

# D6.4. PLAN FOR THE DISSEMINATION, EXPLOITATION AND COMMUNICATION ACTIVITIES



## UP-SKILLING FOR INDUSTRY 5.0 ROLL-OUT Grant Agreement Number 101070666

Deliverable name: Plan for the Dissemination, Exploitation and  
Communication Activities  
Deliverable number: D6.4  
Deliverable type: Document/Report  
Work Package: WP6: Exploitation, Dissemination and Communication  
Lead beneficiary: KNEIA  
Contact person: Michael Hepworth – [mike@kneia.com](mailto:mike@kneia.com)  
Dissemination Level: Public  
Due date for deliverable: February 28<sup>th</sup>, 2023



Funded by the  
European Union



## DOCUMENT CONTROL PAGE

Author(s):	Michael Hepworth
Contributor(s):	Cristina Barragán / Ciro Avolio
Reviewer(s):	Ewelina Kurczynska
Version number:	v.2
Contractual delivery date:	28-02-2023
Actual delivery date:	28-03-2023
Status:	Final

## REVISION HISTORY

Version	Date	Author/Reviewer	Notes
v.0	22-11-2022	Michael Hepworth	Creation, First Draft
v.1	10-02-2023	Cristina Barragán	Comments/Ready for review
v.2	28-02-2023	Ewelina Kurzcynska	Final

## ACKNOWLEDGEMENTS

The work described in this publication was subsidised by Horizon Europe (HORIZON) framework through the Grant Agreement Number 101070666.

## DISCLAIMER

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or HADEA. Neither the European Union nor the granting authority can be held responsible for them.

## LIST OF ABBREVIATIONS

AI	Artificial Intelligence
ARU	Anglia Ruskin University
CA	Consortium Agreement
CEO	Chief Executive Officer
CFO	Chief Financial Officer
D	Deliverable
DSS	Decision Support System
EAB	External Advisory Board
EU	European Union
GA	Grant Agreement
GDPR	General Data Protection Regulation
I4.0	Industry 4.0
I5.0	Industry 5.0
IPR	Intellectual Property Rights
KER	Key Exploitable Result
KPI	Key Performance Indicator
LUN	University of Lancaster
M	Month
MDU	Mälardalen University
MITC	Mälardalen Industrial Technology Centre
PDEC	Plan for Dissemination, Exploitation & Communication
RD&I	Research, Development & Innovation
SME	Small Medium Enterprise
SWOT	Strengths, Weaknesses, Opportunities, Threats
UMIL	University of Milan

## LIST OF TABLES AND FIGURES

Table 1	Communication Strategy	Page 10
Table 2	Communication Phases	Page 11
Figure 1	Horizontal logo	Page 13
Figure 2	Vertical logo	Page 13
Table 3	Expected project exploitable outputs and impacts and stakeholder groups.	Page 17
Figure 3	Website Analytics: 11/11/2022 – 11/02/2023	Page 21
Table 4	LinkedIn Analytics: 11/11/2022 – 11/02/2023	Page 22
Table 5	Twitter Analytics: 11/11/2022 – 11/02/2023	Page 22
Table 6	Up-Skill Project Appearances on Partner and Third-Party Websites	Page 23
Table 7	Event Participation M1-M6	Page 24
Table 8	Target Groups and Dissemination Objectives	Page 25
Table 9	List of Exploitable Outputs	Page 29
Figure 4	Key Exploitable Result Form	Page 30
Table 10	SWOT analysis of DSS market	Page 32

## EXECUTIVE SUMMARY

This document is Deliverable D6.4 “Plan for the Dissemination, Exploitation and Communication Activities” as part of Work Package 6 – Exploitation, Dissemination and Communication.

The aim of this document is to provide a coherent methodology and plan for the execution of communication, dissemination, and exploitation activities throughout the life of the Up-Skill project and beyond, with the objective of maximising the visibility and impact of the research and results.

The document will be divided into three main sections:

1. **The Communication Plan** details who and how the communication strategy will be managed, the objectives, the channels to be used, materials to be produced, and how the target audiences and stakeholders will be identified and engaged with.
2. **The Dissemination Plan** maps the planned activities, in alignment with the principles of “Open Science”, that will be actioned to disseminate the project’s results to target groups and stakeholders and as wider audience as possible to lay the foundation for exploitation.
3. **The Exploitation Plan** provides a framework for how the project results and research will be managed and exploited following the project’s conclusion through an analysis of the foreseen key exploitable results and their expected application, market analysis, business model and marketing strategy.

Deliverable D6.4 “Plan for the Dissemination, Exploitation and Communication Activities” is a live document and will be revised and updated periodically in relation to project progress. The final version of this document, Deliverable D6.5, will be submitted on month 36.

## TABLE OF CONTENTS

DOCUMENT CONTROL PAGE .....	2
REVISION HISTORY .....	2
ACKNOWLEDGEMENTS.....	2
DISCLAIMER .....	2
LIST OF ABBREVIATIONS.....	3
LIST OF TABLES AND FIGURES.....	4
EXECUTIVE SUMMARY .....	5
TABLE OF CONTENTS.....	6
1. INTRODUCTION .....	8
1.1 DESCRIPTION OF THE DOCUMENT & PURSUE .....	8
1.2 WPS & TASKS RELATED WITH THE DELIVERABLE.....	8
2. COMMUNICATION PLAN.....	9
2.1 COMMUNICATION PLAN MANAGEMENT.....	9
2.2 COMMUNICATION OBJECTIVES & STRATEGY.....	9
2.3 PHASES OF THE COMMUNICATION PLAN.....	11
2.4 VISUAL IDENTITY & COMMUNICATION CHANNELS.....	12
2.4.1 BRAND IDENTITY.....	13
2.4.2 LOGO.....	13
2.4.3 TEMPLATES.....	14
2.4.4 PROJECT WEBSITE.....	14
2.4.5 SOCIAL MEDIA CHANNELS.....	14
2.4.6 PROJECT VIDEOS.....	15
2.5 COMMUNICATION MATERIALS .....	15
2.5.1 LEAFLETS, FLYERS & POSTERS.....	15
2.5.2 BROCHURES.....	16
2.5.3 NEWSLETTERS.....	16

2.5.4	INFOGRAPHICS .....	17
2.5.5	PRESENTATION MATERIALS .....	17
2.6	STAKEHOLDER ANALYSIS & TARGET AUDIENCES.....	17
2.7	CLUSTERING & NETWORKING .....	21
2.8	COMMUNICATION REPORT FOR MONTH 6.....	21
2.8.1	PROJECT WEBSITE .....	21
2.8.2	SOCIAL MEDIA CHANNELS .....	22
2.8.3	COMMUNICATION MATERIALS.....	22
2.8.4	PROJECT VIDEO 1 .....	23
2.8.5	PROJECT FEATURED BY PARTNERS & THIRD PARTIES .....	23
2.8.6	EVENT PARTICIPATION .....	24
2.9	CONCLUSIONS & NEXT STEPS.....	24
3.	DISSEMINATION PLAN .....	25
3.1	DISSEMINATION TIMELINE .....	25
3.2	TARGET GROUPS & OBJECTIVES .....	25
3.3	DISSEMINATION ACTIONS.....	26
3.3.1	CONFERENCES.....	27
3.3.2	WORKSHOPS .....	27
3.3.3	WEBINARS .....	27
3.3.4	TRADE FAIRS .....	27
3.3.5	SCIENTIFIC PUBLICATIONS.....	27
3.3.6	NON-SCIENTIFIC PUBLICATIONS, SOCIAL MEDIA & VIDEOS .....	28
3.4	CONCLUSIONS & NEXT STEPS.....	28
4.	EXPLOITATION PLAN .....	29
4.1	KEY EXPLOITABLE RESULTS .....	29
4.2	KEY EXPLOITABLE RESULTS MAPPING .....	30
4.3	IPR MANAGEMENT.....	31
4.4	MARKET CONTEXT .....	31
4.5	BUSINESS MODEL .....	32
4.6	CONCLUSIONS & NEXT STEPS.....	32
5.	REFERENCES.....	33
6.	ANNEX I.....	34

## 1. INTRODUCTION

### 1.1 DESCRIPTION OF THE DOCUMENT & PURSUE

This document, Deliverable D6.4, is the first version of the “Plan for the Dissemination, Exploitation and Communication Activities” due for submission on month 6 of the project. The document will describe the overall methodology and strategy for the implementation of communication, dissemination, and exploitation activities to maximise the impact of the research and results of the project.

Specifically, the document will summarise the communication actions performed to date and detail the communication channels, materials and methods that will be used for their continuation; provide a detailed plan for the execution of dissemination activities throughout the duration of the project; and put forward an exploitation strategy based upon the project’s expected key exploitable results, innovation management and market context.

The document will be revised and updated periodically in line with project progress and the final version will be submitted on month 36 as Deliverable D6.5.

### 1.2 WPS & TASKS RELATED WITH THE DELIVERABLE

Deliverable D6.4 forms part of Work Package 6 – Exploitation, Dissemination and Communication. This document is related to all tasks contained in Work Package 6 – Task 6.1 Communication Activities; Task 6.2 Dissemination Activities; Task 6.3 Exploitation of Results, IPR and Business Model; Task 6.4 Clustering and Networking Activities; and Task 6.5 Stakeholder Analysis and Engagement.

“The Plan for the Dissemination, Exploitation and Communication Activities” provides the methodology and strategy for all the tasks in Work Package 6 to be executed throughout the duration of the project and beyond.



## 2. COMMUNICATION PLAN

### 2.1 COMMUNICATION PLAN MANAGEMENT

The communication plan is defined by KNEIA, who will also be responsible for reviewing and updating the plan and the accurate reporting of all communication actions, with the support of the whole consortium.

Communication management will be discussed regularly with partners during project meetings and internal procedures will be established to ensure the flow of information between consortium members which will lead to regular, accurate and up to date project progress being communicated.

Each consortium member is entitled to perform communication activities, according to their own interests in terms of dissemination and stakeholder engagement, within the framework established by the Grant Agreement and the Consortium Agreement.

### 2.2 COMMUNICATION OBJECTIVES & STRATEGY

The objective of the communication strategy is to maximise the visibility and impact of the project's research and results to both targeted stakeholders and a general audience, and to translate this information into accurate, understandable messages that effectively communicate the benefits and impacts of the project to both individual entities and wider society.

The main purposes of the communication plan have been defined in the Grant Agreement as follows:

- Identify and engage with stakeholders.
- To make better use of the results by making sure they are taken up by decision-makers to influence policymaking, and by industry and the scientific community to ensure a follow-up to the development of the technology.
- To show how the outcomes are relevant to people's everyday lives by creating jobs, introducing novel technologies, or making people's lives more comfortable in other ways.
- To show how European collaboration has achieved more than would have otherwise been possible, notably in achieving scientific excellence, contributing to competitiveness, and solving societal challenges.
- Conduct a dissemination impact analysis at the end of the project based upon the responses gained from the target groups.

An essential part of the communication strategy to achieve maximum impact is establishing a clear understanding of who, in some way, will be impacted by the project's research, what outcomes wish to be achieved when communicating information about the project to specific audiences, what messages will be used to accomplish them, and what communication channels and methods are most appropriate to convey these messages.

