

Annex 3: Interoperability Action plan

INTRODUCTION

The seamless exchange of data among IT systems that support Erasmus+ student mobility, is a long-held dream among most International Relations Officers. It is also an integral part of the European Student Card Initiative (ESCI).

As the first targets for switching to fully digital inter-institutional agreements (IIAs) and learning agreements (LAs) are approaching, further progress is needed to put an end to the considerable difficulties experienced by many end-users. As a result of the new framework contract, the matter has been the object of a technical analysis in the first quarter of 2022 and the organisation of two [webinars](#) with thousands of participants in early April also allowed for powerful insights into this situation.

This new Interoperability Reinforcement Plan (or Action Plan), elaborated at the request of the European Commission, sets out the full IIA and LA interoperability (which means the ability of computer systems or software to exchange machine-readable data among themselves) as the highest priority.

The target is to achieve, as of 1 January 2023, a level of interoperability that enables higher education institutions to seamlessly conclude new inter-institutional agreements and learning agreements directly in digital form for the purpose of intra-European student mobility for studies (KA131)..

THE WAY FORWARD

Making it possible that IT systems exchange context-sensitive data in a seamless manner is a formidable challenge, in that it requires an entire community of diverse technical stakeholders and IROs to perform in close concert. It is important to acknowledge that huge progress has been made thanks to the outstanding efforts of many colleagues, commercial providers included. And yet there's an emerging consensus that vanquishing the challenges ahead will require a transversal change and transitioning into a more closely regulated environment. Here's an overview of the key steps the interoperability reinforcement plan comprises.

1.1. A more regulated environment

Problem to be tackled: A key issue currently affecting interoperability has to do with the fact that the EWP specifications are not always implemented in full, with some key nodes deploying only a subset of the envisaged functionalities (e.g. only cooperation conditions and not the default IIA data which are part of the IIA API and the official IIA template). Many IIAs on the Network are initiated but not completed (e.g. over 19000 IIA have been initiated on the Dashboard, but just under 2000 signed up until June 2022), with users quoting lengthy negotiation procedures and glitches in the systems as causes.

Actions to remediate the problem:

Action	Actor	Start-End
Definition of mandatory business requirements for the IIA and LA processes which set out in clear terms what the baseline EWP implementation scenarios are.	Ghent University will take the lead to set up the requirements based on input from International Relations Officers. DG EAC will validate them.	M1 – M2
The EWP technical team (in particular the Dashboard team in charge of the reference implementation) will proactively investigate errors affecting data exchanges processes, identify solutions and liaise with the affected nodes to accelerate their resolution. The information on where the “debugging” is needed will come from helpdesk tickets, statistical reports and eventually a centralised error logging system.	Aristotle University of Thessaloniki.	M1 – M6
Preparation of the enhancement of the testing protocols to reflect the full breath of the mandatory business requirements (defined under step 1) and specifications for IIAs and LAs. In addition to more detailed tests among technical teams, the process will be extended to include readiness confirmation by business practitioners (international relations officers). Once the testing plan is established, all nodes will have to undergo conformance testing in the future.	IBM for conformance validation; Ghent University and relevant governance organs for involvement of business practitioners. All nodes to implement.	M1 – M6 (local implementation is out of scope)
Preparation of technical tools to automatically log all communication errors in the EWP Network, allowing for a constant and detailed oversight of troublesome nodes and situations.	EWP+ Architecture Office, all nodes to implement.	M2 – M5 (local implementation is out of scope)

Actions number 1, 2, 3, and 4 outlined above are structural in nature and will become part of the operational fabric of EWP.

Complementarity with ongoing activities

Recognising the urgency of improving the interoperability issues currently affecting universities, we will reinforce the ability of the EWP technical team to proactively investigate errors affecting data exchanges processes, identify solutions and liaise with the affected nodes to accelerate their resolution. Such debugging of EWP nodes will intensify already from the start of the Interoperability Reinforcement Plan and take place in parallel of further work on EWP Dashboard and Network enhancements, while actions such as the logging of errors will benefit from work that is already planned and underway as part of EWP+ Track 1.

1.2. No end users left behind

Problem to be tackled: The results of the EWP survey ran among 700 respondents in April 2022 by EWP+ consortium showed that the biggest obstacle to implementing EWP requirements was the perceived lack of support to end users.

Actions to remediate the problem

While the Erasmus Goes Digital webinars in April 2022 marked the launch of a new and expanded EWP Service Desk, we are hereby committing to sweeping changes in the manner in which support is made available to all EWP users. The aim is for the EWP consortium to have a better insight into all interoperability problems during the exchange of Erasmus+ data which are affecting end users and to allow monitoring of the situation as well as redressing the errors or notifying the affected system administrators and working together on possible solutions. This will help avoid that interoperability tickets are not adequately followed-up.

