



## Project Profile

# MEASURE

## Measuring Software Engineering

The ITEA project MEASURE aims to provide technological and process innovations through novel, relevant and efficient metrics, with methodologies and tools in the field of software engineering. It will develop a catalogue of formal and platform-independent measurements whereby improved efficiency of software development processes will boost both product quality and the competitiveness of software editors.

### ADDRESSING THE CHALLENGE

Growing global competition and system complexity in the software industry, increase market pressure for new features at lower cost and shorter time-to-market.

The challenge is to meet the demand without compromising on quality and date; for this, more automation in software engineering has been the solution. With this increasing use of automation and advanced tools and methods in software engineering comes the need to measure performance with the required detail in order to improve. Traditional metrics and evaluation methods are no longer sufficient for modern iterative development practices and new automated software engineering tools and methods.

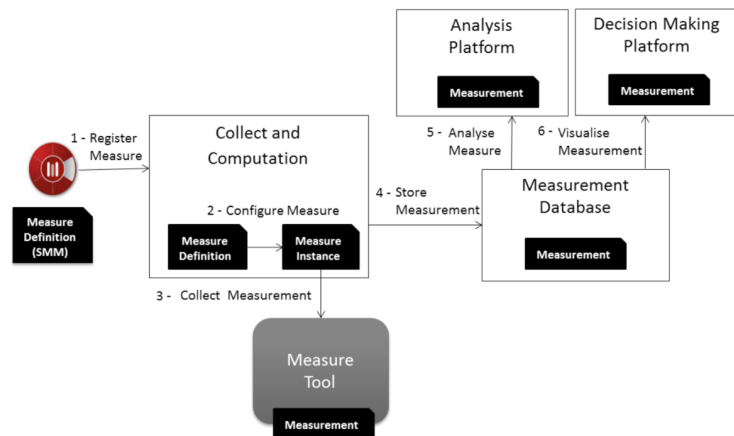
The goal of the MEASURE project is to increase the quality and efficiency while lowering the costs and time-to-market of software engineering in Europe.

### PROPOSED SOLUTIONS

To reach this ambitious goal, the project will iteratively and incrementally define better metrics. It will develop methods and tools for the automated, precise and unbiased measurement of software engineering activities and artefacts for the analysis of the big data produced by the continuous measurement to enable continuous improvement of performance.

The project consortium comprises experts in the metrics and measurement of various aspects of software engineering, tool vendors and developers able to implement and exploit the results of the project, and large industrial companies acting as early adopters and pioneers by providing the industrial requirements and evaluating the results in practice.

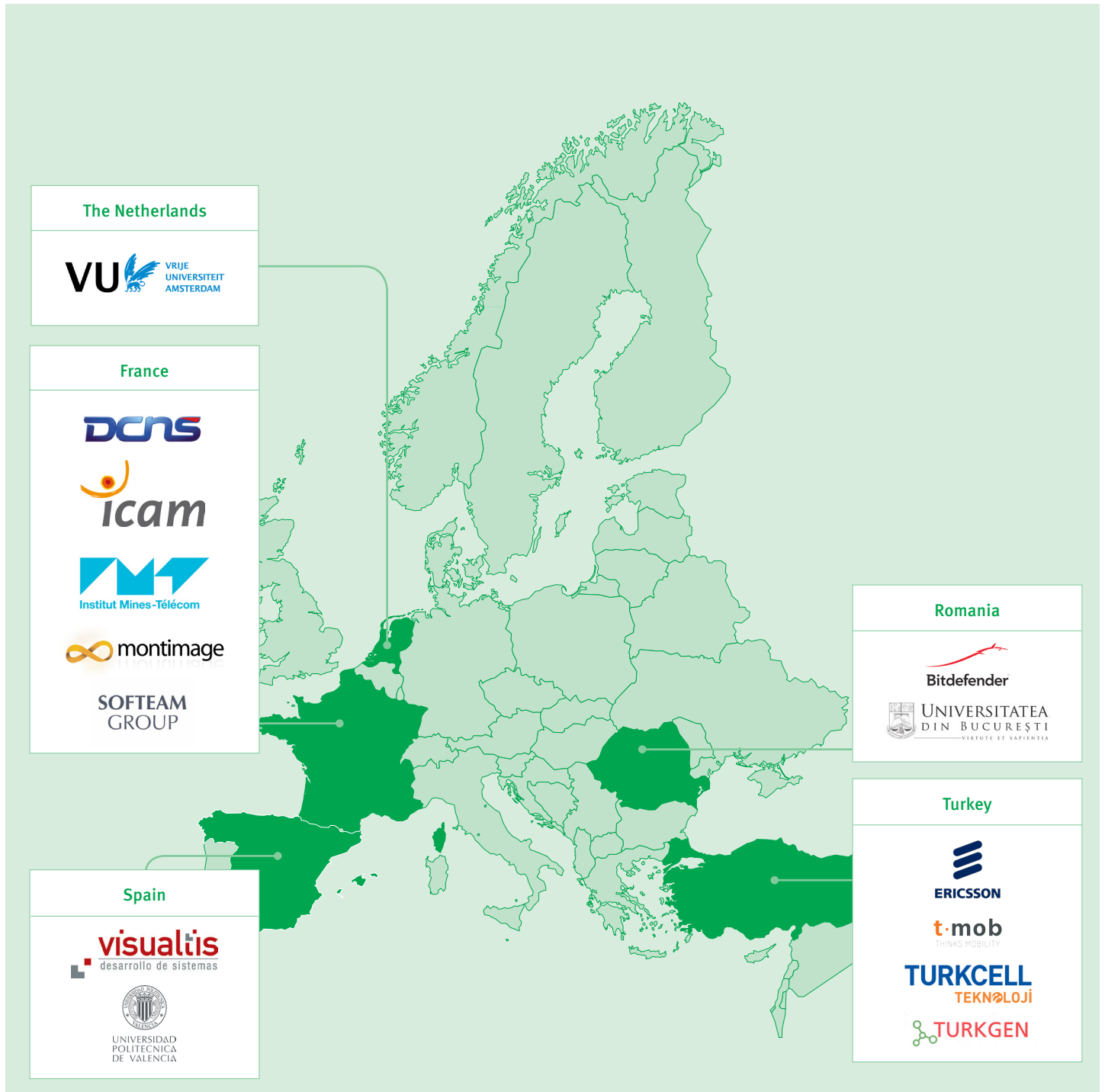
The implementation of a comprehensive set of tools for automated and continuous measurement will generate a toolset for future projects to properly measure their impact.



Main process Measure platform

### PROJECTED RESULTS AND IMPACT

The project's key innovative impact will come in the shape of the advanced analytics of the measurement data enabled by the project, and the measuring tools developed will enable an accurate evaluation of the impact in real software engineering environments. The innovative uses for the measurement data include root cause analysis for automating debugging and finding bottlenecks in performance. The improved performance metrics can be used for rewarding personnel and increasing their motivation, happiness and productivity.

**Project start**

December 2015

**Project leader**

Alessandra Bagnato, Softeam

**Project website**<http://measure.softeam-rd.eu/>**Project end**

August 2019

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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.