

Paris Session 2022



Real Time Oil pressure monitoring on SCOF Cables

B1 Insulated Cables - PS3-Q3

Simon Stul - Belgium



Group Discussion Meeting

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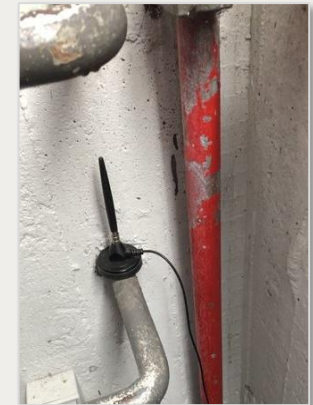
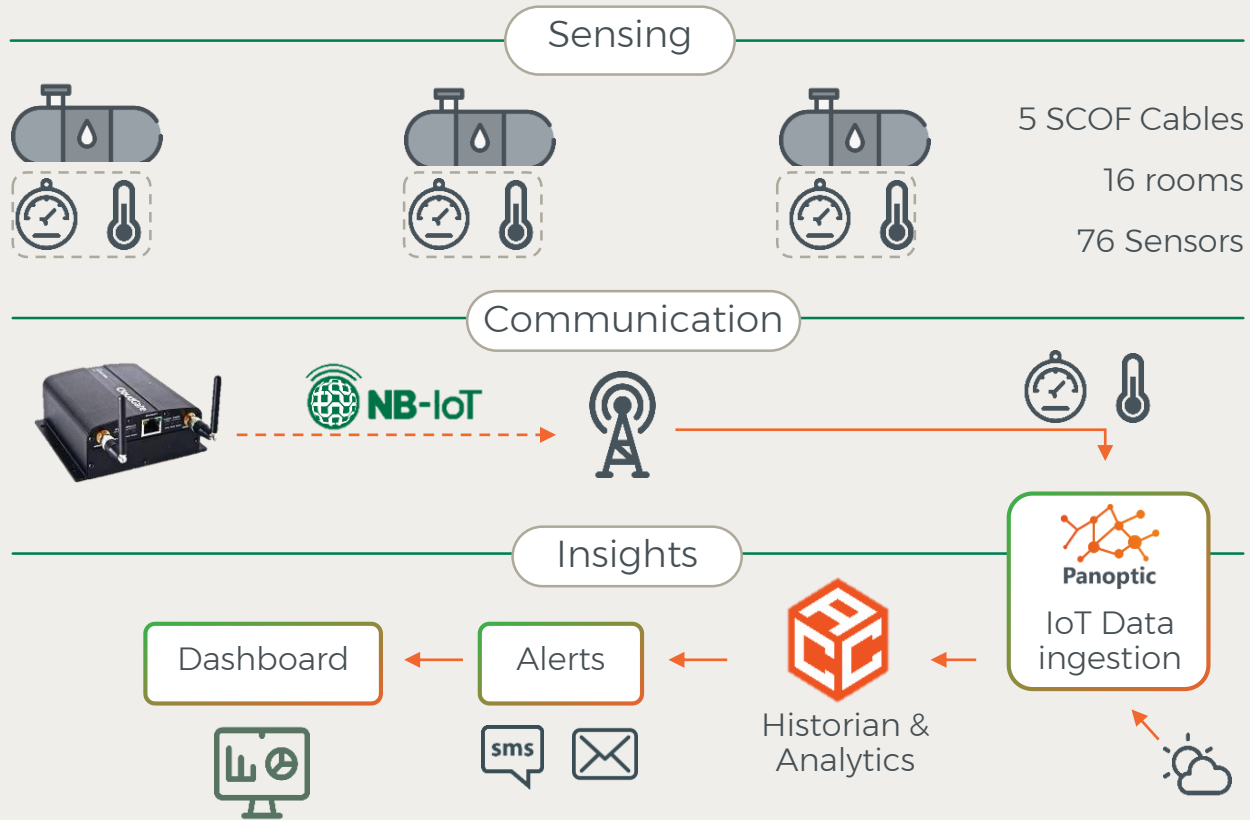
Challenge

- Underground SCOF cables face oil leakages due to aging or damage caused by works. This results in:
 - Oil spills have significant environmental impact
 - The more severe the oil leakage, the higher the risk of permanent damage to the cable (with longer outages for repairs)
 - High OPEX costs for reparation or soil treatment
- Existing monitoring on SCOF cables:
 - A level1 and level2 alert to the SCADA/EMS is available on most cable systems
 - Manual metering campaign, but this is time consuming and can't predict a failure

Target

Develop a Real Time monitoring solution that is cost effective and retrofitable to the remaining fleet of SCOF cables

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Advantages of this solution:

- A Real Time monitoring system that can detect small leakages (wear and tear) and big leakages (excavation damage).
- No need for manual inspections anymore
- The concept uses an easy deployable IoT acquisition unit (need = mains power and a good location for the antenna).
- Analytics, historian and dashboards are integrated in existing systems for condition monitoring.
- The operational team receives an SMS when they need to check up on an alert (= low adoption).
- Simple and configurable in house algorithms give us flexibility (learning curve)

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Overview SCOF Monitoring		Version : 1.0	
150 - 162: Beguignes Location : Rue des Béguignes 243 Molenbeek St Jean Last Value : 23/11/2021 16:09:32 URL : Dashboard Link	150 - 163: Beguignes Location : Rue des Béguignes 243 Molenbeek St Jean Last Value : 23/11/2021 16:09:35 URL : Dashboard Link		
150 - 162: Dansaert Location : Avenue Robert Dansaert 168 à Grand-Bigard Last Value : 23/11/2021 16:09:34 URL : Dashboard Link	150 - 163: Dansaert Location : Avenue Robert Dansaert 168 à Grand-Bigard Last Value : 23/11/2021 16:09:35 URL : Dashboard Link		
150 - 162: Grand-Bigard Location : Rue de Grand Bigard 243 Berchem St Agathe Last Value : 23/11/2021 16:10:09 URL : Dashboard Link	150 - 163: Grand-Bigard Location : Rue de Grand Bigard 243 Berchem St Agathe Last Value : 23/11/2021 16:10:07 URL : Dashboard Link		
150 - 162: Rue de Bruxelles Location : Rue de Bruxelles 1 à Grand Bigard Last Value : 23/11/2021 16:10:05 URL : Dashboard Link	150 - 163: Rue de Bruxelles Location : Rue de Bruxelles 1 à Grand Bigard Last Value : 23/11/2021 16:10:05 URL : Dashboard Link		

