European Commission

Call for tenders - JRC/SVQ/2022/OP/0013

European Digital Skills Certificate – Feasibility Study (EDSC-FS)

Open procedure

DRAFT TENDER SPECIFICATIONS Part 2: Technical Specifications

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1 BACKGROUND AND RATIONALE

The Directorate and the Unit

The Joint Research Centre is the internal science and knowledge service of the European Commission. Its aim is to support EU policies with independent evidence throughout the whole policy cycle. Research and policy support is focused on the six new policy priorities of the Commission (2019-2024) led by President Von der Leyen: A European Green Deal; An economy that works for people; A Europe fit for the digital age; Promoting our European way of life; A stronger Europe in the world and a new push for European democracy.

The Directorate Growth and Innovation of the Joint Research Centre (JRC) of the European Commission, based in Seville (Spain), is closely involved in creating a strong and resilient Economic and Monetary Union, ensuring stable financial markets, as well as strengthening and deepening the Single Market including the Digital Single Market. It assists in the development of policies for trade and modern manufacturing as well as in the analysis of how to achieve equitable access to education and training. This includes the examination of the key issues around open, digital science as well as open innovation and the characteristics of innovation ecosystems. It also includes the analysis of the impact of regional funding. The Directorate serves the following policy areas: Economic and Monetary Union, Employment and Social Affairs, Taxation, Competition, Enterprise and Industry, Information Technologies, Regions and Cohesion, Single Market, Trade, Education, Training and Youth, Customs and Audio-Visual Media.

The Human Capital & Employment Unit (JRC-B4) provides expertise, qualitative and quantitative analyses in the field of education and training, skills and employment. Following from the digital and green transition, the Unit is doing research on (1) adapting and modernising EU education and training systems and making them fit for the digital age, (2) tackling the changing nature of work and employment, and (3) addressing 21st century skills required for future jobs and for participation in society.

Policy background

On 30 September 2020, the Commission published in the <u>Digital Education Action Plan 2021-2027</u>, its intention to *Develop a European Digital Skills Certificate (EDSC) that may be recognised and accepted by governments, employers and other stakeholders across Europe. This would allow Europeans to indicate their level of digital competences, corresponding to the Digital Competence Framework proficiency levels.*

The EDSC should contribute to the EU digital skills strategy and objective of enhancing digital skills and competences for the digital transformation (<u>Digital Education Action Plan</u>), support the objectives of the <u>European Skills Agenda</u>, of 1 July 2020, which supports digital skills for all. The EDSC should also support the ambitious objectives of the Skills Agenda of ensuring that 70% of 16 to 74 year olds should have at least basic digital skills by 2025, and of the <u>Europe's Digital Decade target</u> of reaching a minimum 80% of the population with basic digital skills, by 2030.

Digital skills certification at European level will help to complement and increase visibility of existing digital skills training and certification schemes produced by governments and private actors across Europe. It will enable a common understanding of digital competences of different levels.

The EDSC will be based on the Digital Competence Framework for citizens, <u>DigComp</u>. A large number of digital competence certification services exist in the EU, provided by both private and public sector actors, at regional, national and international level. Moreover, a potentially large number of stakeholders could be affected by the EDSC.

The Digital Education Action Plan refers to the development of a European Digital Skills Certificate. In the context of this study, the contractor is invited to focus on digital skills certification at European level rather than on the development of a certificate per se. The implementation of the Action requires carrying out a Feasibility Study in order to ensure that the different options of the implementation are assessed against different scenarios for the implementation.

The final aim of the study is to ensure that the solution for an EDSC addresses the needs of and provides benefits to the multiple stakeholders, through a cost-effective design of the EDSC, building on, and not competing with existing schemes.

Research context

Previous JRC research on DigComp-based digital competence Certification include the following reports:

DigComp into Action: Get inspired, make it happen. A user guide to the European Digital Competence Framework. This Guide supports stakeholders in the implementation of the European Digital Competence Framework (DigComp) through sharing of 38 existing inspiring practices of DigComp implementations. These are illustrated by 50 content items consisting of Case studies and Tools. The list of examples provided in the Guide's annex is not exhaustive and aims to illustrate the wide range of DigComp implementation practices.

DigComp at Work report. This report and its accompanying Implementation Guide (published separately) support stakeholders in the implementation of the European Digital Competence Frame work (DigComp) in contexts of employability and employment through the analysis and sharing of 9 existing inspiring practices and related resources of DigComp implementations. The list of examples provided in the Report's Annex is not exhaustive and aims to illustrate the wide range of DigComp implementation practices.