Table 1 below serves as a preliminary framework for the communication strategy by detailing the audience groups, desired outcomes, messages, and channels. This strategy will be updated periodically based upon project progress and consultations with the Up-Skill consortium. In addition, it will serve as guidance for the stakeholder analysis, details of which can be found in

Section 1.5 of this document, where methods for the identification of subsectors and individual entities that will be impacted or have a potential interest in the project from the target audience groups specified in Table 1 below will be detailed.

*Table 1. Communication Strategy*

Target Audiences	Communication Outcomes	Messages	Channels & Methods
<b>Academia &amp; Research</b>	<ul style="list-style-type: none"> <li>• Knowledge transfer</li> <li>• Collaborate &amp; explore synergies to maximise impact</li> <li>• Opportunities for future research projects</li> </ul>	<ul style="list-style-type: none"> <li>• Project progress</li> <li>• Research methods</li> <li>• Innovations &amp; discoveries</li> </ul>	<ul style="list-style-type: none"> <li>• Website</li> <li>• Social media</li> <li>• Email list (Newsletter)</li> <li>• Deliverables</li> <li>• Publications</li> <li>• Events</li> </ul>
<b>Industry</b>	<ul style="list-style-type: none"> <li>• Inform about project concepts &amp; EU initiatives</li> <li>• Project objectives</li> <li>• Demonstrate impacts &amp; benefits for profitability, resiliency &amp; sustainability</li> </ul>	<ul style="list-style-type: none"> <li>• I5.0 Concept</li> <li>• Up-Skill Platform</li> <li>• Training &amp; upskilling</li> <li>• Technology integration</li> </ul>	<ul style="list-style-type: none"> <li>• Website</li> <li>• Social media</li> <li>• Print &amp; digital media</li> <li>• Email list (Newsletter)</li> <li>• Publications</li> <li>• Events</li> <li>• Brochures</li> </ul>
<b>Government &amp; Policymakers</b>	<ul style="list-style-type: none"> <li>• Inform about project concepts related to EU policies &amp; initiatives</li> <li>• Inform about expected impacts related to future EU policies &amp; initiatives</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate potential impact of project to reach future goals</li> <li>• Policy evolution based on potential impact</li> </ul>	<ul style="list-style-type: none"> <li>• Website</li> <li>• Social media</li> <li>• Email list (Newsletter)</li> <li>• Publications</li> <li>• EU policy and initiative events</li> </ul>
<b>Civil Society</b>	<ul style="list-style-type: none"> <li>• Inform about project concepts related to EU policies &amp; initiatives</li> <li>• Inform about project benefits to societal wellbeing &amp; development</li> </ul>	<ul style="list-style-type: none"> <li>• Cultural preservation</li> <li>• Upskilling &amp; maintenance of skilled work</li> <li>• Impact on employment &amp; wider society</li> </ul>	<ul style="list-style-type: none"> <li>• Website</li> <li>• Social media</li> <li>• Print &amp; digital media</li> <li>• Email list (Newsletter)</li> <li>• Publications</li> <li>• Events</li> <li>• Brochures, flyers, leaflets</li> </ul>

			etc.
<b>General Public</b>	<ul style="list-style-type: none"> <li>Educate about I4.0 and I5.0 concepts</li> <li>Educate about project concepts, objectives &amp; potential impacts</li> <li>Create contexts which are relatable to everyday lives &amp; how they will be affected</li> </ul>	<ul style="list-style-type: none"> <li>Future of work</li> <li>Upskilling &amp; maintenance of skilled work</li> <li>Digital technologies</li> <li>Sustainability &amp; resilience of industry and jobs</li> </ul>	<ul style="list-style-type: none"> <li>Website</li> <li>Social media</li> <li>Print &amp; digital media</li> <li>Flyers, leaflets, posters</li> <li>Infographics</li> </ul>

### 2.3 PHASES OF THE COMMUNICATION PLAN

Table 1: *Communication Strategy*, in Section 2.2 of this document, details the overall strategy towards identifying and effectively engaging with target and general audiences to communicate information about the project and will evolve organically as the project develops.

Therefore, it is necessary to identify specific timeframes and the objectives and tools that are deemed to be most effective based upon the foreseen timeline of project development and results, so that the interest of target groups, stakeholders and end-users is captured as soon as possible and maintained throughout the project’s duration.

The demarcation of the communication phases can be rationalised as follows:

- Phase 1 - **Awareness**: ensure that the project’s objectives and expected impacts and results are known by targeted stakeholders.
- Phase 2 – **Understanding**: foster a clear understanding of the project’s evolution and expected results and how they could impact and benefit the targeted stakeholders.
- Phase 3 – **Achievement**: ensure the transfer of the technologies, research methods and services developed by the project.

Table 2 below provides a breakdown of the communication phases and the needs, objectives, and methods within them, that are predicted to attain the most impact based upon the timeline of the project.

Table 2. *Communication Phases*

Methods & Objectives	Initial Awareness Phase M1-M12	Targeted Awareness “Understanding” Phase M13-M24	Full Awareness “Achievement” Phase M25-M36	Awareness After Project Completion
<b>Communication Needs</b>	Create project visual identity, develop main dissemination tools, and identify initial dissemination opportunities	Communication activities that increase awareness about Up-Skill technologies	Communication activities that keep end users informed and increase uptake potential	Dissemination activities that promote the project for further exploitation

<p><b>Communication Objectives</b></p>	<ul style="list-style-type: none"> <li>• Raise awareness.</li> <li>• Inform about Up-Skill actions to stimulate the interest of the full range of potential end users to ensure maximum exploitation of the developed foregrounds</li> </ul>	<ul style="list-style-type: none"> <li>• Increase and maintain awareness (including objectives &amp; expected impact)</li> <li>• Keep interested potential end users informed on the latest developments of the project</li> </ul>	<ul style="list-style-type: none"> <li>• Increase intensity of awareness by having more promotional activities to target end users</li> <li>• Lobby with policy makers and public influencers about potential of Up-Skill results and their impact on the public and environment</li> </ul>	<ul style="list-style-type: none"> <li>• Effective exploitation</li> <li>• Incorporation of Up-Skill technologies into best practices for the relevant industry</li> </ul>
<p><b>Communication Channels, Tools &amp; Measures</b></p>	<ul style="list-style-type: none"> <li>• Project website, project logo, posters, leaflets, presentations and poster templates</li> <li>• Use of social media (LinkedIn, Twitter, etc)</li> <li>• Participation and organisation of conferences and/or workshops</li> <li>• PDEC definition</li> </ul>	<ul style="list-style-type: none"> <li>• Update PDEC by M18</li> <li>• Identify target audiences</li> <li>• Keep project website up to date with new developments</li> <li>• Workshops, events, and conferences</li> <li>• Press releases and newsletters</li> <li>• Advertisements and promotional films on social media</li> <li>• Cross-communication with the activities of other organizations</li> <li>• Open access publications according to requirements (8 publications)</li> <li>• Presentations at conferences (at least 10)</li> </ul>	<ul style="list-style-type: none"> <li>• Update and submission of D6.5 PDEC by M36</li> <li>• Keep project website up to date with new developments</li> <li>• Workshops, events, and conferences</li> <li>• Press releases and newsletters</li> <li>• Advertisements and promotional films on social media</li> <li>• Cross-dissemination with the activities of other organisations</li> <li>• Site tours to relevant facilities</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure project website is live and updated after project completion</li> <li>• Continuation of promotional videos</li> <li>• Materials in social media</li> <li>• Continue site tours to relevant facilities with the combination of workshops</li> </ul>

## 2.4 VISUAL IDENTITY & COMMUNICATION CHANNELS

The creation of the Up-Skill brand identity, which will appear on all the project’s communication channels and project pages, is an important aspect of the communication strategy. Continuity of use of the project logo, colours and graphics in all communication and dissemination activities establishes familiarity and gains the trust of targeted and general audiences with an aim to maximise interest and a following of the project’s research and intended impact.

#### 2.4.1 BRAND IDENTITY

KNEIA has produced an Up-Skill Identity Manual for internal use by consortium members. The manual contains the horizontal and vertical project logo, colour scheme, and style of graphics that will be used on the project's communication channels and will allow the continuity of the brand identity on all communication and dissemination activities.

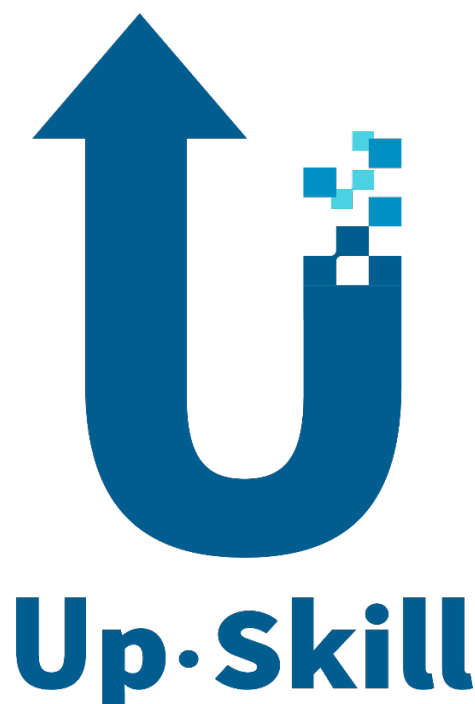
#### 2.4.2 LOGO

The Up-Skill logo has been produced in both a horizontal and vertical format with transparent background and contains the project acronym and graphics on the letter "U" representing "Up-Skilling" and "Digital Technology".

*Figure 1. Horizontal Up-Skill logo.*



*Figure 2. Vertical Up-Skill logo.*



### 2.4.3 TEMPLATES

Document templates have been produced by KNEIA for internal use by the project consortium which include:

- General document
- Deliverable template
- Meeting agenda
- Meeting minutes
- Signature sheet
- PowerPoint presentation

### 2.4.4 PROJECT WEBSITE

The Up-Skill public project website went online on November 11<sup>th</sup>, 2022, fulfilling deliverable D6.1 and a document was produced detailing the rationale and technical aspects of the website which has been submitted to the European Commission as a form of additional verification.

The website can be accessed at <https://www.upskill-horizon.eu/> and will act as the focal point for all the project's communication and dissemination activities with updates on the project's progress and industry related news, access to public deliverables and print materials, related events, links to the project's social media channels and a contact form.

### 2.4.5 SOCIAL MEDIA CHANNELS

The use of social media is viewed as a valuable way to communicate the general concepts of the project, project progress and the expected impacts and benefits to industry and a general audience, and direct traffic to the Up-Skill website where more detailed and nuanced information will be provided about the project and the Industry 4.0 and Industry 5.0 concepts.

Social media channels can also act as an effective means of engaging with relevant stakeholders and fostering "communities of support". The channels deemed most effective for achieving this are LinkedIn and Twitter. YouTube will act as a repository for project videos which will also be published on the website and publicised on social media channels.

The project will create interest on social media and digital platforms by using visual media, videos, animations, icons, and info-graphic imagery which will be linked to more detailed content on the project website.

