



STAFFER

EUROPEAN RAIL SKILLS ALLIANCE

STAFFER DELIVERABLE 6.2

Student Mobility programme

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1 INTRODUCTION

This document presents results of STAFFER Task 6.2: Implementation of cross-European student mobility programmes and work-based internships. This task specifically aimed at preparing the STAFFER student mobility programme. This programme was designed to complement existing educational mobility programmes within Erasmus+ or existing national scholarship frameworks in each EU member country. Task 6.2 involved three main tasks: Development of a standardised process, development of a single information platform describing the offer of rail training programmes and finally the development of a mobility pilot project.

The development of a standardised process for students from the railway sector to identify, apply for, and be accepted to institutions offering railway related courses was investigated. In the short term, the use of existing tools in Erasmus+ mobility projects were found to be the most appropriate, mainly the implementation of Blended Intensive Programmes (BIPs). In the long term, a proposal for a mobility programme which requires changes in the structure defined for the current Erasmus+ mobility projects are put forward. This is in line with the long-term strategy and action plans mentioned in STAFFER Work Package 7.

The process was supported by a new information platform, implemented on the STAFFER project website, which provides information on the courses offered by all participating educational institutions, information on applications and a direct link to the websites of each of the higher education institutions involved. For this purpose, rail education and traineeship programmes in Europe have been identified and a database of about 100 programmes has been built. Additionally, a new website concept and prototype has been designed that adopts the newly identified needs. This new design also considers the concentration of information related to Internships as defined in conjunction with WP 6.3. These new websites could be implemented as part of a follow-on project to STAFFER or interested organisations of stakeholders.

Finally, a pilot student mobility programme was developed in close coordination with partners from the railway industry, who develop the internships in companies, and which is closely linked with what has been developed in WP 6.3. The experience of the BIP programmes already realised in recent years by the University of Applied Sciences St. Pölten (UASSP) is taken as the main reference, and in the pilot program, STAFFER partners have been included in the next version of the BIP programme to be realised in November 2024. In the long term a new BIP programme concept is proposed based on the positive experience of the implemented BIP programmes as well as on the identified needs for a European-wide railway vision to be achieved.

2 STANDARDISED PROCESS FOR MOBILITY PROGRAMMES

During the initial research phase, the complex and different realities around standardised processes in mobility programmes at national level were identified. Each mobility program (i.e., between different educational institutions) has its own unique process resulting in universities often having over one-hundred different agreements and processes (e.g., UASSP has over 160). Therefore, to propose a single standardisation process is complex in view of the existing timeframe for the present project. However, at European level, the processes are already standardised by Erasmus+ and thus it is possible to use these tools in student and staff mobility programmes. STAFFER members, as well as other universities, are subscribed to this programme and fulfil all requirements, including the inter-institutional agreements.

In the current program coordination is done through the national agencies of each country and the international relations offices of each university. Under the current standard there are two active concepts:

- **Standard mobility programme (Erasmus+)** in which students can undertake full or partial courses (exchange programmes) at Bachelor's and master's level. This may even include an internship. The doctorate has a different mobility concept. Period of study: up to 12 months.
- **BIP (Blended Intensive Programme)** which is more flexible and allows annual student (and staff) mobility projects for a shorter period (e.g. one month). Period of study: up to 30 days.

By mutual agreement, STAFFER members recognised that, in the short term, this is the ideal mechanism for funding pilot programmes, in line with current European standards (which all already comply with).

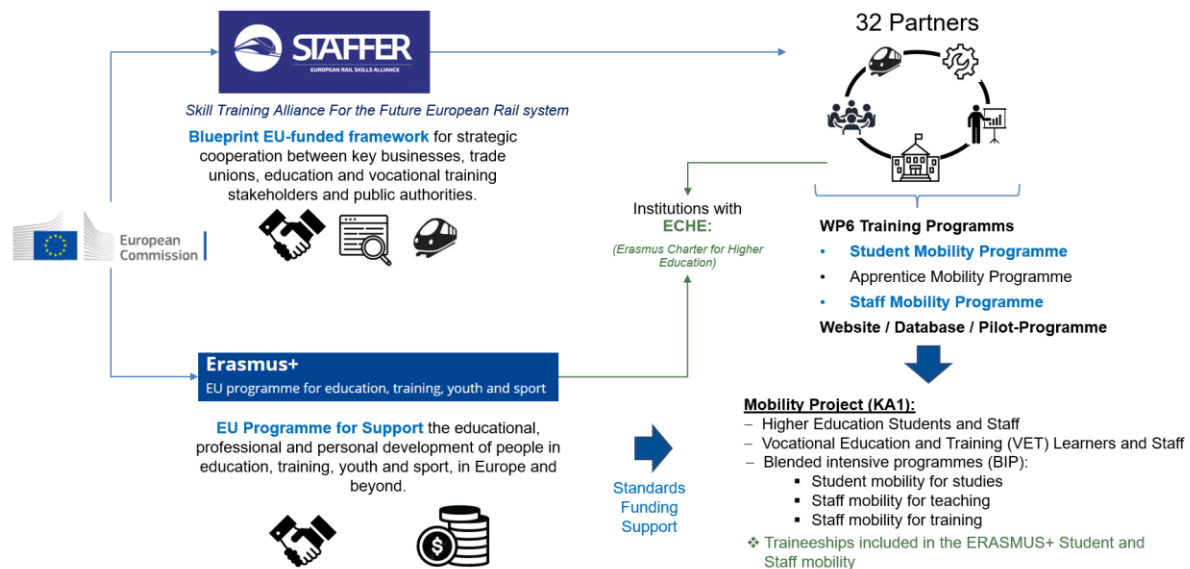
For the longer term, constraints to more demanding mobility projects are already identified. The present proposal conceptually sets out the necessary modifications to be able to realise mobility projects that will materialise in a time horizon beyond the STAFFER project.

2.1 Erasmus+ Mobility Programs

Erasmus+ is a student and professional mobility program managed by the European Commission, the Education and Culture Executive Agency (EACEA), a number of National

Agencies in Programme Countries and National Offices in partner countries¹. The Erasmus+ mobility programs in relation to the STAFFER project is illustrated schematically in Figure 1.

FIGURE 1: ERASMUS+ MOBILITY PROGRAMS AND THE STAFFER PROJECT



Source: STAFFER WP 6, Deliverable 6.2, 2024.

Erasmus+ aims to support, through education and lifelong learning, the educational, professional and personal development of people in education, training, youth and sport, in Europe and beyond, thereby contributing to sustainable growth, quality employment and social cohesion, fostering innovation and strengthening European identity and active citizenship. Erasmus+ seeks to promote²:

- Learning mobility of individuals and groups
- Learning mobility of sport staff
- Non-formal and informal learning mobility and active participation among young people
- Cooperation, quality, inclusion and equity, excellence, creativity and innovation at the level of Organizations and policies.

In particular, and in order to link European priorities more closely to specific needs at the national level, the Erasmus+ National Agencies have identified European priorities as particularly relevant in their national context. In this way they seek to encourage organizations

¹ Erasmus+ Programme Guide, 2022, P.19-20.

² Erasmus+ Programme Guide, 2022, P.6.

to focus their contributions on these selected areas in a given year. The following priority areas were defined in 2023³:

- Inclusion and diversity
- Digital Transformation
- Environment and Fight Against Climate Change
- Democratic Life, Common Values and civic Engagement

The following subsection summarize current Erasmus+ mobility projects in the field of Education and Training.

Higher education students and staff mobility⁴

- Supports physical and blended mobility of higher education students in any study fields and cycle (short cycle, bachelor, master and doctoral levels).
- Students can either study abroad at a partner higher education institution or carry out a traineeship in an enterprise, a research institute, a laboratory, an organization or any other relevant workplace abroad.
- Students can also combine a study period abroad with a traineeship, further enhancing the learning outcomes and development of transversal skills.
- While long-term physical mobility is strongly encouraged, this action recognizes the need to offer more flexible physical mobility duration to ensure the Programme is accessible to students from all backgrounds, circumstances and study fields.
- This action also supports higher education teaching and administrative staff to take part in professional development activities abroad as well as staff from the world of work to teach and train students or staff at higher education institutions. These activities may consist of teaching as well as training periods (such as job shadowing, observation periods, training courses).
- Furthermore, this action supports blended intensive programs, allowing for groups of higher education institutions to jointly develop blended mobility curricula and activities for students as well as academic and administrative staff.

³ Erasmus+ Programme Guide, 2022, P.7-10.

⁴ Erasmus+ Programme Guide, 2022, P.40-74.

Vocational education and training (VET) learners and staff mobility⁵

- Supports providers of vocational education and training (VET) and other organizations active in the field of VET that want to organize learning mobility activities for VET learners and staff.
- A wide range of activities are supported, including job shadowing and professional development courses for staff, traineeships and long-term placements (Erasmus-Pro), invited experts, and other activities as explained below.
- The participating organizations should actively promote inclusion and diversity, environmental sustainability and digital education through their activities: by using the specific funding opportunities provided by the Programme for these purposes, by raising awareness among their participants, by sharing best practices, and by choosing appropriate design for their activities.

Additional Erasmus+ mobility projects in the field of Education and Training⁶:

- Mobility projects for school pupils and staff.
- Mobility projects for adult education learners and staff.

2.2 Erasmus+ Mobility Program Application Process

Applications for support and funding of a mobility project are submitted directly to the corresponding Erasmus+ National Agency in each Member State⁷. For this, all participants as higher education institutions (HEIs) must hold the Erasmus Charter for Higher Education (ECHE). Fortunately, it has been found that 90% of STAFFER partners have the above-mentioned document, and if extrapolated to the other institutions in Europe the percentage is 94%⁸. The exceptions are countries that are not members of the European Union, but nevertheless have a very similar agreement with member countries (Switzerland, United Kingdom, among others).

Additionally, an agreement is required, through a so-called Erasmus+ Interinstitutional Agreement (IIA)⁹. These agreements can be signed between two or more higher education institutions (HEIs) and set out the framework conditions for student and staff mobilities taking place between institutions funded by the Erasmus+ Programme. The document is also available in digital format.

⁵ Erasmus+ Programme Guide, 2022, P.83-98.

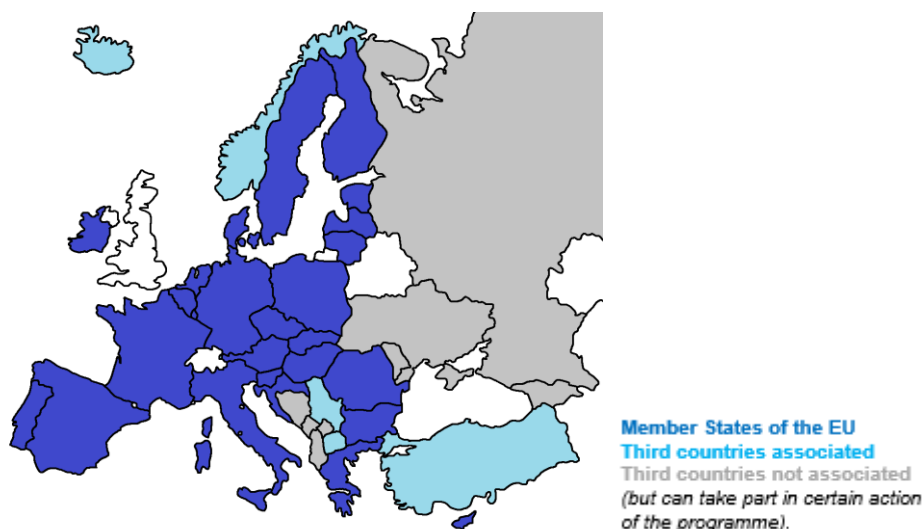
⁶ Erasmus+ Programme Guide, 2022, P.99-126.

⁷ Erasmus+ Programme Guide, 2022, P.41.

⁸ Accredited HEIs within the Erasmus+ Programme 2021-2027, July 2023.

⁹ <https://erasmus-plus.ec.europa.eu/resources-and-tools/inter-institutional-agreement>

FIGURE 2: ERASMUS+ PARTICIPATING COUNTRIES



Source: STAFFER WP 6, Deliverable 6.2, 2024.

