



IoT WebTalk

The Power of Partnership: **CLEAR SKIES AHEAD FOR MOBILE-ENABLED AVIATION**

Wednesday, 24 March 2021 | 08:00 PDT | 11:00 EDT | 15:00 GMT



Polls & QA

The screenshot displays a BlueJeans webinar interface. The main content area shows a slide titled "GET STARTED" with the subtitle "Your quick start to version 2.0". The slide features a cityscape background, a blue geometric logo, and the date "08 23". Below the slide are three small video thumbnails of participants. The top status bar indicates "Marketing Webinar", "00:00:36", "RECORDING ON", "BROADCAST ON", and "1 ATTENDEE". The right sidebar shows a list of participants under "Participants" and "Presenters (10)", including Mike, Carol, Greg, Peter, Bobby, Marsha, Jan, Cindy, and Alice. Two icons in the sidebar are highlighted with yellow circles and arrows: a poll icon labeled "Polls" and a question & answer icon labeled "Questions & Answers". The BlueJeans logo is visible in the bottom right corner of the interface.

Agenda

15:00 Introduction

Barbara Pareglio, **GSMA**
Pawel Trominski, **GUTMA**
Christopher T. Kucera, **OneSky**

15:10 How to develop enablers for aviation in 3GPP standards?

Stefano Faccin, **Qualcomm**

15:15 How cellular can enable BVLOS operations?

Gerry Libunao, **Verizon**

15:20 What data can MNOs offer for BVLOS flights?

Thomas Neubauer, **TEOCO**

15:25 How to integrate cellular enabled UAS into aviation?

Boris Resnick, **GLONASS Union**

15:30 Panel and Q&A, moderated by Barbara Pareglio, GSMA

All speakers and ACJA Board Members

The GSMA in numbers



1987

The GSMA
was founded



12

offices
worldwide



93m

lives impacted through
Mobile for Development



2016

we're the first sector to commit
to the UN Sustainable
Development Goals



GSMA Membership:

750+

mobile
operators

400

companies in the
broader ecosystem



Nearly **200,000**

attendees worldwide come
to our MWC and Mobile
360 Series events



Connecting **23,000**
industry experts through
InfoCentre2



10.1bn+

cellular connections
worldwide (including IoT)



5.2bn+

unique mobile
subscribers



\$600bn

annual 5G contribution to
global economy in 10 years



75%

of the global fixed broadband
market is represented by
GSMA members



Over **600**

meetings in the past year
amongst the GSMA
Working Groups



About GUTMA

- **MISSION:** To support and accelerate the transparent implementation of globally interoperable UTM.
- **UTM PURPOSE:** To foster the safe, secure, efficient and affordable integration of drones into national airspace systems.
- **GUTMA MEMBERS:** In over 30 countries across 6 continents, our diverse membership represents the entire UTM ecosystem.

GOALS:



Empower a
harmonized global
digital UTM ecosystem



Enable more UTM
flights than ATM



Trusted source for
UTM knowledge



Aerial Connectivity Joint Activity (ACJA)

