

DELIVERABLE D4.1 – Inventory of TT ecosystem



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Abstract	This report (user guide) explains the mapping process of the TT ecosystem of the EDUC Alliance. The document guides users through the process to display their own capacities, facilities that are relevant from the TT ecosystem perspective, furthermore, describes the interaction capabilities of the platform that enables ecosystem members to share, search information with respect to research and innovation project. Researchers, professionals, companies and all ecosystem members can interact via the platform which gives a comprehensive view of the TT ecosystem.
Keywords	ecosystem mapping, direct interaction, technology and innovation sharing, co-creation, business model generation

1. Introduction

This document is to give a guidance to the technology transfer (TT) mapping tool applied in the framework of this WP.

The objective of this WP was “the identification of the stakeholders participating in TT (internal services and services at the interface with stakeholders), together with that of the barriers that prevent TT will be based on the ‘university-centered entrepreneurial ecosystem model’ approach. The [www.openup.education \(https://educ.openup.education/feed\)](https://educ.openup.education/feed) platform developed by UPECS will make it possible to visualize the potential interconnection of the ecosystem stakeholders.”

While in this stage of the work the “mapping” was the core objective, which was to bring stakeholders to a common platform to enable transparency across all Higher Education Institutions (HEI) within the alliance the members of this WP expanded the focus of the “mapping” process to

1. enable interaction among the stakeholders of the integrated TT ecosystem;
2. include researchers in the discussion beside the agents (TT officers, entrepreneurship centers, etc.) of the TT process to enable knowledge creators to learn about any needs on the part of other stakeholders of the TT ecosystem that can inspire future research, or to seek early-stage validation of their research objectives;
3. “map” the service capability of the consortium by creating a Core facility/Research Infrastructure space, where these service providers can also showcase their capabilities and can start engaging with each other or with stakeholders in need of their services.

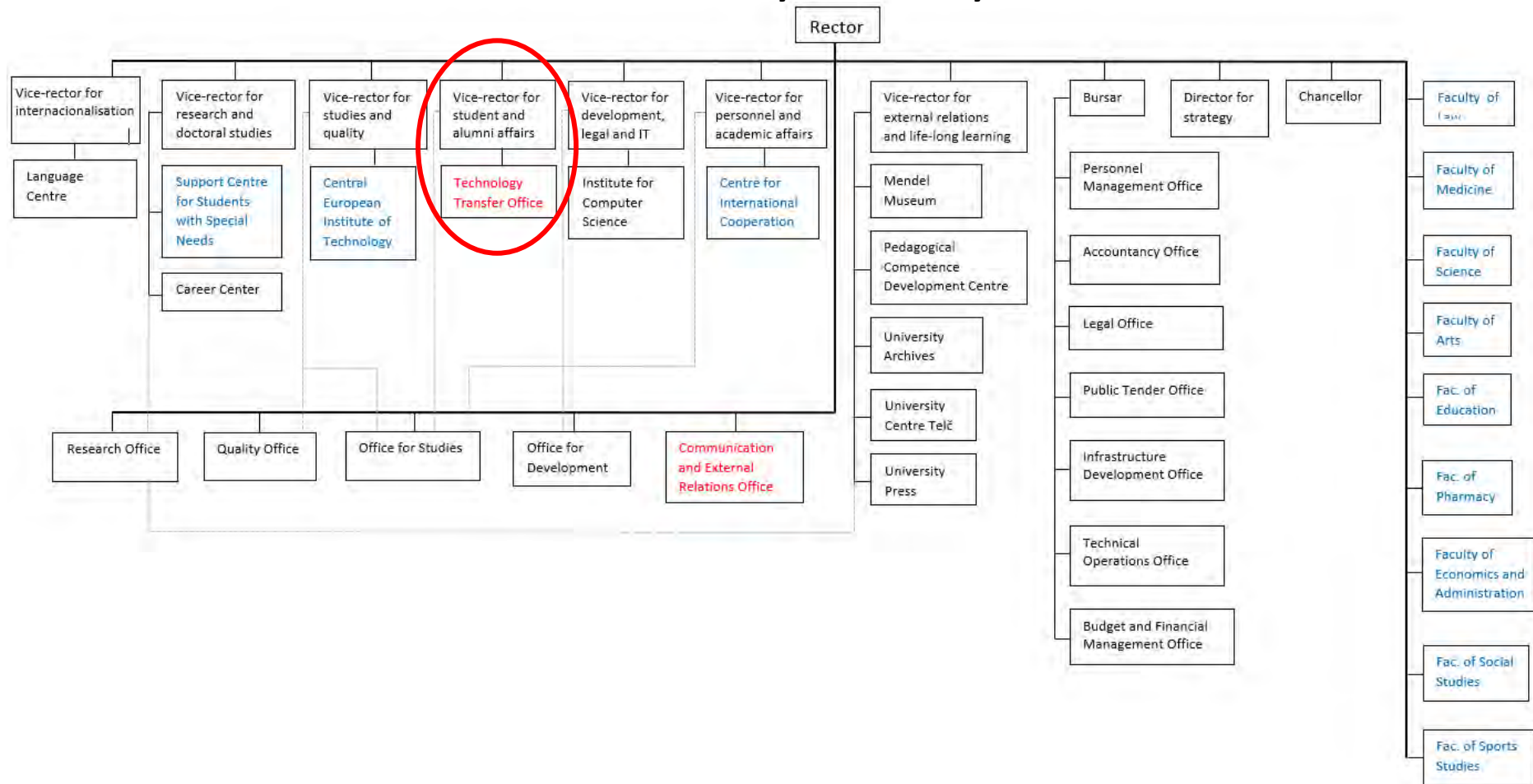
Based on the assessment of the member HEIs of the alliance we can conclude that all institutions are dedicated to support TT activities in both the traditional way of protecting Intellectual Property (IP) that emerge at the institution as the end in progress result of the research activity and contribute to entrepreneurial capacity building process. At all institutions IP protection is conducted in all categories – invention, utility model, design, know-how, plant, copyright, trademark – in a differing distribution as the HEI’s disciplinary profile are divergent. While all HEIs are multidisciplinary, which is a sound base for the innovation activity some of the HEIs are more focused on research and teaching in the area of humanities (e.g.: University of Nanterre), while others are more IT and engineering focused (e.g.: University of Rennes 1). All member HEIs have integrated TT activity and in some cases the entrepreneurial capacity building activity into the organizational structure shown on the organigramme of the institutions in the following figures. The specificities of the TT offices and the entrepreneurship and innovation centers are displayed in the educ.openup platform among the member profiles of the community.

On the educ.openup platform, beside the members of the ecosystem the following dimensions were mapped with the contribution of the individual researchers or by the administration personal (e.g.: TT officers):

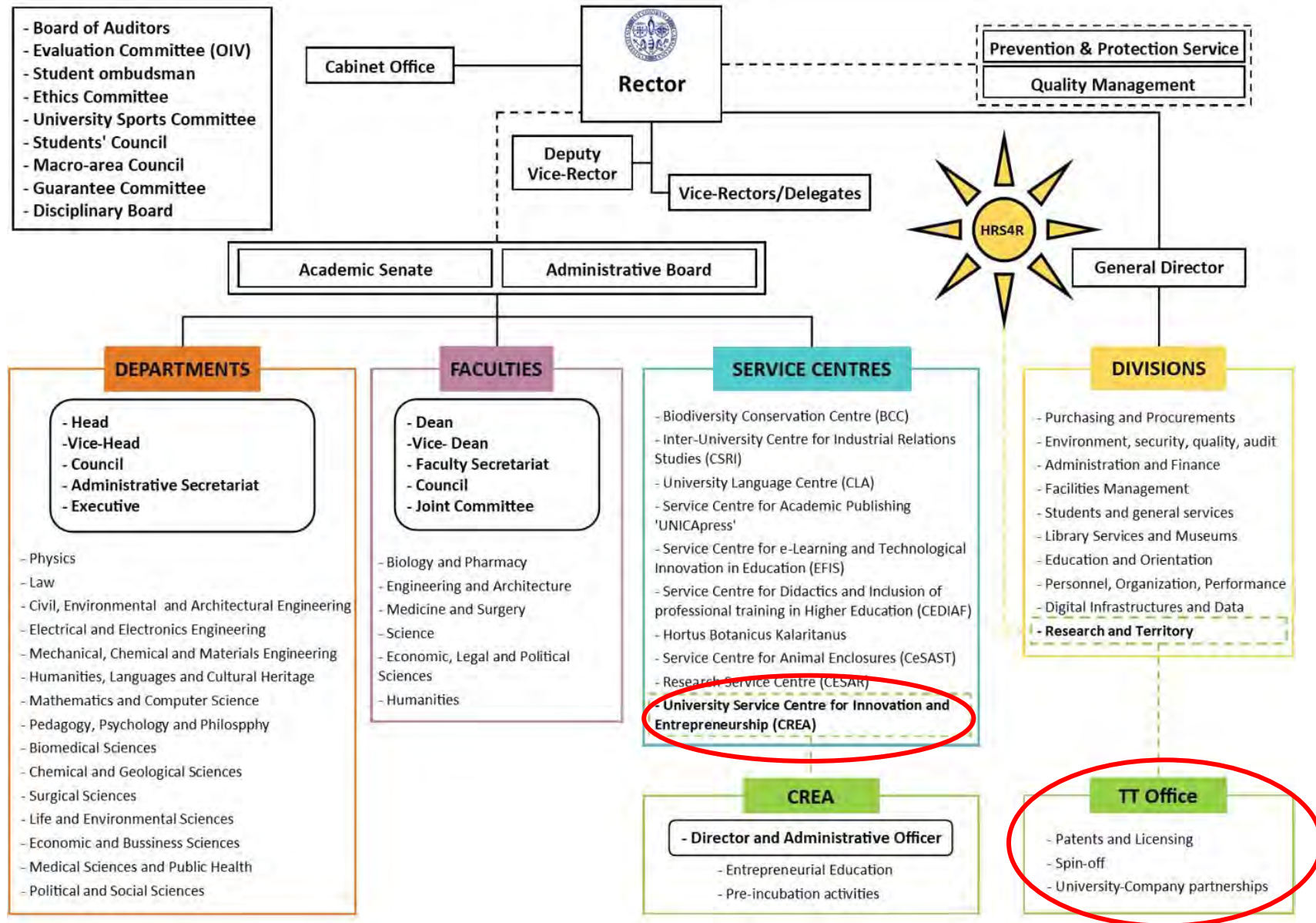
1. members: internal and external stakeholders, individuals, and organizations,
2. projects
 - a. research
 - b. product/service
 - c. technology
 - d. idea

