

## ANNEX X2

### Service Management details (including SLA, Hosting, regular administration and maintenance, monitoring and availability of the system)

#### 1. INDICATORS TO BE INCLUDED AS MINIMUM IN THE PROPOSAL

1. Maximum time a page takes to load in the Europass website
2. Maximum time the EWA Editor takes to load
3. Maximum time it takes to receive a document after requesting for it to be generated, in the EWA editor
4. Maximum time it takes for a drawer window to open after clicking for it to open in the EWA editor (e.g. pressing on the section "Personal information" and having the drawer open)
5. Maximum response time when using the CMS (navigation, editing, window and dialog opening)
6. Maximum time it takes to respond to any request/question from Cedefop with an acknowledgment message containing an indication of when the request/question will be answered
7. Maximum time it takes to respond to any incoming request/question from Europass visitor, resolving/answering the visitor's question, for the cases where the issue is not delegated to Cedefop
8. Maximum time It takes to see online changes made on the texts of the Europass main website
9. Maximum time it takes to see online changes made on the texts of the EWA editor
10. Maximum time before an incident with severe/high/normal impact or priority, affecting the users of Europass web resources, is resolved
11. Maximum number of days after the 1<sup>st</sup> day of each month, when the statistical reports available online in PDF format (<http://europass.cedefop.europa.eu/en/resources/statistics>) are updated with the statistical data of the previous month. Normally this should be 0, i.e. the reports are immediately generated and made available within the 1<sup>st</sup> day of the month.
12. Availability percentage of
  - (a) the EWA editor (<https://europass.cedefop.europa.eu/editors/en/cv/compose>) is available
  - (b) generating a document ([https://europass.cedefop.europa.eu/api/document/to/pdf?stats=false -d "json=contents of cv-in.json" -o cv-out-from-json.pdf](https://europass.cedefop.europa.eu/api/document/to/pdf?stats=false -d \))
  - (c) REST API (<https://europass.cedefop.europa.eu/rest/v1/document/to>)
  - (d) the Europass website (page <https://europass.cedefop.europa.eu/>) is available)
  - (e) the CMS
  - (f) other parts of the technical architecture (Tomcats, API, etc.)

A service can be considered available if it is provided within less than 1 minute as a maximum from when it is requested.

In general, high availability is required for the services towards the citizens (that is, all but the CMS), i.e. 99.9% or more (less than 9 hours of downtime per year).

## 2. SCOPE

This annex describes the required services related to website hosting, administration and monitoring which aim at ensuring maximum system availability and stability.

These services shall be provided on a **fixed monthly price** basis. In addition, there may be a start-up fee, i.e. a fixed price cost at the beginning of the contract to set up the systems, if applicable.

### 2.1. General conditions for the provision of services

The tenderer must comply with the minimum service requirements presented here; however, the tenderer is allowed to propose an improved service level in each of the categories hereafter, as part of his offer for award criterion 4.

If the tenderer proposes an improved service level, he will be bound to his proposal after acceptance by Cedefop and may not afterwards revert to the minimum requirements as set out in the present document.

The financial offer of the tenderer shall reflect the technical offer and will be binding.

### 2.2. Fixed monthly price

The services described in this annex shall be provided on a **fixed monthly price basis, except when otherwise clearly specified by Cedefop**.

The fixed monthly price shall include hosting, regular administration and maintenance services, troubleshooting, security and improvement patches, delivery of monitoring reports, any software license annual fees, guarantee of availability and support.

Depending on the tenderer's proposal, there could be a start-up fee, which is an integral part of the offer. If this is the case, the start-up fee should be all inclusive, including choice of servers' topology and architecture, setup and configuration, and any software purchase and installation related costs and will be reflected in Annex H (Financial Offer).

## 3. HOSTING AND REGULAR ADMINISTRATION SERVICES

### 3.1. General conditions

3.1.1. The hosting services that the contractor will be asked to provide under the contract will include:

- managed Cloud-based hosting on dedicated servers in a controlled environment with support, including operating systems and databases. Servers should be located in the EU.
- maintenance, administration and support of the operating system, applications and databases (including but not limited to upgrading, updating and patch management).

