

Project: Network of Competence on Internet of Things [NEON]

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Work Package 6: Quality Control and Monitoring

Title: D6.3b Second report on project implementation

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Participating Organisations: UNI-KLU, UC3M, UNC, UNS, UNMDP, UdelaR, UCU, INCUTEX, ALASSIO, ALENET, TEAC, EYCON, ALLIANSYS SRL, Santex, TELECOM ARGENTINA S.A, CONTROLNET S. A., ABM ingeniería y sistemas S.R.L., UTE, CONAE.

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0	19.12.2022	Lianet Méndez. Ana García Armada	UC3M	First draft of the report.

LIST OF ACRONYMS

AP	Assurance Point
EU	European Union
HEI	Higher Education Institution
ICT	Information and Communications Technologies
IoT	Internet of Things
LA	Latin America
LFM	Logical Framework Matrix
MB	Management Board
NoC	Network of Competence
QC	Quality Control
QCM	Quality Control and Monitoring
QCMB	Quality Control and Monitoring Board
WP	Work Package

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1 INTRODUCTION

The main objective of project NEON is to improve and diversify the training of human resources, both in the academic field and in the public-private sphere by motivating innovative technologies in the Information and Communications Technologies (ICT) field, particularly in the Internet of Things (IoT). The main goal of the institutions that make up the consortium is the creation of a Network of Competence (NoC) for IoT. The project aims to offer the framework and support to foster industry collaboration in each country of interest, namely, Argentina and Uruguay, and, at the same time, provides the possibility of exchange and advice from two European countries: Austria and Spain, that have demonstrated significant development and innovation in the IoT field. The project goals are to be achieved by updating and improving the curricula of different university degrees, creating at least 5 laboratories on IoT, training their academic staff and establishing collaborations between the local and regional industries.

The present document is the continuation of the annual reports on the execution of the project developed by WP6. This document contains the status of the activities to date, including information regarding the deliverables, tasks and, milestones of the first and second years and the results of the numerical indicators. It also includes the quality recommendations and suggestions of internal reviewers and external experts of the Quality Control and Monitoring Board (QCMB), together with the guidelines on how to accomplish them.

This analysis is useful to prepare an action plan to resolve any problems possibly identified in the future. In addition, this report includes the main conclusions and lessons learned and will act as a useful instrument to all the partners for further improvement over the years.

2 NEON QUALITY CONTROL AND MANAGEMENT

2.1 QUALITY CONTROL AND MANAGEMENT

Quality Control and Monitoring (QCM) activities are performed continuously throughout the project duration. The WP leader is UC3M. The QCM Board (QCMB) has been established at the kick-off meeting by assembling a team of representatives from UC3M, UNI-KLU, UCU and UdelaR, and two students (from partner HEIs). In addition, one external QCMB member has been appointed and is assisted by two external experts who act as advisors to provide inputs and independently assess the project results. NEON exploits the following set of tools for quality assessment and monitoring activities:

- Meeting minutes template: used to summarize the content of project meetings and to verify the coherence with the actual and the planned agenda.
- Meeting / Event Evaluation form: used to assess the degree of satisfaction and utility of NEON events/trainings/workshops considering both scientific and logistical aspects.

- Attendance sheet: demonstrates the attendance to any event.
- Deliverable Evaluation Forms: used to revise and evaluate deliverables.
- Milestone Verification Forms: used to certify the achievement of a Milestone by verifying the compliance between planned and actual timing and the sources of verification.
- Evaluation surveys of the quality of classes and developed material will be developed as the project progresses.
- List of indicators of progress.
- Courses/Internships evaluation forms.

The related documents are available on the Intranet project documentation portal on Confluence; <https://intranet.aau.at/display/projneon/Templates> and in D6.2.

2.2 DELIVERABLES AND MILESTONES

The deliverable 6.2 (Quality Plan) describes the steps and procedures for revision, assessment and publication of deliverables. The milestone approval procedure is similar to the deliverable approval procedure but is more contracted. It is indicated for those milestones that are considered critical for the project's advancement.

The templates to be used in the process are available in the Intranet project documentation portal on Confluence, <https://intranet.aau.at/display/projneon/Templates> and D6.2.

2.3 EVENTS

The quality of the project events are ensured by collecting a variety of information through visits, interviews, questionnaires, consultation, and other forms of activities. These are to bring awareness of the level of satisfaction of beneficiaries and other target groups. A template for feedback is created as a tool of impact assessment of the project activities. This template can be adapted marginally to conform to the specific needs of different events.

In addition, a specific event report template available under the Templates folder on the project's Intranet site <https://intranet.aau.at/display/projbenefit/Templates> is to be filled in and collected by project partners (organizers) for all NEON events (workshops, info days, trainings). The report includes a summary review of statistical data and will help in final reporting.

3 PROJECT ACTIVITIES, DELIVERABLES AND MILESTONES FOR THE SECOND YEAR

3.1 LIST OF DELIVERABLES, TASKS AND MILESTONES

In order to obtain its objectives, the project is organized into different activities and tasks that have the deliverables, milestones and events as its output.

The project deliverables are organized in a form of tangible deliverables (eg. reports, publications, manuals, methodology, plans, printed and electronically available promotional material), as well as intangible deliverables in the form of organized events (eg. training, conferences, seminars, info days, etc.).

The summary of tasks, deliverables and milestones for the first and second year are listed below, according to the project work plan. The associated indicators of progress are depicted in the work plan as well. The indicators of achievement and or/performance include both the ones listed in the original project proposal (from the logical framework matrix (LFM) which is also reported in ANNEX A of the D6.2 Quality Plan) as well as the ones listed in ANNEX B of the Quality Plan and are further grouped according to the Work Package (from 1 to 8):

WP1: PREPARATION

Deliverable/Task/Milestone	Year
T1.1 Survey and analysis of IoT courses in ICT study programmes in relation to modern society and industry needs in the IoT domain	1
T1.2 Consolidate guidelines for curriculum modernisation in cooperation with industry	1
T1.3 Preparation of implementation actions of the network of competence	1
D1.1 Consolidated analysis of educational/industrial needs on IoT in Argentina and Uruguay	1
D1.2 Consolidated project plan of implementation actions	1
M1.1 Snapshot of present situation about IoT in ICT studies in Argentinian and Uruguayan HEIs	1
M1.2 Surveys to enterprises in order to have a feedback from IoT enterprises, mainly for technical contents	1
M1.3 Preliminary summary of industry needs, profile competencies and skills needed on IoT	1
M1.4 Analysis of the state of involved partnership institution's infrastructure related to remote courses, MOOCs, audio video supporting	1
M1.5 Pedagogical advice. Survey to technology & pedagogy specialists. The purpose is to have a feedback and advice about the technological tools for graduate & postgraduate courses	1
M1.6 Project meeting to present the summary of A&U situation and consolidated project plan	1

M1.7 Completion of the action plan and network of competence development guidelines	1
Indicators of progress	
-	