- e. business challenge
- 3. core facilities/research infrastructure
- 4. events

Masaryk University



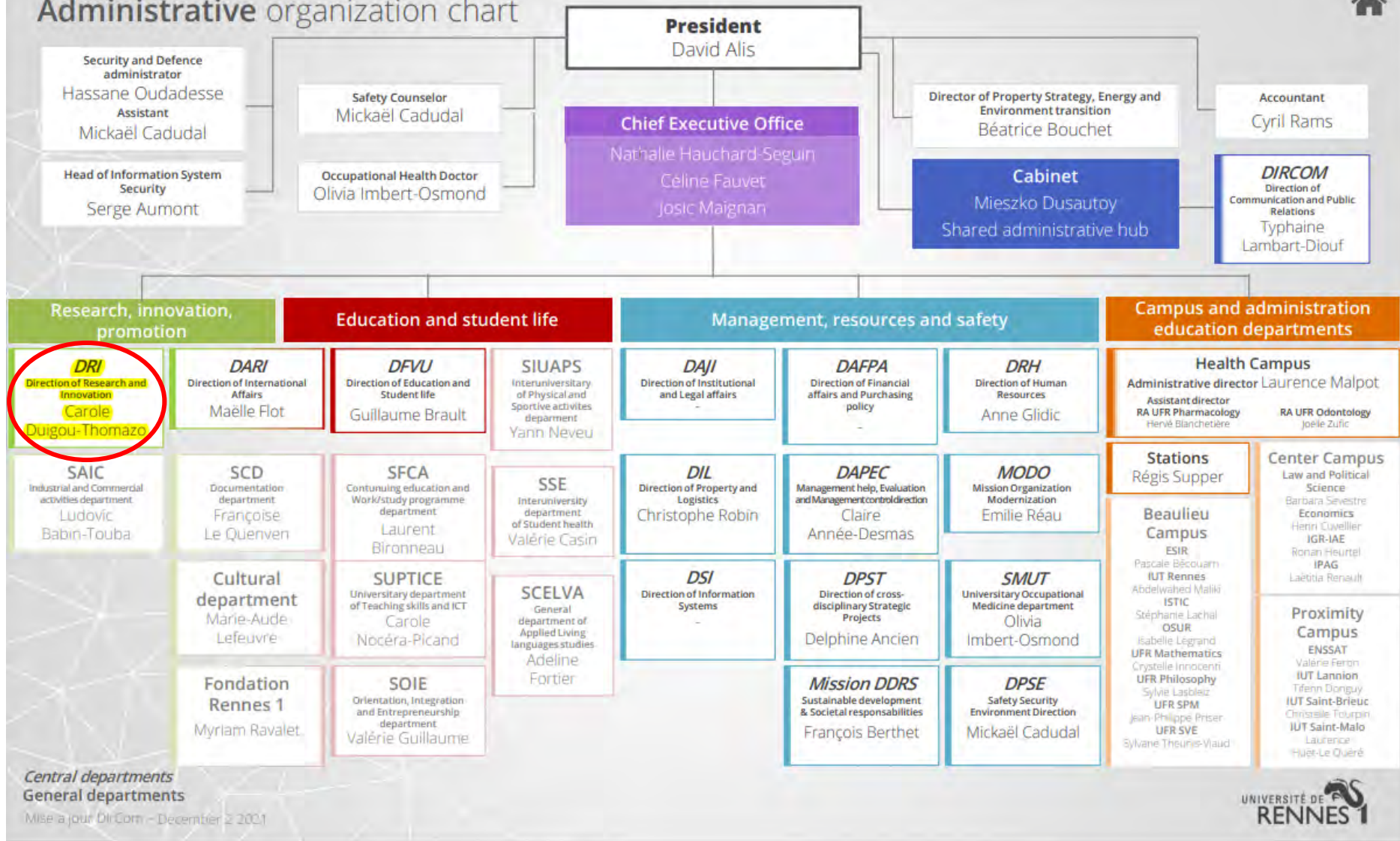
University of Cagliari



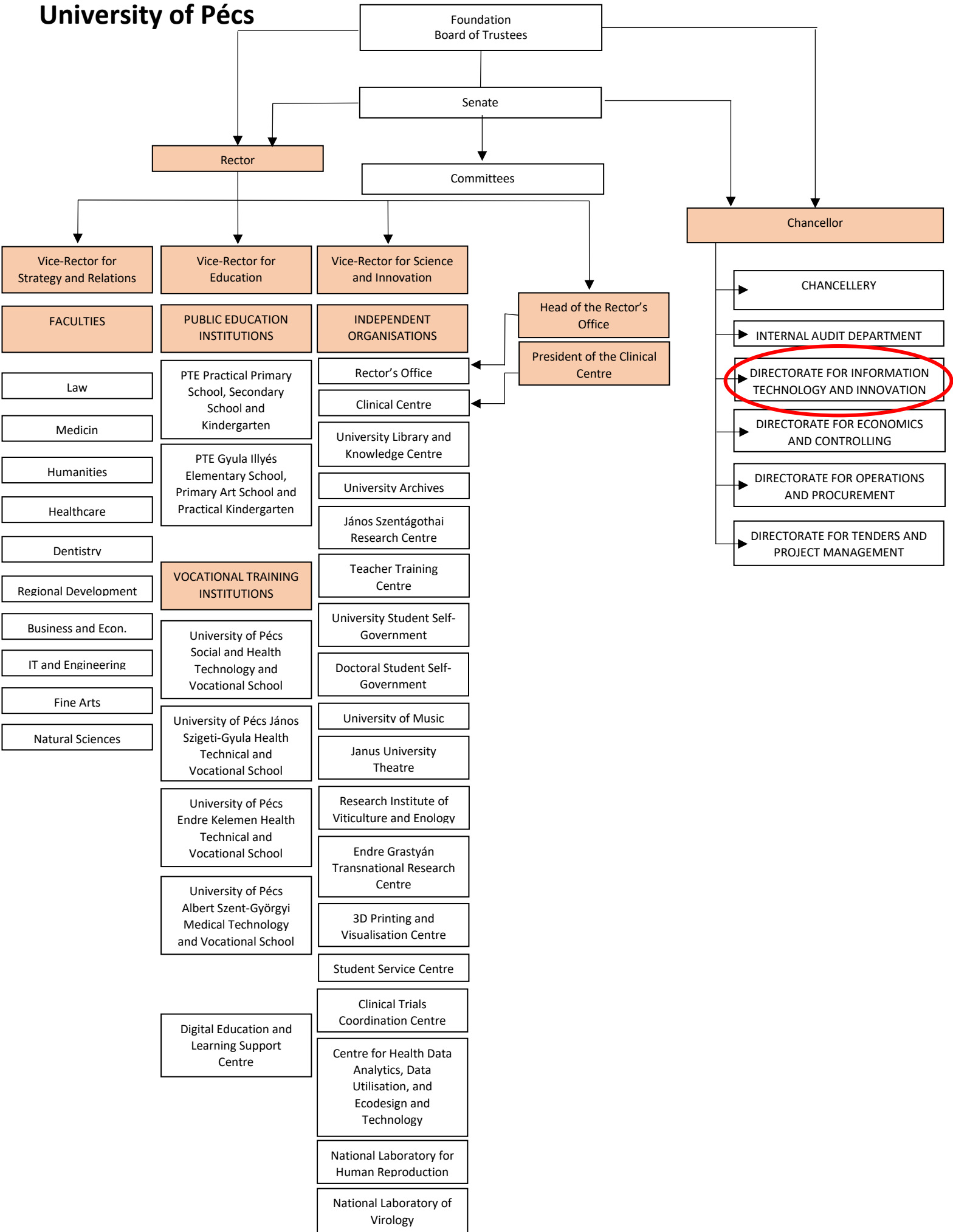
University of Rennes 1



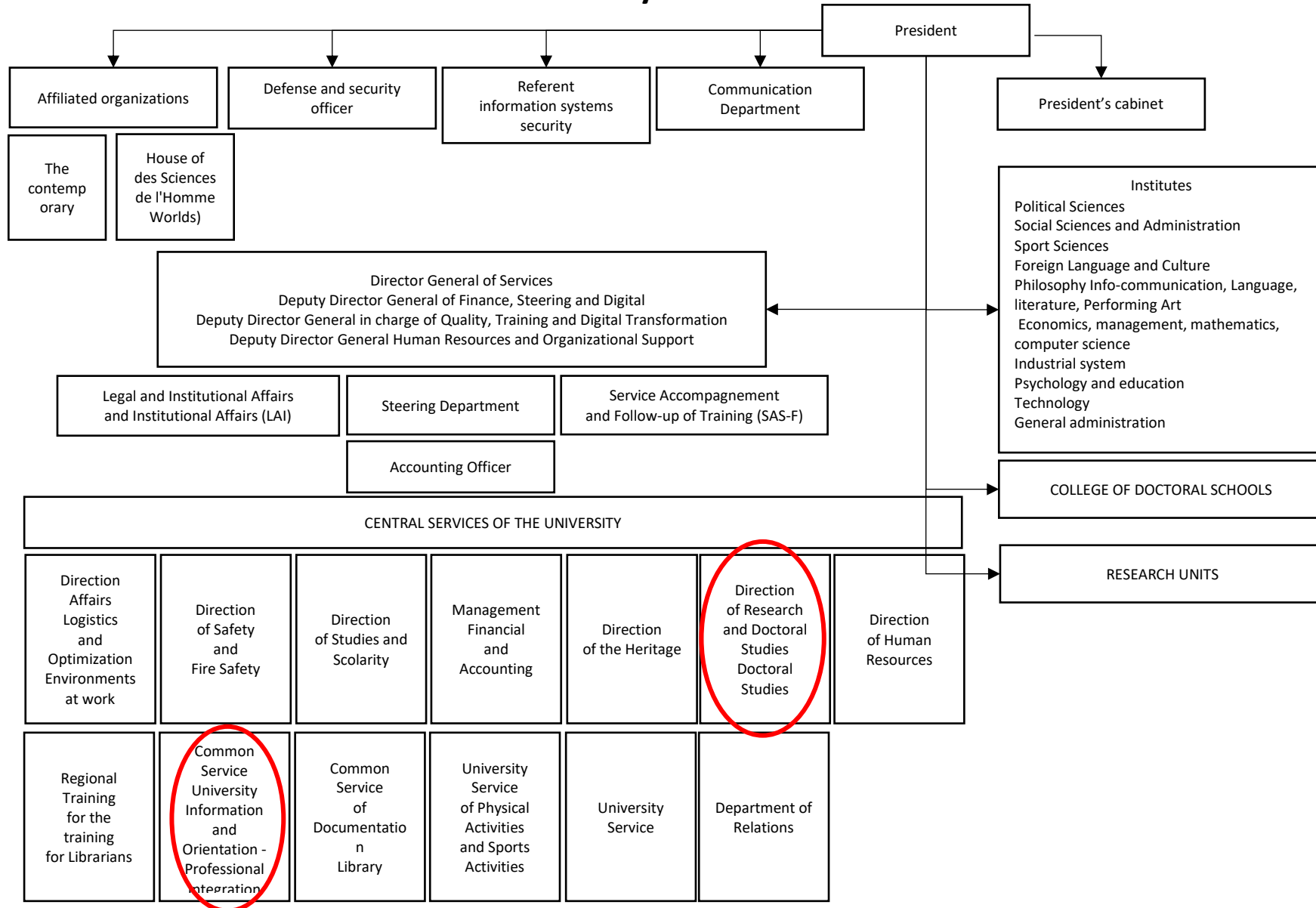
Administrative organization chart



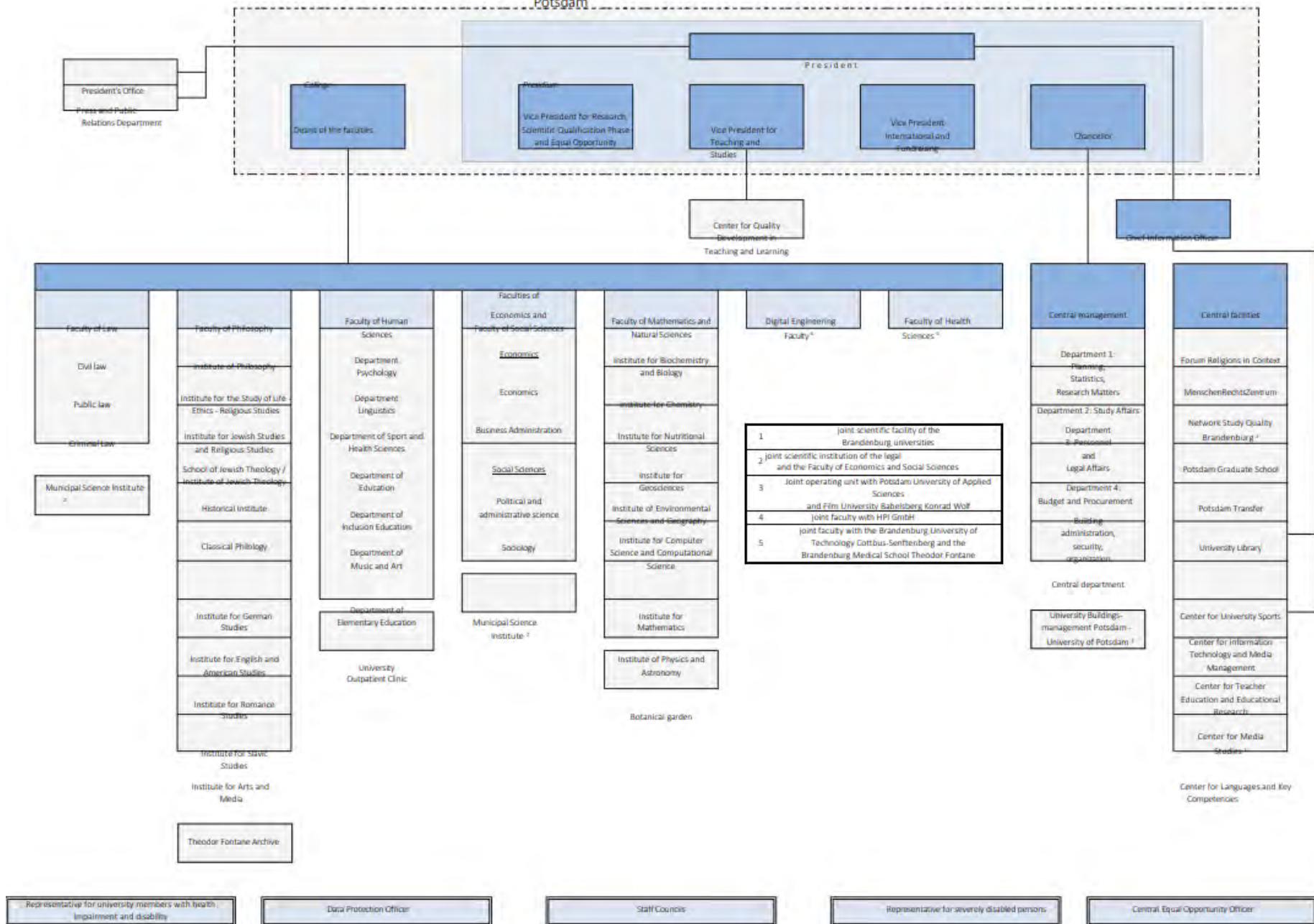
University of Pécs



University of Paris Nanterre



Organizational structure of the University of Potsdam



Representative for university members with health impairment and disability

Data Protection Officer

Staff Councils

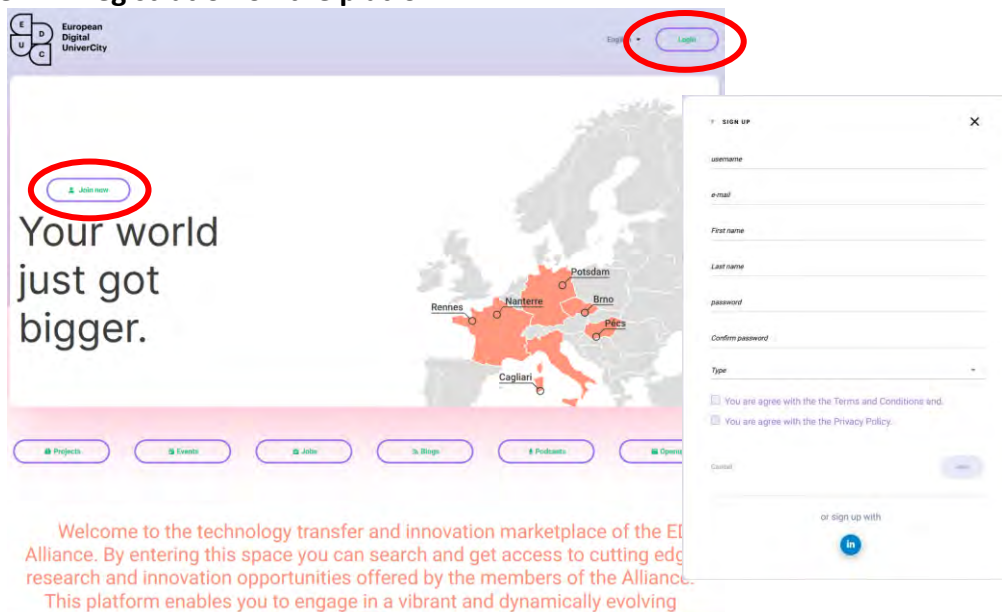
Representative for severely disabled persons

Central Equal Opportunity Officer

2. Registration and profile creation

All internal and external members of the innovation ecosystem of the EDUC alliance can register on the <https://educ.openup.education/welcome> community platform by going through the following simple steps. If the user is currently a non-member, he/she needs to click on the “Join now” button, which will bring up a template, which must be completed, statements must be checked, and the form is to be saved. If the user has a LinkedIn account, he/she can use that to complete the registration process (see *figure 2.1.*). When completing the registration form, the user must make sure that the appropriate member category is selected! Categories are in the drop-down menu.

Figure 2.1. Registration on the platform



When the user sends the registration request to the system, the system after an authentication process sends an approval email, after which the user can enter the platform by clicking the “Login” button on the public interface of the platform (see right upper corner of *figure 2.1.*). User can log in via his/her LinkedIn account or by using the username/password combination set up during the registration process.

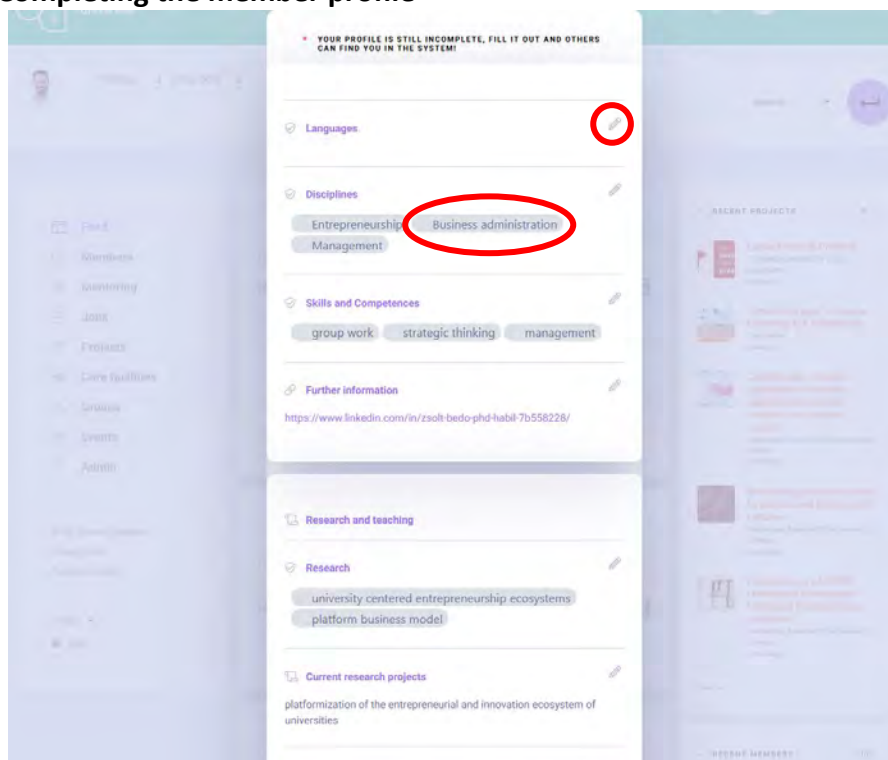
Once the user can enter the community space, he/she need to complete the member profile with high care to enable other members to learn about the competences, projects, etc. of the new member.

