ITEA3

Project Profile

Reflexion

## React to Effects Fast by Learning, Evaluation, and eXtracted InformatiON

This ITEA 3 project will support the emerging high-tech industry paradigm shift from selling 'boxes' to supporting 'integrated solutions' by providing significant improvements in quality and stability during early product roll-out.

ADDRESSING THE CHALLENGE

Software-intensive high-tech (embedded) system technologies are becoming increasingly crucial to societal and industrial innovations. As the traditional business model of selling 'boxes' (stand-alone products) shifts to providing total end-user 'solutions', companies have to address an emerging role as system integrator, providing smart personalised equipment that can flawlessly be integrated and maintained in a customers' operating environment.

PROPOSED SOLUTIONS

Reflexion will optimise the full end-to-end product development lifecycle and maintenance process, bringing in analytics to automate and complement expert knowledge, and enabling predictive maintenance on a broader industrial scale and shortening product evolution development iterations. With a consortium of high-tech OEM companies, technology and service companies, tool providers and an applied research knowledge institute, the project focuses on the key issue of how to provide efficient systems individualised to customer needs and fully integrated in the customer's operating workflow. One innovation is a diagnostic framework for professional systems that will help analyse system behaviour and to find the root causes of failures, thereby contributing considerably to shorter development time
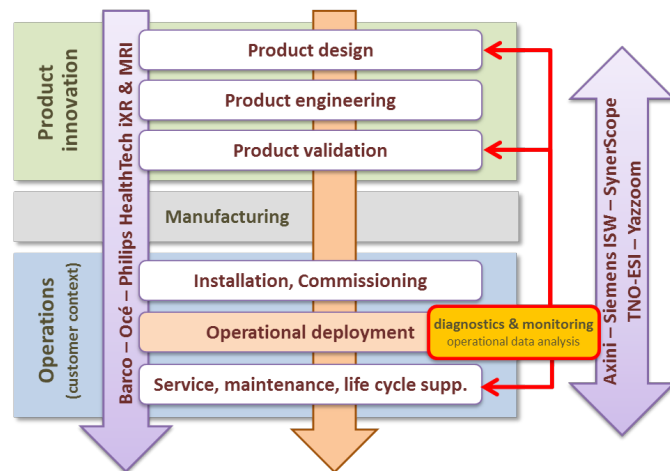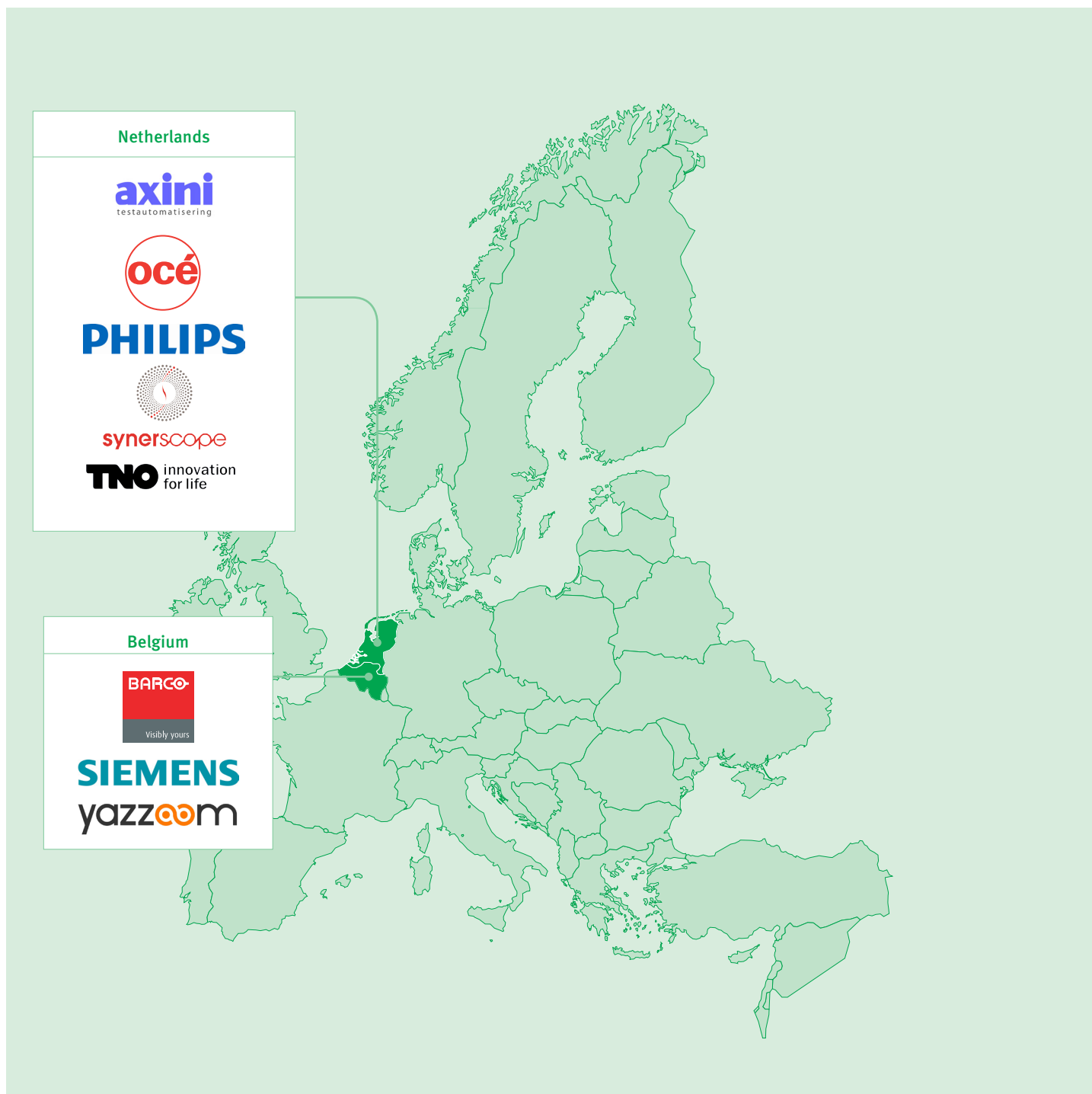