WP2: DEVELOPMENT OF THE NETWORK ON COMPETENCE ON IOT

Deliverable/Task/Milestone	Year
T2.1 Develop a management platform to coordinate the network of competence and to serve as knowledge base	1
T2.2 Develop policies and procedures to regulate the network of competence	1
T2.3 Define the governance of the network of competence	1
T2.4 Partners and network implementation	1
D2.1 Report on management platform to coordinate the network of competence	1
D2.2 Report on the creation of the legal framework for the network of competence	1
D2.3 Report that defines the governance of the network of competence	1
D2.4 Report on network implementation	1
M2.1 Creation of the management platform to coordinate the NoC	1
M2.2 Define the most appropriate legal framework for the NoC based on the local regulations	1
M2.3 Prepare the statute of the network of competence	1
M2.4 Define the network of competence members and their roles	1
M2.5 Meeting of the NoC group to coordinate the activities	1
Indicators of progress	
Indicators of progress from LFM: <ul style="list-style-type: none"> Completion of deliverables and achievement of milestones in due time. Numerical indicators of progress (<i>TARGET</i>): <ul style="list-style-type: none"> Number of partners of the network of competence (10) 	

WP3: TEACHING METHODOLOGIES, MATERIAL AND MODERNISATION OF STUDY PROGRAMMES

Deliverable/Task/Milestone	Year
T3.1 Adoption of new learning/teaching methods, tools, ICT best practices in teaching	1,2
T3.2 Creation and / or modernisation of teaching material related to IoT	1, 2
T3.3 Improvement and implementation of new learning/teaching methods, tools, ICT best practices in teaching	2
D3.1 Web repository for class and lab sessions material	1
D3.2 Report on the modernised teaching methodologies applied to IoT courses	1
D3.3 Teaching and training materials for new and modernized IoT courses	2
M3.1 Identification of modern teaching methodologies	1

M3.2	Collection of preliminary teaching material for new and modernized courses	1
M3.3	Delivery of web repository and platform	
M3.4	Adoption of tools and equipment to enable innovative teaching methodologies	1
M3.5	Development of class material	2
Indicators of progress		
<i>Indicators of progress from LFM:</i>		
<ul style="list-style-type: none"> • Completion of deliverables and achievement of milestones in due time. 		
<i>Numerical indicators of progress (TARGET):</i>		
<ul style="list-style-type: none"> • Number of courses included in the study programmes (5) • Number of labs included in the study programmes (5) • Number of study programmes involved/modified (2) • Number of the study programmes included in the web portal (central platform) (6) • Number of courses on the web portal on IoT (10) • Number of contributions to textbooks published on IoT (1) • Number of students enrolled in the courses on IoT (100) • Satisfactory survey responses of the new learning on IoT (33) 		
<i>Students' satisfaction survey reports (2)</i>		

WP4: DEVELOPMENT AND IMPLEMENTATION OF LABORATORIES

Deliverable/Task/Milestone	Year	
T4.1	Creation of joint university-industry labs and modernisation of the lab infrastructure	1
T4.2	Pilot lab development. The purpose is to develop a complete undergraduate or graduate lab with pedagogical/technological tools in the domain of IoT.	1
D4.1	Report on the laboratory infrastructure and equipment at each LA university	1
D4.2	Report on the created five joint university-company labs ruled by an agreement	2
M4.1	Identification of laboratory infrastructure to be restructured in each LA university and initial steps for the joint university-industry labs	1
M4.2	Establishment of formal links and joint lab operation agreements between universities and companies	1
M4.3	Define the procurement procedure	1
M4.4	Purchase and installation of the laboratory equipment	2
Indicators of progress		
<i>Indicators of progress from LFM:</i>		
<ul style="list-style-type: none"> • Completion of deliverables and achievement of milestones in due time. 		
<i>Numerical indicators of progress (TARGET):</i>		
<ul style="list-style-type: none"> • Number of partner country HEIs students trained (120) • Number of partner country HEIs academic staff trained (60) 		

- *Number of partner country HEIs administrative staff trained (10)*
 - *Number of trainings (5)*
 - *Number of labs created (5)*
- Number of partner country non-HEI individual trained (20)*

WP5: TRAINING AND INTERSHIP IMPLEMENTATIONS

Deliverable/Task/Milestone	Year
T5.1 Creation of a section in the project website where training and internship opportunities are listed	1, 2
T5.2 Implement framework for student training in cooperation with EU partners and industry	1, 2
T5.3 Implement framework for student internships in companies	1, 2
T5.4 Offer techno-economic, entrepreneurial and IPR related training modules	1, 2
T5.5 Implement teacher staff training on technology and modern prototyping tools for IoT	1, 2
T5.6 Implementation of three workshops on IoT and ICT technologies	1, 2
D5.1 Report on the training/internships website section	1
D5.2 Report on the framework for training and internships	1
D5.3 Report on organized hackathons for students of the region	2
M5.1 Define the content and the responsible persons of the website section dedicated to internships and trainings	1
M5.2 Creation of the website section with training and internship opportunities	1
M5.3 Define the requirements and objectives of the training process for both students and teachers	1
M5.4 Define the required resources for the training implementation	1
M5.5 Create the training action plan and agenda for both students and teachers	1
M5.7 Define the organisation team for the proposed hackathon	1
M5.8 Organization of the student mobility for the hackathon	2
M5.9 Hackathon for students. Organized at UCU.	2
M5.10 List industry partners and related internships opportunities	1
M5.11 List professors and related co-supervised theses under the umbrella topic of IoT	1
M5.12 Define technical content for internships and cosupervised theses	1
M5.13 Workshop on teaching methodologies for IoT. Exchange about pilot courses and pilot labs. General consensus about pilot course and pilot lab structures. Pedagogical and methodological contributions. Survey results. Organised at UNI-KLU	1
M5.14 Workshop on communication technologies for IoT. Organized at UC3M	2
Indicators of progress	
<i>Indicators of progress from LFM:</i>	
<ul style="list-style-type: none"> • <i>Completion of deliverables and achievement of milestones in due time.</i> 	
<i>Numerical indicators of progress (TARGET):</i>	
<ul style="list-style-type: none"> • <i>Number of partner country HEIs students trained (120)</i> • <i>Number of partner country HEIs academic staff trained (60)</i> 	

- *Number of partner country non-HEI individual bises (5)*
 - *Number of signed agreement about long-term cooperation between HEIs and non-academic partners (4)*
- Feedback, questionnaires results from clusters and other industrial partners (20)*

WP6: QUALITY CONTROL AND MONITORING

Deliverable/Task/Milestone	Year
T6.1 Establishment of the QCM Board and appointment of an external expert for QC	1, 2
T6.2 Consolidation of areas to be monitored, indicators, and correction strategies both internal and external	1, 2
T6.3 Internal control of project progress and outcomes	1, 2
T6.4 Monitor graduate profiles, improvements in their skills, in correspondence to industry needs	1, 2
T6.5 Collect questionnaires and surveys via social networks (LinkedIn, Angellist)	1, 2
T6.6 Monitor student enrollment statistics in the region	1, 2
T6.7 Establish a monitoring system for employment statistics of graduates	1, 2
T6.8 Establish a monitoring system for entrepreneur attitude and newcos (by means of surveys, databases, etc.)	1, 2
D6.1 Establishment of Quality Control (QC) board and appointment of external experts for QC	1
D6.2 Development of guidelines for QC	1
D6.3 Reports on project implementation	1, 2
D6.5 Report on tools for monitoring student enrolment and employability/employment/entrepreneurial statistics of graduates	2
D6.6 Reports on stakeholders reached beyond the project consortium	2
M6.1 QCM Board establishment	1
M6.2 Quantitative indicator definition for project progress evaluation, as a part of QCMB duties	1
M6.3 Activity report delivered by QCM board to MB once a year	1, 2
M6.4 Define QCM structure	1
M6.5 QCM Board meeting in Madrid	2
M6.6 Implementation of surveys and questionnaires to retrieve feedback on employment from graduates working in partner industries; study and analysis of social networks capabilities with respect to project visibility	
M6.7 Stakeholder appraisal relative to D6.6	1
Indicators of progress	
<i>Indicators of progress from LFM:</i>	
<ul style="list-style-type: none"> • <i>Completion of deliverables and achievement of milestones in due time.</i> 	
<i>Numerical indicators of progress (TARGET):</i>	
<ul style="list-style-type: none"> • <i>Number of milestones reached (64)</i> • <i>Number of meetings (12)</i> • <i>Number of webinars (3)</i> • <i>Number of deliverables (35)</i> 	

