European Space University for Earth and Humanity

UNIVERSEH is an alliance of five European universities established to develop a new way of collaboration in the field of Space, within the "European Universities" initiative.

The alliance aims to create new higher education interactive experiences for the university community, teachers and students, and for the benefit of society as a whole. Such initiatives will enable broadminded, informed and conscientious European citizens to capture and create new knowledge and become smart actors of European innovation, valorisation and societal dissemination within the Space sector, from science, engineering, liberal arts to culture.

Grant agreement number: 101004066

Funding Scheme: Erasmus+ / European Universities

D 1.20 Progress Report

Due date of deliverable: M 20
Actual Submission date: 30/06/2022

Start date of the project: 01/11/2020   Duration: 36 months

Organisation responsible for this deliverable: UT

Version: final

Dissemination level

PU	Public	X
CO	Confidential, only for members of the consortium	

UNIVERSEH – European Space University for Earth and Humanity is an alliance of

Document History

Version	Date	Author	Partner	Summary of main changes
1	15.06.2022	Hélène Gentils, Nicole Dittrich Adam Walters, Joanna Hubinette, Eric Tschirhart, Joanna Pyrkosz-Pacyna, Krystina Garibyan	UT, UDUS, uni.lu, LTU, AGH	Initial drafts
2	21.06.2022	Hélène Gentils, Emmanuel Zenou, Mathilde Marcel, Florence Voitier Sienzonit	UT	Compilation of WP parts, comments, final draft of annex
3	30.06.2022	Hélène Gentils	UT	Final version

UNIVERSEH – European Space University for Earth and Humanity is an alliance of

ERASMUS+
CREATIVE EUROPE

Progress Report

Version 1.0
15 January 2022

IMPORTANT NOTICE

What is a progress report?

Progress reports are deliverables which are sometimes requested at mid-term (or other crucial points in the project) if there is a long time-span without reporting.

The report must be prepared (by all beneficiaries together) in WORD format and uploaded as a PDF document on the Funding & Tenders Portal Grant Management System (PGMS) Continuous Reporting Deliverables screen. The template to use is available in the Funding & Tenders Portal Reference Documents.

⚠ Progress reports should NOT be confused with periodic reports. Periodic reports are linked to payments, progress reports are not.

COVER PAGE

PROJECT	
Project number:	101004066
Title:	European University for Earth and Humanity
Acronym:	UNIVERSEH
Starting date:	01/11/2020
Duration:	36
Coordinator contact:	Hélène Gentils [UT]
Project website:	https://universeh.eu/
Amendments:	*[not applicable]*

PERIOD COVERED	
⚠ *Please note that this is only a progress report. The information in this report must also be included in the next periodic report/final report.*	
Period (from last periodic report):	from [01/11/2020] to [30/04/2022]

TABLE OF CONTENTS

1. DELIVERABLES& MILESTONES (OUTPUTS/OUTCOME) & CRITICAL RISKS

Deliverables & milestones (outputs/outcomes)	YES/NO
We confirm that we updated the following PGMS Continuous Reporting screens: - Deliverables - Milestones	YES

Critical risks	YES/NO
We confirm that we updated the following PGMS Continuous Reporting screen: Critical risks	YES

2. OVERVIEW OF THE PROGRESS & ACTIVITIES

WORK PACKAGES

[If your grant agreement does NOT use work packages, use WP1 only (for the entire action); if your grant agreement uses work packages, use WP1 for project management & coordination and the other work packages for the other activities]

Work package 1

Work package 1: General Management and Coordination			
Activities			
Report on the implementation status of the activities that were to be implemented during the period and explain deviations from the description of the action (DoA) in Annex 1 GA.			
Task number (continuous numbering linked to WP)	Task name	Implemented? (Yes/No/Partially)	Justification (explain what was done and by whom; explain what was not done and why not; indicate how you intend to handle the situation and new timing; indicate if it was a one-off issue or how you intend to avoid similar issues in the future)
T1.0	Preamble	Partially	UT, as project coordinator, has supported the establishment of governance bodies and has provided tools to ensure the implementation of the project according to the plan set out in the proposal, as well as all legal, financial and administrative rules.
			All partners are represented and involved in all the governance bodies, as well as in all work packages.
			A consortium agreement defines the common governance bodies of the project.
T1.1	Establishment of governance and coordination bodies	Yes	UT has contributed to creating the following five governance bodies and has supported their work (organisation, terms of reference, minutes and follow-up). All of the bodies are now meeting regularly, chaired by one representative of UT, save for the Student Council and the Advisory Board:
			- The Governing Board is composed of the heads of each partner university and one student representative, appointed by the Student Council. The Governing board is responsible for validating general policy, major goals and long-term strategies for the alliance. Since the start of the project,

			they have met twice online and twice in hybrid mode (due to covid-19-related travel restrictions). It has also met with all work package leaders and the Advisory Board. - The Academic Council is composed of five deans/vice-rectors for education from all members of the alliance and two student representatives appointed by the student council. The Academic council's role is to oversee all learning activities organised in the alliance and their certification. Since the start of the project, the Academic Council has validated a five-star rating system to ensure the UNIVERSEH courses contribute to the main project objectives. They have met seven times since the beginning of the project, as the course creation activity has been fruitful. They also provide significant guidelines to promote quality standards in new common courses and work towards harmonising evaluation systems in the alliance. - The Steering Committee is composed of universities' representatives and WP leaders. They meet at least 10 times a year (more than expected in the application form) to work on the overall coordination and implementation of the work plan. - The Student Council gathers at least two and at most three student representatives from each partner university (more than expected in the application). They meet at least 10 times a year to coordinate student engagement in the project and ensures students' input and feedback are taken into account. The Student Council appoints representatives to all other governance bodies, and they also decided to appoint representatives to take part in all work package work, as well as elect their president. - The Quality Assurance Committee is composed of one representative from each university, an external stakeholder and one student. It has met three times since the beginning of the project. - The Advisory board is composed of twelve stakeholders representing the advisory committee. The role of the body is to advise the academic council and steering committee on the content of entrepreneurship and innovation courses and activities, to participate in the project activities, to share and to find opportunities (traineeship, internship), to review the project's results quality and relevance, to contribute to the dissemination strategy and efforts. The Advisory Board has met twice since the beginning of the project. The project management team is composed of a project manager, an administrative and financial officer, and, more recently, a stakeholders' network facilitator, based in UT. They are in charge of the daily management of the project in terms of budget, administrative processes, reporting and monitoring.
T1.2	Financial and administrative management	Partially	The project management team has identified administrative contact points in each university and organises monthly meetings. UT also organises regular meetings with its administrative contacts in third parties. Financial and administrative internal monitoring is ensured by these contact points, with financial guidelines and continuous support provided by the project management team. The project management team is also responsible for the liaison between the European Commission project officer and the project partners regarding financial and administrative management, as well as project reporting (e.g: updates on deliverables).

			The final budget reporting will happen at M36. However, an internal financial reporting was done at M12, in order to get an overview of budget spend. Following this, minor budget adjustments were made at partner level, and among third parties, to better reflect actual and planned spend in view of the workplan.
T1.3	Quality monitoring and assurance	Partially	The main difficulty encountered in WP1 has been the management of the quality monitoring and assurance. This is due to prolonged vacancy of the quality officer position at UT. As a result, the project manager had to take on this task, with little time and resources to commit to it, resulting in delays in producing the expected documents. UT is exploring different options to solve the issue as quickly as possible.
			However, a Quality Assurance Process has been drafted and approved by the Quality Assurance Committee, and the Quality Assurance Report of the first year of the project has been submitted.
T1.4	Intra-consortium communication and coordination	Partially	The project manager is in charge of sound communication between partners, especially regarding a good understanding of management procedures.
			An online working tool (Google Work Space) has been implemented and is managed by Uni.Lu allowing partners to share documents and communicate in compliance with GDPR. An informative newsletter has been implemented to share activities related to the project and strengthen the sense of community within the UNIVERSEH teams in each university.
			Minutes of the various governance bodies are available at the latest ten days after the date of the meeting, including a clear action list of the next steps.
T1.5	Risk management	Partially	The project manager has created a risk register, which is updated every six months by the Steering Committee following discussion.
Other issues *Mention and explain unforeseen events and adjustments that had to be made. Explain impact on other tasks, available resources and planning/timing.*			

Milestones (outputs/outcomes) & deliverables

Report on the implementation status of the milestones and deliverables that were due during the period and explain deviations from the description of the action (DoA) in Annex 1 GA.

Ensure consistency with the PGMS Continuous Reporting Milestones and Deliverables screens
No need to report on milestones if not required under your grant agreement.

Milestone number (numbering PGMS screens)	Milestone name	Achieved? (Yes/No)	Justification (explain what was done and by whom; explain what was not done and why not; indicate new timing)

MS1	Governance Set Up	Yes	UT has supported the establishment of all governance bodies (Governing Board, Steering Committee, Student Council, Academic Council and Advisory Board), with all partners ensuring their organisation is represented at the agreed level.
			The governance bodies are now meeting regularly, more often than planned in the application. These meetings happen mostly by videoconference, and in-person when possible.
Deliverable number (numbering PGMS screens)	Deliverable name	Achieved? (Yes/No)	Justification (explain what was done and by whom; explain what was not done and why not; indicate new timing)
D1.1	Consortium agreement	Yes	UT has drafted the Consortium agreement and consolidated the amendments received from partners. The CA has been amended in June 2022.
D1.2	Terms of reference of each governance body	Yes	UT has drafted the terms of reference of each governance body, based on the content of the consortium agreement. All the Terms of Reference have been approved by the relevant bodies. They can be amended after discussion and approval by the relevant body.
D1.3	Administrative toolkit	Yes	An administrative toolkit consisting of a template for deliverables, a template of timesheet and a template for budget monitoring has been drafted by UT.
D1.4	Data management Plan	Yes	UT has drafted a data management plan, which was discussed during WP1 meetings and approved by the Steering Committee.
D1.5	Quality assurance process	Yes	UT has drafted a Quality Assurance Process, consisting of a process and a list of indicators, which was amended and approved by the Quality Assurance Committee.
D1.6	Quality assurance report M12	Yes	UT has drafted a Quality Assurance Report, which was amended and approved by the Quality Assurance Committee.
D1.7	Minutes of the governance and coordination bodies meetings M1	Yes	UT has collated the minutes of the governance and coordination bodies meetings.
D1.8	Risk register M2	Yes	UT has drafted a risk register, which was discussed during WP1 meetings and approved by the Steering Committee.
D1.12	Minutes of the governance and coordination bodies meetings M9	Yes	UT has collated the minutes of the governance and coordination bodies meetings.
D1.13	Minutes of the governance and coordination bodies meetings M18	Yes	UT has collated the minutes of the governance and coordination bodies meetings.

D1.17	Risk register M14	Yes	UT has updated the risk register, which was discussed during WP1 meetings and approved by the Steering Committee.
Other issues			

Work package 2

Work package 2: Mobility and Multilingualism			
Activities *Report on the <u>implementation status</u> of the activities that were to be implemented during the period and explain deviations from the description of the action (DoA) in Annex 1 GA.*			
Task number (continuous numbering linked to WP)	Task name	Implemented? (Yes/No/Partially)	Justification (explain what was done and by whom; explain what was not done and why not; indicate how you intend to handle the situation and new timing; indicate if it was a one-off issue or how you intend to avoid similar issues in the future)
T2.0	Preamble	Partially	The core tool MOPLAT to fulfil the tasks regarding Mobility and Multilingualism is up and running and is currently further developed. Platform is currently only available in English and it is unclear whether a translation into the other languages is necessary at this stage. MOPLAT provides staff and students with all relevant information on mobility is now developed to a more active tool, where students and staff can constantly exchange for example experiences.

Students and staff can get personalised information for all five universities. The different services and support systems at each university were identified and a harmonised offer was built. The link to Erasmus Without Paper remains a challenge due to administrative barriers at all universities. |
| T2.1 | Development and implementation of Student and staff mobility indicators | Yes | UDUS with the support of the mobility team has developed and implemented student and staff mobility indicators. |
| T2.2 | Preparation of students for mobility | Partially | UDUS and other mobility team members prepared students participating in the Summer School through virtual and physical meetings, supporting documents, office hours and team building exercises. The coordinating Summer School team at AGH UST took additional responsibility in |

preparing selected students for their mobility through a preparatory language course and other activities.

In the future, additional to the information available on MOPLAT, mobile students will receive promotional material informing them about opportunities and testimonials from alumni will be developed.

> A. *Identifying problems and questions on part of UNIVERSEH students concerning an upcoming stay abroad*

The task to was to identify potential problems and questions from UNIVERSEH students regarding an upcoming stay at one of the partner universities and how we can deal with them adequately. The ideas was to conduct a questionnaire to get a comprehensive overview. Do to COVID, however, physical mobility was not possible within the first months. Therefore, it was impossible to interview students on their mobility needs within the alliance. The questionnaire will be conducted during the upcoming winter semester, when we will have physical mobility within our alliance. Especially, UNIVERSEH students in their first semester will be extensively interviewed to find out what they expect from the exchange. The results will then be analysed and compared with the previous information and supplemented if necessary. The result will also be used to harmonise the information given by all partner universities.

> B. *Raising awareness and providing information on mobility opportunities*

MOPLAT has been up and running until the beginning of last year. All partners provide the same information to students interested in studying at one of our alliance universities. Currently the given information is clustered into three parts:

- "Starting your mission" - everything you need to know before your stay (including for example information about registration, the academic calendar and cost of living).
- "Ready to take off" – arrival and first days at the new university (including for example campus services as well as getting around information).
- "Exploring new Universes" - learn more about your new city and its surroundings (including for example city information as well as sport activities on campus).

The currently provided information was agreed on by all partner and is based on the expertise of the International Offices of all partner universities. The brand "join the crew" was developed to make students feel part of the UNIVERSEH crew and highlight the unique mobility opportunities we are offering. In Social Media the "jointhespacecrew" account was released this June to reach students via Social Media and also provide them with information on UIVERSEH, mobility as well as reports on Summer Schools. Furthermore, with short videos students that already participated in UNIVERSEH mobilities will report on their experience. MOPLAT is currently further developed to a more active tool. UDUS is currently looking into offers from agency to develop MOPLAT further.

