



# GOVERNANCE OF EU SKILLS ANTICIPATION AND MATCHING SYSTEMS

European Centre for the Development  
of Vocational Training (Cedefop)

Framework for assessing  
governance of skills anticipation  
and matching in EU countries

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Table 1. **Cedefop's skills governance framework**

	<b>Organisation</b>	<b>Resources</b>	<b>Stakeholders</b>	<b>Use of information</b>
<b>Foundations</b>	<b>A</b> Legal and institutional framework	<b>D</b> Funding and human resources	<b>G</b> Cooperation arrangements	<b>J</b> Feedback mechanisms
<b>Processes</b>	<b>B</b> Management and control	<b>E</b> Data, methods and expertise	<b>H</b> Feedback and validation	<b>K</b> Customisation and dissemination
<b>Sustainability</b>	<b>C</b> Vision and strategy	<b>F</b> Stability	<b>I</b> Integration of stakeholder needs	<b>L</b> Reputation

Source: Cedefop (2017)

Table 2. **Facilitators and descriptors of Cedefop's skills governance framework**

Main pillar	Sub-pillar	Facilitators	Descriptors
External environment	Economy	Regular publication of key economic indicators	Output trends; macro-economic indicators; austerity/public spending constraints
			Perceived causes of economic performance and whether these relate to skills supply/skill shortages
	Labour market and education system	Provision of labour market information	Key employment statistics (e.g. employment by educational attainment, returns to qualifications)
		Reform of education system in relation to labour market needs	Understanding rationale for education system reform in relation to labour market
	Demography	Policies to deal with demographic supply or actions taken to adapt to an ageing population	Migration trends/policies towards migration/attempts to validate qualifications of those from EU/outside of EU
			Policies designed to cope with an ageing population
Regulation, governance and policy	Regulation/legislation relevant to LMSI	Specification of skills anticipation in legislation/regulation	Legislation dedicated to a national skills strategy is in place
		If no regulation, does skills anticipation have an accepted place in policy	Development and operation of LMSI explicitly embedded in legislation or regulation/if no legislation or regulation is in place, there is an well-established tradition or non-formal arrangements in place
			Legislation/regulation describes ways for LMSI integration in policy-making
			Legislation makes it obligatory for HE/VET institutions to respond to LMSI in enrolment decisions
	Governance style	Wider political and economic system is predicated on a process of	Extent to stakeholder involvement in practice
			Role of stakeholders: advisory or decision-making

Main pillar	Sub-pillar	Facilitators	Descriptors
		stakeholder involvement	Collection of labour market and skills intelligence to be used for policy reasons is standard practice
			Policy ambitions and objectives tend to drive the development, adaptation and implementation of policy instruments
			Statistical evidence and skills intelligence has a significant impact on the policy decision-making process
	Cooperation between stakeholders	Regulation of stakeholder involvement in skills anticipation/LMSI and actual observed practice	The institutions in which stakeholders involved and their role within these
			Are some stakeholders excluded? If so, why?
			What are particular areas of responsibility
			Collaboration among stakeholders is encouraged by (national) culture
			Collaboration between employers and employee organisations is customary at policy level
			Do certain groups prove difficult to engage with and why? Do some stakeholders participate, but do not play much of a role. If so, why?
	Policy domains and (current) policy intent	Regulation/legislation specifies the responsibilities for skills anticipation/LMSI in the wider political system	Actual roles filled by different ministries and agencies; and roles of NGOs
			There exist clearly defined policy instruments and projects aimed at skill needs anticipation and matching
			LMSI is clearly defined as a building block in national qualification framework acts
LMSI is clearly identified as an element of a quality assurance system			
LMSI is clearly defined as a building block in Validation of non-formal and informal learning			

Main pillar	Sub-pillar	Facilitators	Descriptors
	Stability and continuity	Political commitment – over time – to dealing with skills anticipation	The development/operation and use of LMSI is supported by key political parties
			There is evidence of sufficient political commitment to the sustainability of LMSI
			LMSI development has a clear mission which is known, understandable and shared by authorities and stakeholders
Funding and resources for LMSI/skills anticipation	Funding	Dedicated funding stream	Level of funding/stability of funding
		Funding guaranteed in regulations	Sources of funding (EU, national, etc.)
			Whether funding continuous and/or ad hoc (e.g. dependence on one-off EU funding)
			Projection of disengagement from EU funding and reliance on national resources is in place
			A project plan that takes into consideration direct and indirect costs and benefits of LMSI exists
			Stakeholders contribute to funding
	Personnel	Recognition of expertise required in order to produce LMSI	Number of personnel (by category)
			Outside experts are used
		Outside experts are used	Competent authorities and stakeholders' representatives rely on specialised experts
			Experts are offered training to support their professional development
		Experts working for several stakeholders can brainstorm/collaborate regularly	

