Skill-UP Project overview

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Skill-UP Launch Event

09/10/2020

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

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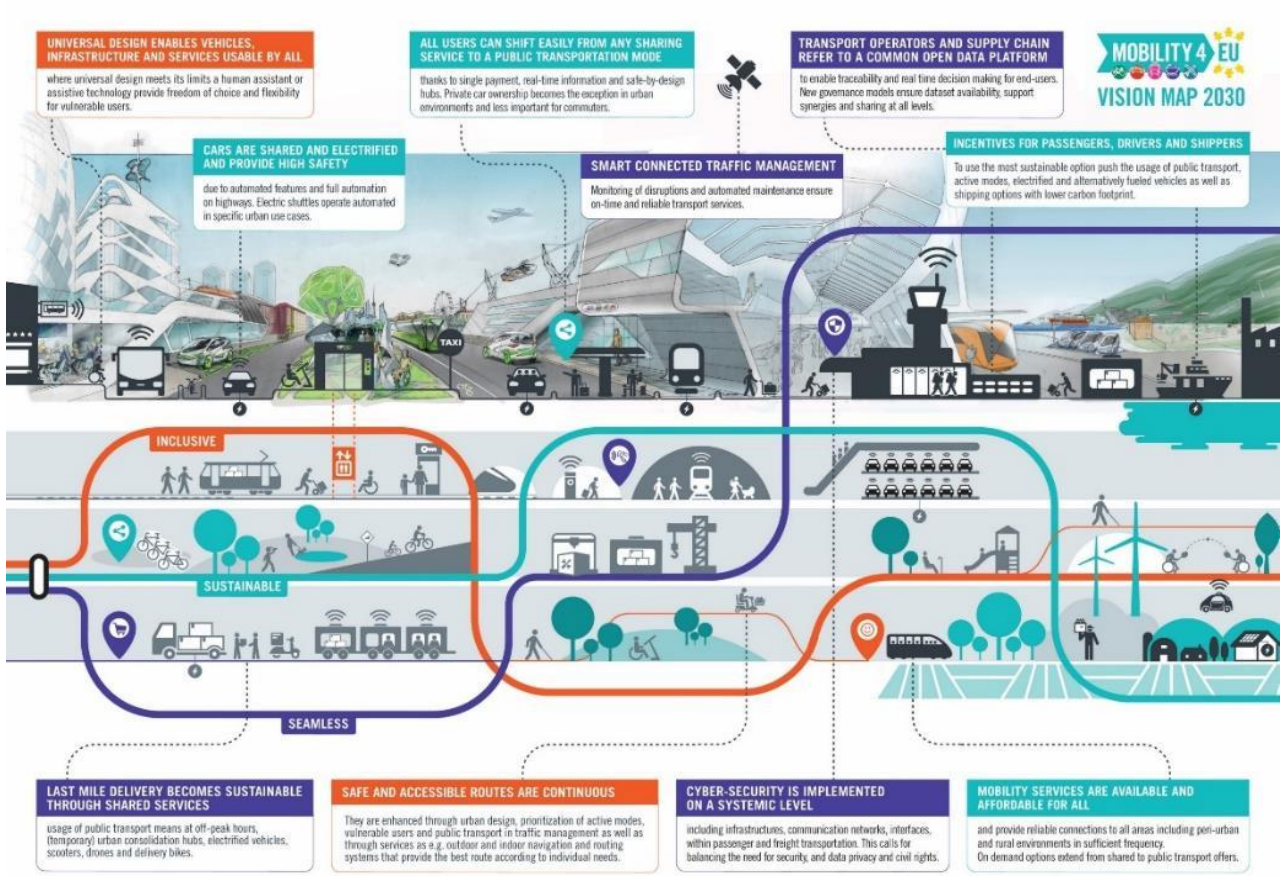
Context: Future trends/Vision for future transportation system