DigComp at Work Implementation Guide, The Implementation Guide accompanies the 'DigComp at Work' report published separately. It aims at supporting labour market intermediaries in their digital skilling actions in employability or employment contexts. It offers specific guidelines, examples, tips and useful resources for the use of DigComp for defining specific job's digital competence needs, for assessing digital competences and for cataloguing, developing and delivering training on digital competences.

The work developed within this Study should build on this previous knowledge.

In addition, the contractor will make use of the results of the 1st EDSC consultation that took place from 25 Feb to 12 March 2021, available at the <u>Digital Competence Certification Community of Practice</u>.¹

2 AIM AND OBJECTIVES OF THIS CONTRACT

Objectives

The Feasibility Study has the following objectives:

- (1) mapping and analysis of the Digital competence development and skills certification landscape in the EU;
- (2) identification of stakeholders for consultation;
- (3) gap analysis (what is the demand for an EDSC and what is lacking) to understand the role and value of an EU Digital Skills Certificate and how it could support recognition of digital skills in Europe;
- (4) validation of the operational concept;
- (5) technical feasibility;
- (6) costs and benefits analysis for different stakeholders;
- (7) limitations, risks and challenges;
- (8) propose the definition of the purpose, scope and steps of a pilot of the EDSC.

Approach

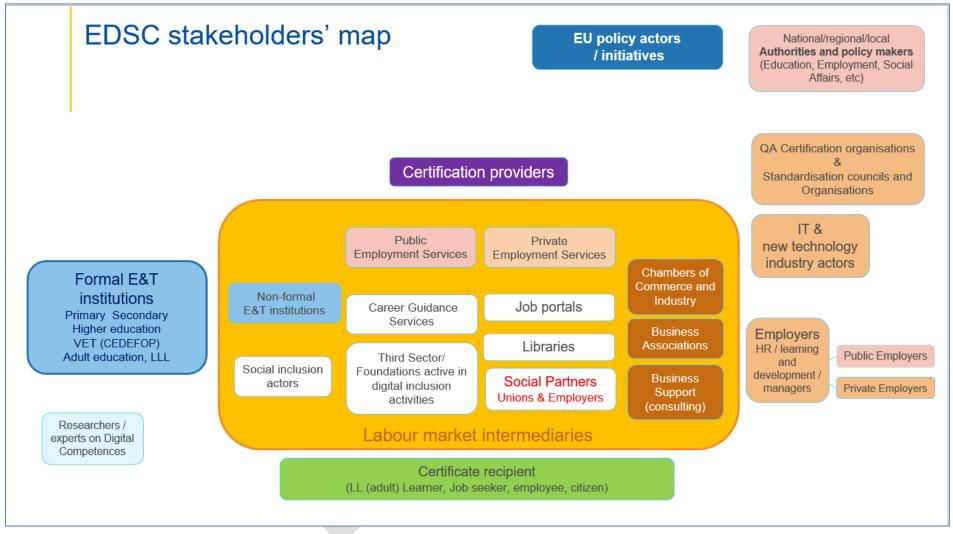
The Feasibility Study will be developed with a consultative and participatory approach, in close cooperation with a broad variety of stakeholders (see Fig.1 below), and will aim at developing consensus, promoting participation and building buy-in to the defined EDSC. Other channels, eventually more adapted to the targeted stakeholders, should also be used. The Study aims at ensuring that European added value is provided in the implementation of the Action, taking into account that the EDSC pertains to a policy area governed by the subsidiarity principle.

The development of the study needs to consider that the certification of digital competence is embedded in the wider process of digital skills development that involves other steps like: policy development, training of teachers and of other staff involved in employability development and career orientation, (self-) assessment of individual digital competence, education and training provision, individual learning activities, accreditation of courses followed, etc. The successful implementation and take-up of an EDSC will need to take place in connection to these other overall skilling related activities, and contribute to the goal of 70% of the EU adult population having basic digital skills by 2025, and 80 % by 2030.

Following the Feasibility Study, and after validation by stakeholders, it is expected that a Pilot will take place of which the purpose, scope, steps and participants will have been defined during this study.

¹ Please consult the padlet document uploaded in the Doc & files section of the CoP, and summary report (under publication)





3 TASKS

The Contractor must perform the following tasks during the implementation of the contract.

