

# VOJEXT

## NEWSLETTER

*Where human-robot collaboration meets cognition!*

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## ABOUT VOJEXT

VOJEXT (Value Of Joint EXperimentation in digital Technologies for manufacturing and construction) is a 42-months long Horizon 2020 project, started in July 2020, which aims to provide a favourable business and technological framework for cognitive autonomous systems supporting human-robot interaction.

Under the vision Value Of Joint EXperimentation (VOJEXT) in digital technologies, the project dynamizes science-driven industry approaches engaging human and Cyber Physical Systems (CPS) in the same loop; thus amplifying the cognitive capabilities needed to achieve more effective sociotechnical and business ecosystems. For this purpose, VOJEXT will design, develop, and demonstrate affordable, market-oriented, multipurpose and easy-to-repurpose robotic systems; to be developed as one of the main components of a smart and scalable CPS ecosystem for the manufacturing and construction industry.

You can read more about the project, its main aims and specific objectives [here](#). For all the latest updates, please follow us on social media:





## VOJEXT'S ADDED VALUE

### *Development of DIH network*

In the framework of the Digital Innovation Hub (DIHs) initiatives and long-term sustainability, the project aims at creating a network gathering European DIHs interested in AI and robotic solutions. The 4 DIH core partners' in VOJEXT (FORTISS, PIAP, EMC2 and UPM) – together with representatives of other European DIHs will work at building a community to:

- Promote European cooperation and innovation among DIHs and their members;
- Assess and exchange experiences for close collaboration;
- Encourage collaboration and serve as intermediary to connect technology suppliers and end users, matching capabilities and demands in Europe;
- Share knowledge about the funding opportunities to foster innovation in respective ecosystems, in particular regarding regional S3 strategies;
- Identify and exchange knowledge on AI, robotics and manufacturing;
- Investigate the applicability of the VOJEXT project results to the widest possible industrial community.

VOJEXT consortium is in the process of defining and structuring the activities of the network and will involve interested DIHs to contribute. The launch of the network is foreseen after summer 2021. If you are interested to get more information, please drop us a line at [contact@vojext.eu](mailto:contact@vojext.eu)

## LATEST NEWS AND DEVELOPMENTS

### *Launching of 1st Open Call to SMEs*

In the period 1 March - 30 April 2021, VOJEXT accepted applications for Open Call # 1 - Challenge, which aimed to extend the capacity and technology outreach of VOJEXT demonstrators by engaging tech SMEs in solving proposed technological challenges. The 1st Open Call addressed innovators (SMEs and Mid-Caps) in Cognitive autonomous systems for human-robot interaction, specially “cobots” covering traditional and non-traditional areas for AI- robotics and cognitive ICT developments. Projects had to clearly fit within one of the following 5 challenges:

1. Construction Robotic Toolset;
2. Navigation;



3. Visualisation of Point Cloud in VR;
4. Integrate two leap motion devices to improve user's hand mapping;
5. Investigate a new method of hand mapping and integrate it to the teleop pipeline.

The maximum amount of funding that each beneficiary could apply for was up to €100 000. The cascade funding available through the 1st Open Call amounts to €230 000.

Two open call information webinars were held on 11 March and 15 April 2021 with the participation of more than 70 representatives of SMEs, research institutes and DIHs across Europe. The sessions provided information about the project, open calls challenges and application procedure to potential applicants.

VOJEXT received 17 applications and the consortium selected 5 SMEs from different countries like Italy, Bulgaria, UK, Cyprus, and Netherlands to address 5 different challenges after an evaluation process that involved external experts from industry and academia, and the consortium partners.

Starting in September 2021, the acceleration programme will integrate different companies and new concepts into the project ecosystem, aiming to boost innovation in the cognitive robotics and human-robot interactions. The third parties will join the project for six-twelve months. You can find full information about the open call [here](#).

#### *Development of use cases*

VOJEXT consortium is in the process of defining and planning the use case demonstrators. The project foresees the implementation of five use case demonstrators in the following sectors - Plastics and polyurethanes in textile (pillows and mattresses) industry; Electronics; Automotive; Construction; Crafts, culture and creativity. Read more about the use cases [here](#).

#### *Establishment of official liaison*

Kontor46 thanks to the support of the VojEXT project was able to establish an Official Liaison, through the EU Robotics Topical Group on standards, to the ISO Technical Committee on Robotics and to that on Artificial Intelligence.

So now, VojEXT has a preferential channel to contribute input to standards under development in the area of Robotics and that of Artificial Intelligence.

Kontor46 organised a workshop in collaboration with the European, BDVA (Big Data), ELLIS (AI), and the projects RODIN and Robotics4EU. Topics presented and discussed among others, were AI standards, the EU proposal for regulation of AI, the revised EU Machinery Directive. The workshop took place on 12 July 2021.





## CALENDAR OF UPCOMING EVENTS

- 2-13 August 2021 (online) - International Conference on Automated Planning and Scheduling
- 18-22 August 2021, Beijing International Convention Center - World Robot Conference
- 8-12 September 2021 (hybrid), Linz - Ars Electronica Festival, planned public event of WAAG "Robots are people too"
- 16-19 November 2021, Munich Messe - Productronica and Semicon Europa
- 7-9 December 2021 (hybrid), San Francisco - Semicon West

## VOJEXT PARTNERS

Led by the Universidad Politécnica de Madrid (UPM), VOJEXT brings together a multidisciplinary and complementary consortium team consisting of twenty partners from 14 EU and associated countries. VOJEXT partners comprise 8 SMEs (Shadow, Robotnik, Tree Technology, Technovative Solutions, Kontor 46, F6S Network Limited, Officina Keller Napoli, OSAI Automation Systems), a mid-cap (PEMU), two large companies (Acciona, Mercedes Benz), two universities (UPM, NEBRIJA), four research centres (Fortiss GmbH, Przemysłowy Instytut Automatyki i Pomiarów -PIAP-, Istituto Italiano di Tecnologia, Deutsches Zentrum fuer Luft- und Raumfahrt-DLR-) and three non-profit organisations (Pôle EMC2, Bulgarian Chamber of Commerce and Industry, Stichting Waag Society).

Check out a map of all participating countries and short profiles of the partners [here](#).

## GET IN TOUCH WITH US

For all the latest news, please visit VOJEXT's [website](#). If you would like to contact us or subscribe for our newsletter, please drop us an email at [contact@vojext.eu](mailto:contact@vojext.eu)

Thank you for reading. Expect our 3rd issue of VOJEXT's newsletter in January 2022.



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