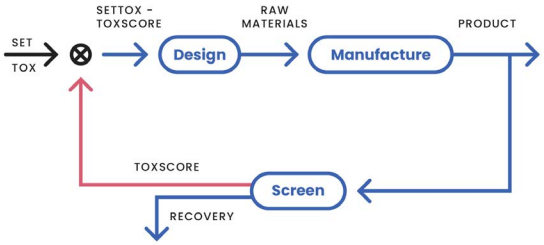
What is SABYDOMA about?

The first ideas for the project were developed originally to solve issues of environmental pollution and climate change. SABYDOMA is based on the technology developed in the EU H2020 HISENTS project, which builds a high-throughput flow through platform for screening nanomaterials using multiple sensor elements; and, aims to develop a Lead Demonstrator which will be used for the flow-through production of safe nano.



The key to Safety-by-Design (SbD) is directly coupling screening to production.

SABYDOMA's main objective is to develop a new methodology to address the Safety by Design challenge as a Control System Problem. Its technological solution is coupling screening to design, i.e. the screening at the point of production feeds back to modify the design of nanomaterials.

Meet our Team

The partners are from the following countries: Austria, Bulgaria, Cyprus, Finland, France, Germany, Greece, Norway, Portugal, Spain, UK, Ukraine; international countries: Australia, Hong Kong and the Republic of Korea. All partners contribute actively to the project, ensuring the flow of ideas and projects results to the wider community.

Get in touch!
info@sabydoma.eu

SABYDOMA

SAfety BY Design Of nanoMAterials

From Lab Manufacture to Governance and Communication: Progressing Up the TRL Ladder.

To learn more visit:
www.sabydoma.eu

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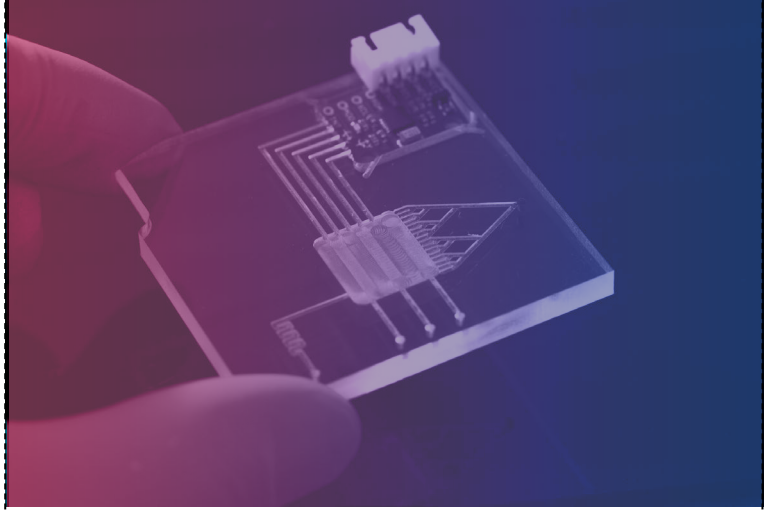
Project Summary

SABYDOMA addresses developments in the safety by design (SbD) paradigm by examining four industrial case studies in detail where the Technology Readiness Levels (TRLs) will advance from 4 to 6.

Each TRL activity progresses from being lab based at TRL4 to being industry based at TRL6. The TRL4 activity involves only innovation with regular industrial communication whereas the TRL6 activity involves industrially located activities with innovation communication.

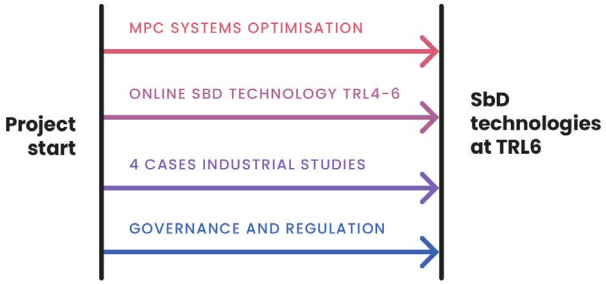
One of the novel themes of this study is to use system control and optimisation theory including the Model Predictive Control philosophy to bind the whole subject of SbD from laboratory innovation to the industrial production line and from decision making processes to project governance.



The objectives of SABYDOMA are:

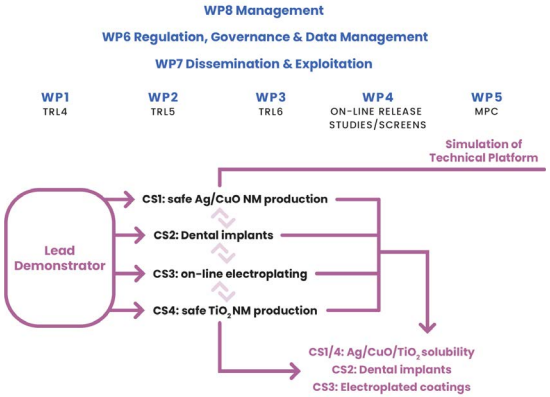
SABYDOMA's overarching aim is to develop the SbD paradigm from the highest level to the reductionist one, in order to implement faster, more effective and cost-effective protocols. It will do this by focusing on four technological processes where existing SbD platforms will be developed from TRL4 to TRL6 demonstrating their operation in the relevant industrial environment.

Overall strategy of SABYDOMA



Work plan

The project is divided into nine work packages covering the scientific and technical aspects of the project, exploitation and dissemination of results, ethic requirements and project management.



WP1 – TRL4 lab validation

WP2 – TRL5 industrial validation

WP3 – TRL6 demonstration in the industrial environment

WP4 – Release studies

WP5 – Computational modelling

WP6 – Regulation, governance and data management

WP7 – Dissemination and Exploitation

WP8 – Project management and Coordination

WP9 – Ethics requirements