BEREC IoT WORKSHOP
BEHIND THE SCENES, INDUSTRIAL RAIL
SNCF: A WORLD BENCHMARK FOR MULTIMODAL TRANSPORT SOLUTIONS

3,000 STATIONS SERVING

2 BILLION PEOPLE A YEAR

30,000 KM OF LINES

15,000 TRAINS RUNNING EVERY DAY

5 MILLION PASSENGERS A DAY
CONNECTIVITY
IN THE HEART OF RAILWAY PRODUCTION

- Operating systems
- Connectivity for customers and employees
- IoT and Industrial Internet
Combining IoT with Big Data will bring us major gains in safety and performance.

Predictive maintenance will replace preventive maintenance.
REMOTE DIAGNOSTIC OF OUR ROLLING STOCK

BEHIND THE SCENE: HOW TO MAINTAIN OUR LAVATORIES IN OUR TRAIN USING IOT SENSORS & LPWA NETWORKS?

FEATURES

Gathering information using IoT sensors to enable remote diagnostics of water tank level

PRESSURE SENSOR

TRANSMITTER Sigfox ou LoRaWAN

DIGIDAG PLATFORM

3 gains:

- Savings of maintenance costs
- Increased availability for the user
- Reduced maintenance operation time

ROLL OUT

30 additional trains and a permanent certification

Launching:

11/2015 02/2016 07/2016 2017

New fitted trainset

Trainset already fitted

(LoRaWAN & Sigfox)

LEARNINGS

When it seems too easy, beware!

LPWA networks for train to ground communication are not ready yet.

What to expect from LTE-M and NB-IOT coming soon?

DIRECTION GÉNÉRALE e SNCF

VENDREDI 3 FEVRIER 2017
CONNECTING OUR NETWORK

BEHIND THE SCENE: THE CUTTING EDGE THERMOMETER

FEATURES

- Warning of abnormal temperature (high/low) to trigger a targeted visit
- Geolocation of each sensor
- Autonomy of 2 years

Reliable and quality telemetry with traceability
Productivity

500 COUPONS BEING DEPLOYED
ESTIMATED VOLUME OF HOURS
53H / MONTH SAVED

ROLL OUT

1000 coupons

LEARNINGS

- How to produce the highest technology on short series in good financial conditions?

DIRECTION GÉNÉRALE e.SNCF
6 – VENDREDI 3 FÉVRIER 2017