

## Activity Framework



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#### **EXAM 4.0 partners:**

TKNIKA – Basque VET Applied Research Centre, CIFP Miguel Altuna, DHBW Heilbronn – Duale Hochschule Baden-Württemberg, Curt Nicolin High School, Da Vinci College, AFM – Spanish Association of Machine Tool Industries, 10XL, and EARLALL – European Association of Regional & Local Authorities for Lifelong Learning.

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## Abbreviations

<b>AI</b>	Artificial Intelligence
<b>AM</b>	Advanced Manufacturing
<b>EaFA</b>	European Alliance for Apprenticeships
<b>EC</b>	European Commission
<b>ECVET</b>	European Credit System for Vocational Education and Training
<b>EQF</b>	European Qualifications Framework
<b>ESCO</b>	European Skills, Competences and Occupations
<b>EU</b>	European Union
<b>HVET</b>	Higher Vocational Education and Training
<b>OECD</b>	Organisation for Economic Cooperation and Development
<b>RIS3</b>	Regional Innovation and Smart Specialisation Strategy
<b>S3</b>	Smart Specialisation Strategy
<b>VET</b>	Vocational Education and Training

This document outlines the activity framework for the creation of the EXAM platform in the next few years. In other words, we give a framework for our activities.

1. Section 1 of the document describes our framework. The Framework will be considered as a set of concepts, criterias and rules that will guide our actions, allow us to identify and solve problems, to register our activity, to monitor our work and to extract conclusions aimed at continuous improvement.
2. Section 2 discusses the eight aspects of the framework.
3. Section 3 proposes a specific tool to manage and monitor everything.

The activities outlined cover only until the submission of the next project in September 2021. However, the activity framework continues to be valid if the proposal is not approved for funding. As a framework, it will be valid for all our activities: the ones that are planned now, and the ones that we will plan later.

## Section 1: Alignment of the platform to EU policy

The EXAM 4.0 platform aims to become the European reference platform for knowledge generation and exchange, collaboration and service provision for VET/HVET centres and companies working in the Advanced Manufacturing sector.

We want to support collaboration and networking between VET/HVET centres and companies/company associations working in the Advanced Manufacturing sector to reduce skills gaps in the industry and to transfer knowledge between VET centres and companies.

Our main objective is to create an easy-to-use digital platform beneficial to different stakeholder groups. This objective is divided into smaller strategic objectives and the key initiatives to achieve them:

1. To submit a project to fund creation of the platform
2. To create the platform
3. To create/provide the services of the platform
4. To position the platform in Europe
5. To make the platform self-sustainable

We have defined the key initiatives that will help us to achieve the strategic objectives mentioned above. Under the first strategic objective: to submit a project to fund the creation of the platform, we have defined the following key initiatives:

1. Define the main features of the project, WPs, deliverables, types of partners we are looking for, etc.
2. Create a list of interesting potential partners in different EU-countries (mainly from industry and VET/HVET).
3. Meet with potential partners to discuss their possible involvement in the project.
4. First project draft.
5. Second project draft.
6. Project budget.
7. Third project draft.
8. Submit the proposal.

Under the second strategic objective, to create the platform, we have defined these key initiatives:

1. Define our unique selling proposition. Define the typical user. Understand what the user might look for, and what he cannot find elsewhere. Define the key services for each group.
2. Understand each stakeholder's interest on the platform.
3. Build the platform.

For the third strategic objective, to create/provide the services of the platform, the key initiatives defined are:

1. To start offering the key services on the platform. (The key services are explained in D.3.2. Strategic Plan of the Platform of Advanced Manufacturing).

