

# How Public Safety Agencies Optimised Critical Comms During the Paris Olympics

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# Reseau Radio du Futur (RRF)

- Designed to replace existing radio networks from 2025
- Fully implemented by 2027
- Uses existing commercial Infrastructure- Orange, Bouygues
- Uses 4G, 5G with Radio Capabilities in 700Mhz

# Reseau Radio du Futur (RRF)

- Designed to replace existing radio networks from 2025
- Police Radio- ACROPOL
- Gendarmerie Radio – RUBIS
- Fire Brigade Radio - Antares

# Reseau Radio du Futur (RRF)

- Existing Radio Networks based on TETRAPOL
- Originally Developed by Airbus Space and Defence in the 90's
- Considered end of life
- Original Budget 700 million Euros, Likely cost 2 Billion euros

# Leading into Paris Olympics

- Police and Gendarmerie directed to utilise RRF
- Combined 30,000 users

# Hurdles to overcome

- Users not confident in MCPTT only network
- Accessing screen locked smart phones problematic
- MCPTT accessories for smart phones limited
- 2 devices = 2 different accessories

# Hurdles to overcome

- Limited real estate:





# User Wishlist



## Smartphone Connexion

Via Bluetooth or wired, through a lockable USB cable



## Radio Terminal Connexion

Connexion via cable or BT. Radio terminal provides battery charging to the MDR



## 4 PTT

Personalization of PTT assignment (smartphone or radio terminal)



## SOS

SOS settings either to the smartphone and/or the radio



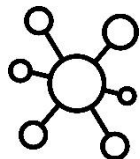
## Noise cancelling

Integration of a software solution for noise cancellation



## Accessories

Wired or BT connection. 3.5mm Jack for earphone and Nexus or Leno or Fischer connectors for audio headsets