When the new user enters the community space for the first time, the system will bring the member’s personal profile template up for completion. This automatic pup-up will appear until the member does not complete the required segments of the profile. To make any addition or correction to the profile the user must click on the “pencil” icon, which will make that entry editable. If the information category contains meta data, then the system will display the uploaded information in a grey box. In such a case the user needs to set only



keywords, instead of complete sentences as the list of the metadata will become the foundation of the search process in a later stage (see marked with a red frame in *figure 2.2.*). The categories in the profile that contain plain text are not researchable by the Advanced search of the system.

Figure 2.2. Completing the member profile



For both member and non-member users, new projects, events, and jobs are displayed on the public surface of the platform to provide a snapshot of the activities within the community space. "Published projects" were uploaded by the member to enable non-registered users to have more detailed view of the projects, while "Project preview" only gives a limited project view. If the project, event or job raises interest among the outside observers the "Show more" button enables the user to enter the community space to learn more about the activity in question.

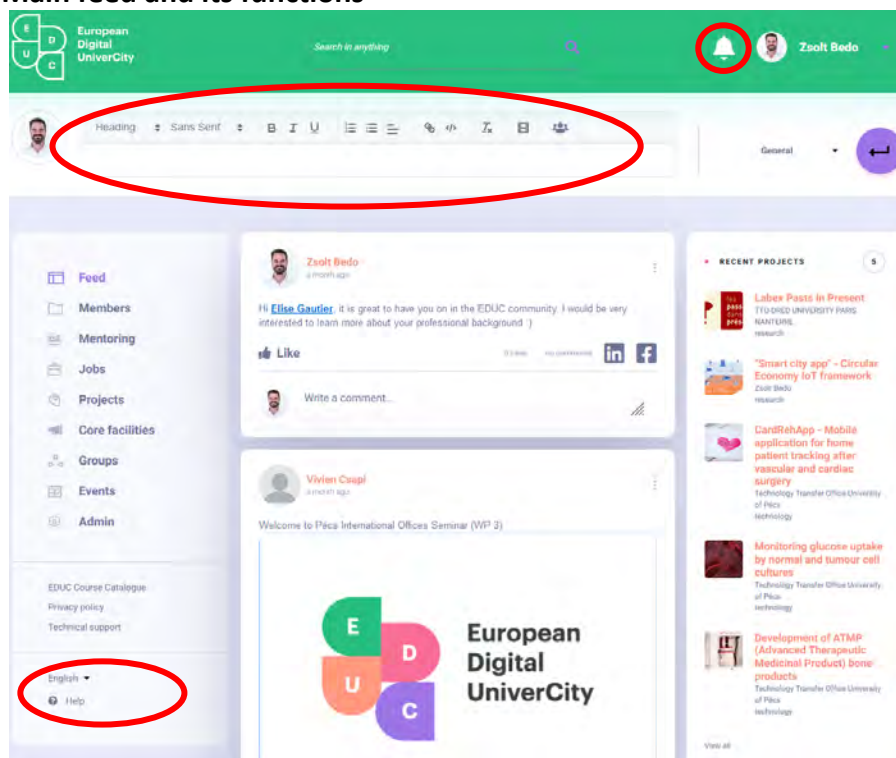


3. Main feed section

The main feed section of the educ.openup platform serves the purpose of information sharing, feedback provision in all topics and themes in relation to research, innovation and/or product/service development. Feed posts can generate discussion, debates, can bring up new lines of research and development projects without any boundaries. If a group of members of the community feel that the information flow in the main feed section is overwhelming and contain too much “SPAM” information, that group can move the more focused discussion into the “Group space” of the platform, which is elaborated on in another section of this guidebook.

