



5G experimentation environment for 3<sup>rd</sup>  
party media services



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Project Coordinator

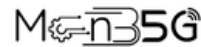
Iquadrat Informatica S.L.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 101016714.



# Iquadrat Informatica R&D



## R&D Technological Targets

### 5G communications platform

- Full stack testbed, Amarisoft and OAI gNBs

### IoT / IIoT platform

- Multi-sensor support

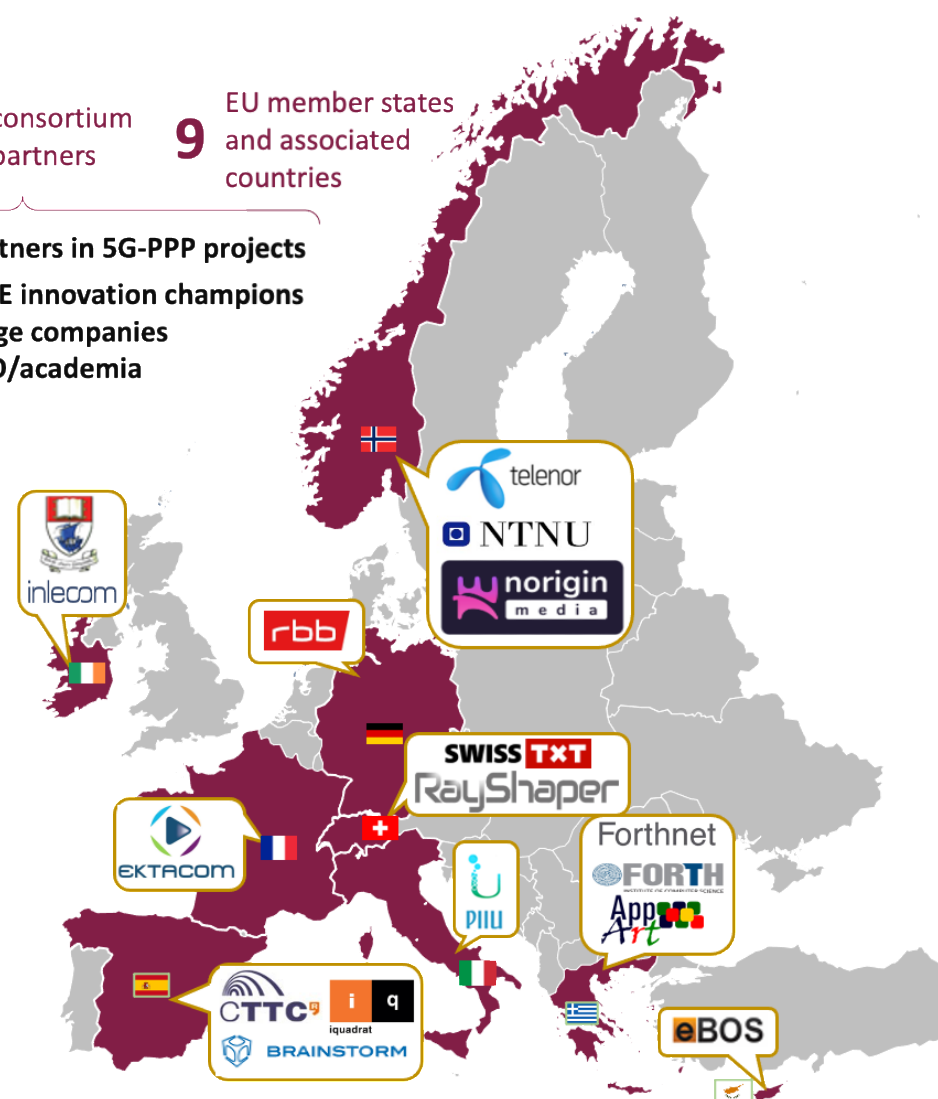
### Smart Grid platform

- Energy management and demand response

- ✓ 21 concluded EC Funded projects
- ✓ 9 Ongoing EC Funded projects (2 as coordinators)
- ✓ International collaboration with more than 60 European partners
- ✓ 1 Innovation Award
- ✓ 1 Demo Award
- ✓ 1 Best Paper Award
- ✓ Multinational R&D Team (7 PhDs)
- ✓ 5GPPP Association member
- ✓ 6G-IA Full Member



17 consortium partners  
9 EU member states and associated countries  
13 partners in 5G-PPP projects  
9 SME innovation champions  
3 Large companies  
5 RTO/academia



- ✓ Grant Agreement: 101016714
- ✓ Duration: 39 months
- ✓ Starting date: 01/01/2021
- ✓ Total max budget: 7 494 838.75 Euros