> C. *Raising intercultural awareness about European history and culture.*

One central goal of the European university is to foster European spirit and identity among its participants. In a first step, a working group was implemented to develop the content of the course. This task was supervised by LTU. Currently, professors from all partner universities are

			working on the MOOC course that will be available to all UNIVERSEH students by the beginning of next year.
T2.3	Supporting students during periods abroad	Yes	Students participating in the AGH UST Summer School and Diversity Conference have received substantial support during and prior to their stay abroad (peer-to-peer and by project management). UDUS coordinates the development of a crew mate program inside "join the crew" that shall be implemented in the future to support a community centered approach. *A. Providing information on basic needs* As stated before, due to COVID no physical mobility took part within the first month. Therefore, the information on basic needs provided on MOPLAT is based on the partner universities experiences. Further, the UDUS bilingual brochure "Feel at home" was used as example to ensure all relevant information are given. The section on MOPLAT on accommodation exchange will not be implemented as each university already offers support for students in that regard and UNIVERSEH students can use those services as well. *B. Preparing and supporting incoming students - providing a "welcome pack" and workshops* Students can find their individual information kit online. Furthermore, within the next month MOPLAT will develop further to support their students throughout their mobility experience. The UT "Mouv'Box" was used as an example as students can find individual relevant information in preparation for their stay for example information on funding, health insurance and many more. Additionally to the information on MOPLAT, UNIVERSEH students will receive a "welcome pack" by the respective host university providing them with all necessary information. The monitoring during their stay as well as reporting on their mobility experience is currently worked on. Those two points will be part of the "new" MOPLAT version. *C. Addressing the needs of incoming students in the first weeks of their stay abroad & Responding to concerns and needs of students during the stay* As drop-out rates of students can be very high within the first weeks UNIVERSEH developed "Feel at Home" now called "Join the Crew" modules to avoid high drop-out rates and make students feel welcome at their new university. As an example, some of the modules of the Join the Crew Programme are: - Welcome week at the beginning of the semester - Welcome package with local goodies and guidance brochure - Advice, guidance and psychological support by student service - Student tandem/buddy matching and activities - Language cafés to improve linguistic skillset - Activities by local student associations throughout the mobility term - Specific support offers for students with specific needs or limited mobility

			The outlined activities are the core of the tailor-suited Join the Crew programme and have been developed cooperatively by all UNIVERSEH-partners to assure coherence and a common understanding of the service portfolio. As the aim is to respond to the needs of the students, it is emphasised, that regular revision and evaluation of the Join the Crew is essential to assuring the quality and success of the activities.
T2.4	Organizing short-term mobility of students	Partially	AGH UST organised the first Summer School and Diversity Conference (WP6) in May 2022. The Summer School took place as 5 days physical academic course followed by a 2 week virtual learning component. The diversity conference was organised in presence solely. An evaluation form set up by UDUS was shared with all students and staff to monitor mobility experiences.
			A. Addressing the challenge of studying in an international environment
			One target of UNIVERSEH is to promote short term mobility within the alliance, for example by offering summer schools, intercultural trainings or language classes to UNIVERSEH students. Due to COVID physical mobility was restricted and those offers were all online.
			Already in Summer 2021 the first language classes were online given to students. So far each semester intercultural trainings, language cafes as well as language classes were offered to all UNIVERSEH students. The first Summer School took place in Krakow, Poland this May and 50 students, 10 from each partner took part in the week-long school that focused on "Space & Mining". Three more Summer/ Winter Schools are planned. One will take place in February 2023 at LTU (was postponed due to COVID, another Summer School will take place in June 2023 in Düsseldorf. Furthermore, an Autumn School will be organized at Uni.Lu.
			B. Exploring specific cultural contexts in the five UNIVERSEH locations
			The first Summer School at AGH took place in May. 50 students participated. The Summer School focused in Space Resources and Mining (SSSRM) and took place in cooperation with a group of Polish mining companies. Each day students attended different lectures in the morning, while in the afternoon they had the chance to get to know the city or the UNESCO world heritage Wieliczka.
			The Arctic Winter School at LTU will take place in February 2023. It was scheduled for February 2022 but due to COVID it was postponed. The School will focus on Earth polar atmosphere and its significance for solar-terrestrial interactions and space weather, aurora physics and observations, optical phenomena in polar regions, introduction to snow and ice-related phenomena, the Arctic climate systems. The school will include lectures, practical (field observations and measurements, data recording, data analysis), study visits to the scientific laboratories, project work. The School will take place at Kiruna Space Campus, where the Division of Space Technology of the Lulea University of Technology is located, together with the Swedish Institute of Space Physics (headquarters) and EISCAT Scientific Association (headquarters).
			In June 2023 UDUS will organize a Summer School about "Space in Arts and Culture" for the course of five days in cooperation with different cultural institutions in Duesseldorf. UDUS can draw on a lively cultural "scene" in Duesseldorf comprising a famous Art Academy, several renowned museums, the Robert Schumann Academy of Music and further municipal cultural institutions, all of which are closely linked to our campus culture. Together with the UDUS

			department of literature and its university orchestra, UDUS will compile a comprehensive and experimental programme examining cultural and artistic aspects of the space. In Autumn 2023 Uni.Lu will organize another School that will focus on law, governance, ethics & business. The following topics will be discussed: - Space law : International, European and national level space law . - Business economics: it will provide basic knowledge of economics and management. - Corporate governance & ethics: corporate governance represents the moral framework, the ethical framework and the value framework under which an enterprise takes decisions, with a positive impact on the company's performance, by considering transparency, accountability, and security. *C. Community building in an intercultural environment* So far, intercultural events for students have been offered online. For example, different language cafes from each partner university were offered. Here students had the chance to connect with students from all partner universities and train their intercultural and language skills. During the Summer School in Krakow students had the chance to connect with students from all partner universities and also with local UNIVERSEH staff members. More community building activities are planned.
T2.5	Staff mobility	Partially	First staff mobility was organised and a great interest in participation is noticeable. Many project meetings mobilised staff members across alliance partners. Structural obstacles (limited working hours/personnel capacities, language barriers, and childcare responsibilities) have been identified that halt staff mobility to reach the degree expressed in the targets. A colleague-to-colleague nomination approach is tested at the moment to support staff mobility in a more targeted way. A first staff mobility potentially takes place in late autumn. *A. Raising awareness about and enhancing mobility opportunities for researchers and staff* Due to COVID staff mobility was not possible for the last months. However, different staff weeks are currently planned to foster the physical exchange between the partners. A staff seminar on "Mobility and access to space sciences" took place last May. Here staff members from all universities introduced their current mobility offers and discussed how to promote mobility within UNIVERSEH. Another staff seminar on "Erasmus without papers" took place in April. Uni.Lu presented the current state of EWP at their university and all participants had the chance to discuss current problems and solutions concerning EWP. Further, it has become clear that especially for administrative staff it is very difficult to participate in events not held in their mother tongue, this is why starting in the upcoming winter Semester specific language classes, for example how to write emails in English will be offered. Further, the alliance is currently discussing specific language courses/ cafes for staff. However, time constraints of staff members is a big problem. The staff mobility portal on MOPLAT is up and running. Here staff members can find all relevant information on mobility opportunities.

			B. *Developing family support for staff mobility*
			On MOPLAT a specific section can be found that supports staff mobility. Here also all relevant information on family support can be found. Each university offers different support to staff members travelling with family, therefore, no consistent support system could be agreed upon so far.
T2.6	Multilingualism for all	Yes	The multilingualism program started its work last spring. Student have the opportunity to improve their language skills by participating in language classes offered online. *A.* *Increasing English proficiency among students* Several virtual English course with different levels have been offered throughout the semesters to all students to rise their English level to C1. Currently, we are working on a specific course that teaches students space terminology. This is done in the framework of the Space Dictionary. *B.* *Establishing multilingual exchange partnerships* UNIVERSEH offers regularly language cafes were students have the chance to get to know other languages and cultures. Furthermore, UDUS is currently working on a tandem app, were students can register and get matched with another student from a partner university to establish multilingual tandems. *C.* *Training local languages* Before taking part in the Summer School all students had the chance to take part in an intensive polish course to train their polish language skills. Before the Winter School in Sweden as well as the Summer School in Germany, intensive language courses are offered in Swedish and German to all participating students. Further, intensive French and English classes have been offered online by UDUS to all UNIVERSEH students. Students furthermore have the opportunity to participate in courses offered by the different language centres. Currently we are working on also providing tutorials on MOPLAT.
T2.7	UNIVERSEH going digital	Yes	UDUS developed an outline of UNIVERSEH going digital supported by all partners. With MOPLAT, a network yet distributed digital infrastructure approach is targeted. A workshop on "Universeh going digital" / Erasmus without Papers (EWS) was organized by UDUS together with colleagues from Uni.Lu in April 2021. The workshop aimed to discuss the implementation process of Erasmus without Papers (EWP) as well as the European Student ID Card in all five universities. The goal was to learn from the different stages of the implementation process, discuss problems and concerns as well as develop a common strategy on how to proceed with the implementation and how the five partners can support each other during the implementation phase. The University of Luxemburg acted as a role model and led the workshop. Another workshop is planned.
T2.8	Space Dictionary	Partially	*A.* *Developing a multilingual and illustrated Dictionary of Space Concepts (DSC)*

			Currently the DSC is set up. Together with a PHD student from the computer linguistic department of UDUS words are subtracted from relevant papers, journals and textbooks to fill the dictionary with life. Furthermore, in the course "Space Dictionary" students are participating in setting up the DSC. Furthermore, it is planned to open the DSC to citizens to make them collaborate as well.
Other issues *Mention and explain unforeseen events and adjustments that had to be made. Explain impact on other tasks, available resources and planning/timing.*			

Milestones (outputs/outcomes) & deliverables

Report on the implementation status of the milestones and deliverables that were due during the period and explain deviations from the description of the action (DoA) in Annex 1 GA.
Ensure consistency with the PGMS Continuous Reporting Milestones and Deliverables screens.
No need to report on milestones if not required under your grant agreement.

Milestone number (numbering PGMS screens)	Milestone name	Achieved? (Yes/No)	Justification (explain what was done and by whom; explain what was not done and why not; indicate new timing)
MS2	MS2 Mobility platform (MOPLAT) functional	Yes	UDUS has coordinated the work on the "Mobility platform" (MOPLAT) which is functional for students, staff and researchers. All partners have contributed to the content of MOPLAT, and Uni.lu has ensured it is available on the project website. MOPLAT will be improved continuously throughout the project lifetime.
MS3	First summer school organised	Yes	AGH has successfully organised the first summer school in Krakow in from May 15th to May 20th 2022 focusing on the topic of space resources and mining. Around 50 students (nominated by each partner) participated in the summer school. The programme consisted of lectures by professors, professionals of the space sector, thematic excursions and project work. A preparatory Polish language course was offered to all participating students. The planned Arctic Winter School which was planned to take place in late February/early March 2022 had to be postponed due to covid-19 pandemic conditions and sanitary restrictions that applied during the time of final planning. It will now take place in the same week in year 2023.
Deliverable number (numbering PGMS screens)	Deliverable name	Achieved? (Yes/No)	Justification (explain what was done and by whom; explain what was not done and why not; indicate new timing)
D2.1	List of mobility indicators	Yes	List of mobility indicators has been developed by the mobility team and implemented by all partners.

D2.3	Analysis report on students mobility experience within the Alliance	No	Due to the COVID-19 crisis, no student mobility took place in Year 1 of the project. As a result, we were unable to draft a report on mobility for M12, but we will produce the deliverable for M24. The due date has been updated on the PGMS deliverables screen..
D2.4	Content of the European History and Culture course	Yes	Content has been defined and the course is currently in the making.
D2.5	Brochure	Yes	The "Universeh Space Guide" has been published as an open source informational material available on the alliance website. The work has been coordinated by UDUS, but all partners contributed.
D2.6	MOPLAT section on UNIVERSEH website	Yes	Moplat section on the website is online and running. A redesign of the user interface and experience is currently under way and will be advanced throughout the project lifetime.
D2.7	Feel at home program	Yes	Feel at home program has started and was re-branded to "Join the (space) crew" as the name fits better to the project. Program is running.
D2.8	Report on UNIVERSEH collaboration with Erasmus Student Network M12	Yes	Report has been handed in by UDUS. All partners reported on ongoing and planned activities.
D2.9	Summer/Winter School reports M12	No	Due to the Covid-19 pandemic situation, the first Winter School was planned to take place the last week of February 2022, so we agreed with the PO to delay the due date of the report to M17. However, LTU had to postpone the Winter School to the Winter 2023, due to Covid-19 related restrictions. The first Summer School took place in May in Krakow and the report is currently drafted and will be submitted by July 15th 2022.
D2.10	Implementation plan for family support for staff mobility	Yes	Together with all partners, the family support plan was developed and can be found on Moplat .
D2.11	UNIVERSEH multilingualism plan	Yes	Plan developed and running
D2.14	Report on UNIVERSEH going digital M10	Yes	Report has been written by all partners and supports the establishment of a distributed yet networked digital infrastructure for student, staff, researchers participating in the alliance.
D2.17	Summer/Winter School reports M18	No	Due to the Covid-19 situation, the first Winter School was planned to take place the last week of February 2022. However, LTU had to postpone the Winter School to the end of February 2023, due to Covid-19 related restrictions. As a result, this deliverable will be produced for M29, after the Winter School has taken place and can be evaluated properly.

Other issues	

Work package 3

Work package 3: Interdisciplinary and cross-sectoral curricula			
Activities *Report on the implementation status of the activities that were to be implemented during the period and explain deviations from the description of the action (DoA) in Annex 1 GA.*			
Task number (continuous numbering linked to WP)	Task name	Implemented? (Yes/No/Partially)	Justification (explain what was done and by whom; explain what was not done and why not; indicate how you intend to handle the situation and new timing; indicate if it was a one-off issue or how you intend to avoid similar issues in the future)
T3.0	Preamble	Partially	The three phases of our collaboration during the first three years are: (1) preliminary analysis; completed. (2) creation of courses; designed on paper, creation ongoing, experimentation and evaluation in the academic year 2022-23. (3) programs; first discussions are started. WP3 has been coordinated both at European and local partner level with a relatively small but dedicated and assiduous team at each level representing all partners. There has also been extensive and regular collaboration with WP2 and WP4 for common teaching issues and with all other WPs when deemed useful.
T3.1	Mapping and sharing of partner competences	Yes	Mapping of consortium space related programs (and courses when not part of a program) was completed both as an Excel data base and D 3.1 to analyse and describe the results. We were able to identify a wide range of expertise and extensive teaching over all space application segments in the science and engineering fields. We also identified the combination of segments and fields where teaching would benefit from being reinforced. More details are given in D3.1.
T3.2	Today and tomorrow's needs for student competences	Yes	We prepared, sent and then analysed a questionnaire to identified stakeholders and interested parties asking for their future needs for student competences before employment. We concentrated particularly on future employers of our students in a European context. The questions asked were created by a working group coordinated by UniLu More details are given in D3.2.
T3.3	Completing the catalogue of courses	Yes	In total 16 courses have been created on paper (common UniverseH template) and validated by the academic council according to the five-star system (at least three stars from Active learning techniques, Digital content, Interdisciplinarity, Multilingualism, Shared teaching between two

			European partners). This includes a Summer and Winter School. All courses have identified potential student participation from at least two partners. This exceeds by far the 10 new courses which we set as an objective in the proposal. More courses may subsequently be proposed. The templates have been reread, iterated and improved by a reading committee from Toulouse. Participants in the teaching have been detailed in the templates and course leaders from all partners have been identified to facilitate contact with teaching teams. The deliverable D3.3 summarising the courses is due at M24. The results of T3.1 have been updated to include the new UniverseH courses in creation with all boxes in the matrix having at least one course. Videos have also been produced, and are publicly available, explaining the aims of producing a UniverseH course.
T3.4	Towards a common Universeh Diploma	Partially	This task was conducted with the strong will to use and promote existing European tools. It can be divided in two actions. 1. A certificate supplement and short report of our envisaged short-term solutions for awarding recognition to students – this is detailed in D3.4. It is envisioned that students will receive a supplement for each UniverseH course taken. 2. Work over the entire 36-month period for harmonising practices and delivering diploma supplements and/or recognition for students taking courses and participating in the project. This work has started for example with discussions on a grid of equivalent marks, on the way in which a certificate supplement would be awarded, on the use of digital badges, on the way in which courses in different partners can be coordinated through Moodle and on partner teaching calendars.
T3.5	Short programmes and space awareness	No	Except for a few earlier actions detailed below, this task was (and is still) planned to start in academic year 2022-23 since courses need to be designed and created before being available to students. The first major action planned in February 2022 was an Artic Winter School coordinated by LTU and devoted largely to Atmospheric and Environmental Physics; organisation and teaching program were almost completed but the School had to be cancelled at the last minute due to COVID-19 restrictions. The School is planned to take place in February 2023. The first major action will hence be a Summer School coordinated by A Krukiewicz-Gacek (AGH) in May 2022 and devoted to Space Resources and Mining. Presently 10 new UniverseH courses are expected to be available in the first semester of the 2022-23 academic year and another 6 in the second semester.
T3.6	Semester Exchange	No	UniverseH courses are in the production phase.
T3.7	Joint Bachelor programs	No	The description of UniverseH programs was proposed to be completed before the end of the third year of the project, following the first production of UniverseH courses. We have started discussions at the beginning of 2022. The ongoing stage is a document overviewing the aims and guidelines for constructing a UniverseH program as well as a template similar to that of the courses for proposing programs between partners.
T3.8	Joint Master programs	No	
T3.9	Joint Doctoral Programs and Joint Doctorates	No	
Other issues			

Mention and explain unforeseen events and adjustments that had to be made. Explain impact on other tasks, available resources and planning/timing.	