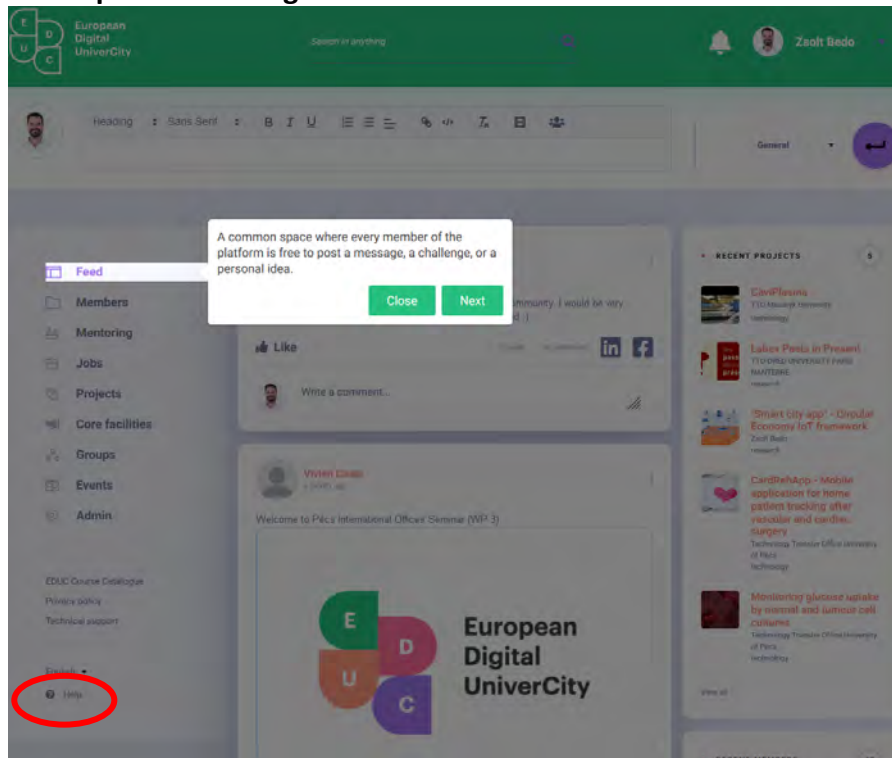
To create a post the user needs to use the text editor field showed on *figure 3.1*. The post creator can type in text, can imbed video link, past pictures, can tag other members of the ecosystem to enable direct access to that member’s profile and send him/her a push notification via email by the system as the result of the tagging feature. Posts can be “Liked”, commented on, where “@” symbol will also tag the person mentioned in the comment. All these features serve the purpose of supporting vibrant interaction, discussion, co-creation among the community members. Any feedback or notification to any user is displayed not only in the push notification emails but on the platform at the “Bell” symbol in the top section of the screen. By clicking the bell symbol, the user can have a direct access to the section of the platform where the feedback, like or comment arrived to.

Figure 3.1. Main feed and its functions



For those, who are beginners on the platform there is a “Help” function that supports them with a virtual guide (see *figure 3.2*) of all functions on the main space of the platform. In the pop-up information windows the user can proceed further with the guide tour by clicking “Next” or can exit the tour by “Closing” the window.

Figure 3.2. Virtual platform tour guide



After logging into the platform members can reset their profile at will along with the personal setting (see *figure 3.3*). In the personal setting one can set the notification option, more specifically if he/she would like to receive email messages from the system in case of new content uploaded into the feed sections of the platform. To search for a project team member the personality profile of the user might be vital to understand. If the user wishes to disclose his/her personality profile on his/her personal profile it can be selected in the setting space. The personal profile setting, and resetting is introduced and explained in step-by-step manner in the “Registration and profile setting” section of the user guide.

On *figure 3.4*, one can see the “preview” boxes for projects, members, and jobs, that enable the user to have a quick understanding of the most recent opportunities upon entry to the platform. Projects, members, and job opportunities are directly accessible via the links, also the “View all” options direct users to the sub-spaces of the platform with the relevant information and interaction options.

In case the user, who publishing a post, would like to make it accessible and visible for non-member outside stakeholders to possibly raise attention in relation to the post and the



platform as well can make the post appear on the global platforms (LinkedIn and Face Book) by clicking on the icons of these platforms in the post box (see *figure 3.4.*).

Figure 3.3. Personal settings

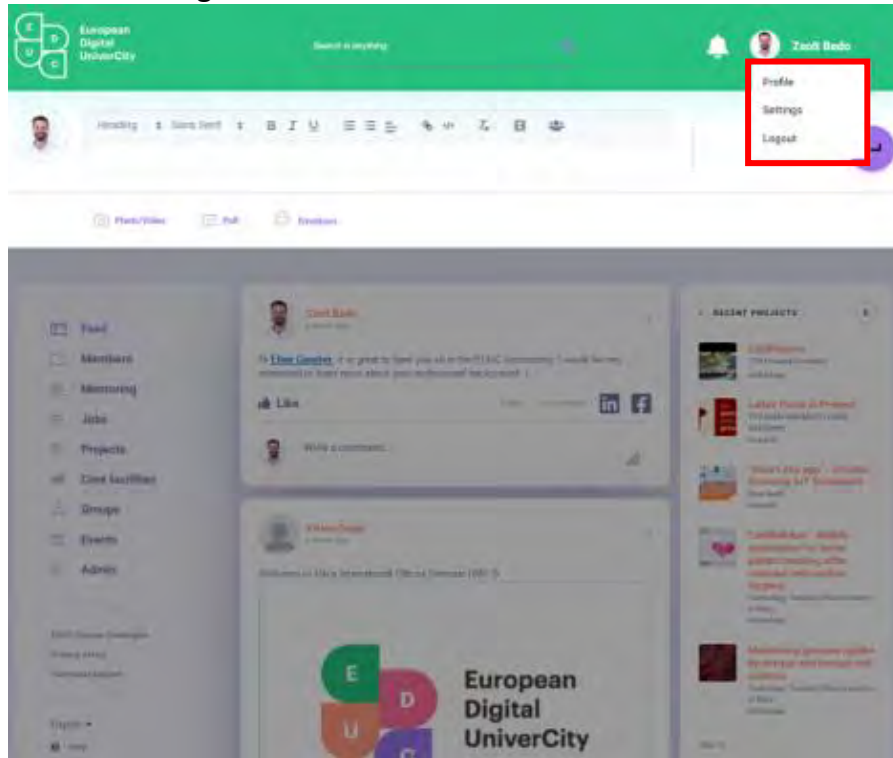
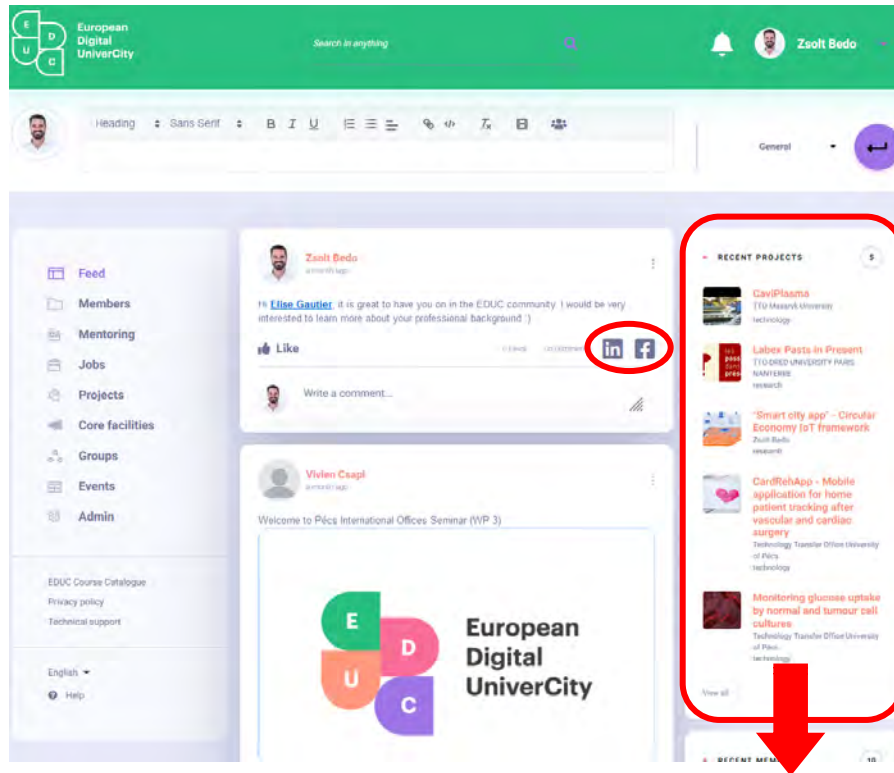


Figure 3.4. Preview sections



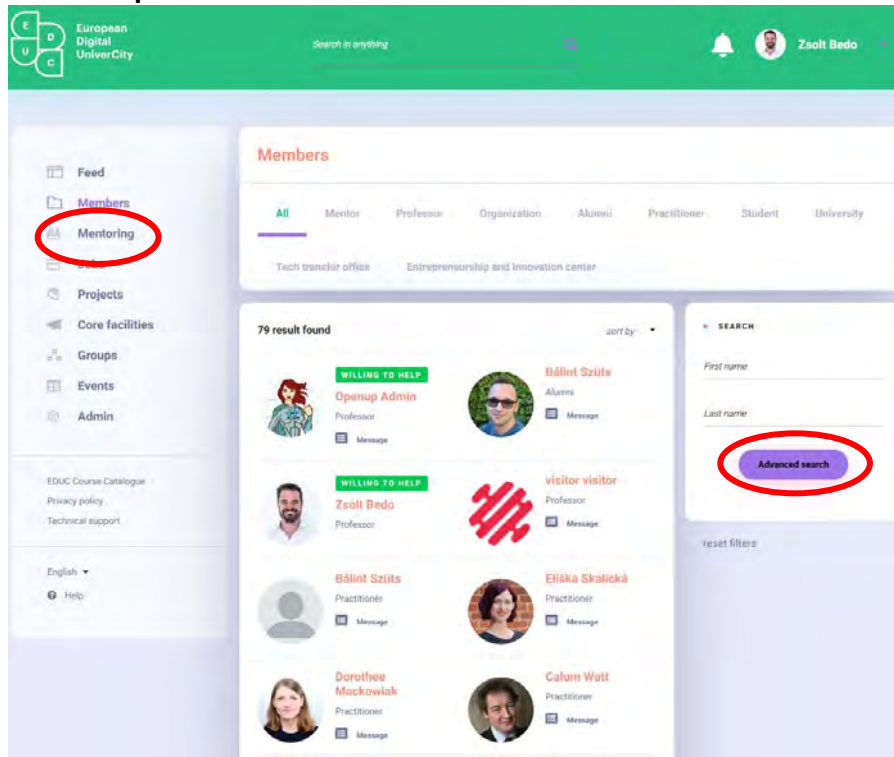
4. Membership space

Members of the innovation (tech transfer) ecosystem of the EDCU alliance can view each other's profile in the "Member" space of the platform. To establish a transparent structure within the community the following categories exist (see *figure 4.1.*):

- Professors – researcher or researcher/educator faculty members at the Higher Education Institutions (HEIs) of the EDUC alliance,
- Practitioners – external and internal nonacademic experts/professionals, who have affiliation to the HEIs of the alliance,
- Organizations – external organizations, let them be for-profit or non-profit or even governmental, that are part of the business ecosystem of any of the member HEIs,
- Students – students conducting their study term at any of the HEIs in the alliance,
- Alumni – former students of the HEIs of the alliance,
- Universities – member HEIs,
- Tech transfer offices/Entrepreneurship and innovation centers – subunits of the HEIs focusing on capacity building and tech/knowledge transfer facilitation,
- Mentors – in case a mentoring program in place, the members with a mentoring role.