Up-Skill LinkedIn, Twitter and YouTube accounts have been set up using the same logos, colours and graphics as the website to ensure the continuity of brand identity. The social media accounts can be accessed at:

LinkedIn: [Up-Skill Project: Overview | LinkedIn](#)

Twitter: [UPSKILL\\_HORIZON \(@UPSKILL\\_HORIZON\) / Twitter](#)

YouTube: [Up Skill - YouTube](#)

## 2.4.6 PROJECT VIDEOS

As fulfilment of deliverables D6.2 and D6.3, two project videos will be produced. The first video, due for submission at month 6, will provide historical and conceptual context to Industry 4.0 and 5.0 and how the Up-Skill project fits in with these concepts. The video will also provide a general overview of the project's methods, objectives and expected impacts. The video is designed to provide context to general audiences to enhance the understanding of why the project is needed and why the research is of value. This will be followed by numerous other shorter videos throughout the project's duration that will provide more specific details of the project's methods, case studies, objectives and expected impacts, along with related concepts such as Industry 4.0 and 5.0, building upon the story of the first video, and concluding with D6.3 Project Video 2.

The second video, due for submission at month 36, will place far more emphasis on the project's methods, achievements, discoveries, and results, and how these will affect the integration of emerging technologies in industry and manufacturing and their impact upon wider society. It is foreseen that some of the partners could provide footage from the case studies, but most video footage will be captured by KNEIA via trips to partner locations.

From January 11<sup>th</sup> – 14<sup>th</sup> 2023, KNEIA travelled to Eskilstuna, Sweden to collect footage from Up-Skill partners MDU, MITC and Helekopter (Ztift) which has provided most of the content for D6.2 Project Video 1 and will also lead to numerous other videos being produced.

The videos will be made available online to the public via the Up-Skill YouTube channel and the "Public Deliverables" and "Multimedia Gallery" pages on the Up-Skill website.

## 2.5 COMMUNICATION MATERIALS

Communication materials will play an important role in the Up-Skill communication strategy, not just by providing audiences, stakeholders and media outlets with downloadable and printable materials detailing specific aspects of the project and their potential impacts, but also by providing the Up-Skill partners materials that can be used at communication and dissemination events. Most communication materials will be published in English, Swedish and Italian.

The Grant Agreement details the KPIs for the creation of communication materials which serves as framework for what materials will be produced and when. The KPIs are:

- Presentation material: a PowerPoint, a poster, and a Word document.
- 8 newsletters, (1 every 6 months).
- 3 flyers outlining different aspects of the project (technology developments, future of work, Industrious Modernity).
- 1 brochure (updated each year – 3 versions in total translated into English, Swedish and Italian).
- 1 timeline infographic.

### 2.5.1 LEAFLETS, FLYERS & POSTERS

Leaflets, flyers, and posters will be used for both online communication activities and consortium participation in conferences, events, workshops etc. The first leaflets have been produced in English, Italian and Swedish and are available on the Up-Skill website at <https://www.upskill->

[horizon.eu/resources](https://horizon.eu/resources). The leaflet provides an overview of the project's funding information, consortium, social media and contact details, research focus, objectives and expected impacts. As specified in the Grant Agreement, 3 flyers and 1 poster will be produced detailing what the project partners deem to be the most appropriate core aspects to be communicated to target and general audiences. However, it is probable that customised materials will also be produced that are geared towards specific events that the consortium members attend.

## 2.5.2 BROCHURES

Whilst leaflets, flyers and posters are designed to educate and inform and provide a general overview of the project to audiences, brochures provide more in-depth details with a particular focus on the project's objectives, benefits and expected impacts to industry, wider society, and policymakers.

The Grant Agreement states that 1 brochure will be produced and updated each year. The preliminary schedule and topics for the brochures are as follows:

- **Brochure 1:** Overview of project objectives and expected impacts (M12)
- **Brochure 2:** Project developments related to expected impacts (M24)
- **Brochure 3:** Project results and expected impacts on industry, society and EU policies and initiatives (M36)

## 2.5.3 NEWSLETTERS

Newsletters will play an important role in periodically communicating project progress and related news to more targeted audiences identified through the stakeholder analysis to be conducted as part of Task 6.5, of which more details will be provided in Section 1.5 of this document.

The Grant Agreement states that, in total, 8 newsletters will be produced, 1 every 6 months. However, it has been decided that the first newsletter will be published around month 12 of the project, and every 6 months thereafter, in order to make sure we avoid the publication of initial newsletters that do not provide significant value based upon the materials being produced within the first six months of the project (such as the website and its first updates, and the first video). This allows time for the project to progress sufficiently enough to provide more detailed and engaging content for the first newsletter.

The preliminary schedule and topics for the newsletters are as follows:

- **Newsletter 1:** Overview of project concepts, progress, and objectives, related EU projects (M12)
- **Newsletter 2:** Project progress, case study updates, participation in events, related EU projects (M18)
- **Newsletter 3:** Project progress, case study updates, participation in events, related EU projects (M24)
- **Newsletter 4:** Project progress, preliminary results, publications, participation in events, related EU projects (M30)
- **Newsletter 5:** Project conclusion, overview of progress, dissemination of results and expected impacts, related EU projects (M36)



### 2.5.4 INFOGRAPHICS

Infographics are useful visual tools for communicating project concepts to general audiences via the website and social media channels. Infographics are already being used on the website to communicate basic information about the project and the details and progress of each work package. The infographics can be viewed at <https://www.upskill-horizon.eu/about-upskill>.

As stated in the Grant Agreement, 1 timeline infographic will be produced, providing a basic idea of the project’s workflow and research. However, as mentioned previously, it is foreseen that these types of digital materials will be used frequently on the website and social media channels to communicate project and Industry 4.0 and 5.0 concepts.

### 2.5.5 PRESENTATION MATERIALS

As previously stated, digital and print materials will also be utilised by consortium members to assist with communication and dissemination activities. A PowerPoint presentation and Word document will be made available to the Up-Skill partners to be used as and when needed.

## 2.6 STAKEHOLDER ANALYSIS & TARGET AUDIENCES

Conducting a stakeholder analysis in the first 12 months of the project is vital to ensuring a structured, targeted and coherent communication strategy that will engage relevant actors and garner their interest and support for the project’s research and expected impacts and establish a foundation for the dissemination and exploitation of results.

A good place to start a stakeholder analysis is the foreseen exploitable outputs and impacts of the project. A preliminary list of exploitable outputs and impacts have been specified in the GA and compiled in Table 2 below along with an initial breakdown of stakeholder groups.

*Table 3. Expected project exploitable outputs and impacts and stakeholder groups.*

Exploitable Outputs	Potential Users	User Subgroups
<p><b>Creation of scientific data</b></p> <p><b>Up-Skill Platform and Decision Support System</b></p>	<ul style="list-style-type: none"> <li>• Academia &amp; research institutions</li> <li>• Industry &amp; manufacturing</li> <li>• Policymakers</li> </ul>	<ul style="list-style-type: none"> <li>• Basic &amp; applied researchers</li> <li>• Universities</li> <li>• R, D&amp;I</li> <li>• EU funded projects</li> <li>• CEOs and CFOs of major industry and manufacturing organisations</li> <li>• Engineers</li> <li>• Developers</li> <li>• Policymakers at national level</li> <li>• Policymakers at EU level</li> <li>• Related EU networks and</li> </ul>

		associations
<b>Reports &amp; deliverables</b>	<ul style="list-style-type: none"> <li>Academia &amp; research institutions</li> </ul>	<ul style="list-style-type: none"> <li>Basic &amp; applied researchers</li> <li>Universities</li> <li>R, D&amp;I</li> <li>EU funded projects</li> </ul>
<b>Report on cost analysis &amp; positioning of the technology</b>	<ul style="list-style-type: none"> <li>Policy makers</li> <li>Industry &amp; manufacturing</li> </ul>	<ul style="list-style-type: none"> <li>Policy makers at national level</li> <li>Policy makers at EU level</li> <li>Related EU networks and associations</li> <li>CEOs and CFOs of major industry and manufacturing organisations</li> <li>Engineers</li> <li>Managers</li> </ul>
<b>Expected Impacts</b>	<b>Stakeholder groups</b>	<b>Stakeholder Subgroups</b>
<b>Quantified, predictive approach to the implementation of Industry 4.0 principles within manufacturing industry</b>	<ul style="list-style-type: none"> <li>Industry &amp; manufacturing</li> <li>Academia &amp; research institutions</li> <li>Policy makers</li> </ul>	<ul style="list-style-type: none"> <li>CEOs</li> <li>Engineers</li> <li>Developers</li> <li>Managers</li> <li>Basic &amp; applied researchers</li> <li>Universities</li> <li>R, D&amp;I</li> <li>EU funded projects</li> <li>Policy makers at national level</li> <li>Policy makers at EU level</li> <li>Related EU networks and associations</li> </ul>
<b>Cost savings, quality of output, improved productivity &amp; waste reduction</b>	<ul style="list-style-type: none"> <li>Industry &amp; manufacturing</li> </ul>	<ul style="list-style-type: none"> <li>CEOs &amp; CFOs</li> <li>Engineers</li> <li>Managers</li> </ul>
<b>Longevity of demand for skilled labour/craft skills</b>	<ul style="list-style-type: none"> <li>Industry &amp; manufacturing</li> <li>Policy makers</li> <li>Civil society</li> </ul>	<ul style="list-style-type: none"> <li>CEOs</li> <li>Engineers</li> <li>Managers</li> <li>Policy makers at national level</li> <li>Policy makers at EU level</li> </ul>

		<ul style="list-style-type: none"> <li>• Related EU networks and associations</li> <li>• Labour organisations</li> <li>• Cultural heritage organisations</li> </ul>
<b>Advancing the knowledge on future skills requirements</b>	<ul style="list-style-type: none"> <li>• Policymakers</li> <li>• Industry &amp; manufacturing</li> <li>• Academia &amp; research institutions</li> <li>• Civil society</li> </ul>	<ul style="list-style-type: none"> <li>• Policymakers at national level</li> <li>• Policymakers at EU level</li> <li>• Related EU networks and associations</li> <li>• Engineers</li> <li>• Managers</li> <li>• Basic &amp; applied researchers</li> <li>• Universities</li> <li>• R, D&amp;I</li> <li>• EU funded projects</li> <li>• Labour organisations</li> <li>• Lifelong learning &amp; vocational training institutions</li> </ul>
<b>Establishing a new methodology for reviewing, interpreting and describing the emerging field of human/technology interfaces created by I4.0</b>	<ul style="list-style-type: none"> <li>• Academia &amp; research institutions</li> </ul>	<ul style="list-style-type: none"> <li>• Basic &amp; applied researchers</li> <li>• Universities</li> <li>• R, D&amp;I</li> <li>• EU funded projects</li> </ul>
<b>Enabling ongoing manufacturing of products where skills are at risk</b>	<ul style="list-style-type: none"> <li>• Industry &amp; manufacturing</li> </ul>	<ul style="list-style-type: none"> <li>• CEOs</li> <li>• Engineers</li> <li>• Managers</li> </ul>
<b>Improving the utilisation, efficiency of highly skilled workers</b>	<ul style="list-style-type: none"> <li>• Industry &amp; manufacturing</li> <li>• Policymakers</li> </ul>	<ul style="list-style-type: none"> <li>• CEOs &amp; CFOs</li> <li>• Engineers</li> <li>• Developers</li> <li>• Managers</li> <li>• Policymakers at national level</li> <li>• Policymakers at EU level</li> <li>• Related EU networks and associations</li> </ul>
<b>Preserving innovation capabilities</b>	<ul style="list-style-type: none"> <li>• Industry &amp; manufacturing</li> </ul>	<ul style="list-style-type: none"> <li>• CEOs</li> </ul>

