SDO Impacts of 5G-CLARITY

Tezcan Cogalan

22/09/2021

5G-CLARITY Vision

- **5G private networks** gaining momentum
  - 3GPP Rel-16 features make 5G systems all-inclusive critical communication platform for industry digitization
  - Incumbent actors (industry verticals, neutral-host and wholesale operators, etc) start making sizeable investment in private 5G networks.
- For the widespread adoption of private 5G networks, it is required:
  - **Seamless interworking between 3GPP 5G access and legacy technologies** (e.g. wired Ethernet, IEEE 802.11) -> backwards compatibility
  - **Small operational costs**-> easy operation and flexible integration with public 5G networks (for CAPEX reduction)
  - **Ever-increasing network capability portfolio**-> ICT-driven network evolution allows for OT-driven service innovation.
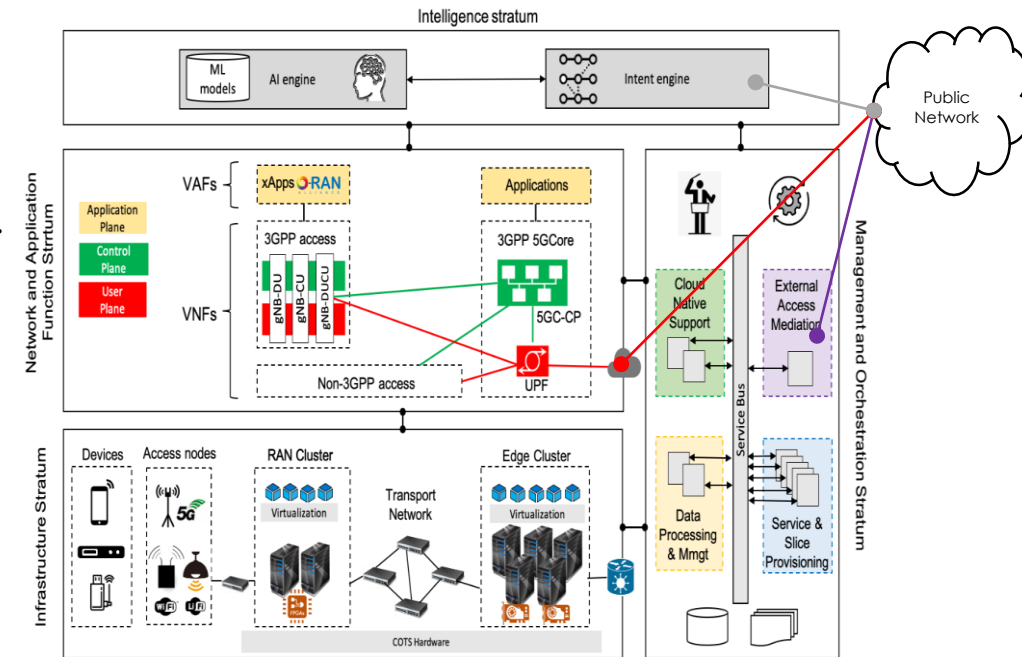
The mission of 5G-CLARITY project is to develop and demonstrate a Beyond 5G (B5G) system for private networks integrating multiple wireless access technologies including 5G, Wi-Fi and LiFi technologies, all operated through AI-based autonomic networking.

Contributions from 5G-CLARITY

- Currently 23 adopted/accepted contributions listed in the tracking sheet
    - 16x 3GPP
    - 4x ETSI
    - 3x IETF

Contributions from 5G-CLARITY

Target SDO	Item/Activity	Status	Explanation
3GPP SA5	S5-201594	Accepted	pCR 28.807 Solutions and conclusions for mgmt of SNPN
3GPP SA5	S5-204463	Accepted	pCR 28.557 Roles related to NPN management
3GPP SA5	S5-204465	Accepted	pCR 28.557 Structure content on concepts and overview of NPN management
IETF	ANIMA	Accepted	Autonomic setup of fog monitoring agents
IETF	RAW	Accepted	Extensions to enable wireless reliability and availability in multi-access edge deployments
ETSI	MEC(20)000258r2	Accepted	MEC036 Update to Section 4 Overview
ETSI	MEC(20)000259r2	Accepted	MEC036 Use case Zero Defect Manufacturing
ETSI	MEC(20)000261r2	Accepted	MEC036 Use case Mission critical vehicular and mobile node application
3GPP SA5	S5-205403	Accepted	pCR 28.557 Add use case on SNPN provisioning
3GPP SA1	S1-204435	Accepted	pCR 22.858 Use case on seamless switching from a UE-to-UE direct communication to an indirect communication via a residential gateway
3GPP SA1	S1-204436	Accepted	pCR 22.858 Use case on seamless switching to a service hosting environment via an evolved residential gateway
3GPP SA5	S5-202339	Accepted	pCR 28.807 Additional considerations on NPN
3GPP SA5	S5-205338	Accepted	pCR 28.807 Ad requriementts for management of SNPN and PNI-NPN
3GPP SA5	S5-211479	Accepted	pCR 28.557 Add CAG management
ETSI	ZSM(21)000023r2	Accepted	ZSM003 Clarify network slice as a service
3GPP SA5	S5-205402	Accepted	pCR 28.557 Add generic management aspects