

Wireless for Mission Critical Applications

Reporting

Project Information

Wi-MCA

Grant agreement ID: 854462

[Project website](#)

DOI

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Project closed

EC signature date

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INDUSTRIAL LEADERSHIP - Innovation In SMEs

Total cost

€ 71 429,00

EU contribution

€ 50 000,00

Coordinated by

CORETIGO LTD



Israel

Periodic Reporting for period 1 - Wi-MCA (Wireless for Mission Critical Applications)

Reporting period: 2019-03-01 to 2019-08-31

Summary of the context and overall objectives of the project



Industrial Internet of Things (IIoT) is reshaping industries and competitive landscapes with factory automation alone a big business with big players. However, there is an elephant in the room: the wiring that is required to fulfill that vision. A typical factory is equipped with untold kilometers of cables and wires. These wires pose many problems and constraints, from simple inconvenience, to

maintenance difficulty, performance limitations and safety issues.

Some typical examples of such scenarios (and pain points):

- 1: In the Food & Beverage industry, wires are a substantial source for contamination and wired solutions are very expensive to implement.
- 2: In dynamic (rotating, moving, mobile) installations or harsh environments, wires tend to break and stall the operation frequently, thus adding downtime and loss of productivity.
- 3: In some applications, the cost and complexity of wiring is substantial and moreover is not flexible to frequent changes required in the production line.
- 4: Every industrial robot carries a braid of wires (electricity & communication) that are essential to its operation. These wires can stick, break, bump and drag people and objects, in addition to limiting the robot's travel distance.
- 5: Automated clamping systems, such that are used in milling stations in factories around the world, are not intelligent. They require careful human supervision to make sure that the system is properly aligned before milling. Deviations can cause damages and loss of assembly parts, or worse - damage production equipment
- 6: In many cases, adding physical wires to a system is not viable, and hence systems integrators are limited in their capacity to make their systems more intelligent.

Smart manufacturing is the new frontier for innovation, with I-IoT and augmented reality redefining manufacturing: lowering costs, increasing operational performance, reducing downtime and increasing asset utilisation, all whilst improving safety and compliance and increasing flexibility and agility.

The European Commission has set a path to digitise European Industry as it recognises that European manufacturing is strategic and important to maintain competitiveness.

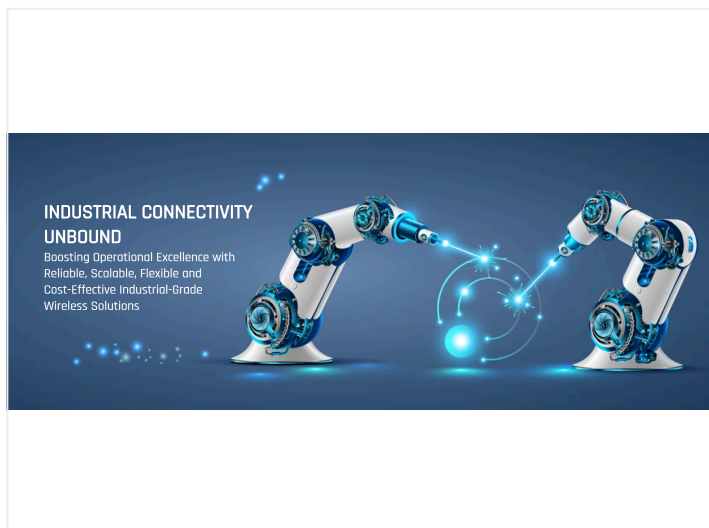
The overall objective of the project is to perform feasibility study on the business and market opportunities for CoreTigo. Namely the result of the project is a report containing the following structure: Primary Market Research, Technical Feasibility Study, and Business planning.

Work performed from the beginning of the project to the end of the period covered by the report and main results achieved so far

At the project start we received a training/coaching of 3 days, courtesy to the European Commission. This session helped us to align our efforts. Following that, two strands of studies were performed. The first, primary market research and the second - technical feasibility study. The results fed the third task of business planning and the project resulted in a deliverable that details all the findings. Main results are new insights about the market, identification of two major sectors that need to be handled separately, and deeper understanding of the customers pain points and needs.

Progress beyond the state of the art and expected potential impact (including the socio-economic impact and the wider societal implications of the project so far)

The progress achieved in the project, although in relatively short cycle of 6 months, is quite substantial. During the project, a lot of new knowledge was gathered from the market, and new collaborations began to establish. First new customers in production were seen during the execution. The potential impact of the project has increased due to these achievements. The manufacturing sector in Europe is strong, the 2nd largest in the world (after China), and hence the project is supporting European industrial sector, therefore contributing to strengthening the Continent.



CoreTigo banner demonstrating two cable-less robotic arms creating CoreTigo's logo symbol

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