THE AUTOMATION WILL INCREASE FOR ALL ROLES

DIGITAL ANALYTICS WILL IMPROVE AIRLINE AND AIRPORT OPERATIONS

DIGITAL TWINS AND 3D PRINTING WILL CHANGE HOW PLANES ARE MADE

SUSTAINABLE FLYING WILL BE A MUST



SECURITY BY DESIGN

D2D WILL BE A SEAMLESS EXPERIENCE

UAVS WILL BE POPULATING OUR URBAN AREAS

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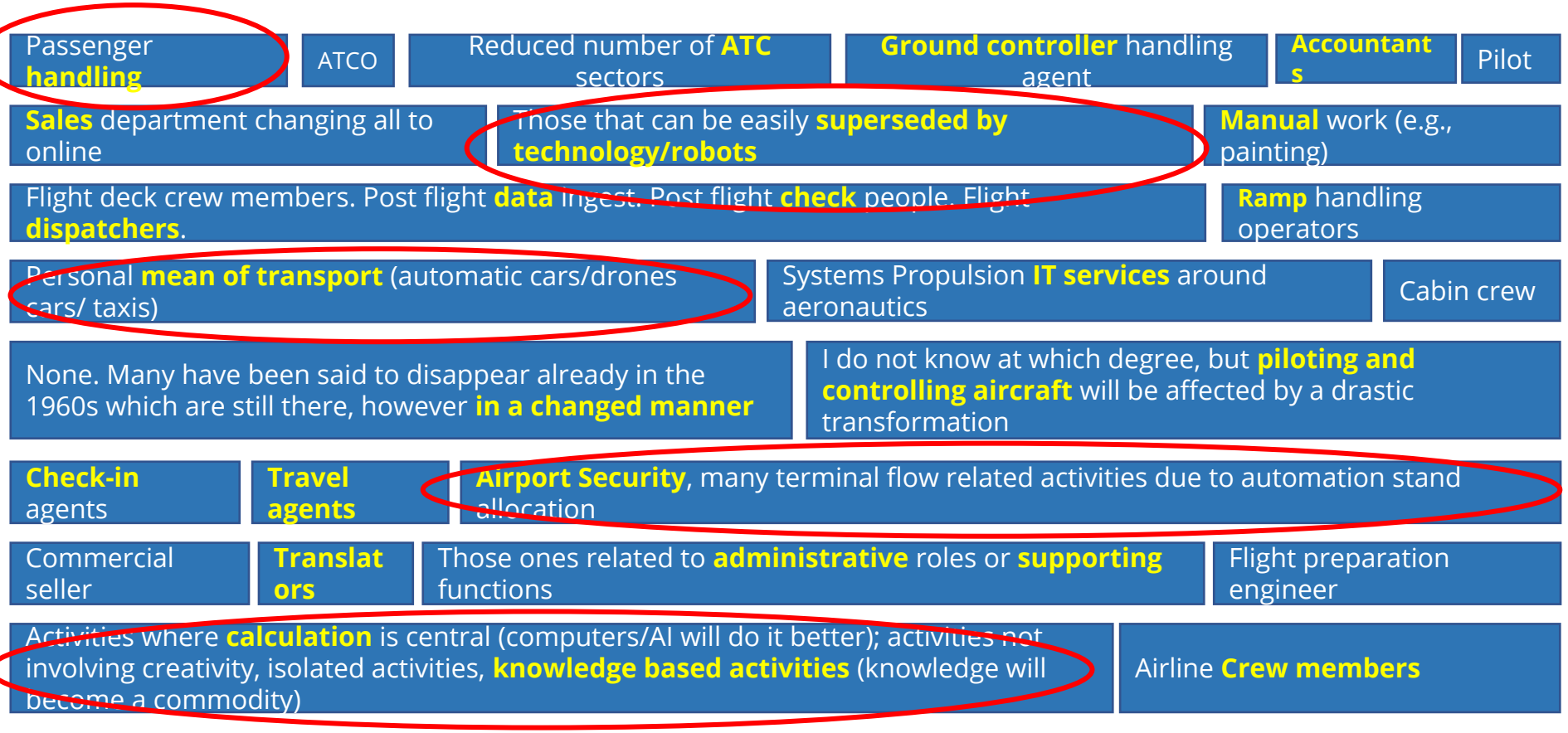
Online launch event- Public