## Aim and Motivation

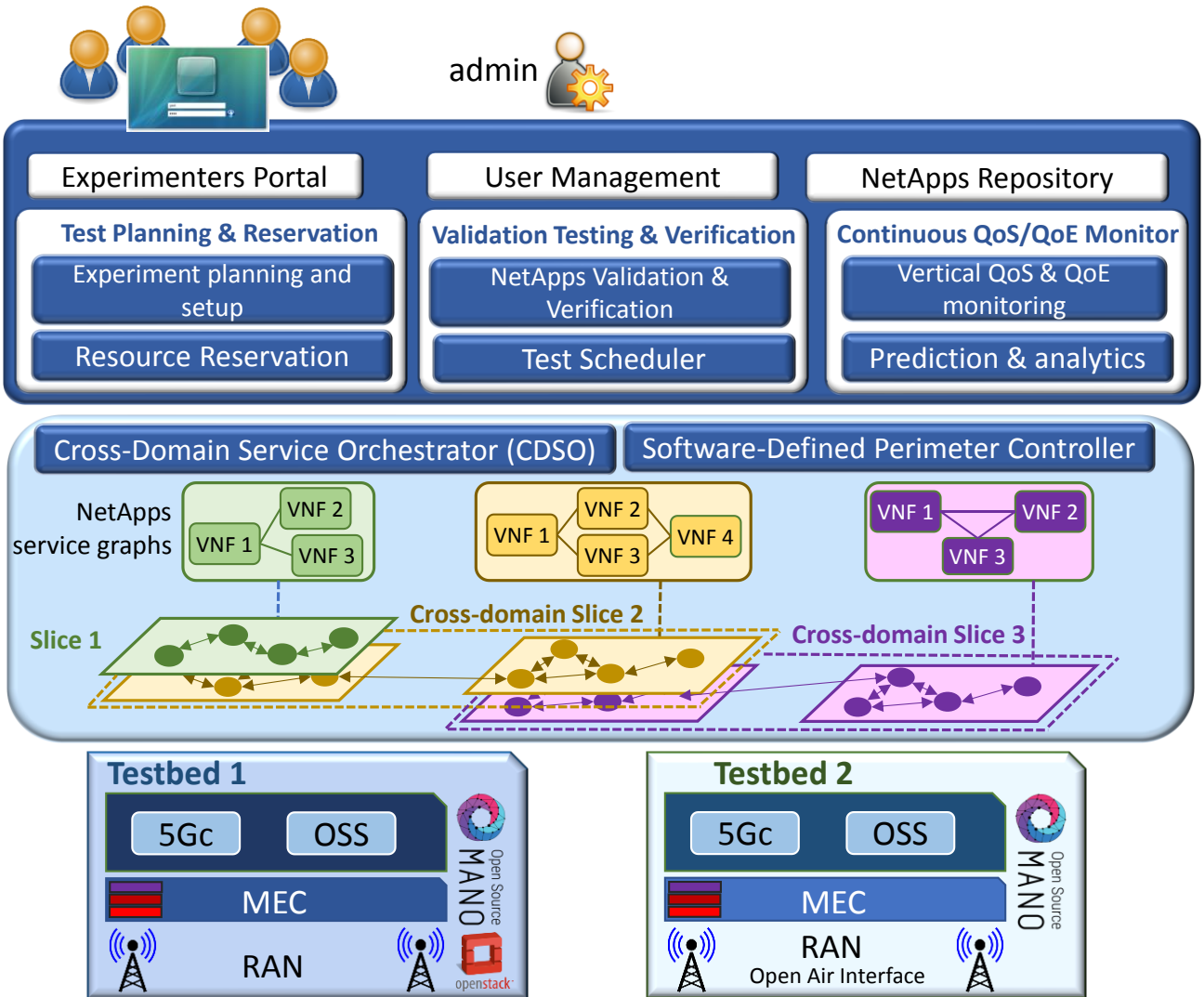
Accelerate the testing and validation of innovative 5G-empowered media applications and NetApps from 3rd party experimenters and 3rd party NetApps developers, respectively, through an integrated, open and fully featured Experimentation Facility.