3.1.2. The contractor should provide the necessary hardware/software and services to match the web site and CMS needs.

- 3.1.3. The contractor shall provide a production environment and a staging environment for Cedefop use. Additionally the contractor will have its own testing/development environment.
- 3.1.4. During the contract life, the software for the different technologies (e.g. CMS) and operating systems should not be older than two versions of the latest version in the market unless agreed otherwise with Cedefop.
- 3.1.5. The proposed Cloud provider should be an independent, third-party, IaaS or PaaS provider (e.g. linode.com, digitalocean.com, AWS, Azure, etc.). After the end of the contract, it should be possible to maintain the same Cloud provider.
- 3.1.6. The contractor remains responsible for a data breach and is subject to damage repair and penalties except if the origin is due to a fault of Cedefop and one or more of its staff.
- 3.1.7. The contractor must guarantee that at the end of the contract all Cedefop data will be transferred in a commonly agreed format and period back to Cedefop against no additional costs other than the necessary person-days to complete the task.

### **3.2. Physical environment**

- 3.2.1. All hosted systems are to be housed in a secure and redundant environment **physically located within a Member State of the European Union** (mandatory requirement).
- 3.2.2. The proposed Cloud hosting solution should either be certified as ISO 27001 (or equivalent) compliant. In the case that it is not certified, then the contractor should provide evidence of conformance to those standards (mandatory requirement).
- 3.2.3. The Contractor shall establish a Business Continuity Plan.

### **3.3. Capacity Management**

- 3.3.1. Cedefop requires that the contractor have sufficient hosting and network bandwidth capacity to meet the required performance as defined in the service level requirements.
- 3.3.2. The contractor shall ensure that the capacity at each layer of the platform is proactively monitored and managed.
- 3.3.3. The contractor shall ensure that prompt adequate actions are taken before thresholds are reached.

### **3.4. Security**

- 3.4.1. The contractor shall ensure the security of the Cedefop systems.
- 3.4.2. The contractor shall have documented security policies and procedures to ensure the information security. This should include firewall(s), vulnerability management, intrusion detection and protection from denial of service attacks (DoS/DDoS).

- 3.4.3. The contractor shall ensure that only authors authorised by Cedefop can put content on the web site. Secure access to CMS shall be possible from various locations. The CMS's editors shall be able to connect remotely to the CMS from any location with appropriate authorisation and secure way.
- 3.4.4. The contractor shall apply, throughout the duration of the contract, policies and procedures to ensure that Cedefop systems are sufficiently protected against unauthorised access and system attacks. Along with continual security testing throughout the development process, the webserver must be regularly checked to ensure it is patched with latest software security releases (mandatory requirement).

### **3.5. Availability and service level requirements**

- 3.5.1. Cedefop requires that all components comprising the Cedefop systems be available 24/7/365. The contractor should take the necessary measures to address any incidents and restore the service.
- 3.5.2. The technical architecture chosen should allow for any scheduled maintenance to be done without affecting the running of the services (no downtime).
- 3.5.3. Overall, systems downtime shall not overpass a total of 9 hours in one year, including any scheduled maintenance.

### **3.6. System Administration**

- 3.6.1. Perform Europass service administration, management and support: interaction with operating system; setup, maintenance, troubleshooting and optimal performance of web/application servers and all software components comprising the system.
- 3.6.2. The contractor shall apply, throughout the duration of the contract, server system administration policies and procedures including software upgrade and patch application, capacity monitoring/management and change control.
- 3.6.3. In exceptional circumstances, major software upgrades may make the object of a separate order form.
- 3.6.4. The contractor shall apply, throughout the duration of the contract, server system administration policies and procedures that govern the backup/restore processes, including backup tools used, retention cycles and policies, frequency, restore procedures, backup validation procedures, and off-site storage facilities and processes (mandatory requirement).

### **3.7. Special clauses for the Cloud provider**

- 3.7.1. Cedefop data is protected by the Protocol of Privileges & Immunities applicable to the EU Institutions which means that they are inviolable. They shall be exempt from search, requisition, confiscation or expropriation. The property and assets of the Union shall not be the subject of any administrative or legal measure of constraint without the authorisation of the Court of Justice.
- 3.7.2. Therefore Cedefop data must be separated/partitioned and inaccessible from other service provider clients.