Which occupations are going to drastically change or disappear by 2030 in the Air sector? (KAAT 2018)



To access the survey, please go to:

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Which occupations are going to drastically change or disappear by 2030 in the Air sector? (KAAT 2018)

None. Many have been said to disappear already in the 1960s which are still there, **however in a changed manner.**	I do not know at which degree, but **piloting and controlling aircraft** will be affected by a drastic transformation.
CHANGE	**TRANSFORMATION**

To access the survey, please go to:

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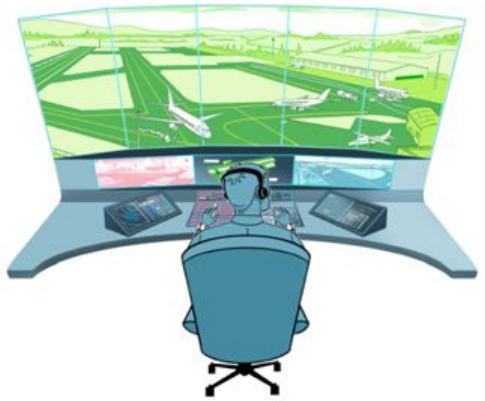
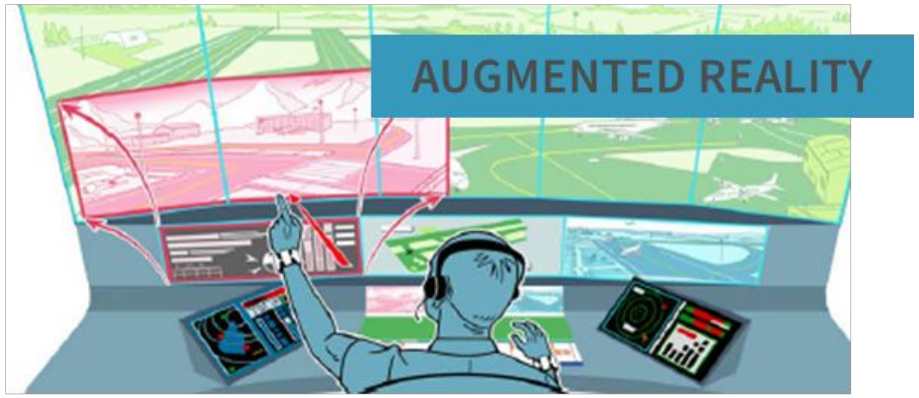
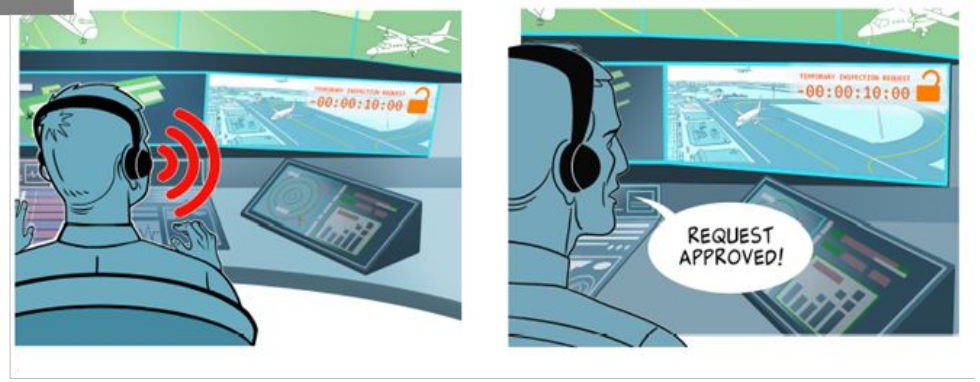
Context: The changing nature of work





MULTI SENSORY INTERACTION



Innovations transform **the interaction between technology/people** and **the working environment conditions:**

- Change **skills /competencies** that employees need for doing their job.
- Align **training/educational** programmes and **teaching methods** to the **skills needed** in the future operational **scenarios** by the future generations of **workers**.

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skill-UP - skilling, upskilling and reskilling in the future Air Transport

Air traffic controllers, pilots, airport operators and drone operators: how are these profiles going to change in the next years?