Our fourth strategic objective is to position the platform in Europe, and to achieve it, our key initiative is:

1. Dissemination of the platform.

And the last one is to make the platform self-sustainable, which will be achieved by:

1. Defining how the platform will be funded.

To make it more accountable and easy to monitor, we have defined some indicators:

Strategic objective	Key initiative	Indicator
To submit a project to fund the creation of the platform	Define the main features of the project, WPs, deliverables, types of partners we are looking for, etc.	The project idea draft is written.
	Create a list of interesting potential partners in different EU countries (mainly from industry and VET/HVET)	The list is created
	Meet with potential partners to discuss their possible involvement in the project.	10 meetings with 10 potential partners.
	First project draft	First project draft is written.
	Second project draft	Second project draft is written.
	Project budget.	Project budget is estimated and agreed with partners.
	Third project draft	Third project draft is written
	Submit the proposal.	The proposal has been submitted on time.
To create the platform	Define our unique selling proposition. Define the typical user. Understand what the user might look for, and what he will not find elsewhere. Define the key services for each group.	The unique selling position has been identified.
		The typical user has been defined.
		The key services for each group are defined.
	Understand each stakeholder's interest on the platform.	10 questionnaires to 10 stakeholders.
	Build the platform.	The platform is built.
To create/provide the services of the platform	To start offering the key services on the platform.	A report summarising a pilot on the first provision of services.
To position the platform in Europe	Dissemination of the platform.	Numbers.
To make the platform self-sustainable	Define how the platform will be funded.	The financial rules of the platform are written and approved by members.



In this document we will define our activity framework. But what is an activity framework?

We understand the word “framework” as a structure that allows us to introduce and make sense of our activities. We also understand it as a system of interrelated processes. We say they are interrelated because a change in any of these parts will cause a change in other parts as well.

This structure, this system of interrelated processes, consists of:

1. Definition of our main users, their needs, expectations and requirements.
2. Definition of groups of interest, their needs, expectations and requirements.
3. SWOT analysis. Risks and opportunities. Mitigation actions.
4. Work plan.
5. Objectives and indicators.
6. Technology Watch.
7. Learning and improvement.
8. Memory.

In the next sections, we delve deeper into the different aspects of the framework.

## Section 2: Aspects of the framework

Our framework consists of eight interrelated parts. In this section we will define the context of each of them.

### Definition of our main users, their needs, expectations and requirements

The main users of the platform will be:

1. VET/HVET centres working in AM.
2. AM companies and company associations.
3. Research bodies with interests in research regarding AM and VET/HVET.

*What are their interests? What needs do they have? What are their requirements?*

**For a VET/HVET centre, their main interests will be to:**

1. Have access to networking opportunities in the field of AM.
2. Have access to high quality information.
3. Get guidance and advice on the implementation of different types of AM technologies.
4. Get information on our Collaborative Learning Factory approach and connect their own labs as well.
5. Have access to highly innovative tools to work on skills needs identification and to define the skills needed for each occupation (the CUBE, the assessment tool).
6. Have access to online training courses.
7. Have access to relevant events.
8. Be aware of the “news”.

**For AM companies and company associations, their interests will be to:**

1. Have access to networking opportunities in the field of AM.
2. Have access to high quality information.
3. Get guidance and advice on the implementation of different types of AM technologies.
4. Have access to highly innovative tools to work on skills needs identification and to define the skills needed for each occupation (the CUBE, the assessment tool).
5. Have access to online training courses.
6. Have access to relevant events.
7. Be aware of the “news”.

**For research bodies, their main interests will be to:**

1. Have access to networking opportunities in the field of AM.
2. Have access to high quality information.
3. Have access to highly innovative tools to work on skills needs identification and to define the skills needed for each occupation (the CUBE, the assessment tool).
4. Have access to relevant events.
5. Be aware of the “news”.

To answer all the needs of our users, we need to include specific services on the platform. These services have been defined in our Strategic Plan, but now, we should ensure that they are included in our work plan:

- 1. Networking/collaboration:** an area where users can interact with each other. There will be different working groups (WHICH GROUPS) where platform users could discuss technologies, skills, projects, occupations, etc. related to each one of them. This area will look like a forum. Platform users can use this forum for peer reviewing documents as well.
- 2. Information/publications:** the platform should have an area where users could publish and consult articles, case studies, etc. From a technical perspective, this area should allow us to upload archives in various formats.
- 3. Guidance service:** VET/HVET centres or companies interested in getting guidance on the implementation of new technologies will have an area where they could make their requests and find a platform member who could provide them a service. This area should work similar to a matchmaking platform. We should be able to use Artificial Intelligence to find the best match and to connect users with the highest matching potential based on existing data.
- 4. Lab's collaboration/connection:** the EXAM 4.0 project has developed a model of a collaborative Learning Factory in order to put a system into practice and to co-create value among different organizations. The added value would not only be to create and produce products in collaboration but also to share data from the respective Labs. Members of the platform who would be interested in participating in such an initiative and go further in that direction would have the opportunity to do so. There are a lot of challenges to address, both conceptual and technical.
- 5. EXAM 4.0 CUBE:** The EXAM 4.0 CUBE is a tool partially developed in the EXAM 4.0 project. It should be an interactive tool where industries and VET/HVET centres can collaborate to define the skills and competences required for different occupations in the AM sector.
- 6. Online training:** the EXAM platform should be able to create training courses that could be accessed by anyone, anywhere in Europe.
- 7. Events:** platform members will organise different types of events and in this area, we will inform all the users about them.
- 8. Become a member:** there should be an area in the platform where interested VET/HVET centres and companies/associations of companies could submit their applications.
- 9. News.**
- 10. Links:** an area of the platform that gives links to already existing interesting initiatives, tools, platforms, etc.

And there is a prerequisite for the fulfilment of these needs: the creation of the platform. We will need to include the creation of the platform in the plan. This will also be included in our work plan.

## **Definition of stakeholders, their needs, expectations and requirements**

We will consider as our stakeholders all those organisations that might be interested in our work, such as:

1. The European Commission.
2. Governments.
3. Other CoVE platforms.
4. Other platforms/groups/associations of AM.
5. International associations.
6. Social partners, NGOs, etc.

The main interest of the EC will be to see CoVE platforms be successful. It is an initiative in which they have invested a lot of effort and they will feel very encouraged if they know their initiatives are thriving.

Government's interest will be more related to their specific competences. It is very probable that they will be interested in knowing about our platform and our developments and probably inviting VET/HVET centres, AM companies and research bodies from their areas to join.

Other CoVE platforms, meaning other projects approved under the call for platforms of centres of VET excellence, will be interested in finding synergies with us. From our side, this is interesting as well: what are other CoVEs doing? How are they facing their challenges? What issues are they having? What products and services are they developing that might be interesting for us? How could we benefit from cooperation? Etc.

The interest of other platforms/associations/groups of AM will be related to the services and products we are developing and in finding synergies with us. From our side, we will have similar interests in their work.

International associations is an abstract group of several types of associations. It is very difficult to know what the interest of such an abstract body is. However, considering that all these associations have members and that they are already working in some fields, they might be interested in getting benefits for their members, being aware of what we are doing and finding synergies from us. We will also have similar interests in their work and they could also be interesting from the dissemination point of view. They could help us to position the platform and to reach more people. Considering they may represent relevant agents in relation to our work, we should think about including them as advisory boards in our group.

Social partners, NGOs, and other organisations of these kinds will be interested in following our work. Considering they may represent relevant agents in relation to our work, we should think about including them as advisory boards in our group.

It should be important for us to take into account the interests of our stakeholders as well, since part of the success of our platform could be based on them.

## **SWOT analysis. Risks and opportunities. Mitigation actions.**

We did the SWOT analysis and the design of the mitigation actions for the risks in the Strategic Plan. This is a summary:

### **First, we will talk about our strengths:**

- 1.** We have an already established partnership, representing VET/HVET centres, businesses, and governments. Our partnership has plenty of expertise in different fields related to our intentions. We count on relevant skills and expertise and we represent different EU countries in which each of us is very well connected.
- 2.** We have already developed very innovative ideas such as the CUBE and the Collaborative Learning Factory. As far as we know, we are the first and the only international collaboration among institutions based on collaborative learning factories connecting labs from different countries with Industry 4.0 technologies.
- 3.** We are a group of practitioners, we have not been set up by a government, we represent a bottom up approach. This gives us credibility.

## **Second, there are several opportunities for us:**

- 1.** The EC is supporting the creation of these types of platforms. They have allocated a big budget for 2021-2027.
- 2.** A Platform like the one we are envisioning does not exist and will be a very useful service for VET/HVET centres and companies in AM.
- 3.** Industry is technologically evolving continuously and industry, especially the SMEs, needs help to adapt to these changes.
- 4.** Many institutions may be interested in joining the project and the platform.