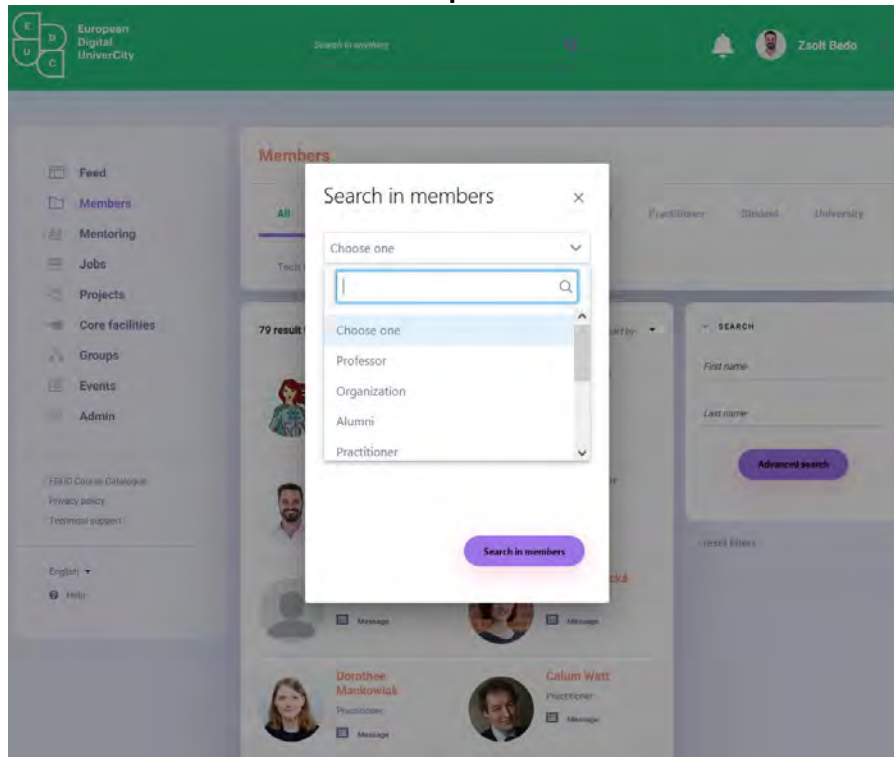
Figure 4.1. Member space



One of the most important benefits of the platform is to enable all user members to be able to search for those competencies that are vital to start and/or to complete research, innovation projects within the alliance. To enable the full utilization of this feature member profiles must be completed with high care as the result of uploading quality information. Once profiles are completed the advanced search function will use meta data within the profiles (see *figure 4.2.*). The first and most important first step of the advanced search is to select the appropriate member category and then to complete the parameters of the search.



Figure 4.2. Advanced search in the member space



5. Project space

The project space segment of the educ.openup community platform is the heart of the knowledge, technology transfer as this is the segment of the platform where project opportunities are displayed by the members of the community (see *figure 5.1*). In this space the following project categories can be uploaded by anyone who is the member of the EDUC alliance:

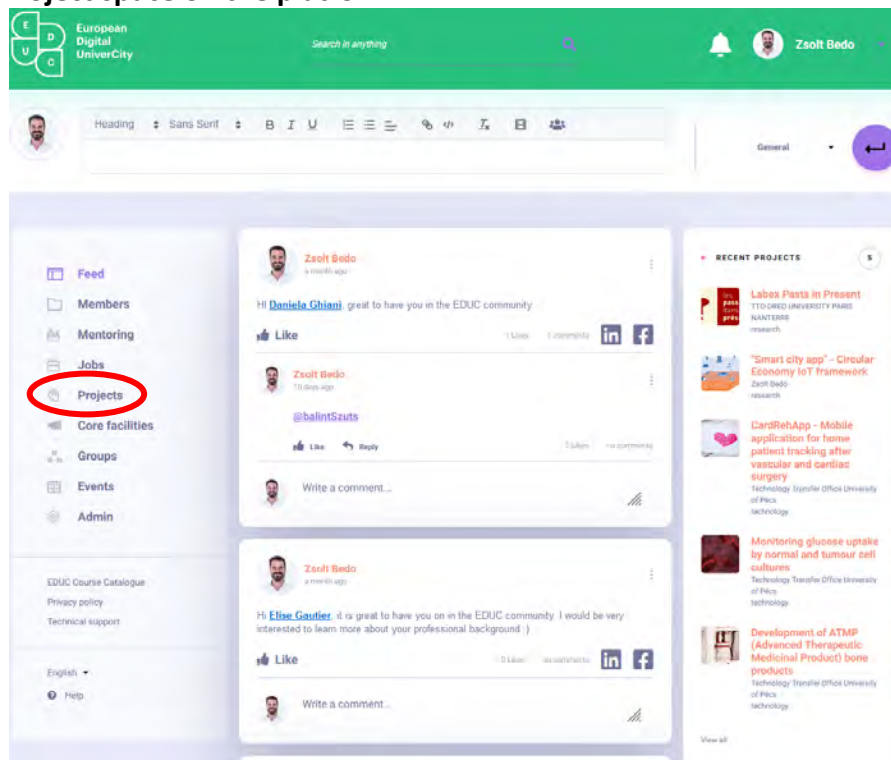
- Research – any ongoing or finished research project that the owner needs additional capacity to be involved in the execution phase or who would like to inform the community of the results of the research.
- Product/Service – product or service development projects that emerge from research and/or development project. This enables nonacademic members to take part in the TT process as financiers or professional contributors to complete the innovation process.
- Technology – if the outcome of the research is a technology, which has not been formalized into a product/service concept, it can be published by the owner to enable companies to connect via the platform to begin the process of transforming the raw technology into a marketable product or service.
- Challenge – organizations (for-, non-profit or governmental ones) that are member of the business ecosystem of any of the HEIs can upload problems/challenges that they



face in their environmental of regular activity with the intention of recruiting a team of professionals and/or researchers/professors or any other type of members to contribute to the solutions of the challenge.

- Idea – early-stage opportunities coming from any of the members of the ecosystem can be published, which can serve as the base of product/service development or a new research project.

Figure 5.1. Project space on the platform

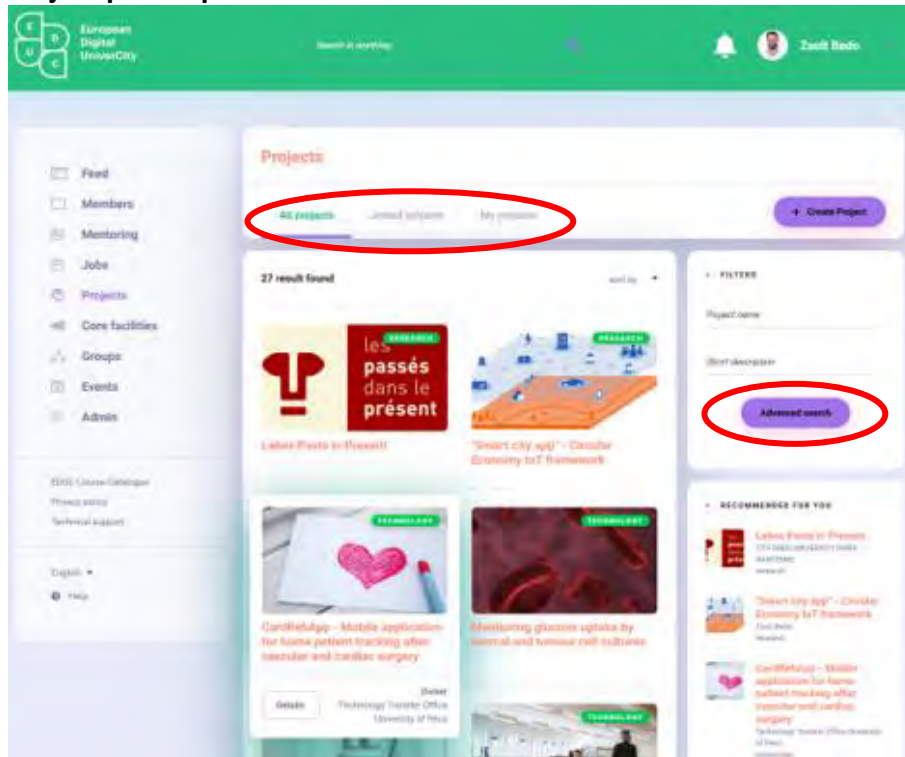


By entering the project space users can have a quick overview of all projects that have been uploaded by either the project owner or by an agent, typically the TT office. The project of interest for any user can be opened by clicking the “Detail” button on the project box, which will give access to all the data on the project available on the platform. Members can view all projects, projects that were published by the member and the ones that the member is part of, but not an owner (see *figure 5.2.*).

Advanced search can be accessed through this interface which help all users to find projects fitting to their own needs based on the project parameters that contain meta data, which enables the search engine to execute finetuned search activities.



Figure 5.2. Project profile preview

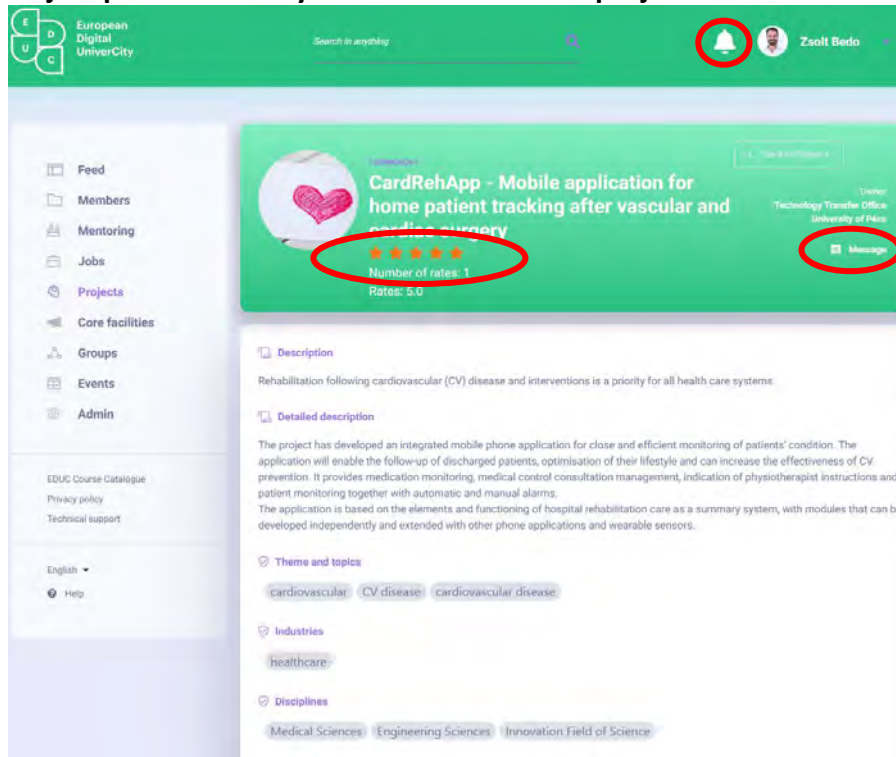


After clicking on the “Detail” button of the project the detailed profile will appear (see *figure 5.3.*) Beside learning more about the project the observer user can interact with the project owner in several ways.

- Project rating and feedback provision – by clicking on the five-star rating in the header of the project the clickable rating template will appear along with a box where feedback in the form of text can be inputted. In this box other ratings and the names of the members, who have already rated the project is also visible. This feature visualizes the sub-community of the project.
- Messaging – on the right side of the header of the project profile one can directly contact the project owner via the internal instant chat system of the platform. If the project owner is not present (logged in) in the system at the moment of the chat messaging, he/she receives a notification via email that there has been a chat message sent to him/her. If the project owner is logged in, then he/she will see a signal marked in red by the “bell” notification display on the top of the screen.



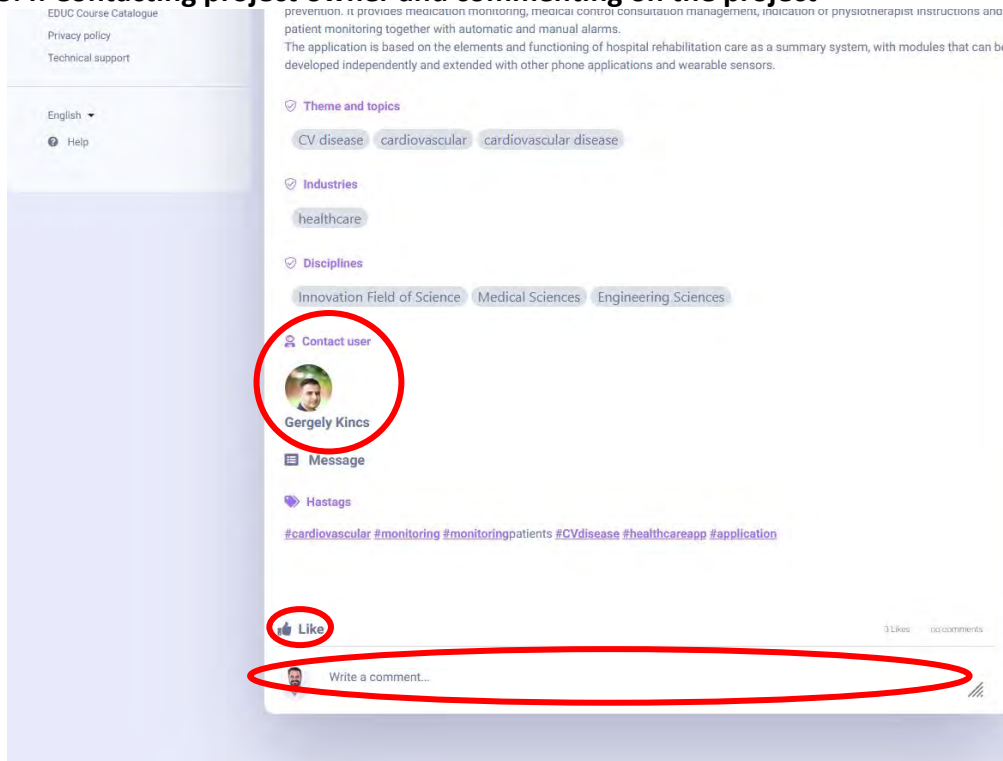
Figure 5.3. Project profile and ways to interact with the project owner



Project owner or the ecosystem member (TTO officer), who uploaded the project can be directly contacted via the personal profile in the contact section of the profile displayed on the bottom of the profile page (see *figure 5.4.*).