Milestones (outputs/outcomes) & deliverables

Report on the implementation status of the milestones and deliverables that were due during the period and explain deviations from the description of the action (DoA) in Annex 1 GA.
Ensure consistency with the PGMS Continuous Reporting Milestones and Deliverables screens.
No need to report on milestones if not required under your grant agreement.

Milestone number (numbering PGMS screens)	Milestone name	Achieved? (Yes/No)	Justification (explain what was done and by whom; explain what was not done and why not; indicate new timing)
MS1	Governance Set Up	Yes	UT has supported the establishment of all governance bodies (Governing Board, Steering Committee, Student Council, Academic Council and Advisory Board), with all partners ensuring their organisation is represented at the agreed level. The governance bodies are now meeting regularly, more often than planned in the application. These meetings happen mostly by videoconference, and in-person when possible.
MS5	Future needs for student competences identified	Yes	UT has circulated a questionnaire to our stakeholders. Analysis of the responses led to the writing of a report on skills needed in the industrial sector regarding space-related activities. The analysis of the questionnaire has been sent to our stakeholders and provides a resource for creating UNIVERSEH courses

Deliverable number (numbering PGMS screens)	Deliverable name	Achieved? (Yes/No)	Justification (explain what was done and by whom; explain what was not done and why not; indicate new timing)
D3.1	Consortium course and competence overview related to space and humanities	Yes	This action was led by UT with contributions to collect the data from the whole WP3 organising team. The deliverable was submitted on time to give both the raw data and an analysis of the results with conclusions for the rest of the project. The results were summarised by filling in the matrix of fields and space application segments with the total ECTS available in the consortium for each combination and colour-coded to show the degree of coverage. A course or a program exists for every combination of academic field and space segments, however, the coverage is not always extensive.
D3.2	Identification of future needs for student competences	Yes	The online questionnaire was created by UT who also analysed the answers and wrote the report (D 3.2). The action was coordinated by Toulouse with help and input from the whole WP3 organising team. The sample achieved in the quantitative and qualitative survey, though modest in size, allows us to have an overview of the expectations of industry and of other professionals in the space sector in terms of skills. The survey showed willingness of respondents to hire people

			with both sector specific and non-sector specific skills, hence an interest stressed for profiles requiring a combination of skill sets
D3.4	Common diploma supplement	Yes	This action is coordinated by UT. An example diploma supplement has been created in English for one of the proposed courses using the Europass model. One supplement will be created per UniverseH course (so 16 in total so far) detailing for example the related competences achieved. We are also experimenting with the use of digital open badges for recognition of all UniverseH related activities.
Other issues			

Work package 4

Work package 4: Innovative pedagogical models

Activities
Report on the _implementation status_ of the activities that were to be implemented during the period and explain deviations from the description of the action (DoA) in Annex 1 GA.

Task number (continuous numbering linked to WP)	Task name	Implemented? (Yes/No/Partially)	Justification (explain what was done and by whom; explain what was not done and why not; indicate how you intend to handle the situation and new timing; indicate if it was a one-off issue or how you intend to avoid similar issues in the future)
T4.1	Preamble		Spring 2022 has been very productive, where all our tasks have produced materials and been engaged in several processes synchronize our different tasks in addition share experiences and knowledge. This is also our biggest challenge- to make communication work between tasks and within the task groups. Share information and ideas, decide, and have input from every task to support and back decisions made. We also see a need to communicate between work packages. Our different findings and strategies need to harmonise and be modified to work as a whole. There have been several changes of task leaders, which also have had some impact on information sharing and progress.
			The approved courses vary in the way they have adapted the concepts of the five stars and the vision of UNIVERSEH. In addition to that WP4 has worked on standards, producing a model for evaluation and check lists. We have made a checklist for a quality check and discussed how roles and responsibility can be clarified. We have also made a letter to welcome teachers to UNIVERSEH and a welcome video to new members of WP4 or teachers collaborating with WP4.

T4.2	Training program for teaching staff and educational developers / teaching advisors		The overall aim with T4.2 is to support teachers and provide material, workshops and seminars to support teachers, when designing a UNIVERSEH course. The five stars, which describes the standards and objectives with a UNIVERSEH course are the foundation of the course design.
			The instructional Designers work closely with some teachers to support course design and implementation of the five stars. Some teachers do their course design without help from an ID, which means that the courses are very different in their course design and their deliverance concerning the five stars. Teachers who have chosen to work with IDs, are very positive to the collaboration, especially with using digital tools, course design, Moodle features, M-learn and digital nuggets. Every teacher in UNIVERSEH receive their own TEAM space, where they will have access to chat, support and materials.
			The teacher's course has been tested with a group of teachers from five different courses with a very positive result. The course is very practical and focuses on both course design and the implementation of the five stars. Next step is to work make this course available and develop teaching modules in Moodle for teachers and students.
			We have arranged a series of seminars and workshops for IDs and others involved in the project: Personal learning network, Hybrid learning, Walkabout, Gathertown and workshops on iReal, Mlearn and Elastic. In addition we have also started a collaboration with another WPs to design courses with multilinguism in mind and learn more about inclusion and entrepreneurship.
T4.3	Personal Learning Network		The overall aim of this PLN module is to present how personal Learning Network (PLN) can be used as an innovative pedagogical methodology to prepare student to use human and technological recourses to approach and solve advanced problem and work successfully in collaborative professional environments.
			This module consists of two different parts; one self-instructed module for teachers that are to give this module (train-the-trainer module) as well as one module for the students. The course for teachers helps them to become facilitators and they, in turn, can guide the students in the learning of personal learning networks. When used together, the courses make it easy for both teachers and students to test out a student-centred approach.
			Before start of the assignment (spring 2021), all included universities in UNIVERSEH were asked for interested teachers to join this PLN group project. A work group consisting of one task leader (IJ) from Luleå (LTU), 4 university teachers from Luleå/Kiruna (LTU) and 1 university teacher from Krakow (AGH) was formed. Work group meetings has been held digitally approximately every 3 weeks during the period May 2021 – May 2022. During these meetings the group have discussed PLN as an innovative pedagogical activity, a method of teaching/learning. The group have investigated digital literature, digital videos and different sources concerning PLN and discussed the findings during the meetings. An instructional video was developed. The aim of this video is to give the student/teacher information about how to use PLN as a method for learning, solving assignments and connecting with companies/society. In addition to the project meetings, a workshop was held in February 2nd 2022. The aim of this

			workshop was to discuss the topic with university teachers at LTU and AGH, testing our thoughts as well as getting feed-back from teachers outside the project. Over time, the two modules, one for teachers and one for students, were formed. At present, the modules are being tried out and evaluated in three ongoing pilots. The results of these pilots are still to be evaluated.
T4.4	From Student to Teacher		A number of pedagogical concepts have been identified and will be turned into digital nuggets and distributed to UNIVERSEH teachers and potentially others in the future. These concepts are, in the time of reporting this, the following: 1. **Giving a lecture**: Students pick a topic, or perhaps a project, to work on. They are then responsible for giving an in-depth lecture on this. In preparing the lecture the students investigate their topic in terms of the intended learning objectives of the course. The insights are shared during the lecture and help expand the ways in which the intended learning objectives can be applied in different topics, which both increases student understanding and benefits experienced based learning. 2. **Presenting a-ha moments**: In courses where students or student-groups are able to select their own project it will likely result in students gaining somewhat different experiences as they have to solve different problems although with the same intended learning objectives. Traditional project presentations typically have the students present what they have done in the project, but "a-ha moments" capitalises on the unique experiences of the students. They present how the course material "click" while applying theory to solve real problems faced while working on their project. This is a great way of exemplifying real use of theory and hearing this from fellow students may be very beneficial compared to hearing the teacher give a lecture about it. It also highlights the importance of the course material when examples of its use is being described. 3. **Group discussion**: In a course with many students it can be difficult to share experiences between peers. But if student-groups come together in smaller sessions, such as having three project groups in one session, they can share experiences of working with assignments. There they can discuss problems they have faced, how they have applied course theory to solve problems, and how they have worked as a team. Comparing experiences can be very beneficial, especially early on, as it may help groups adopt better practices for the future. It also highlights course theory and how it is used to solve actual problems in contexts that were not taught. 4. **Instruction videos**: Students create short videos for future course-goers with important "this is what we think is the most important about this course" nuggets. Hearing from other students can often be more effective than hearing from a teacher, partly because of the vocabulary and background info used, and partly because of how you relate to other students compared to your teacher 5. **Developing exercises**: students develop exercises for other students. Developing exercises means having to develop a good understanding of learning objectives in the course, so it is very beneficial for both the one developing exercises and the one trying to solve them. At the time of reporting some initial test-videos have been uploaded in the mLearn platform, but more extensive work to upload digital nuggets will commence in the autumn of 2022. This will be

			complemented by exercises, handouts to students, and material to aid teachers who wishes to implement one of the pedagogical "student to teacher" concepts in their courses.
T4.5	Hybrid learning and Virtual classroom	Yes	Diana Chroneer has made a report describing different reality processing concepts´ impact and usability in learning and a number of seminars are available (in Moodle and when applying) for teachers to learn more about this and use these concepts within their courses. Currently we are working with the implementation of these ideas. There are two projects on virtual labs within to different courses; Sumeet Gajanan Satpute is working with simulation environment related to space in a collaboration Luxemburg and Hamam Mokayed is working on Machine learning tin robotics and edge devices for space exploration" for better labs and education.
			There is another project to implement and test the software Walkabout in a language course during next semester (22/23). This is a cooperation between Sonja Bretschneider (Instructional Designer) Germany and Peter Parnes (Walkabout Led Designer) Sweden.
			Hybrid learning has designed a room with techniques for integration campus and distance students, visual and sound, working with how to build a good environment for group work (campus working with distance), next step is to pedagogy around this, asynchronous vs synchronous activities. This knowledge will be shared with WP2 and during 2022/23 we aim to produce modules in Moodle for teachers to learn more about hybrid learning and how they can use this in their course. This is an ongoing process where we must decide who and what such module/modules will comprehend.
			There are also plans on further courses and even a master with robotics as major feature in next semester (22/23).
T4.6	Accreditation process: Learn abroad and validate at home	Partially	The consortium is continuously working in this task, which is led within the work of WP2.
			Year 1: Learn abroad & validate at home workshop took place with participants from all universities. The aim was to present the processes of credit recognition at all partner universities of the alliance. Starting the discussion and possible ways forward regarding issues related to recognition and validation of credits studied abroad.
			Year 2: Currently the different design and settings of the different universities is looked at.
			Currently it depends on the home university of a student whether the course offered by UNIVERSEH is recognized or not. Different regulation in different countries hinder the accreditation process.
T4.7	Digital experiment-based learning	Partially	Several communications have been held about IREAL (Interactive meetings, webinars, videos, and tutorials for different types of UNIVERSEH people (I.e., WP4, WP3, COPIL, Public.). This leads to identifying potential experiments on the UNVIERSEH partners campus (e.g., Lunalab in Luxembourg) A live demonstration and tutorial explaining how to digitalize experiments has been achieved during the Toulouse meeting. A specific methodology to implement this digitalization has been designed and applied to new experiments: one designed for a tutorial purpose (allasonic effect) and another one using a local turbo reactor. The IREAL platform implements various other

			experiments that can be used in the context of open education in UNIVERSEH. Each experiment implementation may imply specific platform evolutions (technical and/or UX Design/Interface) with software developments that are useful for future experiments.
			We are currently working on several new experiment's digitalization and their usages in the context of labs that can be integrated into the Moodle platform or ADN Microcontents.
T4.8	Microlearning platform	Partially	Several communications have been held about MLEARN (Microlearning platform) and the Nuggets as a Service ecosystem (Interactive meetings, webinars, videos, and tutorials for different types of UNIVERSEH people (I.e., WP4, WP3, COPIL, Public.). Both the microlearning platform and the Nugget Editor application were deployed In Beta version in December 2021. It is regularly updated through an AGILE SCRUM development method (1 sprint every monthes). In collaboration with WP 4.9, the main Instructional designer of each university received a preliminary formation on the use of these tools. We recently published (June 2022), an MLEARN companion website about the platform and its possible usages (see https://mlearn.universeh.eu/about/).
			We are currently working on releasing a stable version of the Microlearning platform and Nugget editor application and a beta version of an analytics tool based on learning traces for December 2022.
			We are also working on starting a user community around the use of those tools.
T4.9	ADN Factory	Yes	During 2020 and 2021, several meetings and webconferences have been held about the concept of ADN-Aerospace Digital Nuggets. The goal of these presentations was to sensibilize the UNIVERSEH partners with this new pedagogical object, how to create it and how to use it and for what. During the Toulouse meeting in October 2021, we held a live demonstration of ADN creation.
			According with the expected contribution, the deliverable 4.12 "ADN Production and Methodology" has been achieved and sent to European authorities in time (Jan 2022).
			Along spring 2022, the two task leaders organized trainings for the instructional designers and university managers to help them to get familiar with the author tool (Nugget Editor – cf. WP4.8). Now, each university partner of the UNIVERSEH project has to create their own ADN to participate to the last mandatory artefact for this task (24 ADN; Dec 2023).
			In June 2022, a companion website for ADN description has been published (https://mlearn.universeh.eu/adn-factory). This website is the reference for whom (teachers and instructional designers) wants to create ADN and add it to UNIVERSEH courses.
			The final success of this task also depends on WP3 in charge of course creation, in particular instructional designers and teachers of all universities who will integrate ADN into the UNIVERSEH learning path.
Other issues			

Mention and explain unforeseen events and adjustments that had to be made. Explain impact on other tasks, available resources and planning/timing.	

