



European Design Technicians League  
(Proj. 2020-1-ES01-KA202-082337)



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## Press Release – DESTINE Road Map

DESTINE - Inspire, develop and influence a career of young trainees as European Metal AM Design Technicians

01.11.2020 to 31.10.2022

DESTINE was an Erasmus+ project launched and developed in a very special circumstance. Apart from the pandemic limitations that the world was facing at that time, society didn't stop, and amazing projects were developed in between.

DESTINE aimed to create a new Professional Profile in metal additive manufacturing (AM), the European Metal AM Design Technician and pursued its inclusion within the Euroskills and WorldSkills Competitions. The results have now been achieved and shared among stakeholders in Education and Training fields, but also in the Additive Manufacturing Industry and Policy Makers.

One of the main goals of DESTINE was to promote a link to the future, and to ensure that the development of the European Metal AM Design Technician could add value and impact industry and young students. Moreover, for that reason, the partnership implemented a roadmap of activities, starting with the creation of a new European qualification, a training guide for teachers and trainers, a handbook to promote the skills competitions and a guide to support the implementation of this new European qualification in national qualifications systems.

The first semester of the project was dedicated to create the Metal Additive Manufacturing Design Technician (EMAM- DT) training programme, replying on AM Industry's needs for qualified personnel in AM Design, as well as on the need to broaden the scope of AM sector training offer at vocational level, in order to attract more youngsters for this innovative technology. The new qualification was designed according to international and harmonized system ([IAMQS](#)) methodology, which has the advantage of being aligned with the labour market needs and industrial requirements set by standardization bodies, such as ISO, CEN and ASTM.

Once the [new qualification](#) was prepared, the partnership provided a training guide for teachers and trainers to capacitate them to deliver the new EMAM-DT Qualification. These materials were prepared, based on an approach that includes the AM design innovative and interactive activities and a learner-centred paradigm, providing an attractive programme for youngsters. Education materials, such as lesson plans, case studies and assessment tools were also developed and delivered, being now available [here](#).

In terms of skills competition, the leagues were inspired by the world competition, following similar rules and steps. WorldSkills competition intend to cover the specialist, technical and generic skills that comprise intermediate work roles across the world and indicates the relative importance of each section of the standards, as advised by industry and business. In DESTINE, this aspect was covered by the development and validation of the EMAM- DT qualification following the quality assurance system of IAMQS.

The National and European Skills Leagues played a key role in giving visibility to the new AM qualification profile, especially among the competition participants. The participants were students with a



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background in technical areas and experience skills in using 3D CAD tools. Along the leagues, they had the opportunity to interact and learn with local and foreign peers, thus establishing bonds while they were proving their know-how in design. Two rounds of competitions were successfully completed. In total, the National and the European Skills League directly reached around 130 VET students, from Spain, Germany, Italy and Portugal.

Along with the Skills Leagues, the invitation of experts and institutions with relevance in AM and in design it also brought validation and recognition from outside of the project.

The presence of Kelvin Hamilton from [Autodesk](#), sponsor of WorldSkills and provider of Tinker CAD in DESTINE Skills Leagues, was a strong presence among the participants. The presence of Beatriz Lopez, the IAMQS System Manager, allowed the reliability of the knowledge and skills developed in the project. And finally, the invitation of Vasco Vaz, a representative of the World Skills Portugal, allowed the partnership to confirm the success of the project and to prepare a [handbook](#) that helps other institutions/VET centres to set up and put on wheels a competition at local level.

Moreover, in order to target the policy level, DESTINE partners undertook a desk research focused on national qualifications frameworks and systems, while dialoguing with the national qualification authorities in each country. As a result, a [guide](#) was prepared addressing a set of recommendations and actions to be taken in order to facilitate the future uptake of EMAM-DT in formal VET systems. The guide can also be used as a tool for benchmarking among other countries policy maker, a VET providers or other educational players.

Last milestones to be achieved was the European Final Conference preparation, which was a dynamic and enthusiastic event of DESTINE. It was embedded into the 1st AM International Conference, gathering more than 100 participants around the world, focused on cutting-edge technology in Additive Manufacturing R&D. During the event, the sessions enabled to emphasize the state-of-the-art and innovative developments in AM and its industrialization, as well as analysing the scope of several Erasmus+ projects, such as DESTINE.

DESTINE effort is now to continue spreading the word, inspiring, developing and influencing a career of young trainees as European Metal AM Design Technicians. The future exploiting and sustainability plans, include among others, the following actions:

- The integration of the EMAM- DT within in the IAMQS as Independent Qualification;
- The national roll out of the EMAM-DT Qualification, or Competence Units, within partners VET Systems;
- The integration of the Qualifications and AM design competition within the Euro and WorldSkills Competitions.

DESTINE is an Erasmus+ funded project and represents the efforts to create and to implement the European Metal AM Design Technician Qualification on Partners' countries' VET Systems and beyond, while enhancing trainees' motivation and engagement to learn about Metal AM Design, preventing school leaving.