ETSI Conference on
Non-Terrestrial Networks,
A Native Component of 6G

Session 8:
CONCLUSIONS, RECOMMENDATIONS & NEXT STEPS

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Disclaimer: *Opinions, interpretations, recommendations and conclusions presented here are those of the moderators and are not necessarily endorsed by the respective company/organization as well as by the speakers and their respective companies/organizations.*

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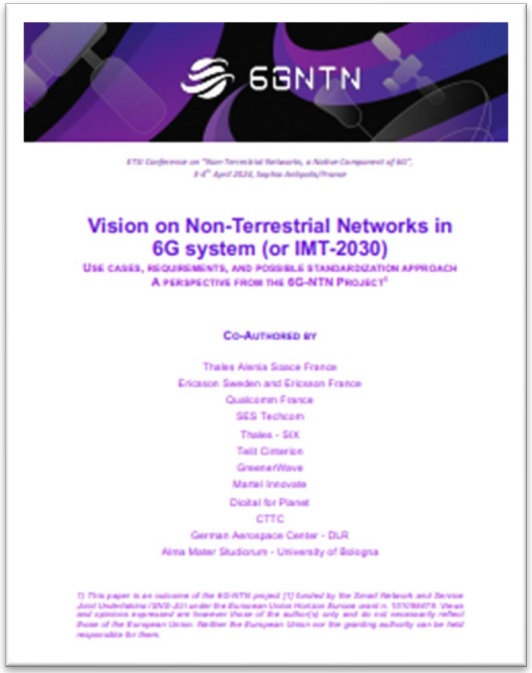
NOTE: This summary reflects the *moderators understanding* ONLY & does not represent views of all participants / speakers

Session#08: *Moderated by Nicolas Chuberre, 6G-NTN Technical Manager, Thales Alenia Space*
6GNTN Whitepaper on Vision for NTN in 6G

- 6G-NTN Project has recently published a whitepaper >>> https://www.6g-ntn.eu/scientific-publications/
- Identifies Market segments,
- Examines most promising use cases/connectivity scenarios,
- Provides Native support of NTN in 6G principles,
- Proposes Standardisation principles
  - Evolution of 5G-NTN
  - Start 6G-NTN in Rel-21.



Open Call to those interested in discussing further the topics presented and contributing actively to another paper (as co-author)

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NTN in 6G: Potential list of use cases

1. Direct connectivity to smartphones/wearable devices including in light indoor/in car scenarios
2. Broadband connectivity to land vehicles
3. Broadband connectivity to drones (or UxV)
4. Connectivity to homes and small offices
5. High speed broadband connectivity to transportation platforms (Trains, aircraft, vessels)
6. Fast set-up of Connectivity to an Area/theater of operation (for utilities and public safety)
7. Content distribution for media applications
8. Data collect from a wide area (e.g. utilities, agriculture, public safety)
9. PNT augmentation
10. Low latency service over long distance
11. Safety critical applications
12. Coverage extension to CSPs
13. JSAC (Joint Sensing & Communications)

AND. Important to ensure Backward compatibility with 5G/4G capable UE

NOTE: text in RED was collected 'live' from the event audience

Open Call for feedback on these items

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Session#08: *Moderated by Nicolas Chuberre, 6G-NTN Technical Manager, Thales Alenia Space*
NTN in 6G: Possible standardisation activities

- Requirements of a common Mobile VSAT Terminal (FR2 band) for NGSO across verticals
- Definition of a reference multi orbit constellation system(s) as evaluation framework for the assessment of routing schemes
  - Latency, jitter, packet loss
- Free space optical link
  - NOTE a new Work item will be discussed at ETSI TC-SES#105
- NTN/TN Spectrum sharing study
  - => 3GPP ?
- Split RAN option 7.2 (or others) for NTN
  - => Possibly in O-RAN ?
- REDCAP via NTN
  - => Contribution to 3GPP Rel-19 WI NR-NTN-ph3
- Integrated Sensing And Communication in the context of NTN (same or separate spectrum ?)
  - => Requires prior research
  - => 3GPP, ETSI ISG ISAC, ETSI TC-SES?
- Integrated or Wireless Access and Backhaul over NTN
  - => 3GPP?
- Integrated Positioning And Communication in the context of NTN
  - => 3GPP ?

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Session#08: *Moderated by Nicolas Chuberre, 6G-NTN Technical Manager, Thales Alenia Space*
NTN in 6G: Identification of possible 3GPP stage 2 standardisation

- Identification of features to be prioritized in Rel-21 at SA level

- Identification of features to be prioritized in Rel-21 at RAN level
  - e.g. GNSS free operation, PAPR reduction, UL asynchronous Low data rate access, etc..

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