A Mobility Project will consist of the following phases¹⁰:

- Planning: Definition of learning outcomes, formats of activities, work programs and timetable of activities.
- Preparation: Practical arrangements, selection of participants, agreements with partners and participants, linguistic, intercultural, learning-related preparation and predeparture task of participants.
- Implementation: Mobility activities.
- Follow-up: Evaluation of activities, validation and recognition of participant's learning outcomes during the activity, as well as dissemination and use of project results.

Resources and tools available to prepare the development of mobility projects and to develop the application¹¹:

- Application guidance
- Document library: Mobility, Learning, Inter-institutional agreement and Guidelines, Templates for Mobility, Learning and Inter-institutional agreement.
- Distance Calculator (Organizations): to calculate travel distances for grant support to individuals.

¹⁰ Erasmus+ Programme Guide, 2022, P.38

¹¹ <https://erasmus-plus.ec.europa.eu/resources-and-tools/overview>

- Online Language Support (OLS).
- Factsheets, statistics, evaluation.

2.3 Erasmus+ Programme Structure

According to Erasmus+ and as a general rule, organizations participating in Erasmus+ projects must be established in an EU Member State or third country associated to the Programme. The Programme is open to any organization active in the fields of education, training, youth or sport. Several Actions are also open to the participation of other players in the labor market. The Erasmus+ Programme consists of the following key actions and projects¹²:

- **Key Action 1: Learning mobility of individuals program that supports:**
 - Mobility of learners and staff
 - Youth participation activities
 - Mobility for sport coaches
 - Discover-EU
 - Language learning opportunities
 - Virtual exchanges in higher education and youth
- **Key Action 2: Cooperation among organizations and institutions program that supports:**
 - Partnerships for Cooperation, including Cooperation Partnerships and Small-scale Partnerships.
 - Partnerships for Excellence, including European Universities, Centers of Vocational Excellence (CoVE), Erasmus+ Teacher Academies, and Erasmus Mundus Action.
 - Partnerships for Innovation, including Alliances for Innovation, and Forward-looking Projects.
 - Capacity Building projects, including Capacity Building projects in the field of higher education, Capacity Building projects in the field of vocational education and training, Capacity Building projects in the field of youth, and Capacity Building projects in the field of sport.
 - Not-for-profit sport events.
- **Key Action 3: Support to policy development and cooperation (EU Level) program that supports:**

¹² Erasmus+ Programme Guide, 2022, P.14-18.

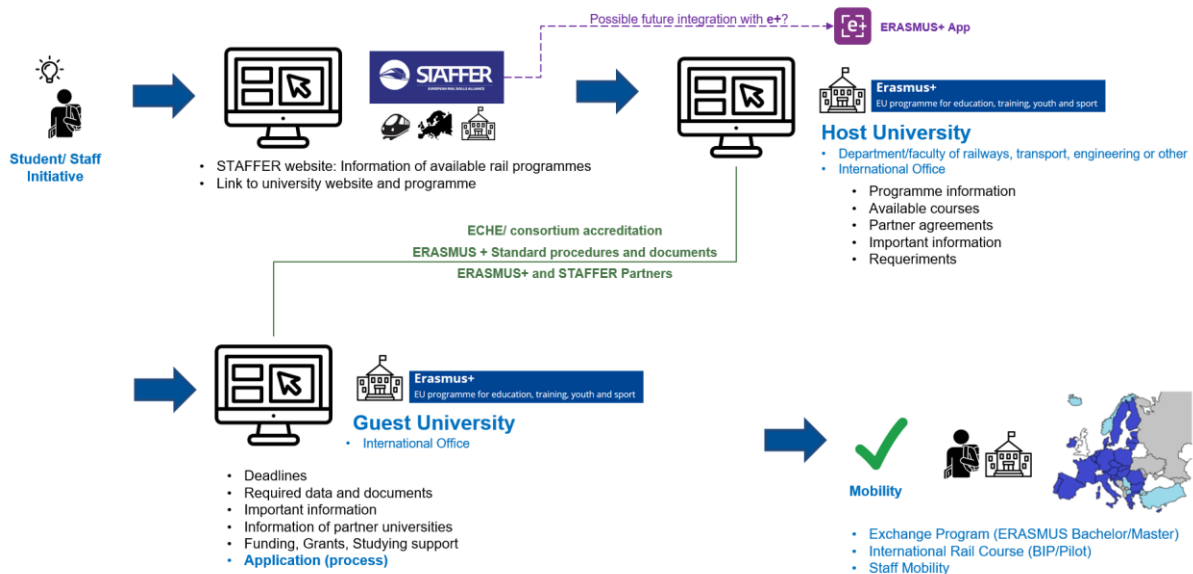
- The European Youth Together action.
 - Actions aimed at preparing and supporting the implementation of the EU policy agenda on education, training, youth and sport, including sectoral agendas for higher education, vocational education and training, schools and adult learning, and in particular by facilitating the governance and functioning of the Open Methods of Coordination.
 - Carrying out European policy experimentations, led by high-level public authorities and involving field trials on policy measures in several countries, based on sound evaluation methods. In line with the EU Youth Strategy, a financial support will also be provided to the structures animating the National Working Groups designated by each national authority in the frame of the EU Youth Dialogue at national level.
 - Actions aimed at gathering evidence and knowledge about education, training, youth and sport systems and policies at national and European level, with a view to facilitate reasoned policymaking. Evidence gathering and analysis will be undertaken through EU-wide or international surveys and studies as well as thematic and country-specific expertise.
 - Actions which facilitate transparency and recognition of skills and qualifications, as well as the transfer of credits, to foster quality assurance, support validation of non-formal and informal learning, skills management and guidance. This area will also include the support to national and European-level bodies or networks that facilitate cross-European exchanges as well as the development of flexible learning pathways between different fields of education, training and youth and across formal, non-formal and informal learning settings.
 - Actions that foster policy dialogue with stakeholders within and outside the European Union, though, for example, conferences, events and other activities involving policy makers, practitioners and other stakeholders in the fields of education, training, youth and sport, to raise awareness about the relevant European policy agendas and to promote Europe as an excellent study and research destination.
 - Cooperation with international organizations with highly recognized expertise and analytical capacity (such as the OECD and the Council of Europe), to strengthen the impact and added value of policies in the fields of education, training, youth and sport.
- **Jean Monnet Action program that supports:**

- Jean Monnet Action in the field of Higher Education
- Jean Monnet Action in other fields of education and training.
- Jean Monnet policy debate: Jean Monnet Networks in Higher Education.
- Support to designated institutions.

2.4 STAFFER Mobility Program Process Recommendations from the Perspective of Students and Staff

As part of STAFFER Task 6.2 mobility programs for rail sector students were analyzed and discussed by project partners. This section summarizes key finding and recommendations from that process. These recommendations can be used to help guide future ideas for improving the quality and effectiveness of mobility programs. They are presented from the perspective of students and/or staff, and considering the contact points in the whole mobility process to be achieved. The recommendations are summarized in Figure 3.

FIGURE 3: APPLICATION PROCESS AND COORDINATION FROM THE STUDENT/STAFF POINT OF VIEW.



Source: STAFFER WP 6, Deliverable 6.2, 2024.

1. Improve access to information: Search for information related to educational programs in the railway field or related to it. Two steps are distinguished for this purpose:

- General and consolidated information point: Platform that brings together all the general information on the railway educational offer and the railway-

related education offer information. The development of a new STAFFER website with updated information on all the programs is key here.

- Detailed information point: Once the program(s) of interest have been identified. Information located on the website of the institution providing the program. Here the direct connection between the new STAFFER website and the respective websites of each partner education institution is key.

For both cases, it is critical that the information is properly updated and constantly monitored.

2. Standard application, processing and confirmation procedure: Stages of application management for admission to the identified program, under the mobility agreements already established between the institutions. Applications are made directly at the university where the student or staff is enrolled and therefore through the respective international offices. Coordination takes place directly between the guest universities and the host universities, including the request for resources, signing of inter-institutional agreements, coordination and complementary issues. Confirmation of participation in the program is done directly by the host university or through the host university and its defined information channels.

All universities currently have different requirements and procedures for the admission and processing of applications for the different study programs (full: semesters, years) and temporary mobility programs (partial or full of shorter duration: weeks, months, semesters). However, the procedures are always carried out under the standards and processes defined by Erasmus+ through the national agencies and between the international offices of the partner higher education institutions.

3. Sponsored Mobility: Finally, mobility is mainly managed by the host university with possible support or sponsorship from other partner institutions of the program: other universities, institutions, authorities, industry, operators, among others.

3 RAIL PROGRAMS WEBSITE

As part of Task 6.2 a section of the STAFFER website presents information on student mobility (<https://www.railstaffer.eu/student-mobility-programmes/>) together with the limited information on some specific mobility programmes. These programmes consist of Erasmus Agreements, Double Degree, Joint Degree International Programmes, Co-Tutoring, Visiting PHD Students and Work-Based Internships. However, there is no further information about the academic programmes and there is no link to the institutions mentioned.

Therefore, in work package 6.2 a conceptual design of a new version of the website has been created which lists all university rail education programmes together with information about mobility programmes. Additionally, a first prototype was developed in order to test the conceptual design:

<https://www.figma.com/proto/2e7pwSuS81BLh6P75UcPr8/STAFFER?page-id=1%3A5&type=design&node-id=317-2105&viewport=794%2C289%2C0.19&t=Jhqr0EuoPmxchY5c-1&scaling=min-zoom>

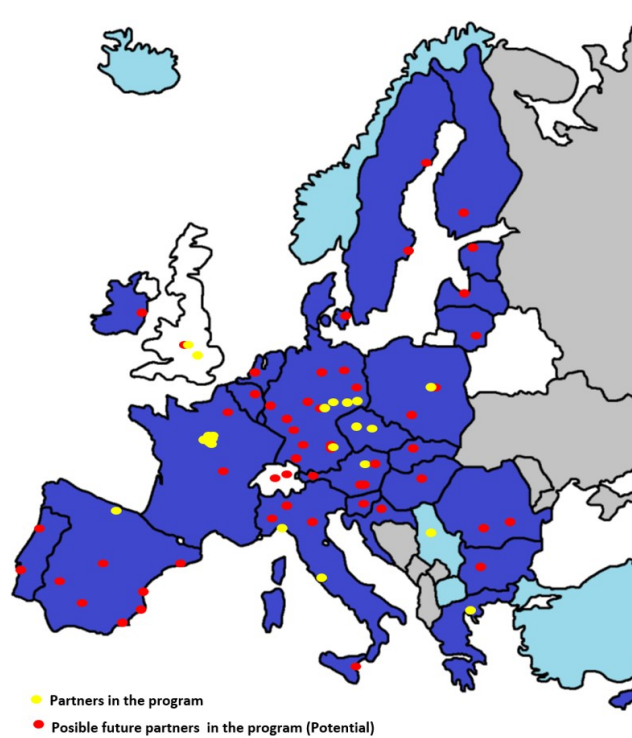
Regarding the Work-Based Internships, a parallel design is developed and adapted to the new website.

3.1 Rail programs data base

The first step in developing the rail educational program database was to identify all university railway training programs including programs which are not 100% railway related but provide some railway related courses. Currently, this information is not properly consolidated and updated in any of the possible portals available on the Internet.

The database was constituted based on information received from all STAFFER project partners as well as other educational institutions. Figure 4 presents a map of educational institutions included in the database.

FIGURE 4: EDUCATIONAL INSTITUTIONS IN STAFFER DATABASE



Source: STAFFER WP 6, Deliverable 6.2, 2024.

The rail educational programs database is an excel spreadsheet that is designed to be easily updatable and include very basic information about all the railway educational programs available in the European Union and associated countries. The database is included in Annex 1 of this report.

A summary of the database information by country and program is presented in Table 1.