Task 1. Mapping the Digital competence development and skills certification landscape in the EU

This task will include the following sub-tasks, further detailed below:

- 1. Comparative mapping of existing digital skills certification schemes² and models in Europe
- 2. Usage of digital skills certificates by actors such as labour market actors, intermediary actors, E&T institutions, public authorities, etc.
- 3. Map of existing digital competence development policies in Europe leading to a certification, policy actors and alignment to DigComp
- 4. Evaluation of existing digital competence development offer and ecosystems in the EU and alignment to DigComp

Sub-task 1.1) Comparative mapping of existing digital skills certification schemes and models in Europe

The contractor must develop, through desk research³ and a consultation of relevant stakeholders, a LIST of existing **available digital competence certification schemes,** and possible different programmes in each scheme, offered by schools, higher education, VET institutions, training agencies, public bodies or private industry actors, at a local level, regional, EU and international level. It will also include recent developments that address digital certifications from a new technological perspective or content. All EU countries must be covered.

For all schemes included in the list, **basic information** will be included with at least the following information: issuer organisation, geographical coverage, languages supported, target groups, competence areas, competences, sectors, proficiency levels, user costs, delivery method (online/presential), DigComp alignment/non alignment/blended, adoption and recognition levels, years of operation, vendor independence.

For a sub-set of schemes, the contractor will provide a **more detailed analysis** of the characteristics of the scheme including, at least, elements such as operational implementation, assessment, security and quality assurance aspects, associated training offer, certificate characteristics, business model and sustainability aspects, as well as strengths and weaknesses. Finally, it will highlight key similarities and differences between schemes. The final list of schemes, and the subset of schemes to be analysed in more detail, will be agreed, based on a jointly defined selection criteria, between the contractor and the European Commission. It is expected that between 15 and 20 schemes will be analysed.

² A digital competence certification scheme in this document refers to the one that assesses the level of digital competence, and delivers a certificate, in whatever physical or digital format.

³ See, for example, Euridyce report on <u>Digital Education at School in Europe</u>, Aug 2019; <u>Innovation and digitalisation in VET</u>, Dec 2020; Cedefop research paper on <u>Key competences in initial vocational education and training: digital, multilingual and literacy</u>; and <u>COMMISSION STAFF WORKING DOCUMENT</u> Accompanying the document *Proposal for a COUNCIL RECOMMENDATION on Key Competences for LifeLong Learning* (COM(2018)24 final).

Here follows a non-exhaustive initial list of digital competence certification systems already identified, which will not necessarily be included in the list of schemes to be analysed in detail:

Certification scheme	Country(ies)	Certification scheme	Country(ies)
PIX , the online public service for assessing, developing and certifying digital skills. CleA Numérique , a Digital Competence Certification for employees (Adult Education), the result of a collective work among several including the French Ministry of Work and Adult Education (Certif Pro)	FR	ICDL , certification programmes, delivered through an active network worldwide, enable individuals and organisations to assess, build and certify their competence in the use of computers and digital tools.	International
ACTIC, Accreditation of skills in information and communication technologies (Cataluña) BAIT, Certification System for Basic Skills in Information Technology, which certifies the skills that a person has in the use of computer tools and the Internet (Basque Country) TuCertiCyl, certification of digital skills for citizenship (Castilla y León) CODIX, Certification of competences in office software (Galicia) Junta de Andalucía – under development	ES	<u>iC3 Digital Literacv Certification</u> by Certiport, validates worldwide learners' ability to do more than simply consume technology, and enables them to comprehend the possibilities and form the foundational set of skills necessary to support our modern digital economy.	International
ECCC, European Digital Competence Certificate	PL, CY, HR, B&H, Kosovo, Serbia, India, Bangladesh, Indonesia	Microsoft <u>Global skills initiative</u>	International
<u>CRISS</u> , a digital platform for the acquisition and certification of digital competences in primary and secondary schools throughout Europe.	CRISS Consortium member countries: HR, GR, IT, RO, ES, SE	ICoBC , International Council on Badges and Credentials, a network of educational, corporate, association and government organisations, to develop and facilitate best practices on badges and credentials regionally and globally.	International
D-Skill , a tool developed by a coalition of Italian chambers of commerce and industry (Unioncamere).	IT	<u>CompTIA</u> - The Computing Technology Industry Association - validates IT skills.	International
IDCERT , International digital certification			
AICA, an accredited ISO17024- compliant certification body, focusing on digital competences at all levels (from citizens and young students up to IT professionals)			
Cyprus Computer Society (managing ECDL programme in CY)	СҮ	SFIAplus – IT Skills framework BCS – the Chartered Institute for IT	International
Adult education centres, Higher	(Wallonie) BE	EITCI- European Information	EU

education centres		Technologies Certification Institute	
ITpass sp. z o.o. is a certification system that confirms having competences in the field of information and communication technologies at various levels of advancement.	PL		
<u>Fit4Internet</u> (Austria ADSB) – under development	AT		

Sub-task 1.2) Usage of digital skills certifications

This task will identify through desk research, existing literature, or, if needed, through consultation with stakeholders, the current use of digital competence certifications by: citizens, learners, workers, private and public employers, education and training institutions and labour market intermediaries, as per Fig 1.

