Networld2020 GA Meeting Annual SatCom WG Report

Telco, November 2020, 16th

Presenter: Tomaso de Cola





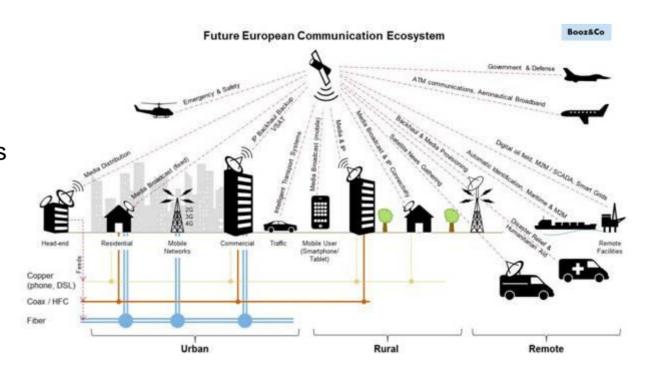


• Main Objectives:

- 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:

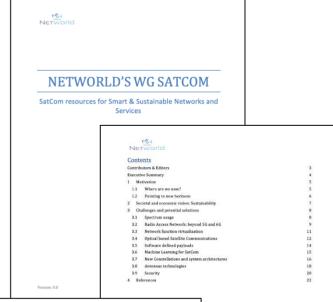
- Vision and Research Strategy task force (new)
 - Leader Prof. Alessandro Vanelli-Coralli (University of Bologna)
- Standardization subgroup (renamed)
 - Leader Nicolas Chuberre (Thales Alenia Space, France)
- Policy and Promotion subgroup
 - Leader Matthieu Dollon (Airbus DS)
- More details available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

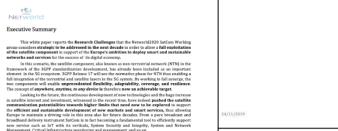


"SatCom Resources for Smart & Sustainable Networks and Services"

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.





combination of the system itself that has to be transparently integrated into the overall must generation global swireless system, i.e., beyond of of ed optomen. To this ans, several must dimension need to be applicable swireless system, i.e., beyond of of ed optomen. To this may rewrite must dimension need to the minimation is kept, and the overall wireless community can benefit from the availability of such a powerful component as the Sattom one. Then new Mad Gunceliness are detailed in Section 3 of this white paper that represents the core of the document kiped. In particular, the BAD actions that the section of the section o

It is a firm belief of the entire SatCom Community, fully represented in the Networld202 SatCom Working Group, that the successful realization of future Samar Networks and Period can only be achieved by the harmonic development of several fundamental components of which is now widely known to be the Satellite Communication one. The research challenge reported in this white paper aim at supporting its development in order to enable all of the paper of the same paper aim at supporting its development in order to enable all of the communication of the same paper aim at supporting its development in order to enable all of the same paper aim at supporting its development in order to enable all of the same paper aim at supporting its development in order to enable all of the same paper aim at supporting its development in order to enable all of the same paper aim at supporting its development in order to enable all of the same paper aim at supporting the same paper aim at same paper aim at supporting the same paper aim at same paper aim at supporting the same paper aim at same paper aim at



Version:

24/11/2019

- Dedicated chaper (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



Sep 2020

Strategic Research and Innovation Agenda 2021-27

European Technology Platform NetWorld2020

"Smart Networks in the context of NGI"

2020

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



- 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







Visit Our Website | futurenetworks.ieee.org/roadmap





Thank you for the attention!

For any questions you can reach me at: tomaso.decola@dlr.de



