

Gwendoline HOCHET DEREVIANCKINE

Feasibility and performances of a LoRaWAN network in the 2.4 GHz ISM band



Background

- INSA Lyon TCA
- Project manager in fiber deployment at ERT
- PhD student : INSA Lyon + UCA + Semtech



Testbed experience

- FIT IoT LAB Chile – connection with master site in Grenoble
- USRP for exploring the 2.4 GHz ISM band

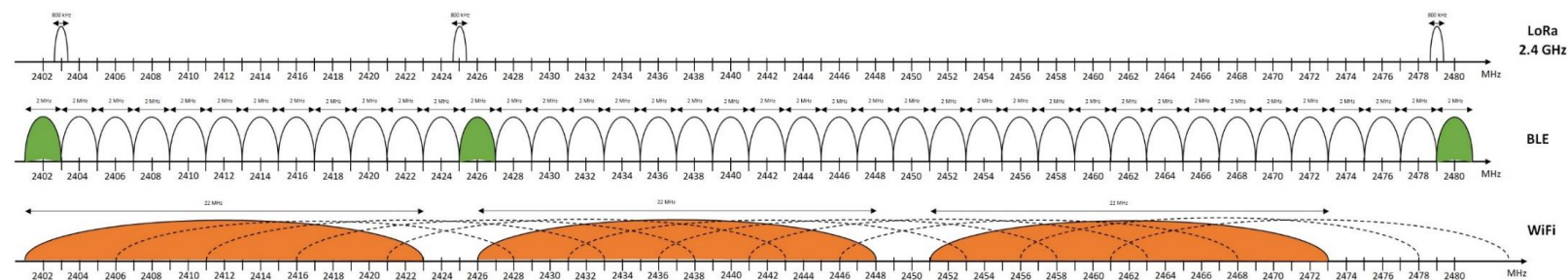
Feasibility and performances of a LoRaWAN network in the 2.4 GHz ISM band



Motivations for LoRa 2.4 GHz: global applications and world wide interoperability

REFERENCES

- Semtech, "Application note: Wi-Fi immunity of LoRa at 2.4 GHz," *Tech.Rep.*, June 2017, aN1200.30 Revision 1
- SX1280/81: Long Range, Low Power, 2.4 GHz, Transceiver with Ranging Capability. *Datasheet*



Challenges : coexistence with alternatives technologies (e.g. BLE, Wi-Fi, etc.)