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skill-UP - skilling, upskilling and reskilling in the future Air Transport

JAN 2020-DEC 2022

Erasmus + KA2: Cooperation for innovation and the exchange of good practices - Sector Skills Alliances (EACEA)

Deep Blue, Lazio Connect, APANT Portuguese Association of Unmanned Aircraft, Fraport TAV Antalya, Eurocontrol, Quasar Consulting, INOVA+, ENAC-Ecole National d'Aviation Civile, University of Malta, Uninettuno, Eskisehir Technical University, Kastamonu University.

5 Countries (Italy, France, Portugal, Malta, Turkey)

12 Partners

The EU agency sponsoring the project is **EACEA**: Education, Audiovisual and Culture Executive Agency.

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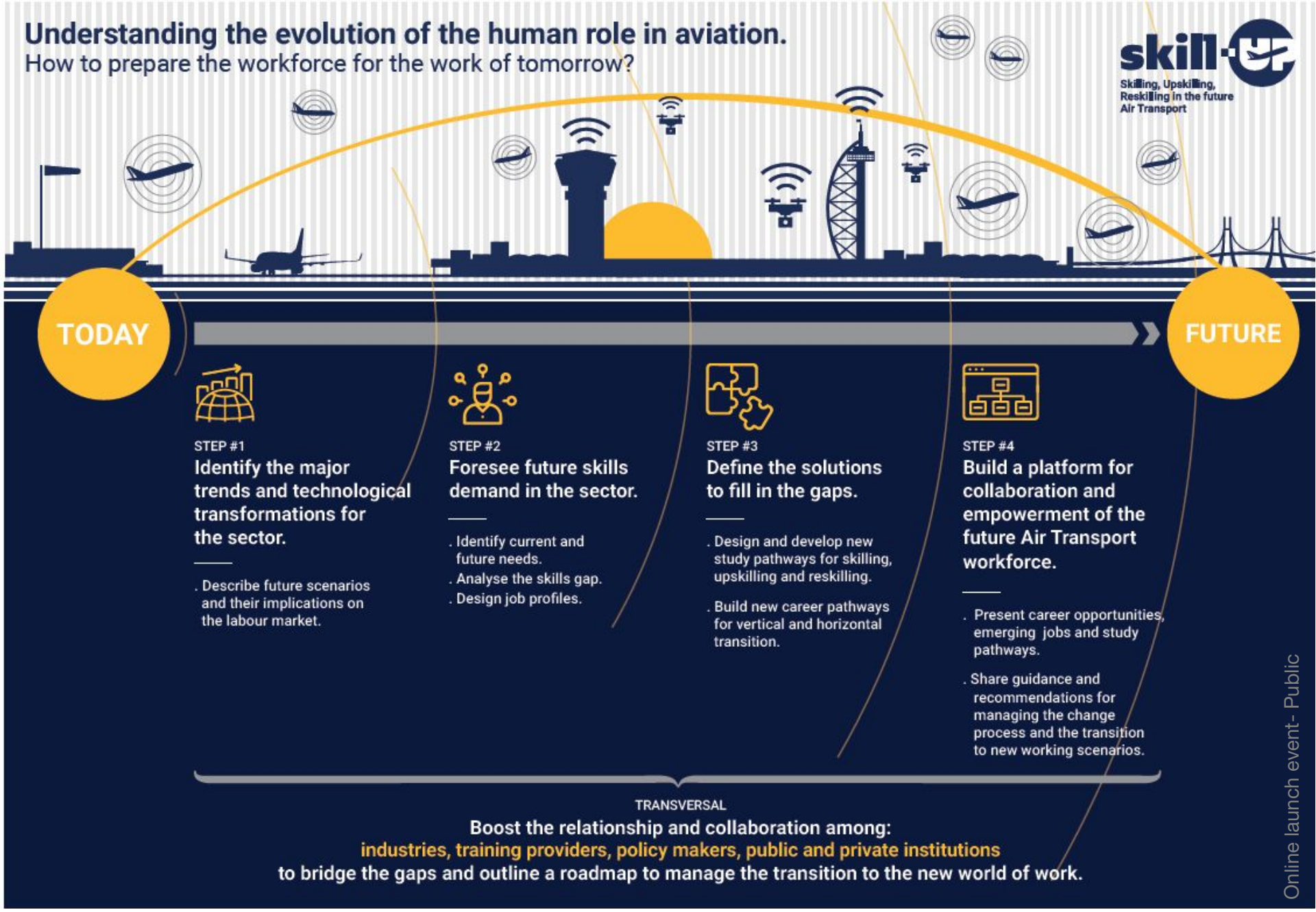
Skill-UP overall approach