Milestones (outputs/outcomes) & deliverables

Report on the implementation status of the milestones and deliverables that were due during the period and explain deviations from the description of the action (DoA) in Annex 1 GA.
Ensure consistency with the PGMS Continuous Reporting Milestones and Deliverables screens.
No need to report on milestones if not required under your grant agreement.

Milestone number (numbering PGMS screens)	Milestone name	Achieved? (Yes/No)	Justification (explain what was done and by whom; explain what was not done and why not; indicate new timing)
N/A			
Deliverable number (numbering PGMS screens)	**Deliverable name**	**Achieved?** (Yes/No)	**Justification** (explain what was done and by whom; explain what was not done and why not; indicate new timing)
D4.3	Staff and student education concerning PLN and lifelong learning	Yes	The report was drafted by LTU with contributions from partners and presents how personal Learning Network (PLN) can be used as an innovative pedagogical methodology to prepare student to use human and technological recourses to approach and solve advanced problems and work successfully in collaborative professional environments.
D4.6	Prerequisites for hybrid learning and virtual classroom	Yes	The report was drafted by LTU with contributions from partners and is the result of the work carried out in task 4.5 and give details on the use of technical solutions in education.
D4.8	Study abroad assess at home	Yes	The report was drafted by LTU and UDUS, with contributions from partners. It presents the various recognition processes of the partners, as well as next steps for improved recognition.
D4.12	ADN production methodology; experience and recommendation	Yes	The deliverable was drafted by UT. It takes the form of a complete document integrating the definition of the concept of ADN, a production methodology, an explanation of the use of the author tool (Nugget Editor made by WP4.8) and examples of use cases.
D4.14	Innovative pedagogy and upcoming technology	Yes	The report was drafted by LTU with contributions from partners and describes different reality processing concepts, impact and usability in learning.
Other issues			

Work package 5

Work package 5: Entrepreneurship and Innovation			
Activities			
Report on the <u>implementation status</u> of the activities that were to be implemented during the period and explain deviations from the description of the action (DoA) in Annex 1 GA.			
Task number (continuous numbering linked to WP)	Task name	Implemented? (Yes/No/Partially)	Justification (explain what was done and by whom; explain what was not done and why not; indicate how you intend to handle the situation and new timing; indicate if it was a one-off issue or how you intend to avoid similar issues in the future)
T5.1	Map existing courses and programs at the consortium level	Yes	A common effort from all partner universities allowed the constitution of the whole catalog of entrepreneurship courses and related teaching activities. The objective was to be able to design appropriate space-related courses within UNIVERSEH, eliminating the possibility of having already existing courses in the same field.
T5.2	Develop new common course/entrepreneurship module adapted to the European space sector	Yes	This development is issued from T5.1 and led to the design of a new 5 ECTS module called "Entrepreneuring in space industry". Determination of learning objectives and learning outcomes will follow according to planning. The Startech program implanted by UNIVERSEH allowed about twenty master students from various disciplines to discover entrepreneurship in practice. Students are put in a leadership position where they have to act as a project manager to make their ideas a marketable prototype/product/project. All through the training, they develop a set of skills that are crucial when developing new projects, new research directions or a new company.
T5.3	Developing entrepreneurial and innovative mind set using Geo-data	Yes	This Entrepreneurship program based on FabSpace 2.0 Startech was run in October 2021, face-to-face in Toulouse. 20 students from partner universities participated to the training, from which 9 females and 11 males. one was unable to travel because of a Visa problem. 14 mentors also participated to the training from which 10 males, 4 females.

T5.4	Stimulate entrepreneurial mindset and creativity for all members of the universities' communities		The Covid pandemic precluded the organisation of meetings and seminars. Corrective actions are being draw n up to secure solutions. Still, the w hole communities are struggling in absorbing the backlog of strategic activities in the partner institutions. An update w ill be done during summertime to forecast events and meetings.
T5.5	Call for project w ith stakeholders such as industry/NGOs (e.g. ActInSpace)	Partially	A "UNIVERSEH SpaceHack" is being built based on the SpaceHack.lu. It is designed as an experiential learning experience for the students of UNIVERSEH. It is being integrated in a new course called "Space Innovation, business and Law ", as a final and innovative evaluations scheme for students and staff. UNIVERSEH Space Hack is supported by the partner universities, and other too; support has already been gained from IT companies and incubators.
T5.6	Raising aw areness about intellectual property and financing opportunities	Yes	A new course called "Space Innovation, Business & law " has been elaborated through a collaboration betw een WP5 and WP3. First run-up w ill take place in academic year 2022/2023.
T5.7	Netw orking and mentoring program		The Covid pandemic precluded almost all in-person non-strategic meetings. Meetings are being planned again, w ith some sanitary constraints.
T5.8	Practical experience in research and innovation		The Covid pandemic precluded the organisation of in person meetings and seminars in person. An update w ill be done during summertime to forecast events and meetings, and appreciate corrective measures, if any..
T5.9	Support to student projects		New Space Venture Talks event in Luxembourg has been organized to inspire students and stakeholders to consider collaboration after post-covid period.
Other issues *Mention and explain unforeseen events and adjustments that had to be made. Explain impact on other tasks, available resources and planning/timing.*			
Milestones (outputs/outcomes) & deliverables *Report on the <u>implementation status</u> of the milestones and deliverables that were due during the period and explain deviations from the description of the action (DoA) in Annex 1 GA.* *Ensure consistency with the PGMS Continuous Reporting Milestones and Deliverables screens.* *No need to report on milestones if not required under your grant agreement.*			
Milestone number	Milestone name	Achieved?	Justification

(numbering PGMS screens)		(Yes/No)	(explain what was done and by whom; explain what was not done and why not; indicate new timing)
MS1	Governance Set Up	Yes	UT has supported the establishment of all governance bodies (Governing Board, Steering Committee, Student Council, Academic Council and Advisory Board), with all partners ensuring their organisation is represented at the agreed level. The governance bodies are now meeting regularly, more often than planned in the application. These meetings happen mostly by videoconference, and in-person when possible.
Deliverable number (numbering PGMS screens)	Deliverable name	Achieved? (Yes/No)	Justification (explain what was done and by whom; explain what was not done and why not; indicate new timing)
D5.1	List of UNIVERSEH courses in Entrepreneurship and Innovation	Yes	The full list has been delivered in January 2022. Unsurprisingly, collecting course data from five higher education institutions using different learning management systems was substantially difficult. Organization of curricula are somewhat different, and teaching objectives too.
D5.2	Development plan for UNIVERSEH curriculum in entrepreneurship and Innovation with a focus on Space field	Yes	This development is issued from T5.1 and led to the design of a new 5 ECTS module called "Entrepreneuring in space industry". including the following courses: - Space economy: past, present, and future - Foundation courses - Team ideation - Entrepreneurial project and monetization - Protecting and funding Minimal Viable Products - Presentation and assessment
D5.4	Report on the geo data program	Yes	20 European students from the consortium have been selected to participate to the UNIVERSEH Startech. 19 only could join, including 9 women. The pandemic did not affect the running of the training program apart for the sanitary measures that had to be respected. The students were mainly M2 and PhD's. The training was hosted by the teacher training school (INSPE department) of Université Toulouse Jean-Jaurès of UT partner, from October 4th to October 8th. 14 experts and mentors from all five partner universities, as well as from private companies and external universities across Europe joined the programme. The Startech program resulted into 4 ideas, one per group of students, from which we recorded videos, some of which are kept private because the students wanted to investigate deeper the possible commercialisation of the ideas they developed. A large majority of participants found that the training met their expectations and was appropriate to their level. The pedagogical progression as well as the composition and size of the groups corresponded to their expectations. They were satisfied with the balance between theory and practice and with the meetings and interactions with the experts.

D5.7	Report on networking and mentoring programs	No	The due date of this deliverable had to be postponed to M24, as the sanitary situation affected the implementation of WP5 activities. However, a number of activities have been carried out, that will be further detailed on the report to be submitted in October 2022: - New Space Venture Talks, a series of in-person events in Luxembourg aimed at gathering professionals interested in discovering the current developments of the commercial space sector, and exchanging on the related opportunities. The first event took place on April 29th 2022 - WP5 organized a visit of astronaut Romanian cosmonaut Dumitru Dorin Prunariuas an inspirational talk and round table for students.
D5.8	Monitoring report on the development of cooperation between the Alliance and external stakeholders	Yes	The engagement of stakeholders is a key component of the UNIVERSEH project and is essential in WP5 focusing on entrepreneurship and innovation. The work on the development of the network of stakeholders is led by UT as project coordinator and Uni.Lu as WP5 coordinator, and is supported by all the partners. Due to the pandemic situation in Europe, a number of activities had to be postponed, or delivered virtually. Nevertheless, some events took place virtually (Unicareers fair in Luxembourg), others in-person (UNIVERSEH Conference on Space and the Universities of the Future in Europe on October 4th in Toulouse). Additionally, stakeholders are engaged in the governance of the project: one stakeholder is a member of the Quality Assurance Committee, and the Alliance has been working on the setting up of the Advisory Board.
D5.9	Report on events organised to support students' projects	No	The due date of this deliverable had to be postponed to M24, as the sanitary situation precluded the organisation of in-person events. For immediate compensation, students were also invited to New Space Venture Talks (see above).
Other issues			

Work package 6

Work package 6: Equity, Inclusion and Diversity

Activities

Report on the <u>implementation status</u> of the activities that were to be implemented during the period and explain deviations from the description of the action (DoA) in Annex 1 GA.

Task number (continuous numbering linked to WP)	Task name	Implemented? (Yes/No/Partially)	Justification (explain what was done and by whom; explain what was not done and why not; indicate how you intend to handle the situation and new timing; indicate if it was a one-off issue or how you intend to avoid similar issues in the future)
T6.0	Preamble		
T6.1	Support mobility for students with specific needs	Yes/Partially	Due to Covid-19 outbreak the mobility was restricted. Especially for students with specific needs mobility in the time of pandemic is very difficult. We have conducted an investigation on support services for students with specific needs among partners and prepared a report with online guidelines. We have also facilitated a collaboration between offices for students with specific needs among the consortium. We have supported a mobility of a disabled student who took part in Students Conference in Krakow. Both sending and receiving university were in contact in order to support this mobility. We will dedicate a separate meeting to list the solutions to facilitate participation in the mobility of students with specific needs who might be hesitant to travel or have additional issues regarding post-pandemic travel. Overall, we can say, that this activity was implemented partially, part of a general attempt to address inclusion and diversity, and its relation to mobility.
T6.2	Integration of students from a disadvantaged socio-economic background	Partially	This was a difficult task for our team because many students do not want to be identified as those from disadvantaged background. Therefore, it is not easy to propose interventions for this group specifically. We will devote more consideration in WP6 to this issue. The mobility for both students' conferences that were held was financially covered by Universeh so students from all backgrounds had no fee. We are highlighting that space sector is open and inclusive for people from all different backgrounds in our activities. For example, during the 2nd conference on diversity and inclusion in the space sector for example students prepared and displayed profiles of diverse individuals form the space sector.

			We have conducted a survey among foreign students at AGH to identify their needs.
			In order to engage high school students from disadvantaged socio-economic background for whom travel to bigger city for a space event might be a barrier we have decided to organize Space Day events online.
			We are also collaborating with WP4 in preparing a workshop program about diversity & inclusion best practices and strategies to be used in all Universeh classes. The workshop, designed by WP6, will be conducted among Instructional Designers and later on used to facilitate D&I in all Universeh classes.
			WP6 is liaising with WP5 in order to facilitate paid internship options for students with financial strain.
			Overall, we can say, that this activity was implemented partially, part of a general attempt to address inclusion and diversity, and its relation to mobility.
T6.3	Promotion of women participation in the space sector	Yes	We have recorded seven videos of women in the space sector that are now available online.
			The first students' conference on diversity and inclusion in the space sector had a main theme relating to women in space sector.
			We are highlighting the need for gender diversity in project activities like for example: during recruitment procedure to Space Team AGH (students space club).
			We make sure to invite diverse representatives to our outreach initiatives like for example Space Day event for students.
			Gender diversity is a crucial point in the EuroCharter document WP6 is currently working on.
			Overall, we can say, that this activity was implemented as a part of a general attempt to address inclusion and diversity, and its relation to mobility.
T6.4	Support for migrants and refugees	Yes	During the 2nd conference on diversity and inclusion in the space sector students prepared and displayed profiles of individuals of diverse background form the space sector.
			We have also adopted our program for high school students in order to provide workshops for Ukrainian refugee's kids.
			We are also collaborating with WP4 by preparing a workshop program about diversity & inclusion best practices and strategies to be used in all Universeh classes. The workshop, designed by WP6, will be conducted among Instructional Designers and later on used to facilitate D&I in all Universeh classes.

			Overall, we can say, that this activity was implemented as a part of a general attempt to address inclusion and diversity, and its relation to mobility.
T6.5	Student to student support	Yes	As a pre-conference event together with WP5 we have organised a student to student online meeting. The goal was for students to get to know each other before the conference and support each other before and during the mobility.
			Students to student support is also realized through the activities carried out by students involved in the project.
			LTU have worked to improve and support the interactions between the different local Student Unions, such as the Technological student union, the Philosophical student union, the Space Student organization (Kiruna) and the Erasmus Student network. In order to improve student-to-student support and also diversity in the space field.
			Overall, we can say, that this activity was implemented as a part of a general attempt to address inclusion and diversity, and its relation to mobility.

Other issues	
Mention and explain unforeseen events and adjustments that had to be made. Explain impact on other tasks, available resources and planning/timing.	

Milestones (outputs/outcomes) & deliverables

Report on the implementation status of the milestones and deliverables that were due during the period and explain deviations from the description of the action (DoA) in Annex 1 GA.
Ensure consistency with the PGMS Continuous Reporting Milestones and Deliverables screens.
No need to report on milestones if not required under your grant agreement.

Milestone number (numbering PGMS screens)	Milestone name	Achieved? (Yes/No)	Justification (explain what was done and by whom; explain what was not done and why not; indicate new timing)
N/A			
Deliverable number (numbering PGMS screens)	Deliverable name	Achieved? (Yes/No)	Justification (explain what was done and by whom; explain what was not done and why not; indicate new timing)

D6.1	Report on staff seminars	Yes	All partners representatives took part in the online Staff Seminar on diversity and inclusion.
D6.2	Development plan for EuroCharter on Equity, Inclusion and Diversity: towards European standards	Yes	All partner representatives from WP6 are working in collaboration to prepare the EuroCharter document that will highlight our consortiums standards.
D6.4	Minutes on mobility scholarships for students with specific needs	Yes	All partners came to agreement to fund some additional scholarships for students in need of additional support when taking part in mobility due to specific needs that they have.
D6.5	Catalogue of online guidelines on services for students with specific needs	Yes	The document was prepared by UFT with assistance of all WP6 partners.
D6.8	Testimonial videos of Women in the Space sector	Yes	Seven testimonials were recorded presenting women from all partner universities. These videos are on project youtube channel with open access. Subtitles are provided in all partner languages.
D6.10	Report on support services for migrants and refugees	Yes	The document was prepared by HHU and with support of all WP6 partners.
D6.11	Reports on a yearly joint conference on diversity and inclusion M12	Yes	After the 1st Conference detailed Report was prepared and submitted by UT and with support of all project partners.
Other issues			

Work package 7

Work package 7: Sustainability and Dissemination
Activities
Report on the <u>implementation status</u> of the activities that were to be implemented during the period and explain deviations from the description of the action (DoA) in Annex 1 GA.

