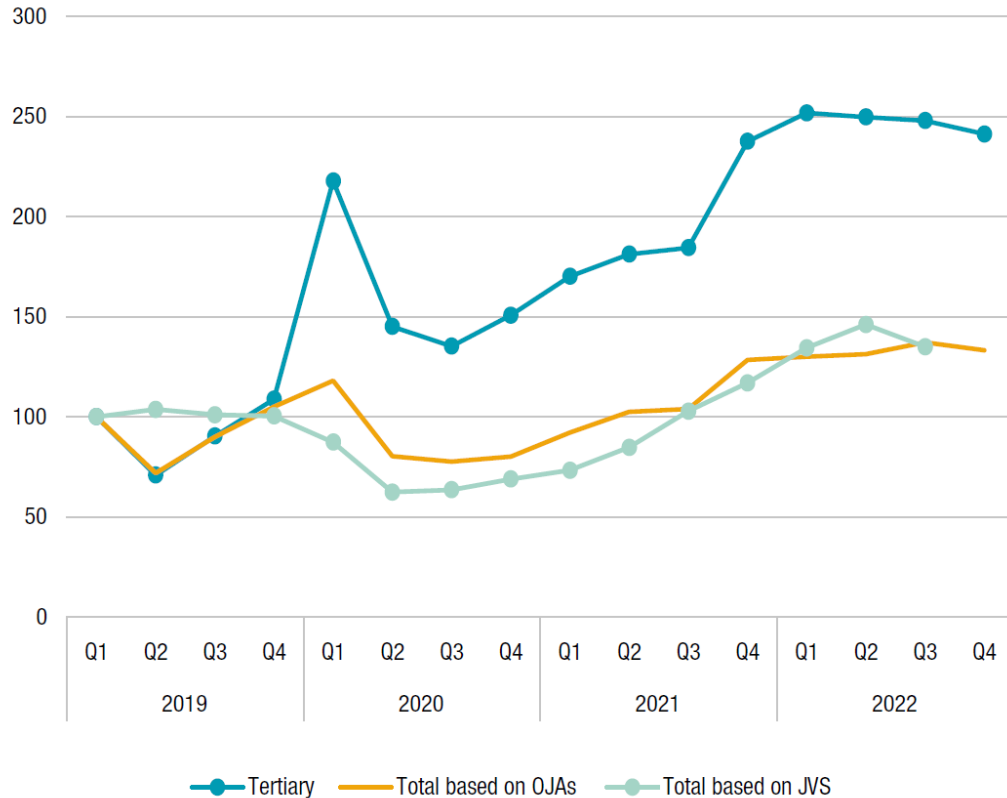# Matching skills
From evidence to action

Konstantinos Pouliakas
Expert, Cedefop

Cedefop 5th VGT, 'Inspiring skills matching policy'
17 October 2023

Skill mismatch – More than shortages

SKILL SHORTAGE

VERTICAL   Over-qualification
under-qualification

HORIZONTAL   Field-of-study mismatch

SKILL GAPS   Skills below level needed to do job proficiently

SKILL OBSOLESCENCE   Skills becoming outdated (physical, economic)

SKILL UNDERUTILISATION   Not (effectively) using skills in job

Legend: Tertiary — Total based on OJAs — Total based on JVS

NB: Calculation of tightness based on JVS data does not include information from DK, FR and IT. Vacancies requiring tertiary education were derived based on occupation group, including ISCO groups 1,2 and 3. The tightness for 2022 was calculated based on values for unemployment for year 2021.
Source: Cedefop calculations based on EU-LFS, JVS and WIH-OJA database.

