



# PROJECT DELIVERABLE REPORT

## INTEL-LINE

### Work Package 4

### Deliverable 4.2

**Achieve at least three expressions of  
interest**

**Due date of deliverable: 30<sup>th</sup> June 2019**

**Actual submission date: 28<sup>th</sup> September 2019**

#### **Authors:**

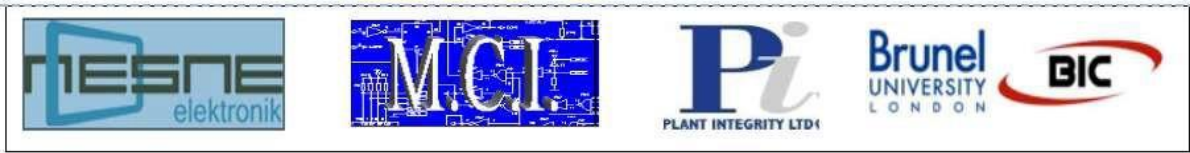
**BRUNEL UNIVERSITY, PLANT INTEGRITY  
NESNE ELEKTRONICS and MCI**

#### **Dissemination Level: Public**

**Project Call:** Fast Track to Innovation Pilot  
**Project Number:** 720402  
**Project Start Date:** 01 October 2016  
**Project's coordinator:** Mrs Hilal Tolasa Gundogdu (Nesne electronic)  
**Tel:** 0090232 7659096  
**E-mail:** [hilalt@nesne.com](mailto:hilalt@nesne.com)



This project has received funding from the European Union's Horizon 2020 programme under grant agreement No 720402



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## Summary

The Intel-line project is going to produce the **only** non-destructive system for overhead cables in the market, based on Ultrasonic Guided Wave Testing. Although it is a challenging innovation, it is generating interest among end-users from the Power industry.

This system aims to offer 24/7 continuous monitoring which will allow results to be made available instantaneously through reporting of defects. The system aims to screen a very large coverage, currently estimated at 50 meters length from a single location.



## RTE Visit

Since 2017, MCI has been in contact with RTE (Réseau de transport d'électricité). The entire consortium first met RTE in Paris, on 27<sup>th</sup> November 2017, in order to introduce the Intel-line system. This meeting led to further discussions in order to organise the shipment of cables to the UK, for testing of the Intel-line system on cables owned by RTE.

RTE, which represents 95% of the anticipated market in France, has shown further interest in the Intel-line system developed by Brunel University, Plant Integrity Ltd, Montage Cablage Installation and NESNE Elektronik. Pascale PRIEUR (PILOTE DE DOMAINE R&D), Francois-Xavier SARDOU (Assets Manager) and Stéphane HEURTAULT (R&D ENGINEER) of RTE visited Plant Integrity Ltd (on 9<sup>th</sup> April 2019) where the partners made a demonstration of the Intel-line system. This demonstration focused on the capabilities of the Guided Wave technology for the screening and defect detection in ACSR (Aluminium Conductor Steel Reinforced) cables, along with its potential applications to solve different technical challenges/needs of the Power industry.





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## **BORUSAN EnBW Visit**

Nesne established a strong network with the leading companies of the industry during the Intel-line project. Following the several informative meetings with BORUSAN, TEIAS and ENERJISA, face to face meetings were carried out to introduce the capabilities of the product.

During these meetings and through informative emails, Nesne shared all the technical features, capabilities and benefits of the product where the prototype was fully scaled up and ready to Go-To-Market.

At the beginning of 2019, upon the meetings with BORUSAN EnBW, they were invited to the second demonstration which was held at Cambridge, UK.

In addition to the invitation, the idea of a field trial of the product at BORUSAN facilities has occurred which would enable further introductions to potential customers. The discussions, joint studies and feedbacks gathered from BORUSAN were very valuable to finalise the product as TRL9. In line with the work and meetings carried out, Nesne ensured the preliminary negotiations and working ground for the Intel-line product's real-environment trials and further marketing introductions to Turkey.

BORUSAN EnBW has shown further interest in the Intel-line system developed by Brunel University, Plant Integrity Ltd, Montage Cablage Installation and NESNE Elektronik. Serkan Erçin Gültekin visited Plant Integrity Ltd (on 1<sup>st</sup> July 2019) where the partners made a demonstration of the Intel-line system. This demonstration focused on the capabilities of the Guided Wave technology for the screening and defect detection in ACSR (Aluminium Conductor Steel Reinforced) cables, along with its potential applications to solve different technical challenges/needs of the Power industry.





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## National Grid Visit

Brunel University and Plant Integrity had their first face-to-face meeting with National Grid on 20<sup>th</sup> March 2019, in order to introduce the Intel-line system and discuss the Guided Wave technology.

National Grid, owner of the power grid in England and Wales, has shown further interest in the Intel-line system developed by Brunel University, Plant Integrity Ltd, Montage Cablage Installation and NESNE Elektronik.

Five engineers from National Grid visited Plant Integrity Ltd on 9<sup>th</sup> September 2019, where the partners carried out a demonstration of the Intel-line system. This demonstration focused on the capabilities of the Guided Wave technology for the screening and defect detection in ACSR (Aluminium Conductor Steel Reinforced) cables, along with its potential applications to solve different technical challenges/needs of the Power industry.