TABLE 1: RAIL EDUCATIONAL PROGRAM DATABASE SUMMARY

Country	Institutions		Programs	
Austria	STAFFER Partners	1	Rail Programs	B: 1 M: 3
	Non-STAFFER Partners	5	Civil Engineering	B: 3 M: 3
Belgium	Non-STAFFER Partners	1	Transport	B: 1 M: 1 D: 1
Bulgaria	Non-STAFFER Partners	1	Rail Programs (E)	B: 2 M: 1
Croatia	Non-STAFFER Partners	2	Civil Engineering	B: 1
			Transport	B: 1 M: 1

Czech Republic	STAFFER Partners	2	Rail Programs (E) Transport (E)	B: 0 M: 1 B: 4 M: 5 D: 3
Denmark	Non-STAFFER Partners	1	Rail Programs (E) Transport (E)	B: 1 B: 0 M: 1
Estonia, Lithuania and Finland	Non-STAFFER Partners	1	Rail Programs (E)	Other: 1
France	STAFFER Partners	3	Civil Engineering (E)	Other: 1
	Non-STAFFER Partners	2	Transport	B: 1 M: 3 Other: 1
Germany	STAFFER Partners	4	Rail Programs Civil Engineering	B: 1 M: 4 Other: 1 B: 1 M: 2
	Non-STAFFER Partners	11	Transport (E)	B: 5 M: 7 Other: 1
Greece	STAFFER Partners	1	Civil Engineering	B: 1 M: 1 D: 1
	Non-STAFFER Partners	1		
Hungary	Non-STAFFER Partners	1	Transport (E)	B: 0 M: 1
Ireland	Non-STAFFER Partners	1	Transport (E)	B: 1 M: 1
Italy	STAFFER Partners	2	Civil Engineering (E)	B: 0 M: 4 D: 1
	Non-STAFFER Partners	4	Transport	B: 0 M: 3 D: 1
Lithuania	Non-STAFFER Partners	2	Transport (E)	B: 1 M: 0 D: 1
Netherlands	Non-STAFFER Partners	1	Civil Engineering (E)	B: 0 M: 1 D: 1 Other: 1
Norway	Non-STAFFER Partners	2	Civil Engineering	B: 1 M: 2
Poland	STAFFER Partners	1	Rail Programs	B: 1 M: 1
	Non-STAFFER Partners	2	Transport Business (E)	B: 1 M: 2 B: 0 M: 1
Portugal	Non-STAFFER Partners	3	Rail Programs	Other: 1
			Civil Engineering Transport (E)	B: 0 M: 1 B: 0 M: 1 D: 1
Romania	Non-STAFFER Partners	2	Mech. Eng. (E)	B: 1 M: 1
			Transport	B: 1 M: 1
Serbia	STAFFER Partners	1	Transport	B: 1 M: 1 D: 1
Slovakia	Non-STAFFER Partners	1	Civil Engineering (E)	B: 1 M: 1

Slovenia	Non-STAFFER Partners	1	Civil Engineering	B: 1 M: 1 D: 1
Spain	STAFFER Partners	1	Rail Programs	B: 0 M: 3
			Civil Engineering	B: 2 M: 2
	Non-STAFFER Partners	7	Transport	B: 0 M: 1
			Mech. Eng. (E)	B: 0 M: 1 D: 1
			Business	B: 0 M: 1 D: 1
Sweden	Non-STAFFER Partners	4	Rail Programs	B: 1
			Transport (E)	B: 0 M: 2
			Mech. Eng. (E)	B: 0 M: 1 D: 1 Other: 1
Switzerland	Non-STAFFER Partners	2	Civil Engineering	B: 1 M: 1 D: 1
			Transport	B: 1 M: 1 Other: 1
United Kingdom	STAFFER Partners	2	Civil Engineering (E)	B: 1 M: 1 D: 1
	Non-STAFFER Partners	1	Transport (E)	B: 1 M: 1 Other: 1

B: Bachelor, **M:** Master, **D:** PhD or Doctorate, **Other:** Short-term course **(E):** Courses in English.

Source: STAFFER WP 6, Deliverable 6.2, 2024.

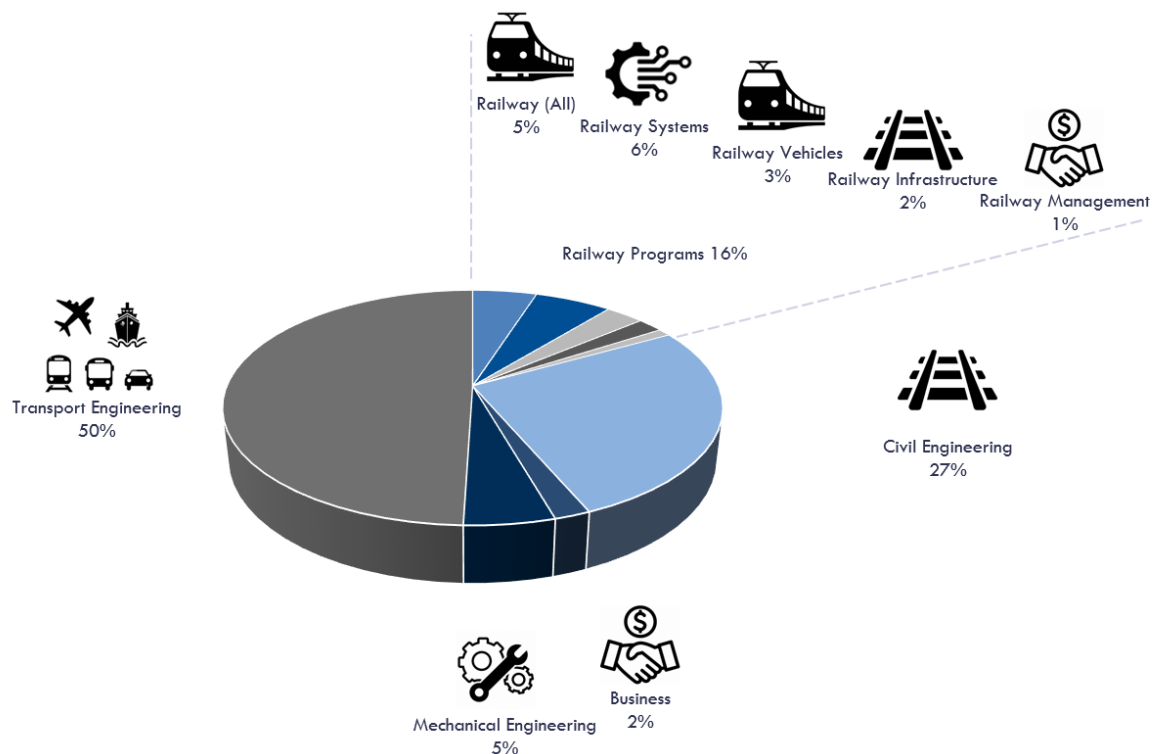
Based on an analysis of the database, it is possible to state the following:

1. The portals currently available on the internet, are oriented to the search for all types of university programmes, differentiating only based on major areas of study and not on the specific specialities: health, law, engineering, administration, among others.
2. There is currently no unique portal that focuses on railway education programmes, or programmes related to railway education.
3. The majority of railway courses are found in civil, mechanical and transport engineering programmes. In a universe of almost 141 identified programmes, engineering specialisations correspond to 82%. Management and business account for 2%.
4. As illustrated in Figure 4, the specific railway programmes correspond to 16%, where 6% correspond to programmes focused on railway systems, 3% to railway vehicles, 2% to railway infrastructure and 1% to management. Finally, 5% correspond to 100% railway programmes, in other words, their focus is on the railway system as a whole: infrastructure, systems, vehicles, operation, management, etc.
5. Only 16% of the total number of programmes are offered in English.
6. The promotion of railway-oriented courses and programmes is the responsibility of each university institution. In some cases, in collaboration with some railway companies.



7. There are different realities in each European country that influence the definition of the academic offer: number of institutions, number of courses, academic level, areas of specialisation.
8. The offer is dynamic and undergoes changes in each semester or even in some of the trimesters of each year. This means that a future single portal that consolidates all programme information must be managed by an institution that allocates the necessary resources and tools for its proper operation.

FIGURE 4: RAILWAY EDUCATIONAL PROGRAMS BY TYPE



Source: STAFFER WP 6, Deliverable 6.2, 2024.

3.2 Website Conception

As part of Task 6.2, a prototype was developed for a new website which would summarise all the railway educational programs available in the European Union and associated countries. This website would be fed with information from the database outlined above. This effort was not anticipated in the original STAFFER work program, but was considered to be an important addition to the work of addressing the future workforce needs in the railway sector.

A first version of the database was prepared, and in parallel, the functional definition and prerequisites associated mainly with the interfaces that shall exist with the user, as well as those

variables that allow filtering the available information, in order to make it as practical as possible, for example to apply filters according to country, language, academic level, among others.

Additionally, the discussion among STAFFER partners focused on what information should be available on a future version of the STAFFER website:

- 1) Show all railway and non-railway programs (those that contain railway courses).
- 2) Include both STAFFER project partners and other identified education institutions (non-partners).
- 3) Need to include railway industry partners: Internship programs in a parallel design, within the new STAFFER website.
- 4) Identify mobility programs: Rather than showing current mobility program agreements, show those courses that realize student or staff mobility. Example: BIP Programs, Summer Schools, among others.
- 5) The page should contain basic information, and that which undergoes the minimum changes over time. For more details, there must be a valid link to the official website of the institution or company (internship) where the program is offered.

Finally, it was emphasised that this website should be easy to maintain and update with the frequently changing educational program information. The prototype website development process is summarised in the following sections.

3.3 First Ideas

Table 2 summarises in schematic form, the first ideas of what would be expected from a new version of the railway educational programs section of the STAFFER website were realized:

TABLE 2: PROTOTYPE CONCEPTS FOR RAILWAY EDUCATIONAL PROGRAM WEBSITE

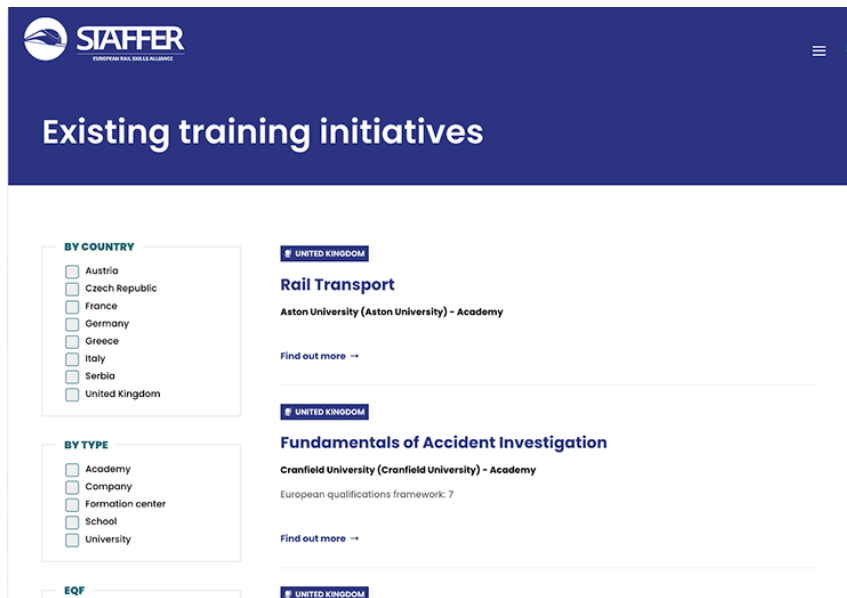
<p>Arrival site, where the user makes the first filter according to what he/she is looking for. Criteria such as country, language, academic level, area of study and associated mobility program (partner program).</p>																																																	
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Source: STAFFER WP 6, Deliverable 6.2, 2024.

3.4 Website development

As outlined above, the STAFFER website already has a section summarising training initiatives. This is illustrated in Figure 5.