Federation of existing 5G facilities

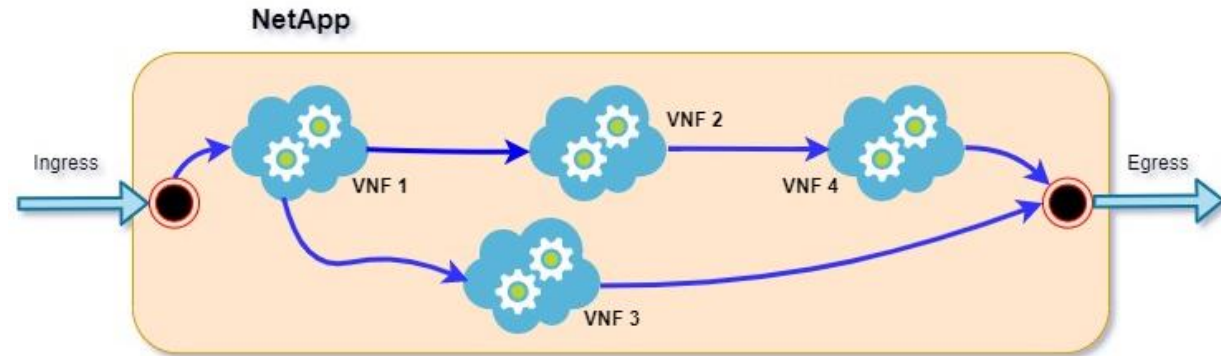
Media Verticals and NetApps

Simplify access to SMEs

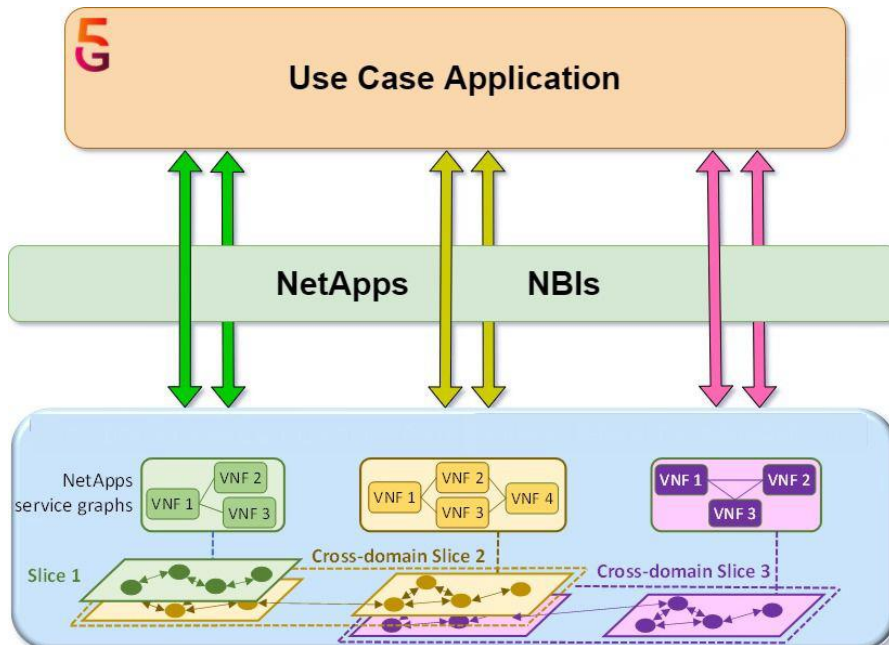
•Bringing together Media and 5G communities

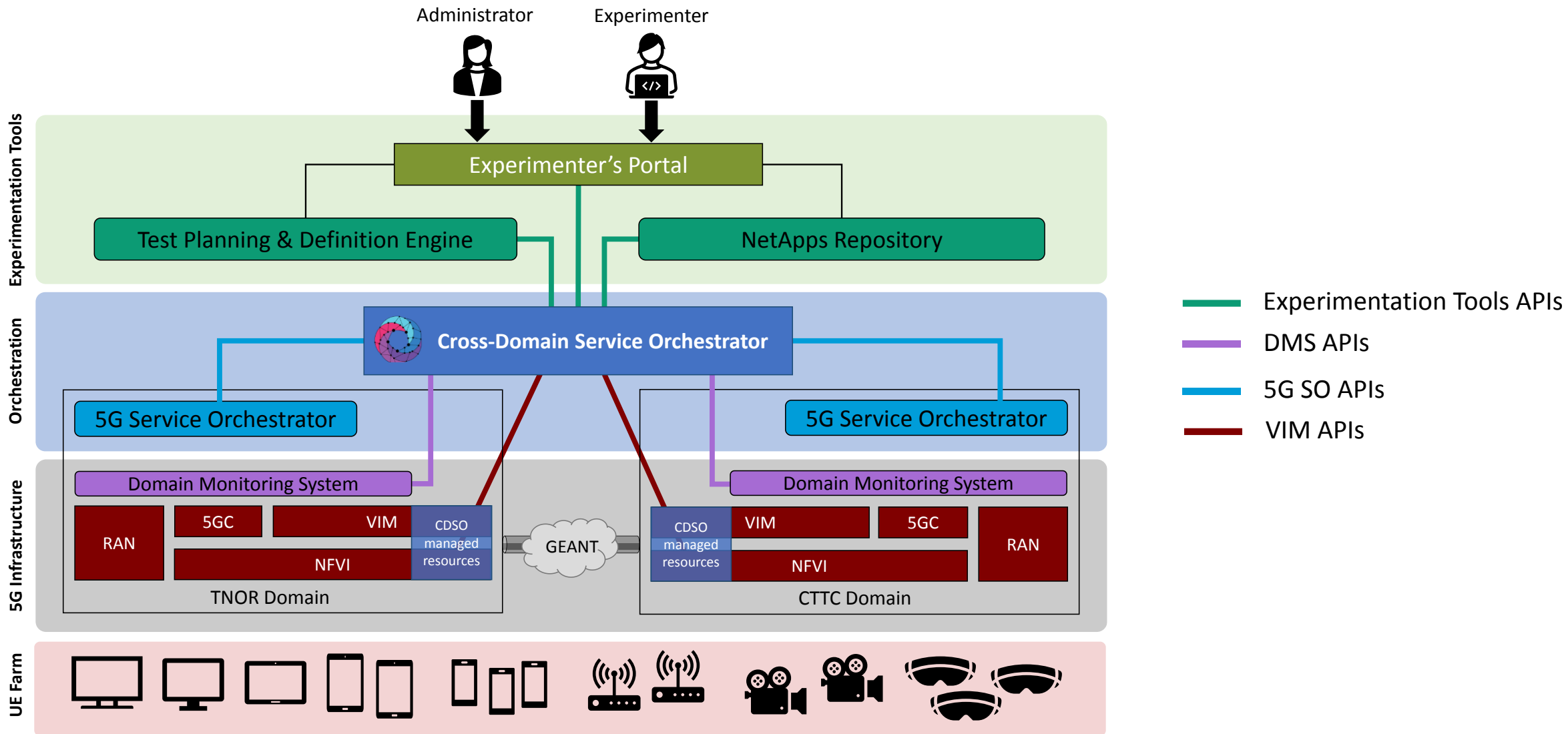


- NetApps: Chains of VNFs, offering reusable functionality (e.g., video streaming)



