Contact Tracing mobile apps cross-border interoperability

eHealth Network

Technical Experts – "Third way" work stream

2020-05-25

Meeting purpose

How to enable interoperability between alternative protocols for contact tracing apps?

European Commission

Known alternative protocols

- **“Centralised”**
  - Exposed keys
  - Server-side risk calculation
  - E.g. ROBERT
- **“Decentralised“**
  - Infected keys
  - On-device risk calculation
  - E.g. Apple/Google

Contact tracing app
Situation across MS (to be confirmed)

	Decentralized (DP-3T or G/A)	Centralized	COVID app not for contact tracing, or contact tracing ruled out	Total
In Use	AT, CZ	NO, HU	SK	5
Planned and/or publicly announced	EE, IE, DE, FI, IT, LV, NL, PL LT, MT, CY, HR, PT,	FR	BE, LU, SE, SL	18
Total	15	3	5	23
To be confirmed	*ES (currently testing A&G), BU, EL, RO*			

European Commission

How to enable interoperability between different protocols?

1. ~~Centralised protocols should be able to work with infected keys~~
   - ~~Send and receive infected keys~~
2. ~~Decentralised protocols should be able to work with exposed keys~~
   - ~~Send and receive exposed keys~~
3. Centralised protocols should be able to work with infected keys AND decentralised protocols should be able to work with exposed keys
   - IDPT (interoperable digital proximity tracing) protocol https://github.com/IDPTdocs/documents/blob/master/IDPT-v2.pdf
4. All protocols send and receive “encounter keys”
   - DESIRE approach (academic PoC being prepared)

Generall comments

- ES working on a protocol to bridge the gap between (A&G and DP-3T and ROBERT protocols[other centralised systems maybe studied later on]). ES will share the preliminairy report.
  - https://github.com/IDPTdocs/documents/blob/master/IDPT-v2.pdf
  - Interest in decentralised to CENTRALISED is not limited only to Robert. Although the UK are not part of EU we are equally concerned about interop with the UK and other countries should note also please
- Risks regarding transmission “to every devices” of infected keys: https://github.com/oseiskar/corona-sniffer
  - The software code/ the PoC implementation of Bluetooth sniffer attack on the Apple/Google protocols.

Next steps

Next meetings:

- 27 May, 16:30 CEST (90 min) – *prepare questions do drive the conversation*
  - Legal issues:
    - Are there any personal data (anonymised or pseudonymised)
    - Legal basis
    - Agreement between MS to exchange data

- 8 June, 10:00 CEST (120 minutes)
  - Who is interested in participating in IDPT (Spanish paper)?
    - Dedicated work stream: ES, FR
  - Who is interested in participating in DESIRE academic PoC?
    - Dedicate work stream: FR, ES, IE, DE, PL