- QCMB established (1)
 - Quality Plan (1)
 - Quality expert reports (3)
- Minutes from QCMB meetings (8)

WP7: DISSEMINATION AND EXPLOITATION

Deliverable/Task/Milestone	Year
T7.1 Development of the project web site combined with the web platforms developed in the other WPs. Preparation of the materials to keep the project website up to date with the current activities	1, 2
T7.2 Preparation of exploitation and dissemination plan	1, 2
T7.3 Create promotional and dissemination material targeting high school students and society at large (exploiting also media)	1, 2
T7.4 Organise an annual open event outreaching a wide audience that includes public authorities, industry, students, pupils and non-expert people	1, 2
T7.5 Organise a yearly event (hosted in turn by the HEIs partners) in the form of a webinar broadcasted to all locations to present the study programmes, tips on studying engineering targeting enrolled and prospective students/pupils	1, 2
T7.6 Establish agreements for future double degrees, joint teaching, student mobility beyond the project duration, bilateral agreements within Erasmus+ KA1	1, 2
T7.7 Create an agreement for the maintenance of the web platform beyond the project life time	1, 2
T7.8 Create partnerships for follow-up projects	1, 2
D7.1 Central project web platform linked to the e-platforms developed in other WPs	1
D7.2 Report on exploitation and dissemination plan	1, 2
M7.1 Establishment of a workgroup dedicated to coordinate dissemination actions	1
M7.2 Central web platform design drafted by UNS and approved by the project coordinator	1
M7.3 Central web platform released	1
M7.4 Central web platform linked with the other online services created in the previous WPs	2
M7.5 Webinar on the NoC structure and partners, hosted by UNC	1
M7.6 Webinar on new / modernized IoT courses in Uruguay, hosted by UNC	2
M7.8 Open Event involving the community on studying ICT with the participation of a renowned keynote speaker in UNMdP	1
M7.9 Open Event involving the community on academia-industry cooperation in teaching with the participation of a renowned keynote speaker in UCU	2
M7.11 Preliminary exploitation plan	2
Indicators of progress	
<i>Indicators of progress from LFM:</i>	
<ul style="list-style-type: none"> • Completion of deliverables and achievement of milestones in due time. 	
<i>Numerical indicators of progress (TARGET):</i>	

- *Project webpage (1)*
- *Number of visits to project website (100)*
- *Central web platform (1)*
- *Number of visits to web platform (200)*
- *Designed, printed and disseminated project promotion material (10)*
- *Newsletter, e-bulletins, newspapers (3)*
- *Reports from presentation meetings, presentations for media and interested groups (6)*

WP8: MANAGEMENT

Deliverable/Task/Milestone	Year
T8.1 Creation of a project management (PM) board	1
T8.2 Creation of an e-platform for project management	1
T8.3 Monitor and coordinate the overall project	1
T8.4 Maintain flow of information between partners and the funding agency	1
T8.5 Organise regular meetings (face to face and remote)	1
T8.6 Monitor the financial aspects of the project, funding, and prepare the reports	1
D8.1 Report on the project management (PM) board and its establishment	1
D8.2 Report on the project management (PM) e-platform for sharing documentation	1
D8.4 Mid-term report	2
M8.2 On an annual basis there will be physical project meetings, according to the following schedule: kickoff meeting in Klagenfurt (M1), project meeting in Madrid	1, 2
M8.3 On an annual basis there will be a project meeting carried out via web conference for a total of three instances.	1
M8.4 PC and the funding agency will communicate annually to assess the project progress	1, 2
M8.5 Financial reports will be delivered to the coordinator on an annual basis, according to the following schedule: first report (M12), second report (M24) and final report (M36)	1, 2

Indicators of progress

Indicators of progress from LFM:

- *Completion of deliverables and achievement of milestones in due time.*

Numerical indicators of progress (TARGET):

- *Number of direct beneficiaries in the partner country(ies) per year: academic staff from HEIs (50)*
- *Number of direct beneficiaries in the PC(/year): administrative staff from HEIs (10)*
- *Number of direct beneficiaries in the PC(/year): HE students (400)*
- *Number of direct beneficiaries in the PC(/year): non HE individuals (100)*
- *Partnerships agreement (9)*
- *Inter semi-annual financial reports (6)*
- *PM board meetings and minutes (8)*
- *PM board reports (3)*
- *External audits (1)*

3.2 MONITORING AND CONTROL OF PROJECT WORK

This section contains the report on monitoring and control of the project's progress for all the deliverables, tasks and milestones to date, for the first and second year. They are organized according to the WP and the tasks. For every task, there are specific associated deliverables and milestones. The degree of achievement is measured based on the progress of these deliverables and milestones and the project indicators. The results of the indicators of progress are included in this section, and their state will be later analyzed in section 5.

Table 3.1: Achieved results for each WP

WP1: PREPARATION			
Task	Start date	End date	Achieved milestones/deliverables and indicators of progress
T1.1 Survey and analysis of IoT courses in ICT study programmes in relation to modern society and industry needs in the IoT domain	15-01-21	14-07-21	<ul style="list-style-type: none"> • Kickoff meeting held online. • MS1.1 Snapshot of present situation about IoT in ICT studies in Argentinian and Uruguayan HEIs was achieved. • Delivery and analysis of the industry survey (MS1.2 and MS1.3). Results are available on deliverable D1.1.
T1.2 Consolidate guidelines for curriculum modernization in cooperation with industry	15-01-21	14-07-21	<ul style="list-style-type: none"> • Deliverable D1.1 provides consolidated guidelines that are based on 4 main pillars to modernize curricula and 3 layers of activities. It is available and published on the project website.
T1.3 Preparation of implementation actions of the network of competence	15-01-21	27-10-21	<ul style="list-style-type: none"> • The project meeting (MS1.6) was delayed due to travel restrictions, but it successfully held in Klagenfurt at the beginning of May 2022. • Deliverable D1.2 includes the consolidated action plan and is published.

The activities for WP1 have been completed. The comments with respect to the original proposal are:

- The final version of the deliverable D1.1 was concluded and published on time.

- D1.2 instead was slightly delayed by 3 months due to COVID-19 limitations impacting the planned meeting and events and thus the finalization of the implementation actions.