Task number (continuous numbering linked to WP)	Task name	Implemented? (Yes/No/Partially)	Justification (explain what was done and by whom; explain what was not done and why not; indicate how you intend to handle the situation and new timing; indicate if it was a one-off issue or how you intend to avoid similar issues in the future)
T7.0	Preamble	Yes	UNIVERSEH communication policy has the objective of delivering its strategic message to all its target audiences: present and potential students, employees of partner universities, other universities and networks, national and international administrations, policy makers, industrial companies, and society in general. Various communication approaches were used in order to reach an audience irrespective of gender or background.
T7.1	Dissemination and communication plan and Visual identity	Yes	The dissemination plan was delivered on 15/06/2021. Please consult the document here for further details: The implementation of the communication plan is ongoing. *Tools* A website was created: https://universeh.eu/ Visual identity was delivered in February 2021 and has been updated since. It is available for partners in the "Resources" section of the website. The logo of Beyond UNIVERSEH was created in parallel to ensure coherent graphic charters, as well as templates of Word, PowerPoint documents The common templates of UNIVERSEH and Beyond UNIVERSEH were created and implemented alliance-wise. Brochures and flyers have been developed and disseminated, electronically and physically. Social media channels were set up and implemented: LinkedIn, Twitter, Youtube, Facebook, Instagram. Locally, the visual identity of UNIVERSEH is also relayed. In Toulouse, UT and each of its five third parties (UT2, UT3, INP, TBS, ISAE) have created a subpage dedicated to the project on their respective institutional website. The Toulouse universities publish UNIVERSEH news on their respective social media accounts. UT has created a specific page dedicated to UNIVERSEH on its Welcome desk website (website dedicated to the Toulouse student community) where Toulouse students can find all the news of the project that concern them.

			The Toulouse students involved in the Students council have created their own Toulouse UNIVERSEH social media (Instagram, Facebook, Twitter, LinkedIn).
T7.2	Outreach activities	Yes	Outreach activities are dynamic and ongoing. Activities: - December 2020: Press release on creation of UNIVERSEH (local and international IDW) - October 2021: Press release on UNIVERSEH conference in Toulouse and launch of BEYOND UNIVERSEH - Website and social media are used to communicate on relevant activities. - The news and events being published consistently: https://universeh.eu - Two videos were created in order promote the project (UNIVERSEH video and Toulouse Inauguration event video) - A social media presence (LinkedIn, Twitter, Instagram, Youtube and Facebook accounts) reaching diverse audiences. Values, activities and achievements of the project are communicated via the website and social media accounts. Multiple news were communicated through social media to the wider audience. - University of Luxembourg Open Day UNIVERSEH booth on March 19th - Social media communication plan for the promotion of the Summer School in Krakow [15.05.22 - 20.05.22] (stories during the whole summer school, repost, video interview with students). - A student winter school was planned for [date] in Lulea, but had to be cancelled due to Covid restrictions. - Social media toolkit for UNIVERSEH summer school in Krakow students was created. - Students' conferences organised to promote the project among students: In Toulouse (Toulouse: 06.10.2021, Krakow 20.05.2022) - Planned participation at the International Astronautical Congress (Paris, September 2022) The online audience of UNIVERSEH: Analytics were performed on our social media accounts; all figures indicate an increase in impact. | Followers	04/10/21	29/05/22
---	---	---
Facebook	308	366
LinkedIn	390	664
Twitter	183	259
Instagram	118	376	

YouTube	35	70
Total	1034	1735

Presentations targeting specific current or potential stakeholder groups:

By the University of Luxembourg:
- Presentation "UNIVERSEH": New Space education and experiential learning at New Space Ventures Talks at Spuerkees (28 April 2022)
- Presentation 'UNIVERSEH' from a student perspective at L'Athénée de Luxembourg (6 May 2022)
- Inclusion of UNIVERSEH in the promotional presentations of the University of Luxembourg in Luxembourgish high schools
- Visit of Romanian cosmonaut Dorin Prinariu at the University of Luxembourg following of the presentation of UNIVESEH (13 May 2022)
- Conferences organisation for the Space Semester in Lycée Vauban in Luxembourg (October- April 2022-23)
- Participation at the Asteroid Day (30 June 2022)

By LTU:

- Presentation of UNIVERSEH for the Science and University attaché at the French Embassy in Stockholm (June 2, 2022) marketing of UNIVERSEH via LTU Instagram on numerous occasions.
- Participation in a network for communications officers at Swedish universities regarding European universities, e.g. UNIVERSEH (2020).
- The Vice-Chancellor of LTU talks about UNIVERSEH during all her external generic presentations of the university.

By Université de Toulouse:

- In the framework of the "European Week" organised by Toulouse Métropole (Local authority), the representatives of the Student Council organised a Student Conference on the theme of European cooperation in the field of space (May 12, 2022)
- UNIVERSEH was presented to college children during "Les Cordées de la réussite", an event promoting and supporting young people from disadvantaged backgrounds towards higher education (May 19, 2022)

By HHU Düsseldorf:

- Space Day on HHU campus on 11 May, 2022 as part of the European Universities Week. In a press release and on central Social Media channels of HHU, it was communicated that the Düsseldorf UNIVERSEH crew answers questions at an information stand and explains how to become "part of the crew". Communications

involved advertisements for workshops on the "Space Dictionary ", "How to become an innovator" and a space-related Pecha Kucha talk.
- Promotion online (hhu.de) and on Instagram (instagram.com/hhu_de) for the Summer School at AGH UST Krakow in May 2022 incl. announcement of the Student Conference on Diversity & Inclusion in the Space Sector.
- Announcement of the first Beyond UNIVERSEH workshop "Media training and the use of social media for researchers"
- Instagram announcement for Language Café (19 May) on central HHU account
- Instagram takeover of HHU account on May 17 for UNIVERSEH
- Feb 2022: DAAD radio/podcast with project coordinator Nicole Dittrich, shared on all central HHU SM channels
- Nov 2021: Advertisements on all central HHU channels including Instagram story on the Arctic Winter School in Kiruna
- Since 2021: Permanent UNIVERSEH slider motive featured prominently on front page of HHU (www.hhu.de)
- Permanent UNIVERSEH website/microsite on HHU web page

October 2021: Press release on UNIVERSEH opening conference in Toulouse (HHU)

December 2020: Press release on foundation of UNIVERSEH + release on IDW

By AGH UST – Space Technology Centre - UNIVERSEH:

- Website, Facebook, Linkedin, Youtube, Twitter
- Visual identity
- Logotype printed in materials and also presented on campus at the Office of Project leader.
- Documents made by AGH UST WP7 Team:
    - Guide for social media and communication channels for STC AGH UST.
    - Project Promotion Actions in WP6 – communication kit WP6->WP7.
    - Communication guide for AGH UST leaders of all WP.
    - List of events about space.
    - Draft of UNIVERSEH presentation in Polish
- Promotion materials: STC - AGH UST - UNIVERSEH: flyer, catalogue, labels, copybook, pencil, bag, mug, marker
- AGH UST: Summer School on Space Resources, Students Conference on Diversity & Inclusion, Space Day, Cassini Hackaton
- Women in space – movies

Additionally, several presentations of UNIVERSEH were made to international audiences:

As coordinator of the Alliance Emmanuel ZENOU met several stakeholders and made several presentations:

			- Meeting with representative of NEREUS in October 2020 - Meeting the French Member of Parliament Corinne Vignon in June 2021 - Meeting with representative of ESA in July 2021 - Meeting with representative of CNES in September 2021 - Meeting with representative of Galaxy Club October 2021 - Presentation to the National Agency for Research in October 2021 - Charm EU Seminar March 2022 - Seminar Pégasus in May 2022 - Meeting with the University of Tor Vargata in May 2022 Members of student council have also represented the Alliance: - Elizaveta SHASHKOVA attended the European Student Assembly at the European Parliament in March 2022 - Thomas CALVY participated in a panel discussion on student involvement in European university projects at the CHARM EU Seminar in March 2022 Eric TSCHIRHART has presented the Alliance's project at an EARMA online seminar on the initiative of European universities in March 2022
T7.3	Impact assessment	Yes	Delivered for the period on 10/03/2022. For more details please consult the document. A first open-access publication on the UNIVERSEH project is issued from a presentation at the AerospaceEurope 2021 Conference, and will be published in one of the journals of Council of European Aerospace Societies.
T7.4	Internal actions to sustain the long-term vision of UNIVERSEH	Yes	*By the University of Luxembourg:* - Presentation of UNIVERSEH at Rectorate level on 13/7/2021Presentation of UNIVERSEH to the University community at UL - recurrent on-boarding meetings with internal participants - Student activities: visit of Planetarium (1 April 2022) - Establishment of links to SnT interdisciplinary research Centre, the Interdisciplinary Space Master programme and university faculties to implement the curriculum - Visit of Romanian cosmonaut Dorin Prunariu at the University of Luxembourg (13 May 2022) *By LTU:* - Three student information days at LTU about UNIVERSEH during 2021 - Presentation of UNIVERSEH to all University departments at LTU, in November 2020 - Internal web pages, one for students and one for faculty. - Information about UNIVERSEH and related activities on the LTU info screens across Campus (recurring). *By Université Toulouse:*

			- UT has organised a general meeting with all the Toulouse colleagues involved in the project in September 2021
			- In January 2021, the University of Toulouse presented UNIVERSEH to the presidents and directors of the Toulouse higher education institutions members of the UT
			- Additionally, several presentations were made to the governance bodies of the Third Parties of UT.
			
			By HHU Düsseldorf:
			
			- Creation and sharing of templates for UNIVERSEH badges, stickers and bags to be used / individualised by all partners.
			
			By AGH UST:
			- Conferences with speeches of Prof. Tadeusz Uhl on UNIVERSEH:
			  - Forum Cybersec in Krynica (September 2021),
			  - Conference International Students in Poland (Wrocław, March 2022),
			- Cooperation with POLSA, European Rover Challenge (September 2021),
			- IMPACT (May 2021, May 2022)
			- Seminars:
			  - January 2021 - Seminar with Agata Kołodziejczyk - Educational, research and technology development activities at the Analog Astronaut Training Center - audience of 25 people;
			  - February 2021 - Seminar "Moon - the impact of basic research results on engineering structures" - Dr. Karol Seweryn, prof. Center for Space Research of Polish Academy of Sciences - audience of 45 people;
			  - April 2021 - Seminar - "Education and research in space technologies". Lecture "ICEYE a world leader in the field of the new space" Rafał Modrzewski - audience of 20 people;
			  - June 2021 - Seminar "Geological conditions and technical possibilities in the search for metal deposits on Mars" - Dr. Jakub Ciążela from the Institute of Geological Sciences of the Polish Academy of Sciences - audience of 20 people;
			  - September 2021 - Seminar with Joanna Pyrkosz - Pacyna "Is space exploration necessary, ethical, safe? - audience of 25 people;
			  - November 2021 - Seminar with Chuck Farrar - Engineering Space Mission Support at Los Alamos National Laboratory "- Audience of 40 people;
			  - December 2021 - Seminar with prof. Marek Banaszkiewicz - Other planets, other worlds - a challenge for Earth sciences - audience of 15 people;
			  - February 2022 - Seminar "Commercialization of R&D results in the space sector" with - dr Marta Wachowicz

			- March 2022 - Seminar "Satellite activities for oceanographic research at NTNU" with Roger Birkeland
T7.5	Programme for administration and services to sustain UNIVERSEH	Partially	uni.lu: internal funding has been secured to sustain UNIVERSEH objectives and activities LTU: additional internal funding for the UNIVERSEH project (2 MSEK/year) has been secured. UT: The University of Toulouse and its five third parties are receiving for the project the financial support of the National Agency for Research (ANR) for the whole duration of the project. AGH UST: submitted project to National Agency for Academic Exchange for cooperation with Tohoku - Japan and UNIVERSEH partners HHU received funding from DAAD.
T7.6	Programme with public and industrial partners to sustain UNIVERSEH	Yes	uni.lu: Presentation "UNIVERSEH": New Space education and experiential learning at New Space Ventures Talks at Bank Spuerkees (28 April 2022); for the first time, the conference was live-streamed and recorded on UNIVERSEH YouTube channel. uni.lu: Conferences organisation for the Space Semester in the French Lycée Vauban in Luxembourg (October - April 2022-23)
T7.7	Model of good practices to attract new partners in Europe and Beyond	Partially	Deliverables are published on the universeh.eu website. Please find them here in the bottom of the page: https://universeh.eu/about-the-project/governance/

Other issues *Mention and explain unforeseen events and adjustments that had to be made. Explain impact on other tasks, available resources and planning/timing.*	

Milestones (outputs/outcomes) & deliverables

Report on the <u>implementation status</u> of the milestones and deliverables that were due during the period and explain deviations from the description of the action (DoA) in Annex 1 GA.
Ensure consistency with the PGMS Continuous Reporting Milestones and Deliverables screens.
No need to report on milestones if not required under your grant agreement.

Milestone number (numbering PGMS screens)	Milestone name	Achieved? (Yes/No)	Justification (explain what was done and by whom; explain what was not done and why not; indicate new timing)

MS1	Governance Set Up	Yes	UT has supported the establishment of all governance bodies (Governing Board, Steering Committee, Student Council, Academic Council and Advisory Board), with all partners ensuring their organisation is represented at the agreed level. The governance bodies are now meeting regularly, more often than planned in the application. These meetings happen mostly by videoconference, and in-person when possible.
Deliverable number (numbering PGMS screens)	**Deliverable name**	**Achieved?** (Yes/No)	**Justification** (explain what was done and by whom; explain what was not done and why not; indicate new timing)
D7.1	Dissemination plan	Yes	The dissemination plan for the project was drafted by Uni.lu based on initial plans in the application form, with partners contributing.
D7.2	Visual identity	Yes	A visual identity (graphic charter, logo) was delivered, in conjunction with a "Beyond UNIVERSEH" graphic charter. It was created by Uni.Lu on the basis of a first logo created by UT for the application.
D7.3	Website	Yes	The website was delivered by Uni.Lu, with contributions from partners. It is updated regularly (news…) and will be further modernised in a 2.0 version. https://universeh.eu
D7.4	Social media accounts	Yes	Social media accounts have been created by Uni.lu, which is also publishing regularly on it, and monitoring impact, with input from all partners: - Facebook - Twitter - LinkedIn - Instagram - YouTube
D7.5	Impact assessment	Yes	The impact assessment was drafted by Uni.lu with contributions from partners.
Other issues			

Timetable

Report on deviations from the description of the action (DoA) in Annex 1 GA.
Fill in the planned implementation in beige and the deviations in red. Repeat lines/columns as necessary.