	<ul style="list-style-type: none"> <li>• Policymakers</li> </ul>	<ul style="list-style-type: none"> <li>• Engineers</li> <li>• Managers</li> <li>• Policymakers at national level</li> <li>• Policymakers at EU level</li> <li>• Related EU networks and associations</li> </ul>
<p><b>Establishing training programmes to meet identified future needs &amp; enhancing and growing opportunities for decent work</b></p>	<ul style="list-style-type: none"> <li>• Civil society</li> <li>• Policymakers</li> <li>• Industry &amp; manufacturing</li> </ul>	<ul style="list-style-type: none"> <li>• Labour organisations</li> <li>• Lifelong learning &amp; vocational training institutions</li> <li>• Policymakers at national level</li> <li>• Policymakers at EU level</li> <li>• Related EU networks and associations</li> <li>• Engineers</li> <li>• Managers</li> </ul>
<p><b>Preserves traditions and cultural heritage &amp; increased ease of repair and retention of cultural heritage</b></p>	<ul style="list-style-type: none"> <li>• Civil society</li> <li>• Policymakers</li> </ul>	<ul style="list-style-type: none"> <li>• Labour organisations</li> <li>• Cultural heritage organisations</li> <li>• Policymakers at national level</li> <li>• Policymakers at EU level</li> <li>• Related EU networks and associations</li> </ul>

The above table is non-exhaustive but does provide a starting point for future investigation and identification of the most important stakeholders related to the foreseen KERs and impacts of the project. Once the target stakeholder groups have been adequately defined, activities will focus on identifying the most relevant organisations. This, in part, will be done through:

- Cordis database searches
- Online research
- Consultation with consortium members (particularly TWI)
- Literature reviews

After a sufficient number of organisations have been identified, a process of engagement will begin via social media and direct email communications using the messages, channels and materials specified in the communication strategy, and an online survey will be conducted to gauge the stakeholder's interests, expectations and position towards the project's predicted results and impacts. Once this information has been collected, more refined and targeted engagement strategies will be discussed with consortium members and actioned appropriately.

## 2.7 CLUSTERING & NETWORKING

The stakeholder analysis will also aid towards the identification of related EU funded projects, associations, and networks at both national and EU level with an aim to facilitate knowledge interchange and reuse between previous and future projects. A close interaction with other proposals under the same or relevant topics will be ensured and a “Related Projects” page will be added to the Up-Skill website.

A dedicated “Related EU Funded Projects” section will be published in the Up-Skill newsletter and the cooperation and the promotion of communication activities between projects will be sought via the creation of joint communication materials and publications on project websites and social media channels.

Two workshops will be organised with the networked projects to foster the exchange of non-sensitive information, and two dissemination events will be held to help maximise the visibility and impact of all projects involved.

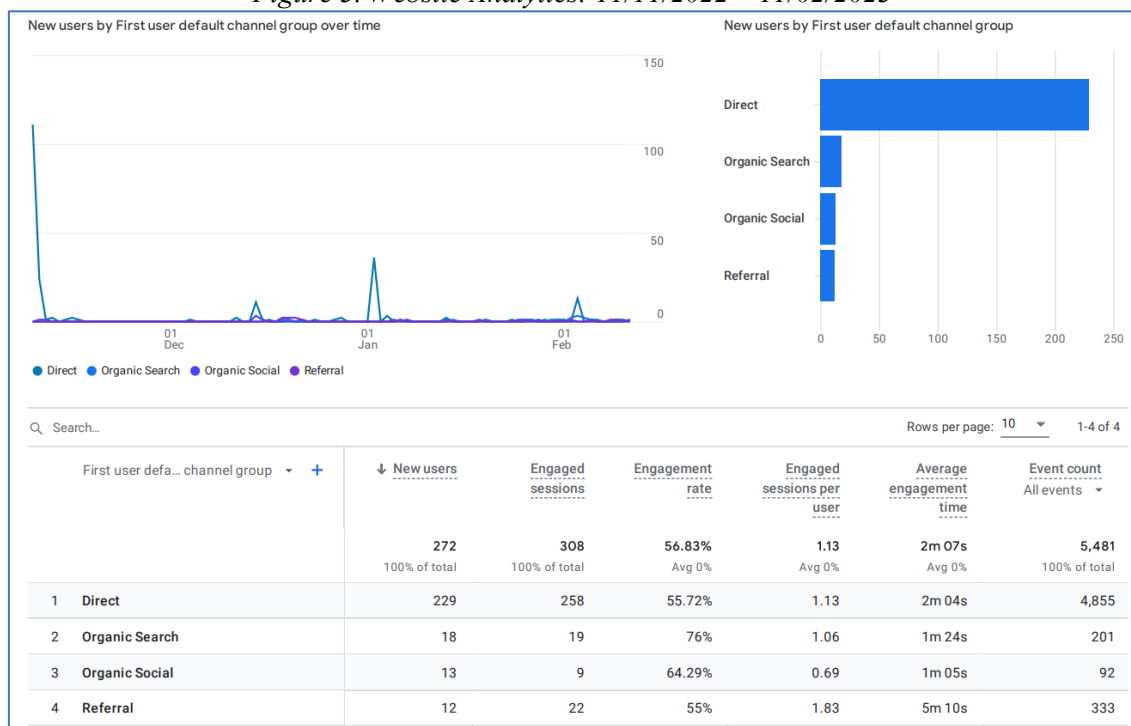
## 2.8 COMMUNICATION REPORT FOR MONTH 6

This section summarises all the communication activities performed within the first 6 months of the project and the performance analytics of the Up-Skill website and social media channels.

### 2.8.1 PROJECT WEBSITE

The Up-Skill project website went online on November 11<sup>th</sup>, 2022, and the performance of the website is being monitored using Google Analytics. Figure 1 below provides an overview of the website performance through tracking when and how many users accessed the website and through what channel, the number of engaged sessions, average time per session etc. The data was taken from the first full 3 months of the website’s release date.

Figure 3. Website Analytics: 11/11/2022 – 11/02/2023



There has been a total of 272 users within the first 3 months of the website going live (M6 of the project) and most users have accessed through the website domain directly. It is expected that visitors to the website through organic searches (search engine) and organic social (links from social media networks) will increase noticeably over the next 12-month period due to search engine optimisation and an increased following on social media.

## 2.8.2 SOCIAL MEDIA CHANNELS

The Up-Skill social media channels were timed to become active the same day as the website on November 11<sup>th</sup>, 2022. The analytics below are taken from the first full 3 months of the channels' release date.

The Up-Skill LinkedIn account can be accessed at [Up-Skill Project: Overview | LinkedIn](#) and the main indicators of the channel's performance are summarised in Table 3 below. No significant recruitment of followers and engagement with stakeholders has been conducted up to this point, therefore, the indicators below represent the organic growth of the channel via posts appearing on LinkedIn member feeds. Following the completion of the first stakeholder analysis, the active engagement of stakeholders on LinkedIn will begin.

*Table 4. LinkedIn Analytics: 11/11/2022 – 11/02/2023*

Channel	Indicators	Status
LinkedIn	No. of Followers	56
	No. of Impressions	4173
	No. of Page Views	86

The Up-Skill Twitter account can be accessed at [UPSKILL HORIZON \(@UPSKILL\\_HORIZON\) / Twitter](#) and the main indicators of the channel's performance are summarised in Table 4 below. As with LinkedIn, no significant recruitment of followers and engagement with stakeholders has been conducted up to this point. However, Twitter will act more as method to direct users to the Up-Skill website or promote related HaDEA or Industry 5.0 news rather than a tool for stakeholder engagement.

*Table 5. Twitter Analytics: 11/11/2022 – 11/02/2023*

Channel	Indicators	Status
Twitter	No. of Followers	11
	No. of Impressions	455
	No. of profile Visits	2585

The Up-Skill YouTube channel can be accessed at [Up Skill - YouTube](#) however, no videos have been uploaded, therefore, there is no analytic data to provide at present. The first Up-Skill project video 1, as deliverable D6.2, will be uploaded to the channel following its submission no later than February 28<sup>th</sup>, 2023.

## 2.8.3 COMMUNICATION MATERIALS

The Up-Skill project leaflet has been published in English, Italian and Swedish and can be accessed at <https://www.upskill-horizon.eu/resources>. The leaflet details the project funding, consortium, research focus and objectives and expected impacts, and provides email contacts and

social media channel addresses. An example of the English version can be found in Annex I of this document.

## 2.8.4 PROJECT VIDEO 1

The project video, as deliverable D6.2, will be submitted, along with this document, no later than February 28<sup>th</sup>, 2023 and will be available to view on the Up-Skill YouTube channel ([Up Skill - YouTube](#)) and on the Up-Skill website (<https://www.upskill-horizon.eu/deliverables>). A new “Multimedia Gallery” page will be added to the website which will host all videos produced by the project and the video will be publicised on all project social media channels.

## 2.8.5 PROJECT FEATURED BY PARTNERS & THIRD PARTIES

This section details the communication activities that have appeared on partner or third-party websites within the first 6 months of the project. Screenshots of the activities are available in Annex I of this document.

*Table 6. Up-Skill Project Appearances on Partner and Third-Party Websites*

Title	Partner / Website	Link	Date Published
MITC is partner in a new EU project, Up-Skill for Industry 5.0	MITC	<a href="#">MITC is partner in a new EU project, Up-Skill for Industry 5.0 - MITC</a>	14/06/2022
<b>Industria 5.0 – Un progetto per comprendere come le nuove tecnologie riconfigurano le competenze nel mondo del lavoro</b>	UMIL	<a href="#">Industria 5.0 – Un progetto per comprendere come le nuove tecnologie riconfigurano le competenze nel mondo del lavoro   Dipartimento di Economia management e metodi quantitativi - DEMM (unimi.it)</a>	04/10/2022
Up-Skill for Industry 5.0	MITC	<a href="#">Up-Skill for Industry 5.0 - MITC</a>	October 2022
Up-Skill Project – Upskilling for Industry 5.0 Roll-Out	KNEIA	<a href="#">UPS·KILL Project - Kneia</a>	25/10/2022
Up-Skill Horizon Europe	Zenodo	<a href="#">Up-Skill HorizonEurope   Zenodo</a>	26/10/2022
MITC is a part of the EU project Up-Skilling for Industry 5.0 Roll-Out	MITC	<a href="#">MITC is a part of the EU project Up-Skilling for Industry 5.0 Roll-Out - MITC</a>	07/11/2022
Up-Skill: Upskilling for Industry 5.0 Roll-Out	ARU	<a href="#">Up-Skill: Up-Skilling for Industry 5.0 Roll-Out - ARU</a>	13/12/2022
Introducing the Up-Skill Project	TWI	<a href="#">Introducing the Up-Skill Project - TWI (twi-global.com)</a>	16/12/2022
TWI Innovation Centres Commence Work on the Up-Skill Project	TWI	<a href="#">TWI Innovation Centres Commence Work on the Up-Skill Project - TWI Innovation Network</a>	19/12/2023

## 2.8.6 EVENT PARTICIPATION

Within the first 6 months, the Up-Skill project was presented at 2 events detailed below. There are no longer links to the events online, however, the agendas of both events are listed in Annex I of this document.

