**OVERVIEW OF RECENT AND ONGOING PROJECTS**

Please find below in a nutshell an overview of our main projects we are part of and have leadership roles in:

• **EBSI-VECTOR:** Developing the European Blockchain Services Infrastructure (EBSI)-enabled verifiable credentials and trusted organizations registries for cross-border use. In this project we oversee the stakeholders’ management function for use cases in the educational, social security and business registries domains. The overall budget for this project is: €14.5 million. Partners are from 52 from 20 countries. More details at: [EBSI-VECTOR Website](https://www.ebsi-vector.eu/en/) More details about EBSI can be found at: [Home - EBSI - (europa.eu)](https://ec.europa.eu/digital-building-blocks/sites/display/EBSI)

• **ESSA - European Software Skills Alliance:** Focusing on upskilling in high-demand software roles across Europe. In this project we participate in the design and piloting of VET courses in the software engineering domain. These include these five programs (Developer, DevOps expert, Solution designer, Test specialist, Technical [software] specialist) each of them offering 6-10 short courses of 1-2 ECTS. For these courses we offer microcredentials. The budget of the overall project is: €8.5 million. More details at: [ESSA Website](https://softwareskills.eu/)

• **NOO ULTRA:** Educational initiative focusing on renewing higher education professional study programs at the University of Ljubljana. In this project we develop a protype of eIDAS2 compliant application that addresses the overall lifecycle of microcredentials offered to students. Functionalities include:

•        issuance of badges to students,

•        hierarchically organized microcredentials,

•        issuance of diplomas for an overall programme of study,

•        integration with the university’s student information system,

•        a mobile application with additional services,

•        a work-based learning component,

•   and quality assurance process for proposals of new courses and their acceptance and publication by the programme committee of the University.

The budget of the overall project: €25 million. More details at: [NOO ULTRA Website](https://digitalna.uni-lj.si/noo-ultra-digitalna-pismenost-pedagogov-in-studentov-ul/)

•  **TRUSTCHAIN:** Dedicated to creating next-generation internet protocols and decentralized software solutions. In this project we develop a set of Semantic Web W3C compliant software services, technologies and tools that follow the DID standard. TRUSTCHAIN envisions and implements 75 technology development projects many of which are eIDAS2 compliant and focus on solutions for:

•        the digital identity,

•        privacy and security,

•        the issuance of microcredentials,

•        democratic/voting and economic/tokenomics mechanisms,

•        interledger technologies,

•        and sustainable cryptographic mechanisms.

In this project the University of Ljubljana is the scientific and technical coordinator. The overall budget of this project is: €12 million. More details at: [TRUSTCHAIN Website](https://trustchain.ngi.eu/)

• **BUILDCHAIN:** Creating a decentralized BIM-based knowledge platform for building lifecycles. The University of Ljubljana oversees the design and implementation of a decentralized knowledge base for the exchange of data, services and products centred around the Building Information Model also known as a Digital Building Logbook. The decentralized knowledge base uses advanced mechanisms such as the Ethereum compliant ERC-721, ERC-20, ERC-1155 and ERC-3643 tokens. The Semantic Web’s W3C DID standard is widely used to implement the necessary functionalities. The decentralized knowledge base is used in 13 use cases. The budget of this project is: €5 million. More details at: [BUILDCHAIN Website](https://buildchain-project.eu/)

• **ONTOCHAIN:** Combining Semantic Web and Blockchain for knowledge management.  In this project the University of Ljubljana oversees the scientific and technical development. The project delivers methods for:

•        on-chain and off-chain data management,

•        integration capabilities between ontologies and blockchains,

•        interledger technologies,

•        advanced smart oracles, marketplaces,

•        reputation mechanisms and similar.

ONTOCHAIN features 44 technology development projects. The overall budget of this project is: €6 million. More details and technology demonstrators can be found on a clickable map at: [ONTOCHAIN Website](https://ontochain.ngi.eu/)

•  **ExtremeXP:** Integrating technologies for data analytics and knowledge engineering. This project - in which the University of Ljubljana leads the conceptual work package - focuses on the user-centric development of Artificial Intelligence methods of extremely high accuracy and precision. Budget: €10 million. More details at: [ExtremeXP Website](https://extremexp.eu/)

• **DECENTER:** A collaborative European Union and Republic of Korea project focusing on Fog Computing Platform. Budget: €4 million. In this project the University of Ljubljana is focused on the design and the integration of five technology types:

•        Internet of Things,

•        Cloud-to-Edge Computing,

•        Blockchain,

•        Artificial Intelligence,

•        and Digital Twins.

More details at: [DECENTER Website](https://www.decenter-project.eu/)

• **ACES:** Autopoietic Cloud-to-Edge System is a project that advances communication technologies and services for 5G networks. More details at: [ACES Website](https://cordis.europa.eu/project/id/101093126)

• **ENTICE:** Enhancing cloud-data management and efficiency. More details at: [ENTICE Website](https://cordis.europa.eu/project/id/644179)

•  **SWITCH:** Developing solutions for interactive, time-constrained cloud applications. More details at: [SWITCH Website](https://cordis.europa.eu/project/id/643963)