- 3.7.3. Cedefop data treated by the service provider (and all its (sub-) subcontractors) remain the exclusive property of Cedefop and may in no way be transferred to any other instance or person including national judicial authorities without the prior agreement of Cedefop's AIPN or delegated person.
- 3.7.4. Cedefop data may only be stored and treated on the territory of the European Economic Area (EEA = 28 EU countries + Iceland, Liechtenstein, Norway) + Switzerland.
- 3.7.5. The service provider must provide the list of all locations Cedefop data can be stored and or treated. The list must be accepted by Cedefop. Every additional data storage and or treatment location must be communicated in advance to Cedefop that can refuse the location or terminate the contract.
- 3.7.6. The service provider must provide the list of all subcontractors and eventually any sub-subcontractors that will store and or treated Cedefop data. The list must be accepted by the Cedefop. Every additional or replacement of (sub-) subcontractor must be communicated in advance to Cedefop that can refuse the subcontractor or terminate the contract.
- 3.7.7. The service provider and all its (sub-) subcontractors may not be subject to the Patriot Act (pending Court case Microsoft vs USA).
- 3.7.8. Cedefop shall implement appropriate technical and organisational measures to ensure a level of security appropriate to the risks represented by the processing and the nature of the personal data to be protected.
- 3.7.9. Such measures shall be taken in particular to prevent any unauthorised disclosure or access, accidental or unlawful destruction or accidental loss, or alteration, and to prevent all other unlawful forms of processing.
- 3.7.10. For this reason the service provider needs to put in place the necessary technical and organisational measures to assure the data controller (Cedefop) that he (and all his sub-contractors) protect Cedefop's data against destruction, loss, modification, publication, without authorisation, during the treatment and its transmission over a network but also against any other illicit treatment.
- 3.7.11. The service provider needs to prove to Cedefop that he has an Information Security Management in place based on ISO27001, BSI or any other equivalent standard as CobiT and by preference certified for the services offered to Cedefop.
- 3.7.12. Cedefop shall be allowed to carry audits or let them be carried out by a third party if the service provider (and all its (sub-) subcontractors) has the necessary technical and organisational measures in place, has the necessary competences and the efficiency of the control measures including vulnerability and penetration testing based on a commonly agreed audit plan.
- 3.7.13. Cedefop has the right to verify or let verify by a third party, at any moment, the storage, location and access rights of its data and the technical environment on which its data is treated.

- 3.7.14. Communications between the service provider and Cedefop as well between data centres should be encrypted. If possible data “at rest” should also be encrypted.
- 3.7.15. The service provider is not allowed to link Cedefop data and that of its users with other services as geolocalisation, profiling, etc. of users and/or data.
- 3.7.16. The service provider has an obligation to inform Cedefop, within 24 hours, of any cyberattack he was subject to, indicating which Cedefop data was effectively or potentially accessed/modified/copied/made available to non-authorised persons.
- 3.7.17. When the service provider merges or has been taken over by another company the new company must continue, without any delay to guarantee the information and data security measures. If the new company (and its subcontractors) does no longer comply with the information and data security conditions and the requirements for independence from territory and Patriot act clauses (see 3.7.7) Cedefop has the right to terminate, with immediate effect and without any penalty, the contract.
- 3.7.18. When the service provider stops its activity (bankruptcy, liquidation, etc.) Cedefop’s data will be transferred, without any delay, in a common agreed format without any costs.
- 3.7.19. At the end of the contract the service provider (and all of its (sub-) subcontractors), after having transferred all Cedefop data back to the Cedefop, is obliged to destroy in a secure and irreversible way all Cedefop data (including backups, temporary files, previous versions and file fragments) within a commonly agreed time period.

#### **4. SERVICE DESK**

- 4.1. The contractor shall provide 1st and 2nd level support services for a limited number (3-4) of Cedefop staff, within Cedefop’s working hours (09:00 to 19:00 time zone GMT+2) and for all the year’s working days. Cedefop observes most Greek holidays and is closed for 15-20 days every year (incl. 5 days at Christmas/New Year, 2 days at Easter, Labour Day and Europe Day on May 9th). However the Centre may be open during some Greek public holidays during which the service desk function should be available, if required.
- 4.2. The contractor shall use an automated tool for the registration, management and reporting of support and change (development) requests (issue tracking system). Incident requests and change requests should both be handled by the same tool. Cedefop is using JIRA as issue tracking system. The tenderer is however free to propose another equivalent system. The hosting, functioning and availability of this system will be the responsibility of the contractor. The system should cover the possibility of indicating the time spent for each ticket, for the purpose of charging the exercised effort.
- 4.3. The contractor shall provide the means for Cedefop staff to report new support requests both inside and outside of the stated working days and hours (Monday to Friday, 09:00 to 19:00 time zone GMT+2).

