

## ANNEX 1



### EUROPEAN UNION SUPPORT TO HIGHER EDUCATION IN THE ASEAN REGION

#### Terms of Reference

#### **"Design and Development of Identity Provider (IdP) and Credit Converter- Extension for the SHARE DAECTS Platform"**

<b>Description of the Assignment</b>	To design and develop an Identity Provision solution and a Credit Converter add-on that are compatible and can be fully integrated with the SHARE DAECTS platform.
<b>Related activity of annual workplan and component</b>	<u>Result Area 3</u> <b>AWP Activity 22:</b> Design and Development of Digital Credential Recognition in the SHARE AECTS Platform. <b>AWP Activity 39:</b> Maintaining SHARE Digital Platforms (VE/COIL platform and DAECTS Platform)
<b>Duration and Location of</b>	Two (2) months, online
<b>Category</b>	Service provider/agency with international IT service standard
<b>ToR No.</b>	19/SHARE RA3-TOR/IX/2022
<b>Time of assignment</b>	October 2022 – December 2022
<b>Anticipated Budget</b>	EUR 41,000

## 1. PROJECT INFORMATION / BACKGROUND

This project aims to produce infrastructure that would allow the implementation of the Identity Provision solution and the Credit conversion to support the Digital ASEAN EU Credits Transfer System (DAECTS) that is currently being developed by the Knowledge Innovation Center (KIC) and the European University Foundation (EUF) team. During the inception phase of the project, it has come to the team's attention that not all partner universities have the institutional domain or user management systems in place to ensure all users (academic staff and students) have unique identification and authentication mechanisms.

The ASEAN DAECTS Dashboard relies on a Single Sign-On mechanism that behaves consistently for users from all Higher Education Institutions, which also allows for a separation of concerns by decoupling the user management from the main application. Based on the current project team's Unique Identifier research on SHARE partner universities, the implementation of an Identity Provision solution will ensure the sign-in and authentication requirements are met. Furthermore, considering the diverse nature of the credit configuration in each university in the region, a credit converter is also required to ensure a common understanding of their values for the mobility processes which are facilitated by the DAECTS platform

## 2. OBJECTIVES

SHARE is intended to contract one service provider or agency specialist to provide IT architecture design and development of the Identity provider (IdP) solution as well as the Credit Converter for the DAECTS platform. The additional infrastructure and add-on functionalities are required to meet the requirements previously explained. These additional features must be compatible and can be fully integrated with the DAECTS platform that is currently in development.

## 3. CONTEXTS OF THE ASSIGNMENT

### 3.1. Duties and Responsibilities

The service provider is expected to develop the additional IT infrastructure supplementing the SHARE DAECTS Platform, which entails the Identity provider (IdP) solution and the Credit Converter add-on. The service provider is also expected to work together with the DAECTS-assigned experts. The tasks of the service provider include, but are not limited to assisting the project in the following aspects:

Proposed Tasks
Develop a solution architecture, its implementation approach, and project schedule (including infrastructure development, deployment, piloting, and training).
Build the IdP solution and develop a Credit Converter add-on ensuring they will be compatible and fully integrated into the DAECTS platform. Such work will be conducted in consultation with the DAECTS experts.

Implement pilot testing of the fully integrated additional infrastructures within the DAECTS platform.

Provide user guidelines, maintenance recommendations, and configuration training about the IdP and Credit Converter for the SHARE Programme team and universities.

The assignment and presentation are expected conducted online, and the experts will work entirely home-based. In some circumstances, when physical meetings are needed to support the project better, can be granted with the approval of the Programme Manager and the Team Leader.

The tasks incorporate, at least, the following concerns

- Data security/privacy will streamline compliance with the appropriate laws and regulations at a regional, national, and university level.
- System integration to better optimise adoption of the DAECTS platform with the existing student information system.
- Open standards to enable interoperability and scale.
- Systems that are fully ensuring inclusive recognition, which all parties can benefit from it. Considering the variety of IT ecosystem availability in the ASEAN region.
- Develop common components for the university systems to connect with DAECTS.
- Integrate the additional infrastructure with the DAECTS platform, especially for the IdP, ensure DAECTS registration and login UI will be updated according to the IdP solution integration
- User-friendly interface for the Credit Converter produced.

### 3.2. Expected result / key deliverables of the assignment.

The key deliverable expected is a high-quality additional IdP infrastructure and an add-on (functionality) for the SHARE DAECTS platform, which includes:

- A full IdP solution infrastructure to ensure user unique identification and single sign-on and the Credit Converter add-on that is user-friendly, compatible, and fully integrated into the SHARE DAECTS platform.
- User's guidelines, maintenance recommendations, and configuration training for both deliverables integrated into the SHARE DAECTS platform.

### 3.3. Target Group

The resulting key deliverables of this assignment will ensure that the DAECTS platform will support the student mobility activities of the 33 SHARE partner universities. The platform in a later stage is expected to support the mobility of a higher number of universities in the ASEAN region after the SHARE extension program, beyond December 2022.



Deutscher Akademischer Austauschdienst  
German Academic Exchange Service



#### 4. Eligibility Criteria

Qualifications – Service provider with at least five (5) years of professional experience with the following requirements:

- a) Experience in developing and administering the Digital Credit Transfer System platform and digital credential, preferably in the ASEAN region;
- b) Familiarity with credit transfer and student mobility;
- c) Experiences in providing secure access to data;
- d) Ability to provide a portfolio of the previous digital credential platform developed

#### 5. Schedule Timeline

To be agreed upon between the service provider, the SHARE DAECTS experts, and the SHARE programme. The project is expected to take place for a duration of two (2) months, from the second week of October 2022 to the first week of December 2022

Activities	October				November				December			
	1	2	3	4	1	2	3	4	1	2	3	4
Development of the Identity provision (IdP) solution												
Development of the Credit Converter functionalities												
Integration of IdP and Credit Converter into the main DAECTS platform												
The testing phase of the IdP and the Credit Converter Documentation												

#### 6. TECHNICALITIES AND REPORTING

The service provider shall report to the SHARE Team Leader and Result Area 3 Programme Manager throughout the process. The Programme Manager deems the service provider's input to the project complete once the products of contribution have undergone the final quality assurance check by the SHARE Team Leader and the SHARE Programme Management Board (PMB).

#### 7. Budget

The duration of the work will be two (2) months

Deliverables	Payment
Submission of the final version of the additional infrastructure and add-on functionalities fully integrated into the platform with their user guidelines	100%