Sub-task 1.3) Overview of existing digital competence development <u>policies</u> leading to a certification in Europe, policy actors and alignment to DigComp

Note: Sub-task 1.3 and 1.4 will be carried out with the same sets of country groups: a) the set of 5-10 countries where developments are found both on digital competence development policies leading to a certification and on education and training programmes leading to a certificate; and b) the set of 5-10 countries where no developments are found on both areas.

- A. Based on recent literature and desk research,
 - a. Identify 5 to 10 EU countries where there are existing digital competence development policies leading to a certification.
 - b. For each of the countries, analyse the existing digital competence development and certification policies and strategies, taking into account education and training, skills, labour market, industry, digital transformation (etc) policy areas addressing digital competences/ skills development of citizens, learners, workers, job seekers, etc, including vulnerable groups. Identify the level of alignment to / support of DigComp of these policies.
 - c. For each of the countries, identify the **funding mechanisms** that exist for digital competence development provision government incentive schemes and training allowance schemes.
 - d. For each of the countries, identify the related ministries and authorities, business or sectoral organisations, or other, in charge of digital competence development and certification actions across countries /regions.
 - e. For each of the countries, analyse development trends.
- B. Identify 5 to 10 EU countries where there are no existing digital competence development policies leading to a certification and **analyse the barriers to this development**.
- C. **Develop a map** for the EU-27 countries that will provide an overview of countries about the degree of existence of **digital competence development policies** leading to a certification, with a view of the overall development trends.

Sub-task 1.4) Overview of existing digital competence development <u>training offer and</u> <u>ecosystems</u> in the EU and alignment to DigComp

- A. Based on recent literature and desk research, for the same set of 5 to 10 EU countries identified under Sub-task 1.3.A:
 - a. For each of the countries, identify the level of **availability and accessibility of education and training programmes** to acquire digital skills **leading to a certificate**, adapted to the needs of the different target groups, including vulnerable groups. In particular, analyse the role of formal and non-formal education and training (curriculums and Syllabuses on Digital Skills offered in K12 – VET –), adult learning, and other private/public/third sector training providers.
 - b. For each of the countries, identify the level of adaptation of existing digital competence education and training offer to **labour market needs** and to technological developments (AI, datification, disinformation, robotics, co-botization, etc). Identify the existence of dialogue/cooperation spaces between the **multiple stakeholders** that play a role in digital competence development.
 - c. For each of the countries, identify the level of awareness among education and training actors of the European Digital Competence Framework (DigComp), and the level of **alignment of the existing education and training offer to DigComp** across countries/regions.
 - d. For each of the countries, analyse development trends.
- B. For the same set of 5 to 10 EU countries identified under Sub-task 1.3.B, where there is no existing digital competence development training offer leading to a certification to digital skills, **analyse the existing barriers to this development**.
- C. Develop a map for the EU-27 countries that will provide an overview of countries with about the degree of existence of a digital competence development training offer leading to a certification, with a view of the overall development trends.

The following deliverable must be produced:

D1 Mapping the Digital competence development and skills certification landscape in the EU *T0+4M*

Task 2. Identification of key stakeholders for consultation and consultation strategy

Based on the initial stakeholders' map provided in Fig 1, this task must identify **key stakeholders** across European countries and regions (see Task 3 requirement for geographical coverage), and beyond (international actors) that will need to be consulted for the study, and it will make a proposal to ensure representativeness of each type of stakeholder, to ensure an effective, neutral and representative consultation process.

The contractor will also determine a stakeholders' consultation strategy, and identify, in cooperation with the EDSC Task Force, the most effective consultation method and channel, making, as much as possible, use of the existing cooperation structures and networks. The consultation strategy will aim at maximising outreach and stakeholders' participation.

During the consultation processes, the contractor is invited to make use of the <u>Digital Certification</u> <u>Community of Practice</u>, hosted by All Digital, and moderated jointly by All Digital and JRC. Other channels should also be used for the consultation in case these would be more adapted to the targeted stakeholders.