- NetApps are instantiated within Network Slice Subnet Instances (in line with 3GPP 5G management standards)
- NBIs: connecting OTT Apps to NetApps via ingress / egress points to the VNF chain (e.g., video streaming APIs)
- 5GMediaHUB delivers SoTA Media NetApps for Broadcasting and UGC, Distribution, 360 VR, Interactive 8k content

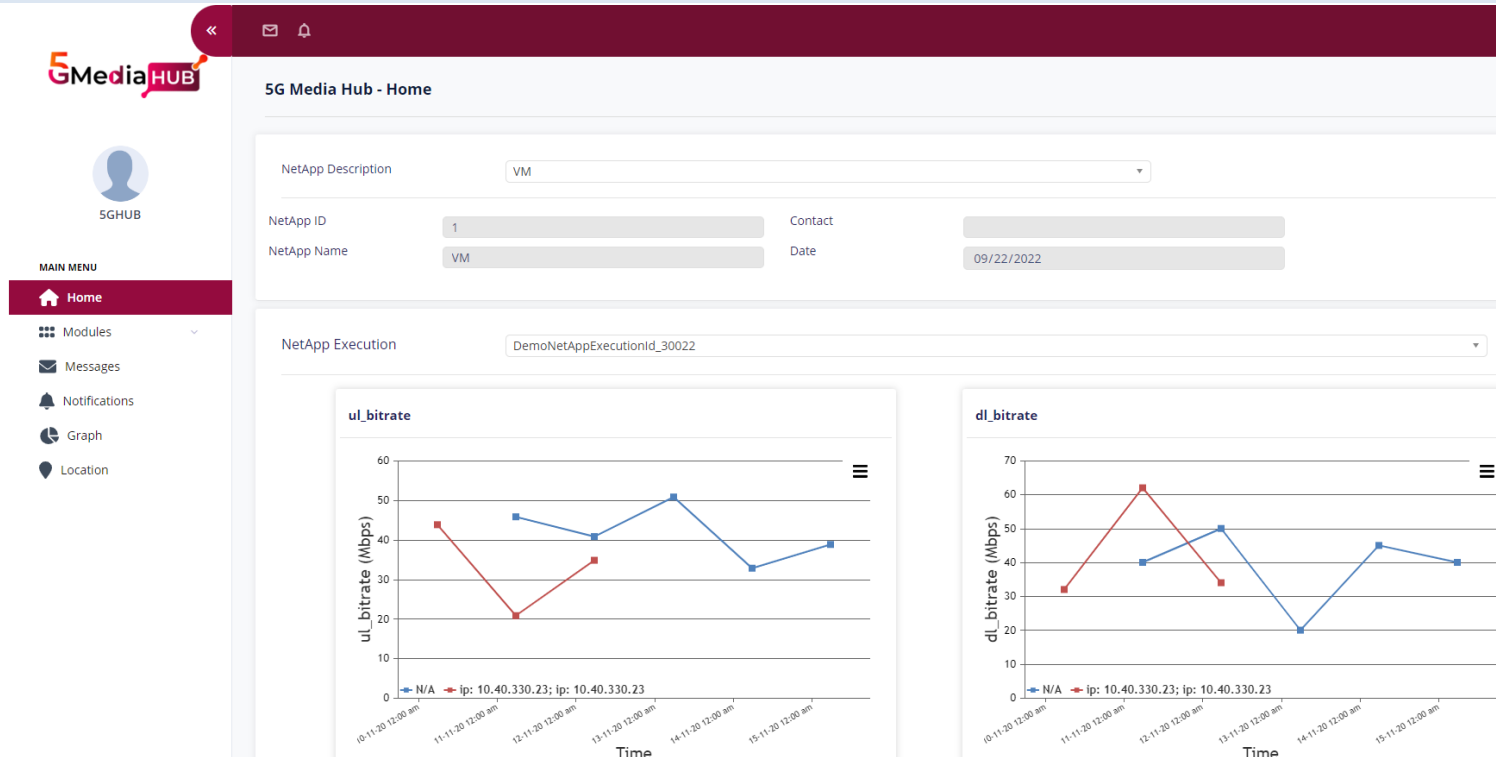






## 5GMediaHUB Experimentation tools

- Tenant Web Portal and UMM implemented and deployed at <https://5gmediahub.ebostechologies.com>
- Implementation and deployment of the NetApps repository
- Resource Reservation engine implemented with Kubespray controller and Ansible
- Validation and Verification engine implemented with Jenkins and Robot framework