FIGURE 5: TRAINING INITIATIVES SECTION FROM EXISTING STAFFER WEBSITE



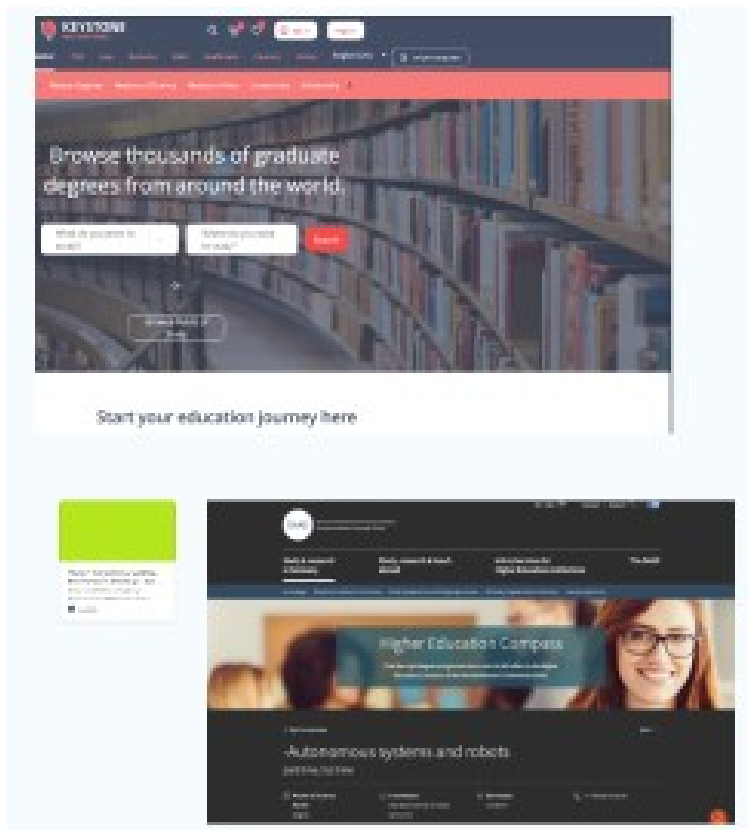
Source: <https://www.railstaffer.eu/existing-rail-training-initiatives/>

After developing the first ideas of what is expected from the new concept, the following activities were undertaken:

1) Research stage

- a. Information about the project and requirements and Brainstorming. The first ideas of what is expected from the new website are taken as a reference, plus feedback with the commission formed from the STAFFER project partners.
- b. The current website is analysed, identifying weaknesses and strengths.
- c. A benchmark is carried out with different educational program search portals, identifying the general characteristics of the interfaces, the type of information provided, the types of filters used, design aspects, integration with other applications and/or extensions, among other relevant elements. Two examples of these websites are presented in Figure 6.

FIGURE 6: EXAMPLE EDUCATIONAL PROGRAM WEBSITE PORTALS



Source: New websites develop for STAFFER, UASSP, Felipe Hernández, 2023.

- d. In order to facilitate the understanding of the future user, a definition of three different Personas is made in a standard format, where different stories, needs and personal objectives are described. This is illustrated in Figure 7.

FIGURE 7: POTENTIAL FUTURE USER PERSONAS

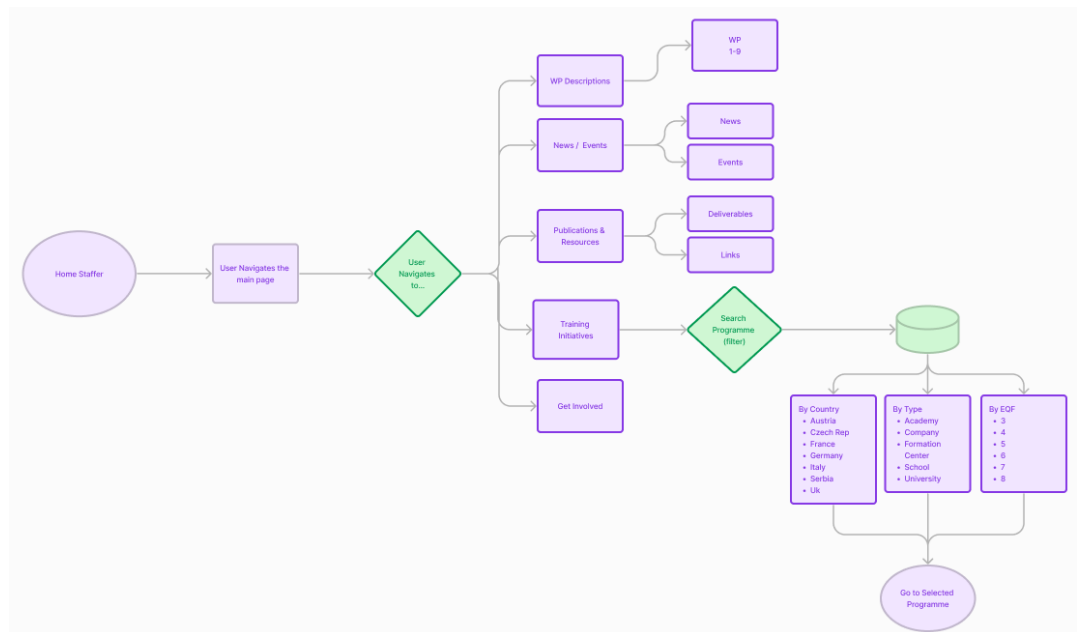


Source: Source: New websites develop for STAFFER, UASSP, Felipe Hernández, 2023.

2) Diagnosis stage

In this stage the information architecture map for the new website was developed. This is represented by flow diagrams illustrating how users would navigate the website to find desired information. A flowchart is presented in Figure 8.

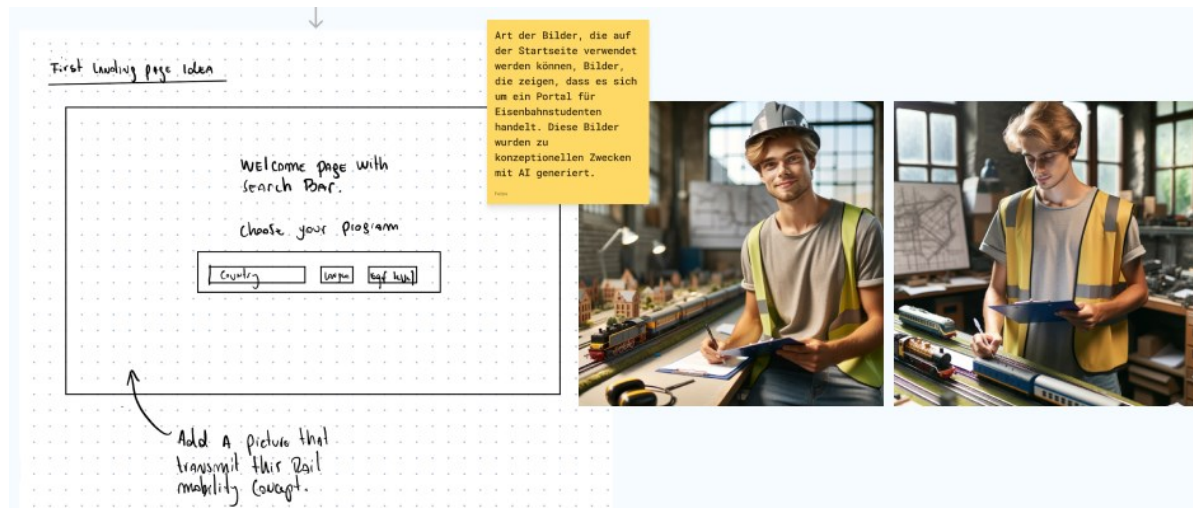
FIGURE 8: EDUCATIONAL PROGRAMS WEBSITE PROTOTYPE FLOW DIAGRAM



Source: *New websites develop for STAFFER, UASSP, Felipe Hernández, 2023.*

Subsequently, the first sketches of ideas and concepts are elaborated, which through technical discussion meetings, are subject to constant iterations and modifications. Figure 9 illustrates a potential design.

FIGURE 9: RAILWAY EDUCATIONAL WEBSITE PROTOTYPE DESIGN SKETCHES

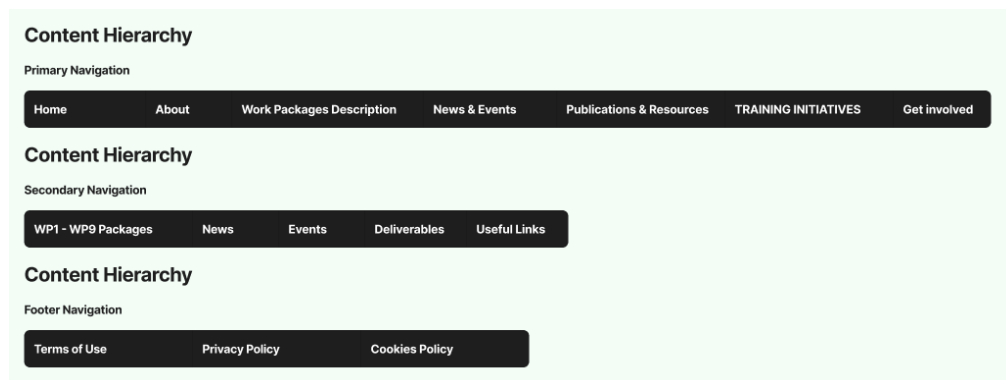


Source: New websites develop for STAFFER, UASSP, Felipe Hernández, 2023.

3) Development stage

In this stage, first, the content hierarchy is developed, separated into three main categories: Primary Navigation, Secondary Navigation and Footer Navigation.

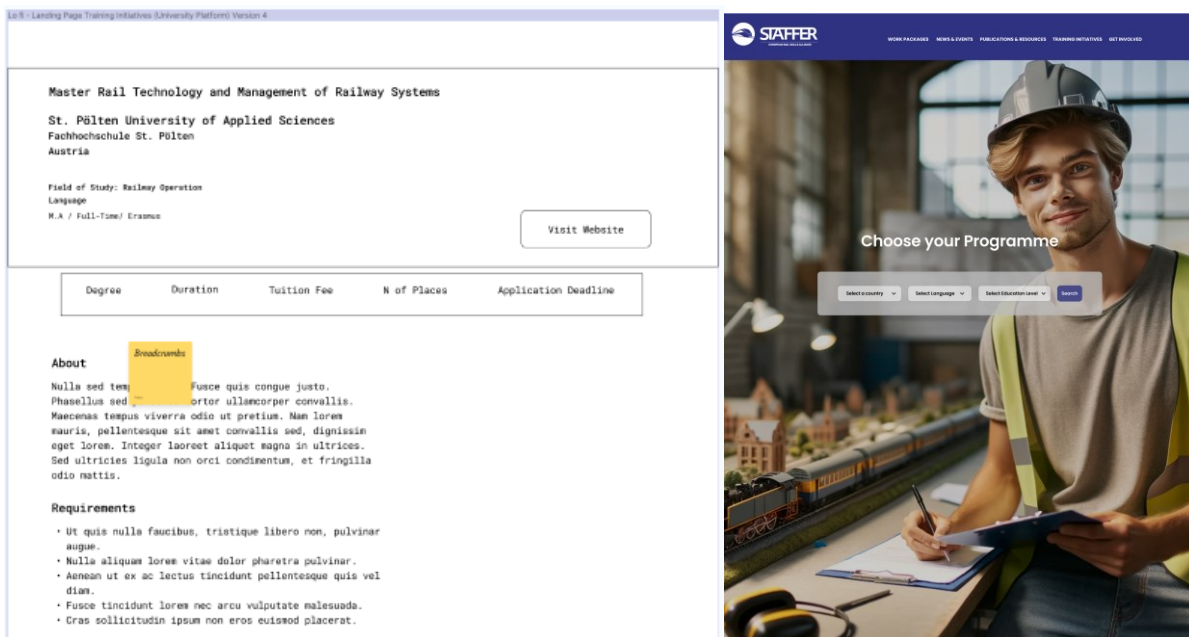
FIGURE 10: RAIL EDUCATIONAL PROGRAM WEBSITE HIERARCHY



Source: New websites develop for STAFFER, UASSP, Felipe Hernández, 2023.

Secondly, the navigation design is analysed and developed, working on solving current problems and proposing changes. From there, the Lo-Fi and Hi-Fi Wireframes are finally designed. Figure 10 illustrates potential wireframes.