## **Third, there are some weaknesses in our platform that we should try to overcome:**

- 1.** We still have a very small amount of content to publish. It reminds of the chicken-egg puzzle: the more content we have, the more people will be interested in joining; and the more people join, the more content we will have.
- 2.** We should come up with a solution for platform maintenance funding once the project is finished.
- 3.** Some partners are not committed to work or lack the necessary resources. The next project may imply more working days. Also, the partnership is quite small for such an ambitious endeavour. We should augment our partnership.
- 4.** Lack of experienced partners on building platforms from scratch.
- 5.** We have our origin in an Erasmus+ project. Some organisations will probably doubt our quality. We will need to work on building trust to attract good organisations.

## **Four, there are some threats for us:**

- 1.** The CoVE call for proposals will be very competitive. It will not be easy to have the project proposal approved for funding.
- 2.** There is also some likelihood of other institutions presenting similar projects to the same call. Projects dealing with KETs, AM, digitalisation, etc. They are all hot topics of the moment.
- 3.** We know that we will need to augment our partnership and we risk choosing wrong partners in doing so.

At this point, there are many weaknesses and threats. If we consider them, weaknesses + threats together, as risks or potential obstacles to achieving our aims, we could work on a risk management strategy for the platform.

**If we do so, we have identified eight risks that can be classified in three groups:**

- 1.** Risks related to the platform: initial funding to create the platforms, maintenance funding to create the platform, dissemination of the platform.
- 2.** Risks related to the partnership: partners without enough resources, partners lacking the needed knowledge, need to include new partners and the risk of not choosing the right ones.
- 3.** Risks related to the quality of the platform content.

**Following this classification, we can categorise our risk mitigation actions according to the relation with each group of risks:**

- 1.** Mitigation actions aimed at reducing the risks related to the platform:
  - a.** The creation of the platform will require a strong initial funding. We will look for it in the next CoVE call.
  - b.** The maintenance funding will depend on the quality of the platform content and services: if institutions see benefits, they will be happy to contribute with fees to maintain it.
  - c.** Describe a long-term plan and find sustainable funding solutions for its stages: support from the government, payment of fees by platform members, etc.
  - d.** Attract new members by means of dissemination activities. It is necessary to have high quality materials and services before doing that.
  - e.** Identify our market niche, our unique selling proposition, the things that no-one else is doing.
- 2.** Mitigation actions aimed at reducing the risks related to the partnership:
  - a.** Look for partners with experience, in building platforms and in learning factories, for the next call. It will also be important to meet the new partners with plenty of time and to discuss their capacities way before the submission of the project.

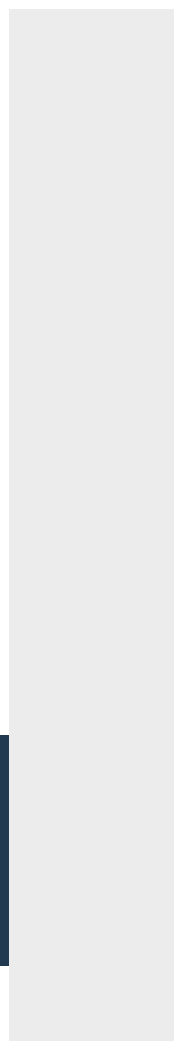


**3.** Mitigation actions aimed at reducing the risks related to the quality of the platform content:

- a.** At first, a way to have more content on our platform could be that each partner analyses what they have and to upload it to the platform.
- b.** Build digitally sophisticated tools
- c.** Continue working on use cases: more use cases, job profiles and skills (cube), CLF, description of labs, skills assessment tool, latest trends.

And, finally, regarding the actions to take advantage of our opportunities, we should think about submitting a project proposal for the next CoVE call. It is the most realistic option to get funding for the creation of a platform in VET/HVET.

However, it is important to note that we are not limiting ourselves to the restrictions of a project. The project will allow us to take the first steps, but then the initiative will be self-sustainable.