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			Provisions for drawing on external expertise if not available domestically exist
		Support available for stakeholder/expert involvement	Stakeholders experts funded to contribute (and by who); if so, to do what?
	Use and sufficiency of resources	Resourcing (regularly) reviewed	Is amount of funding and expertise available considered sufficient
			What are implications for LMSI of existing funding arrangements/staffing
			Sufficient number of experts and administrative support for the operation of LMSI, the analysis of data and diffusion of results
			Competent authorities and stakeholders' representatives rely on specialised experts
			Experts are offered training to support their professional development
			Experts working for several stakeholders can brainstorm/collaborate regularly
			Provisions for drawing on external expertise if not available domestically exist
			Is there any evidence that available expertise is not being used? And if so, why?
			In terms of resources: which part of the process should be considered the weak link (i.e., if any, where is the critical shortage in resources)?
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LMSI: institutional responsibilities	Institutions/agencies involved	Roles of various agencies clearly defined in policy	Which are the agencies involved and what are their respective roles
			To what extent are non-government agencies involved and what is their role



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	Management of involvement	There is a central coordinating agency	To what extent are national, regional, and sectoral interests represented and how?
			Is there coordination of LMSI/skills anticipation and if so, who by?
			How is the role of outside experts determined?
			What role do external experts play
			Are data made generally available?
			Leading authorities for carrying out LMSI exist and are widely accepted by relevant stakeholders
	Clear specification of project plan	A clear plan for task responsibility among stakeholders exists and is widely accepted by relevant stakeholders	
			What are main areas of consensus/conflict between stakeholders if any? And how is conflict resolved or has been resolved?
	Project management	Clear specification of project plan	Leading authorities for carrying out LMSI have a well-defined project plan specifying necessary steps and actions
	Role of stakeholders	Stakeholders expected to take part in various forums	The institutions in which stakeholders take part in practice
The remit of their decision-making			
Play an active part in practice/how influential in practice			
Nature of involvement		Decision-making or advisory in practice	
Periodicity of engagement	Regularity of meetings laid down in regulation or policy	How often do they meet?	
LMSI: nature of stakeholder	Means of coordination	Stakeholder collaboration is facilitated via formal/informal	How is the variety of LMSI data all brought together, by whom, and in what format?

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engagement and its management		mechanisms	Formal committees/councils of all key LMSI stakeholders exist
			Ad hoc meetings between all key LMSI stakeholders regularly take place
			Dedicated skills bodies have been instituted (e.g. sector skill bodies)
			Evidence of co-ordination failures? And if so, why?
	Coverage of coordination	Stakeholder bottlenecks are avoided or swiftly resolved	Mechanisms to resolve potential conflicts in LMSI interpretation and policy formation are foreseen
			Inclusion of all relevant high level stakeholders
			Inclusion of stakeholders of smaller size/representation
	Design of LMSI	Participation of stakeholders in design/adaptation of LMSI	Stakeholders regularly provide LMSI
			Stakeholders are involved at a strategic level in the design of anticipation tools
		Design ownership by stakeholders	Stakeholders are involved in the design of tools at national level. If so, why ones and why
			Stakeholders undertake own/independent LMSI exercises
			Stakeholders participate in strategic foresight exercises as part of expert groups
	Validation of LMSI	Stakeholders participate in validation of LMSI	Specific agreements exist between main LMSI body (e.g. PES) and sectoral bodies to validate LMSI outputs
Research centres are requested to validate LMSI results			
Transmission of LMSI	Stakeholders are involved in LMSI	Stakeholders disseminate LMSI to own target audience	



Main pillar	Sub-pillar	Facilitators	Descriptors
		dissemination	Stakeholders jointly (with LMSI generating body / others) disseminate LMSI to target Stakeholders disseminate LMSI to broad target audiences
LMSI tools	Specific tools used	Measures of current and future skill demand are in demand	What methods are used for purposes of LMSI (surveys, tracer studies, forecasting, foresight, etc.)
			What specific information/indicators is each tool designed to deliver?
			Is there are a core set of information produced that represents the heart of the system
			Is LMSI 'harmonised' if similar/the same indicators can be developed from various sources?
			Is there a direct link between LMSI and planning of education and training places?
	New developments on the horizon	New developments encouraged	What new developments are on the horizon?
			Is there greater use of administrative data/matched databases, use of big data, etc.
			How much progress to date in new developments
			How will they improve skills anticipation
	LMSI tool limitations		Lack of expertise
			Lack of data
			Difficulty articulating or agreeing the purpose of skills anticipation
	Updates	Regular updates are provided	How often are data updated?
Is this considered sufficient? Does it coincide with stakeholders planning cycles			

