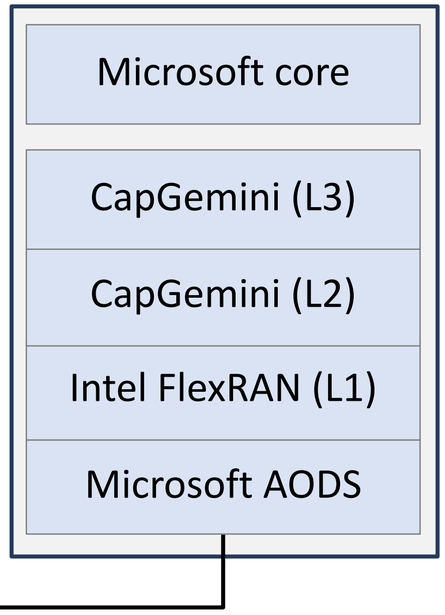


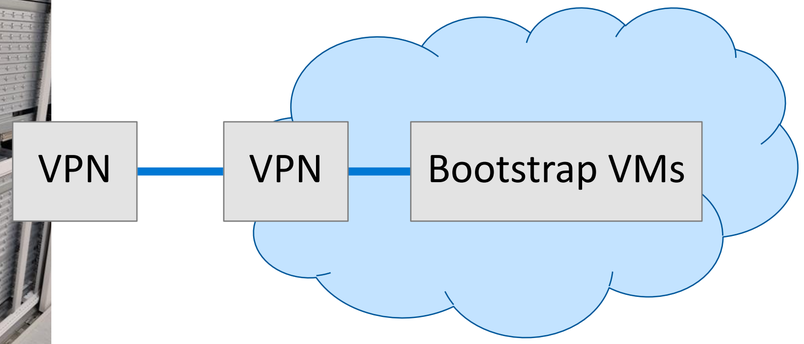
First Milestone

Deployment from cloud

5G connectivity







5G phone

Radio unit

vRAN SW

RAN far edge

Next steps

- Data collection
- Larger testbed deployment
- Data processing algorithms
- Security principles: design and implementation