*Table 7. Event Participation M1-M6*

Organiser	Title of Event	Participants	Title of Presentation	Date	Location
TWI	TWI Digital Manufacturing Conference	Chris Ivory (MDU)	Industry 5.0: Skills & Competitiveness	01/12/2022	Hybrid – Cambridge, UK & Online
BRIDGES 5.0 Project	BRIDGES 5.0 Project Kick-Off Meeting	Chris Ivory (MDU)	The Up-Skill Project	26/01/2023	Brussels, Belgium

## 2.9 CONCLUSIONS & NEXT STEPS

The communication activities for the first 6 months of the project have been focused on the creation of communication channels (website, social media) and producing content, both on Up-Skill and partner channels, to gain interest and inform a general audience about the project and the objectives and expected impacts.

6 articles have been published on the Up-Skill website informing audiences about the project and Industry 4.0 and 5.0 concepts, all of which have been publicised on social media, and a downloadable, printable project leaflet has been produced in English, Italian and Swedish which are accessible on the Up-Skill website.

KNEIA travelled to Sweden to collect footage for D6.2 Project Video 1, which will be submitted no later than February 28<sup>th</sup>, 2023, and enough footage was collected through interviews with researchers from MDU and MITC and filming on-site at Helekopter (Ztift) to produce numerous other shorter videos to inform audiences about the project’s research and objectives.

Templates for internal use by the consortium have been produced and internal communication procedures established to ensure the communication flow required to produce accurate, up-to-date content for the Up-Skill website, social media channels and third-party publications.

Over the next 6 months, the aim is to expand the reach of the project by:

- **Website updates:** system upgrades, new “Related Projects” and Multimedia Gallery” pages, upload public deliverables, new articles on project developments and related news.
- **Communication materials:** poster, brochure, newsletter, infographics.
- **Stakeholder analysis:** complete preliminary stakeholder mapping and begin engagement.
- **Networking:** engage with related EU projects and stakeholders.



### 3. DISSEMINATION PLAN

The Dissemination Plan details what actions need to be taken to ensure that the project’s results are effectively disseminated to target and general audiences within specific timeframes, with a clear rationale and structure, and utilising the appropriate channels and messages that maximise the interest and uptake of the results and enable an environment that will facilitate the exploitation of the research and results once IPR have been protected.

The GA specifies that the focus of dissemination will be:

- Creating awareness of the project potential through dissemination of the results obtained from the WPs.
- Performing dissemination of success stories related to the innovative developments within the project.
- Making the scientific community, stakeholders, and decision makers aware of the potential uses of the innovative approach to the assessment of the value of human capital developed in the project.
- Convincing end users about the added value of the technology.
- Collecting feedback from the future end users and early adopters.
- Creating the basis for the exploitation of the results that will be obtained.

#### 3.1 DISSEMINATION TIMELINE

Coherently with the evolvement of the project, dissemination activities will start at the end of phase 2 of the communication plan (“Understanding” phase, M12 to M24), and phase 3 (“Achievement”, M25 to M36).

#### 3.2 TARGET GROUPS & OBJECTIVES

Table 8 below details the dissemination target groups and objectives. As part of Task 6.5, *Stakeholder Analysis and Engagement* and the execution of the dissemination strategy, stakeholders will be identified who are deemed to be affected by, have a direct interest in, or a hold a position to the results and expected impacts of the project. They will then be engaged, with specific objectives in mind, using content and channels identified as being the most effective in communicating the results of the project.

Table 8. Target Groups and Dissemination Objectives

Target Audiences & User Groups	Description & Rationale	Objectives	Content & Channels
<b>Academic &amp; Research Communities</b>	This group targets all research communities interested in the project’s deliverables, research developments, results and innovation which can benefit their research activities. Innovative contributions of the project are particularly interesting for researchers.	<ul style="list-style-type: none"> <li>• Knowledge transfer</li> </ul>	<ul style="list-style-type: none"> <li>• Public deliverables</li> <li>• Scientific publications</li> <li>• Conferences and other scientific events.</li> </ul>
<b>Industrial Sector</b>	An important objective of Up-Skill is to address and	<ul style="list-style-type: none"> <li>• Demonstrate the</li> </ul>	<ul style="list-style-type: none"> <li>• Market test results,</li> </ul>

	trigger the active involvement of the industrial sector. TWI is a membership organisation with 600+ industrial members (aerospace, oil & gas marine, heavy industry, automotive, electronics, ...) across 40 countries who benefit from TWI's 70 years of knowledge and expertise in research, contract R&D, technical, standards information and engineering services. TWI actively participates in 100+ national and international standards committees.	<p>business potential of inclusivity towards early adoption of products and services developed by the consortium</p> <ul style="list-style-type: none"> <li>• Collect feedback on their expectations and requirement to adjust commercial exploitation plans</li> <li>• Convince about the technical feasibility and competitiveness of the concept and tools developed</li> </ul>	<p>techno-economic assessment, etc.</p> <ul style="list-style-type: none"> <li>• Dedicated workshops</li> <li>• Public deliverables</li> <li>• Scientific publications</li> <li>• Related project Events</li> </ul>
<b>Government Bodies &amp; Policymakers</b>	This is a wide group encompassing innovation driven local and regional authorities, representatives and associations, ministries, parliaments, and public administrations at national and international level.	<ul style="list-style-type: none"> <li>• Demonstrate the benefits of Up-Skill concept and tools to reach the inclusive European future goals</li> <li>• Raise awareness about proposed regulatory evolution</li> </ul>	<ul style="list-style-type: none"> <li>• Final recommendation in deliverables</li> <li>• Participation in policy events</li> </ul>
		•	•
<b>Related EU Projects</b>	EU funded projects addressing similar topics and the participation of consortium members in other relevant projects offers the opportunity to establish quick links among parties through joint actions.	<ul style="list-style-type: none"> <li>• Coordinate dissemination activities to maximize their impact</li> <li>• Exchange R&amp;D results to improve robustness of project results</li> </ul>	<ul style="list-style-type: none"> <li>• Dissemination events</li> <li>• Presentation at conferences</li> <li>• Participation in workshops from other projects</li> </ul>
<b>General Public</b>	The general public consists of a general audience and other actors not identified as direct targeted groups by the project, though this group can have strong interest in the project.	<ul style="list-style-type: none"> <li>• Raise awareness on the importance of inclusive future work and decent life for EU citizens specifically as a credible alternative for the future</li> <li>• To inform about the benefits of the project towards a sustainable production system</li> </ul>	<ul style="list-style-type: none"> <li>• Project website</li> <li>• Leaflets, flyers</li> <li>• Press releases</li> <li>• Social media</li> <li>• Project events</li> </ul>

### 3.3 DISSEMINATION ACTIONS

A set of KPIs have been detailed in the GA that serve as a benchmark for the dissemination activities that need to be achieved before the project's conclusion. The details of these KPIs have been set out below, however, they are by no means exhaustive, and every opportunity will be taken to participate in a dissemination activity as and when it arises. This is particularly applicable to non-scientific publications, social media, and videos as it is planned that every academic or

sectoral dissemination activity will be accompanied by content designed for other target audiences, more details of which can be found in Section 3.3.6 below.

### 3.3.1 CONFERENCES

Conferences will serve as an important channel to disseminate the project results to academic and research, industry and manufacturing and policymaking stakeholders. The KPIs for conference participation are as follows:

- Participation in at least 10 conferences where project results will be presented.
- Participation in at least 3 industrial related events.

### 3.3.2 WORKSHOPS

Workshops will form an integral part of the dissemination strategy, particularly in coordination with other EU funded projects and the integration of industrial stakeholders via the TWI network. The KPIs for the planning of workshops are:

- The organisation of at least 2 international technology workshops and 1 final information day.
- The organisation of 1 technology workshop related to the project results with a targeted attendance of 40 stakeholders.

### 3.3.3 WEBINARS

The consortium members will deliver webinars through regional and national Industry 4.0 promoting bodies, in the UK, Italy, and Sweden. Interested stakeholders will be targeted to participate in each of the countries involved and will be made aware of the project's work through direct communication and webinars.

### 3.3.4 TRADE FAIRS

Trade Fairs will provide the opportunity for the consortium members to promote the exploitable outputs to industry and manufacturing stakeholders. The partners will participate in national trade fairs, in Italy, UK, and Sweden.

### 3.3.5 SCIENTIFIC PUBLICATIONS

The Up-Skill partners will publish at least 8 scientific publications in peer-reviewed journals and, in accordance with Open Science and the Open Access obligations specified in the GA, the publications will be uploaded to the Up-Skill Community on the Zenodo online repository.

Links to the publications on Zenodo will be made available and publicised on the Up-Skill website and social media channels, as well as the partners' digital communication channels.

### 3.3.6 NON-SCIENTIFIC PUBLICATIONS, SOCIAL MEDIA & VIDEOS

All partners will be encouraged to produce non-scientific publications on their websites, and social media channels and participate in the production of promotional videos related to the dissemination of project results and expected impacts.

Each scientific publication or dissemination activity will lead to non-scientific articles on the Up-Skill website and trade and industry focused publications, social media posts and digital materials being produced that are aimed at disseminating the results to stakeholders with content appropriate to the target audience. This will ensure that all stakeholders, regardless of their position to the project's results and impacts, will be engaged with and kept informed.

## 3.4 CONCLUSIONS & NEXT STEPS

Dissemination activities will start at the end of phase 2 of the communication plan ("Understanding" phase, M12 to M24), and phase 3 ("Achievement", M25 to M36). Next months will be devoted to the identification of main events and publications to be targeted for future dissemination actions.

## 4. EXPLOITATION PLAN

The Exploitation Plan builds upon the work done through the communication and dissemination strategies by identifying the KERs and how they will be protected and exploited, the market context for the potential exploitable outputs, and the identification of enablers and barriers in relation to their market-readiness, from the perspective of positioning the Up-Skill solutions as a means of contributing to the growth of competitive inclusive digitalisation in Europe.

The Exploitation Plan will summarise:

- The planned key exploitable results.
- The IPR management.
- The market context.
- Business model, basically focused on the enablers and barriers for the results uptake.

Task 6.3 – Exploitation of Results, IPR and Business Model – begins at M12, therefore, the Exploitation Plan will be updated at M18 and M36 based upon the project’s development and consultations with consortium members, many of whom are experts in innovation management and the exploitation of research for industrial applications.

### 4.1 KEY EXPLOITABLE RESULTS

The predicted top-level outcome, as specified in the GA, is the development of a quantified, predictive approach to the implementation of Industry 4.0 principles within the manufacturing industry. Comparatively little research has been undertaken to address the question of how to tailor the implementation of Industry 4.0 technologies to a particular company based on an assessment of local needs. Therefore, it is considered that the data collected from the case studies and the transformation of this data, through the Up-Skill Platform and Decision Support System (DSS), into information for industrial and manufacturing stakeholders to use when attempting to understand and manage how to implement Industry 4.0 technologies within their specific business context, will be the fundamental KER generated by the project.

In addition, the reports, deliverables, and training manuals produced by the project, related to the collected scientific data, can also provide significant value to businesses, researchers and policymakers when investigating and assessing the business and workforce implications of the emerging technologies. Table 9 below provides a summary of the project’s expected exploitable outputs, how they will be protected, and how and to who they will be exploited.