FIGURE 10: RAILWAY EDUCATIONAL PROGRAM WEBSITE PROTOTYPE WIREFRAMES

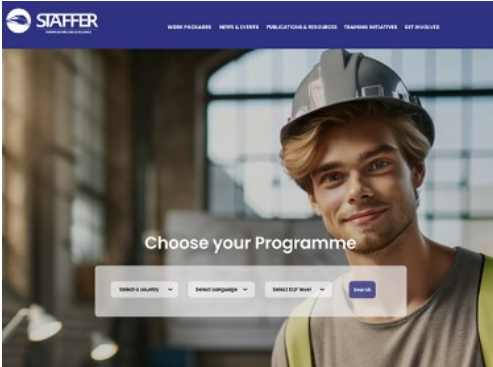


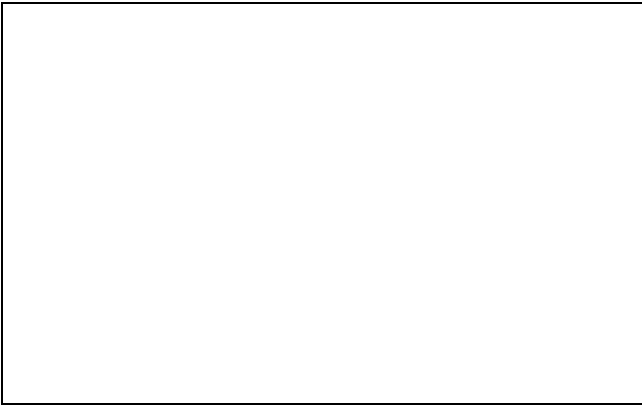
Source: New websites develop for STAFFER, UASSP, Felipe Hernández, 2023.

3.5 Refining Prototype into a New Online Page

Once the initial prototype was designed, the navigation design was analysed and developed, working on solving current problems and proposing changes. From there, the Lo-Fi and Hi-Fi Wireframes are finally designed. The results of this process are summarised in Table 3.

TABLE 3: REFINING RAIL EDUCATIONAL PROGRAM WEBSITE PROTOTYPET

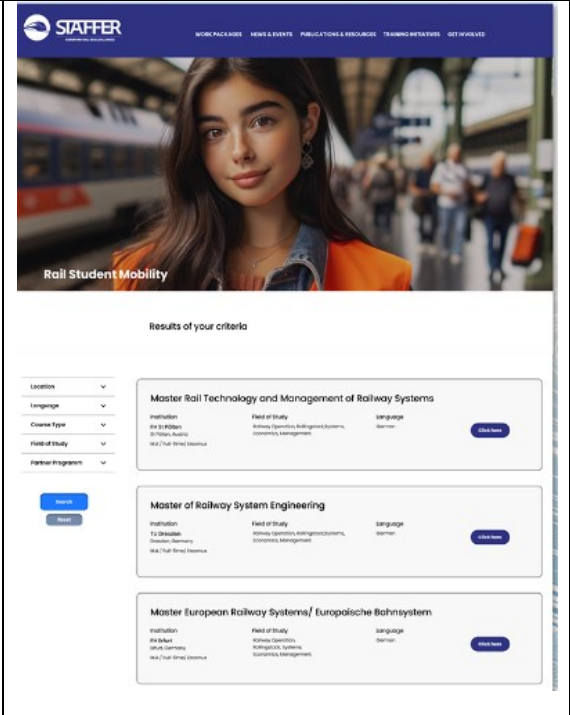
<p>Arrival site, where the user makes the first filter according to what he/she is looking for. Criteria such as country, language, academic level, area of study and associated mobility program.</p> <p>→ Redesign of the arrival site.</p> <p>→ New search filters.</p>	
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Results site, where the user identifies the possible options according to the filters applied, showing also the basic information of the courses found. Here there is also the possibility to iterate and change the filters.

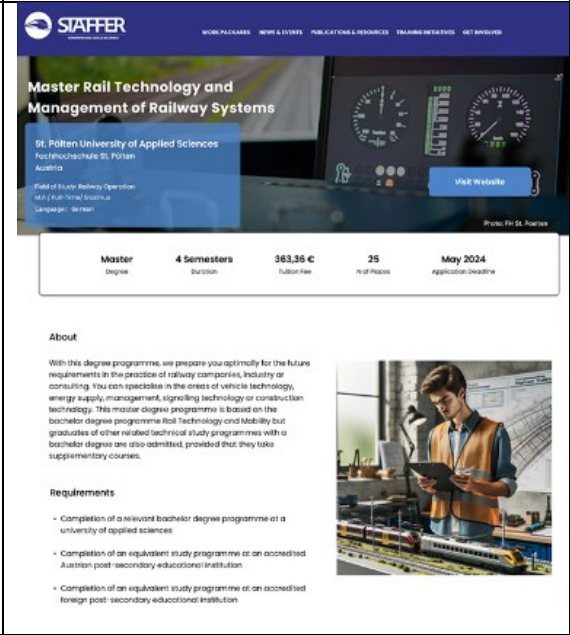
→ **Redesign of the results site.**

→ **New search filters in the sidebar.**

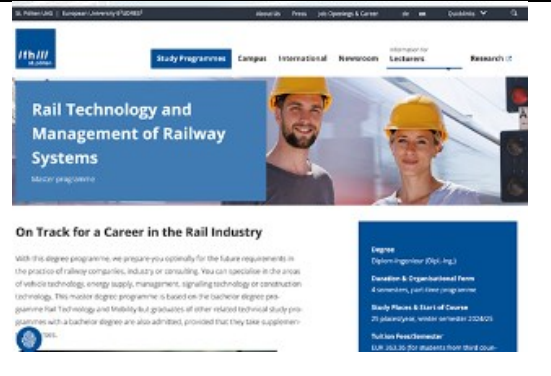


Individual site of the program and partner institution, where by choosing one of the search results, more descriptive information about the program and the institution is displayed. Here is also the valid link to the website of the institution that delivers the program, in order to guide to the site with the official information and in more detail.

→ **A new page showing a summary of the selected Study Programme, identifying the essential and basic information about the program: cost, duration, etc.**

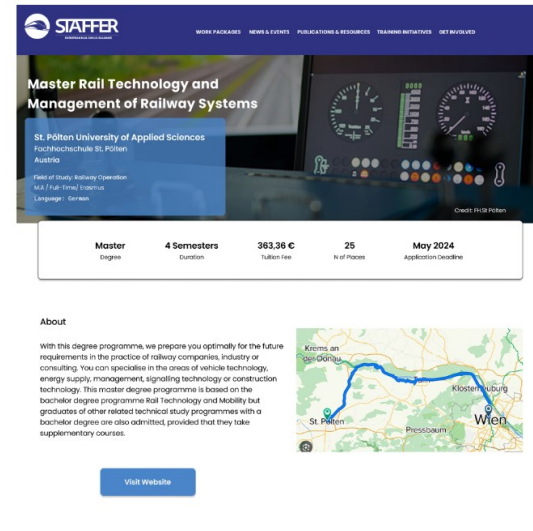


→ Through this page it is possible to be redirected to the university website and find more detailed information.

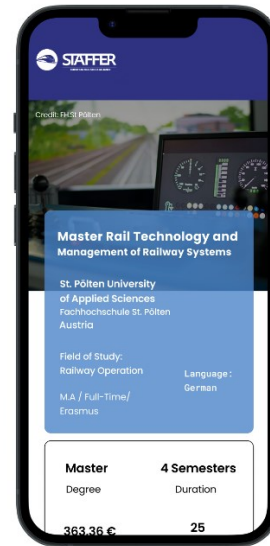


Possible integration with Google Maps (location), DeepL (translation) and social networks.

→ Integration with Google Maps. Other integrations (e.g. with DeepL) are also possible, once the website is operational.



→ Responsive web design (RWD) is included. This means that the website renders well on a wide variety of devices and screen sizes (mobile devices).



Source: New websites develop for STAFFER, UASSP, Felipe Hernández, 2023.

Prototype

Finally, the prototype contains the new web design in RWD considering the "Front-End" for the railway programs as well as the internships. The design is limited to one example case, in order to show the complete flow. It includes notes with instructions to follow.

Link: <https://www.figma.com/proto/2e7pwSuS81BLh6P75UcPr8/STAFFER?page-id=1%3A5&type=design&node-id=317-2105&viewport=794%2C289%2C0.19&t=Jhqr0EuoPmxCHy5c-1&scaling=min-zoom>

Next Phase

During the next phase of implementation, the following steps are defined from the conceptual design of the new website, the database and the developed prototype:

- **Updating the database:** The information is very dynamic and requires constant monitoring and updates.
- **Programming:** Coupling between "Front-End" and "Back-End", in other words, linking the prototype with the database through programming using WordPress, JavaScript, React (Framework), among others.
- **Deployment:** Mount the website on a server and materialize the continuous management of the database.
- **Integration with extensions:** Once the website is finished, it is possible to integrate with Google Maps extensions, DeepL or others.

4 STUDENT MOBILITY PILOT

The STAFFER student mobility pilot programme concept is defined as those programmes that enable complementary, specialised, vanguard, multicultural and international railway education and training with the active participation of the railway industry and operators.

In the short term, it has been determined that the most recommended mechanism to implement student mobility is through Blended Intensive Programmes (BIP) within the current Erasmus+ mobility programme. This is based on the positive experience of these programmes to date at the University of Applied Sciences St. Pölten as well as at other STAFFER partner institutions.

Based on this experience and the challenges that still exist in the railway sector at European level, a new version of a more ambitious railway BIP is proposed. A more ambitious programme to be developed in the long term, which requires modifications to the current standards in order to be realised.

4.1 BIP programs as short-term mobility

Blended Intensive Programmes (BIPs) are short, intensive programmes that use innovative forms of learning, teaching and training for students and staff, including the use of online cooperation. Their objectives are mainly to¹³:

- Develop short, intensive and joint mobility curricula and activities (workshops, projects, summer school, etc.)
- Design and implement new teaching and learning formats together.
- Promote the use of innovative learning and teaching methods
- Intensify cooperation of transnational as well as interdisciplinary teams
- Erasmus+ 2021-2027 Priorities: Inclusion and diversity, Green Erasmus+, Digital Transformation, Shared values, civic engagement and participation
- United Nations Sustainable Developments Goals

A BIP programme is developed and implemented by at least three higher education institutions (HEIs) from at least three EU Member States and third countries associated to the Programme (so-called Mixed Intensive Programme partnership). All institutions involved must have an ECHE

¹³ *Erasmus+ Programme Guide, 2022, P.47.*

(Erasmus Charter for Higher Education). Depending on the role of each of the organising partners, the following functions must be fulfilled:

- **BIP HOST** → **One coordinator only.**
- **BIP GUEST** → **More than one participant.**
- **Other participating institutions.**

This segregation is very important, as the funds, which are administered and managed directly with each of the national offices concerned, are distributed as follows:

- **BIP HOST: Funds for organisers (Erasmus+ OS).**
- **BIP GUEST: Funds for student participants (Erasmus+ SMS).**
- **BIP GUEST: Funds for participating staff (Erasmus+ STT).**

The participation agreement is realised through an Erasmus+ Inter-institutional Agreement (IIA) which can be signed between two or more higher education institutions (HEIs). This is where the framework conditions for student and staff mobilities taking place between institutions funded by the Erasmus+ Programme are established. Figure 11 illustrates the BIP program application¹⁴:

FIGURE 11: BIP PROGRAM APPLICATION

Digital Bilateral Inter-Institutional Agreements
Erasmus+ Key Action 1 – Mobility of higher education students and staff
Mobility between Erasmus+ countries (EU Member States and third countries associated to the Programme)
[Requirements for bilateral Inter-Institutional Agreements 2022-2023]

[Explanation for the use of the Digital Bilateral Inter-Institutional Agreements. For the Erasmus+ programme 2021-2027, bilateral Inter-Institutional Agreements should be concluded digitally through an IT system connected to the Erasmus Without Paper network. This template is provided for information purposes and should not be used to enter or create bilateral agreements. This document gives an overview of the data contained in digital bilateral inter-institutional agreements which are comprised of two parts. The first part is general information that can be shared with all partner institutions as "background". The second part is the cooperation conditions that are unique to each agreement. All fields contained in this template are mandatory unless marked as optional within those symbols: <->. The next upgrade of the ERP network will align all data standards with this template. In case of discrepancies between this template and a system connected to ERP, and until the next upgrade, the current ERP implementation can remain in place. For more information, please visit the European Commission's webpage about Erasmus Without Paper.]

Standard information applicable to all bilateral Inter-Institutional Agreements

The institutions agree to cooperate for the exchange of students and/or staff in the context of the Erasmus+ programme. They commit to respect the quality requirements of the Erasmus Charter for Higher Education in all aspects related to the organisation and management of the mobility, including automatic recognition of the credits awarded to students by the partner institution as agreed in the Learning Agreement and confirmed in the Transcript of Records, or according to the learning outcomes of the modules completed abroad, as described in the Course Catalogue, in line with the European Credit Transfer and Accumulation System. The institutions agree on exchanging their mobility-related data in line with the technical standards of the European Student Card Initiative.