Skill underutilisation is marked in Europe

HIGH MISMATCH

Hungary
Greece
Latvia
Lithuania
Ireland
Cyprus
Spain
Italy

**HIGH VERTICAL/
LOW HORIZONTAL**

France
Malta
Portugal
Sweden
Norway
Estonia
Iceland

**LOW VERTICAL/
HIGH HORIZONTAL**

Czechia
Slovakia
Poland
Croatia
Bulgaria
Belgium
Austria

LOW MISMATCH

Slovenia
Romania
Germany
Netherlands
Denmark
Luxembourg
Finland

28%
Overqualified

12%
Underqualified

35%
Field mismatch

55%
Overskilled

CEDEFOP

Skill mismatch – Wasting potential

SKILL MISMATCH	PAY ABOVE HIGHEST QUARTILE	JOB SATISFACTION
Reference group: workers with same education level ('classmates')		
Overqualified	-9% ***	-7% ***
Severely overqualified	-15% ***	-9% ***
Underqualified	6% ***	3% ***
Reference group: workers in job with similar education and skill requirements ('coworkers')		
Overqualified	+1% **	-4% ***
Severely overqualified	+3% ***	-4.4% ***
Overskilled	-5% ***	-17% ***
Underqualified	-6% ***	insignificant

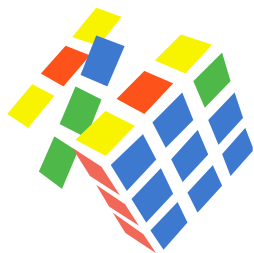*NB*: Mincer-type wage and job satisfaction probit regressions; marginal probabilities at means.

Source: ESJS2

Strengthening skills intelligence
for Europe

Matching skills

Skills forecast

Skills OVATE

European skills & jobs survey

Jointly produced by CEDEFOP and EUROFOUND

Eurofound Company Survey

Matching skills
Inspiring policies for anticipating and matching skill needs
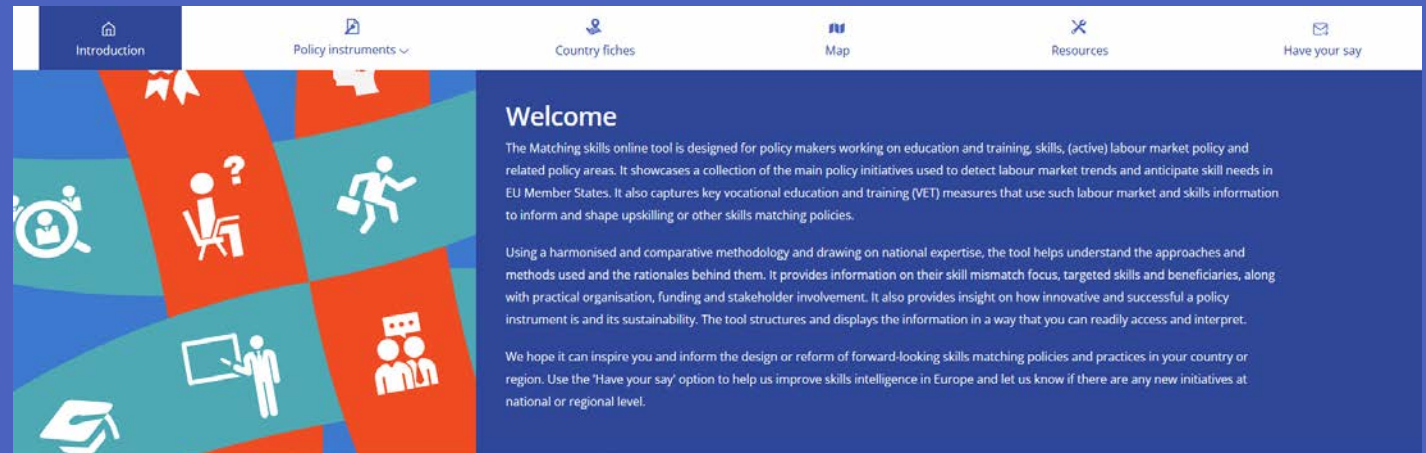
27
EU countries

102
skills anticipation and matching practices

65
Main skills anticipation initiatives

37
Key VET policy measures

COMPARATIVE EU INFORMATION BY

- Focus area
- Policy area
- Skills matching focus
- Use of skills intelligence
- Country