*Table 9. List of Exploitable Outputs*

Exploitable Outputs	Owner	Exploitation Route & Protection	Potential Users	Dissemination to Ensure Exploitation
<b>Creation of scientific data</b>	All	Open databases	<ul style="list-style-type: none"> <li>• Basic and applied researchers</li> <li>• Engineers</li> <li>• Developers</li> </ul>	<ul style="list-style-type: none"> <li>• Dissemination in open access lectures and courses</li> <li>• Publications through websites and journals</li> </ul>
<b>Reports &amp; deliverables</b>	All	Publication of scientific papers	<ul style="list-style-type: none"> <li>• Basic and</li> </ul>	<ul style="list-style-type: none"> <li>• Participation</li> </ul>

			applied researchers	in scientific conferences • Trade fairs
<b>Report on cost analysis &amp; positioning of the technology</b>	All	Participation and support to EU policies	• EU and national policymakers	• Dissemination through EU networks and associations

On further updates of the exploitation plan, a systematic review of the KERs will be performed to ensure their appropriate mapping.

## 4.2 KEY EXPLOITABLE RESULTS MAPPING

Systematic reviews of the project’s development and potential KERs will be conducted through regular consultations with consortium members, and the periodic fulfilment of KER forms, an example of which can be found in Figure 3 below.

Each consortium member will be required to complete the form when there is a new KER identified or an amendment to an existing KER. The KER form will not only facilitate co-ordination of technological development between work packages and identify trends, opportunities, and barriers for market uptake; but also, it will assist in the development of the stakeholder mapping and engagement as part of Task 6.5.

In addition, the KER forms will facilitate communication between work packages needed for periodic updating of the PDEC in line with technological developments within the project, making the planning and execution of dissemination activities more cohesive.

*Figure 4. Key Exploitable Result Form*

DATE	<i>[Indicate the current date]</i>
PARTNER NAME	<i>[Please indicate the acronym of your organization]</i>
Key exploitable result #1	<i>[Please give a “title” to the result obtained]</i>
Description of the result	<i>[Explain the details required to understand the nature of the result]</i>
Related WPs and Tasks	<i>[Please indicate the number of WP and tasks within the project related with the development of this result]</i>
Unique Selling Point/different selling points	<i>[Explain the progress beyond the state of the art that the result represents]</i>
Product/Service Market Size	<i>[Indicate the market addressed (in sectorial and geographical terms), and the estimated size]</i>
Market Trends/Public Acceptance	<i>[Indicate if you have identified any trend in social terms that might contribute to arise interest on your result –or the opposite-]</i>
Product/Service Positioning	<i>[Any element that characterize your product in relation with market alternatives]</i>

Legal, normative or ethical requirements (need for authorisations, compliance to standards, norms, etc.)	<i>[Is there any legal requirement related with bringing your result to the market?]</i>
Competitors/Incumbents	<i>[Indicate current alternatives in the market your result will compete with]</i>
Early Adopters - First Customers	<i>[Which type of customers would first take advantage of your results?]</i>
Cost of implementation - bringing product/service to the “market” (before exploitation)	<i>[Which other steps are necessary to bring your result to the market?]</i>
Time to market (from the end of the project)	
Foreseen Product/Service Price	
Adequateness of Consortium Staff	
External Experts/Partners to be involved	
Status of IPR: Background (type and partner owner)	<i>[Please indicate if the exploitation might be conditioned by any background access that is not granted]</i>
Status of IPR: Results/Foreground (type and partner owner)	<i>[Please indicate if you plan to protect the result and how]</i>

### 4.3 IPR MANAGEMENT

The management of IPR is ruled by the Consortium Agreement (CA) which includes all provisions related ownership, protection and publication of knowledge, access rights to knowledge and pre-existing know-how as well as questions of confidentiality, liability, and dispute settlement. On further updates of the exploitation plan, the specific IPR management strategy for each KER will be specified, according to the interests of the results owners.

### 4.4 MARKET CONTEXT

It is estimated that the worldwide Decision Support System (DSS) market will grow at a compound annual growth rate of between 7 - 17.8% with a projected worth of between 22.7 – 30 billion USD being reached between 2027 - 2030 (1) (2) (4). On-premises DSS will grow at the slowest rate but will remain the dominant application, however, cloud-based and hybrid applications are predicted to become the dominant segments due to the growing use of other cloud-based software (2).

The essential drivers of the DSS market are the ever-increasing ability to capture and store huge amounts of data which requires AI to interpret it (4) and the desire for firms to reduce operational costs and optimise efficiency and productivity (2).

A SWOT analysis conducted on the DSS market, seen in Table 11 below, identifies pathways and barriers to entry for DSS in the marketplace.

Table 10. SWOT analysis of DSS market (2)

Strengths	Weaknesses	Opportunities	Threats
High accuracy of the data	High complexity of the system	Growing demand for advanced analytics	High cost of implementation
Flexible and customisable	Limited user interface	Increasing demand for better decision support	Competition from other business intelligence systems
Improves decision-making processes	Difficult to maintain	Increasing need for better data analysis	Data security risks

The Up-Skill platform and DSS can fit into this market by providing unique sets of data from prior data sources, reports and studies in conjunction with the data compiled from the case studies. The data will be accurate, customisable based upon a specific firm's need for technological implementation and the decisions surrounding it. IRIS will also implement a user-friendly human-machine interface for added practicality and user satisfaction, and all data protection requirements will be met.

As part of WP5, starting at M7 of the project, WP leaders IRIS will:

- Define the design and requirements for data capture and representation.
- Develop data repository, data capture processes and pipelines and populate with data.
- Develop the DSS using advanced data processing algorithms.

Between M12-M18, the advances made by IRIS will allow for a clearer definition of the potential end-users of the technologies, how the Up-Skill technologies will help solve the problems faced by industrial and manufacturing firms, and who the competitors in the DSS marketplace are.

The developments and results from WP5 will then be added to the update of this document due for submission by M18.

## 4.5 BUSINESS MODEL

A business model canvas approach, as a visual chart that defines the value proposition, infrastructure, distribution channels, key resources, activities and impacts of the business outcomes, will inform the development of business models that will facilitate the exploitation of the Up-Skill solutions. The business modelling will also ensure the proper positioning of the solutions and use through the elaboration of an effective business cycle involving all project partners and stakeholders. The definition of this model will be performed once the KERs be appropriately identified and mapped.

## 4.6 CONCLUSIONS & NEXT STEPS

Work will begin on Task 6.3 – Exploitation of Results, IPR and Business Model – from M12, and the developments from WP5 – Up-Skill Platform – will inform the updates to the Exploitation Plan of this document which will be submitted on M18.

The main activity foreseen within the next 6 months will be conducting a stakeholder analysis to identify the most relevant actors deemed to be affected by, gain benefit from, or hold a position to the expected exploitable outputs of the project.



## 5. REFERENCES

- 1) Poniecki-Klotz, Bartłomiej, “Unleashing the Power of AI in Decision Support Systems”, Medium.com, February 1<sup>st</sup>, 2023, [Unleashing the Power of AI in Decision Support Systems | by Bartłomiej Poniecki-Klotz | Ubuntu AI | Feb, 2023 | Medium](#)
- 2) DATAINTELO, “Decision Support System Market Report | Global Forecast From 2022 To 2030”, [www.dataintelo.com](http://www.dataintelo.com). Accessed February 21<sup>st</sup>, 2023, [Decision Support System Market Report | Global Forecast From 2022 To 2030 \(dataintelo.com\)](#)
- 3) European Factories of the Future Research Association (2021) “Made in Europe – The manufacturing partnership in Horizon Europe”, The European Commission, [ec\\_rtd\\_he-partnership-made-in-europe.pdf \(europa.eu\)](#)
- 4) Markets and Markets, “Decision Intelligence Market”, [www.marketsandmarkets.com](http://www.marketsandmarkets.com). Accessed February 21<sup>st</sup>, 2023, [Decision Intelligence Market Size, Share and Global Market Forecast to 2027 | MarketsandMarkets](#)

## 6. ANNEX I

*Up-Skill Leaflet:* [UPSKILL\\_leaflet \(upskill-horizon.eu\)](https://upskill-horizon.eu)

### The focus

of the **Up-Skill** project is to develop a better understanding of how businesses, particularly in industrial and manufacturing environments, can lever value from human and machine integration, and change the way we understand technology implementation from being a substitution of skilled human work to one of human-machine inter-augmentation.

The project will address the implications of Industry 5.0 and the relationship between automation, skilled work and organisational systems. The research will establish how automation and human input plays out in a range of industrial settings, creating comparative case studies to capture effective implementation strategies.



**Partners:**

**Funded by the European Union** **UK Research and Innovation**

---

**www.upskill-horizon.eu**  
**info@upskill-horizon.eu**  
**@UPSKILL\_HORIZON**  
**up-skill-project**  
**@UPSKILL\_HORIZON**

**Project Coordinator:**  
 Ewelina Kurczynska  
 Mälardalen University  
 ewelina.kurczynska@mdu.se

**Technical Coordinator:**  
 Chris Ivory  
 Mälardalen University  
 chris.ivory@mdu.se



## Up-Skill

**Up-Skilling for Industry 5.0 Roll-Out**

**CALL:** HORIZON-CL4-2021-HUMAN-01  
**TOPIC:** HORIZON-CL4-2021-HUMAN-01-26  
**PROJECT NUMBER:** 101070666  
**STARTING DATE:** 1 September 2022  
**END DATE:** 31 August 2025  
**GRANT AMOUNT:** €2,948,250.25

**Funded by the European Union**  
Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or H2020. Neither the European Union nor the granting authority can be held responsible for them.

---

### Specific Objectives

1. Identify the nature of the different business, industrial and market contexts in which skilled workers are likely to continue to add and be valued.
2. Identify how skilled and creative workers act to ensure their continued place in the value chain.
3. Identify and detail good practices in organisations that continue to mobilise human skill, ingenuity and creativity as a source of value and competitive advantage.
4. Examine the specific organisational and managerial competencies needed in contexts where skilled and creative roles meet autonomous, semi-autonomous and intelligent systems.
5. Develop pathways for integration of Industry 5.0 and craft skills for different case studies.
6. Test the developed pathways in related companies.
7. Develop and carry out proper dissemination, communication and exploitation strategies to maximize the beneficial impacts of the project outcomes, ensuring a successful scaling-up and market uptake to boost European industry competitiveness.
8. Design of management training course content and course modules for Industry 5.0 introduction for management and workers.



## Expected Impacts

**Development of the Up-Skill Platform,** a data repository and Decision Support System (DSS) that will store the compiled research data and convert it into information that can be utilised by businesses for technological integration and decision making.

**Cost savings** in primary manufacturing through the efficient implementation of human-machine augmentation.

**Improved quality of output and productivity** by addressing production methods, development cycles of new products and the reproducibility of products in conjunction with the artisan skill needed for certain specifications.

**Waste reduction** by enabling higher levels of reproducibility, defining specification tolerances and the use of software to make more efficient use of components that may have otherwise been utilised.

**Longevity of demand for skilled labour and craftsmanship** through enabling better quantification of the added value provided by skilled workers via a reference framework which can be used to understand and express employee value across all levels of the business.

Published article on MITC website: [MITC is partner in a new EU project, Up-Skill for Industry 5.0 - MITC](#)

**MITC** MÅLARDALEN INDUSTRIAL TECHNOLOGY CENTER

About us For you What we do News Contact

MITC > News > News > MITC is partner in a new EU project, Up-Skill for Industry 5.0

## MITC is partner in a new EU project, Up-Skill for Industry 5.0

NEWS - 14 JUNE 2022



The European Union has granted funding for the project Up-Skill for Industry 5.0 Roll-Out, in which MITC is a partner among a number of leading European institutions and companies, namely Twi Limited (UK), Mälardalen University (SE), Anglia Ruskin University Higher Education Corporation (UK), Università Degli Studi Di Milano (IT), Helekopter Ab (SE), University Of Lancaster (UK), Zift Ab (SE), Iris Technology Solutions, Sociedad Limitada (ES), Alfa Laval Tumba Ab (SE), Kneia Sl( ES), Webber Brennertechnik Gmbh (DE), Ford Motor Company Limited (UK) . The estimated project duration is 36 months after commencing in the fall 2022.