Grading systems of the institutions

Receiving higher education institutions need to provide a link to the grading system and statistical distribution of grades or make the information available through EDIACONS according to the descriptions in the ECTS users' guide. The information will facilitate the interpretation of each grade awarded to students and will facilitate the credit transfer by the sending institution.

Applications from incoming students must reach the receiving institution by:

Autumn term (day/month)	Spring term (day/month)

Application procedure for incoming students

<-Contact details> (email, phone)	Website for information

Academic requirements for nominations [must be provided if applicable]

Requirement	<-Details>	Website for information
[For example: Number of ECTS credits completed]		
[Other]		

First part – factsheet

The factsheet contains general information applicable to all bilateral intra-European inter-institutional agreements of a single higher education institution and must be shared with all partner institutions through the Erasmus Without Paper Network. The general information must be accessible to students as well and updated as needed. Factsheet updates do not require approval since only the cooperation conditions of each agreement are subject to approval of both partners.

Name of the institution	Erasmus code	Contact details (email, phone)

Websites	URLs
[Faculty/faculties]	
Course catalogue	

Calendar

Nominations of incoming students must reach the receiving institution by:

Autumn term (day/month)	Spring term (day/month)

[Terms can be adapted in case of a trimester system]

Additional requirements [must be provided if applicable]

Requirement	<-Details>	Website for information
[For example for applications: Motivation letter, CV]		
[Other]		

The institution will send its decision within [x] weeks, and no later than 5 weeks.

Inclusion and accessibility

The institution will provide support to incoming mobile participants with fewer opportunities, according to the requirements of the Erasmus Charter for Higher Education. Information and assistance can be provided by the following contact points and information sources:

Available infrastructure adjusted for people with:	<-Description of infrastructure>	<-Contact details> (email, phone)	Website for information
[For example: - Reduced mobility - Hearing impairments - Visual impairments]			

Available support services for people with:	<-Description of support services>	<-Contact details> (email, phone)	Website for information
[For example: - Reduced mobility - Hearing impairments - Visual impairments]			

Source: <https://erasmus-plus.ec.europa.eu/resources-and-tools/inter-institutional-agreement>

¹⁴ <https://erasmus-plus.ec.europa.eu/resources-and-tools/inter-institutional-agreement>

The following types of mobility activities can be organised to participate in an intensive blended learning programme¹⁵:

- **Student mobility for studies**
- **Staff mobility for teaching**
- **Staff mobility for training**

The structure of a BIP programme must take into consideration at least the following¹⁶:

- **Physical stay** (between 5 and 30 days)
- **Virtual component** (before, during and/or after Physical stay). No limitation on the duration of the virtual component.
- **Min. 3 ECTS** for the positive completion of both components (physical/virtual)
- **Min. 15 mobile learning participants (maximum 25 participants to be financed by ERASMUS+).**

4.2 BIP programs planning

COST PLANNING

As defined in the Erasmus+ Programme Guide (2022) for BIP programmes, the financial support to be allocated is defined as follows¹⁷:

The sending universities (GUEST):

- Support the physical stay of students and teachers from their Erasmus+ funds:
 - Students:
 - Between 5 and 14 days: 70 EUR/day
 - Between 15 and 30 days: 50 EUR/day.
 - Min. 350 EUR.
 - Plus, up to 4 additional travel days and top-ups, if applicable.
 - Teachers: Funding as Erasmus+ Teaching Mobility.

The hosting universities (HOST):

- Support the physical stay of students and teachers from their Erasmus+ funds:

¹⁵ Erasmus+ Programme Guide, 2022, P.48.

¹⁶ Erasmus+ Programme Guide, 2022, P.52

¹⁷ Erasmus+ Programme Guide, 2022, P.62-74



- 400 EUR per participant
- Min. 6.000 EUR (15 participants)
- Max. 8.000 EUR (20 participants)

Travel Support (GUEST):

- Thought GREEN ERASMUS¹⁸: To qualify for Green Travel Support, you must use sustainable means of transport for most of your journey (outward and return). Available if destination lies within 100 km to 4.000 km travel distance

Table 4 presents an example of funding amounts for a typical BIP project.

TABLE 4: ERASMUS+ BIP FUNDING EXAMPLE

HOST	20 international participants	8.000 EUR (OS)
	10 local participants	0 EUR
GEST 1	4 students	~1.400 EUR (SMS) +200 EUR (GTS)
GEST 2	5 students	~1.750 EUR (SMS) +250 EUR (GTS)
GEST 3	6 students	~2.100 EUR (SMS) +300 EUR (GTS)
GEST 4	3 students	~1.050 EUR (SMS) +150 EUR (GTS)
	2 teachers	~ 700 EUR (STT) +100 EUR (GTS)

ERASMUS+ funds for organisers (**OS**), ERASMUS+ funds for student participants (**SMS**), ERASMUS+ funds for participating staff (**STT**), ERASMUS Green Travel Support (**GTS**).

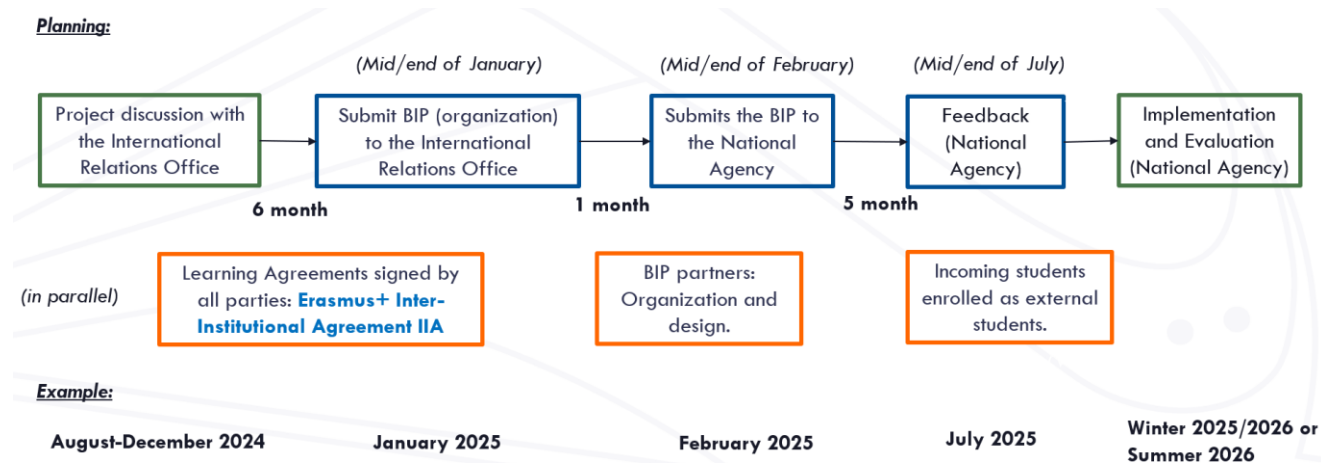
Source: STAFFER WP 6, Deliverable 6.2, 2024.

TIME PLANNING

The timescales to be considered for the preparation of a BIP programme are associated with the critical route based on the deadlines established in the national agencies as well as in the international relations offices of each of the partner universities of the programme. Figure 12 illustrates the main steps to follow regarding the formal processing of a BIP programme, which takes a minimum of approximately 12 months.

¹⁸ <https://www.greenerasmus.org/before-mobility/travel>

FIGURE 12: ERASMUS+ BIP PROGRAMME TIME PLANNING



Source: STAFFER WP 6, Deliverable 6.2, 2024. Based on Erasmus+ Programme Guide, 2022.

4.3 BIP Programs Experience (UASSP)

Table 5 summarises the latest BIP programmes developed by the University of Applied Sciences St. Pölten, in particular the railway BIP programme for the year 2023 and the new railway BIP programme for the year 2024, in which STAFFER project partners are involved.

TABLE 5: UASSP BIP PROGRAMS EXPERIENCE

BIP Program	Period	Host	Countries	Students	Topics
Interface / Metaverse – Experiment in Art, Design & Technology	2021/22	FH St. Pölten (AT)	4 Belgium 4 Denmark 5 Germany 4 Finland 9 Greece 3 Netherlands 5 Austria	26 incoming students 10 incoming STA 11 Local students	Art, digital media technologies.
Social work in a digital world. Digital work in a social world			12 Poland 5 Portugal 12 Switzerland 5 Spain 1 Ukraine	26 incoming students 32 incoming STA 14 Local students	Social work, media, IT, technology.
Telehealth in Dietetics	2022/23	FH St. Pölten (AT)	21 Belgium 41 Germany 3 Italy 3 Letonia 1 Liechtenstein 18 Lithuania 10 Netherlands 9 Sweden	24 incoming students 5 incoming STA 2 incoming STT 5 Local students	Clinical and non-clinical services, electronic information and telecommunications technologies.
Security Awareness				29 incoming students 5 incoming STA 9 Local students	IT Security, media Technology, Marketing & Communication.
Trends in Research				36 incoming students 3 incoming STA 3 incoming STT 15 Local students	Research, innovation and digitalization.
International Radio Days				17 incoming students 1 incoming STA 1 incoming STT 5 Local students	Programme concepts, Journalistic forms of presentation, techniques and design.
Advertising and Content Factory: From product to advertising	2023/24	FH St. Pölten (AT)	22 Belgium 44 Germany 3 Estonia 15 Finland 5 Great Britain 4 Italy 11 Lithuania 32 Netherlands 12 Poland 4 Portugal 33 Romania 1 Sweden 15 Slovakia 5 Spain 3 Czechia 6 Hungary 4 United States	24 incoming students 2 incoming STA 10 Local students	Film & TV, Digital Media Production, Media Management, Communication, Public Relations and Advertising
Creating Human Centered Digital Media solutions for Sustainable Societal Development				21 incoming students 5 incoming STA	Media and societal development, methodological inputs and teams building.
The Foodture				64 incoming students 8 incoming STA 11 Local students	Sustainable food and nutrition.
Trends in Research and Innovation in the Context of Computer Science				64 incoming students 8 incoming STA 10 Local students	Interface of applied research, innovation and digitalization. Artificial intelligence, governance and protection.
International railway technology				48 incoming students 5 incoming STA 1 incoming STT 4 Local students	Railway operations, CO2 Footprint calculation,
International railway technology	2024/25	FH St. Pölten (AT)	Roma (IT), Genova (IT), Erfurt (DE), TTK (EE), Vilnius (LT), UPT (RO).	25 incoming students, 38 home students, 15 international teachers.	Railway operations, Railway Infrastructure, Railway Systems, Transport Systems, CO2 Footprint calculation,

STA: Staff Mobility for Teaching

STT: Staff Mobility for Training

Source: UASSP, 2024.

4.4 New RAIL BIP program for long-term mobility

Based on the positive experience in the use of the BIP programmes to provide student and staff mobility, STAFFER proposes a new and more ambitious idea for using BIPs to achieve the following objectives:

- To get to know the different railway realities across Europe: the continent has different levels of railway development and therefore different challenges to be faced according to each reality.
- To encourage a Europe- level discussion about railway development: To promote international freight and passenger services and to facilitate cross-border operations.
- Promote technological innovation and exchange of experiences in a multicultural and multidisciplinary environment: In line with the areas prioritised by Erasmus+.
- Promote rail development as one of the modern mobility solutions to climate change: In line with UN objectives and Erasmus+ priority areas.

