

Networld2020 GA Meeting Annual SatCom WG Report

Telco, November 2020, 16th

Presenter: Tomaso de Cola

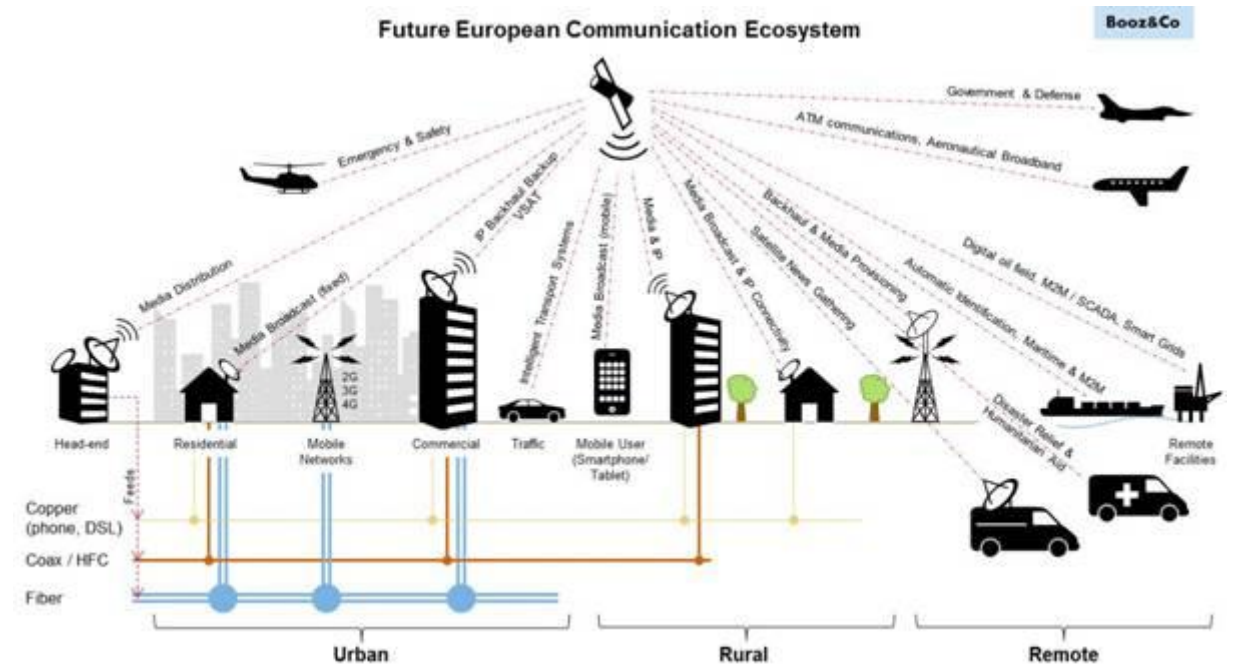


Knowledge for Tomorrow



SatCom WG overview

- Main Objectives:
 - To **define Vision and priorities** for SatCom related research topics: Among other fostering Fixed/mobile Satellite network convergence with 5G network
 - To **analyze EC policies** and communications related to SatCom R&D, develop and convey the sector position towards the EU stakeholders
 - To **interface with European and national organizations** and other ETPs for space related matters
 - To **foster links between Research and Standards** (support related policy)
 - To **interface with the New-ETP Steering Board** for harmonization and coordination
- AND:
 - To **define the positioning of SatCom** within **future smart networks**, where innovations are required to develop techniques/technologies to ensure also **sustainable ICT**



Structure

WG Chairperson

- Dr. Tomaso de Cola is the new elected chairperson since March 2019

Task forces and subgroups:

- **Vision and Research Strategy task force** (new)
 - Leader Prof. Alessandro Vanelli-Coralli (University of Bologna)
 - **Standardization subgroup** (renamed)
 - Leader Nicolas Chuberre (Thales Alenia Space, France)
 - **Policy and Promotion subgroup**
 - Leader Matthieu Dollon (Airbus DS)
- More details available on WG webpage → <https://www.networld2020.eu/satcom-wg/>



“SatCom Resources for Smart & Sustainable Networks and Services”