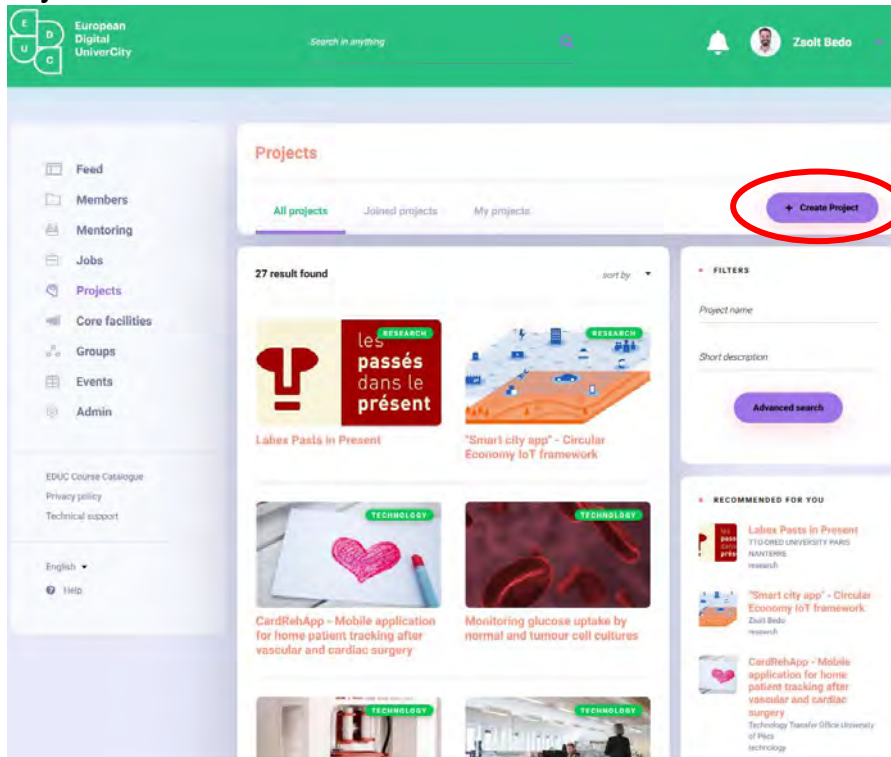
Figure 5.4. Contacting project owner and commenting on the project



If the observer wants to leave instant feedback to the project owner, he/she can do so by commenting on the project or by clicking “Like”, which will show later in relation to the project, so project owner will have a complete understanding on who has been viewing and appreciating the project.

Project creation can be done using the “Create project” button in the upper right corner circled in red in *figure 5.5*.

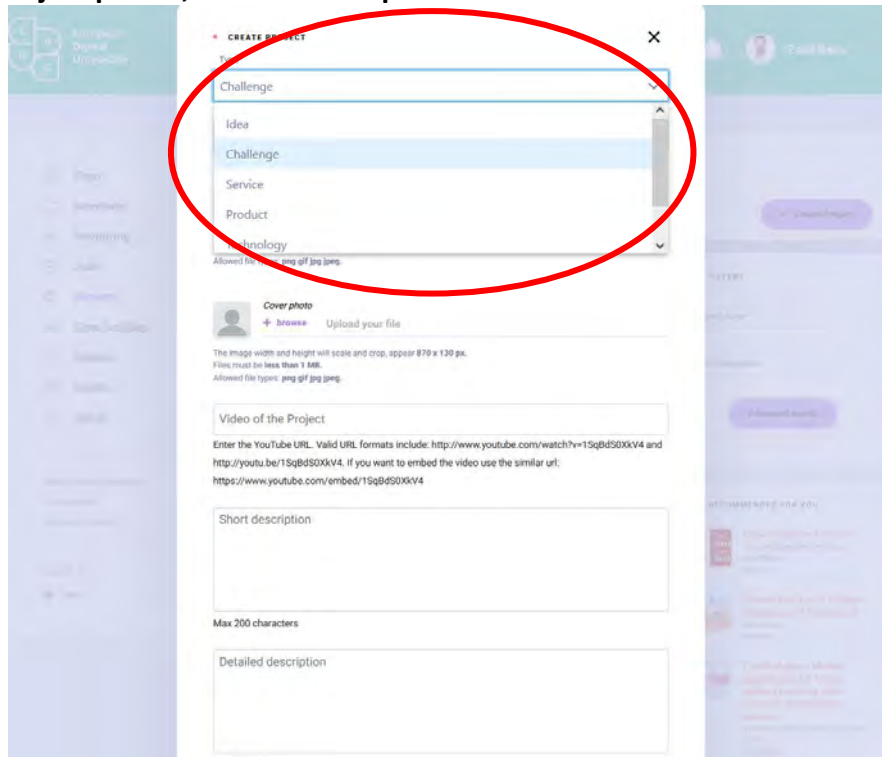
Figure 5.5. Project creation



The project profile provides the owner the opportunity to upload different means of information from text, meta data, video (embedded as a link), pictures format to maximize the understanding on the part of the observer. The person creating the profile must make sure that in the very beginning of the process he/she selects the appropriate type for the project otherwise the likelihood of it being found in the framework of the advanced search process will decrease. This important step is displayed on *figure 5.6.* in the circled area.



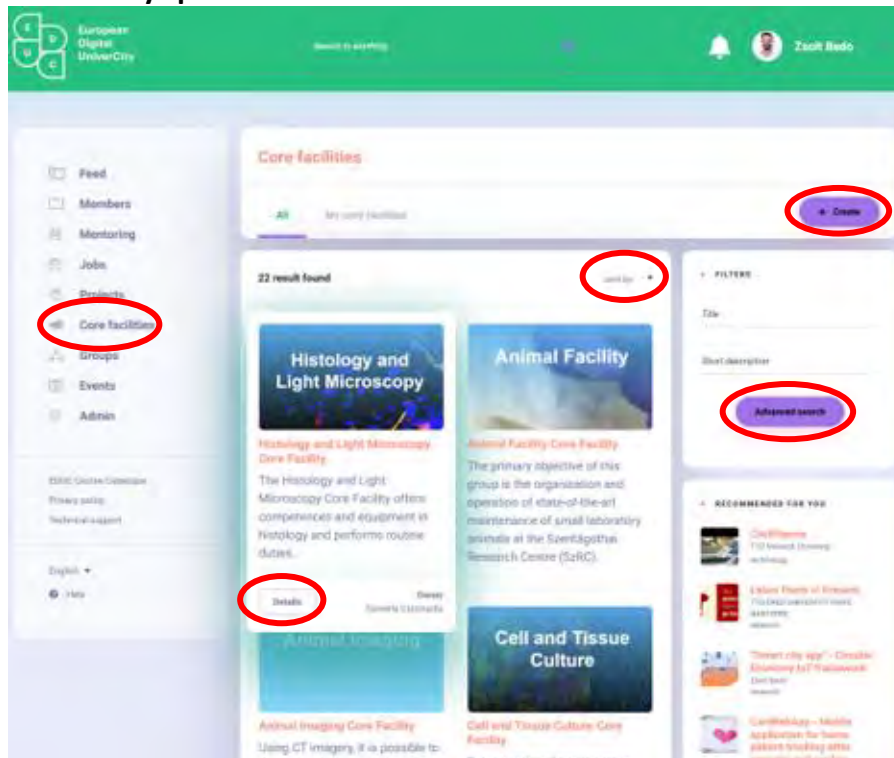
Figure 5.6. Project profile, information upload



6. Core Facility/Research infrastructure (CF/RI) space

To optimize the use of high value research and diagnostic capacity the alliance established a CF/RI space where CF leaders can publish their own facilities, their availability. On *figure 6.1.* it is shown that by clicking the “Detail” button further information can be read about the CF. The list can be sorted and can be searched using the advanced search engine of the platform.

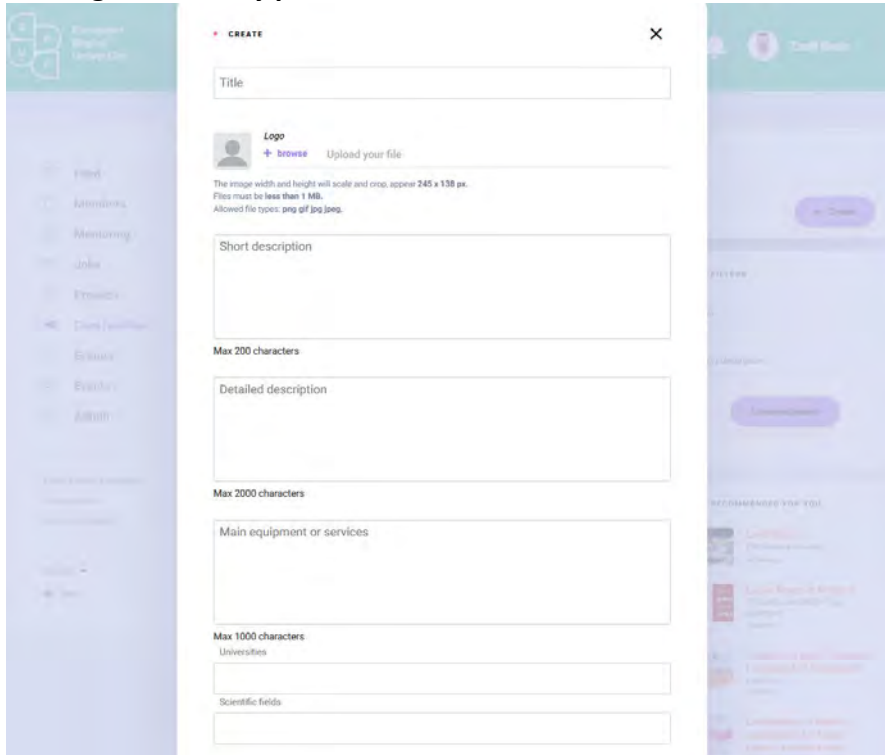
Figure 6.1. Core facility space



By using the “Create” function in the CF space (see *figure 6.1.* upper right corner) one can establish his/her CF profile by filling out the entries in the template that pops-up (see *figure 6.2.*). When filling out the template the user must make sure that the entries where meta data is required is completed by using keywording methodology in order to enable the advanced search engine to function properly. If the CF/RI has an activity or capacity that focuses on a very narrow niche segment that is not part of the list of the meta data set, the learning algorithm built into the profile template will recognize that there is a new parameter added to the meta data list and will save that in the list. From this point on the system will offer this new scientific field or capacity when a new advanced search is pursued.



Figure 6.2. Creating core facility profile



CREATE ✕

Title

Logo
+ browse Upload your file
The image width and height will scale and crop, approx 245 x 138 px.
Files must be less than 1 MB.
Allowed file types: png, gif, jpg, jpeg.