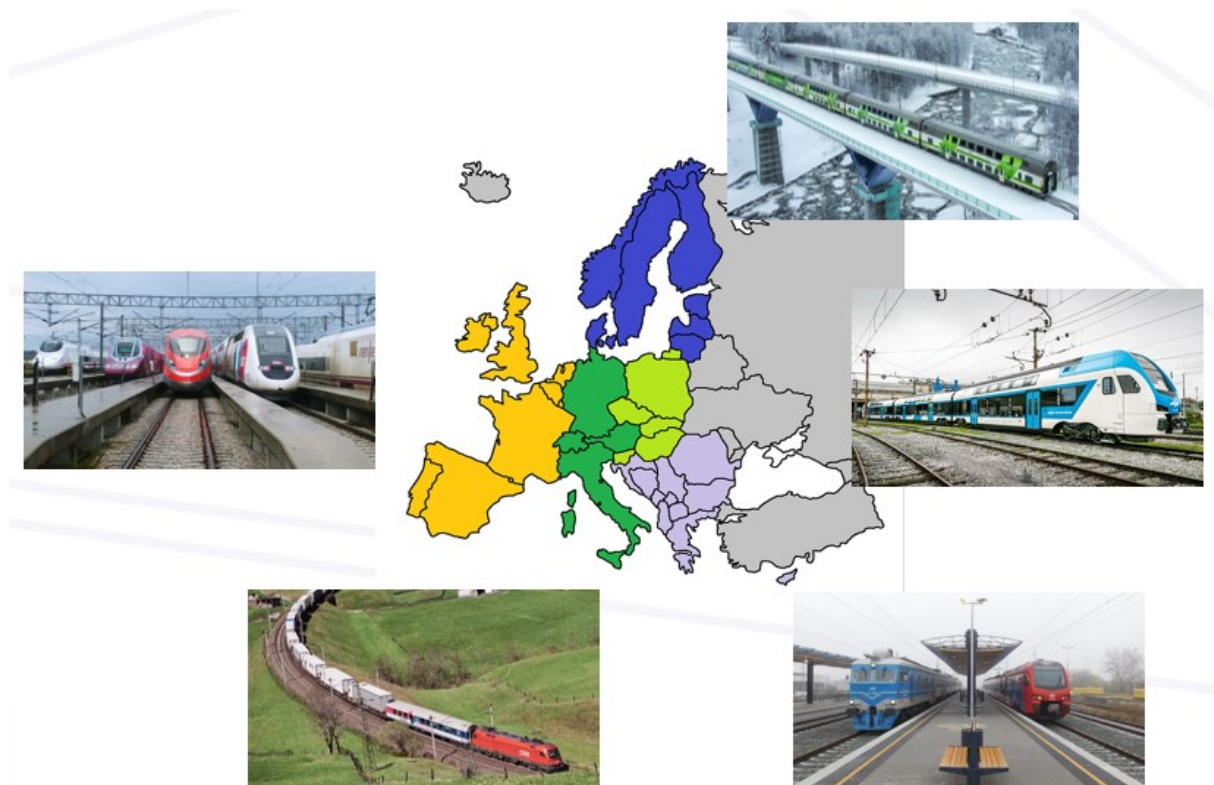
In this way, it is proposed to elaborate a programme that will allow, within the same period, to have a similar experience as the current BIP mobility projects in three different countries within a "macro-region" to be defined (for example: Western, Central, Northern, Eastern and South-Eastern Europe). Figure 13 illustrates this concept schematically.

Proposed BIP Project Main Structure

In order to meet the above-mentioned objectives, the following model programme structure is established:

- At least one Rail BIP each Euro-Region pro year (summer).
- Duration: 1 month:
 - **First week** online: Universities
 - **Second week** on site (first country): University + Rail Operator + Rail Industry
 - **Third week** on site (second country): University + Rail Operator + Rail Industry
 - **Fourth week** on site (third country): University + Rail Operator + Rail Industry
- Active participation of railway companies and the railway industry (on-site week) on each country.

FIGURE 13: STAFFER RECOMMENDED BIP MOBILITY PROJECT



Source: STAFFER WP 6, Deliverable 6.2, 2024.

Therefore, the following aspects need to be solved within a longer time horizon than the STAFFER project and with a broader institutional scope:

- A new standard format is required (based on the current one defined for the BIP programmes) that allows the organisation of programmes with three hosts (and not only one), also adding spaces for cooperation with the railway industry and operators.
- Depending on the results, have the possibility of renewing the programme on an annual or longer-term basis, allowing for flexibility to rotate at least one of the three hosts (university/country).
- Funding and cooperation agreements considering the new structure of three hosts plus several guests. Include the possibility of co-funding by industry and minimum conditions to be fulfilled in terms of transparency.

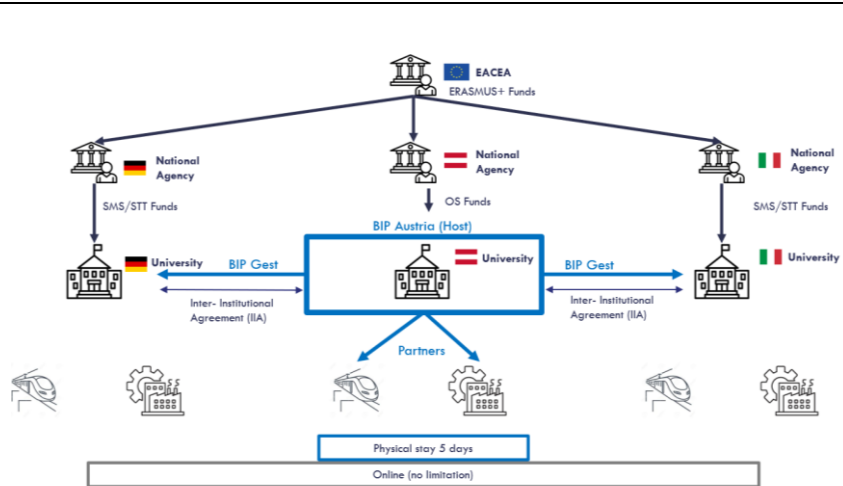
The changes needed to implement an international mobility programme with three hosts are illustrated in Table 6.

TABLE 6: PROPOSED BIP PROJECT ORGANISATION

Today a BIP mobility program is managed from a unique host institution.

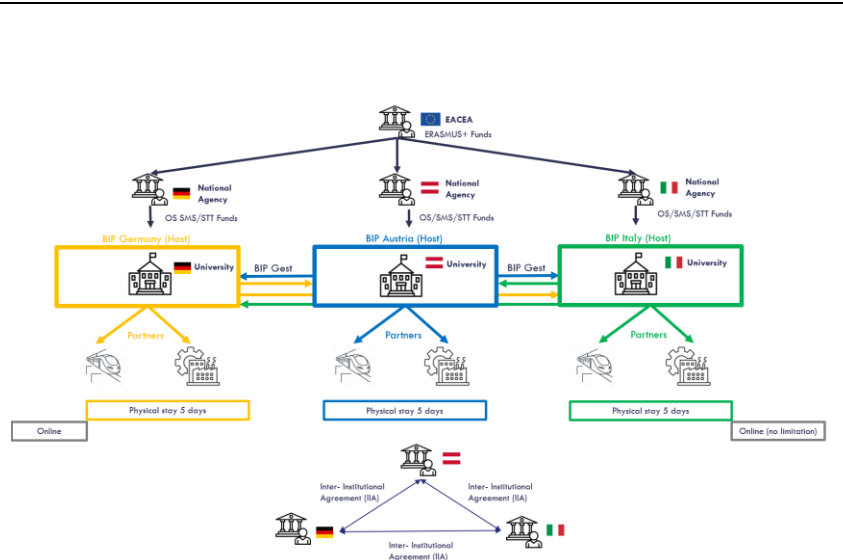
The invited guest institutions sign the IIA with the host. The host and the different guest institutions receive the funds directly from the respective national agencies.

Mobility takes place to the country where the host institution is based.



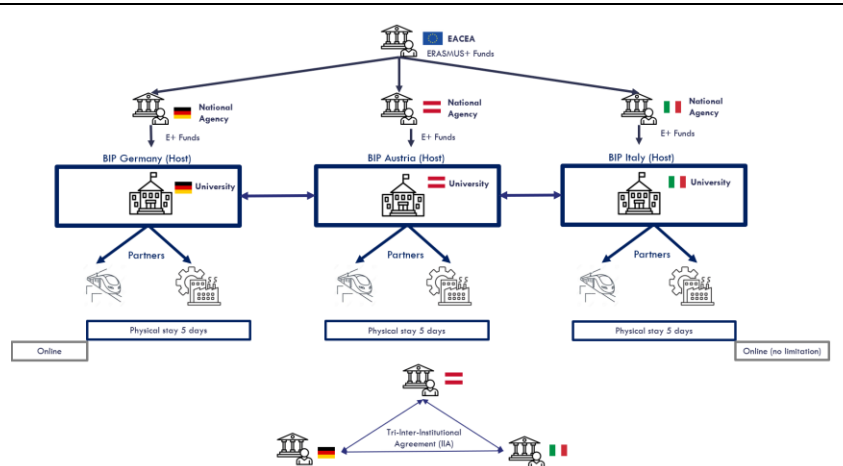
In theory, the BIP structure could be replicated three times to reach the three host institutions. However, there are doubts that this can be done in the same period (same month), and between the same participants repeatedly.

Obviously, this structure is not efficient in terms of the procedures to be completed (many IIA agreements) and replicating at least three times all Host/Guest procedures with national agencies.



Therefore, it is suggested to have a unique IIA agreement between three host institutions and a defined number of guest institutions (a role that is also replicated in two of the three hosts at the time of mobility).

With this, a common distribution structure for the three hosts containing the funds for the



<p>organization as well as for the mobility of their students and staff. In the case of 100% guest institutions, the current system is being maintained.</p>	
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Source: STAFFER WP 6, Deliverable 6.2, 2024.

The proposed changes can be implemented through the Erasmus+ Key Actions, which are mentioned below:

- Key Action 1: Through the established tools for the materialisation of mobility plans, making some changes to the standard formats, and creating a special case for the rail sector.
- Key Action 2: Through cooperation agreements of institutions, with defined roles (hosts and guests) and even a defined rotation.
- Key Action 3: Through political cooperation agreements at EU level, with the understanding that the present programme is aligned with policies on education, transport infrastructure development (rail), and climate change actions.

The final path to be chosen will have to be discussed and defined together with EACEA, and with it the changes agreed upon in order to materialise this type of rail mobility programme.

EXAMPLE

As part of Task 6.2 an example of this new type of mobility program was developed. This is illustrated schematically in Figure 14 and consist of the following main points:

- Rail BIP example: Central Region EU (Italy, Germany, Austria)
- Hosts (universities): Sapienza Università di Roma (Italy), FH Erfurt (Germany), and FH St. Pölten (Austria).
- Co-Host (Industry): FS Group (Italy), Hitachi Rail (Italy), DB (Germany), Techne Kirow (Germany), ÖBB (Austria), Siemens AG (Austria).
- Funding: Erasmus+ and Co-Funding from the Rail industry.
- Participants (Gests): Students and Staff (EU)

- Mobility coordinators: Erasmus+ and International Offices of each university (Host and Guests)
- Platform coordinator (Post-STAFFER): To be defined.
- Language: English
- Travel between countries: Train (ICE, Nightjet, Fecciarossa).
- Visits: DB Projects, Techne-Kirow Factory, ÖBB Workshops, Siemens AG Factory, Gruppo FS Italiane Traffic Control Center, Hitachi Rail Factory.

FIGURE 14: EXAMPLE RAIL BIP PROGRAM

Week 1 (Online)

- Online Meetings and lectures (three Universities).
- Coordination for the next three weeks.
- Discussion about specific topics and integration of the group.

Week 2 (Germany) 

- Lectures in the University - Operator Day - Supplier Day - Excursions



Week 3 (Austria) 

- Lectures in the University - Operator Day - Supplier Day - Excursions



Week 4 (Italy) 

- Lectures in the University - Operator Day - Supplier Day - Excursions



Source: STAFFER WP 6, Deliverable 6.2, 2024.

5 STAFFER MOBILITY PROGRAMME CONCLUSIONS AND RECOMMENDATIONS

On a European scale, there is currently no single repository of information that makes it possible to identify where there are 100% railway programmes or those with certain railway content (for example, engineering). This makes it difficult to determine the real academic offer of rail education programmes at different levels at European level. Moreover, there is a dynamism regarding information that requires continuous monitoring and management of information: changes of plans, new programmes, short programmes, among others.

Regarding student mobility, thanks to Erasmus+, there are now standardised tools and processes to materialise mobility plans, where even more than 90% of higher education institutions are affiliated. One of the examples that best reflects the positive experience with large numbers of students and staff in short-term mobility programmes is the BIP Programme, which has been able to facilitate and finance these programmes with a high degree of flexibility in implementation (hybrid modalities).