Published article on UMIL website: [Industria 5.0 – Un progetto per comprendere come le nuove tecnologie riconfigurano le competenze nel mondo del lavoro | Dipartimento di Economia management e metodi quantitativi - DEMM \(unimi.it\)](#)

UNIVERSITÀ DEGLI STUDI DI MILANO

webmail | chi e dove | unimia | lastatale@work | biblioteche | dipartimenti

Cerca

Dipartimento di  
**Economia, Management e Metodi Quantitativi**

HOME PAGE ORGANIZZAZIONE PERSONE RICERCA DIDATTICA TERZA MISSIONE

HOME PAGE > Aggiornamenti e archivi > Tutte le notizie

- TUTTE LE NOTIZIE
- CALENDARIO EVENTI
- NOTIZIE PER IL MAGAZINE UNIMI
- TUTTI GLI AVVISI
- TUTTI I BANDI

NOTIZIE

### Industria 5.0 – Un progetto per comprendere come le nuove tecnologie riconfigurano le competenze nel mondo del lavoro

Si chiama **"Up-Skilling for Industry 5.0 Roll-Out"** il progetto proposto all'interno della Call: HORIZON-CL4-2021-HUMAN-01 (A HUMAN-CENTRED AND ETHICAL DEVELOPMENT OF DIGITAL AND INDUSTRIAL TECHNOLOGIES) che ha l'obiettivo di comprendere in che modo l'introduzione di tecnologie "intelligenti" produca cambiamenti nel lavoro all'interno delle organizzazioni.



Coinvolti 5 paesi, Svezia, Regno Unito, Spagna, Germania, Italia e 13 partners. Il capofila è la Mälardalen University che guida un consorzio composto da università, tra le quali, UNIMI, Anglia Ruskin University e University of Lancaster ed aziende del settore manifatturiero. Svolge un ruolo centrale il Dipartimento di Economia, Management e Metodi Quantitativi, in cui opera il gruppo di ricerca guidato dalla Professoressa Maria Laura Toraldo, Docente di Organizzazione Aziendale.

*Competenze e tecnologia sono le parole chiave del progetto di ricerca. L'introduzione di tecnologie intelligenti nelle aziende, come ad esempio robot collaborativi o automazione, cambia la natura del lavoro svolto dalle persone ed induce le organizzazioni a ridefinire il fabbisogno di competenze. Il progetto studia questi cambiamenti, i nuovi ruoli e l'integrazione tra tecnologia ed abilità umane.*

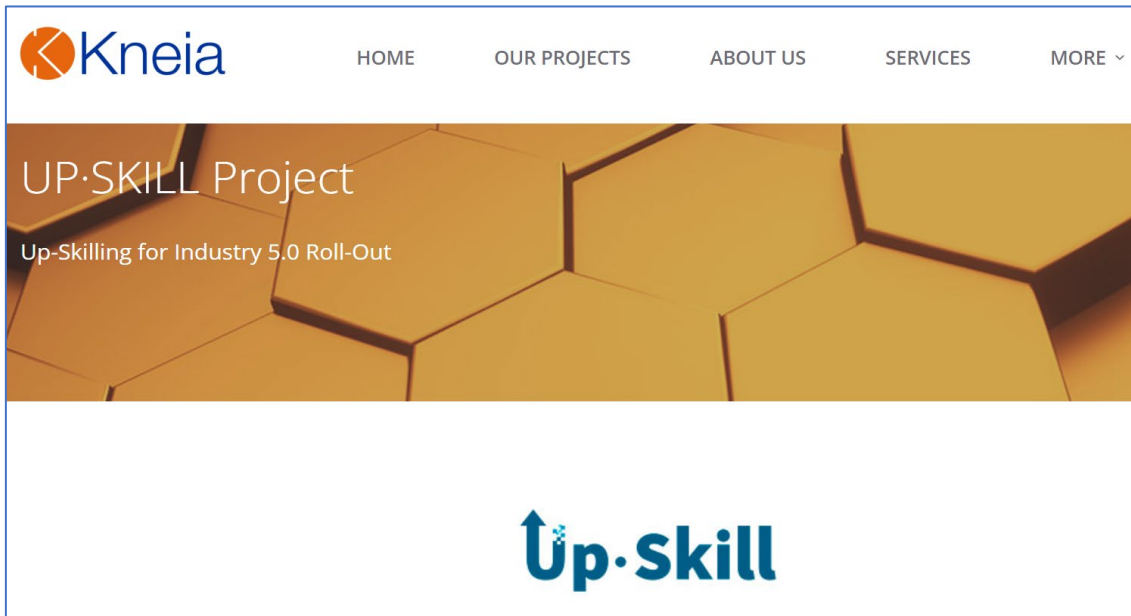
04 ottobre 2022

Published article on MITC website: [Up-Skill for Industry 5.0 - MITC](#)

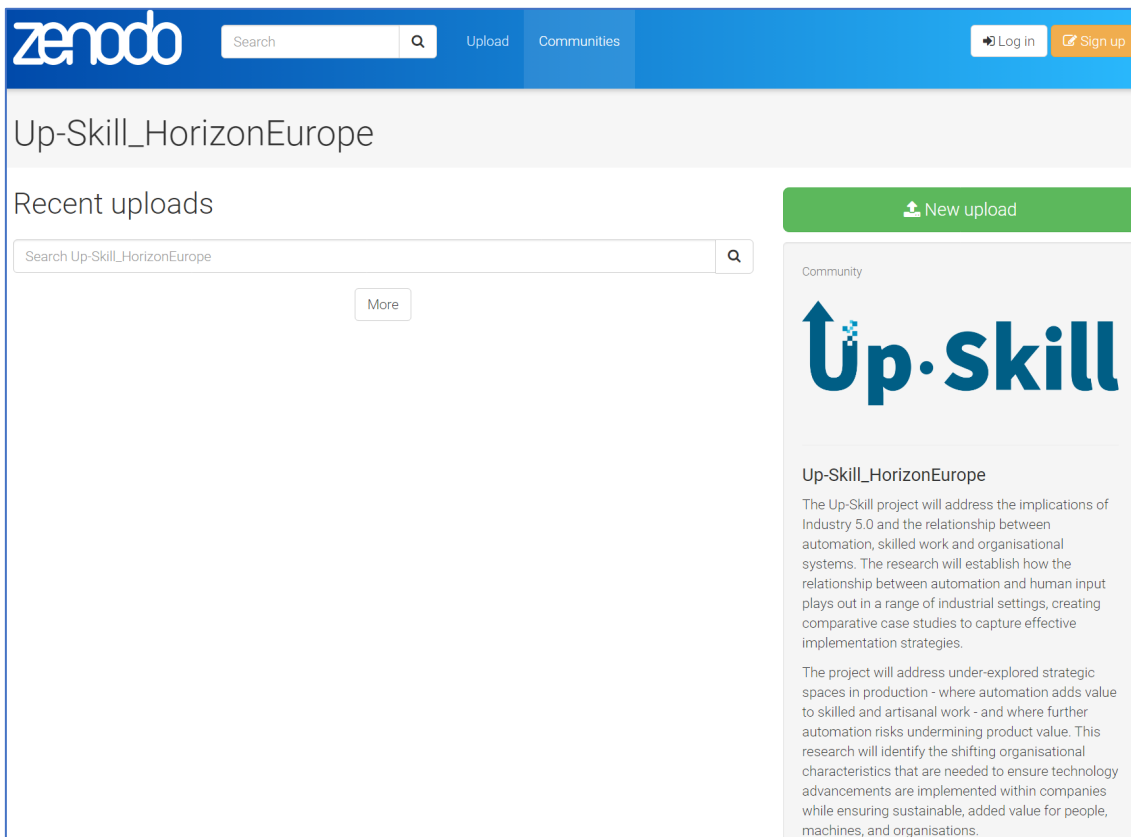


The screenshot shows the MITC website page for the 'Up-Skill for Industry 5.0' project. The page features a navigation menu with 'About us', 'For you', 'What we do', 'News', and 'Contact'. Below the navigation, there is a breadcrumb trail: 'MITC > Projects > Mälardalens Universitet > Up-Skill for Industry 5.0'. The main heading is 'Up-Skill for Industry 5.0'. A large image shows a worker in silhouette against a sunset window. A dark box on the right contains project details: 'Project owner: Mälardalens Universitet, TWI Limited', 'Funding: Horizon Europe', 'Participating actors: ALFA LAVAL TUMBA AB, ANGLIA RUSKIN UNIVERSITY HIGHER EDUCATION CORPORATION, FORD MOTOR COMPANY LIMITED, Helekopter AB, KNEIA SL, Mälardalen Industrial Technology Center, SOCIEDAD LIMITADA, UNIVERSITA DEGLI STUDI DI MILANO, UNIVERSITY OF LANCASTER, WEBBER BRENNERTECHNIK GMBH, Ziift AB', and 'Project duration: August 2022 until August 2025'. The 'Up-Skill' logo is prominently displayed at the bottom of the page.

Project page on Kneia website: [UPS·KILL Project - Kneia](#)



Project page on Zenodo online repository: [Up-Skill\\_HorizonEurope | Zenodo](#)



Published article on MITC website: [MITC is a part of the EU project Up-Skilling for Industry 5.0 Roll-Out - MITC](#)

**MITC** MÅLARDALEN INDUSTRIAL TECHNOLOGY CENTER

About us For you What we do News Contact

MITC > News > News > MITC is a part of the EU project Up-Skilling for Industry 5.0 Roll-Out