- Resources
- Have your say

www.cedefop.europa.eu/en/tools/matching-skills

Matching skills online tool

Displaying 102 policy instrument

TITLE	COUNTRY	FOCUS AREA	POLICY AREA	SKILLS MATCHING FOCUS	USE OF LABOUR MARKET INTELLIGENCE
AMS Standing Committee on New Skills	AT	MAIN SKILLS ASSESSMENT/ANTICIPATION INITIATIVE	EDUCATION TRAINING EMPLOYMENT INNOVATION DIGITAL ECONOMY	UPSKILL OR RESKILL EMPLOYED ADULTS UPSKILL OR RESKILL NON-EMPLOYED ADULTS FACILITATE JOB / CAREER TRANSITIONS ADDRESS SECTORAL OR OCCUPATIONAL SKILL SHORTAGES ADDRESS MISMATCH BROADLY OTHER	DESIGNING TRAINING PROGRAMMES TO ACTIVATE UNEMPLOYED INFORMING DECISIONS ON COURSE FUNDING/PROVISION INFORMING AND TRAINING CAREER GUIDANCE AND COUNSELLORS INFORMING JOB-SEARCH DECISIONS OF UNEMPLOYED ENABLING STRATEGIC BUSINESS DECISIONS AT SECTOR/ENTERPRISE LEVEL OTHER
Implacement labour foundation	AT	MAIN SKILLS ASSESSMENT/ANTICIPATION INITIATIVE	EDUCATION TRAINING EMPLOYMENT	FACILITATE JOB / CAREER TRANSITIONS	DESIGNING TRAINING PROGRAMMES TO ACTIVATE UNEMPLOYED
PES Skills Barometer	AT	MAIN SKILLS ASSESSMENT/ANTICIPATION INITIATIVE	EDUCATION TRAINING	FACILITATE JOB / CAREER TRANSITIONS ADDRESS SECTORAL OR OCCUPATIONAL SKILL SHORTAGES ADDRESS MISMATCH BROADLY OTHER	OTHER
Competent based matching	BE	MAIN SKILLS ASSESSMENT/ANTICIPATION	EDUCATION	UPSKILL OR RESKILL EMPLOYED ADULTS	INFORMING THE DESIGN OF NATIONAL QUALIFICATION FRAMEWORKS

Matching skills online tool

Competent based matching

Competent

POLICY INSTRUMENT | 🇧🇪 BELGIUM | 📄 PDF Version

Description

Country	🇧🇪 Belgium
Focus area	**MAIN SKILLS ASSESSMENT/ANTICIPATION INITIATIVE** *The Competent matching system is a database system. This system is the foundation for the competent based matching approach adopted by the VDAB. Employers provide information on vacancies and competencies they need. Employed adults can use the database to make a compentency profile or gather information. Jobseekers can use the database to determine what competencies they need.*
ⓘ **Implementation level**	REGIONAL
ⓘ **Legal base**	The most recent legal base for the initiative is to be found in the policy document 2019-2024 of the Department of Work and Social Economy (Beleidsnota 2019-2024 Werk en Sociale Economie)
ⓘ **Starting period**	2016
ⓘ **Policy area**	EDUCATION TRAINING

Description

Skill mismatch

Methods

Stakeholders

Sustainability

Other instruments in Belgium

Skill mismatch

ⓘ Skill mismatch target

> UNDERQUALIFICATION (INDIVIDUALS' QUALIFICATIONS/CREDENTIALS ARE BELOW THEIR JOB'S NEEDS)

> SKILL GAPS (WORKER'S SKILLS ARE BELOW THE LEVEL OF PROFICIENCY REQUIRED BY THEIR EMPLOYERS AND JOBS)

> SKILLS OBSOLESCENCE (SOME OR ALL OF AN INDIVIDUAL'S SKILLS ARE NO LONGER RELEVANT TO THE CURRENT EMPLOYER OR IN THE LABOUR MARKET GENERALLY)

ⓘ Skills matching focus

> **UPSKILL OR RESKILL EMPLOYED ADULTS**
> *Employed adults can also use the database to make a competency profile or gather information on reskilling or upskilling based upon the vocational skill fiches as part of lifelong learning (levenslang leren).*