WP2: DEVELOPMENT OF THE NETWORK ON COMPETENCE ON IOT			
Task	Start date	End date	Achieved milestones/deliverables and indicators of progress
T2.1 Develop a management platform to coordinate the NoC and to serve as knowledge base	15-01-21	17-10-22	<ul style="list-style-type: none"> • MS2.1 Creation of the management platform to coordinate the NoC – accomplished. Available at neon-iot.org. • Deliverable D2.1 completed.
T2.2 Develop policies and procedures to regulate the NoC	15-01-21	18-10-22	<ul style="list-style-type: none"> • MS2.2 Definition of the most appropriate legal framework for the NoC based on the local regulation is achieved. • Deliverable D2.2 was completed.
T2.3 Define the governance of the NoC	15-01-21	18-10-22	<ul style="list-style-type: none"> • MS2.3 Preparation of the statute of the NoC is achieved. • Deliverable D2.3 was completed.
T2.4 Partners and network implementation	15-01-21	21-10-22	<ul style="list-style-type: none"> • Target number of partners of the NoC achieved (10/10). • Deliverable D2.4 was completed. This is a working deliverable which will be updated at project end. • MS2.4 Definition of the NoC members and their roles.

The comments regarding the original proposal are:

- T2.1 The development of the NoC website was started (September 2021) based on the guidelines and functionalities of the NEON project. This was because the activities to define the structure of the NoC were carried out practically in parallel. With those tasks now nearly completed, the development of the NoC website will be updated and finished by the end of the Project.
- T2.2 – T2.3 Delay in these activities was related to the fact that the meeting scheduled for 2021 in Bahía Blanca, Argentina (UNS) was not possible due to the COVID-19 outbreak pandemic. In addition, the formal and legal aspects for the constitution of the NoC were more complex than what thought at the beginning.
- Although deliverable D2.4 has been published, it is considered a living document. Therefore, we expect to update it with the last year of the project developments.

<p>WP3: TEACHING METHODOLOGIES, MATERIAL AND MODERNISATION OF STUDY PROGRAMMES</p>

Task	Start date	End date	Achieved milestones/deliverables and indicators of progress
T3.1 Adoption of new learning/teaching methods, tools, ICT best practices in teaching	15-07-21	15-01-22	<ul style="list-style-type: none"> MS3.1 Identification of modern teaching methodologies was achieved. Survey results are internally available on the project. management platform. Deliverables D3.1 and D3.2 published. MS3.4 Adoption of tools and equipment to enable innovative teaching methodologies was achieved. The number of involved study programs rise to 13, surpassing the proposed target of 2. One student's satisfaction reported is achieved, over the two proposed as target.
T3.2 Creation and / or modernization of teaching material related to IoT	15-07-21	15-09-22	<ul style="list-style-type: none"> MS3.2 Collection of preliminary teaching material for new and modernized courses was achieved. MS3.3 Delivery of web repository and platform was achieved Github (private) repository available on https://github.com/neon-iot MS3.5 Development of class material completed for all delivered courses. A table collecting all relevant information about the teaching material developed in WP3 is available on the project platform. Level of development of 86% of the teaching material for all 20 courses. Deliverable D3.3 completed for all delivered courses. The numbers of labs included in the study programs is 7, exceeding the proposed target of 5. The number of contributions to textbooks published on IoT is 2

			(with a target proposed of 1).
T3.3 Improvement and implementation of new learning/teaching methods, tools, ICT best practices in teaching	15-07-21	15-03-23	<ul style="list-style-type: none"> • Delivery of 13 courses completed. • The number of courses included in the study programs is 20, exceeding the proposed target of 5. • The number of courses on the web portal on IoT is 17, exceeding the proposed target of 10. • Number of students enrolled in the courses on IoT: 259 (the target was 100). • Satisfactory survey responses of the new learning on IoT (11 conducted).

The comments with respect to the original proposal are:

- T3.2: The development of the teaching material was started in mid 2021 as planned in the original project. The number of proposals for developing this material were much more than originally planned and their required time to be completed became longer. Even if most of the material has already been completed (~79%) the finalization of all proposals is expected to occur early in 2023. However, this has not delayed the delivery of the material (which has already occurred for some proposals while for others is planned in 2023) and T3.3 is on track as planned.

WP4: DEVELOPMENT AND IMPLEMENTATION OF LABORATORIES			
Task	Start date	End date	Achieved milestones/deliverables and indicators of progress
T4.1 Creation of joint university-industry labs and modernization of the lab infrastructure	15-01-21	15-01-22	<ul style="list-style-type: none"> MS4.1 Identification of laboratory infrastructure to be restructured in each LA university and initial steps for the joint university-industry labs was achieved. MS4.2 Establishment of formal links and joint lab operation agreements between universities and companies was achieved. MS4.3 Definition of the procurement procedure was achieved. Memorandum of Understanding (MoU) signed: 15 (4 UNMDP, 5 UCU, 1 UNC, 2 UNS, 3 Udelar). Deliverable D4.1 was published. Equipment acquired overall 64% (UNS : 61%, UndMP : 3%, UNC: 100%, UCU: 78%, Udelar: 95%).
T4.2 Pilot lab development. The purpose is to develop a complete undergraduate or graduate lab with pedagogical/technological tools in the domain of IoT	15-01-21	15-12-22	<ul style="list-style-type: none"> Number of labs created: 5/5.
T4.3 Pilot lab development. The purpose is to develop a complete undergraduate or graduate lab with pedagogical/technological tools in the domain of IoT, regarding introductory Lab, Smart grids and HW for IoT	15-01-21	15-12-22	<ul style="list-style-type: none"> Number of labs created: 5/5 (same as T4.2).

Changes from the original proposal:

- There were many difficulties in acquiring the equipment on time. The reasons for the delay are local contexts, such as tax delays in exemption procedures, Central Bank restrictions, procurement on hold due to lack of funds, and global circumstances particularly the significant material and electronic components shortages during the pandemic. Some items or quantities were slightly modified (e.g., Udelar). On the other hand, UNMDP that is experiencing the highest difficulties is in the process of requesting

a four-month extension of the deadline for the equipment purchases (the new deadline would be May 15th, 2023).

WP5: TRAINING AND INTERSHIP IMPLEMENTATIONS			
Task	Start date	End date	Achieved milestones/deliverables and indicators of progress
T5.1 Creation of a section in the project website where training and internship opportunities are listed	15-01-21	15-07-21	<ul style="list-style-type: none"> MS5.1 Define the content and the responsible persons of the website section dedicated to internships and trainings was achieved. MS5.2 Creation of the website section with training and internship opportunities was achieved. Deliverable D5.1 was completed.
T5.2 Implement framework for student training in cooperation with EU partners and industry	15-01-21	15-12-23	<ul style="list-style-type: none"> <u>Deliverable D5.2</u> was completed. MS5.3 Define the requirements and objectives of the training process for both students and teachers was completed. MS5.4 Define the required resources for the training implementation was completed. MS5.5 Create the training action plan and agenda for both students and teachers was completed. MS5.7 Define the organization team for the proposed hackathon was completed. MS5.8 Organization of the student mobility for the hackathon was completed. MS5.9 Completed the Hackathon for students. It was organized at UCU. MS5.11 List professors and related co-supervised theses under the umbrella topic of IoT was completed. MS5.12 "Define technical content for internships and co-supervised theses" is partially accomplished. Number of partner country HEIs students trained (120/58). Number of partner country HEIs academic staff trained (60/24). Number of partner country non-HEI individual trained (20/20). Number of labs created (5/5). Feedback, questionnaires results from clusters and other industrial partners (20/146).
T5.3 Implement framework for student	15-01-	15-12-21	<ul style="list-style-type: none"> MS5.10 "A list industry partners and related internships opportunities" was

internships in companies	21		<p>partially accomplished.</p> <ul style="list-style-type: none"> Number of collaborating enterprises (5/20). Number of signed agreement about long-term cooperation between HEIs and non-academic partners (4/12).
T5.6 Implementation of three workshops on IoT and ICT technologies	15-01-21	15-12-23	<ul style="list-style-type: none"> MS5.13 was completed. Workshop on teaching methodologies for IoT. Exchange about pilot courses and pilot labs. General consensus about pilot course and pilot lab structures. Pedagogical and methodological contributions. Survey results. Organized at UNI-KLU. MS5.14 was completed. Workshop on communication technologies for IoT. Organized at UC3M.