White paper v1.0. November 25, 2019

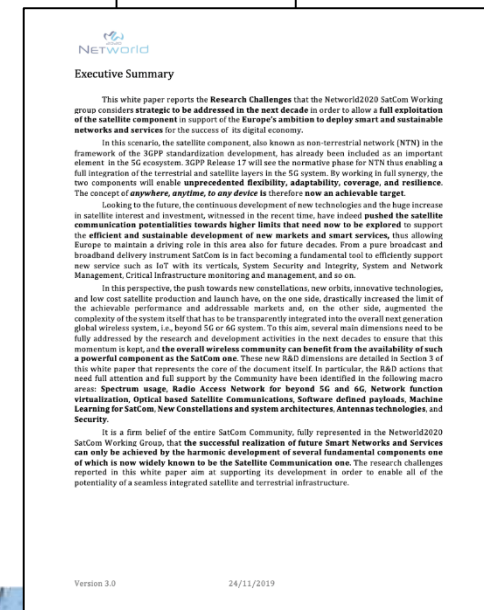
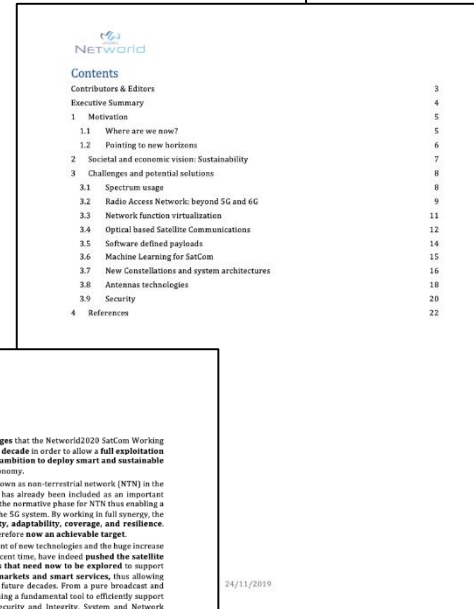
<http://bit.ly/SatComWG>

- Main objectives

- **highlight SatCom Role and Research Challenges to be addressed in the next decade** to allow a full exploitation of the satellite component in support of the Europe’s ambition to deploy smart and sustainable networks and services
- **provide updated information** about SatCom status-quo and trends
- **update the Vision paper** published in 2014
- **kickstart the SatCom contributions** to SRIA v3.0

- Schedule

- **Nov. 25, 2019**, version 1.0 published on the Networld2020 website (bit.ly/SatComWG) and on the relevant fora and social media
- **Dec. 2019**, version 2.0, containing updated contributions deriving from the Expert Group, Standardization discussions, etc.



Contribution to SRIA v3.0

- Dedicated chapter (Chapter 9) about SatCom Communications:
 - <https://bit.ly/35t1M5l>
- Based on the white paper inputs:
 - System architectures
 - Evolution of Networking Architectures
 - Hybrid infrastructures: Broadcast/Multicast/Unicast/Storage – EdgeCasting
 - Smart Satellite Networking
 - Optical based Satellite Communications
 - Software Defined Payloads
 - Radio Access Network beyond 5G and 6G
 - Antennas
 - Spectrum usage
 - Artificial Intelligence for SatCom
 - Security
 - Communication, Computation and Storage
 - Plug and Play Integrated Satellite and Terrestrial Networks



Standardisation activities

- Ongoing support to the main standardization activities carried out mostly in ETSI and 3GPP:
 - ETSI: Contributions to the SES SCN WG with respect to pending work items
 - 3GPP:
 - contributions to NTN WIs (in RAN and SA areas)
 - Contributions to NTN SI (about NB-IoT for NTN, not yet started)
- Ongoing discussion about the positioning of the Satellite industry with respect to standardization needs:
 - Draft questionnaire being prepared
 - Outcomes early January '21



Dissemination activities

- Organisation of the ASMS/SPSC conference with focus on bringing closer SatCom and B5G technologies:
 - Several track sessions
 - Tutorials
 - Panels and keynotes

- Involvement in the IEEE WF-5G event:
 - Specific workshop on SatCom
 - Session on SatCom verticals

- Involvement in the INGR roadmap for the Future Networks initiative within IEEE Future Networks, with a SatCom dedicated chapter



Thank you for the attention!

For any questions you can reach me at:
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