

# Progress on Security Certification – Implementation of EU Cybersecurity Act

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## Agenda

- Cybersecurity Act
- Security Certification status
- Challenges for PSCE
- Rôle of standardisation
- Conclusion

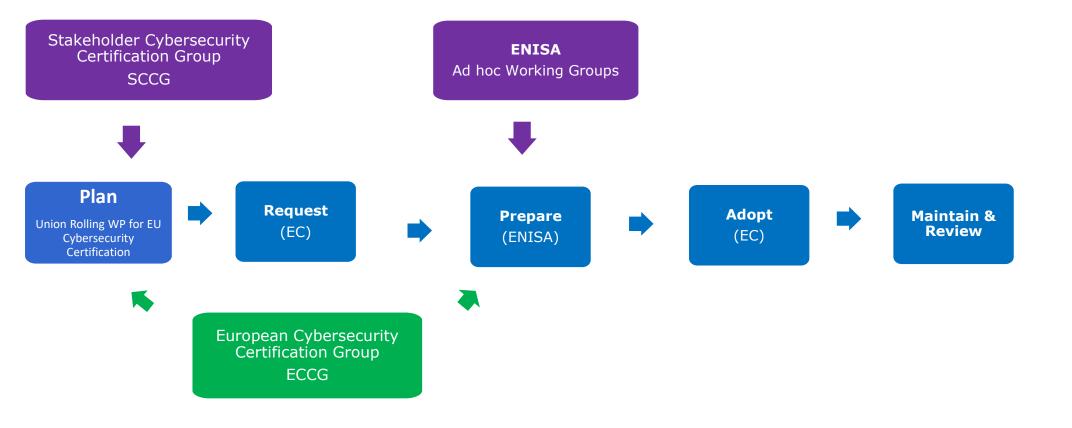


## Cyber act (1)

- One Framework, many schemes requirements and assessment methods tailored to the types of ICT products, services, or processes and taking into account cybersecurity risk.
- Open, inclusive and transparent governance processes.
- Reinforces harmonised EU-wide approach and building trust with peer reviews.
  - Taking into account the dynamic nature of modern software and hardware development throughout a product's lifecycle: certification processes such as secure development, vulnerability handling and disclosure, provision of updates
  - Providing additional value for users: guidance on secure configuration and use, documenting patched vulnerabilities and mitigation measures, security contact points for security researchers;



## The lifecycle of an European Cybersecurity Certification Scheme





## Cyber act (2) the status

- > Entry into force June 2019
- ➤ European Commission first request to ENISA to prepare CC base scheme based on SOG-IS agreement; Cloud, 5G, IOT, IACS, IOT will follow
- > ECCG has been established; two meetings have been taken place;
- ➤ SCCG call for applications closed on 17 September; selection process on-going with DG CNCT;
- ➤ Preparation of the URWP (Union Rolling work plan) for European Cybersecurity Certification

## **European Cybersecurity certification Scheme**



an EU Certification Scheme **Specifies** 

Elements of the Scheme (incl. prod category, assurance level)

Evaluation process

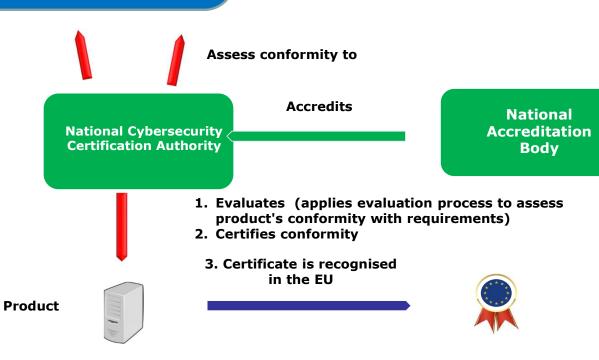
**Cybersecurity Requirements** 



By reference to

International EU standards & tech specs

**Assurance Level High** 





## Challenges for PSCE/Broadway

- Broadway will be in the scope of cyberact :
- For4G/5G threat management potential candidate for EUWP
  - See EU coordinated risk assessment of the cybersecurity of 5G networks Report dated 9 October 2019
- For PPDR specificities:
  - E2E encryption (only AIE and LI are covered in 3GPP standards)
  - Key management and crypto algorithms
  - Direct Mode (Proximity services)
  - Group calls,
  - •

#### EU coordinated risk assessment of the cybersecurity of 5G networks Report dated 9 October 2019



#### Core network functions

- User Equipment Authentication, roaming and Session Management Functions
- User Equipment data transport functions
- Access policy management
- Registration and authorization of network services
- Storage of end-user and network data
- Link with third-party mobile networks
- Exposure of core network functions to external applications
- Attribution of end-user devices to network slices

#### NFV management and network orchestration (MANO)

- Management systems and supporting services (other than MANO)
  - Security management systems
  - Billing and other support systems such as network performance

#### Radio Access network

- Base stations
- Transport and transmission functions
  - Low-level network equipment (routers, switches, etc)
  - Filtering equipment (firewalls, IPS...)

#### Internetwork exchanges

- IP networks external to MNO premises
- Network services provided by third parties

#### **CRITICAL**

**CRITICAL** 

MODERATE/HIGH

HIGH

**MODERATE/HIGH** 

**MODERATE/HIGH** 



## Role of standardisation, the stakeholders in security evaluation and certification

- ISO/IEC JTC1 SC27 IT Security Techniques
  - 150+ Standards
  - ISMS, CC, Crypto, Privacy, Certification, biometry

**International SDO's** 

- IEC TC 65 (Industrial-Process Measurement, Control & Automation)
  - IEC 62443: Industrial Automation and Control Systems Security
- CEN CENELEC JTC13
  - Transposition of ISO/IEC standards
  - Lightweight certification
  - IOT security evaluation

**European SDO's** 

- ETSI TC Cyber
  - Cybersecurity for IOT
  - QSC, Middle box sceurity Critical security controls, ISI



### Role of standardisation

- In support to Cyber act
- Will guarantee :
  - Repetitability
  - Interoperability
  - Consistency at European level
  - Harmonisation of evaluation scheme
- Standards will part of the certification schemes :
  - Requirements
  - Evaluation methods
  - Evaluation of processes, companies and people



### Conclusion

- Cyber act will have impact on Broadway
- Standardisation is a key factor of success
- Strong Need for a security evaluation Framework for PPDR networks



Thank you Questions?