Changes from original proposal:

- The start of the mobilities related to training activities was delayed almost one year due to COVID-19. Once the sanitary situation allowed to start the internships and stays it was possible to define an agenda and, consequently, to start with WP5 activities.

WP6: QUALITY CONTROL AND MONITORING			
Task	Start date	End date	Achieved milestones/deliverables and indicators of progress
T6.1 Establishment of the QCM Board and appointment of external experts for QC (1 QC expert and 2 external advisors)	15-01-21	15-02-21	<ul style="list-style-type: none"> QCMB was established (MS6.1) (1/1). QCM structure (MS6.4) as well as quantitative indicators for project progress evaluation (MS6.2) were defined. Details are in Deliverable 6.1.
T6.2 Consolidation of areas to be monitored, indicators, and correction strategies both internal and external	15-01-21	15-05-21	<ul style="list-style-type: none"> MS6.2 Quantitative indicator definition for project progress evaluation, as part of QCB duties was achieved. Deliverable 6.2 (Quality Plan). Quality Plan (1/1). Minutes from QCMB meetings (8/5).
T6.3 Internal control of project progress and outcomes	15-01-21	15-04-23	<ul style="list-style-type: none"> MS6.3 Activity report delivered by QCM board to MB once a year is up to now achieved. MS6.5 QCM Board meeting in Madrid was achieved. First annual report on project implementation was published as Deliverable D6.3a. Quality reports (3/1). Number of milestones reached (64/44). Number of deliverables (35/16).

			<ul style="list-style-type: none"> • Number of meetings (12/44). • Number of webinars (3/1).
T6.4 Monitor graduates profile, improvements in the skills, correspondence to industry needs	15-01-21	15-11-23	<ul style="list-style-type: none"> • MS6.5 QCM Board meeting in Madrid. • MS6.6 Implementation of surveys and questionnaires to retrieve feedback on employment from graduates working in partner industries; study and analysis of social networks (LinkedIn, AngelList, Facebook) capabilities with respect to project visibility. It is available on Confluence (link).
T6.5 Collect questionnaires and surveys via social networks (LinkedIn, AngelList)	15-01-21	15-01-23	<ul style="list-style-type: none"> • MS6.6 Implementation of surveys and questionnaires to retrieve feedback on employment from graduates working in partner industries; study and analysis of social networks (LinkedIn, AngelList, Facebook) capabilities with respect to project visibility. It is available on Confluence (link)
T6.6 Monitor student enrolment statistics in the region	15-01-21	15-01-23	<ul style="list-style-type: none"> • MS6.6 Implementation of surveys and questionnaires to retrieve feedback on employment from graduates working in partner industries; study and analysis of social networks (LinkedIn, AngelList, Facebook) capabilities with respect to project visibility It is available on Confluence (link).
T6.7 Establish a monitoring system for employment statistics of graduates	15-01-21	15-01-23	<ul style="list-style-type: none"> • MS6.6 Implementation of surveys and questionnaires to retrieve feedback on employment from graduates working in partner industries; study and analysis of social networks (LinkedIn, AngelList, Facebook) capabilities with respect to project visibility. It is available on Confluence (link).
T6.8 Establish a monitoring system for entrepreneur attitude and newcos (by means of surveys, databases, etc.)	15-01-21	15-01-23	<ul style="list-style-type: none"> • MS6.7 Stakeholder appraisal was partially achieved.

Changes from proposal:

- The QCMB meeting in person in Madrid had to be postponed being finally held on November 2022, due to the pandemic situation caused by COVID-19.

WP7: DISSEMINATION AND EXPLOITATION			
Task	Start date	End date	Achieved milestones/deliverables and indicators of progress
T7.1 Development of the project web site combined with the web platforms developed in the other WPs. Preparation of the materials to keep the project website up to date with the current activities	15-01-21	15-07-21	<ul style="list-style-type: none"> MS7.1 Project NEON website was created and constantly maintained by the established workgroup. MS7.2 Central web platform design was drafted by UNS and approved by the project coordinator. Deliverable D7.1 was completed. Project webpage (1/1). Number of visits to project web (100/411).
T7.2 Preparation of exploitation and dissemination plan	15-01-21	15-01-22	<ul style="list-style-type: none"> MS7.3 Central web platform was released and it is available at neon-iot.org. MS7.4 Central web platform linked with the other online services created in the previous WPs was achieved. MS7.11 Preliminary exploitation plan is available on Confluence. Deliverable D7.2 was completed. Central web platform (1/1). Number of visits to web platform (200/1002). Newsletter, e-bulletins, newspapers (36/21) [Newsletter 2021]. Reports from presentation meetings, presentations for media and interested groups (6/2).
T7.3 Create promotional and dissemination material targeting high schools' students and society at large (exploiting also media)	15-01-21	15-06-22	<ul style="list-style-type: none"> MS7.11 Preliminary exploitation plan is partially achieved. Promotional materials are available on Confluence. Deliverable D7.3 was completed. Designed, printed and disseminated project promotion material (6/10) [2+RollUps, Flyers and Event Template in Canva in both EN and ES].
T7.4 Organize an annual open event outreaching a wide audience that includes public authorities, industry, students, pupils and non-expert people	15-01-21	15-11-23	<ul style="list-style-type: none"> MS7.8 Open Event involving the community on studying ICT with the participation of a renowned keynote speaker in UNMdP was achieved. MS7.9 Open Event involving the community on academia-industry

			<p>cooperation in teaching with the participation of a renowned keynote speaker in UCU was achieved.</p> <ul style="list-style-type: none"> • Number of Open Events carried out (3/2).
T7.5 Organize a yearly event (hosted in turn by the HEIs partners) in the form of a webinar broadcasted to all locations to present the study programmes, tips on studying engineering targeting enrolled and prospective students/pupils	15-01-21	15-12-23	<ul style="list-style-type: none"> • MS7.5 Webinar on new / modernized IoT courses offered by Neon was hosted by UNC. • Number of Webinars carried out (3/1).
T7.6 Establish agreements for future double degrees, joint teaching, student mobility beyond the project duration, bilateral agreements within Erasmus+ KA1	15-01-21	15-07-23	<ul style="list-style-type: none"> • MS7.13 Agreements for maintenance of joint labs with industry is partially achieved. • MS7.14 Agreement for further cooperation in education HEIs to establish at least one double degree and promoting student mobility is partially achieved.
T7.7 Create an agreement for the maintenance of the web platform beyond the project life time	15-01-21	15-12-23	<ul style="list-style-type: none"> • MS7.12 Signature of agreement for the prolonged existence of the web platform has been partially done.
T7.8 Create partnerships for follow-up projects	15-01-21	15-07-23	<ul style="list-style-type: none"> • MS7.14 Agreement for further cooperation in education to establish at least one double degree and promoting student mobility was partially done.
T7.9 Participate in an event of dissemination of project results	15-01-21	15-07-23	<ul style="list-style-type: none"> • Report on the participations in other events is ongoing.