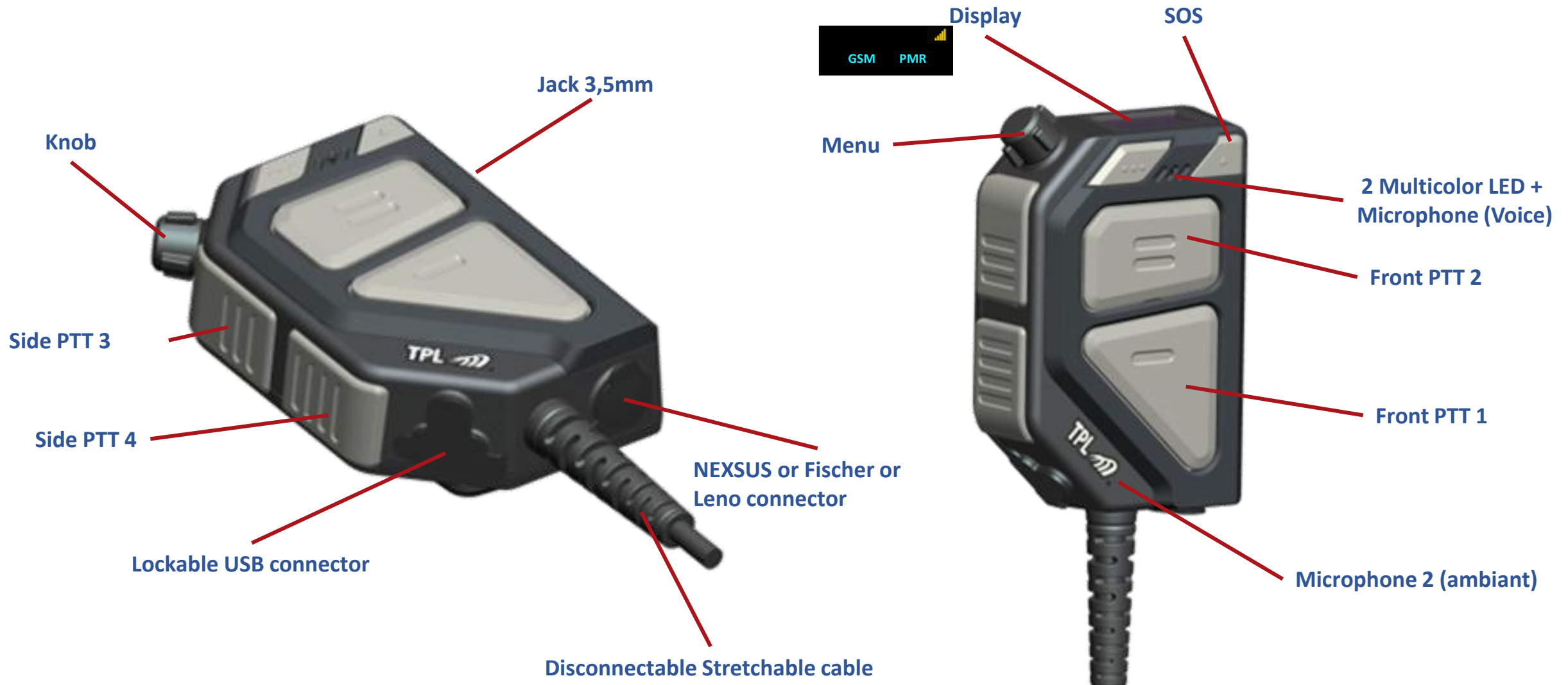


## Knob Dual Functions

Volume + group selection



# Solution



# Gateway Mode

- The gateway mode, developed in the MDR, makes it possible to pair communications coming from the LMR radio to a smartphone group call and vice versa.
- The aim is for example to forward communications coming from the direct mode channel (DMO or Simplex) of the LMR radio to an MCPTT group call of the smartphone.
- This mode is activated via the configuration menu and the user always has the possibility to speak on one or the other communication.



# More hurdles to overcome

- The French Police and Gendarmerie needed to equip all of their motorcycles with a new communications system, offering the rider the possibility to communicate on the current radio network and the new MCPTT radio network, but using the same *modus operandi*.
- They want to re-use the same cabling, PTT button, volume selector and audio system in the helmet



