



Co-funded by the Erasmus+ Programme of the European Union

March, 2023

Newsletter #5

Final project updates

Follow the ACCESS 3DP project on:

http://access3dp.eu/project/

The partner from your country is:





Project ID:

Full name: Art & Creative Craft Enterprises for Successful Streaming of 3D Printing Programme: ERASMUS+ KA202 – Strategic Partnerships for vocational education and training Project duration: 1 October 2020 – 31 March 2023 Total Grant: 346.963,00 EUR Partnership:

- <u>Chambre de Métiers et de l'Artisanat</u> <u>Auvergne-Rhône-Alpes Lyon-RhôneCentro</u> <u>Tecnológico del Mueble y la Madera de la</u> <u>Región de Murcia</u>
- Centro Tecnológico do Calçado de Portugal
- <u>Štajerski tehnološki park</u>
- <u>Technická univerzita v Košiciach</u>

New technologies, new opportunities



Additive Manufacturing (or 3D Printing) is one of the technologies the European Commission identified as a Key Enabling Technologies (KETs). Creative Industries in the craft sector are usually small businesses but important core elements of the EU economy. They work with clients in sectors that have been traditionally connected to creative industries for some time, using flexibility to add value to products by applying their ability to realise innovative ideas. Increasingly these capacities are becoming more relevant to the European Economy as new sectors find out that they need the skills provided by creative enterprise workers. At the same time, new, often disruptive technologies come to light and require highly skilled creative people to reach their full potential.

This also applies to other Advanced Manufacturing technologies, such as Advanced Industrial Robotics. **ACCESS-3DP** brings together an innovative consortium of 5 expert partners which have worked for 30 months to:

- Identify the mismatched skills between creative craft entrepreneurs already using AM and traditional ones potentially interesting in adopting such technology;
- Develop VET curricula on 3D Printing tailored to the needs of the craft sector, to the diffusion of the technology, as well as the mobility and employability of creative craftworkers;
- Improve competitiveness and efficiency of craft businesses through 3D Printing
- Better understand the 3D printing value chain;
- Evaluate the impact of tailored training;
- Develop recommendations for certification of creative craft stakeholders trained in 3D Printing.

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Achievements so far:

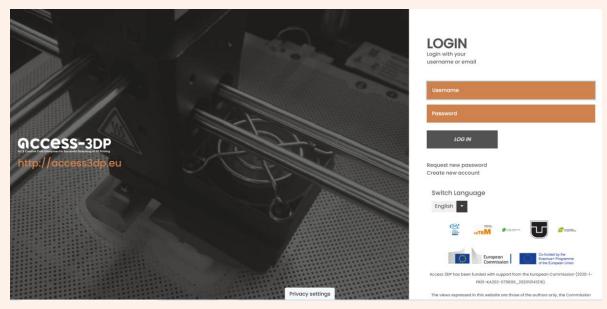
Successful testing of the free e-learning platform

The ACCESS-3DP course has been designed to provide training material related to advanced manufacturing (AM), in particular 3D printing and advanced industrial robotics. It is aimed at different target groups: professionals, workers, entrepreneurs, students, VET providers, universities, unemployed, local education authorities, policy makers and other relevant stakeholders from traditional sectors.

The testing phase was conducted in all projects participating countries – France, Portugal, Slovakia, Slovenia and Spain during the period from November 2022 until mid-February 2023.

The pilot testing phase went according to plan, with the participation of 39 users, some of them from outside the five partner countries, focusing on the content of the training course and the features of the interactive training platform, providing the Consortium with a very good opportunity to obtain feedback to identify possible improvements .

Partners are already modifying the platform and courses and at the same time, establishing a sustainable plan. It has been agreed that possible updates in terms of structuring the content in more detail (dividing it into shorter segments), transferring the study material into video format, and providing additional content focusing on the required topic of real case studies of new business models with 3D printing and any other descriptions of practical experiences will be added in a medium-large period. They have also identified the importance of moving towards green processes and have therefore covered aspects of circularity within 3D printing.



ACCESS-3DP E-platform Source: ACCESS-3DP





To get there, in the past months the partners organised:

Multiplier events on 3D printing in the creative industries and craft sector

Project partners organised multiplier events to present the ACCESS-3DP project, the achievements so far and the e-platform on 3D printing that has been created.

Multiplier events by partner:

- Chamber of Craft Auvergne Rhône Alpes Lyon, Rhône, CMA AURA (28 February at École Centrale Lyon fablab);
- Technical Research Centre of Furniture and Wood of the Region of Murcia, CETEM, (3 March at CETEM's facilities);
- Portuguese Footwear Technological Centre, CTCP (20 March at CTCP's facilities);
- Technical University of Košice, TUKE, (22 February at TUKE's facilities)
- Styrian Technology Park, STP, (21 February 2023 at Academia College of Applied Sciences).

Cycles of workshops

In addition to the multiplier event, CTCP organised several workshops in São João da Madeira and Felgueiras for two different target groups - technicians from the footwear and leather goods industry and students. The topics of the workshops were 3D CAD design in Rhinoceros, 3D Printing Technologies & Applications and 3D Printing and Robotics Coupling - applications and future perspectives. In total there were over 60 students and 50 professionals from the footwear sector. In addition to these workshops dedicated to the technologies, two other events were organised at CTCP for professionals of the footwear and leather goods sector, one about Creativity and Innovation and other about Design Thinking targeting about 30 participants.