Changes from original proposal:

- Due to the pandemic, the first Open Event was carried out virtually. A physical one at Mar del Plata is planned for 2023.
- Due to delays in the first month due to Covid, the 2nd webinar will be held on February 2023 (instead of November 2022).

WP8: MANAGEMENT			
Task	Start date	End date	Achieved milestones/deliverables and indicators of progress
T8.1 Creation of a project management (PM) board	15-01-21	15-02-21	<ul style="list-style-type: none"> D8.1 Report on the project management (PM) board and its establishment was completed. PM board reports (3/ 2).
T8.2 Creation of an e-platform for project management (e.g., wiki page)	15-01-21	15-03-21	<ul style="list-style-type: none"> A Confluence page on intranet.aau.at has been created and is maintained for the purpose of project management. Confluence platform delivered and daily used. Link: https://intranet.aau.at/display/projneon/ D8.2 Report on the project management (PM) e-platform for sharing documentation was done.
T8.3 Monitor and coordinate the overall project	15-01-21	15-12-23	<ul style="list-style-type: none"> Regular emails to partners. Regular upload of info on Confluence. Regular web meetings. Partnerships agreement (9/9). Number of direct beneficiaries in the partner country(ies) per year: academic staff from HEIs (50/54). Number of direct beneficiaries in the PC(/year): administrative staff from HEIs (10/14). Number of direct beneficiaries in the PC(/year): HE students (400/275). Number of direct beneficiaries in the PC(/year): non HE individuals (100/52). The management board has been established at the kick-off meeting and monitors the project progress through monthly project calls and WP status updates (MS8.1).
T8.4 Maintain flow of information between partners and the funding agency	15-01-21	15-12-23	<ul style="list-style-type: none"> MS8.4 Participation to the EC meeting online at the beginning of the project was achieved. MS8.4 Participation in Progress Report submission EACEA Explanatory session (Oct. 2022).
T8.5 Organize regular meetings (face to face and remote)	15-01-21	15-12-23	<ul style="list-style-type: none"> Kick-off online meeting (5 Feb,2021). MS8.2 Two physical project meetings organized to date : Project meeting in Klagenfurt (May 2022) and Madrid (November 2022)

			<ul style="list-style-type: none"> Monthly Zoom calls with minutes uploaded in Confluence. MS8.3 "On an annual basis there will be a project meeting carried out via web conference for a total of three instances" has been satisfied up to date. PM board meetings and minutes (8/14).
T8.6 Monitor the financial aspects of the project, funding, and prepare the reports	15-01-21	15-12-23	<ul style="list-style-type: none"> Partnership agreement signed. Secretariat established. Regular assistance to partners. Collected financial reports every 6 months. Prepared the mid-term financial report. MS8.5 Financial Report delivered by the partners annually: First report (M12) and second report (M18) for Mid-term reporting. D8.3 Submit Mid-Term report to EC. Inter semi-annual financial reports (6/4).

No changes occurred with respect to the proposal for the activities of this WP.

The following tables summarize the achieved deliverables and milestones for each WP based on the results presented above. Note that most of the tasks are associated with activities that will carry on beyond the current date. For this reason, they are marked as "in progress", even though it develops according to the plan.

Table 3.2: Summary of the status of the tasks/deliverables/milestones for each WP

WP1 - PREPARATION	
Deliverable/Task/Milestone	Status
-	<i>Completed WP</i>

WP2: DEVELOPMENT OF THE NETWORK ON COMPETENCE ON IOT	
Deliverable/Task/Milestone	Status
T2.1 Develop a management platform to coordinate the network of competence and to serve as knowledge base	<i>In progress, updates remaining</i>
T2.2 Develop policies and procedures to regulate the network of competence	<i>In progress, updates remaining</i>
T2.3 Define the governance of the network of competence	<i>In progress</i>
T2.4 Partners and network implementation	<i>In progress</i>
D2.1 Report on management platform to coordinate the network of competence	<i>Completed</i>
D2.2 Report on the creation of the legal framework for the network of competence	<i>Completed</i>

D2.3	Report that defines the governance of the network of competence	<i>Completed</i>
D2.4	Report on network implementation	<i>Completed</i>
M2.1	Creation of the management platform to coordinate the NoC	<i>Completed</i>
M2.2	Define the most appropriate legal framework for the NoC based on the local regulations	<i>Completed</i>
M2.3	Prepare the statute of the network of competence	<i>Completed</i>
M2.4	Define the network of competence members and their roles	<i>Completed</i>
M2.5	Meeting of the NoC group to coordinate the activities	<i>Pending</i>

WP3: TEACHING METHODOLOGIES, MATERIAL AND MODERNISATION OF STUDY PROGRAMMES		
Deliverable/Task/Milestone		Status
T3.1	Adoption of new learning/teaching methods, tools, ICT best practices in teaching	<i>In progress</i>
T3.2	Creation and / or modernisation of teaching material related to IoT	<i>In progress</i>
T3.3	Improvement and implementation of new learning/teaching methods, tools, ICT best practices in teaching	<i>In progress</i>
D3.1	Web repository for class and lab sessions material	<i>Completed</i>
D3.2	Report on the modernised teaching methodologies applied to IoT courses	<i>Completed</i>
D3.3	Teaching and training materials for new and modernized IoT courses	<i>Completed</i>
M3.1	Identification of modern teaching methodologies	<i>Completed</i>
M3.2	Collection of preliminary teaching material for new and modernized courses	<i>Completed</i>
M3.3	Delivery of web repository and platform	<i>Completed</i>
M3.4	Adoption of tools and equipment to enable innovative teaching methodologies	<i>Completed</i>
M3.5	Development of class material	<i>Completed</i>

WP4: DEVELOPMENT AND IMPLEMENTATION OF LABORATORIES		
Deliverable/Task/Milestone		Status
T4.1	Creation of joint university-industry labs and modernisation of the lab infrastructure	<i>In progress</i>
T4.2	Pilot lab development. The purpose is to develop a complete undergraduate or graduate lab with pedagogical/technological tools in the domain of IoT.	<i>In progress</i>
D4.1	Report on the laboratory infrastructure and equipment at each LA university	<i>Completed</i>
D4.2	Report on the created five joint university-company labs ruled by an agreement	<i>Pending</i>
M4.1	Identification of laboratory infrastructure to be restructured in each LA university and initial steps for the joint university-industry labs	<i>Completed</i>
M4.2	Establishment of formal links and joint lab operation agreements between universities and companies	<i>Completed</i>
M4.3	Define the procurement procedure	<i>Completed</i>