ACTIVITY	MONTHS																							
	M 1	M 2	M 3	M 4	M 5	M 6	M 7	M 8	M 9	M 10	M 11	M 12	M 13	M 14	M 15	M 16	M 17	M 18	M 19	M 20	M 21	M 22	M 23	M 24
Activity 1.1 - …	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓														
			▇	▇	▇	▇	▇	▇	▇	▇														
Activity 1.2 - …							▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓						
Activity …										▓	▓	▓	▓	▓	▓									
										▇	▇	▇	▇	▇	▇	▇								

]

There are no time deviations on the activities planned to report on.

3. BUDGET IMPLEMENTATION

Budget implementation — Use of resources	YES/NO
We confirm that the overall budget consumption is in line with the advancement of the activities. *If there are major deviations, identify them and explain the reasons why.*	YES
The budget consumption is slightly lower than could be expected at this stage. This is due to a slow start of spent on the personal costs, as it took time to recruit all the people working on the project, and to the absence of travel costs for the first year of the project. Spent is now increasing and mobilities for staff and students have started again, so budget consumption will improve in the second half of the project.	

Indicate the amounts spent by the consortium on each budget category since the beginning of the project.

Budget category	Total amount (EUR)
A. Direct personnel costs	2 135 070,02
B.1 Direct travel costs	96 513,25
B.2 Direct subsistence costs	32 176,72
C. Direct subcontracting costs	N/A
D. Direct costs of financial support to third parties	Not applicable
E. Other direct costs	141 549,74

ANNEXES

LIST OF ANNEXES

Annex 1 – Overview of the progress, participants & project management

Annex 2 – Guidelines on granting the starts in the 5 Star system for new courses

ANNEX 1 - OVERVIEW OF THE PROGRESS, PARTICIPANTS & PROJECT MANAGEMENT

1. OVERVIEW OF THE PROGRESS

1.1 Objectives

> **Work performed & main achievements**
>
> *Short summary of progress towards the project objectives. Highlight significant activities and achievements. Provide clear and measureable details.*
>
> *Report on objectives not fully achieved or not on schedule.*
>
> ⚠ *Do not simply cut and paste the project summary (filled in online on the Summary for Publication screen). Contrary to the summary, this section is for reporting to the EU and will not be published.*

During the first 18 months of implementation, and despite being strongly impacted by the sanitary situation, the UNIVERSEH Alliance has significantly progressed towards its objectives:

To enhance mobility and multilingualism

The Alliance has successfully brought together support services from the 5 partner universities (and the 5 third parties) to create "Join the crew". Short-term mobility has been organised (summer school), long-term mobility has been planned through the signature of a MIIA and several language courses and language cafés have been created. However, the mobility members are still low due to pandemic-related travel restrictions, but will raise in the next few months.

To develop new joint interdisciplinary and cross-sectoral curricula

Different stakeholders have been successfully involved to map current and future needs of the labour market of the space industry. Based on these results, and on the mapping of existing courses, 16 collaborative courses have been selected to be developed, after a quality check based on a 5-star evaluation system. The creation of UNIVERSEH programmes is ongoing.

To develop new pedagogical models

The partners have worked on testing innovative formats such as ADNs (Aerospace Digital Nuggets), Personal Learning Networks, Virtual and hybrid classrooms, identifying barriers and how to overcome them. Workshops and webinars have been organised to explain what a UNIVERSEH course should look like in terms of innovative pedagogy. Additionally, each of the partner have dedicated instructional designers' time to supporting the new UNIVERSEH courses being developed.

To become an entrepreneurial university

Following the mapping of existing entrepreneurship courses in the partner universities, the Alliance is currently designing and developing a new 5 ECTS module, "Entrepreneuring in space industry". In addition, events were organised (virtually or in-person) to encourage the development of entrepreneurship skills in students, as well as to support students in finding jobs and internships in the Space sector (e.g. Spacehack, Unicareers, Startech…). Moreover, the Alliance has structured its stakeholders in an Advisory Board, thus reinforcing links between the project and the Space economic ecosystem. A person dedicated to facilitating the network of stakeholders has been recruited in Toulouse from M18, which will reinforce the capacity of the alliance to interact with its stakeholders and attract new ones.

To address some of the barriers students can face when it comes to joining higher education in general and studying abroad in particular

The activities in this aspect have been varied. In order to provide role-models and encourage students from various backgrounds to join higher education in the space field and/or embrace carriers in the space sector, videos of women in the Space Sector have been produced by all the partners, activities have been organised with high schools, 2 student conferences on Equity, Inclusion and Diversity have been organised. In order to better support the partner's students with specific needs to access mobility, dedicated scholarships have been discussed but have not yet been implemented.

1.2 Impact

Results & impacts

Analyse the outcome of the project (so far) and its (actual and expected) impact (on target groups, change, innovation etc.), including a description of the European dimension and added value of the project.

Report on changes in your impact analysis/strategy (if any) and the effects on the project/need for adaptations.

In your analysis, please also include the following aspects regarding the results achieved so far:

a) *Contribution of the achieved results to a higher level of enhanced cooperation between the partner institutions*

b) *Contribution of the achieved results to quality, performance, attractiveness and international competitiveness*

c) *Other benefits for participating organisations (if any)*

d) *Specific benefits for the target groups (students, researchers, staff, and external stakeholders)*

e) *Contribution to geographical balance: Please explain how the re-inforced institutional cooperation between the full partners builds the capacity of the higher education institutions that compose the alliance and is (so far) contributing to the actual involvement of the partner higher education institutions from the different regions that compose the alliance*

f) *Contribution to regional development*

g) *Contribution to the promotion of common European values and a strengthened European identity such as in terms of diversity, global cultures, across borders, sectors and academic disciplines*

h) *Contribution to the long-term mission statement*

i) *Mobilities and progress towards the 50% student mobilities target: Please briefly describe the mobilities organised (so far) and how you organised them. Which were the main obstacles, if any, you encountered (so far) and how did you address them and please explain how the mobility activities financed through other European schemes (such as Erasmus+ KA1, KA2 or KA3) or national and institutional funds have been used to complement the mobilities financed by the alliance*

j) *Contribution toward the European Education Area*

k) *Transformation of the alliance towards the emergence of a fully-developed European University*

In the last 18 months, the Alliance partners and third parties have dedicated significant resources, reaching a deeper level of cooperation, to the achievement of the project's vision of a comprehensive European Space University for Earth and Humanity where:

- New joint and flexible curricula are delivered in the space domain, based on multi-disciplinary and cross sectoral approaches
- Mobility is embedded at all level
- Business-University cooperation is developed to promote practical and/or work-based experience and to foster entrepreneurial mind-set
- Student involvement is a key pillar
- Innovative teaching and learning play a central role
- Sustainable development goals are a high priority

Impact of the project

The UNIVERSEH Alliance has started to develop its high quality curricula offer, by creating 16 new courses following a "5 star" system thus progressing towards the completion of the UNIVERSEH matrix of courses (per academic field and application domains). Indeed, to be approved a course has to have at least three of the following 5 stars: include active learning techniques, be digital, be interdisciplinary, be multilingual (course in at least 2 languages) and be a European cooperation with another UNIVERSEH partner. The full guidelines on the 5-star quality system is attached as an annex at the end of this report. Additionally, videos are freely available on the project's YouTube channel: "How to build courses for UNIVERSEH: characteristics of a course, digital tools, active learning methods" (playlist available here) and "Innovative Educational Models" (playlist available here).

These courses will begin from September 2022 and will be delivered to students from partner universities. Each partner university will increase its offer in their curricula with these new multidisciplinary courses. Moreover, students from each partner university will study with other students from at least one another partner university in virtual or physical mobility schemes.

One course has already been delivered by AGH (Krakow): the Summer school on "Space Resources & Mining", attended by 50 students from the 5 partner universities. Another course, the Arctic Winter School developed by LTU has been fully designed for winter 2022 but due to the COVID situation it had to be postponed and should be delivered in February 2023.

Flyer of the Summer School and Student Conference organised in Krakow in May 2022

Promotion of the Summer School on Instagram

These courses have been promoted and had a positive impact among students from partner universities, both in terms of technical skills acquired and in terms of interpersonal skills thanks to the mobility experience in a multicultural environment. The short programmes have contributed to the reputation of the Alliance and to the dissemination of its outputs as indeed, some student from other universities or structures have expressed the wish to join the programme next time.

UNIVERSEH multidisciplinary programmes (from one semester to joint programmes) are under discussion. Their impact will be much higher as their visibility will be much higher. From our perspective, it will be the major impact on the European Education Area by promoting new programmes that have never been designed before, by mixing more students from different countries, nationalities, cultures and academic backgrounds, as well as using innovative pedagogical models to deliver these courses.

In parallel, the partners have developed pilot activities and webinars to encourage the use of innovative pedagogical approaches, involving 70+ students and 35+ teachers. A large number of innovative pedagogical methods have been used during these pilot activities, ranging from peer teaching, personal learning network to the use of Padlet, Gathertown, AR or VR. Instructional Designers (IDs) have been nominated to support Professors in building their future courses, mostly for the use of modern techniques and digital tools.

To support the pedagogical approaches, a first version of Moodle has been designed and all courses start to have their pedagogical resources online accessible to all UNIVERSEH students. A new version will soon open, using the "privacy-by-design" approach.

The mobility experience of the students in the framework of the project is improved thanks to the "Join the Crew" programme, which aims at making students feel at home at partner's universities. Through the work on harmonising welcome practices, developing common standards and ensuring a smooth recognition of credits, the Alliance is making

Communication material examples for the « Join the crew » programme, and the language cafés.
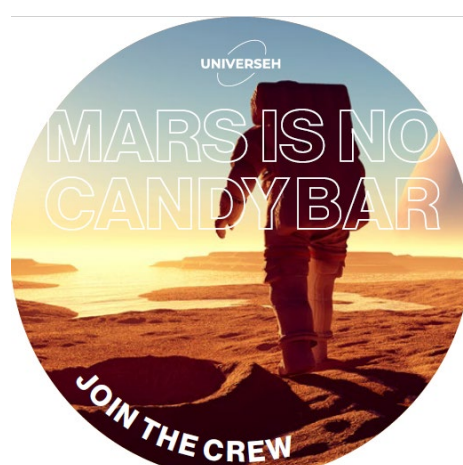
mobility more attractive for its students. Both short term mobility (summer schools) and long term mobility (in the framework of the MIIA) have been developed.

Moreover, the multilingualism plan is being implemented, with a number of activities already put in place such as "language cafés", intensive language courses, preparation courses for language tests...

Finally, courses on European Values are to be finalized in the next months and will be proposed to all students of the 5 universities of UNIVERSEH. These courses aims to contribute to the promotion of common European values and a strengthened European identity such as in terms of diversity, global cultures, across borders, sectors and academic disciplines, and should have a very deep impact on students and staff.

A mobility platform (called 'MOPLAT') has been designed to inform students and staff from partner universities regarding all useful information: university description, accommodation, academic calendar, insurance, cost of living, venue, travels, campus services, etc. This information easily available is on the UNIVERSEH website and has been designed in three parts or "levels" of involvement and information needed: "start your mission", "ready for lift-off" and "discover new universes".

Student involvement

Significant progress has been made towards student involvement in UNIVERSEH, both in terms of student participation in project management and governance, and in the development of student-led activities. The Student Council has gradually developed its activities, further defining its role, and ensuring a student representation in the Governance Bodies (12 students) and in all the work packages (e.g. 10% of participants to the WP3 meetings are students).

Moreover, 2 of the 3 conferences for students by students on equity, inclusion & diversity have been delivered in Toulouse on the 5th of October 2021 (hybrid event) and in AGH in May 2022 (in-person event).

Pictures from the Student Conference organised in Toulouse on the 5th of October 2021

Finally, students have promoted UNIVERSEH in their home university, with the structuring of their activities by creating specific working groups to lead specific projects, such as seminars or conferences. For instance, one conference on the European cooperation in the space domain" has been held in Toulouse on May 12th, 2022, supported by Toulouse Métropole in the framework of the "Week of Europe".

Students involved in UNIVERSEH, at the Toulouse City Council, Oct. 5th 2021

Flyer of a local conference organised by UNIVERSEH Students

Development of links with businesses

The impact of the project activities on the development of links with businesses has been twofold: the development of new courses to train students for the future skills needs of businesses and the implementation of entrepreneurship activities together with industrial partners.

Regarding the latter, a first training programme called "Startech" on geodata has been held in Toulouse in October 2021 (see D4.5). A (virtual) hackathon has been organised in Luxemburg by local actors (UniLu, the TechnoPort, In Tech) in November 2021: "SpaceHack". Many major players and sponsors participated to this event, which will be held again in Spring 2023. Both events aimed at contributing to local development especially through the strong involvement of local stakeholders. Additionally, the Unicareers event held in Luxembourg with a dedicated UNIVERSEH / Space corner enabled partner businesses to share job and internship offers.

Sustainable development goals

The UNIVERSEH alliance directly contributes the promotion of the sustainable development goal focusing on access to quality education. Indeed, the Alliance is developing activities within its WP6 Equity, inclusion and diversity is paving the way for the European University of the Future to provide accessible, inclusive and reliable programs for students irrespective of background or gender. Additionally, through WP2 on Mobility and Multilingualism the Alliance is supporting access to mobility for all students, ensuring that a highly skilled professional enter the Space sector job market. Gender equality is also a major focus of the Alliance's work on inclusion, and is particularly relevant in the field of Space, which, studies show, is still a male-dominated sector of the industry.

The space component of the project and the Alliance's privileged relationship with the diverse European space ecosystem directly contributes to the implementation of the European strategy for the development of space activity, and therefore to the sustainable development goal on Industry, Innovation and Infrastructure. These contributions have been highlighted during the Conference on Space and the Universities of the future held in Toulouse on October 4th, 2021 where associated partners taken part in round tables with engaging topics for the future in order to create a synergy of reflection between education and the space ecosystem on future issues.

Adaptations

The project was designed and submitted before the Covid-19 crisis. As a result, a lot of activities that were planned were no longer relevant in a context of travel restrictions and social distancing. The partners have had to adapt to

working in this complex sanitary situation and have learnt to work together through virtual meetings. Events have been turned to webinars, and the relevance of digital tools for hybrid and virtual classrooms has been even more reinforced.

The main impact of the sanitary situation has been on the mobilities: the progress towards the objective of 50% mobility within the alliance has been dramatically reduced for the first year of the project (see annex 3). This issue has been discussed with other alliances as part of various networks (FOREU2, national networks…) and this was also an opportunity for networking and sharing good practice.

Another aspect of the project that was underestimated at the start was its IT dimension, and more specifically the need for a robust learning management system platform. As a result, the partners have had to adapt and UT has created an initial version of a UNIVERSEH Moodle. Currently, uni.lu is developing an upgraded version of the UNIVERSEH Moodle, with a single sign-in, that will be ready for the new UNIVERSEH courses starting in September.

A questionnaire was circulated in month 18 among the teams of the 5 partner universities (including 5 third parties). It enabled the identification of a difficulty in disseminating information between the work packages, as well as between the governance bodies. Some respondents emphasised the need for more cooperation between the working teams. To meet this concern, WP1 General management and coordination, with the help of WP7 Sustainability and dissemination, has set up an internal newsletter, which aims at presenting each WP and partner's achievements. A process of information flow between the governance bodies and the work packages has also been clarified. As this issue has only recently been raised, the project management team is now focusing its efforts on providing other innovative solutions to facilitate the flow of information.

