

# Google's Views on SA2 R19 Package



3GPP SA#100 R19 Workshop

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# High Level Categories

Based on stage 1 service requirements, and SA2 SIDs proposals in SA2#157 meeting, there are 4 topic categories:

- Category 1: Stage 1 service requirements (new services or phase X)
- Category 2: Potential SA2 driven CN/TEI features
- Category 3: CN assisted/coordinated RAN features
- Category 4: X+1 phase of previous WL\_Ph X for enhancement

\* A topic may belong to more than one categories.

# Google's Prioritized R19 Topics (Enhancement)



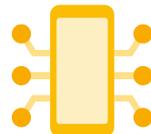
## AI/ML enablers

- Cat.1/2/3/4
- SA1: AIML\_Ph2 (sidelink)
- SA2: AIMLsys R18
- Data/model sharing and coordination among UE/RAN/CN/APP/IoT devices
- Support mobility and Interoperability
- **Security & Privacy Protection**



## eXRM

- Cat.1/2/3/4
- SA1: Metaverse
- SA2: XRM R18
- Physical/digital users identification and info exposure
- Support encrypted traffic
- **Security & Privacy Protection**



## Multiple Accesses

- Cat.1/2/3/4
- SA1: DualSteer
- SA2: ATSSS Ph3 R18
- Dual 3GPP accesses, e.g. TN and/or NTN
- Single subscription and multiple registrations
- Light-weight ATSSS



## Satellite Arch.

- Cat.1/2/3/4
- SA1: 5GSAT\_Ph3
- SA2: 5GSAT\_Ph2 R18
- Satellite coverage maps provisioning

# Google's Prioritized R19 Topics (New Services)



## Ambient IoT

- Cat.1/3
- SA1: AmbientIoT
- New device type
- Simplified protocol stack
- R19 to include only study phase
- Light weight Security & Privacy Protection



## Energy Efficiency

- Cat.1/3
- SA1: EnergieServ
- EE centric decision and signaling optimization
- Solutions shall avoid UE power consumption consequences



## Integrated Sensing and Comm.

- Cat.1/3
- SA1: Sensing
- CN assisted RAN info.
- SA enh. for data collection
- R19 to include only study phase
- Security & Privacy Protection

# Summary

- Google's prioritized phase 1 packages include
  - continuing enhancement with available stage 1 requirements
  - new services enablers
- Potential SA2 driven CN/TEI features can be considered in phase 2 package.
- The target objectives of each topic needs further consideration:
  - based on operators' inputs for deployment progress
  - based on reality check on feature adoption
- For topics that are highly dependent on RAN and requiring coordination across RAN and SA, it is proposed to conduct study only in R19: Integrated Sensing and Comm. and Ambient IoT.

Thank You