



Welcome to the World of Standards

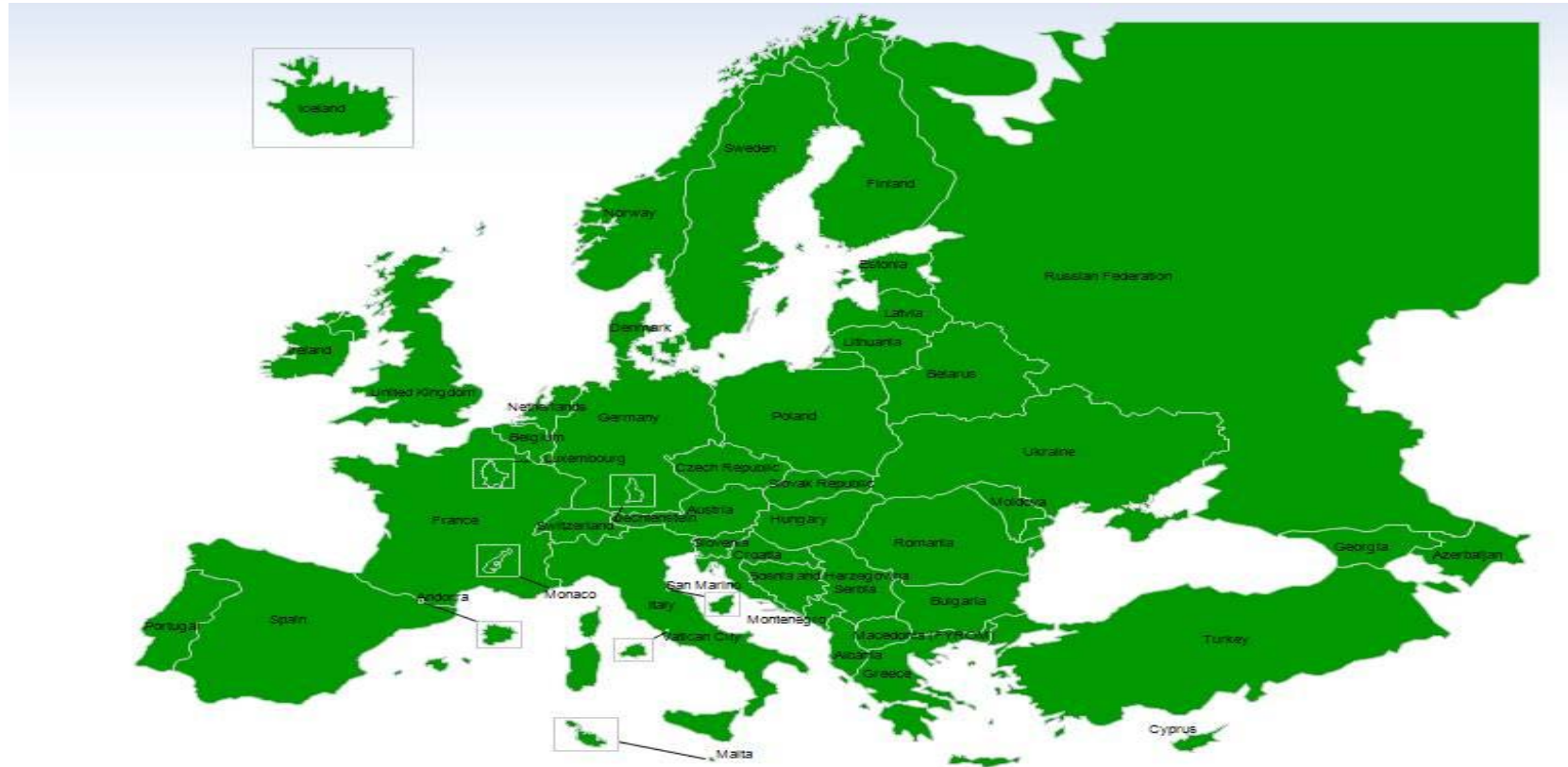


ETSI ACTIVITIES ON DRONES (UNMANNED AIRCRAFT SYSTEMS)