## Work plan

Work plan refers to the activities we will perform during the next year to reach our strategic objectives<sup>1</sup>:

1. Submit a project proposal to the next CoVE call.
2. Create the platform.

The activities designed for succeeding in submitting a project are:

1. To write a draft detailing the main WPs, the requirements of the next call and the types of partners we are looking for.
2. To meet with potential partners who might be interested in joining us for the next project.
3. To write the complete project proposal as a collaborative process with the new partners.
4. To submit the proposal on time.

Although the creation of the platform will require a strong funding and it could not be undertaken until the next proposal is approved, there are some actions, closely related to the previous point, that we should perform in advance:

1. Define our unique selling proposition.

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<sup>1</sup> In our Strategy, we have defined more Strategic Objectives, but we have given priority to these two objectives to focus our work during the next few months.

Together with all the work that we have done in the EXAM 4.0 project.

This actions need to be framed in time as follows:

Activity	Deadline
The project idea draft is written.	16/04/2021
The list of potentially interesting partners is created.	16/04/2021
10 meetings with 10 potential partners.	Between 16/04/2021-16/05/2021
First project draft is written.	16/05/2021
Second project draft is written.	16/06/2021
Project budget is estimated and agreed with partners.	01/06/2021
Third project draft is written.	16/07/2021
All the documents are signed.	01/08/2021
Final project draft is ready in the EACEA porta.l	01/09/2021
The proposal is submitted.	05/09/2021

## Objectives and indicators

The actions outlined above are related to the indicators outlined in the Strategic Plan:

1. The project idea draft is written.
2. The list is created.
3. 10 meetings with 10 potential partners.
4. First project draft is written.
5. Second project draft is written.
6. Project budget is estimated and agreed with partners.
7. Third project draft is written.
8. The proposal has been submitted on time.

## Technology Watch

Our activity framework includes a Technology Watch process: a systematised way of capturing, following, and sharing among partners, relevant information. In our case, the process consists of X areas that we should be paying attention to:

1. The development of the Erasmus+ programme and the call for CoVEs. Is there any relevant information?
2. Other platforms in AM: what are they doing?
3. The other CoVEs: what are they doing?
4. AM technologies: be aware of the developments.
5. Potentially interesting partners.

The Watch process will always follow the same steps:

1. Detect potentially interesting things.
2. Analyse them.
3. Share them with the rest of the partners.
4. Decide whether they are interesting or not.
5. Conduct the necessary changes in the corresponding parts of the framework.

The process will be iterative and will continuously follow the same steps.

## Learning and improvement

This is the section where we will collect all the things that did not work properly. Registering the incompliances here will allow us to manage them effectively.

## Memory

At the end of each planned period, we will write a memory. The aim of the memory is to reflect on what worked well, what did not work properly, what we should continue doing, what we should stop doing, what we should continue doing but in an improved way. The memory will be a key input for the planning of the next period.

## Section 3: Monitoring tool

The description of the framework may seem a little abstract and this is why we have created a rudimentary tool integrating all these sections. This tool will allow us to continuously apply our action framework to all of our activities.

The monitoring tool has the following parts:

- File. This part of the tool describes the Members, their Needs, expectations and requirements and the stakeholders and their needs, expectations and requirements. It also gathers the documentation used in the monitoring tool and for which activity they have been used and consulted.
- SWOT 2021 and, Identification, analysis and evaluation of risks
- Vision, mission, values and strategy
- Work plan 2021. In this part are described the Strategic objective / Action / Responsible / Documents / Chronogramme / Objectives and Indicators / Results / Degree of compliance / Evidences / Comments

The fulfillment of the work plan is represented in different colours:

-  PLANNED
-  DONE
-  CANCELLED
-  REPLANNED

- Key objectives and indicators
- Technology watch
- Meetings
- Learning and improvement
- Memory 2021

[The tool could be consulted here](#)

Our activity framework consists of the eight parts that we have just described and is made operational by means of the tool.

It is a framework in the sense that it constitutes a way of interpreting all our activities as belonging to separate chunks and it connects all of them in a systematic way. We say it is a system because a modification in one of each section will oblige us to modify other parts.

