



Final Conference, 5th November 2020

Beyond the horizon



This project has been funded with support from the European Commission. This communication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

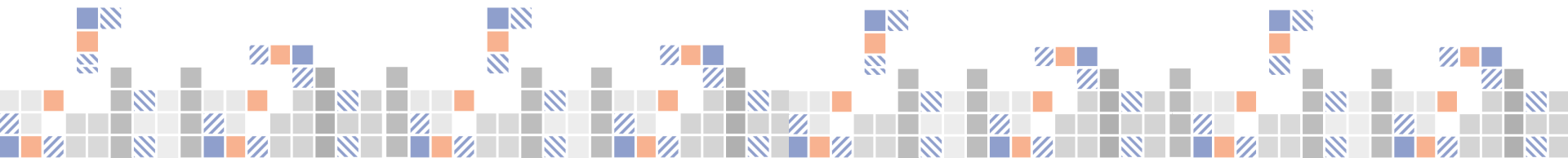


Co-funded by the
Erasmus+ Programme
of the European Union

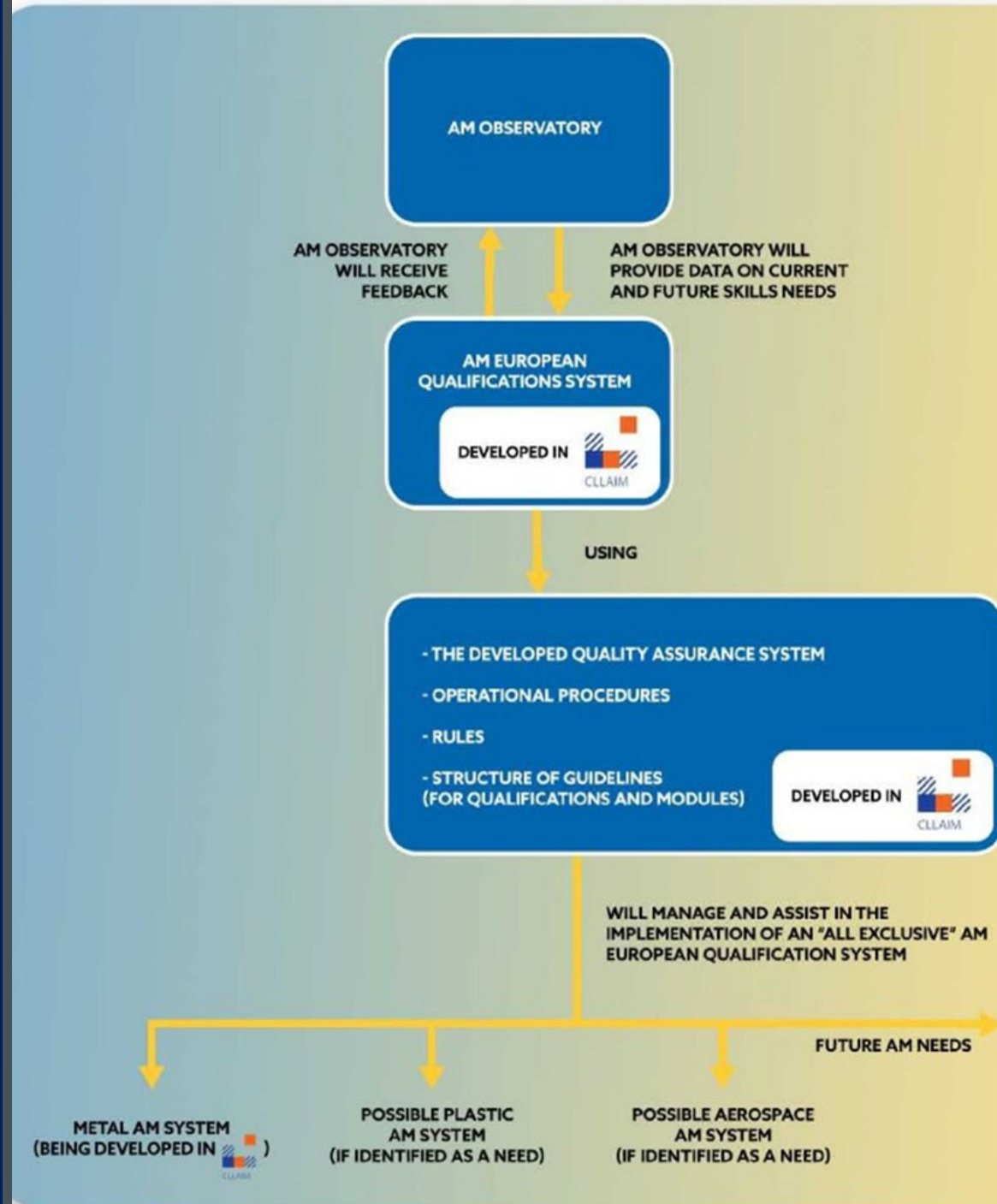
Beyond the horizon

**How will the CLLAIM projects results
will be further exploited ?**

Where can the results be used ?



Exploitation of the AM Qualification System



Relationship between CLLAIM and SAM for International Metal AM Qualifications



Results transferability and sustainability

Update and review of the AM Operators, Designers, Inspectors and Supervisors

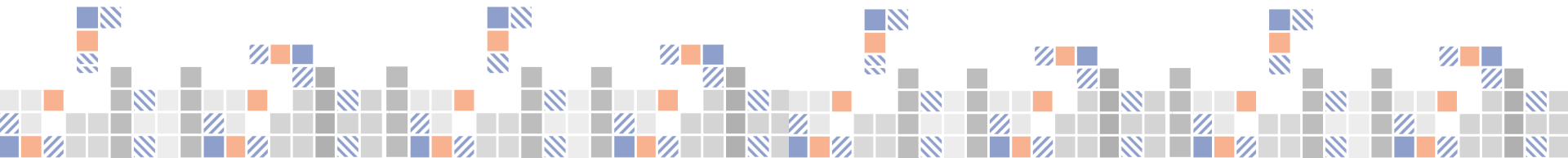
Ensure the continuous implementation of the IAMQS through Members and Training Organisations



The European Sector Skill Strategy

Support the current implementation of AM

Increasing uptake of AM technologies at different levels



Objectives and Expected Results

AM Observatory



Skills forecast

Development & review of
Professional Profiles /Qualifications



Real Case Scenarios
(6 months)

Short Term Scenarios
(2 years)

Foresight Scenarios
(10 years)

Latest Findings 2019

Current Skills Needs and Gaps | Real Case Scenario, 2019

- **AM Professional Profiles**

Process Engineer, Designer and
Materials Engineer
Business related profiles

- **Materials**

Metals followed by Polymers

- **Technological Skills**

Certification, Validation, Topology
Optimisation, Design, Numerical
modelling, Standards

- **Entrepreneurship, Digital and Green Skills**

Costs, Resource Efficient Management/
Sustainability

Short Term Skills Needs and Gaps | Short Term Scenario, from 2020 to 2021

● AM Professional Profiles

Process Engineer, Designer and Materials engineer

● Materials

Metals followed by Polymers

● Technological Skills

AM processes, Testing & Quality Control, Design, Pre-processing & Material Handling, Topology Optimization, Certification and Validation

