Contribution ID: **57** Type: **not specified**

LoRaWAN and proximeters against Covid

Thursday 18 March 2021 08:30 (25 minutes)

The SARS COV 2 virus, the cause of the better known COVID-19 disease, has greatly altered our personal and professional lives. Many people are now expected to work from home but this is not always possible and, in such cases, it is the responsibility of the employer to implement protective measures. One simple such measure is to require that people maintain a distance of 2 metres but this places responsibility on employees and leads to two problems. Firstly, the likelihood that safety distances are not maintained and secondly that someone who becomes infected does not remember with whom they may have been in contact. To address both problems, CERN has developed the "proximeter", a device that, when worn by employees, detects when they are in close proximity to others. Information about any such close contacts is sent securely over a Low Power Wide Area Network (LPWAN) and stored in a manner that respects confidentiality and privacy requirements. In the event that an employee becomes infected with COVID-19 CERN can thus identify all the possible contacts and so prevent the spread of the virus. We discuss here the details of the proximeter device, the LPWAN infrastructure deployed at CERN, the communication mechanisms and the protocols used to respect the confidentiality of personal data.

Speaker release

Yes

Desired slot length

Primary author: MERSCHER, Christoph (CERN)

Presenter: MERSCHER, Christoph (CERN)

Session Classification: Network & Security

Track Classification: Networking & Security