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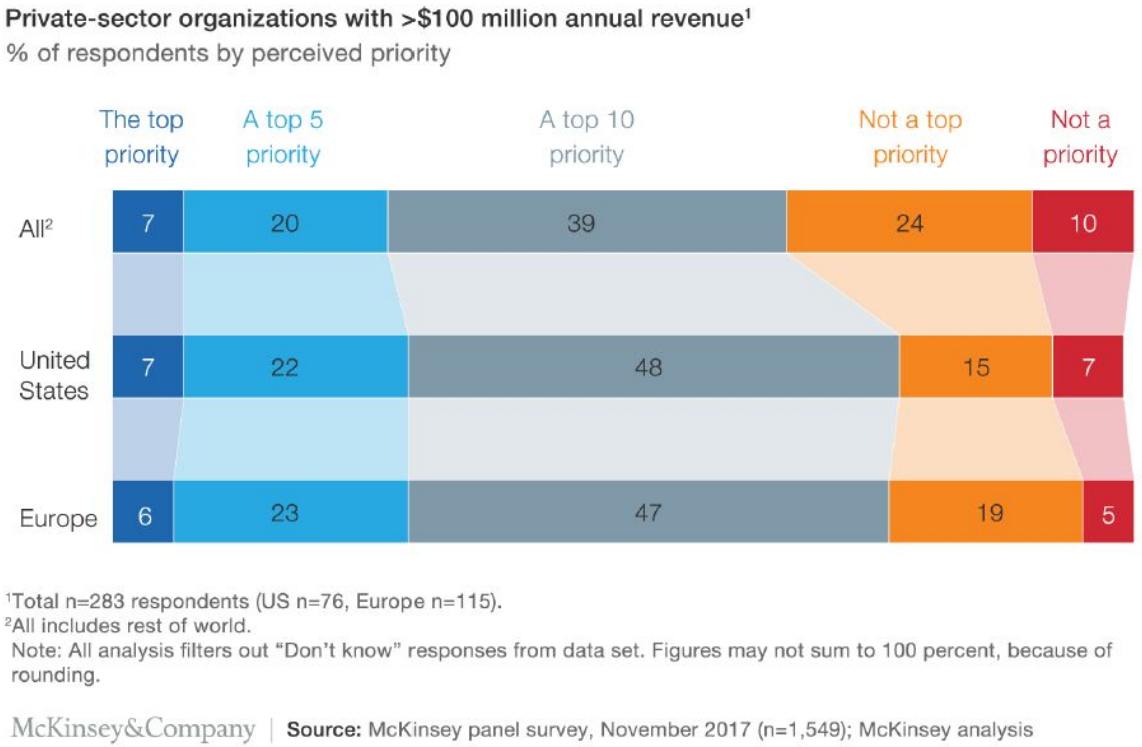
Context: Upskilling and reskilling

EXECUTIVES INCREASINGLY SEE INVESTING IN RETRAINING AND "UPSKILLING" EXISTING WORKERS AS AN URGENT BUSINESS PRIORITY (Source: McKinsey global institute report)

How important is addressing potential skills gaps related to automation and/or digitization within your organization's workforce?



[1]Total n=283 respondents (US n=76, Europe n=115).
[2]All includes rest of world.
Note: All analysis filters out "Don't know" responses from data set. Figures may not sum to 100 percent, because of rounding.

McKinsey&Company | **Source:** McKinsey panel survey, November 2017 (n=1,549); McKinsey analysis

What is Reskilling?
Reskilling is training individuals who have shown they have the attitude to learn in a completely new occupation.