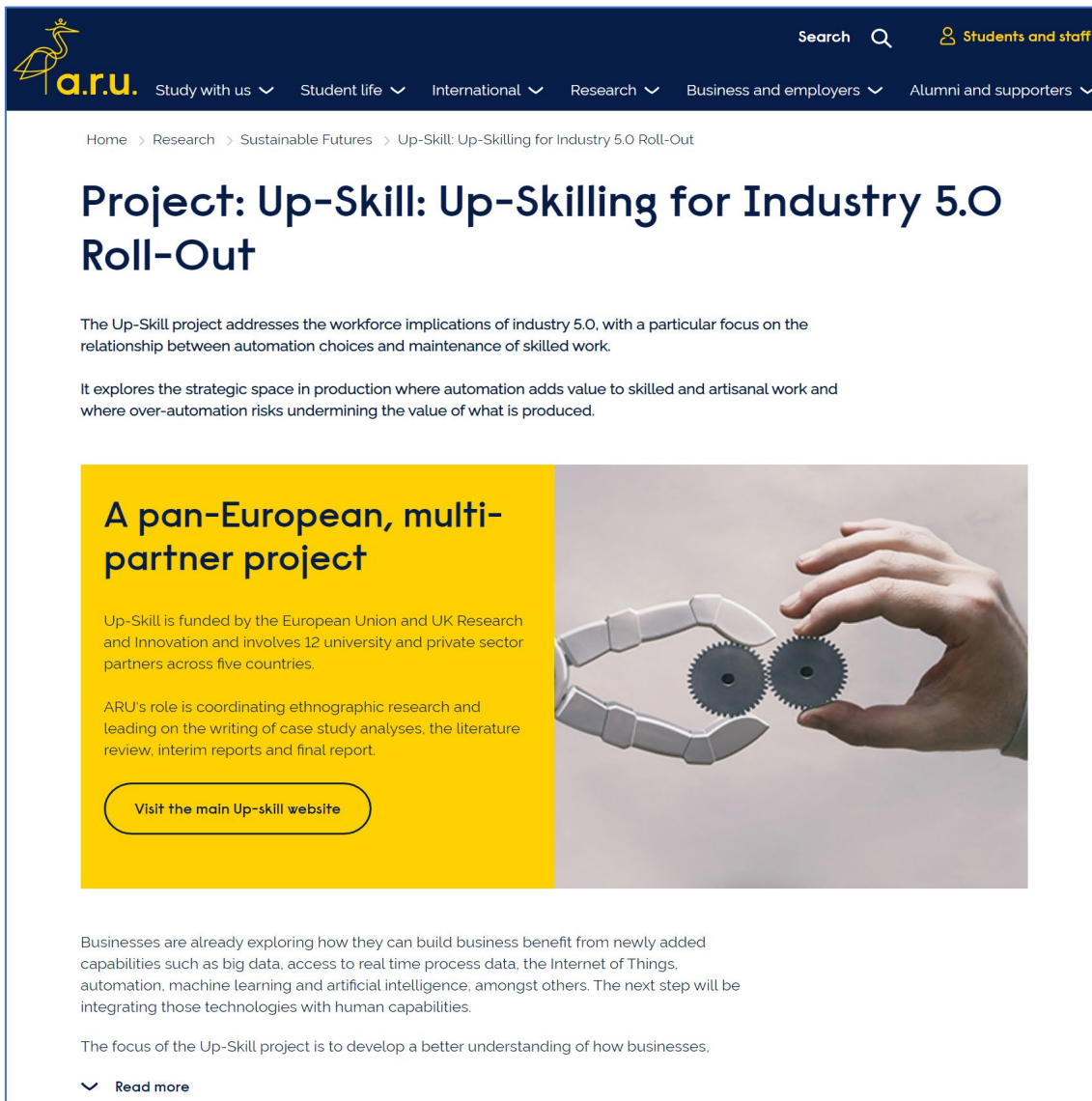
## MITC is a part of the EU project Up-Skilling for Industry 5.0 Roll-Out

NEWS · 7 NOVEMBER 2022



This fall a new EU funded project- **Up-Skilling for Industry 5.0 Roll-Out**, has been started in which MITC is a partner among a number of leading European institutions and companies, namely Twi Limited (UK), Mälardalen University (SE), Anglia Ruskin University Higher Education Corporation (UK), Università Degli Studi Di Milano (IT), Helekopter Ab (SE), University Of Lancaster (UK) , Ziift Ab (SE), Iris Technology Solutions, Sociedad Limitada (ES), Alfa Laval Tumba Ab (SE), Kneia SI( ES), Webber Brenner Technik GmbH (DE), Ford Motor Company Limited (UK) . Jens von Axelson is a Project Coordinator at MITC with estimated project duration of 36 months.

Published article on ARU website: [Up-Skill: Up-Skilling for Industry 5.0 Roll-Out - ARU](#)



The screenshot shows the ARU website page for the 'Project: Up-Skill: Up-Skilling for Industry 5.0 Roll-Out'. The page features a dark blue header with the ARU logo and navigation menus. The main content area has a white background with a yellow sidebar on the left. The sidebar contains the title 'A pan-European, multi-partner project' and a button 'Visit the main Up-skill website'. The main content area has a large image of a hand holding two gears, one of which is being held by a robotic arm. The text describes the project's focus on the relationship between automation and skilled work, and its role in coordinating research and writing reports.

Home > Research > Sustainable Futures > Up-Skill: Up-Skilling for Industry 5.0 Roll-Out

## Project: Up-Skill: Up-Skilling for Industry 5.0 Roll-Out

The Up-Skill project addresses the workforce implications of industry 5.0, with a particular focus on the relationship between automation choices and maintenance of skilled work.

It explores the strategic space in production where automation adds value to skilled and artisanal work and where over-automation risks undermining the value of what is produced.

### A pan-European, multi-partner project

Up-Skill is funded by the European Union and UK Research and Innovation and involves 12 university and private sector partners across five countries.

ARU's role is coordinating ethnographic research and leading on the writing of case study analyses, the literature review, interim reports and final report.

[Visit the main Up-skill website](#)

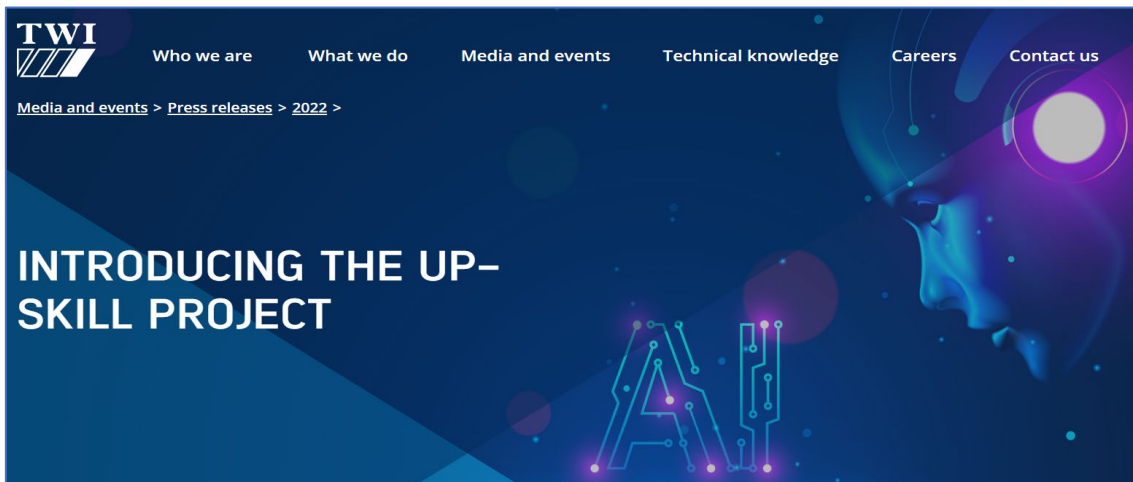
Businesses are already exploring how they can build business benefit from newly added capabilities such as big data, access to real time process data, the Internet of Things, automation, machine learning and artificial intelligence, amongst others. The next step will be integrating those technologies with human capabilities.

The focus of the Up-Skill project is to develop a better understanding of how businesses,

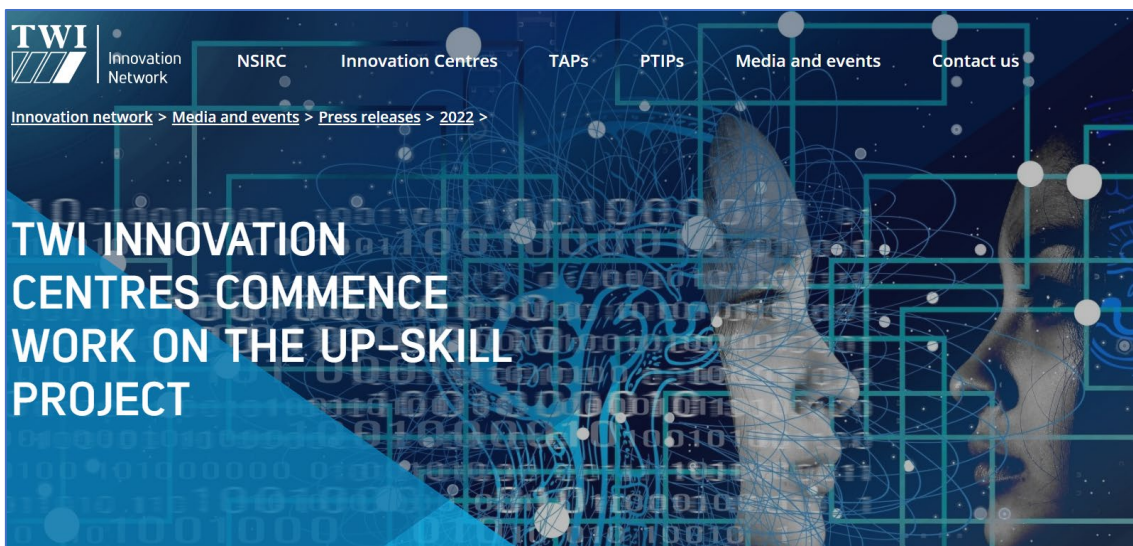
[Read more](#)



Published article on TWI website: [Introducing the Up-Skill Project - TWI \(twi-global.com\)](https://www.twi-global.com/press-releases/introducing-the-up-skill-project)



Published article on TWI website: [TWI Innovation Centres Commence Work on the Up-Skill Project - TWI Innovation Network](https://www.twi-global.com/press-releases/twi-innovation-centres-commence-work-on-the-up-skill-project)



*TWI Digital Manufacturing Conference Agenda.*

**Digital Manufacturing Conference**  
**Thursday 1<sup>st</sup> December 2022**  
**Programme**

Time	Topic	Speaker
12.30	Welcome and Introduction	<i>Darren Williams Team Manager, Welding Systems Integration Team TWI Ltd</i>
12.45	Distributing the Future	<i>Ian Walls Digital Manufacturing Portfolio Developer Siemens Digital Industries Software</i>
13.15	Industry 5.0 : Skills and Competiveness	<i>Professor Chris Ivory Professor of Innovation Mälardalen University</i>
13.45	Collaborative Threads for Manufacturing	<i>Keith Perrin Agile Manufacturing Software Authentise</i>
14.15	Break	
14.30	Improving welding quality through smart welding	<i>Katerina Mouliadou Innovation Lead ATS</i>
15.00	Funding Opportunities	<i>Sally Shi Programme Manager - Collaborative Proposals TWI Ltd</i>
15.25	Wrap up	
15.30	Close	

*Section of BRIDGES 5.0 Project Kick-Off Meeting Agenda.*

Time	Topic	Responsible partners, moderators, remarks
9.00 – 9.30	<b>BRIDGES 5.0 Administration and Coordination</b> <ul style="list-style-type: none"> <li>Working with Sharepoint</li> <li>Questions and answers</li> </ul>	TNO
9.30 - 10.00	<b>The UPSKILL Project</b>	Chris Ivory
10.00–11.45	<b>Building the BRIDGES 5.0 Interventions (WP5-6)</b> <ul style="list-style-type: none"> <li><i>WP5 &amp; 6 tasks description (20-30 min)</i></li> <li><i>Discussion on needs of companies and networks (~1h) – maybe through questions</i></li> <li><i>Conclusions and next actions (10-15 min)</i></li> </ul>	Alexios Papacharalampopoulos - LMS Unai Ziarsolo - DEGV
11.45 – 12.15	<b>Communicating and disseminating the BRIDGES 5.0 messages</b> WP8_ Developing the Industry 5.0 Platform (WIE)	Peter Totterdill WIE and Steven Dhondt TNO
12.15 – 13.30	<b>Lunch and temporary disconnect from digital meeting</b>	