## Validate Value Provided

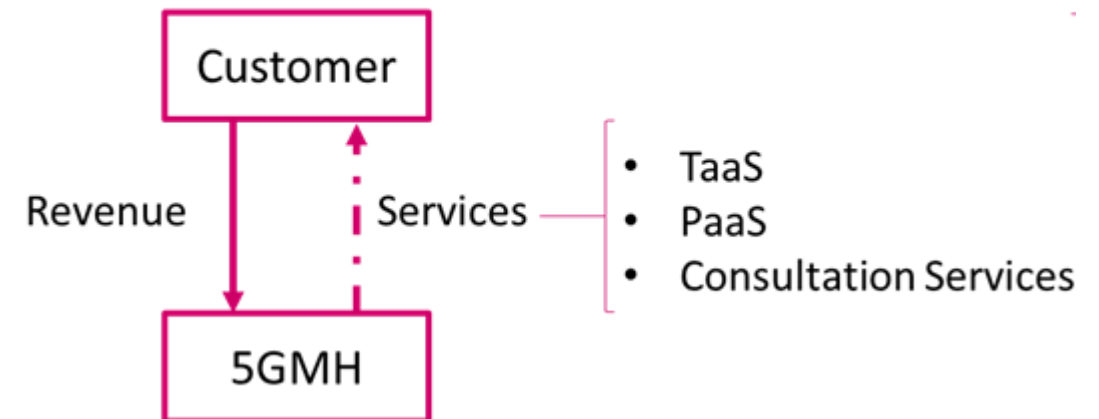
Opportunity for application developers to access 5G infrastructure and network management skills, to experiment and optimise their apps

Accelerate the testing and validation of 5G enablement services (NetApps)

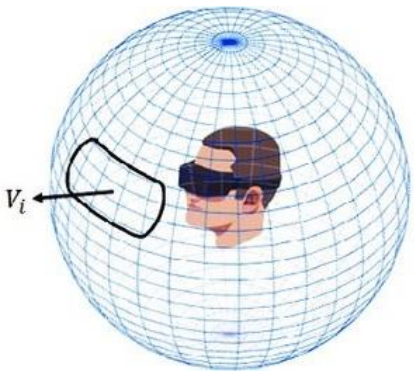
Provide experimentation tools that Reduce time to market, minimise uncertainty, and help quickly assess application performance

