



DRONE INTEREST GROUP MEETING #26

Wednesday 9th October 2019





Agenda

- Welcome & Anti-trust
- Regulatory work
 - JARUS 5
 - U – SPACE consultation
 - JARUS6
 - Spectrum (PT1)
- Technical work
 - Remote ID
- Events
 - Connected Skies at the MWC Barcelona





Regulatory Updates

Marina Solin





Regulatory Work Stream

JARUS 5 Paper 'Cellular connectivity for drones'

Final draft due be released for external JARUS consultation

U-Space consultation

EASA workshop on 11 October and 3 week consultation process will go hand in hand. GSMA response is planned.





JARUS 6

JARUS Discussion 'Connectivity Performance Requirements in support of SORA'

- ↘ Brainstorming Workshop took place on the 1st of October in GSMA
- ↘ Ultimate objective: specify connectivity requirements for risk mitigation





Draft European report proposes restrictions on mobile bands

- Draft report proposes usage conditions that make mobile bands harder to use
 - Reduced power emission limits impact coverage & equipment – plus some no fly zones
 - Report currently on hold due to Member State issue – so public consultation is delayed

| Band | Concerned services | Additional regulatory measures proposed for mobile (simplified summary) |
|------|---|---|
| 700 | Broadcasting & Radio Astronomy | No use on drones below 30 metres. Additional cross border coordination needed between countries. |
| 800 | Radio Astronomy | No fly zone around radio astronomy locations or additional filtering. Additional cross border coordination needed between countries. |
| 900 | Railways (GSM) | None so far |
| 1800 | Meteorological satellite | Reduced power limit for mobile connection on drones |
| 2100 | Mobile satellite ground component, Railway | No fly zone around mobile satellite ground station: 2.5km- 15km (depending on power level). No fly zone around railway: 100-500m (depending on power level) |
| 2600 | Radio astronomy | Coordination around radio astronomy locations |
| 3500 | Satellite, radiolocation and radioastronomy | No fly zone: 26.7km- 290 km around fixed satellite earth station Significantly reduced power limit for mobile connection on drones |



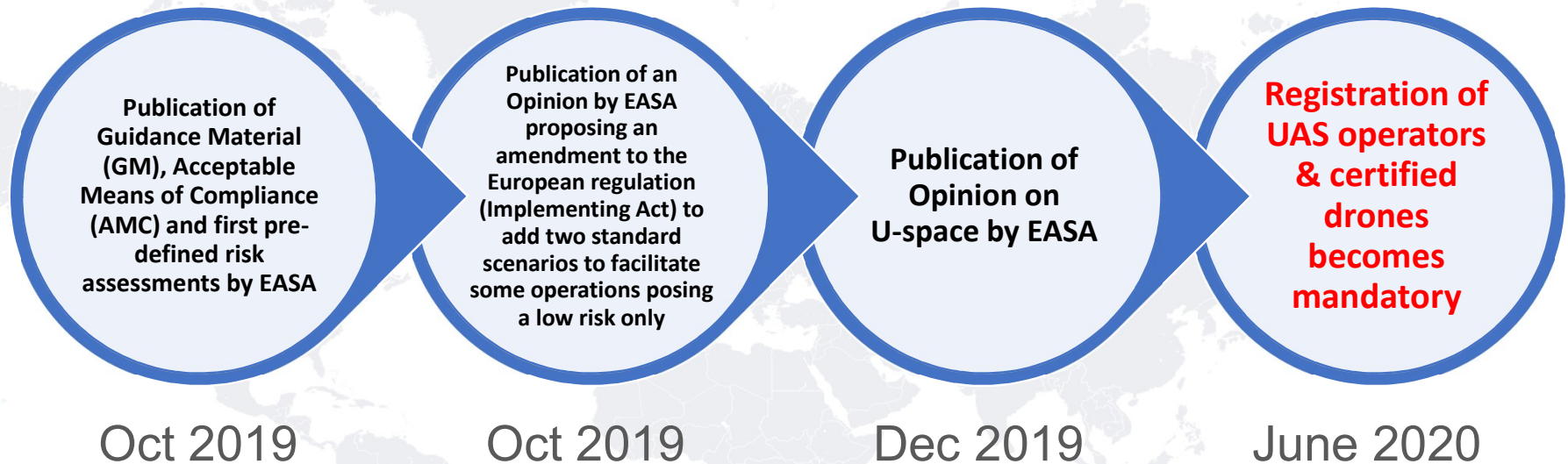
Remote ID

Barbara Pareglio





EASA timeline





MNOS remote ID solutions

- **Problem statement:** regulations on how to identify remotely drones are becoming a reality for different categories of drones. In some cases regulations require a broadcast solution and in other the network solution. Mobile networks are the most suitable network to fulfil the regulation.
- **Objective:** the mobile industry need to demonstrate how mobile network is able to support regulations, both for the open and specific categories (European version, US categories are quite similar). The objective is to describe how the identification can be achieved with the existing network technologies (e.g LTE, NB-IoT, 3G, etc.) and how it will evolve to 5G.
- **How:** create a dedicated task force to contribute to a guidelines or best practise document. The task force will define the actual details of the scope and timeline of the work. We are looking for a chair of the task force to drive the work.





Connected Skies

Graham Trickey





Connected Skies Event Series at MWC Barcelona 2020

- Ministerial Programme
 - Tuesday, 25th of February 4:15 pm – 5:45 pm
- Connected Skies day (organized by GUTMA)
 - Wednesday, 26th of February 9 am – 7 pm
- Possible main conference session





AOB

www.gsma.com/drones