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LMSI: dissemination	Who are the target groups	Policy identifies how different groups might be targeted/reached	Specific groups are targeted directly and why
			Use of intermediaries to transmit information
	Degree of information centralisation	LMSI is disseminated to a wide audience	LMSI is disseminated to all involved stakeholders and not only within policymaking circles
			LMSI is used to inform career guidance and counselling (at all levels)
			LMSI is regularly used by PES officials
			LMSI is regularly used by VET providers
	How information communicated	Channels are encouraged and funded to communicate through various channels	LMSI is freely provided to micro actors (students, families, firms)
			LMSI flow to the public (parents, students) through free of charge events, web platforms, regional campaigns etc. is encouraged
			LMSI is transmitted via regional/local offices (PES, EuropeDirect etc.)
			LMSI is disseminated to key EU jobs and skill portals
	Types of information produced	There are a well-developed series of outputs that are regularly used	How is information produced/in what format?
			How is this tailored to different user groups' needs?
			Specific LMSI information is produced for PES officials/VET providers/education planning/micro-actors/journalists
	Timeliness of dissemination	LMSI is disseminated in a timely fashion	LMSI is disseminated to relevant audiences within a reasonable time frame (specify time frame relative to repetition cycle)
Technology	State-of-art methods for LMSI dissemination are used	LMSI dissemination takes place via specific web portals, social media, IT infrastructure	

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LSMI: Incentives in use	Types of incentive	Targets set by government ministries for skills matching	What targets are in place and what is their purpose.
			How have these developed over time and why
			How are the incentives designed to meet targets and what is role of skills anticipation in allowing targets to be reached
			Have targets been met (if not, why not)
	Groups incentivised	Particular groups incentivised to meet certain targets	Which groups are incentivised and to what extent (e.g., learners, unemployed, etc.)
			Why are groups incentivised
Use in policy-making	Steering policy-making	Steering initial education provision	LMSI is used to make decisions on allocation of school (HE/VET) places and funding
			LMSI is used to make decisions on curricula development and revisions to qualification frameworks
			LMSI is used to inform content of apprenticeship training and number of places
		Steering continuing education and training	LMSI is used to influence funding, curricula, training offers and skill development programmes in enterprises
			LMSI is used to inform the development of adult learning policies
		Steering active labour market policies	LMSI is used to influence content of PES training courses
			LMSI is used as input in skills profiling of job seekers
			LMSI is used to derive shortage occupations and training is targeted towards them
		Influencing guidance and counselling	LMSI is integrated as part of career guidance and counselling activities

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			LMSI is provided online via career guidance portals
		Steering migration policies	LMSI is used to define skill shortage occupation lists and influence migration quotas
		Steering employment policies	LMSI is used as key input in setting occupational standards
	Use of specific tools	Certain sources of data are relied upon more than others	What is the core set of LMSI that tends to be used in policy making? [Alternatively for specific respondents: what is the core set of LMSI used in the respondent's organisation]
			Why are certain sources of data preferred over others?
	Evidence of impact	The use of LMSI is clearly evident in policy-making	What evidence is there of LMSI influencing behaviour? Are there examples where policy has been changed
If there is limited impact on policy, why is this the case			
Assessment, evaluation and reputation development	Assessment	Ex ante and/or ex-post impact evaluation of LMSI exercises is in place	Independent and competent authority/research institution is responsible for impact evaluation
			Impact evaluation is designed with the involvement of all key stakeholders
			Impact assessment regards short- medium and long-term goals
			Impact assessment touches upon educational, employment, economic and social inclusion goals
			Impact assessment is carried out periodically
	Regularity of impact assessment exercise	Impact assessment is not one-shot	Impact assessment is carried out periodically
Building esteem	Stakeholders make their views known	What is the general consensus on the outputs from the LMSI systems or parts thereof	



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			Why do certain views prevail (quality of outputs, periodicity, appropriateness of tools to needs of the labour market, etc.)
			Is the system seen to be contributing to either long-term or short-term development of the labour market?
	Follow-up actions responding to impact assessment exercise	Clear procedure on follow-up actions based on impact assessment results	What measures have been taken to address esteem/reputational issues?
System learning	How lessons learned (for nature of outputs, tools and methods used, dissemination, etc.)	Feedback loops are established	How is the feedback loop established? What mechanisms are in place to ensure any lessons to be learnt are actually learnt?
	Evidence of lessons learned being acted upon	How are suggestions improvements included in the processes/methodologies?	What evidence is there that lessons are being learnt?
	Evidence of system flexing in relation to stakeholder/user group comments		Are some issues proving more intractable than others, and if so why?
	Specific actions	Actions are planned in relation to certain target groups	PES case workers
	Guidance and career counsellors		
	Teachers and trainers		
	Stakeholder representatives in joint committees		
	Employers' WBL trainers		
		Parents' organisations	



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			Vulnerable groups (LTU, migrants)
		Actions are anticipated in relation to certain stakeholders	More training for LMSI experts/building expert capacity
			Greater involvement with experts from other countries
			Establishing alternative supply of LMSI
		Commissioning new data/new models	New data collection has been commissioned? If so, what data and what is the underlying rationale for the data collection
			Have new models been commissioned? If so, why?



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