The following deliverable will be produced:

D2 Key stakeholders and Consultation Strategy	<i>T0+1M</i>
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Task 3. Consultation of Stakeholders' needs and requirements for an EDSC

The consultations of both sub-tasks 3.1 and 3.2 must include at least 15 countries per stakeholder type. The set of countries will have a good geographical, demographic balance, as well as being representative of the different levels of digital competence among adult population. The consultation will ensure a representative sample of each stakeholder type.

Sub-task 3.1. Demand, gap analysis and the benefits of the EDSC

The aim of this task will be to consult the stakeholders (using the outcome of Task 2: D2) with the aim to understand:

- 1. What is the demand for an EDSC; how widespread is this demand across countries and stakeholders?
- 2. What are the gaps between that demand and what is offered by existing digital certification schemes (output of Task 1), i.e., what are the value and limitations of current certification schemes?
- 3. What do stakeholders see as benefits and specific added value of an EDSC?

<u>The outcome of this task</u> will be an analysis of the demand for EDSC per stakeholder type, the gap between the demand and the current situation, and key benefits of an EDSC in addressing these gaps.

Detailed activities:

- 3.1.1 Consultation instruments design and development
- 3.1.2 Carrying out the consultation process
- 3.1.3 Analysis of the results (demand, gaps, key benefits of an EDSC)

The following deliverable will be produced:

D3.1 Demand, gaps and benefits analysis for EDSC T0+5M

Sub-task 3.2. Common requirements for EDSC: key elements of the EDSC and minimum quality assurance requirements

Further to the analysis of demands, gaps and key benefits carried out under Sub-task 3.1, the purpose of this task is to define **Key elements of an EDSC** – minimum aspects on which agreement needs to be reached. These could include elements such as (but not limited to) target groups, set of DigComp competences and proficiency levels covered, assessment methods and accessibility requirements,

certificate content, format and interoperability requirements, validity period and maintenance requirements, and governance requirements.

Identify the minimum **quality assurance** requirements that a digital competence certification scheme should meet, which include the quality and security requirements or other specific requirements related to the scope and process of digital competency certification.

Detailed activities:

- 3.2.1 Consultation instruments design and development
- 3.2.2 Consultation process through different stakeholders
- 3.2.3 Analysis of the results per stakeholders' type

The following deliverable will be produced:

D3.2 Minimum common requirements for EDSC T0+5M

Task 4. Design of an initial EDSC definition and operational model

Based on the consultation results of Task 3 (D3.1 and D3.2), the contractor must recommend minimum 2 and maximum 3 possible implementation scenarios. For the design of the EDSC scenarios, the contractor will take into account recent studies on labour market digital skills needs.

The proposed operational models of the EDSC must address both the need for a standardised certification process as well as the need to respond to the variety of employers' digital competence needs related to different occupational profiles.

The operational model must address, based on the results of Task 1 and Task 3, the need for the development and maintenance of a map of existing digital competence certification schemes in Europe, and their alignment to DigComp.

In developing these scenarios, both the content and the governance model for the EDSC must be addressed. The latter must include potential roles of actors at both EU and national levels as well as the role of stakeholders.

The contractor must then organise a 1 day on-line consultation event with relevant stakeholders to discuss these different possible scenarios, and to build consensus towards the most suitable one. The aim will be to invite as many of the relevant stakeholders as possible.

For the selected scenario, and based on the results of the Task 3, the contractor must carry-out the following activities:

- 4.1 Detailed design of the EDSC: content, format, security, quality, etc
- 4.2 Minimum quality assurance requirements for the certification process
- 4.3 Model for quality assurance/certification of those organisations providing certification
- 4.4 Operational and governance model (EU and national level, stakeholders)

The following deliverable will be produced:

D4 Proposal for an <i>initial</i> EDSC definition and operational model	T0+8M
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Task 5: Feasibility analysis of the proposed scenario

In this Task 5, the contractor must carry out the Feasibility Analysis of the selected scenario resulting from Task 4, taking into account the results of the previous tasks.

In addition, a Consultation of stakeholders will be organised,- allowing voluntary participation, and ensuring a minimum level of participation per stakeholder type as per Fig 1-, to analyse the following aspects of the Feasibility analysis.

The following aspects must be considered for the Feasibility analysis:

Strategic considerations:

- 1. Degree of response to the identified demand in Task 3
- 2. Compatibility with / integration of existing systems in building the EDSC, avoiding redundancy and competition
- 3. SWOT analysis, including limitations and risks analysis
- 4. Expected impact on different stakeholders
- 5. Expected acceptance across countries and stakeholders
- 6. Take-up influencing factors and how to address them.
- 7. Integration of certifications into education and training pathways and systems
- 8. Communication / Marketing strategy of the Digital Skills Certificate

Technical considerations:

- 1. Technical feasibility
- 2. Quality assurance standards, procedures and model
- 3. Elaborate a list of trusted providers and accreditation organisations (if relevant).

