

## D3.2 Simulation Environment Adaptation Components – Executive Summary (September 2017)

This deliverable provides evidence of advances towards the achievement of project objectives related to WP3 *Methods and tools for continuous adaptation of the manufacturing process*. Together with this document, it describes the intended usage of the Integrated Decision Support System (DSS) Demonstrator, which is further analysed in detail in the accompanying deliverable D3.1 *'Adaptation features and modules.'*

More specifically, in this report we present a step-by-step usage guide for the modules comprising the DSS platform, aiming for readers/users of this deliverable to be able to fully realise all steps in the refined adaptation process flow presented in D3.1. By following through each of the steps described in this report, users can gain a complete understanding on how to perform the following activities:

- Create and update a Resource Ontology for a specific factory site;
- Create and update a Capability Model describing all worker-machine capabilities within the factory ecosystem;
- Create and update a list of pre-process plans for describing how raw material is turned into finished products;
- Match resources (e.g. workers) to the tasks defined in the pre-process plan according to their suitability in terms of their capabilities;
- Select the appropriate Levels of Automation (LoAs) for the aforementioned candidate assignees;
- Generate and re-adapt the work schedule according to a number of factors related to the Adaptive Worker Model (WP2), user's well-being and occurrence of unforeseen events and changes in one shift, such as the insertion of a new task or a new worker in the production procedure;
- Orchestrate easy integration of devices (e.g. machine, wearable smart sensors, etc.) to the Factory2Fit Repository (simulation).

The demonstrator, and as a result, this document, will be updated in M30 of the project's lifetime (March 2019).