As university calendars create variations in the schedules of the students involved in the project, the project management team quickly identified the importance of satisfactory stability in the student involvement in some of the working groups. The presence of students in governance bodies and work packages meetings was always very assiduous, although it was noticed some were more discreet and did not have the time to properly prepare each meeting. The task of support students in their implication was given to a person recruited from the project management team from month 18. This responsibility complements the support of the project's stakeholders network in understanding some specific issues related to the complexity of an ambitious European project.

Benefits for the partner universities

The project activities have been implemented by dedicated contact persons at each partner university, and involving students' representatives. However, the impact of the project goes far beyond this (relatively) limited number of people involved. Indeed:

- the UNIVERSEH student community is growing, local teams are formed, organising local events to raise awareness about the project, about space studies and the space sector, as well as supporting inclusion and diversity (e.g. local student team in France organising activities to support Ukrainian refugees, activities on diversity in Space organised during diversity day at UDUS…). The Governing Board supports the recognition of Student Involvement in the project through a certificate. Moreover, the student engagement in the project goes beyond the lifetime of the project with the creation of a Pioneer's group, gathering former student representatives and aiming at supporting the project's activities and disseminating its results.

- the teachers involved in the project activities are not only the ones delivering UNIVERSEH courses, but, for instance, the use of innovative pedagogical models is spread through the partner universities thanks to dedicated workshops and online seminars.

Impact on the European Space environment

UNIVERSEH has received 65+ letters of support, and a "stakeholders' committee" has been settled to gather all stakeholders interested in the UNIVERSEH project. The Conference on Space and the universities of the future, on the occasion of the kick-off meeting of "Beyond UNIVERSEH", the Alliance's research project, has been the opportunity to welcome academics and most of our stakeholders in the "Cité de l'Espace" in Toulouse. Over 200 participants, with including a large part of stakeholders took part in roundtables around different topics:

- "Employability and future skills: the role of SMEs and corporations in UNIVERSEH",
- "Future skills in Europe in the space sector",
- "How can stakeholders and UNIVERSEH benefit from each other",
- and "Ensuring equal access to all students to a high-quality education"

This event had a strong impact among stakeholders and more globally some major players of the European Space Environment, especially thanks to the very high level of representatives among invited people: Christophe Grudler from the European Parliament, Géraldine Naja (remotely) Director at the European Space Agency, several representatives from national space agencies, and many other participants from AIRBUS, Thales-Alenia-Space, the European Investment Fund, etc.

Programme of the Conference on Space and the Universities of the Future in Europe, Toulouse, Oct 4th, 2021

A current action supervised by the Advisory Board aims to increase the number of stakeholders in the 5 countries and beyond. If we reach new major players in Europe, we will increase our visibility among them and in Europe globally. It will be also the opportunity to go ahead on the sustainability of the project.

Beyond the five countries represented, the consortium aims to expand by welcoming two new members, including at least one from the southern zone. In particular, we are targeting countries that are important players in the space sector in Europe, and that would also bring into the project more key stakeholders such as national space agencies and businesses.

2.PARTICIPANTS & PROJECT MANAGEMENT

2.1 Participants

Consortium cooperation & division of roles

⚠️ *Not applicable for mono-beneficiary grants (single applicants).*

Report on the way the beneficiaries and third parties work together (linked third parties, subcontractors, partner organisations, third parties giving in-kind contributions, key stakeholders, etc.).

Please include also the following aspects in your response:

a) *Overall cooperation between the consortium full members towards an institutional cooperation becoming systemic, structural and sustainable and towards involving the different faculties and departments of the different partners*

b) *Deviation regarding the involvement of full partners (if any)*

c) *Overall cooperation with the associated partners and their contribution to the activities*

General consortium cooperation

The rule stated at the beginning of the project was that all partners had to be involved in all the work package's implementation. As a result, each work package is coordinated by a partner, and involves representatives from all the full partners, ensuring a good cooperation on all the aspects of the project and involvement of a large number of faculties or departments of each member in the project (e.g. international offices, professors, administrative staff, equality and diversity offices…). Each partner coordinates at least one work package, except UT and Uni.Lu that coordinate two, and work packages leaders ensure collaboration between their work packages on transversal topics.

Locally in Toulouse, the work has been spread among the third parties, and the organisation is the same: all third parties are involved in all the work packages meetings locally, with one local work package leader, representing "Toulouse" at the consortium meetings. This local work is coordinated through a local steering committee.

Ensuring the representation of humanities in the project

One of the main objectives of UNIVERSEH is to become a comprehensive university in Space. The involvement of humanities faculties and departments is therefore essential for our Alliance, along with STEM disciplines. Given that our theme is Space, ensuring the involvement of humanities as not been the easiest objective to achieve. In order to support this, partners agreed that UT will lead a working group on the involvement of humanities in the project (recruitment of a person in charge of facilitating this activity is in progress).

Cooperation with associated partners

Associated partners (stakeholders) are mainly involved in the project through the Advisory Board and the Stakeholders' Committee, but they have also been involved in the project's activities. In particular, they have a key role in the implementation of WP3 (Interdisciplinary and cross-sectoral curricula) and WP5 (entrepreneurship and innovation), for example through a questionnaire on future skills in the space sector, for conferences and meetings (Spacehack, and Unicareers in Uni.lu). Stakeholders are also represented in the Quality Assurance Committee and they contribute to student activities (eg. local conferences). Additionally, a person has been recruited within the project management team in Toulouse to facilitate the network of stakeholders (including local stakeholders) and another person is being recruited in UDUS.

2.2 Project management

Project management

Report on the functioning of the overall project management and decision-making processes.

Please include also the following aspects in your response:

a) *Involvement of students, staff and researchers in decision-making and implementation of activities*

b) *Involvement and support of the highest decision-making authorities of the partners (rectors, vice rectors, etc.)*

c) *Existence of a partnership agreement between all full partners*

d) *Tools (e.g. IT tools), communication channels and methods to manage the partnership and ensure cooperation*

Decision making in the UNIVERSEH Alliance

A Consortium Agreement had been signed between the project partners, as well as bilateral agreements between UT and its third parties.

The general decision making rule is the consensus, and if a consensus cannot be reached, then each member of each governance body has a vote. The voting process has seldom been used in the first 18 months of the project, as most of the discussions in the governance bodies led to a consensus being reached. Terms of Reference (ToR) for each governance body have been drafted, based on the Consortium Agreement. Some of these ToR have been revised to better reflect the evolution of some of the bodies (e.g. the Student Council electing its president, more detailed rules on agenda setting for the Steering Committee to better manage time during meetings).

Governance
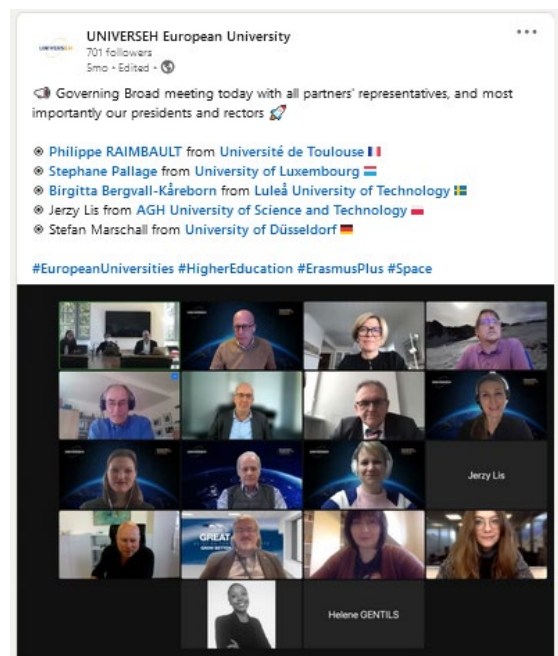
A virtual meeting of the Governing Board, February 2021

All the governance bodies described in the Grant Agreement have been put in place, as follows:

- The Governing Board (GB), the highest governing body, in charge of setting the vision of the project, composed of the Rectors of the full partners, and a Student representative. The GB met 3 times (virtually and in-person) during the first 18 months of the project. One of these meetings included an update from all the work package leaders of UNIVERSEH and Beyond UNIVERSEH on the progress of their workplan. Another meeting, along with a joint meeting of the Advisory Board and the Governing Board is planned.

- The Steering Committee (SC), is in charge of the general coordination of the project and is composed of a representative of each full partner, as well as work package coordinators and two student representatives. The SC met 10 times (virtually and in-person) during the first 18 months of the project.

- The Academic Council (AC), oversees all learning and staff development activities and their certification and is composed of the five deans or vice-rectors for education of each full partner and three students representing the bachelor, master and PhD levels. The AC met 7 times (virtually and in-person) during the first 18 months of the project.

- The Student Council coordinates student involvement in the project and is composed of up to 3 student representatives per full partner. Initially, it was only two student representatives per partner, but in order to ensure a better representation of students across all the project's activities (see below student involvement), it was necessary to share the work between more students. Additionally, the students decided to change the mode of chairing the Student Council, to elect a president. The Student Council met 8 times (virtually and in-person) during the first 18 months of the project.

- The Advisory Board (AB) coordinates stakeholders' involvement in the project and is a representative subgroup of the Advisory Committee (composed of all project's stakeholders). It is currently composed of 11 members (European Space Agency, Airbus…). It is chaired by a President and has met once virtually during the first 18 months of the project (the Advisory Committee also met once).

- The Quality Assurance Committee (QAC) is responsible for quality monitoring and composed of one representative per full partner, one student representative and one stakeholder representative. The QAC met 4 times (virtually and in-person) during the first 18 months of the project.

Most of these Governance Bodies (Governing Board, Student Council, Advisory Board and Student Council) are shared with Beyond UNIVERSEH, supporting a shared vision for the Alliance.

Project management team

The project management team is based in Toulouse. It consists of a project coordinator, a project manager and a project assistant and, more recently, a stakeholders' network & student engagement facilitator. Local project management teams are also in place in all the partner universities, including third parties in Toulouse.

Regular project management meetings (WP1) are organised to share information, review risks, prepare reports and documents. Similar meetings are also organised in Toulouse with third parties, to ensure efficient management of the funding.

Student involvement

As described above in the Governance part, Students have a dedicated governance body and have representatives in all the other Governance bodies (except AB). Additionally, and to ensure a better understanding of the project and a better involvement of students in all the project activities, student representatives are involved in all the work packages.

Tools

Various tools have been used to ensure a good level of cooperation. A dedicated UNIVERSEH Google Work Space (GWS) has been put in place for document-sharing and collaborative working. General information is accessible to all (e.g.

Agreements, Deliverables, Contacts…) and each work package has a dedicated folder. The project manager ensures regular communication with partners through e-mails and one to one meetings. Two general meetings in-person have been organised so far (October 2021 and May/June 2022), with Governance Bodies and work packages meetings for both the UNIVERSEH and Beyond UNIVERSEH projects. Finally, a newsletter has been put in place to ensure that all work package contacts have a good overview of what are the ongoing tasks in the other work packages of the project.

Follow-up to EU recommendations

Highlight measures taken based on any recommendations provided so far (including the evaluation report of the alliance's application, follow-up to EU monitoring or project reviews, if applicable). List each recommendation/comment and explain how they have been followed up.

The UNIVERSEH Alliance has not received any specific recommendation after the Grant Agreement Preparation Stage. However, partners ensure that they follow up on the recommendations contained in the Evaluation Summary Report, as follows.

Links between research and education and innovation

The Evaluation Summary Report states that "The alliance needs to strengthen and expand cooperation linking education to research and innovation, as compared to what is already done by the alliance, through innovative and new structural models" and that "The links with research should be more elaborated".

The UNIVERSEH Alliance has addressed this recommendation, mainly through close links between its research-oriented project Beyond UNIVERSEH, which started in September 2021 and the main UNIVERSEH project. Both project share common governance bodies to ensure consistency. Additionally, discussions in the Advisory Board (gathering the project stakeholders) on a dynamic European Space ecosystem provide useful insight on how to better link the project with innovation.

Geographical balance

The Evaluation Summary Report states that "The alliance includes five institutions from three geographical regions (Northern, Western, Central and Eastern Europe) as full partners, which provides a good geographical coverage."

The Governing Board of UNIVERSEH wanted to improve the geographical coverage of the project by approving the extension of the Alliance to two more partners, focusing primarily on finding partners from Southern Europe. A call for expression of interest has been published and the new partners, once selected, are expected to join the project for the application for the next funding phase, as well as being involved in current activities.

Engagement with local community

The Evaluation Summary Report states that "Engagement with local community through developing links with high schools and local ecosystem stakeholders in order to ensure a closure alignment of the courses offered with the demands of the labour market. This is a rather limited approach"

The engagement with the local community has been further developed in the first half of the project implementation and will be reinforced in the coming months, with the recruitment of two people dedicated to stakeholder engagement (at UT and UDUS). Initial activities included the development of links with secondary education institutions in order to promote role models and encourage careers in space among a young audience, in particular for under-represented groups in the sector, the mapping of current and future skills need, the organisation of events and roundtables with local businesses or networks, including a conference organised by students.

Quality of the alliance cooperation arrangements for mobility

The Evaluation Summary Report states that "The proposal indicates that appropriate cooperation arrangements are in place to establish an integrated comprehensive framework for mobility, qualification recognition and monitoring student experience. It does not refer to further administrative barriers. In this particular respect, it does not demonstrate an analytical and solution-driven approach"

In order to work on this recommendation, administrative barriers have been identified and tackled by a series of joint actions taken by the 5 partners, such as the signature of a Multilateral Inter-Institutional Agreement for Erasmus+ mobilities and the Feel at Home programme, renamed "Join the Crew". Dedicated communication channels will be put in place in the coming months to monitor and improve student experience.

Sustainability and dissemination

The Evaluation Summary Report states that "Each institution mentions different activities that could contribute to sustainability but the proposal lacks a thoughtful and coherent strategy that really addresses the full long-term vision that was defined for this proposal"

In the first half of the project, partners have shared significant resources and committed to the implementation of the project's long term vision. All the partners are involved in the implementation of all the work packages, thus ensuring that all the project's outputs are endorsed by the entire Alliance. The Steering Committee coordinates this effort, to ensure a coherent strategy. Examples of common investment in an activity to ensure the dissemination and sustainability of the project are varied: preparation of the participation to the International Astronautical Congress not as individual partners but as UNIVERSEH, creation of a common Moodle, of common criteria for UNIVERSEH courses (5 stars), creation of a student "Pioneers' Group"…

2.3 Dissemination, communication & visibility

Dissemination, communication & visibility of EU funding

Report on the dissemination and communication activities undertaken in the framework of the project. In this regard, describe the human and financial resources, tools and communication channels, and target groups. Explain how activities, outputs, and good practices could be replicated and shared with other higher education institutions beyond the alliance.

Describe how the visibility of EU funding was ensured.

If you created website(s) and/or social media accounts related to your project, please provide the links, as well as any quantitative indicators evidencing interaction.

Objectives and target groups

In the framework of its communication and dissemination plan, the UNIVERSEH communication policy has the objective of delivering its strategic message to all its target audiences: present and potential students, employees of partner universities, other universities and networks, national and international administrations, policy makers, industrial companies, and society in general.