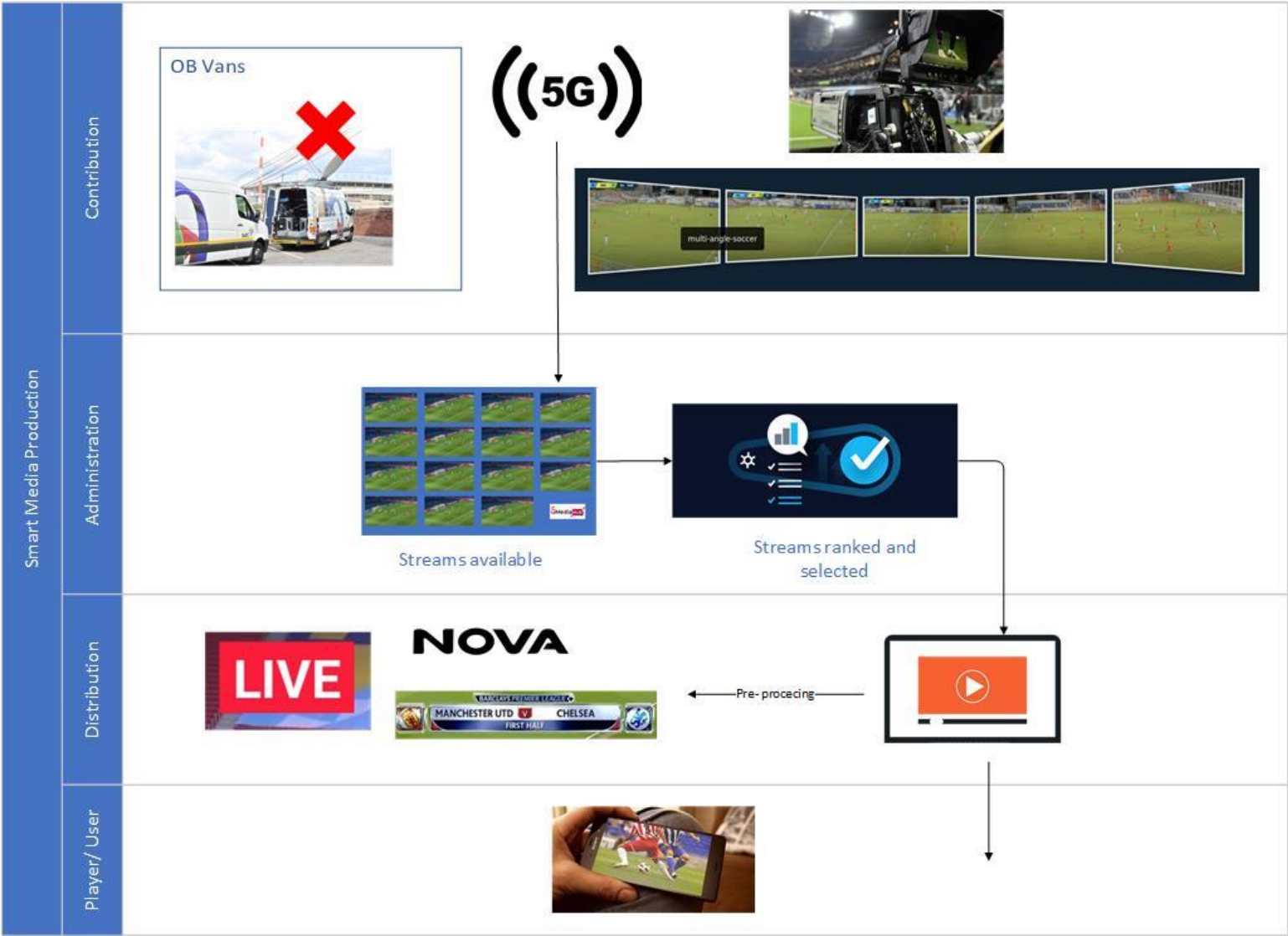
## Core Business Models

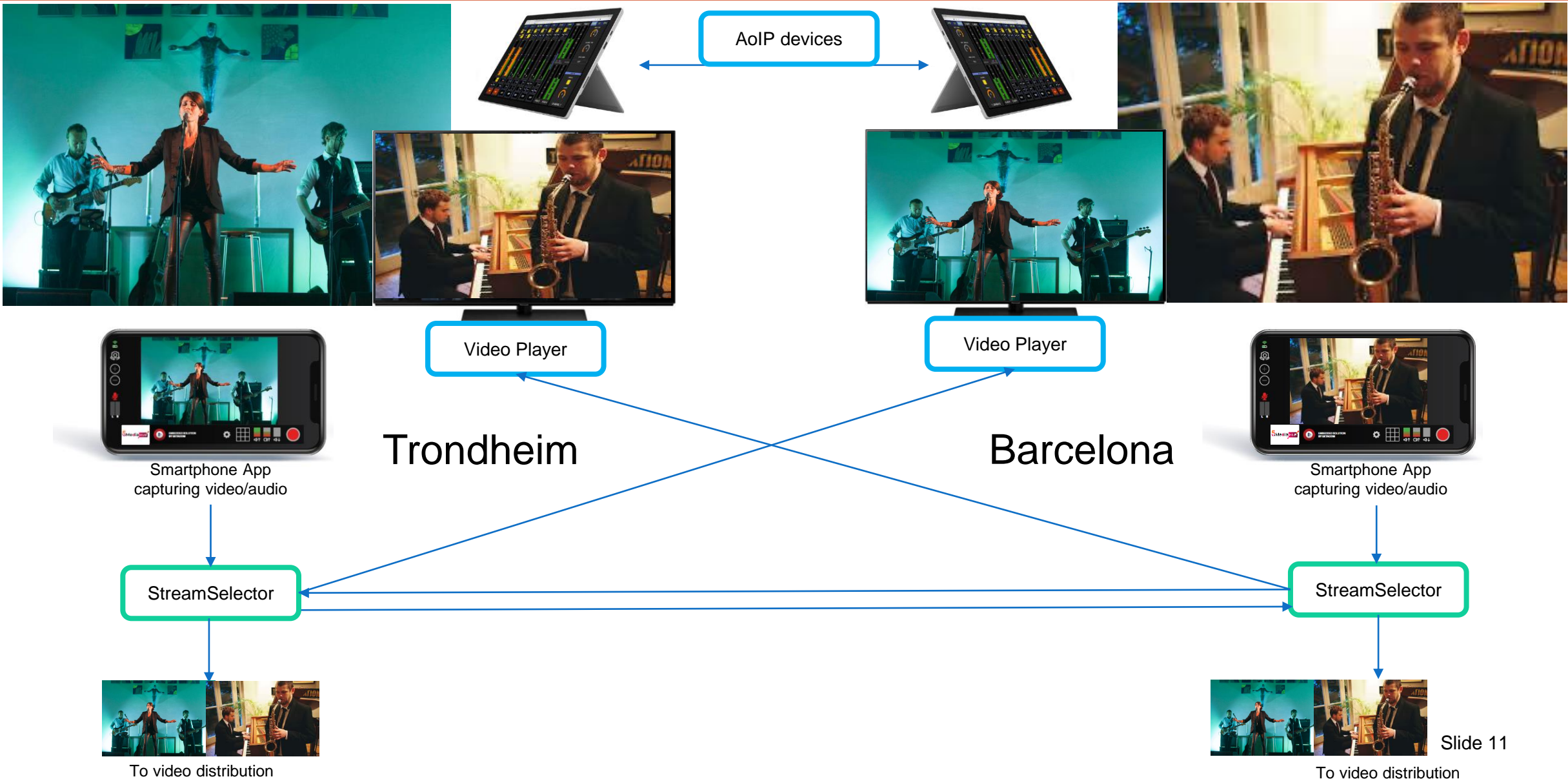
- Testing-as-a-Service (TaaS)
- 5G Platform-as-a-Service (PaaS)
- Consultation Services