> **UPSKILL OR RESKILL NON-EMPLOYED ADULTS**
> *Jobseekers can use the database to determine what competencies they need (upskill, reskill) in order to qualify for a specific job and can communicate their competencies by making a competency based job profile for matching purposes.*

> **ADDRESS SECTORAL OR OCCUPATIONAL SKILL SHORTAGES**
> *Employers provide information on vacancies for the database and can use it to communicatie what competencies they need.*

ⓘ Skills delivered

> JOB SEARCH SKILLS

> CAREER MANAGEMENT SKILLS

Description

Skill mismatch

Methods

Stakeholders

Sustainability

Other instruments in Belgium

Competent based matching

Competent

POLICY INSTRUMENT 🇧🇪 BELGIUM

Skills To Advance.

n/a

🟢 IRELAND

Sectoral and occupational foresight mechanism (Foresight Lab)

Εργαστήριο πρόγνωσης και παρακολούθησης παραγόντων αλλαγής του παραγωγικού περιβάλλοντος κλάδων και επαγγελμάτων

POLICY INSTRUMENT 🇬🇷 GREECE

Methods

SKILLS FORESIGHT

A wide array of foresight techniques are used, including in-depth sectoral studies, focus groups, expert panels, skills-focused analysis and roadmapping.

EXPERT PANELS

A wide array of foresight techniques are used, including in-depth sectoral studies, focus groups, expert panels, skills-focused analysis and roadmapping.

ⓘ **Methods**

SKILLS FORECASTING

SOLAS hosts the Skills and Labour Market Research Market Research Unit, which produces the majority of majority of Ireland's labour market intelligence and skills data.

Please select the most important options and explain how the labour market information (LMI) has been used (maximum 50 words)

INFORMING THE DESIGN OF NATIONAL QUALIFICATION FRAMEWORKS (NQFS)

The Action contributes to the design of NQF through the updating of 10 occupational monographs and the delivery of 5 new occupational monographs.

ⓘ **Use of skills intelligence**

INFORMING DECISIONS ON COURSE FUNDING/PROVISION

ENABLING STRATEGIC BUSINESS DECISIONS AT SECTOR/ENTERPRISE LEVEL

DESIGNING STANDARDS AND ACCREDITATION

The Action contributes to the design of standards and accreditation through the delivery of 7 new certification schemes.

INFORMING DECISIONS ON COURSE FUNDING/PROVISION

The Action contributes to the design of training programmes through the delivery of 7 new training curricula.