Reflexion Technology value chain

and more advanced systems and, ultimately, higher overall system quality and availability for the users of such systems.

In essence, Reflexion will help bringing the total product development lifecycle and maintenance process to the next level, making system introduction and maintenance fully proactive and predictive, and accumulating knowledge during a product's lifetime by means of self-learning systems.

PROJECTED RESULTS AND IMPACT

The results will include the ability to react to unforeseen problems or emerging needs quickly and cost-effectively, such as inferring 'missed' or 'misunderstood' end-

customer requirements or detecting issues that escaped product release testing. The set of methods and techniques generated by the Reflexion project will provide key advantages for European high-tech industry in exploring new opportunities for existing products as well as support accelerated introduction into new markets, helping European high-tech industry to gain a leading position in personalised smart machines. More efficient manufacturing, maintenance and service will have a positive major impact on the quality of life from an environmental perspective and, from an economic perspective, create a more sustainable employment in the maintenance sector.

Reflexion

ITEA 3

Netherlands

axini
testautomatisering

océ

PHILIPS

synerscope

TNO innovation for life

Belgium

BARCO
Visibly yours

SIEMENS

yazzoom

Project start
September 2015

Project end
September 2018

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ITEA is the EUREKA Cluster programme supporting innovative, industry-driven, pre-competitive R&D projects in the area of Software-intensive Systems & Services (SiSS). ITEA stimulates projects in an open community of large industry, SMEs, universities, research institutes and user organisations.

As ITEA is a EUREKA Cluster, the community is founded in Europe based on the EUREKA principles and is open to participants worldwide.

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