Presented by Michael Sharpe

29 to 30 May 2018

ETSI & CEPT: TOGETHER BUILDING A LARGE UNIFIED EUROPEAN MARKET



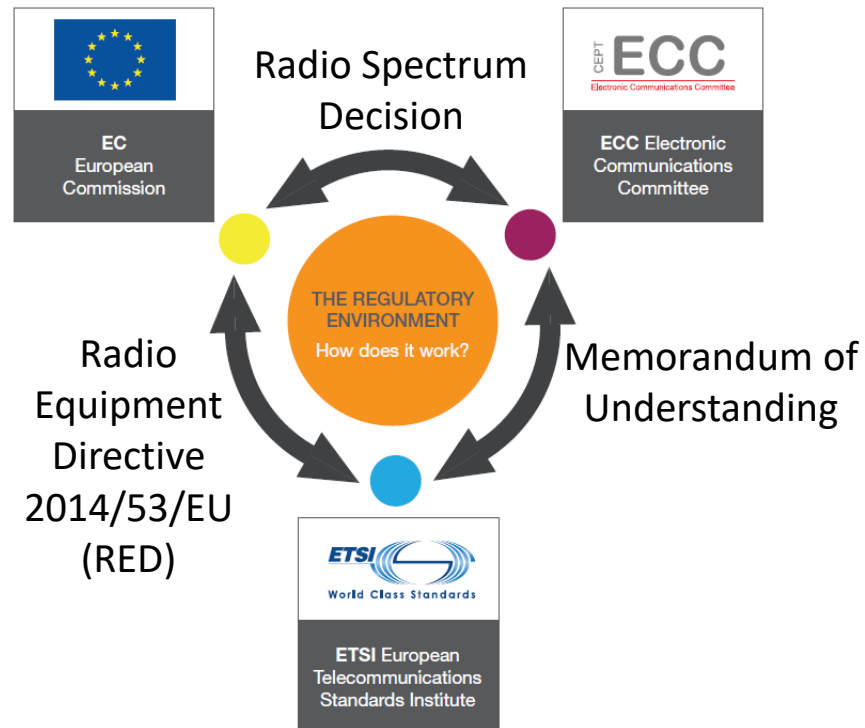
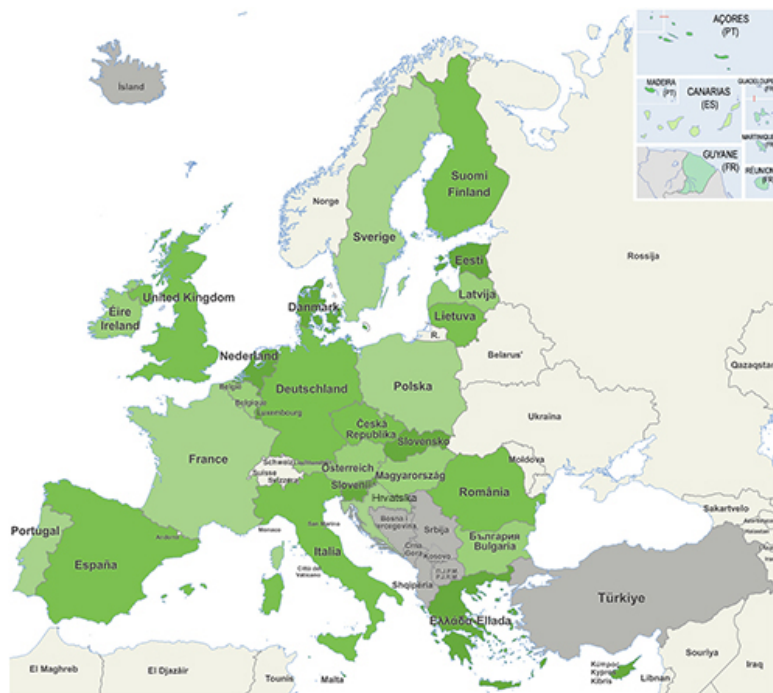
ETSI & CEPT: TOGETHER BUILDING A LARGE UNIFIED EUROPEAN MARKET

- Individual National Administrations (48) commit to implement CEPT/ECC Decisions

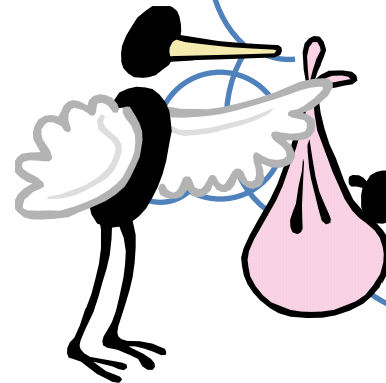


- European Standards transposed in (48) National Standards Organisations

LEGAL CERTAINTY IN THE EUROPEAN UNION



- 🌐 European Standards (EN)
 - including **Harmonised Standards** under the Radio Equipment Directive (RED)
- 🌐 Technical Reports (TR)
 - Including **System Reference Documents**



Also:

- * *ETSI Standards*
- * *ETSI Guides*
- * *Technical Specifications*
- * *Group Reports & Specifications*
- * *Special Reports*

[See CEPT 2017 Spectrum-management workshop](#)

APPLICATION OF THE RADIO EQUIPMENT DIRECTIVE TO DRONES/UAS

- Amended EASA Regulation in its final stages of adoption.
- Certified drones/UAS expected to be covered by the amended EASA Regulation
 - Spectrum management in ITU, in liaison with ICAO
 - Equipment standards in EuroCAE
- Expected to modify RED to clarify that it covers non-certified drones/UAS.

OPTIONS FOR UAS/DRONES IN ETSI

- Use of Mobile Networks (MFCN) (see separate presentation)
- Non-MFCN-based solutions: need frequencies & standards for:
 - Command/Control,
 - Payload (where necessary)
 - Electronic Identification/Geofencing (where required by UAS category)

NON-MFCN-BASED SOLUTIONS FOR UAS/DRONES

- Identify technical characteristics (ETSI System Reference Document)
- Sharing studies in CEPT based on ETSI SRDoc lead to agreed sharing conditions
- Agreed sharing conditions form the basis of CEPT/ECC Decision (EC Decision if needed) & ETSI Harmonised Standard under RED
- ETSI TR 103 373 under development in TC ERM TG AERO
 - very few contributions from industry
 - little progress
 - activity being screened for closure

WHY SO LITTLE PROGRESS ON TR 103 373?

- No demand from industry?
 - Is the MFCN solution sufficient?
- Lack of awareness of the development of the SRDoc in TG AERO?
 - This workshop should help to address the issue
- Still uncertain over the application of RED and the prototype EASA Regulation?
 - Still under discussion in EP/Council, but appears stable
- Are harmonisation measures seen as beneficial, or “more rules”?

BENEFITS OF BUILDING A LARGE UNIFIED EUROPEAN MARKET

- Enables innovative ideas to become a market success
- Benefits for Supplier:
 - bigger market; share development costs;
 - increased probability of acceptance
- Benefits for Purchaser:
 - lever competition between multiple vendors;
 - economy of scale; drive down costs
- Benefits for Investor:
 - Increased benefits; reduced risks

THANK YOU FOR LISTENING



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