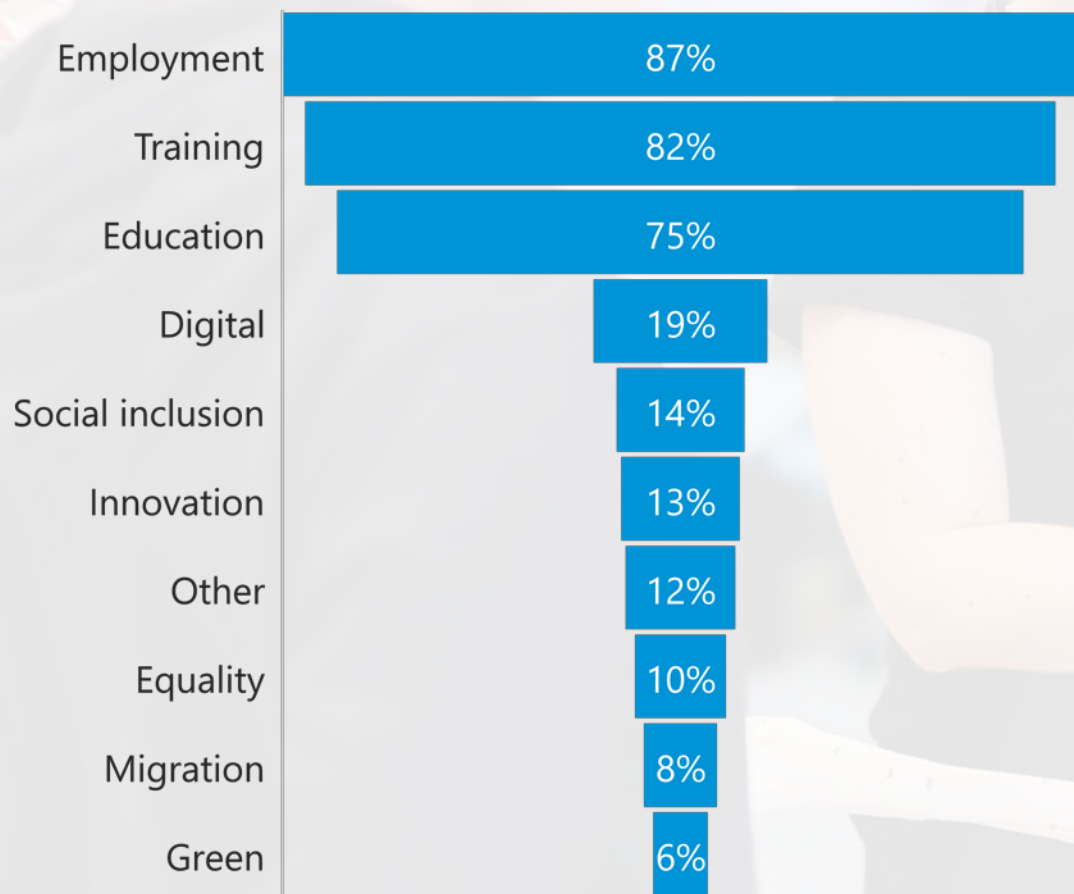**ENABLING STRATEGIC BUSINESS DECISIONS AT SECTOR/ENTERPRISE LEVEL**

The Action contributes to the enabling of strategic business decisions at sector level through the delivery of 20 Road Maps.
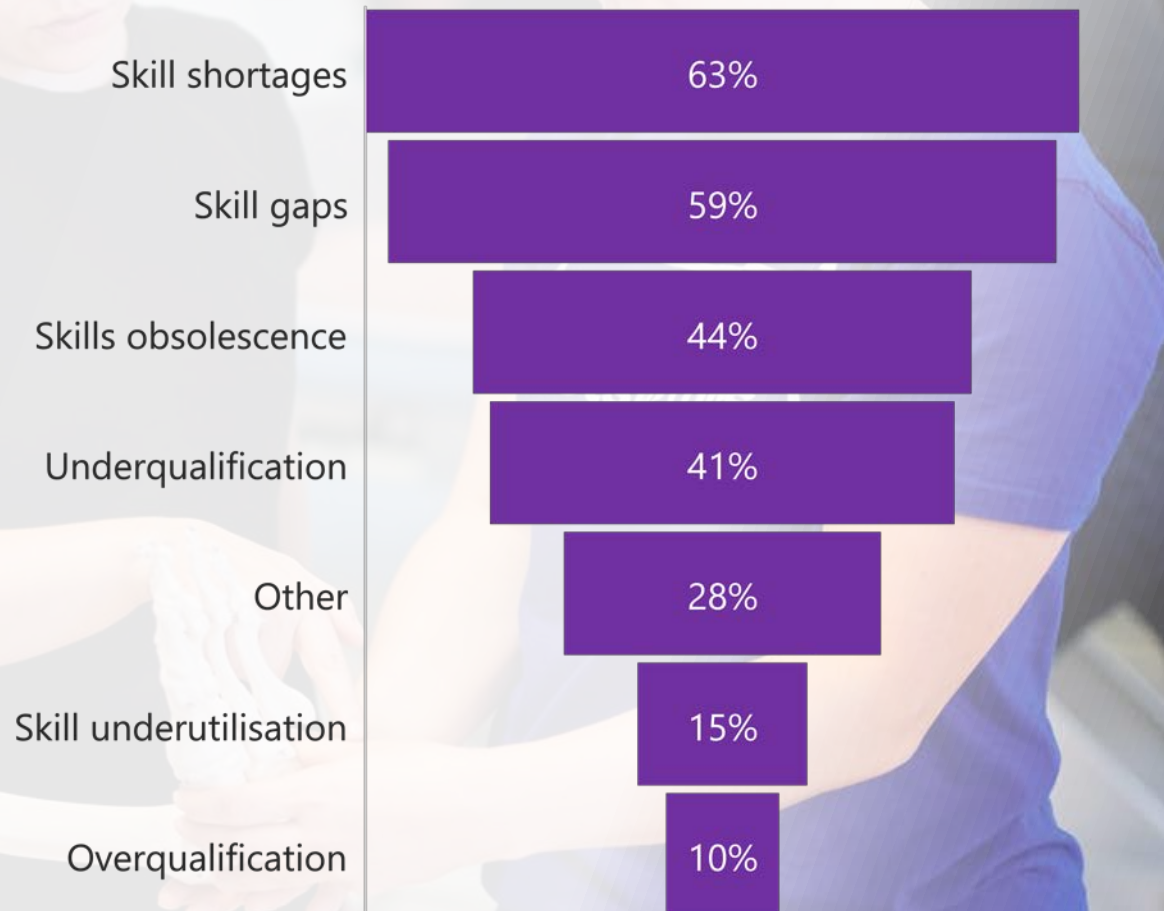
EU skills matching
Target areas