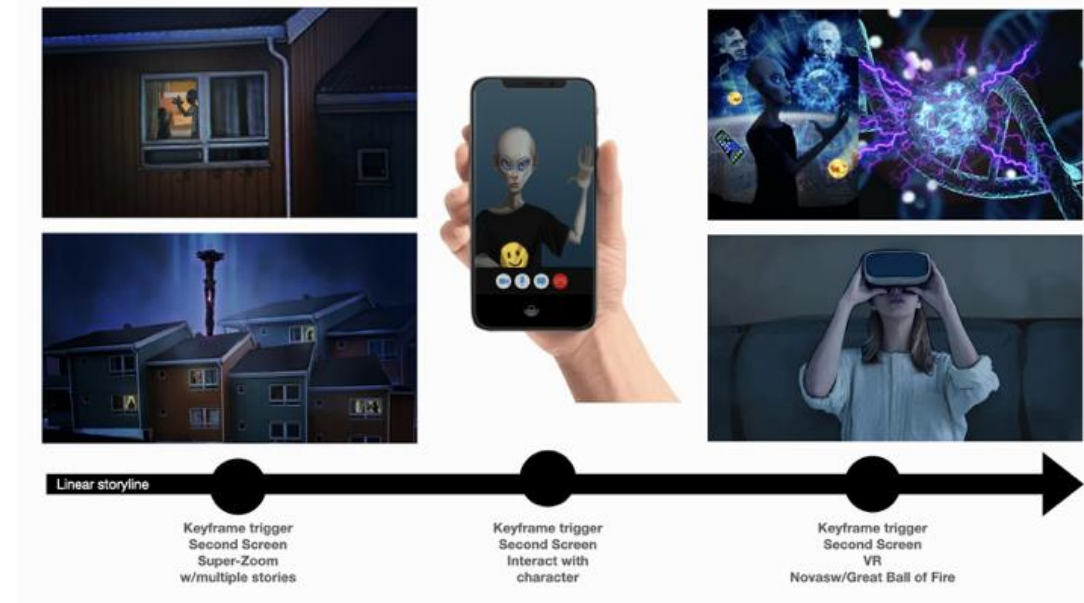








- Linear narrative shown on first-screen, as encoded video stream with marked frames
- Each marked frame triggers action on **second screen**, where user interacts with the narrative via an application