What is Upskilling?
Upskilling is training individuals in the same occupation, but in a new way (i.e., if automation overtakes certain job duties, training that individual in new work).

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Objectives

skill-UP will

- define the **knowledge, skills and competences** required by the future employers of the Air Transport Sector to better align the **training** offered to the **requirements** of different **occupational profiles**
- define the **workforce profiles** (job roles) called by the future trends and scenarios,
- develop **initial** and **continuing training** programmes adapted to the evolving requirements of the sector, based on suitable and **innovative teaching and training methodologies**.
- develop **assessment toolkit** to track and assess individual progression during the training
- develop an online **Knowledge Centre** that will collect the outputs of the project, present curricula, training activities and guidelines for specific target groups
- foster **synergies** between educational institutions and labour market

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Target - Who will benefit from the project?

AIR TRAFFIC CONTROLLERS	PILOTS	DRONE OPERATORS	AIRPORT OPERATORS

1. ***New entrants*** who can use the resources of the project to find out about different careers in the sector, and build their career pathways and competences needed (*Skilling*)

2. ***Professionals and practitioners in the aviation sector*** who wish to progress within the Air Transport Sector, to assess their career pathways, identify relevant training programmes to upgrade their skills, and prepare for the desired job roles (*Upskilling*)

3. ***Employers in the aviation sector*** who will be able to recognise the skills needed and invest in staff training for career development and skills upgrading (*Reskilling*)

4. ***Training providers*** who can gain insights into sector trends and existing and emerging skills that are in demand, and design programmes to address the industry needs accordingly

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The Skill-UP expected results

#1 AIR SECTOR SKILLS TRANSFORMATION MAP

- New scenarios and technological transformations in the aviation sector
- Existing and emerging skills that will be requested in the new scenarios
- Future workforce profiles
- New study pathways

#2 AVIATION TRAINING PROGRAMS

- Specific modules for pilots, air traffic controllers, airport professionals and drone operators
- Transversal modules for all targets

#3 PORTFOLIO OF TRAINING ASSESSMENT TOOLS

- Tools to assess a participant's entry level
- Tools to assess a participant's progression
- Tools to assess a participant's follow-up

#4 KNOWLEDGE CENTRE PLATFORM

- Trends, emerging jobs in the sector and career opportunities
- Training programs to skills upgrading and development
- Guidance and recommendations for the transition to the new scenarios

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skill-UP
AIR SECTOR SKILLS TRASFORMATION MAP

Air sector skills transformtion map

The air sector skills transformation map will facilitate the transitions from education to work. The map will support the identification of major technological transformations and skills changes in the sector, and the design of study pathways for skills and career development.

DESCRIPTION:

The map will provide useful information on:
> New scenarios and technological transformations in the aviation sector;
> Existing and emerging skills that will be requested in the future scenarios;
> Future workforce profiles;
> New study pathways.

WHO IS IT FOR:

- New entrants, professionals and employers in the air transport sector
- Air transportation companies and transport service providers
- Educational institutions and VET training providers
- EU institutions

outcome timeline

outcome #1
December 2020

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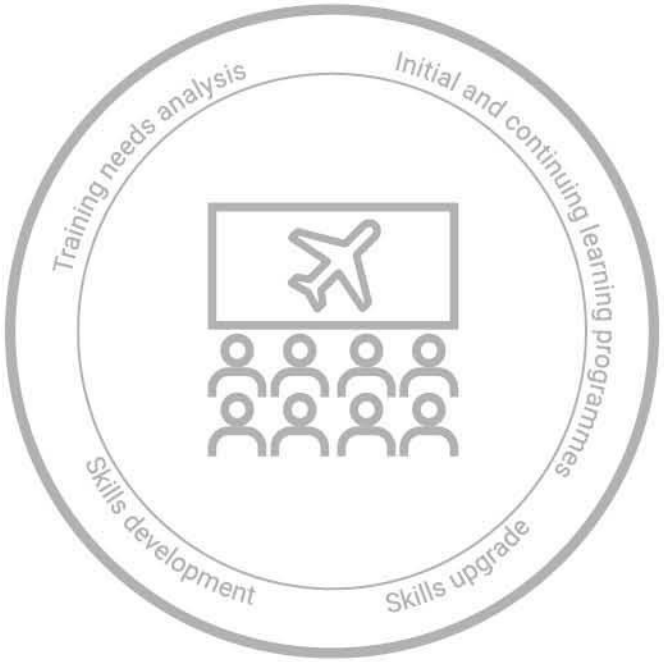
AVIATION TRAINING PROGRAMS