To which policy area does the initiative apply?

Policy area	%
Employment	87%
Training	82%
Education	75%
Digital	19%
Social inclusion	14%
Innovation	13%
Other	12%
Equality	10%
Migration	8%
Green	6%

What type of skill mismatch does the initiative aim to address?

Skill mismatch type	%
Skill shortages	63%
Skill gaps	59%
Skills obsolescence	44%
Underqualification	41%
Other	28%
Skill underutilisation	15%
Overqualification	10%

Source: Matching skills

EU skills matching
Channels

CEDEFOP

What type of skill does the initiative deliver?

- Employability/soft skills
- Job search
- Basic digital
- Career management
- Advanced digital
- Basic literacy and numeracy
- Green
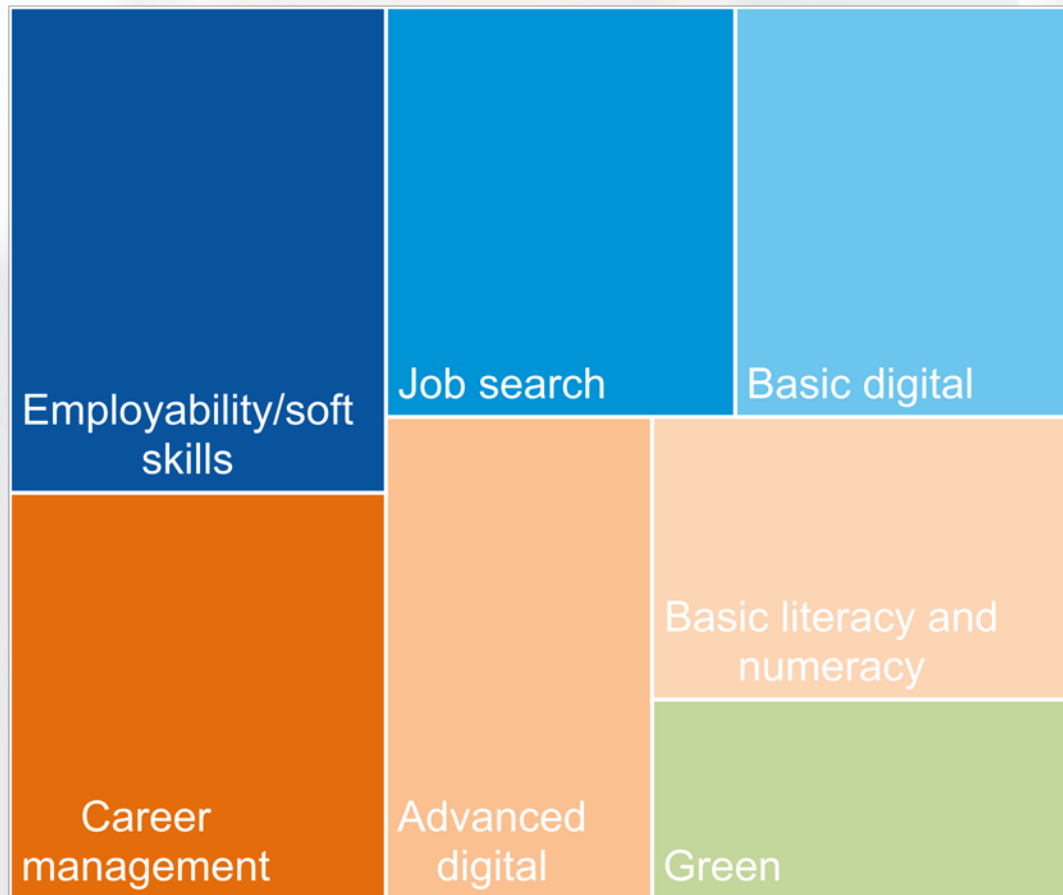
How does the initiative address skill mismatches?
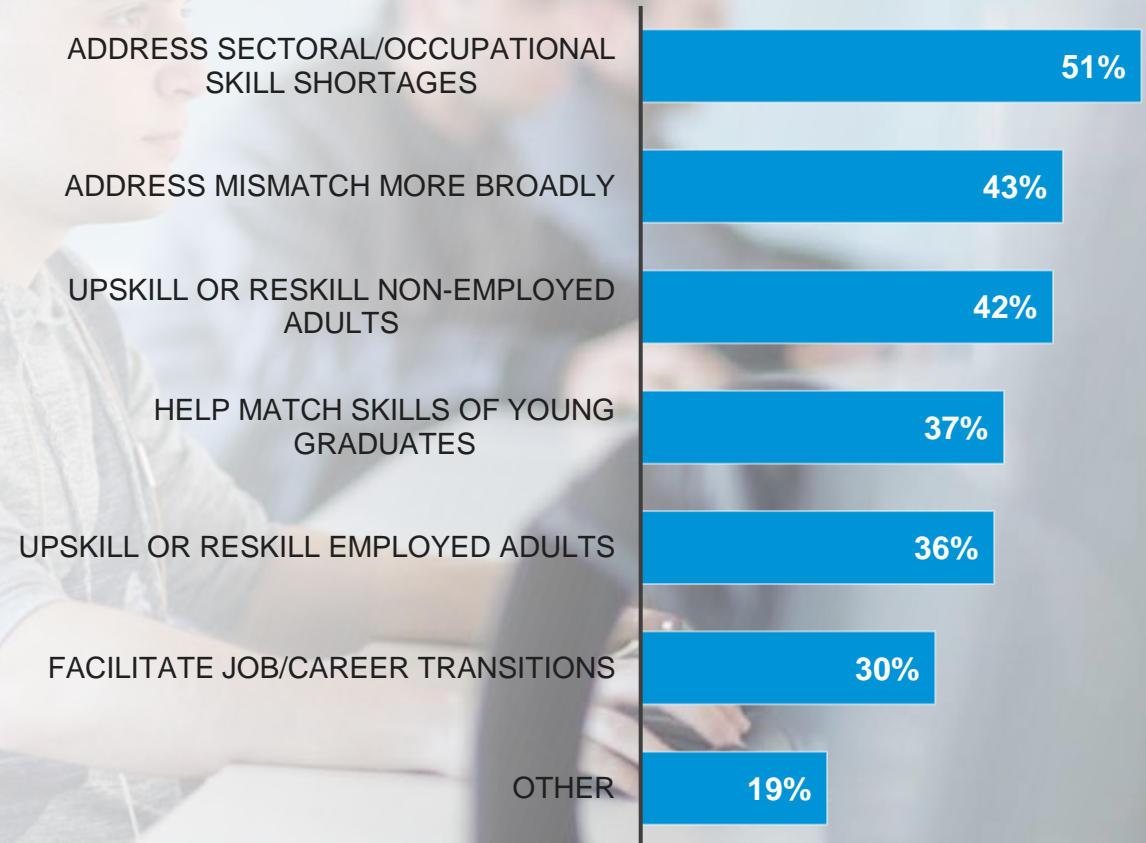
ADDRESS SECTORAL/OCCUPATIONAL SKILL SHORTAGES	51%
ADDRESS MISMATCH MORE BROADLY	43%
UPSKILL OR RESKILL NON-EMPLOYED ADULTS	42%
HELP MATCH SKILLS OF YOUNG GRADUATES	37%
UPSKILL OR RESKILL EMPLOYED ADULTS	36%
FACILITATE JOB/CAREER TRANSITIONS	30%
OTHER	19%