- 4.4. The contractor shall provide the necessary support and ensure that support requests and incidents are addressed as follows (minimum requirements):

	Average response time to open support ticket, providing acknowledgment message and an estimated time for resolving it	Maximum resolution times to resolve incident (reported by Cedefop during working hours)
Low priority	16 working hours	3 working days
Normal priority	6 working hours	2 working days
High priority	1 working hour	6 working hours
Critical/Blocker	1 working hour	2 working hours

The resolution time is the elapsed time between the contractor responding to a support ticket opened by Cedefop and the contractor successfully resolving the Incident.

These resolution times are applicable specifically to requests and incidents identified by Cedefop. Critical issues related to failures at the server or network level should be monitored and resolved proactively by the contractor and are part of the Service guarantee (i.e. are not charged extra).

- 4.5. The contractor shall have incident management policies and procedures in place that describe how problem/issue escalation is handled and measured.

#### **4.6. Specifically for Europass users' requests/questions**

4.6.1. For a subset (e.g. concerning technical issues) of the incoming from Europass users requests/questions/feedback through the "Contact us/Your opinion" facility or via e-mail, Cedefop staff should be able to delegate the full handling of the request (including e.g. providing the answer to the user) to the contractor's service desk, who should handle it in compliance to the policies, procedures, guidelines and templates of the Europass customer support service. This should be possible in an easy and automatic way in relation to the Service Centre platform described in section 6 below and the contractor's proposed issue tracking system mentioned above.

4.6.2. All such delegated requests should be dealt with (answer provided to the requestor) by 14:00 every working day at latest.

### **5. MONITORING/REPORTING**

5.1. The Contractor shall provide monthly reports on the hosting, support and maintenance of Cedefop systems. The reports to be delivered will document at least the following information, for the current month and cumulatively since the beginning of the current year, wherever applicable:

- Scheduled downtimes of the public site and CMS
- Non-scheduled downtimes of the public site and CMS, and list of incidents
- Server connectivity - monthly traffic report, inbound and outbound
- List of actions which were performed as part of regular maintenance
- Software components: list of changes made in maintenance period
- Issues / Risks: narrative of any issues/risks identified by the contractor.

- 5.2. The contractor will provide an on-line web page or website, accessible by Cedefop managers, depicting the current and historical values of the monitored KPIs, for the ones where this is possible.
- 5.3. Further to mutual agreement with Cedefop, parts of the monthly reports may be skipped, if covered by the on-line monitoring web page.

## **6. SERVICE CENTRE PLATFORM**

An on-line solution (such as ZenDesk, FreshDesk, Groove, Casengo etc.) could be considered for supporting the Service Centre function. This should support:

- 6.1. Status of request
- 6.2. Template response messages
- 6.3. Statistics
- 6.4. Sorting, categorisation, grouping and general organisation of feedback messages and responses
- 6.5. Connection and reference to the publically available knowledge base / frequently asked questions section (useful for pointing the users to reference material)
- 6.6. Connection and reference to the internal, technical knowledge base (useful for troubleshooting and providing a precise and relevant response)
- 6.7. Connection/Linking with the Europass application's error codes
- 6.8. Multilingualism: The incoming feedbacks can be in any EU language. For most of them, automatic (e.g. google) translation helps get an idea of what the user is asking. In other cases, the question can be delegated to the National Europass Centres (or NECs) which are the organisations in charge of implementing Europass in every country of the EU, EEA and in candidate countries (see list of NECs in <http://europass.cedefop.europa.eu/en/about/national-europass-centres>).
- 6.9. Delegation of tasks  
The people who are able to respond to incoming questions and requests can be
  1. The Contractor's Service desk
  2. Cedefop business managers
  3. A number of external EU entities (up to 50 persons maximum), experts in their field e.g. National Europass Centres experts, experts in recognition of diplomas (ENIC/NARIC), lifelong guidance experts, etc.

It should be possible and easy for these various entities to use the system.