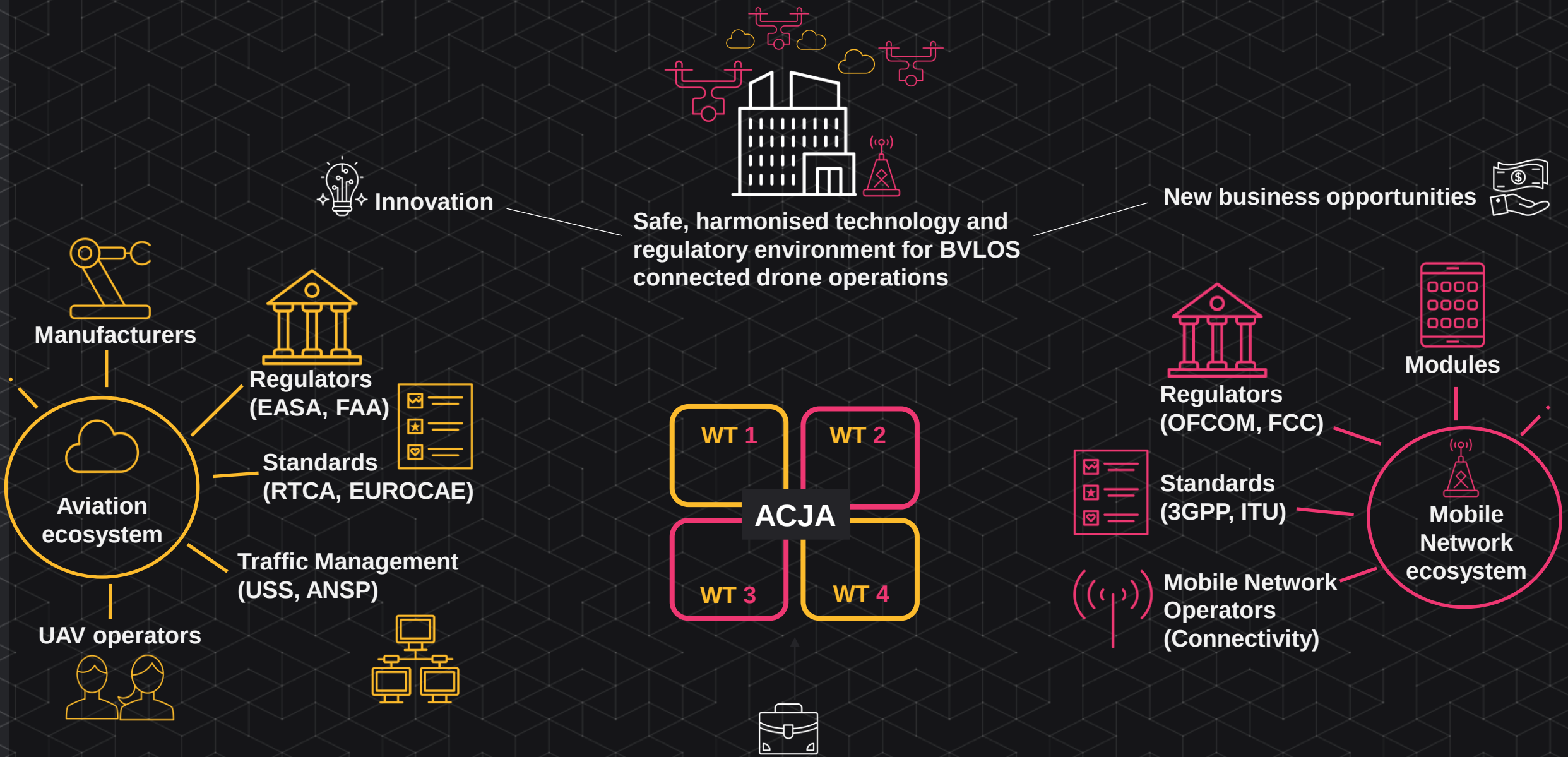


www.gsma.com/aviation/



www.gutma.org/acja/





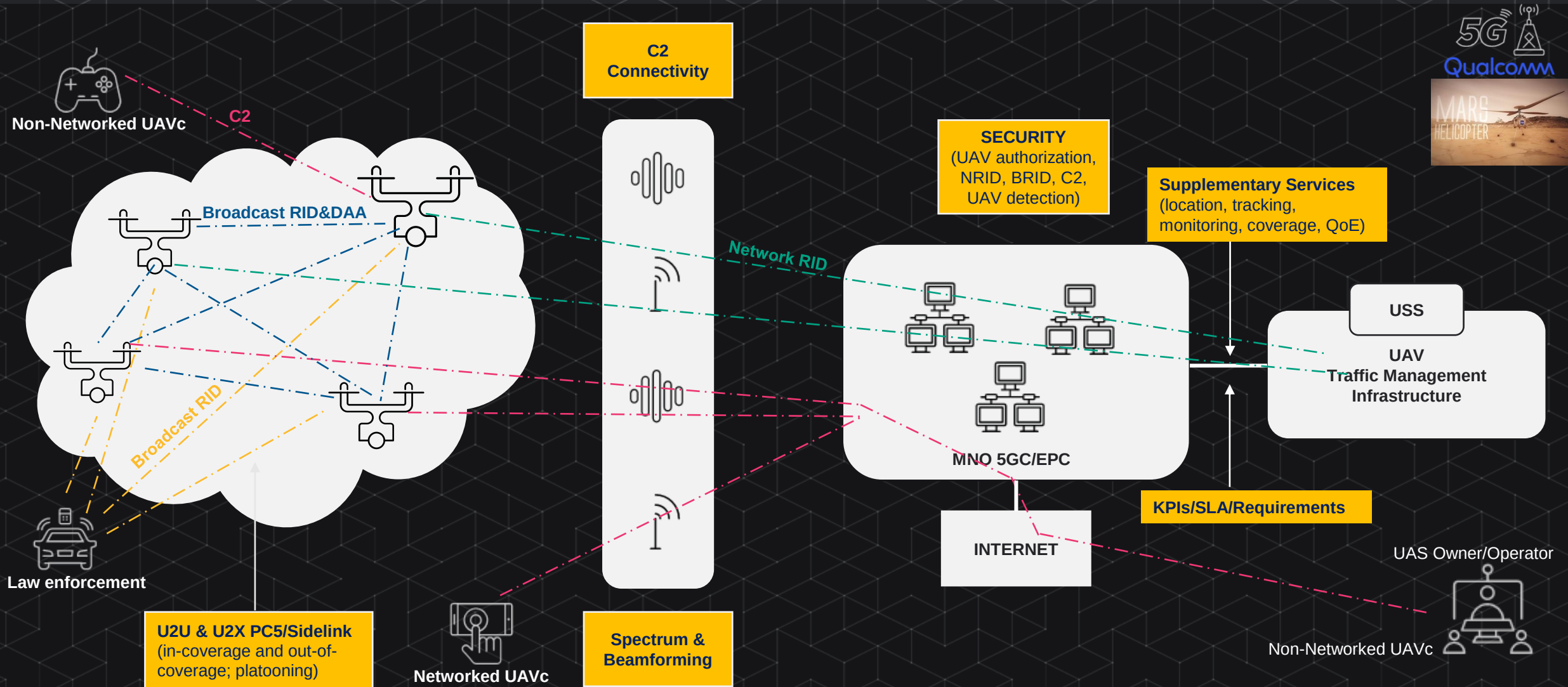
ACJA Work Task 1

Cellular Standard Coordination



WT 1 Lead
Stefano Faccin
Qualcomm

UAV Connectivity Framework and the 3GPP Ecosystem



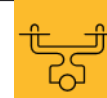
ACJA Work Task 3

Standard Aerial Service Profile



WT 3 Lead
Gerry Libunao
Verizon

Purpose



Define cellular network connectivity profiles for aerial services

Achievements



Industry whitepaper on LTE aerial user-to- network (UNI) base profile

Future plans



WT dormant pending completion of standards for:

- 5G NR support of UAVs in 3GPP
- LTE MOPS in RTCA and EUROCAE

LTE aerial work transferred to GSMA – guidelines for LTE UNI profile, roaming and network Interconnection support of aerial services



DOWNLOAD



ACJA Work Task 2

Data exchange between MNOs and UTM



WT 2 Lead
Thomas Neubauer
TEOCO



LinkedIn



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Purpose



Global data exchange btw MNOs & drone ecosystem

Needed for pre-flight, in-flight and post flight data exchange

Achievements

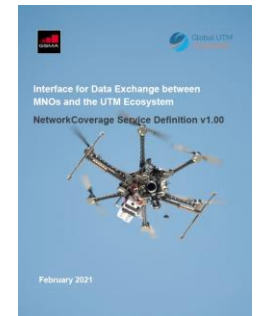
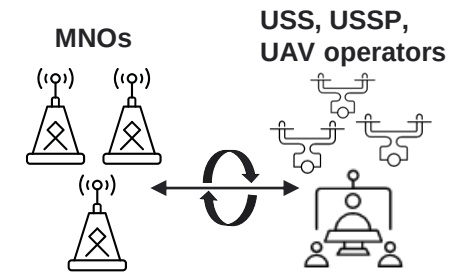


Delivered a globally harmonized Network Coverage Service Definition for connectivity data & ground risk data

Future plans



- Deploy Network Coverage Service
- Measure thresholds & requirements
- Monitoring & logging formats & needs



ACJA Work Task 4