Financial considerations:

- 1. Costs analysis for multiple stakeholders; breakdown of costs.
- 2. What are acceptable costs for providers and consumers?
- 3. Financing / business model

Governance / operational considerations:

- 1. Governance model
- 2. Maintenance model
- 3. Operational model and organisational requirements
- 4. Monitoring model and Key Performance Indicators
- 5. Technical support provision
- 6. Model for updates / adaptations of the certificate:

Implementation considerations:

- 1. Limitations, risks and challenges
- 2. Implementation Plan
- 3. Implementation capacity/plans of member states
- 4. Risks related to implementation
- 5. Accessibility of certification and training options to all citizens
- 6. Availability of educational content to support learners in training towards the certification
- 7. Availability of content services for trainers and counsellors

The study must ensure that the scenario proposed for the EDSC is consistent with other existing European initiatives and tools in the field of skills and employment, namely: European standardization activities in the field of ICT skills,⁴ Europass, EQF, ESCO, EURES, e-IDAS European Digital Skills and Jobs Platform (one-stop shop online tool for digital skills) and future, as well as the announced actions of the European Skills Agenda (micro-credentials, individual learning accounts, revision of the European guidelines for validating non-formal and informal learning) and of the Digital Education Action Plan (DigComp 2.2).

The following deliverable will be produced:

D5 EDSC Feasibility analysis

T0+12M

Task 6. Final scenario for the EDSC: definition, operational model and pilot

The following sub-tasks will be carried out:

6.1 Based on the results of the feasibility analysis, review the initial definition of EDSC and operational model produced in Task 4.

6.2 Develop strategic recommendations for the EDSC implementation: to ensure feasibility, effective implementation (ensuring return on investment) for different stakeholders to stimulate the demand; maximise take-up and propose a realistic implementation plan

6.3 Based on Tasks 6.1 and 6.2, **define the purpose, scope, steps and participation in a pilot of the certificate**. The pilot definition should include the following:

- 1. Pilot objectives, scenarios, period, and how the achievement of these objectives will be monitored
- 2. Pilot scope (geographical, content, competences, levels), target groups, certification providers and other stakeholders involved in the pilot, and related selection criteria
- 3. Development of educational modules, certification systems development or adaptations, procedural development or changes, organisational development (for QA) and communication material, etc to be carried out by different (candidate) actors.
- 4. System and user tests of prototypes, in the different scenarios, prior to the pilot.
- 5. Pilot design, scenarios, expected participation and impact. Scenarios should cover both countries with co-existing schemes as well as countries with no or more limited existing offer, inclusion of different user types and usage scenarios, and different stakeholder types.
- 6. Pilot leadership organisation or structure needs
- 7. Communication campaigns: content, target audience and purpose
- 8. Risks and challenges and strategies to mitigate risks and address challenges
- 9. Help desk support for the pilot
- 10. Planning
- 11. Costs across stakeholders and related financing model
- 12. Monitoring needs (what, how and by whom) and monitoring tools

⁴ See the technical committee <u>CEN/TC 428 "ICT professionalism and Digital competences"</u> and the <u>2021</u> <u>annual workprogramme of CEN</u>, on ICT skills (p.31); the <u>Towards Quality Labels for ICT industry Training</u> <u>and Certifications</u> project reports (available on demand) such as <u>This brochure</u>.

- 13. Expected outputs for the certification community (results, surveys, forms, etc)
- 14. Expected impact (vs. overall EDSC expected impact, see strategic considerations, nr 4) and measurement tools
- 15. Evaluation strategy and methodology
- 16. Review and refinement, recommendations for improvement and possible review of the EDSC
- 17. Dissemination / communication strategy of the results

In order to develop this task, the contractor will cooperate with the candidate pilot stakeholders.

The contractor is invited to consider the relevance of the creation of a community of practice of stakeholders involved in the pilot.

The following deliverable must be produced:

D6 Revised EDSC definition and operational model, Strategic implementation recommendations, and, Pilot proposal, **Draft version**

6.4 Final validation with relevant stakeholders of the above deliverables through an online consultation event. The aim is to invite as many of the relevant stakeholders as possible.

6.5. Review D6, based on final stakeholders' consultation, in order to produce the final Deliverables.

D6 EDSC definition and operational model, Strategic implementation recommendations, and, Pilot proposal, *Final version T0+15M*

The Contractor must respect the applicable Data Protection rules. The Contracting Authority will provide the Contractor with the standard European Commission privacy statement that shall me made visible to interviewees.