● Entrepreneurship, Digital and Green Skills

Resource Efficiency / Sustainability, Marketing and Sales

Technology Trends that will need to be considered in the near future |

Foresight Scenario, from 2022 to 2025

- **AM Professional Profiles**

Designer, Process Engineer, Non-destructive testing and Inspection Technicians

- **Materials**

Metals followed by polymers

- **Processes**

PBF and DED

- **Technological Skills**

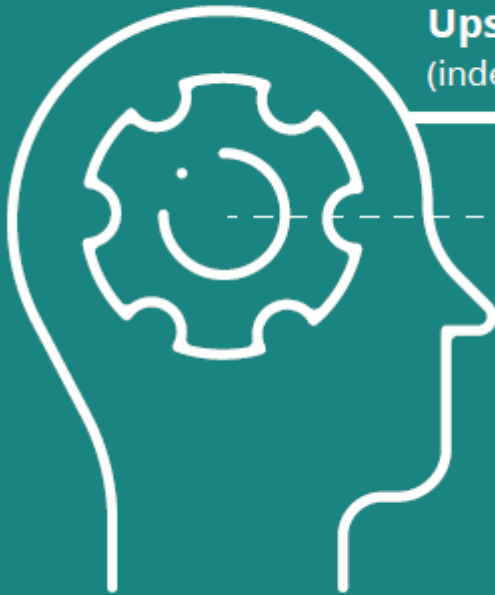
Numerical Modelling, Non-destructive Testing, Metallurgical analysis and characterization, Pre-processing & material handling; Data analytics Design, Materials and process development.

- **Entrepreneurship, Digital and Green Skills**

Resource Efficiency / Sustainability, Marketing and Sales

AM technology trends for R&D&I | Trends for 2020-2025

Real time control / monitoring systems, New materials, Zero-defects manufacturing



Upskilling / Reskilling Existing Professionals

(independent analysis from the scenarios)

- Consultants, Civil engineers, Mechanical engineers, Design Engineers, Inspection Technicians (NDT/DT Technicians, DT Technicians), Project Managers, Process Managers, RTD Professionals from different industries and what to change in industry, Software Personnel; Business developers; programmers.

Future Short Term Skills (until mid 2021):

- Certification and Standards
- Numerical Modelling
- Materials (Eng level)
- Polymers (Designer)
- Entrepreneurship
- Digital and Green skills

JOIN SAM GROUPS!

All Students, Trainees and Jobseekers in AM are invited to join SAM project groups.

Sector Skills Strategy in Additive Manufacturing

<https://www.linkedin.com/groups/12231279/>



Students, Trainees & Jobseekers in AM

<https://www.linkedin.com/groups/8918566/>

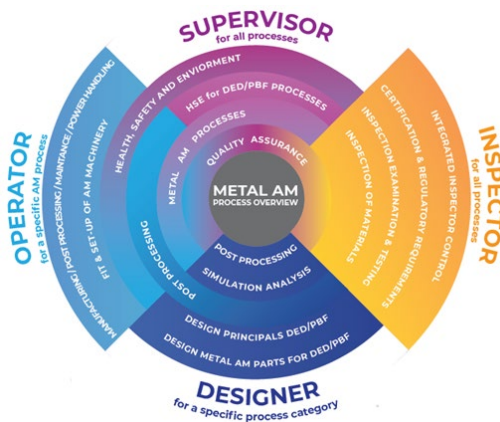


3D Printing Channel



<https://www.youtube.com/channel/UCO-PfDXv5ReiELtkvyVbtHA>

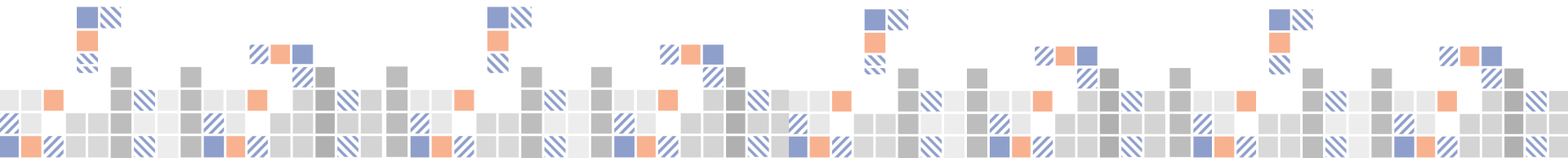
How can external organisations collaborate ?



National MSC



Observatory





CLLAIM

Thank you!

Adelaide Almeida
madelameida@ewf.be



This project has been funded with support from the European Commission. This communication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



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