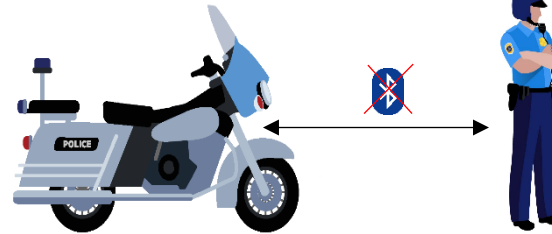
# More hurdles to overcome



Case 1



Case 2



Case 3



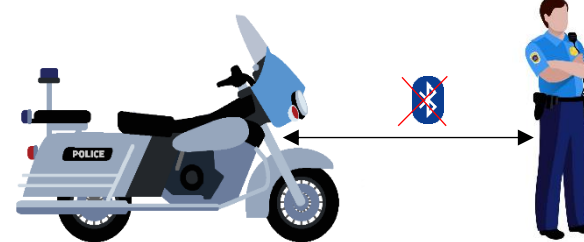
Case 4



Case 5

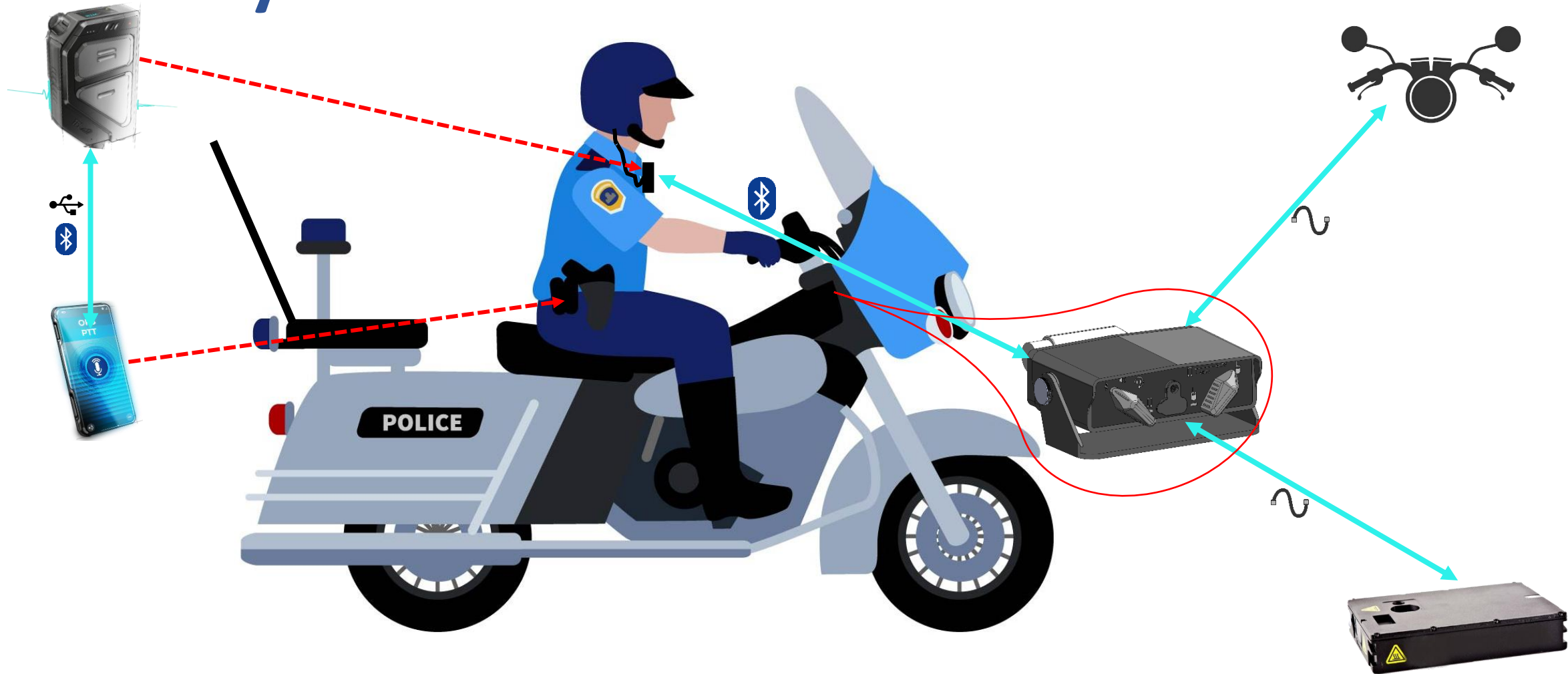


Case 6



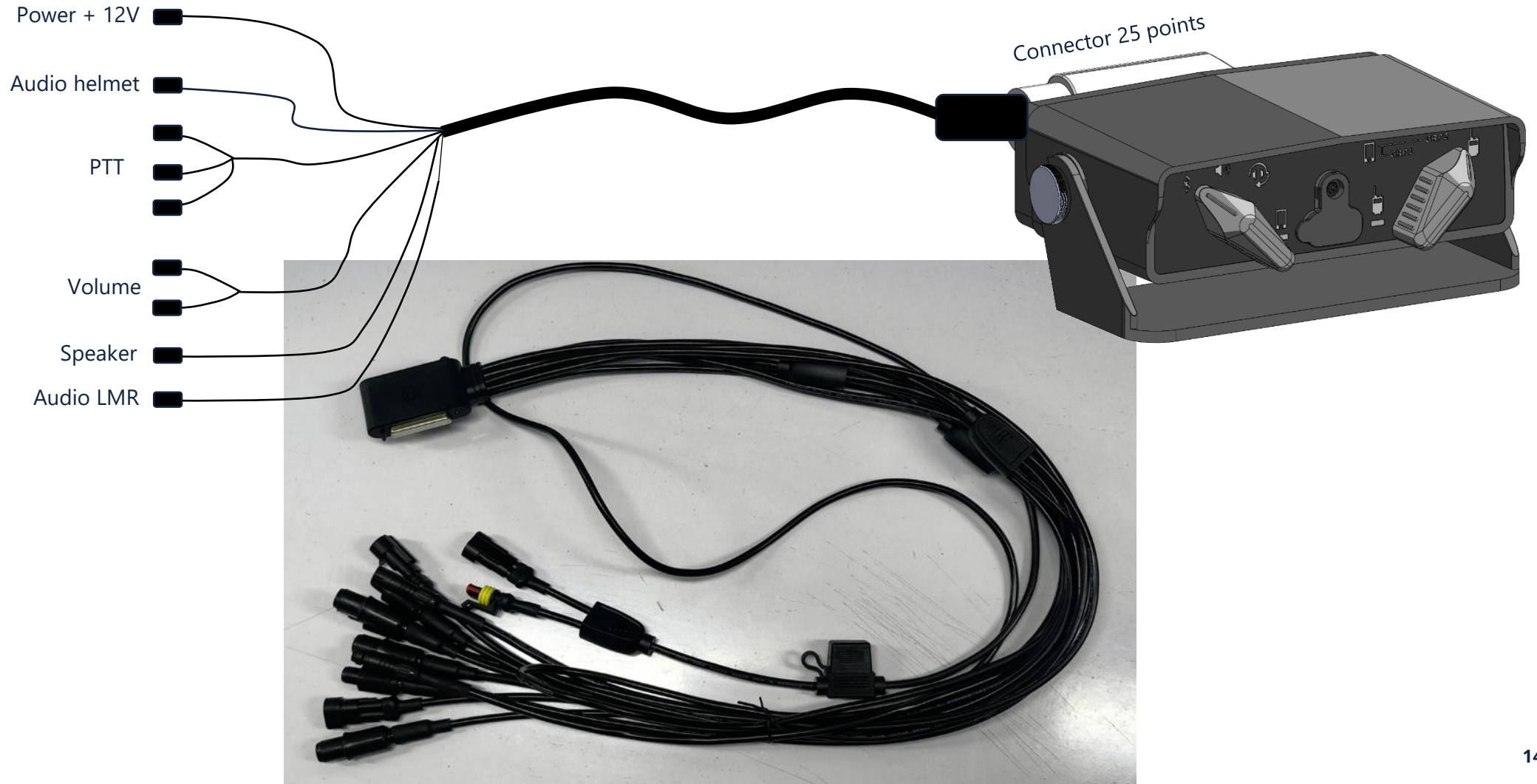
Case 5

# Solution - Pilot with helmet on the motorcycle





# The cable



# The installation



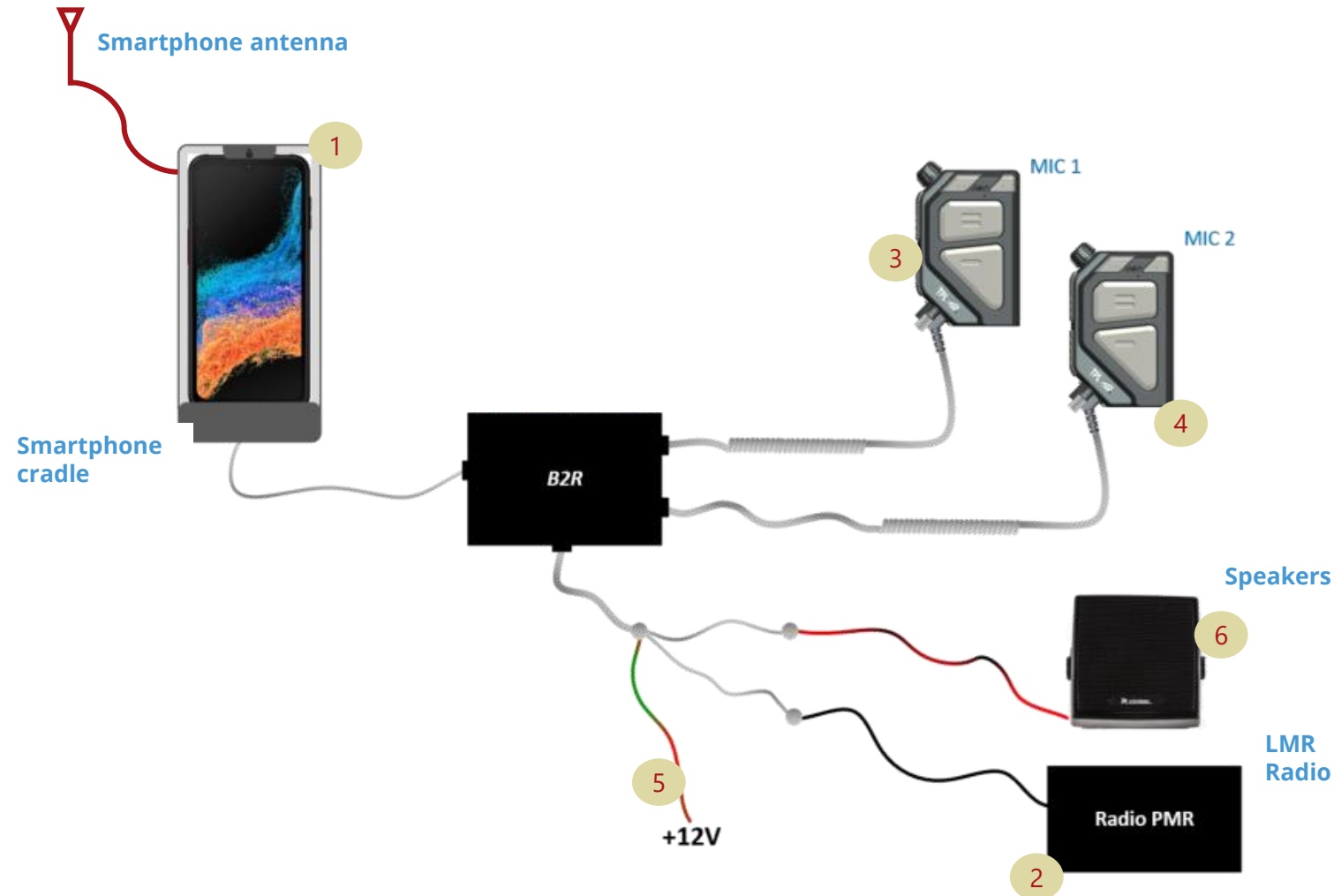


# More hurdles to overcome

- The French Fire Fighters needed to equip all of their appliances with the new communications system, offering the driver/ Captain the possibility to communicate on the current radio network and the new MCPTT radio network, but using the same modus operandi.



# Schematic



1. Smartphone cradle with USB connection
  - Data + audio + battery charge
  - Connection to an external antenna by magnetic coupling
2. Connection to the LMR radio
3. Speaker MIC 1 - Dual PTT + SOS
4. Speaker MIC 2 - Dual PTT + SOS
5. Power supply + 12V
6. 2 x Speaker HP 10W

# Solution



**Connexion to the smartphone and radio mobile terminal**



**Enjoy powerful and clear sound thanks to a high-power speaker**



**Facilitate use with the connection of speaker-micro that can control both the smartphone and the PMR radio**

**Possibility to have 2 speaker-mic**



**Charge the smartphone to benefit from a battery**



**Improve the reception quality of 4G and 5G networks in the vehicle**

# Conclusion

- MCPTT is here and growing quickly so agencies need to adapt
- Making the transition easy helps introduce the technology
- Combining the networks offer resilience
- Listening to the customer is key in development of solutions



# Merci Beaucoup