Development of MOPS & MASPS



WT 4 Lead
Boris Resnick
GLONASS Union



LinkedIn

Purpose



Interface between ACJA & wider telecom community & aviation SDOs (e.g. RTCA, EUROCAE) for enabling UAS communication adoption and ensuring safe deployments based on performance-based requirements

Achievements



Draft minimum operation performance paper for UAS communications by 4G/LTE mobile network as an input towards EUROCAE WG-105 and RTCA SC-228 standards

Future plans



2021: Architecture & use cases for 4G LTE UTM connectivity white paper

2022: MOPS definition & use cases for 4G/LTE C2 connectivity

Beyond 2022: MOPS for 5G connectivity

Panel Discussion



Peter Musgrove

Lead Member of Technical Staff

AT&T



Boris Resnick

Deputy Technical Director

GLONASS Union



Barbara Pareglio

Senior Director, IoT Technology

GSMA



Pawel Trominski

Project Manager

GUTMA



Thomas Eder

Senior Engineering Manager

Nokia Digital Automation



Christopher T. Kucera

Co-Founder and Head of
Strategic Partnerships

OneSky



Stefano Faccin

Director of Technical Standards

Qualcomm



Eric T. Ringer

Co-founder and Chief of Staff

Skyward, a Verizon company



Thomas Neubauer

VP, Business Development

TEOCO



Gerry Libunao

Distinguished member of the
Technical Staff

Verizon

Thank You!



on-demand video recording



www.gsma.com/drones



drones@gsma.com



www.gsma.com/iot/newsletter/



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