Contribution

Administration

Distribution

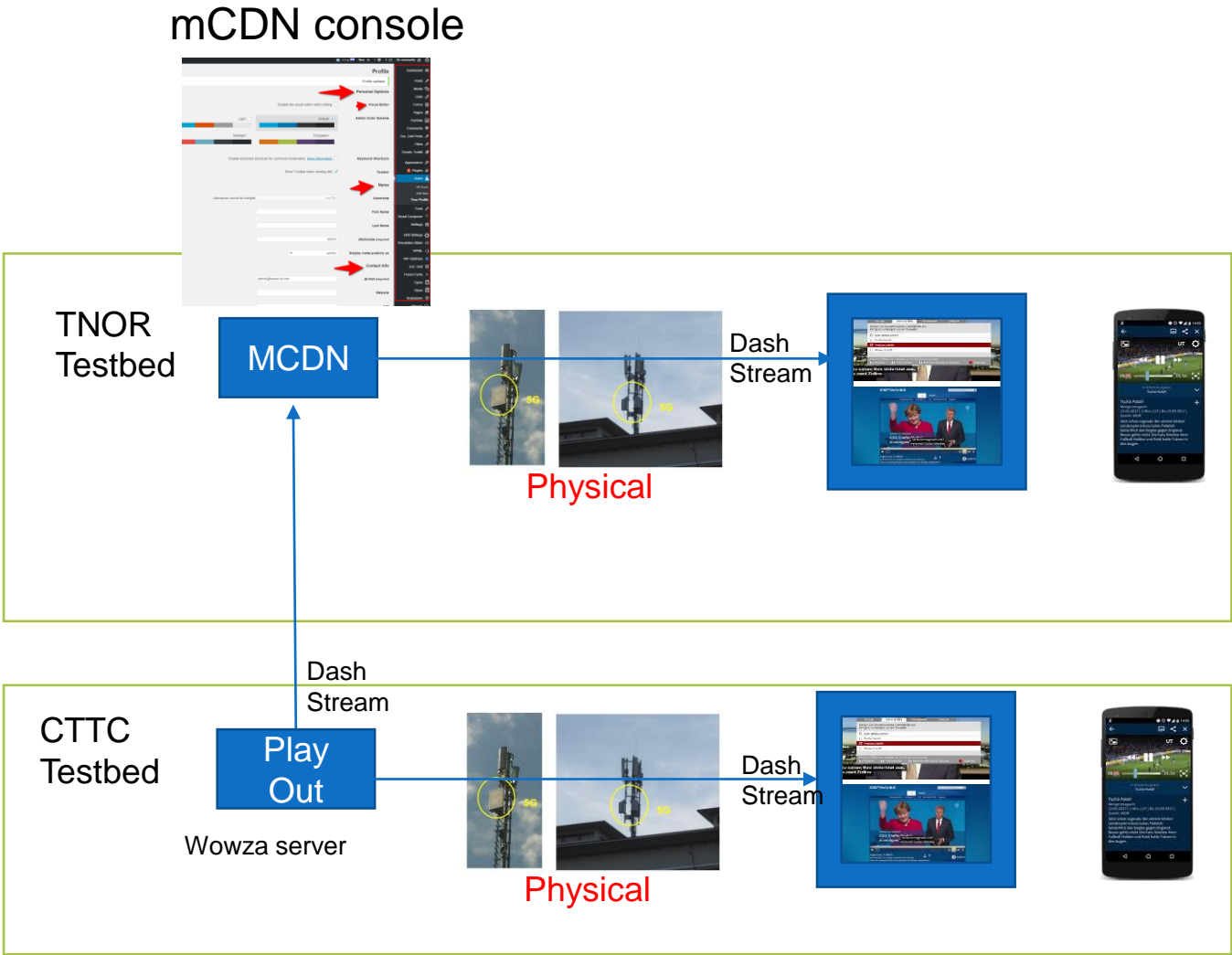
Player / User

mCDN console



Content – Files

5GMEDIAHUB - KoM- 26-27/1/2021





Thank you for you attention!



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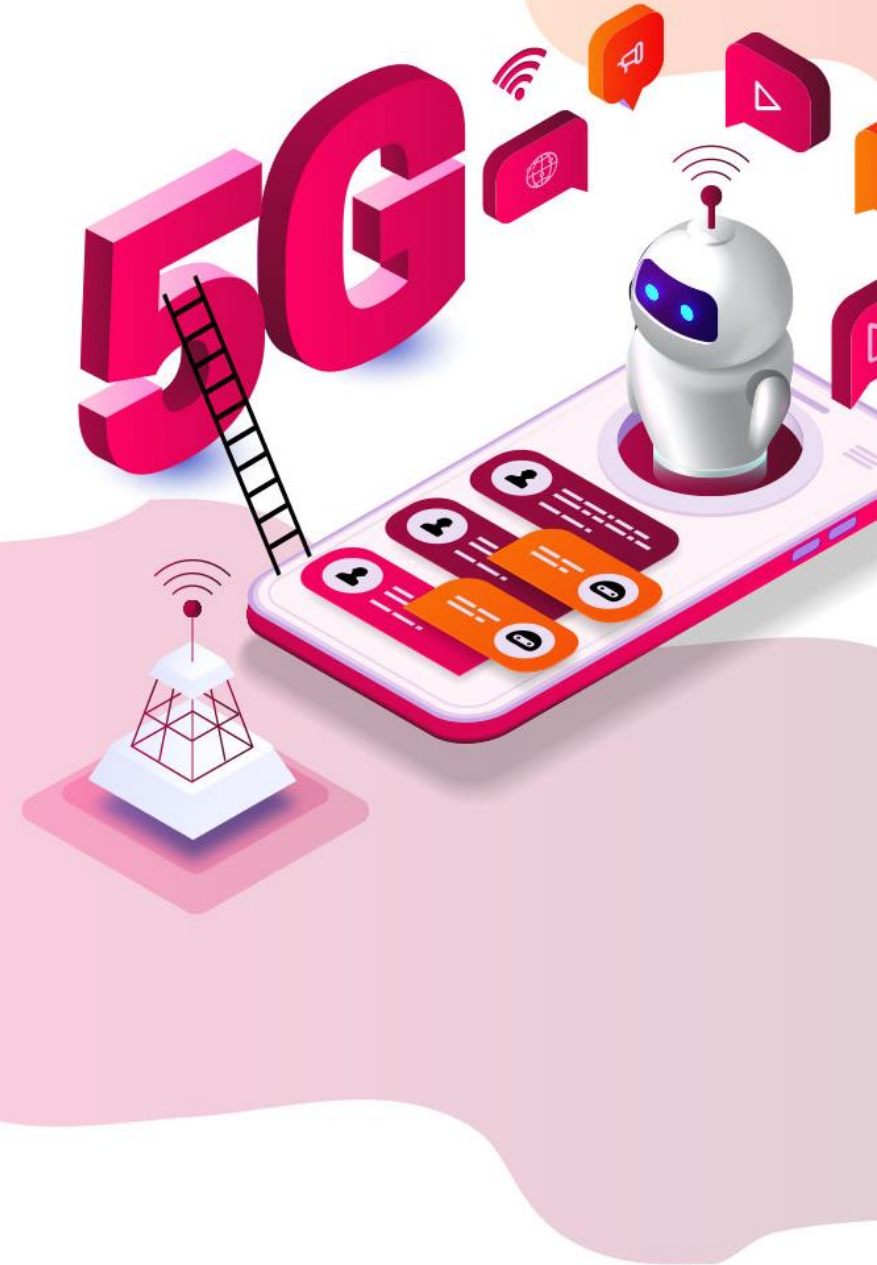
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