Resources

Dissemination and communication on the project has been led by Uni.lu, as coordinator of the dedicated work package, with the involvement of all project partners, as well as of students. The resources committed to the project have mainly been human resources (part-time positions specifically dedicated to UNIVERSEH at uni.lu and UT, as well as people from the communication department of all the partners, including third parties). Partners have dedicated financial resources at various levels, for example for the creation and maintenance of the website (uni.lu), for the organisation of a major event involving stakeholders (UT), or for the creation of promotional material and brochures.

Tools

A website has been created, along with a graphic charter and template documents (report, presentation, poster…), all available for the project partners on the project website. This allows for the project to have a single visual identity, wherever it is presented.

Communication on social media is effective through the project's official channels (Facebook with 419 followers, Twitter with 266 followers, LinkedIn with 690 followers, Instagram with 385 followers), but also through student's social media channels (mainly the French UNIVERSEH student team on Instagram, with 118 followers and Facebook with 122 followers).

Dissemination

Even though it is early stages in the project implementation, dissemination of the first activities and outputs of the UNIVERSEH project has started. In October 2021, a conference organised in Toulouse gathered the UNIVERSEH partners as well as a large number of stakeholders. On this occasion, the initial results of a survey on the future skills in the space sector were presented to the audience.

Additionally, UNIVERSEH has been presented at various events and conferences (International Astronomical Congress, EARMA conference, various events of the French Presidency of the European Union, European Student Assembly, Pegasus network meetings…), and is involved in the various working groups of the FOREU2 Alliance.

Promotion of the participation of UNIVERSEH in the European Student Assembly

The project's Youtube Channel also contributes to the dissemination of the projects' outputs and good practice, though videos on what is UNIVERSEH, what makes a UNIVERSEH course, and videos of women working in the space sector (up to 730 views per video).

Visibility of EU funding

All project partners are responsible for ensuring the visibility of EU funding on all the documents they are producing for the project. All the templates developed for the project have the EC logo. Students on mobility for the project's short programmes are informed about the funding of the project.

2.4 Sustainability & continuation

Sustainability, long-term impact & continuation

Report on any activities regarding your sustainability analysis/strategy (if any).

Describe the strategy to ensure sustainability of results and long-term impact.

Please provide information on any existing or foreseen synergies with EU or other sources of funding, specifying whether they fund the activities foreseen in the work programme of your alliance, or additional activities.

Long term strategy

Given the number of people involved in the project from each of the project partners, it is clear that all the project partners are committing time and resources to the implementation of the project. Strong links have been established, and the Alliance has started to think about its future, after the initial three-year funding and to prepare for the next four years. In order to do so, an online questionnaire was sent to all the project contacts. 53 responses were received, giving feedback on the current project and suggesting ideas for the next one.

The Governing Board decided in February 2022 to expand the Alliance to two more partners, in particular from southern Europe to ensure a better geographical coverage of the project. A call for expression of interest was published, with 4 applications received to-date. These will be examined and the selected new partners will be involved in the UNIVERSEH 2.0 project preparation (renewal after 2023) and insofar as possible, in the current project implementation, to ensure they be fully integrated in the Alliance as soon as possible. We will also work to integrate new partners into the Alliance's research project, Beyond UNIVERSEH.

During the first 18 months of the project, the Alliance attracted new supporting partners, thus widening its sphere of dissemination and collaboration with Space ecosystem: the European Space Agency (ESA), EIT - Climate KIC, AXA XL, the European Investment Fund (EIF), the German Aerospace Center (DLR) and the Asteroid Foundation.

Finally, the Governing Board discussed several times the possibility of creating a legal structure for UNIVERSEH. It has not been prioritised for the time being, as the opinion of the Governing Board is that the Alliance is currently working very effectively at this informal level, and some partners face legal barriers to the establishment of a legal entity. However, the recommendation is to follow very closely the work of the European Commission and best practice shared by other European Universities on this topic, to assess the potential options for UNIVERSEH.

Synergy with other funding

Most of the partners have been able to attract additional funding for the project. UT has received funding from Agence Nationale de la Recherche, which co-funds the project's activities. UDUS has received funding from DAAD for additional activities (languages courses, communication material related to mobility…), AGH submitted a project to National Agency for Academic Exchange for cooperation with Tohoku - Japan and UNIVERSEH partners, whereas LTU and Uni.Lu have secured additional internal funding.

Additionally, partners are using complementary Erasmus+ funding for some of the mobilities within the alliance (long term mobilities, blended intensive programmes…).

ANNEX 2 – GUIDELINES FOR GRANTING THE STARS IN THE 5 STAR SYSTEM FOR NEW COURSES

Guidelines for granting the stars in the 5 Star system for new courses

List of the 5 stars

* Active learning techniques
* Digital content
* Interdisciplinarity
* Multilingualism
* European

General terms

A new UNIVERSEH course should have a minimum of 3 stars.

The star rating will be used to label UNIVERSEH courses and make clear the specific objectives of courses linked to the UNIVERSEH project. In the second phase of the project (year 4+) we will strive to increase the number of stars for all courses up to 5.

In addition to the star rating priority is given to being able to provide courses over the matrix of 6 academic fields combined with 4 space application segments.

Matrix Application Segment vs Academic Field

Application segment / Academic field	Our Earth from space	Sustainable space and Earth orbit	Space exploration and discovery	Space settlement and resources
Science and engineering				
economy-business-finance				
Medecine and health				
Social and Human sciences				
Art and cultural studies				
Innovation patents and entrepreneurship				

Also we will strive to:

- Involve all partners
- Work in collaboration with the other WPs
- Harmonise efforts between partners through collaborative decisions.

A minimum of ten courses will be proposed, with an indicative minimum number for each partner according to the ratio of person-months attributed for WP3. The target for each course is 3 ECTS (around 75-90 student work hours and approximately 30 hours of structured learning). However, each partner can propose additional courses above this minimum if they have sufficient resources to do this and courses have a minimum of three stars.

Each partner assigns stars according to the information given by the course leader (s) and the guidelines agreed together. Each course proposal will have to include a few lines justifying the stars it want to obtain. A purpose built template is available for this.
The stars given to a course will be validated by the Academic Council (TBD). A course of less than 3 stars will not be labelled "UNIVERSEH"

A Moodle platform will be setup specifically for UniverseH courses support. This platform will be the unique portal for student enrolment and authentification. Moodle is a Learning Management System (LMS) for implementing the digital part of courses and to set up communities of learners around content and activities. Each UniverseH course will be present on this platform and will be able to make use of integrated tools with many resources and a very rich set of activities. It will be also possible to integrate WP4 Micro-content ADN or IREAL labs into the various course spaces.

It is expected that the breakout room functionalities offered by classic videoconferencing softwares (Zoom, BigBlueButton, Webex, Teams…) are widely used. The basic use of a web platform for diffusion of course material or collection of student work will not be taken into account for the "digital" star and will be mandatory.

The courses have to be defined in terms of objectives and involve at least 2 groups of students from different universities, possibly from different backgrounds

1. The course should include active learning techniques

Student active and student-centred teaching is something that is emphasised in research and literature about quality in student learning in Higher Education (ESG European standards and guidelines, Chickering och Gamson 1987; Ramsden 2003; Hedin, 2006, Pettersen; 2008, Marton och Säljö 2000, High Level Group on the Modernisation of Higher Education, 2013 etc).

The essential points of student active learning design are:

- outcome-based, where the course design aims at developing the skills to achieve the program outcomes
- based on constructive alignment (aligning the predetermined competencies, the learning and teaching activities, and the assessment types).
- allows for the student to process and reflect on the knowledge
- provides authentic cases to work with and experiences to mimic future working life
- the assessments also measure practical and generic skills such as critical thinking, analytical competences, communication and collaborative and intercultural skills
- considers the student an active agent in their education (not a passive receiver of the teacher's knowledge) to foster student independence and prepare for lifelong learning
- for UNIVERSEH using the methods developed in WP4 such as
  - 4.4 "student to teacher", emphasising the students' active involvement and responsibility for processing course content and challenging the traditional role of a student as a passive receiver by requiring students to become teachers for parts of courses
  - 4.5 Hybrid learning covering the notion of flipped classroom, where the students prepare asynchronously before meeting up for deep discussion and interaction in class.

The teaching methods should include extensive use of innovative active learning techniques. Below is a non-exclusive list of ideas that are presently proposed and supported by WP4; webinars will be organized on each. During the whole course, students will be partially supervised and will work independently.

UNIVERSEH – European Space University for Earth and Humanity is an alliance of

- Students are allowed to explore independent and active roles which could involve problem/project-based learning, students contributing to teaching by creating material or acting as a source of knowledge for other students. UNIVERSEH proposal, task 4.4
- «*A hybrid approach to course delivery combines face-to-face classroom instruction with online activities. The virtual classroom takes the concept one step further, and completely eliminates the physical meeting place. The aim is to be able to connect in synchronized sessions from anywhere in the consortium, in high quality and with an audio-visual production. This re-creates the face-to-face learning experience students can have in on-campus sessions.* » cf. UNIVERSEH task 4.5
- 4.3 PLN – Personal Learning Network, explore and benefit from the net-based accessibility to professional networks in the area of the future profession. Tasks and assessments require student to develop the digital skills in locating, accessing, curating and sharing digital content in their own relevant personal network during their education.
- Problem based learning and solving.
- Flipped classroom: The Flipped classroom is a pedagogical approach that reverses the nature of learning activities with the teacher (e.g., in the classroom) and alone (e.g., at home). Traditional learning roles are modified to include « course at home" and « homework in class". In particular, this approach can use digital content to deliver lessons asynchronously, making extensive use of the ADN (Aerospace Digital Nuggets) reusable micro-content proposed in WP4.8. Students can even prepare labs at home with the WP4.7 IREAL platform (Interactive Remote Experiments for Active Learning) and then discuss during a physical or virtual class with the teacher.

2. The course should be digital

Digital content is both digital aspects of a course such as pre-recorded content, software, digital tools, asynchronous collaboration by the use of a learning platform and also course design as in hybrid Learning, blended learning, and MOOC-like mini-courses with flexible modularized thematic content available online.

In our UNIVERSEH project the methods developed in WP4 that relate to benefit from the accessibility advantages that digital education allows for are:

- as in 4.5 Hybrid learning and 4.7 virtual Labs where student from several parts of the consortium unite in the same course, and in the same class, but are mixed in virtual or physical presence
- 4.8 ADN – Aerospace digital nuggets where flexible digital modules allow for repetition on the student's own initiative (and time) and also integration of self-study preparation in regular courses.

The course should include significant use of digital tools, among the following items:

- Specialized realtime polling devices and smartphone applications (such as <u>iQuiz</u>, Socrativ, Wooclap, or Plickers…) that allow a large group of students to be engaged in a regular practice of formative assessment through mutiple choice questions (MCQ), either face-to-face or remotely,
- Asynchronous polling systems (such as with the Universeh **Moodle** platform) for formative assessment through MCQ and/or summative assessment such as exams,
- Tools which extend the practice of MCQ by adding a written discussion phase and reproducing the Peer Instruction technique, The <u>myDALITE</u> and <u>Elaastic</u> web platforms for example,
- Social annotation platforms pre-class reading assignment, text and video documents that allow students to collectively study and understand course material, such as <u>Perusall</u>;
- Social annotation platforms for "digital post-its" with <u>Mural</u> or <u>Padlet</u> for example
- Interactive simulation platforms such as <u>PhET</u> (specific simulators for introductory courses on different domains) Remote control of instructional devices (such as LabsLand …) that allow practical work in science to be proposed remotely
- Platforms for pre-recorded experiments (such as **IREAL**)
- « *short reusable learning content by the way of "**Aerospace Digital Nuggets" (ADN**)*» and the **MLearn platform**, UNIVERSEH proposal, task 4.8, proposed by ISAE SupAero

Tools indicated in bold will be supported by WP4, training sessions will be organized, and you are encouraged to use them.

<u>Those underlined</u> are free tools and you are encouraged to use them also.

UNIVERSEH – European Space University for Earth and Humanity is an alliance of

A certain degree of homogeneity in the choice of the digital tools will be required to make student learning easier, taking into consideration the IT policy of each institution…

3. The course should be interdisciplinary

The course should have a 4-dimensional coherence
- justification and detailed motivation of the interdisciplinary association: what are the targeted skills and knowledge for the students…
- the teaching teams involved must come from different academic fields as listed below
- the public of students concerned (either a heterogeneous group of several academic fields, or an academic field specifically identified for an introductory course in another academic field), teaching techniques which fit for the interdisciplinary practice (introductory conferences, problem-based learning, group project…)

Interdisciplinarity should be understood as the involvement of two (at least) of the academic fields listed below:

- Science & Engineering
- Economy, Business, Finance
- Medicine & Health
- Social & Human Science
- Art & Cultural Studies
- Innovation & Patents, Entrepreneurship

Examples of possible combinations:

- Non-specialist opening courses, designed for students from other fields
- Develop the systemic approach and the ability to work in a multidisciplinary team with work in project mode between teachers and students from different academic fields
- Development of training through research with specific bi-disciplinary associations (several disciplines identified in the teaching team and in the student team)
- Awareness of global issues, with courses / conferences / projects open to all on a voluntary basis

4. The course should be multilingual (course in at least 2 languages)

- **3-year objective:** The course should be understandable by students of two different native languages of the consortium. Also, the course should include teaching in two different languages with a significant use of each.

- **7-year vision:** The course should be understandable by all students within the consortium. At least two languages must be used for new courses. At least one additional language should be added for already existing courses. One, of these languages could be English

The languages to be used must be clearly indicated to the students before the beginning of the course.

A non-exclusive list of suggestions is given below for the 3-year objective but the idea is to be flexible. Any choice may be made as to the best method to respect the overlying guidelines given above.

- Two full versions of the course in each language
- For asynchronous (on line) learning - talking in language 1 + audio track or subtitles in language 2
- Use of an appropriate mix of oral and written content in both languages (e.g, talking in one language and slides in another).
- Exchange on projects or discussions are given so as to be understandable to all students
- Specific documents, films etc are given in their original language with necessary explanation
- Teaching by a tandem of teachers of different native languages
- Teaching by one teacher fluent in both languages
- Ice breaker games (small amount of course time only) or discussions in both languages
- Collaboration with members of WP2 in producing the course
- Collaboration with WP6 - sign language can count as one of the two languages

In all cases a lexicon (and if possible a glossary) of the most important technical terms used should be made in both languages (this could be linked

with: https://www.checkyoursmile.fr/app.php as well as helping to create the UNIVERSEH space dictionary).

Student Assessment (3-year objective)

- ***At the bachelor level:*** The language must be chosen so that the students are linguistically at ease. In most cases this will involve having (identical) versions in the students' native languages.

- ***At the masters level:*** The assessment can be given either in English or in both of the two languages used for the teaching

Student Assessment (7-year vision)

At least part of the assessment will be designed to test the ability of the students to work in at least two of the different languages chosen.

5. The course should be European cooperation with another Universeh partner

The course should result from the cooperation between two Universeh partners from at least two different countries.

Contribution of the partners should be balanced (40%-60% for example in case of 2 partners)