Short description
Max 200 characters

Detailed description
Max 2000 characters

Main equipment or services
Max 1000 characters

Universities

Scientific fields

CREATE

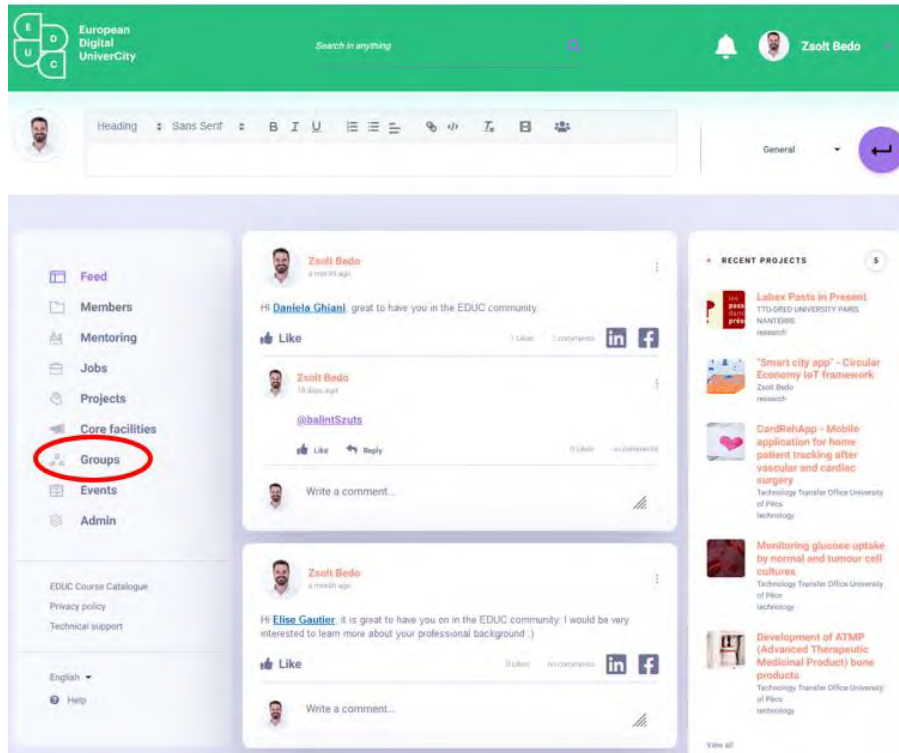
7. Group creation

There are sub-communities existing in all ecosystems (communities) that would like to have a more focused interaction and might want to share information among the members in the forms of documents. This can be achieved in the EDCU community as well by using the “Groups” function. There must be an administrator, who creates the group and manages content, invites other member of the community, and approves membership requests sent by non-group members.

To create the group the administrator needs to go to the “Group” space of the platform (see *Figure 7.1.*).



Figure 7.1. Group space

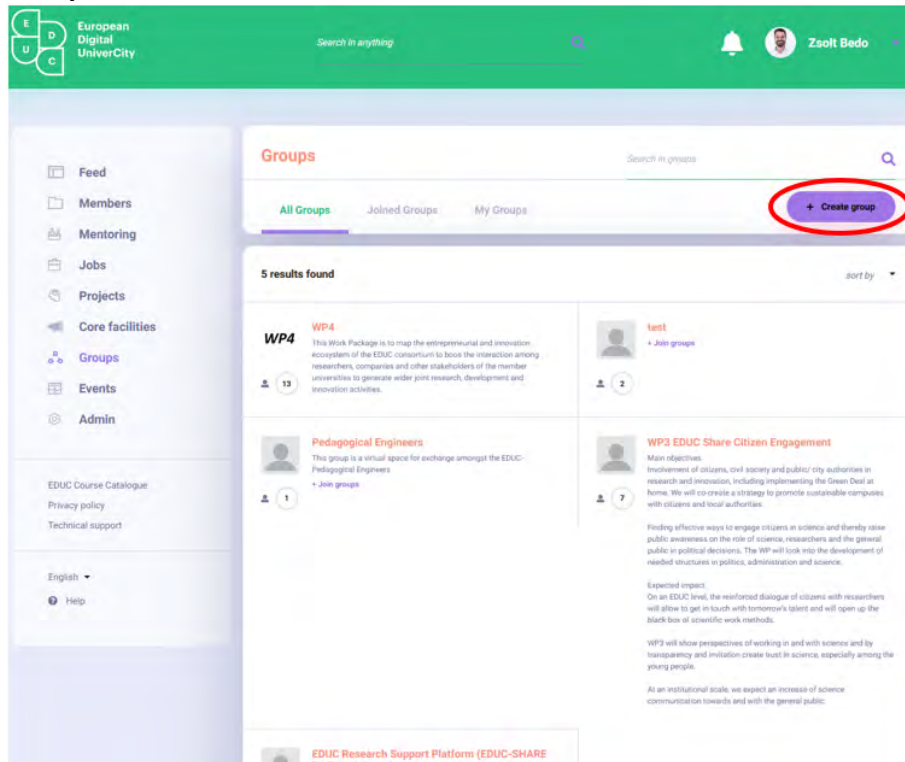


In the “Group space” click on the “Create group” button and provide the group specific information on the group so nonmembers will have an understanding on what is the sub-community if talking about within the group (see *figure 7.2.*).

When creating the group, the short description of the group will appear in the Group space under the name of the group so make sure that you provide all relevant information about the activity and theme of the group in a couple of paragraphs. Also, upload a logo or picture for an easier recognition of your group. To make sure that only invited members can join to your group click the box “Private” (see *figure 7.3.*).



Figure 7.2. Group creation



Once you are done with the settings click “Save” and your group will come alive in the group space.

At this moment the administrator, who has created the group is alone in this sub-community but can invite other members of the EDUC alliance. In *Figure 7.4*, all the management tools are visible that are marked by the red zone. Before starting to create feed posts the administrator might want to invite members of the EDCU platform using the “Invitation” button. If a community member wants to join the group, he/she can send a request to join that will appear in the “Request” tool of the Group, which must be approved by the Group administrator (see *figure 7.5*).

Besides having all members in the Group who are interested in the conversation (transparency and registration of the members) and sharing important documentation interaction can happen within the group by using the Feed and the Chat engines of the platform. In both cases the system will send push notifications to all members. Also, if the member, who is posting a message via the feed wants to connect the message to a Group member can use the “Tag” function by clicking on the button in the Feed creation editor bar (see *figure 7.6*.) and can select the member, who he/she wants to mention in the feed post. By doing so the person being mentioned in the Feed message will receive a push notification in his/her email account that was set during the registration into the educ.openup platform. Furthermore, when discussing issues in the Group members can “Like” the feed posts and can comment on them by clicking the “Reply” button. When pushing Like, the system automatically sends a message to the member who has posted the message informing him/her about who has Liked the post. Also, when sending a reply, the system informs the feed publisher on the comment. When



replying to a feed message the members can involve others in the discussion by “tagging” them using the “@” symbol, which will bring up the list of members that the member can select from or can start typing his/her name into the search window that will select the member to be mentioned. If one is interested in who liked his/her post, the “Like counter” needs to be clicked, display will appear.