There are still major challenges regarding railway training and its internationalisation at European level: the (still) limited presence of programmes taught in English, the implementation of more intensive mobility programmes in order to get to know the different realities in all European regions and to promote a vision on a European scale, and the stability and permanence of these programmes. This is reflected for example in the new proposal for a 'Rail-BIP', which as a concept already requires some adjustments to existing standards in order to be realised.

ANNEX: RAILWAY PROGRAMS

Country	City	Language	University	Programme name	Educational Level				Programs	
					BSc	MS	PhD	Other	Total	Area
Austria	St. Pölten	German	FH St. Pölten	Rail technology and mobility	x				1	Railways
Austria	St. Pölten	German	FH St. Pölten	Rail technology and mobility		x			1	Railways
Austria	St. Pölten	German	FH St. Pölten	European Rail systems (M.Sc)		x			1	Railways
Austria	Wien	German	FH Technikum Wien	Master Rolling Stock Engineering		x			1	Railway MR
Austria	Wien	German	TU Wien	Civil Engineering	x	x			2	Civil Engineering
Austria	Wien	German	TU Wien	Transport / Rail			x		1	Transport
Austria	Graz	German	TU Graz	Civil Engineering	x	x			2	Civil Engineering
Austria	Graz	German	FH Joanneum University of Applied Sciences	Energy, Mobility and Environmental Management	x	x			2	Transport
Austria	Innsbruck	German	Universität Innsbruck	Civil and Environmental Engineering	x	x			2	Civil Engineering
Belgium	Hasselt	Dutch	Universiteit Hasselt	Mobility sciences	x	x	x		3	Transport
Bulgaria	Sofia	Bulgarian/English	Todor Kableshkov University of Transport	Railway engineering	x				1	Railways System
Bulgaria	Sofia	Bulgarian/English	Todor Kableshkov University of Transport	Railway engineering		x			1	Railways System
Bulgaria	Sofia	Bulgarian/English	Todor Kableshkov University of Transport	Rail operation and safety	x				1	Railways System
Croatia	Zagreb	Croatian	University of Zagreb	Traffic and Transport	x				1	Transport
Croatia	Zagreb	Croatian	University of Zagreb	Traffic and Transport		x			1	Transport
Croatia	Rijeka	Croatian	University of Rijeka	Civil Engineering	x				1	Civil Engineering
Czech Republic	Pardubice	Czech	University of Pardubice	Transport Equipment	x	x			2	Transport
Czech Republic	Pardubice	Czech	University of Pardubice	Transport Structures	x	x			2	Transport
Czech Republic	Pardubice	Czech	University of Pardubice	Transport Technology and Management	x	x			2	Transport
Czech Republic	Pardubice	Czech or English	University of Pardubice	Transport Technology and Management			x		1	Transport
Czech Republic	Pardubice	Czech or English	University of Pardubice	Transport Means and Infrastructure			x		1	Transport

Czech Republic	Pardubice	English	University of Pardubice	Rail Vehicles		x			1	Railway MR
Czech Republic	Pardubice	English	University of Pardubice	Transport Operations Management		x			1	Transport
Czech Republic	Prague	English	CTU Czech TU Prague	Transportation Systems and Technology	x	x	x		3	Transport
Denmark	Copenhagen	English	Technical University of Denmark DTU	Railway Design and Maintenance	x				1	Railways Infra
Denmark	Copenhagen	English	Technical University of Denmark DTU	Transport and Logistics		x			1	Transport
Lithuania	Kaunas	English	Kaunas University of Technology	Transport engineering			x		1	Transport
Finland	Hameenlinna	English	HAMK - Häme University of Applied Sciences (EDU Rail)	Harmonised and Modernised Multidisciplinary Railway Education				x	1	Railways System
Estonia	Riga	English	Riga Technical University	Harmonised and Modernised Multidisciplinary Railway Education				x		Railways System
Latvia	Tallin	English	Tallinna Tehnikakõrgkool	Harmonised and Modernised Multidisciplinary Railway Education				x		Railways System
France	Paris	French	CESI	Transport and Logistics Business		x			1	Transport
France	Lille	English/French	IMT Lille Douai	Civil Engineering (Railway Systems)				x	1	Civil Engineering
France	Lyon	French	Université de Lyon - ENTPE	VSE engineer, transport deepening				x	1	Transport
France	Lyon	French	Université de Lyon - ENTPE	Urban and regional passenger transport		x			1	Transport
France	Saintes	French	Ferrocampus Nouvelle-Aquitaine	Rail Transport	x				1	Transport
France	Valenciennes	French	Université Polytechnique Hauts de France	International Master in Transportation and energy		x			1	Transport
Germany	Aachen	German/English	RWTH Aachen University	Transport Engineering and Mobility	x	x			2	Transport
Germany	Westliches Ringgebiet	German	Technische Universität Braunschweig	Transportation Engineering	x	x			2	Transport
Germany	Berlin	German	TU Berlin	Traffic Engineering	x	x			2	Transport
Germany	Darmstadt	German	Technische Universität Darmstadt	Rail transport, mobility and logistics		x			1	Transport
Germany	Dresden	German	TU Dresden	Railway System Engineering		x			1	Railways System
Germany	Dresden	German	TU Dresden	Traffic Engineering	x				1	Transport
Germany	Erfurt	German	FH Erfurt	Railway Engineering (B.Eng)	x				1	Railways
Germany	Erfurt	German	FH Erfurt	European Rail systems (M.Sc)		x			1	Railways
Germany	Gotha	German	FS Gotha	Traffic Engineering				x	1	Transport
Germany	Gießen	German	Technische Hochschule Mittelhessen (THM)	Bahningenieurwesen	x				1	Civil Engineering

Germany	Karlsruhe	German	KIT Karlsruher Institut für Technologie	Mobility and Infrastructure		x			1	Civil Engineering
Germany	Herremberg	English	Steinbeis University	MBA International Rail Management (Master)		x			1	Railways Management
Germany	Wildau	German	TU Wildau	Transportation Systems Engineering	x				1	Transport
Germany	Kassel	German	Kassel Universität	Mobility, Transport and Infrastructure		x			1	Transport
Germany	München	English	TU München	Transportation systems		x			1	Transport
Germany	München	German	München University of Applied Sciences	Rail Engineering				x	1	Railway MR
Germany	Stuttgart	English	Universität Stuttgart	Infrastructure Planning		x			1	Civil Engineering
Germany	Stuttgart	German	Universität Stuttgart	Verkehrsingenieurwissenschaft		x			1	Transport
Germany	Stuttgart	German	Universität Stuttgart	Fahrzeugtechnik		x			1	Railway MR
Greece	Komotini	Greek	Democritus University of Thrace	Railway Engineering		x			1	Railways System
Greece	Thessaloniki	Greek	AUTH Aristotle University of Thessaloniki	Civil Engineering	x	x	x		3	Civil Engineering
Hungary	Budapest	English	Budapest University of Technology and Economics	Transportation Engineering		x			1	Transport
Ireland	Dublin	English	TU Dublin	Transport and Civil Engineering	x	x			2	Transport
Italy	Catania	Italian	Università degli studi di Catania	Water and Transportation Civil Engineering		x			1	Civil Engineering
Italy	Bologna	Italian	Università di Bologna	Master in Sustainable and integrated Mobility in Urban Regions		x			1	Transport
Italy	Genova	Italian	Università degli studi di Genova	Safety engineering for Transport, Logistics and Production		x			1	Transport
Italy	Genova	Italian	Università degli studi di Genova	PhD curriculum in "Logistics and Transport"			x		1	Transport
Italy	Milan	Italian	Politecnico di Milano	Transport Infrastructure		x			1	Civil Engineering
Italy	Rome	Italian	Sapienza Università di Roma	Master Degree in Transport Systems Engineering		x			1	Transport
Italy	Rome	Italian	Sapienza Università di Roma	Master universitario di II livello in Ingegneria delle Infrastrutture e dei Sistemi Ferroviari		x			1	Civil Engineering
Italy	Rome	Italian	Sapienza Università di Roma	PhD course in "Infrastructure and Transports"			x		1	Civil Engineering
Italy	Torino	Italian/English	Politecnico di Torino	Civil Engineering		x			1	Civil Engineering
Lithuania	Vilnius	English	SMK University of Applied Sciences	Transport and Logistics Business	x				1	Transport
Netherlands	Delft	English/Dutch	TU Delft	Transport, Infrastructure and Logistics		x	x	x	3	Civil Engineering
Norway	Torgarden	Norwegian	NTNU Norwegian University of Science and Technology	Civil and Environmental Engineering	x	x			2	Civil Engineering
Norway	Torgarden	Norwegian	NTNU Norwegian University of Science and Technology	Road, Railway and Transport Engineering		x			1	Civil Engineering

Poland	Katowice (Gliwice)	N/I	Silesian University of technology	Railway Transport	x	x			2	Railways
Poland	Warsaw	English	Warsaw School of Economics	Management/ Business/ Finance		x			1	Business
Poland	Warsaw	Polish	UTH Uczelnia Techniczno Handlowa	Transport-freight forwarding-logistic	x	x			2	Transport
Poland	Warsaw	Polish	UTH Uczelnia Techniczno Handlowa	Rail Transport				x	1	Transport
Portugal	Lisboa	Portugese	Universidade Nova de Lisboa	Studies in Railway Infrastructure Rehabilitation				x	1	Railways Infra
Portugal	Lisboa	Portugese	Universidade de Lisboa - Técnico Lisboa	Civil Engineering		x			1	Civil Engineering
Portugal	Porto	Portugese/English	Universidade do Porto	Urban Mobility Management		x	x		2	Transport
Romania	Bucharest	French/English	Universitatea Politehnica din Bucharest	Mechanical Engineering	x	x			2	Mech Engineering
Romania	Petrosani	Romanian	University of Petrosani	Transport and Traffic Engineering	x	x			2	Transport
Serbia	Belgrade	Serbian	University of Belgrade	Transport and Traffic Engineering	x	x	x		3	Transport
Slovakia	Žilina	Slovak/Czech/English	University of Žilina	Railway Engineering and Track Management	x	x			2	Civil Engineering
Slovenia	Ljubljana	Slowenien	University of Ljubljana	Maritime Studies and Transport	x	x	x		3	Transport
Spain	Bilbao	Spanish/English	Universidad del País Vasco (UPV/EHU)	Mechanical Engineering		x	x		2	Mech Engineering
Spain	Bilbao	Spanish/English	Universidad del País Vasco (UPV/EHU)	Industrial Engineering		x	x		2	Business
Spain	Cadiz	Spanish	University of Cadiz	Railway Systems		x			1	Civil Engineering
Spain	Cartagena	Spanish	Polytechnic University of Cartagena	Civil Engineering	x				1	Civil Engineering
Spain	Madrid	Spanish	Universidad Pontificia Comillas	Railways Systems		x			1	Railways System
Spain	Madrid	Spanish	Universidad Carlos III	Railway System Engineering		x			1	Railways System
Spain	Malaga	Spanish	University of Malaga	Industrial Engineering		x			1	Civil Engineering
Spain	Malaga	Spanish	University of Malaga	Intelligent energy systems and transport		x			1	Transport
Spain	Sevilla	Spanish	University of Sevilla	Civil Engineering	x				1	Civil Engineering
Spain	Barcelona	Spanish	UPC Universitat Politècnica de Catalunya	Railway Systems and Electric Traction		x			1	Railways System
Sweden	Umeå	English	Umeå Institute of Design	Master's Programme in Transportation Design		x			1	Transport
Sweden	Linköping	English	Linköping University	Intelligent Transport Systems and Logistics, Master's Programme		x			1	Transport
Sweden	Lund	Sweden	LU Lund University	Railway Engineering	x				1	Railways Infra
Sweden	Stockholm	English	KTH Royal Institute of Technology	Vehicle and Mechanical Engineering		x	x	x	3	Mech Engineering

Switzerland	Zürich	German	ETH Zürich	Civil Engineering	x	x	x		3	Civil Engineering
Switzerland	Zürich	German	ZHAW School of Engineering	Transport Systems	x	x		x	3	Transport
United Kingdom	Birmingham	English	University of Birmingham	Civil and Railway Engineering	x	x	x		3	Civil Engineering
United Kingdom	Birmingham	English	Aston University	Transport Management	x				1	Transport
United Kingdom	Cranfield	English	Cranfield University	Safety and Accident Investigation		x		x	2	Transport