Cofinanciado por:
COMPETE 2020 Lisb@20[20] PORTUGAL 2020 UNIÃO EUROPEIA Fundo Europeu de Desenvolvimento Regional

(LINK4S)ustainability

Project name

(Link4S)ustainability - A new generation connectivity system for creation and integration of networks of objects for new sustainability paradigms

Project code

POCI-01-0247-FEDER-046122 | LISBOA-01-0247-FEDER-046122

Main objective

Strengthening research, technological development and innovation

Region of intervention

North, Center and Lisbon

Beneficiary entities

NOS Comunicações, S.A.; CEiiA – Centro de Engenharia e Desenvolvimento (Associação); WeDo Consulting – Sistemas de Informação, S.A.; International Iberian Nanotechnology Laboratory (INL); Exatronic, Lda.; Universidade do Minho; Associação Laboratório Colaborativo em Transformação Digital (DTx); REN – Rede Elétrica Nacional, S.A.; REN Portgás Distribuição, S.A.; NOS Technology – Conceção, Construção e Gestão de Redes de Comunicações, S.A.; WyzeOps – Mobility Operations, Lda; Beyond Vision – Sistemas Móveis Autónomos de Realidade Aumentada, Lda.

Approval date

23/07/2020

Start date

01/07/2020

Completion date

30/06/2023

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Total eligible cost

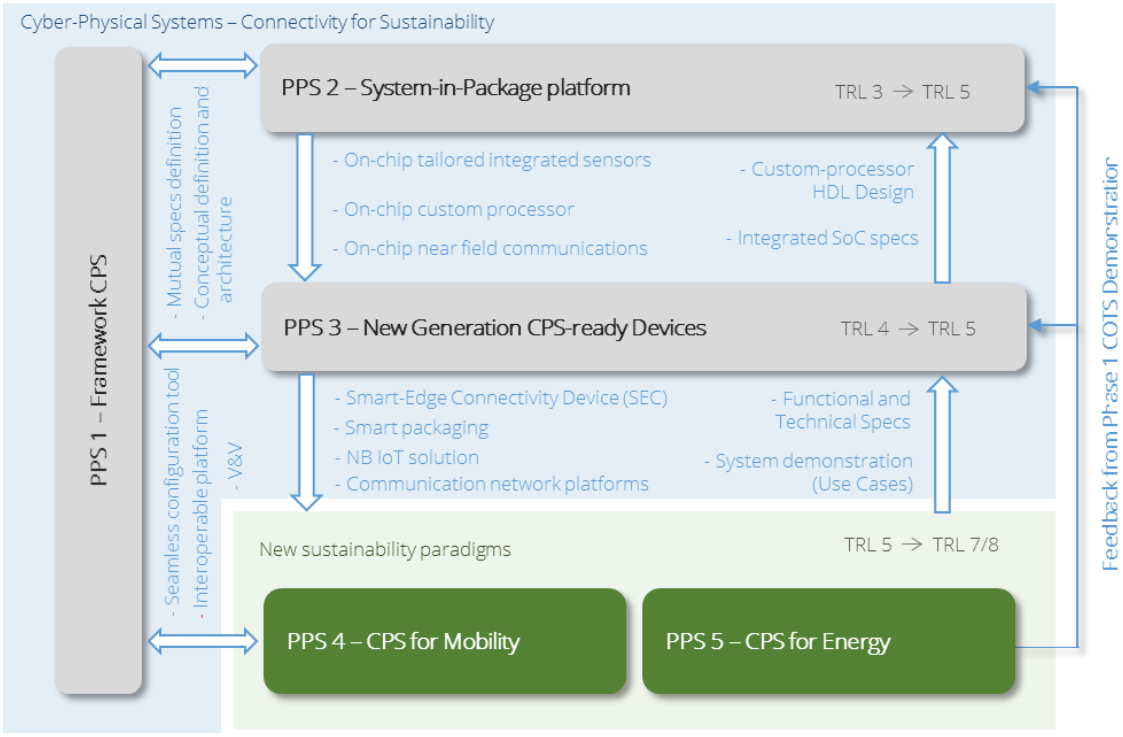
7.599.870,82€

Financial support from the European Union

FEDER - 4 732 738,39 €

Goals

The Link4S project consortium, led by NOS and in collaboration with WeDo, Exatronic, REN, Portgás, Wyze, Beyond Vision, CEiiA, DTx-CoLab, INL and the University of Minho, is committed to generating new scientific knowledge dedicated to the design, development and testing of a new generation of connectivity devices and their associated platforms (communication and software), with the aim of integrating networks of objects in the context of mobility and energy. The project also aims to develop and validate innovative business models and network concepts geared towards sustainable digital solutions that improve the standard of living in cities and reduce environmental impact.



Results Achieved

The results achieved by the (Link4S)ustainability project are presented below, by PPS (Product, Process or Service):

- Under ***PPS1 - Framework Cyber-Physical System***, a new generation connectivity system with a high degree of customization for different business cases was developed, demonstrated and validated, built on an integrated cyber-physical systems (CPS) framework;
- Under ***PPS2 - System in Package Platform Components***, a new customizable "system-in-package" platform was developed, produced and tested, integrating sensors and a customized processor into a single intelligent package, providing the low-level physical abstraction layer for the new generation of devices ready for cyber-physical systems;
- Under ***PPS3 - New Generation CPS-ready devices***, a new embedded intelligent device (SEC) and software platforms responsible for the communications network infrastructure (NB-IoT/5G compatible) were developed, addressing ubiquitous connectivity;
- Under ***PPS4 - CPS for Mobility***, different horizontal use cases were implemented to validate and demonstrate the technologies and solutions developed within the scope of the project for the creation of new business models in the mobility sector, which will make a significant contribution to decarbonizing society and promoting sustainable behavior;
- Under ***PPS5 - CPS for Energy***, different horizontal use cases were implemented to validate and demonstrate the technologies and solutions developed within the scope of the project for optimizing operations in the energy services sector, which will contribute to reducing its carbon footprint and sustainable development.

In short, the (Link4S)ustainability project has achieved its objectives. For more information, please visit the project website (https://link4s.pt/).