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Workshops organised by CTCP. Source: CTCP.

Meeting in-person:

The last transnational meeting of the ACCESS-3DP project, funded by the Erasmus+ programme, took place in Lyon, France, and was hosted by the **Chamber of Craft Auvergne Rhône Alpes (CMA AURA)**.

CMA AURA, organised this a face-to-face meeting at its premises from 15 to 16 March 2023.



Project partners Source: ACCESS-3DP





The meeting was attended by all 5 partners from **France**, **Portugal**, **Slovakia**, **Slovenia and Spain**. On the first day (15 March 2023), they had an overview of the lessons learnt from the implementation of the pilot activities related to the test of the ACCESS 3DP e-learning platform, presented by the project partner from Portugal and Slovakia (CTCP - TUKE). Then they had an overview of quality assurance management and the dissemination of the project. Finally, they reviewed financial and administrative issues.

Partners meeting Source: ACCESS-3DP

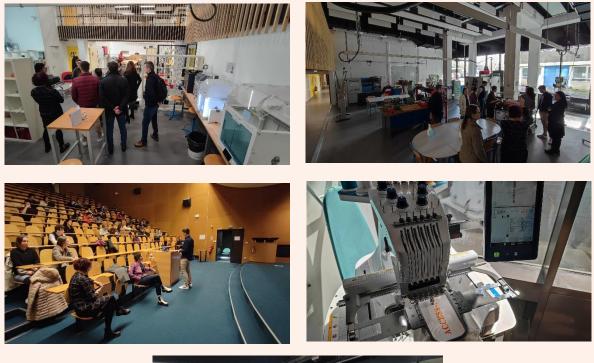


The second day (16 March 2023) was devoted to a practical tour of the innovative Campuses around Lyon with links to additive manufacturing. First they visited the Fab lab of Ecole Centrale Lyon, where they were shown the technical spaces where students can learn about innovative technologies, including 3D printing, and explore practical applications. After the tour, the project partners gave a lecture to students and academics on the "*Applications of 3D printing in the craft sector: the potential of innovative technologies applied to traditional sectors - How engineers and craft entrepreneurs can work hand to hand through 3D printing*". Later, they visited the Campus Numérique (Regional Innovation Hub), where they were introduced to the SURFAB and SWARM platforms related to Industry 4.0 technologies and how they work to support local enterprises to adopt new technologies.

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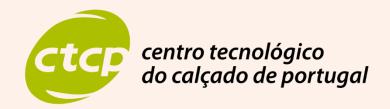


Visit Fab lab of Ecole Centrale Lyon and Campus Numérique

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Presenting the partner:



CTCP is a private, non-profit RESEARCH INSTITUTE and TRAINING CENTRE, founded in 1986, with more than 500 members, employs 62 technicians, engineers and senior specialists and trainers, and works with approximately 30 external consultants/trainers on a regular basis. CTCP's facilities are located in the North of Portugal, near Porto, in São João da Madeira (headquarters) and in Felgueiras, the two main industrial areas of Footwear in Portugal.

CTCP aims at supporting all companies of Footwear, Components and Leather Goods cluster in a total of 1900 SMEs at all fronts, from training to consultancy, on products technology innovation to sustainability. During the last 35 years, CTCP gathered experience working multifacetedly toward footwear accompanying all innovations and support implementation in the cluster covering training, quality control R&D, consultancy, Health and Security at work, normalisation/standardisation. They have strong experience in cooperation project at national and international levels and a strong connection with companies and entities within footwear cluster governance and wide-open channels to entities of footwear worldwide community

The most relevant CTCP's activities are: Quality Control Accredited Laboratory, Consultancy, Training, Marketing and Promotion, Research and Development, Health & Safety, Environment, Business Intelligence, Studies and Comparative Research, Innovation and Digital Manufacturing (Shoe FabLab) and Entrepreneurship support. In the field of training/employment CTCP offers vocational and non-vocational training through classical training, work-based learning, training-action, e-learning, among other models and services. CTCP is certified for providing Training by the Portuguese Government, and promotes more than 5.000 training hours per year, targeted to more than 1500 participants per year, in fact employees in the footwear sector.

The Shoe FabLab is focused on the co-creation, training, learning by doing, innovation and acceleration of ideas, products and new business models. Promotes sharing knowledge and resources, following the Do-It-Yourself principle, accompanied by trainers/coaches. It supports the realisation and development of individual and companies' projects. It acts within 4 pillars: entrepreneurship, training, prototyping and experimentation, and promoting and attracting newcomers to the sector through open days, and other sensitising initiatives. It is featured with machines and technologies to make a shoe from the design to the final product, including the CAD lab. The Shoe FabLab also involves a i4.0 lab equipped with 3D printing, digital and laser printing facilities, IoT solutions and robotics to support robotization and automatization. The Shoe FabLab is the perfect facility to support the test and prototyping of innovative products and technologies in

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the field of footwear sustainable manufacturing, as well simulation of new process approaches.

CTCP participates in the European Commission ESCO Project (European Skills and Competences) being part of the Reference Group of Textile, Clothing, Leather, Footwear and related products and it is also a member of Portuguese Fashion Industries Skills' Council.



CTCP facilities. 1 - Shoe FabLab for Traditional Footwear Production Technologies, 2 - Shoe FabLab for Digital Manufacturing Technologies, 3 - CAD lab and 4 - Testing and R&D Laboratory.