Aviation training programs

A set of initial and continuing Aeronautics VET training programmes will be developed for skills upgrade and career development of the air transport workforce.

DESCRIPTION:

By identifying the needs of an evolving labour market and the changes in skills and competences expected, transversal and specific modules for pilots, ATCOs, ground handling operators and RPAS operators will be designed.

WHO IS IT FOR:

- **New entrants, professionals and employers in the air transport sector**
- **Air transportation companies and transport service providers**
- **Educational institutions and VET training providers**
- **EU institutions**

outcome timeline

outcome #2
August 2022

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skill-up
PORTFOLIO OF TRAINING ASSESSMENT TOOLS

Portfolio of training assessment tools

The portfolio of training assessment tools will support VET training users at different stages of the learning process to track and assess their individual progression during and following the training period.

DESCRIPTION:

The training assessment tools will include
> tools to assess a participant's entry level;
> tools to assess a participant's progression;
> tools to assess a participant's follow up.

WHO IS IT FOR:

- New entrants, professionals and employers in the air transport sector
- Air transportation companies and transport service providers
- Educational institutions and VET training providers
- EU institutions

outcome timeline

outcome #3
November 2022

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Online launch event- Public

skill-up
KNOWLEDGE CENTRE PLATFORM

Knowledge centre platform

The knowledge centre platform will be designed to collect all outputs of the project and present curricula, training activities and guidelines for specific target groups.

DESCRIPTION:

The knowledge centre platform will:

> present trends, emerging jobs in the sector and career opportunities;

> present training programmes to upgrade and develop skills;

> Share guidance and recommendations for managing the change process and the transition to new working scenarios;

> Support collaboration and cooperation activities between educational institutions and labour market.

WHO IS IT FOR:

- New entrants, professionals and employers in the air transport sector
- Air transportation companies and transport service providers
- Educational institutions and VET training providers
- EU institutions

outcome #4
December 2022

outcome timeline

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Composition of the consortium

Expertise and experience in the contents of the project Education and training provider

- contribution in **training development/provision** and consulting in the air transport sector.
- close contact and **capability to mobilize the target groups** and beneficiaries of the project in several countries.
- **dissemination** in other relevant national and international projects and networks, which will reinforce the potential impact of the project and also create better conditions for its future sustainability.

Deep Blue, INOVA+, ENAC, University of Malta, Uninettuno, Eskisehir Technical University, Kastamonu University

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Composition of the consortium

Partners representing companies, industry or sector representatives

- definition of the future scenarios and skills needed (perspective of the industry)
- distribution of the surveys and interviews to practitioners
- definition of the main contents of the training for Air traffic controllers /Pilots/Airport Operators/Drone operators
- testing of innovative training methodologies
- use (simulation) facilities and personnel to test one training programme
- disseminate the results of the project

Eskisehir Technical University, **Fraport TAV Antalya**, **Lazio Connect, EUROCONTROL**

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Project website

skill-UP
Skilling, Upskilling,
Reskilling in the future
Air Transport

OVERVIEW CONSORTIUM OUTCOMES RESOURCES NEWS & EVENTS

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skill-UP

Stakeholders involvement

The skill-UP Project involves a wide number of stakeholders in order to steer its R&D activities. The members of the Stakeholders group will be informed about the project strategic goals and progress and will provide feedback and valuable knowledge stream based on their own experience and information.

Almost 80 people registered so far, representing international, European and national stakeholders representing transport service providers, public authorities at national and European level, training providers, accreditation bodies, universities and research institutes.

Are you interested in being part of our Stakeholders group? Go to

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Q&A

Thank you!

www.skillup-air.eu/