4 DELIVERABLES

The Contractor must provide the following deliverables:

Task	Deliverable	
Task 1	D1 Mapping the Digital competence development and skills certification landscape in the EU	
Task 2	D2 Key stakeholders and Consultation Strategy	
Task 3	D3.1 Demand, gaps and benefits analysis for EDSC D3.2 Minimum common requirements for EDSC	
Task 4	D4 Proposal for an initial set of options for EDSC definition and operational model	
Task 5	D5 EDSC Feasibility analysis	
Task 6	ask 6 Final reports:	
	D6 EDSC definition and operational model, Strategic implementation recommendations	

and Pi	lot proposal
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A specific European Commission EDSC Task Force has been created to follow the implementation of the DEAP Action 9 (EDSC), which will guide the study and review all deliverables.

JRC.B4 and the EDSC Task Force will have 14 calendar days to review the deliverables and send its comments to the Contractor.

The Contractor will then have 14 calendar days for providing the final version of all the deliverables.

5 COORDINATION AND MEETINGS

The Contractor must carry out the service in close co-ordination with the relevant Commission staff (JRC.B4 Unit) and the EDSC Task Force.

Telephone calls / videoconferences between the contractor and the JRC.B4 & EDSC Task Force leader or with the whole Task Force if needed, will be scheduled on a needs-basis approach.

Six meetings will be organised in the frame of this contract as follows:

Kick-off meeting (M1)

The contractor must organise a half-day online meeting to present the detailed work plan, including the research questions to be answered. The meeting will aim at refining the scope of the work, agreeing on the research questions, and discussing the overall approach and work plan.

The meeting shall take place within 2 weeks from the official start date of the contract.

Interim meeting(s) (M2, M3, M4)

M2: at T0+5M, after the delivery of D1, and D3A, D3B.
M3: at T0+6-7M, a scenario consensus building event
M4: at T0+8M, after the delivery of D4.
M5: at T0+12M, after the delivery of D5.

Final validation meeting (M5)

M6: At T0+14, a final validation meeting with the Task Force and the stakeholders to validate draft version of D6.

All meetings will be on-line, and the working language at all of these meetings will be English.

All meeting **Agendas** will be prepared in cooperation with the European Commission, and the contractor will prepare the **minutes of all the meetings** held.

The possible operational costs of running the consultation meetings will be included in the offer.

6 CALENDAR OF DELIVERABLES AND MEETINGS

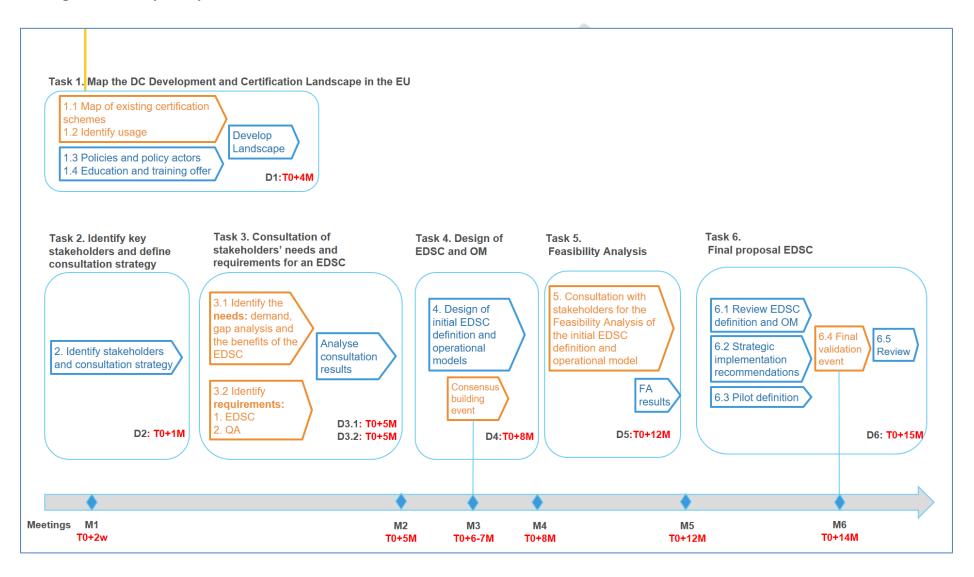
The following summary table reports the tentative time schedule for the different activities and deliverables.

