



# Activity report of Autonomy Working Group

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**Autonomy WG**

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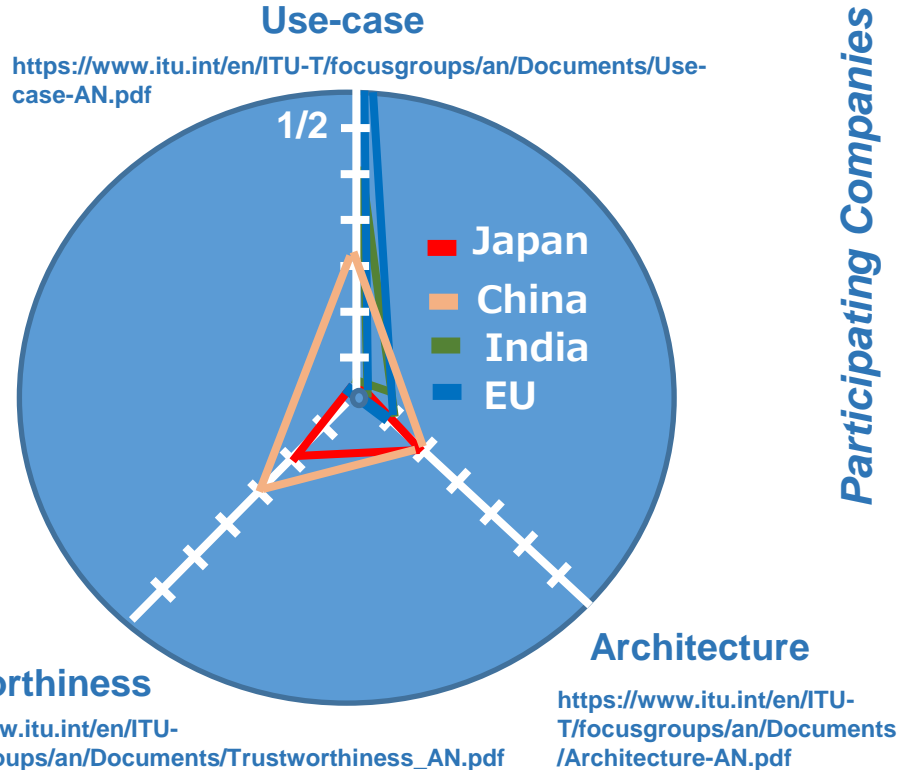
## Autonomy Working Group (Establishment and holding of WG)

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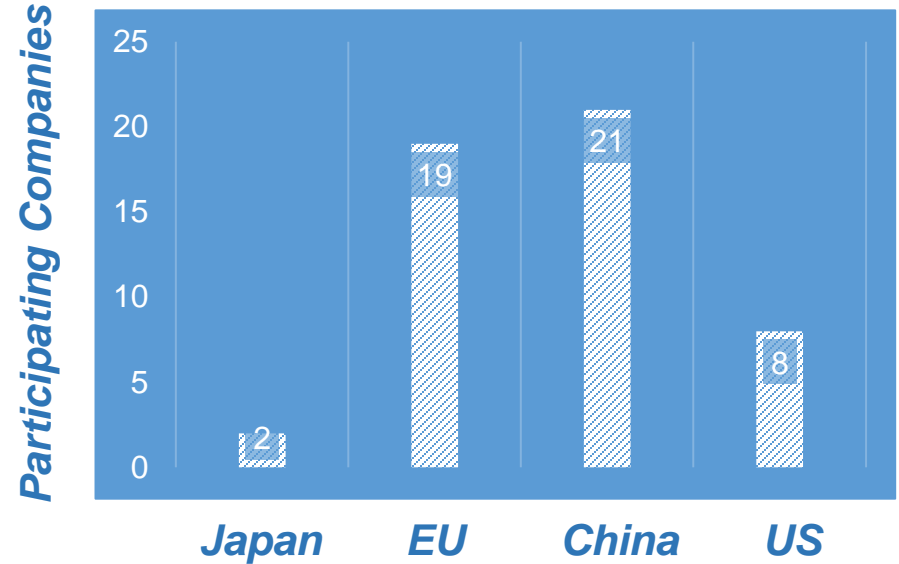
- ✓ **TTC established Autonomous Network Ad hoc Group as a domestic group for deliberations for ITU Autonomous Network Focus Group**
- ✓ **B5G AN WG doubles as a member of the TTC's AN AH and holds meetings at the same time.**
- ✓ **Non-members of the TTC wishing to join the autonomy WG.  
Next autonomy WG will be held separately after the TTC Autonomous Network Ad Hoc group meeting.**



## Contributions to ITU-T AN FG



## Participating Companies to TMF AN Catalyst



AI-driven product design/AI for user experience/Autonomous cloud-networks for vertical industries/Autonomous customer experience index for zero-touch 5g network/autonomous network hyper loops/Autonomous service operations center/Green AI for autonomous networks/Inter-driven autonomous networks/MLOps to improve lowcode based AI /networks



# Ref.) Status of initiatives in each SDO and in Japan

		3GPP	ETSI ZSM	TM Forum	Domestic initiatives
Reference Recommendations		TS 28.533 TS 28.536 TS 28.312 TS 28.100	ZSM-009-2 ZSM-009-3	IG1190	
Management Items	Configuration Management	○	○	○	○
	change management	○	○	○	○
	acceptance test	○		○	○
	Release Management	○		○	○
	Knowledge Management	○		○	○
	Monitoring and Event Management	○	○	○	○
	Incident management	○		○	○
	problem management	○	○	○	○
	Service Desk Management			○	
	Application Update Management	○		○	○
	Capacity Management			○	○
	AI Data Management			○	○
	Definition and concept	○			○

**Problem statement of 2022 Global Round in Japan**

- ML5G-PS-005:(KDDI):Network failure prediction on CNFs 5GC with Linux eBPF
- ML5G-PS-006: (RISING Study Group): Location Estimation Using RSSI of Wireless LAN in NLoS Environment



✓ 2022 Japan challenge (English) : Jul. 6th

✓ 2022 Japan challenge (Japanese) : Aug. 24th

✓ Global Round in Japan hosted by RISING in IEIEC: Oct. 31st (in person) and Nov. 2nd (online)

✓ TTC online Workshop by winner of Japan challenge: Nov.11th

✓ 2022 Final Ground Challenge by ITU (online): from Nov. 29th to Dec. 1st.

2022 Japan challenge (network failure prediction & location estimation)



## □ Network Operation Automation by using AI/ML technologies



**Tomohiro Otani**  
Executive Vice President / Debuty Genneral Manager  
KDDI Research, Inc. /KDDI Corporation

## □ R&D of Automated system design technology for Autonomous network



**Takayuki Kuroda**  
Principal Researcher  
NEC Corporation