



NTT DOCOMO's view on SA Rel-19

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Outline

- Rel-19/5G Advanced Considerations
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Rel-19/5G Advanced Considerations

- Tools to facilitate NR mmWave deployment are required.
- Features ready to deploy, preferably public service, are required.
- Features paving the way to the future can yield results also in Rel-19.
- Rel-18 work needs to be stabilized.



Overall View on Rel-19 Content (1/2)

S.NO.	Title	Brief Description and Key Objectives	Related Stage-1 Study/Work Item	Lead Stage-2 WG	RAN dependencies	Other WG dependencies
1	Home gNB with Local GW	See S2-2306843, S2-2307115 - (Summary of justification of S2-2306843 by NTT DOCOMO) Insufficient use of mmWave is problematic. Home gNB that uses mmWave + Local GW can be considered as a good tool to improve this situation, if that is capable enough to allow customers to put it at their home by themselves in a plug-and-play manner and boost capacity there. - Key objectives: CAG enhancement, Local GW selection	Yes, while SA2 SID proposal's scope is quite reduced.	SA2	Yes, Minor	RAN3 In addition, could depend on SA3/5, RAN2
2	NG_RTC_Ph2	See S2-2306827, S2-2307243, etc. - Enhancement of Rel-18 NG_RTC and Successor of (part of) SA1 Metaverse. The following includes aspects of our interest: (i)Bootstrap DC only media, (ii)Coexistence with legacy UE/NW, (iii)DCSF API, (iv)identity (if there is an accompanying study in SA6).	Yes	SA2	No	SA3/4/5/6
3	XRM_Ph2	See S2-2306753, etc. - Enhancement of Rel-18 XRM. The following includes aspects of our interest: (i)Continuation of Rel-18 work, incl. potential harmonization of architecture for XRM, TSC and TSN, (ii)Handling of traffic based on encrypted protocol, e.g., QUIC. (iii)High mobility scenario (if there is impacts on SA2)	Yes	SA2	Yes, Major	SA3/4/5, RAN1/2/3
4	TRS_URLLC_enh	See S2-2307358 -Wrap-up of Rel-18 TRS_URLLC.	Yes	SA2	Yes, Major	SA3/5 RAN WG



Overall View on Rel-19 Content (2/2)

S.NO.	Title	Brief Description and Key Objectives	Related Stage-1 Study/Work Item	Lead Stage-2 WG	RAN dependencies	Other WG dependencies
5	AI/ML	See S2-2306425, S2-2306462, S2-2306474, S2-2306540, S2-2306633 - Enhancement of Rel-18 eNA/AIMLsys. The following includes aspects of our interest: (i)RAN work support for use of AI for air interface and positioning, (ii)Robustness analytics, (iii) Progress of AI/ML framework (A proposal of ours is to allow use of operator custom AI model/AI engine.)	Yes	SA2	Yes, Major	TBD
6	Energy efficiency	A concrete actionable proposal is to be considered. Our interests include a potential enhancement of “Support for Energy Saving” on capacity booster in TS 38.300, clause 15.4, with CN assistance.	No	SA2	Yes, Major	SA5 RAN2/3
7	ISC(Sensing)	See S2-2306459, S2-2306535, S2-2306722 Successor of SA1 Sensing	Yes	SA2	Yes, Major	TBD
8	Ambient IoT	See S2-2306423, S2-2307089 Successor of SA1 Ambient IoT	Yes	SA2	Yes, Major	TBD

Summary

- 🌿 Tools to facilitate NR mmWave deployment are required.
 - Home gNB + Local GW
- 🌿 Features ready to deploy, preferably public service, are required.
 - NG_RTC_Ph2, XRM_Ph2
- 🌿 Features paving the way to the future can yield results also in Rel-19.
 - AI/ML, Energy efficiency, ISC(Sensing), Ambient IoT
- 🌿 Rel-18 work needs to be stabilized.
 - TRS_URLLC