Action	Actor	Timing
Expansion of the ESCI Service Desk to all EWP users experiencing interoperability issues. The resolution of such tickets will then be escalated to the relevant service provider as required, and they will be asked to report when the said tickets are successfully closed.	EWORX, ESCI Service Desk agents at the Aristotle University of Thessaloniki and at the diverse EWP implementations.	M1 – M6 (including refactoring)
New Town Hall format meetings with end-users, complementing the webinars and trainings foreseen for 2022, with a view to allow more regular communication with IROs and stakeholders. The Town Hall meetings will follow a Q&A style, where participants can ask questions.	Ghent University will organise the Town Hall meetings.	M1 – M6 One Town Hall meeting at the start of Summer on the topic of the “EWP Interoperability Reinforcement Action Plan” One Town Hall meeting in autumn focussing on a hot topic of that moment.
The establishment of system-specific business user groups (i.e. grouped by type of provider), aiming to facilitate the exchange of information and discussion about issues affecting them. These user groups will become part of the new ESCI governance structure.	Ghent University will facilitate the user groups.	M1 – M6
The publication of an EWP assessment report which will consider: <ul style="list-style-type: none"> - Service Desk aggregated feedback - Business process owners’ feedback - Statistical data points available to the EWP team regarding cross-system data exchange <p>This report will help bring to the fore known issues HEIs may still be facing when exchanging Erasmus+ student data via EWP, informing the collective understanding of the state of play of the universities in the EWP ecosystem to move to completely digital IIA and LA processes, public discussion and enhancing transparency towards end users.</p>	Ghent University.	M1-M4 Foreseen report publication date: September 2022.
Ongoing updates and improvements of the support material. Such updates will be based on the feedback from the end-users collected in focus groups. More information will be	Ghent University, Aristotle University of Thessaloniki.	M1 – M6 M1: focus groups

communicated via the social media channels and the Competence Centre.		M2-M3: updates based on focus group feedback M4-M6: updates based on tickets received at the Service Desk
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Complementarity with ongoing activities

Improving the support provided to the end- users, the sharing of information and increased levels of transparency are all key tenets of the steps outlined above. Several EWP+ actions will enhance this further still, notably the systematic collection of statistics from 2022/2023 onwards, that would require all nodes on the EWP Network to provide regular statistical information to a central statistical portal of the EWP.

In addition to the business user groups, the European Commission is setting up an EWP governance structure that will enable representatives of different user groups to provide regular feedback to the Commission on the European Student Card Initiative. The consultative bodies that will be set up in this context will bring together Erasmus+ National Agencies, university networks representatives, IT specialists from universities, international relations officers, students, European University Alliances, and technical experts.

In addition, more granular information about the ESI deployment is also being planned to be published to increase transparency in the ecosystem.

1.3. An enhanced cooperation framework with third-party providers

Problem to be tackled: It is essential to recognise the importance of third-party providers and in-house system operators in achieving the seamless exchange of electronic data in EWP. Current challenges cannot be overcome without their active involvement, so this is an endeavour at which we must succeed together. In practice this means considerably more resources will be made available to support and improve the EWP implementation of these actors.

Actions to remediate the problem

This action plan recognises that a stringent quality assurance framework regarding the viability of all key network nodes must be accompanied by extra measures to provide guidance and support to vital network nodes, and the following actions are envisaged in this respect:

Open the EWP Service Desk to queries from third-party providers and in house systems, complementing the work and exchanges already being carried out through the Infrastructure Forum and EWP GitHub.	Service Desk team	M1 – M6
Organise two technical workshops for developers responsible for API and client implementation for IIAs and LAs where the implementation of specific	University of Warsaw.	Timing to be discussed with the target group in order to maximise participation.

functionalities and business processes is jointly reviewed and validated. Such workshops would also be offered in a physical format.		
Create a relationship manager role focused on enhancing cooperation with and compliance of the third-party providers and in-house systems.	European University Foundation and University of Warsaw.	M1 – M12 Goal to complete recruitment of first RM by M4

Complementarity with ongoing activities

The ESCI governance structures such as Infrastructure Forum will facilitate the co-working with the diverse nodes of the Network and allow for fruitful information exchange to further enhance the user experience for all the nodes.

Opening the EWP Service Desk to queries from third-party providers, complementing the work and exchanges already being carried out through the Infrastructure Forum and EWP GitHub.

Conclusion

In order to benefit from the extra support outlined above, third-party providers and in-house system operators will be asked for a concrete commitment to support the actions described in the other chapters of this action plan through an amendment of the EWP Memorandum of Understanding. We are confident that, taken together, all these actions will provide an effective and impactful enhanced cooperation framework that will serve the higher education community for years to come.