Figure 7.3. Group settings

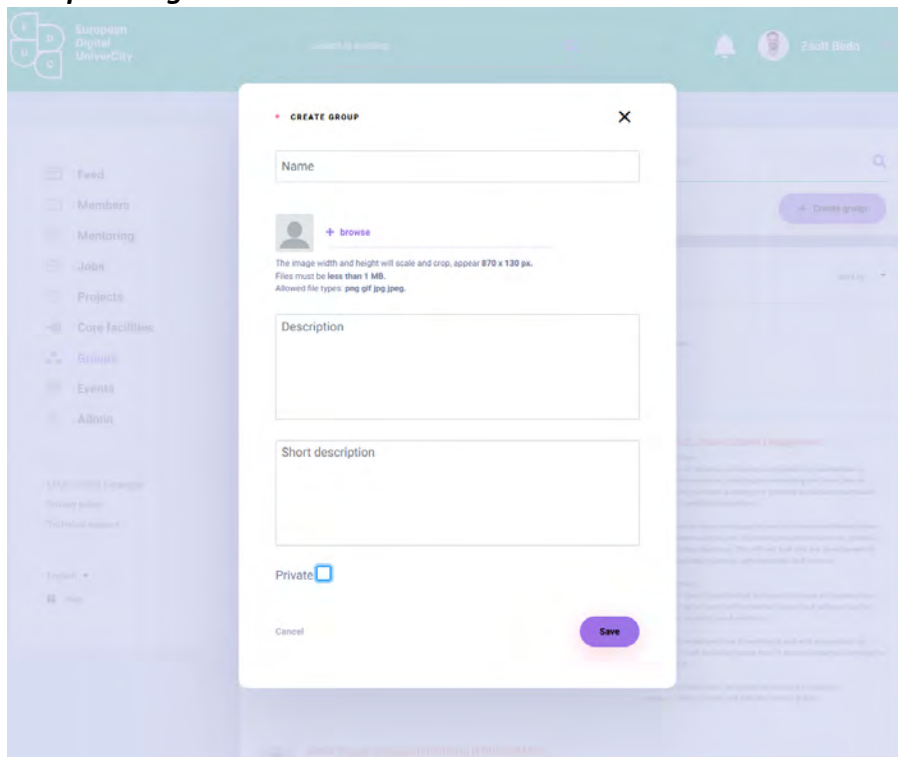


Figure 7.4. Group management

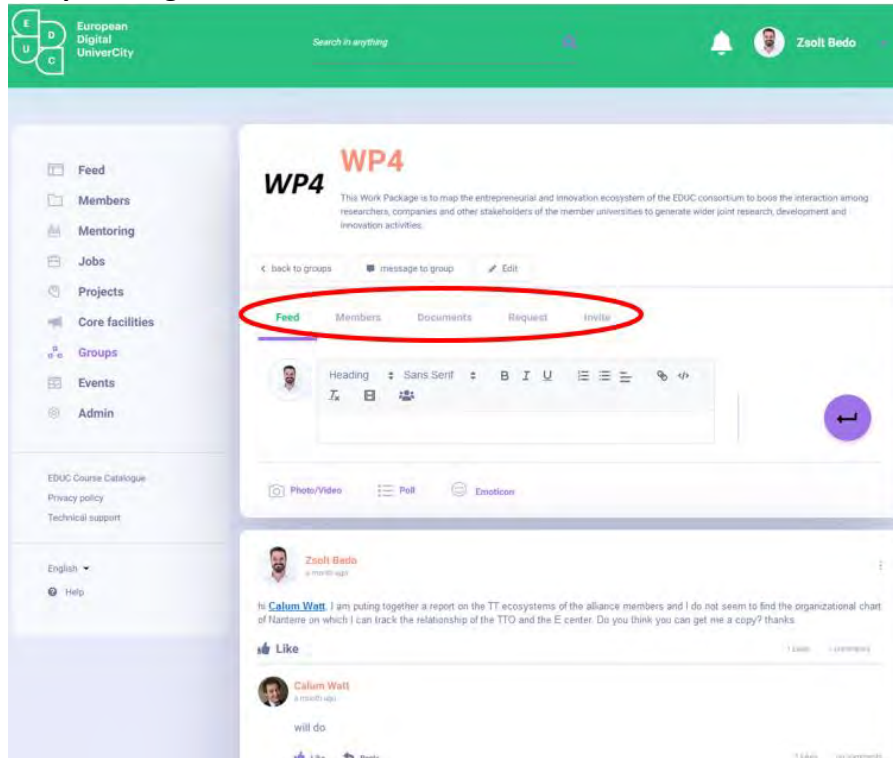


Figure 7.5. Group management – tools

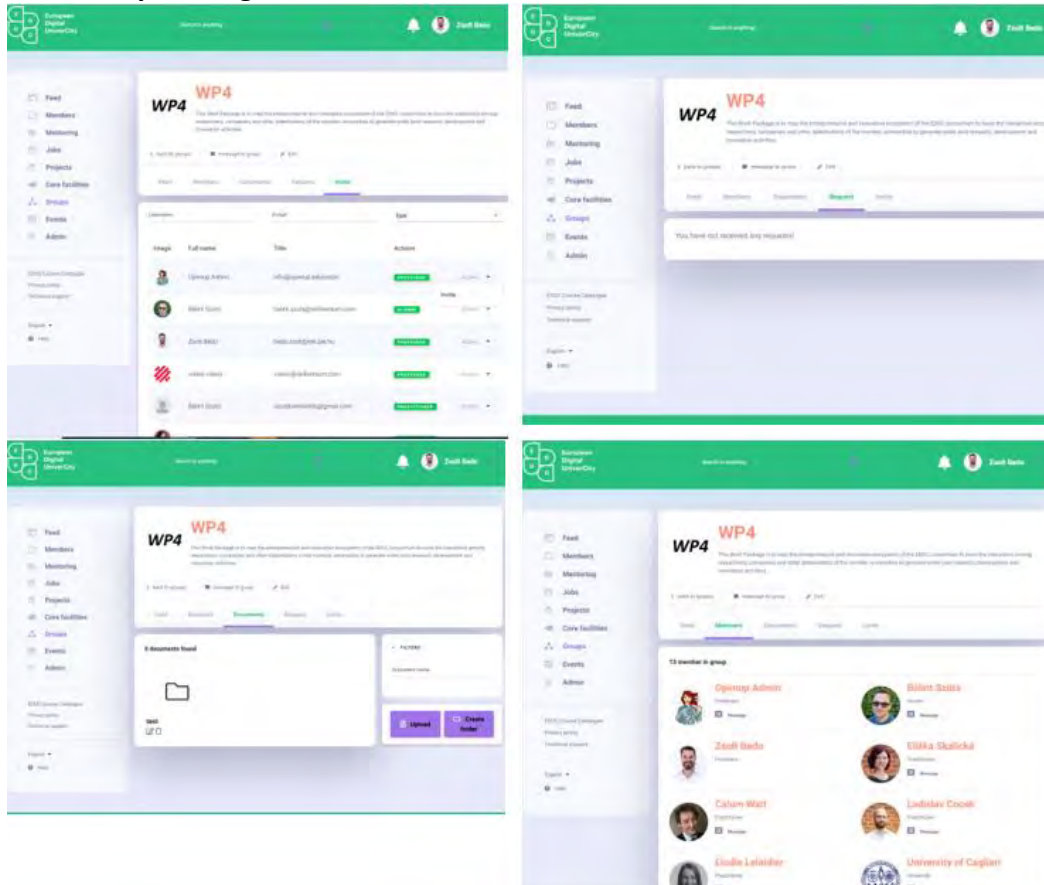
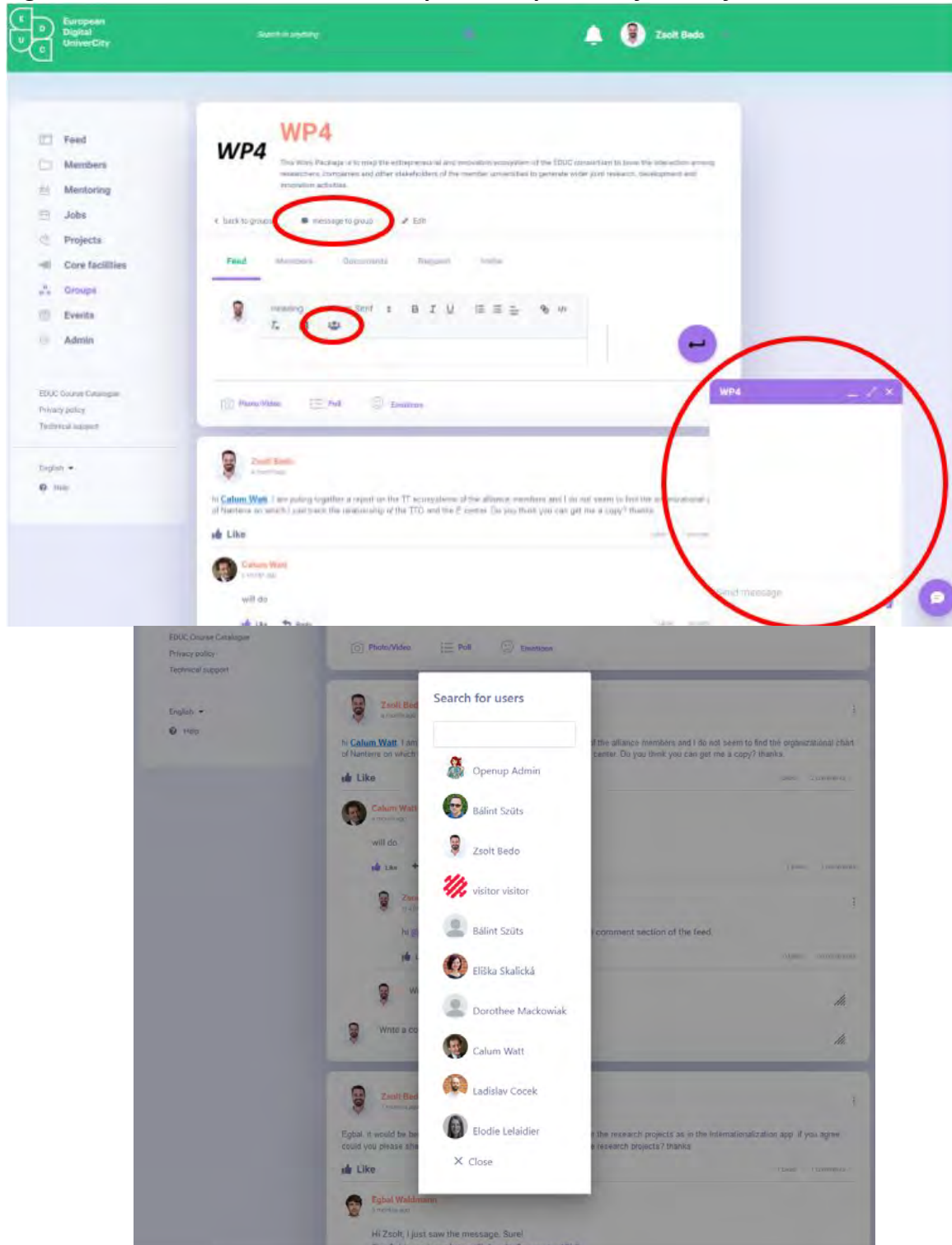


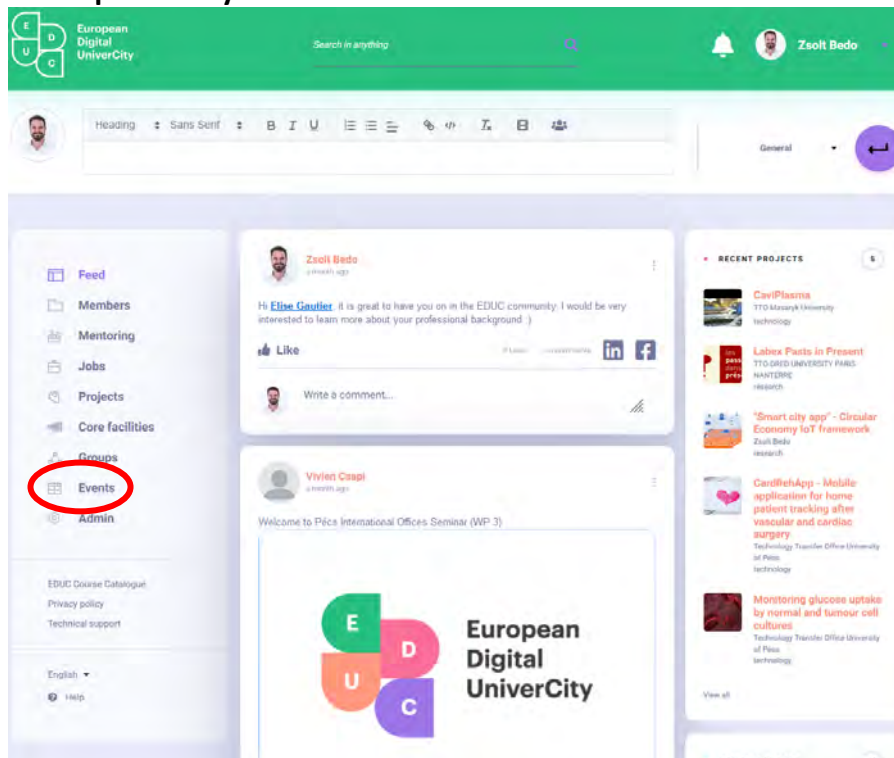
Figure 7.6. Interaction within the Group and the push notification function



8. Event section

Events are an important element of an innovation ecosystem as they contribute to the personal interaction of the complementary human capital that might result in information, knowledge sharing and the emergence of new initiatives, projects. Consequently, the platform has a dedicated sub-space for publishing events within the EDUC alliance (see *figure 8.1.*).

Figure 8.1. Event space entry



Once entering the event space user can see the list of events already published by member users, along with the possibility of sorting them (see *figure 8.2.*). Published events are searchable using the search engine on the right side.

To publish a new event, one must select the “post an event” button and must complete the template, accordingly, using the editing features to make the event appealing for observers. The platform does not have a registration management system as event organizers, in most cases use already established registration systems from independent providers. By setting the time and date of the event, the event will be displayed on the event calendar of the community making it easier for community members to have a visualized order of the community events and possibly to avoid overlap of events if possible.

The detailed event profile (see *figure 8.3.*) provides all the specificities of the event, location, and theme, being displayed in the form of meta data, making the search process more efficient for users. If the publisher wishes to use an external link for the event that will be accessed by clicking the “Join” button.



Figure 8.2. Event space and publishing event

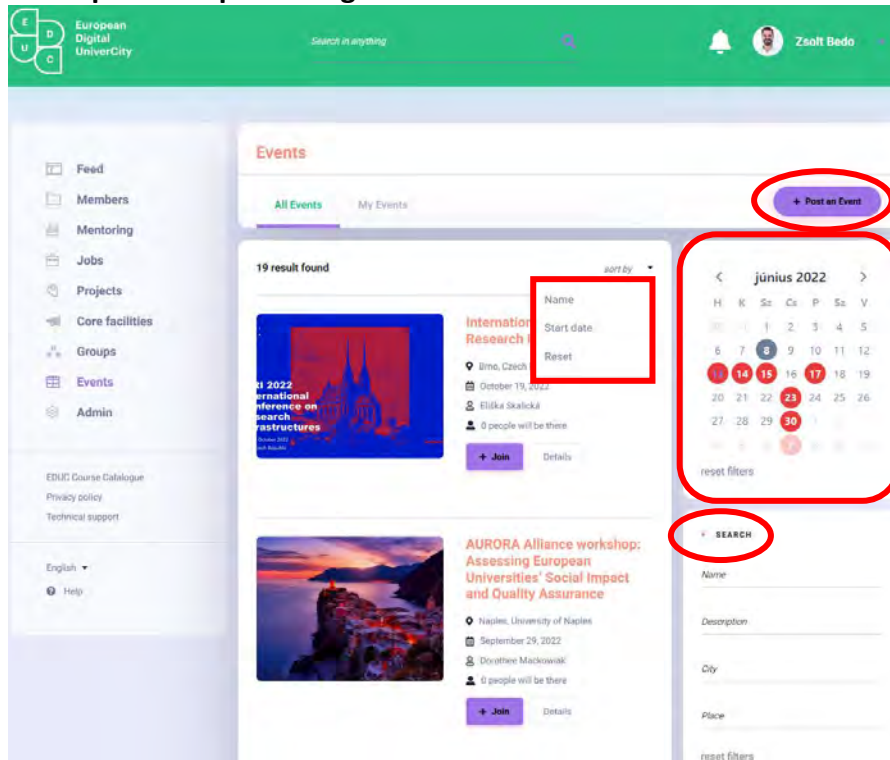


Figure 8.3. Detailed event profile