Deliverable	Title	Weeks or Months
M1	Kick-off meeting	T0+2W
D2	Key stakeholders and Consultation Strategy	T0+1M
D1	Map of the Digital competence development and skills certification landscape in the EU	T0+4M
D3.1	Demand, gaps and benefits analysis for EDSC	T0+5M
D3.2	Minimum common requirements for EDSC	T0+5M
M2	Interim Meeting	T0+5M
M3	Scenario consensus building event	T0+6-7M
D4	Proposal for an initial set of options for EDSC definition and operational model	T0+8M
M4	Interim Meeting	T0+8M
D5	EDSC Feasibility analysis	T0+12M
M5	Interim Meeting	T0+12M
M6	Final validation meeting	T0+14M
D6	EDSC definition and operational model, Strategic implementation recommendations, and Pilot proposal	T0+15M

T0 corresponds to the date on which the last party signs the contract.

In the below Fig. 2, the Feasibility Study workflow is illustrated.

Fig. 2 Feasibility Study workflow



7 QUALITY ASSURANCE

The contractor must establish robust means to ensure the reliability, validity and comparability of the information collected as well as the quality of its analysis and of its reporting, including a full and standard referencing of the sources used.

The work delivered by the contractor must be of such quality that it can be used to support policy making and that it is directly publishable by the European Commission as a part of its official publications. Thus, the contractor should establish robust means of ensuring the validity and comparability of information collected and the quality of its analysis and reporting.

In particular, a Senior Researcher nominated by the Contractor in his offer will be in charge of the scientific quality assurance tasks.

Before final acceptance, all reports will be completed, adapted and corrected by the Contractor who will fully take into account the comments, suggestions and additional written comments provided by the JRC.B4.

8 DURATION

The performance of the tasks cannot start before the date on which the last party signs the contract, and should be finalised in a maximum of **15 months**, including the time for the JRC.B4 & EDSC Task Force to comment on the interim deliverables and the Contractor to implement the suggested amendments. The time needed for possible comments and amendments to the final deliverable (**D6**) would be added to the total duration of the contract.

9 LANGUAGE

The language of all deliverables meetings, presentations, and exchanges will be English. The user interface of all software should be English, and this is the language in which all documentation, including that inserted in source code, will be written.

It is expected that the written text in the deliverables is of high standard scientific language, ideas are expressed in a clear and logically structured way. The text of all deliverables will be strictly assessed according to these criteria in the review process.

10 CONTENT, STRUCTURE AND GRAPHIC REQUIREMENTS OF THE FINAL DELIVERABLES

All studies produced for the European Commission and Executive Agencies shall conform to the corporate visual identity of the European Commission by applying the graphic rules set out in the European Commission's Visual Identity Manual, including its logo.

The Commission is committed to making online information as accessible as possible to the largest possible number of users including those with visual, auditory, cognitive or physical disabilities, and those not having the latest technologies. The Commission supports the <u>Web Content Accessibility</u> <u>Guidelines 2.0</u> of the W3C.

For full details on Commission policy on accessibility for information providers, see: <u>http://ec.europa.eu/ipg/standards/accessibility/index_en.htm</u>

Pdf versions of studies destined for online publication should respect W3C guidelines for accessible pdf documents. See: <u>http://www.w3.org/WAI/</u>

12.1 Content

Final study report (D6)

The final study report shall include:

- 1. an abstract of no more than 200 words and an executive summary of maximum 6 pages, both in English and French;
- 2. the following standard disclaimer:

"The information and views set out in this [report/study/article/publication...] are those of the author(s) and do not necessarily reflect the official opinion of the Commission. The Commission does not guarantee the accuracy of the data included in this study. Neither the Commission nor any person acting on the Commission's behalf may be held responsible for the use which may be made of the information contained therein."

3. specific identifiers which shall be incorporated on the cover page provided by the Contracting Authority.

Publishable executive summaries

The publishable executive summaries shall be provided in both English and French and shall include:

1. the following standard disclaimer:

"The information and views set out in this [report/study/article/publication...] are those of the author(s) and do not necessarily reflect the official opinion of the Commission. The Commission does not guarantee the accuracy of the data included in this study. Neither the Commission nor any person acting on the Commission's behalf may be held responsible for the use which may be made of the information contained therein."

2. specific identifiers which shall be incorporated on the cover page provided by the Contracting Authority.

12.2 Structure

The final study report (D6) must follow the structure agreed at the kick-off meeting.

12.3 Graphic requirements

For graphic requirements, the contractor will have to refer to the template provided in the annex 1. The cover pages shall be filled in accordance with the instructions provided in the template.