Source: Matching skills
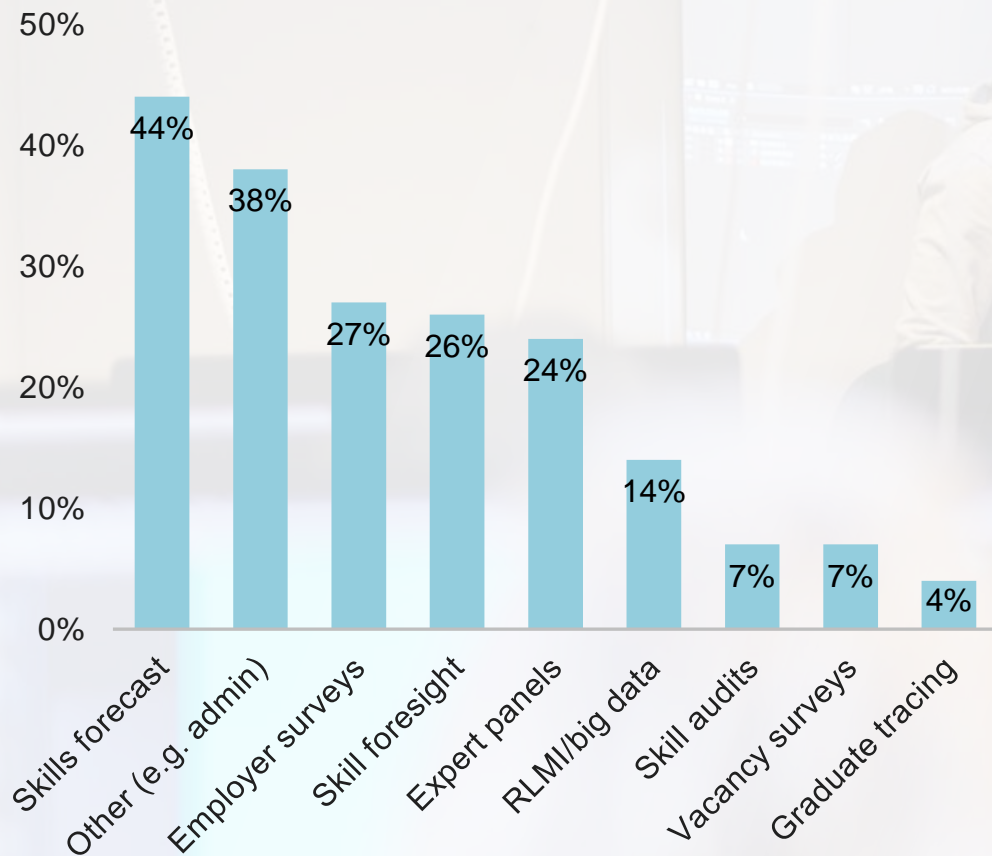
Skills matching
main policy lessons

- Skill "deficiencies" remain primary target area
  (McGuinness, Pouliakas and Redmond, JES, 2018)

- VET policies becoming integrated with employment policy

- Social inclusion/equality/green transition not (yet)a target

- Focus on 'external' mismatch (e.g. vacancies, unemployed); less 'on-the-job'

- Emphasis on 'soft' and digital skills

- Skill forecasts/surveys/administrative methods still dominant

- National ministries/agencies/PES at driving seat

Organisation	Resources	Stakeholders	Use of information skills intelligence	Sustainability

Thank you

For more information
Konstantinos.Pouliakas@cedefop.europa.eu

www.cedefop.europa.eu

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EUROPEAN YEAR OF SKILLS

Inspiring skills matching policy
From evidence to action

Cedefop virtual get-together

17 October 2023
11.30-13.00 CET