FACT SHEET#1
DOME 4.0 - Overview

Project Overview

DOME 4.0 is an EU-funded project at the forefront of innovation, focusing on revolutionizing digital manufacturing through cutting-edge technologies. The project aims to enhance industrial processes by integrating advanced digital solutions.

The aim of the project

DOME 4.0 aims to create an extensive industrial data ecosystem, fostering the exchange of business-to-business (B2B) data to generate value and innovate new or improved products, processes, and services.

Mission

To drive Europe into a new era of Industry 4.0 by fostering digital transformation, innovation, and competitiveness within the manufacturing sector.

Who are the partners of DOME 4.0?

DOME 4.0 brings together 14 partners from 8 European countries: Luxembourg, Germany, Italy, Belgium, Norway, United Kingdom, Netherlands and Switzerland. The project is coordinated by Computational Modelling Cambridge Ltd. (CMCL).

The partners are:

• COMPUTATIONAL MODELLING CAMBRIDGE LIMITED • FRAUNHOFER GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V. • NETCOMPANY-INTRASOFT • ALMA MATER STUDIORUM - UNIVERSITA DI BOLOGNA • ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE • UNITED KINGDOM RESEARCH AND INNOVATION • SIEMENS INDUSTRY SOFTWARE NV • ROBERT BOSCH GMBH • UNIRESEARCH BV • SINTEF AS • CAMBRIDGE NANOMATERIALS TECHNOLOGY LTD

Key Points:

• **Partners:** Collaborative efforts between esteemed partners including leading universities, research institutions, and industrial entities (logos of the partners).

• **Duration:** Project initiated on December 1st, 2020, spanning over four years, concluding on November 30th, 2024.

• **Financial Data:** EU funding amounting to € 4 036 773,75 dedicated to driving research and innovation within DOME 4.0.

What are the objectives of the project?

• **Development of a state-of-the-art** digital open collaborative marketplace ecosystem with connection to existing marketplaces, databases, knowledge bases, and other digital environments.

• **Creation of an efficient user experience** for data providers and consumers through secured and trusted data transactions.

• **Implementation of Artificial Intelligence (AI)** technologies like linked data, semantic knowledge graph, and machine learning algorithms to add value to data extraction, analysis, and processing.

• **Collaboration with existing data platforms and initiatives**, fostering the widely agreed ontology and showcasing the B2B demos.

• **Establishment of an open collaborative network** of data platforms for equal participation among providers, consumers, hubs, and platforms.

What are the expected outcomes of DOME 4.0?

DOME 4.0 will deliver a set of innovative solutions and services for industrial data sharing, such as:

• **A secure and trustworthy data marketplace platform** based on peer-to-peer Industrial Data Space (IDS) infrastructure.

• **A semantic interoperability framework** for data discovery, integration and analysis.

• **A suite of data-driven tools** for data quality assessment, data valuation and data monetization.

• **A set of showcases** demonstrating the benefits of data sharing in various industrial domains, such as smart manufacturing, lightweight construction, polymer additives, structural adhesives, chemistry knowledge graph, formulated consumer products and materials design

DOME 4.0 will also contribute to the development of standards, policies and best practices for industrial data sharing in Europe and beyond.

Visit our website: **www.dome40.eu**