M4.4 Purchase and installation of the laboratory equipment	<i>In progress</i>
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WP5: TRAINING AND INTERSHIP IMPLEMENTATIONS	
Deliverable/Task/Milestone	Status
T5.1 Creation of a section in the project website where training and internship opportunities are listed	<i>In progress</i>
T5.2 Implement framework for student training in cooperation with EU partners and industry	<i>In progress</i>
T5.3 Implement framework for student internships in companies	<i>In progress</i>
T5.4 Offer techno-economic, entrepreneurial and IPR related training modules	<i>In progress</i>
T5.5 Implement teacher staff training on technology and modern prototyping tools for IoT	<i>In progress</i>
T5.6 Implementation of three workshops on IoT and ICT technologies	<i>In progress</i>
D5.1 Report on the training/internships website section	<i>Completed</i>
D5.2 Report on the framework for training and internships	<i>Completed</i>
D5.3 Report on organized hackathons for students of the region	<i>In progress</i>
M5.1 Define the content and the responsible persons of the website section dedicated to internships and trainings	<i>Completed</i>
M5.2 Creation of the website section with training and internship opportunities	<i>Completed</i>
M5.3 Define the requirements and objectives of the training process for both students and teachers	<i>Completed</i>
M5.4 Define the required resources for the training implementation	<i>Completed</i>
M5.5 Create the training action plan and agenda for both students and teachers	<i>Completed</i>
M5.7 Define the organisation team for the proposed hackathon	<i>Completed</i>
M5.8 Organization of the student mobility for the hackathon	<i>Completed</i>
M5.9 Hackathon for students. Organized at UCU.	<i>Completed</i>
M5.10 List industry partners and related internships opportunities	<i>In progress</i>
M5.11 List professors and related co-supervised theses under the umbrella topic of IoT	<i>Completed</i>
M5.12 Define technical content for internships and cosupervised theses	<i>Completed</i>
M5.13 Workshop on teaching methodologies for IoT. Exchange about pilot courses and pilot labs. General consensus about pilot course and pilot lab structures. Pedagogical and methodological contributions. Survey results. Organised at UNI-KLU	<i>Completed</i>
M5.14 Workshop on communication technologies for IoT. Organized at UC3M	<i>Completed</i>

WP6: QUALITY CONTROL AND MONITORING	
Deliverable/Task/Milestone	Status
T6.1 Establishment of the QCM Board and appointment of an external expert for QC	<i>In progress</i>
T6.2 Consolidation of areas to be monitored, indicators, and correction strategies both internal and external	<i>In progress</i>
T6.3 Internal control of project progress and outcomes	<i>In progress</i>
T6.4 Monitor graduate profiles, improvements in their skills, in correspondence to industry needs	<i>In progress</i>
T6.5 Collect questionnaires and surveys via social networks (LinkedIn, Angellist)	<i>In progress</i>
T6.6 Monitor student enrollment statistics in the region	<i>In progress</i>
T6.7 Establish a monitoring system for employment statistics of graduates	<i>In progress</i>
T6.8 Establish a monitoring system for entrepreneur attitude and newcos (by means of surveys, databases, etc.)	<i>In progress</i>
D6.1 Establishment of Quality Control (QC) board and appointment of external experts for QC	<i>Completed</i>
D6.2 Development of guidelines for QC	<i>Completed</i>
D6.3 Reports on project implementation	<i>Completed (D6.3a, this report D6.3b)</i>
D6.5 Report on tools for monitoring student enrolment and employability/employment/entrepreneurial statistics of graduates	<i>In progress</i>
D6.6 Reports on stakeholders reached beyond the project consortium	<i>In progress</i>
M6.1 QCM Board establishment	<i>Completed</i>
M6.2 Quantitative indicator definition for project progress evaluation, as a part of QCMB duties	<i>Completed</i>
M6.3 Activity report delivered by QCM board to MB once a year	<i>Completed</i>
M6.4 Define QCM structure	<i>Completed</i>
M6.5 QCM Board meeting in Madrid	<i>Completed</i>
M6.6 Implementation of surveys and questionnaires to retrieve feedback on employment from graduates working in partner industries; study and analysis of social networks capabilities with respect to project visibility	<i>Completed</i>
M6.7 Stakeholder appraisal relative to D6.6	<i>In progress</i>

WP7: DISSEMINATION AND EXPLOITATION	
Deliverable/Task/Milestone	Status
T7.1 Development of the project web site combined with the web platforms developed in the other WPs. Preparation of the materials to keep the project website up to date with the current activities	<i>In progress</i>
T7.2 Preparation of exploitation and dissemination plan	<i>In progress</i>

T7.3 Create promotional and dissemination material targeting high school students and society at large (exploiting also media)	<i>In progress</i>
T7.4 Organise an annual open event outreaching a wide audience that includes public authorities, industry, students, pupils and non-expert people	<i>In progress</i>
T7.5 Organise a yearly event (hosted in turn by the HEIs partners) in the form of a webinar broadcasted to all locations to present the study programmes, tips on studying engineering targeting enrolled and prospective students/pupils	<i>In progress</i>
T7.6 Establish agreements for future double degrees, joint teaching, student mobility beyond the project duration, bilateral agreements within Erasmus+ KA1	<i>In progress</i>
T7.7 Create an agreement for the maintenance of the web platform beyond the project life time	<i>In progress</i>
T7.8 Create partnerships for follow-up projects	<i>In progress</i>
D7.1 Central project web platform linked to the e-platforms developed in other WPs	<i>Completed</i>
D7.2 Report on exploitation and dissemination plan	<i>Completed</i>
M7.1 Establishment of a workgroup dedicated to coordinate dissemination actions	<i>Completed</i>
M7.2 Central web platform design drafted by UNS and approved by the project coordinator	<i>Completed</i>
M7.3 Central web platform released	<i>Completed</i>
M7.4 Central web platform linked with the other online services created in the previous WPs	<i>Completed</i>
M7.5 Webinar on the NoC structure and partners, hosted by UNC	<i>Completed</i>
M7.6 Webinar on new / modernized IoT courses in Uruguay, hosted by UNC	<i>Pending</i>
M7.8 Open Event involving the community on studying ICT with the participation of a renowned keynote speaker in UNMdP	<i>Completed</i>
M7.9 Open Event involving the community on academia-industry cooperation in teaching with the participation of a renowned keynote speaker in UCU	<i>Completed</i>
M7.11 Preliminary exploitation plan	<i>Completed</i>

WP8: MANAGEMENT	
Deliverable/Task/Milestone	Year
T8.1 Creation of a project management (PM) board	<i>Completed</i>
T8.2 Creation of an e-platform for project management	<i>Completed</i>
T8.3 Monitor and coordinate the overall project	<i>In progress</i>
T8.4 Maintain flow of information between partners and the funding agency	<i>In progress</i>
T8.5 Organise regular meetings (face to face and remote)	<i>In progress</i>
T8.6 Monitor the financial aspects of the project, funding, and prepare the reports	<i>In progress</i>
D8.1 Report on the project management (PM) board and its establishment	<i>Completed</i>

D8.2 Report on the project management (PM) e-platform for sharing documentation	<i>Completed</i>
D8.4 Mid-term report	<i>Completed</i>
M8.1 Project meetings and progress/status reports (every month).	<i>In progress</i>
M8.2 On an annual basis there will be physical project meetings, according to the following schedule: kickoff meeting in Klagenfurt (M1), project meeting in Madrid	<i>Completed</i>
M8.3 On an annual basis there will be a project meeting carried out via web conference for a total of three instances.	<i>Completed</i>
M8.4 PC and the funding agency will communicate annually to assess the project progress	<i>Completed</i>
M8.5 Financial reports will be delivered to the coordinator on an annual basis, according to the following schedule: first report (M12), second report (M24) and final report (M36)	<i>In progress</i>

4 ACHIEVEMENTS OF QUALITY CONTROL ACTIVITY

4.1 PROJECT'S DELIVERABLES

The quality procedure followed for reviewing the deliverables is as follows:

1. Step 1: Evaluation/revision:
 - Once the deliverable has been written in its entirety, the WP leader should upload the Word document to the respective Deliverable Log page in Confluence (as well as the WP page) and inform the QCMB leader/contact person.
 - Evaluation/revision will be performed by a NEON-member who has not directly participated in the preparation of the deliverable.
 - The evaluator/reviewer is appointed by the QCMB Chair via email (upon suggestion by the WP leader) and will have to respond within 5 working days.
 - The evaluator/reviewer will assess the deliverable by providing comments using the predefined Deliverable Evaluation Template: **QCM_Manual_Template_Deliverable_Review** (see Annex C in D6.2, or in the project's Intranet: <https://intranet.aau.at/display/projneon/Templates>).
 - The filled in form mentioned above must be uploaded to the respective Deliverable Log page in the Intranet.
 - The QCMB will check the assessment. In case of quality-related inconsistencies, the deliverable will be returned for refinement.
2. Step 2: Consortium approval:
 - After positive evaluation, the WP leader publishes the revised version of the deliverable on the Deliverable Log Page in PDF and announces by email the consortium approval to the main contacts of each institution.
 - The main contact person of each partner must tick their institution's box to approve the deliverable.
 - Any comment or suggestion on the document can be submitted via the Deliverable Log Page.
 - If suggested changes are minor, the WP leader rectifies them, if not then editor(s) will/can do so.
 - In the absence of any suggestions or comments after a period of 5 working days the approval process is concluded and silence acts as approval.
3. Step 3: Final QCMB approval and publication
 - After the deliverable has been approved by all partners (or 5 working days passed), the WP leader asks the QCMB for the final approval of the document.
 - The QCMB marks it as APPROVED BY QCMB within the Deliverable Log page on Intranet.
 - The WP leader asks UNI-KLU for the publication of the document (in PDF) to the website, usually to the person managing the project's website.

Current deliverable quality revisions are essentially focused on the following assurance points (APs in the sequel):

1. Adequacy of deliverable: General compliance of deliverable specifications. Correct use of methodologies.
2. Deliverable format: Adequate use of project's template, external sources, bibliography, and other related information.
3. Adequacy of written language: Level of written English is adequate

A pass/no pass result is assigned to each of the above-mentioned aspects as a result of the revision. In case a no-pass condition is identified in a deliverable, further information is provided to fully explain the non-conformance to facilitate its amendment.

Up to date, 21 deliverables have been published and reviewed, including D8.3 as the mid-term report. The ongoing and finished deliverables (up to the second year) are listed in Table 4.1, including the information about their status and review process (reviewer, evaluation date and APs). The review time refers to the number of days for the Step 1: Review by partner not directly involved in the development of the deliverable, plus the number of extra days for modifications or corrections if needed. The total time also considers the QCMB review and Consortium approval steps, which are of 5 working days each.

The result of the APs were satisfactory for all the deliverables, overall. However, the reviewer's comments are included, which involved the correction of the documents several times due to minor typos or suggestions for improvement, which resulted in an enhancement of their quality.

The average time for review is of 40 days per deliverable. The main source of delay was detected and measurements were taken for improvement: in the first review step, both the reviewer and the partner's leader should be informed via email about the review assignment. WP6 also monitors the degree of involvement of the partners in this step of the review process. The percentage of participants in the review of deliverables is 40% among all partners. This metric is useful to track the number of deliverables reviewed per partner to avoid overloading.

Table 4.1: Quality process results of the published WP1-WP8 deliverables up to the second year

	Review						Review + Correction time	Total time (days)	
	Reviewer	Date assigned	Date received	Assessment					
				AP1	AP2	AP3			Comments
D1.1	Vitali Korzhun, UNI-KLU	7/9/21	13/9/21	✓	✓	✓	-	6	16
D1.2	Juan P. Oliver, Udelar	19/10/21	22/10/21	✓	✓	✓	-	3	13
D2.1	Ana García Armada (UC3M)	2/12/22	12/12/22	✓	✓	✓	-	3	13
D2.2	Jorge Finocchietto (UNC)	6/12/22	6/12/22	✓	✓	✓	Suggestions for improvement.	0	10
D2.3	Daniel Carrica (UNMDP)	2/12/22	2/12/22	✓	✓	✓	-	0	10
D2.4	Graciela Corral Briones	2/12/22	13/12/22	✓	✓	✓	Minor typos corrected, suggestions by reviewer for improvement.	7+0	17
D3.1	Benigno Rodríguez, Udelar	11/5/22	12/5/22	✓	✓	✓	Suggestion of minor change during QCMB evaluation (final update 13/5/2022).	1	11
D3.2	Jorge Castiñeira Moreira, UNMDP	11/5/22	5/8/22	✓	✓	✓	Suggested minor changes.	63+0	73
D3.3	Horacio Mendoza (UNC)	3/12/22	5/12/22	✓	✓	✓	Suggested minor changes.	2+0	12
D4.1	Patricio Donato, UNMDP	12/7/22	13/7/22	✓	✓	✓	Minor corrections suggested by the reviewer in the first form, made on the document on 23/07/2022	1+7	18
D5.1	Leonardo Steinfeld, Udelar	25/7/22	12/8/22	✓	✓	✓	Reviewer suggested changes, final document received 17/08/2022.	14+3	27



D5.2	Juan P. Oliver, UdelaR	18/8/22	26/8/22	✓	✓	✓	Corrections suggested by reviewer, document after corrections delivered on 30/08/2022.	8+2	20
D6.1	Alfredo Arnaud, UCU	1/11/21	26/5/22	✓	✓	✓	-	149	159
D6.2	Leonardo Steinfeld, UdelaR	1/11/21	7/2/22	✓	✓	✓	Corrections made (8/2/2022). Report from external expert on the deliverable available in the intranet in the deliverable log page.	71+1	92
D6.3a	Matías Míguez, UCU	10/5/22	17/5/22	✓	✓	✓	-	5	15
D7.1	Nicola Novello (UNI-KLU)	13/12/22	13/12/22	✓	✓	✓	Minor typos corrected, suggestions by reviewer for improvement.	3+1	14
D7.2	Juan Cousseau, UNS	29/7/22	16/8/22	✓	✓	✓	Corrections made (7/12/2022)	13+81	104
D7.3	Nicola Novello (UNI-KLU)	13/12/22	13/12/22	✓	✓	✓	-	2	12
D8.1	Nicola Novello (UNI-KLU)	-	-	-	-	-	-	-	-
D8.2	Nicola Novello (UNI-KLU)	-	-	-	-	-	-	-	-

4.2 PROJECT'S MILESTONES

This QC process has been performed again following the rules agreed upon in the consortium, which will once more be included here for the sake of completeness:

1. Whenever a milestone is achieved, the WP leader may contact the QCMB via email and attach the template QCM_Manual_Template_Milestone_Verification (see Annex D of D6.2 or <https://intranet.aau.at/display/projneon/Templates>).
2. It will be evaluated by a member of NEON who has not directly participated in the achievement of the milestone, designated by QCMB. The evaluator will have to respond in 5 working days by delivering his or her comments using the predefined Milestone Evaluation Template QCM_Manual_Template_Milestone_Evaluation (see Annex D of D6.2 or at the website <https://intranet.aau.at/display/projneon/Templates>).
3. Approval by QCMB. In case of quality-related inconsistencies, the milestone will be returned to the WP leader for refinement.
4. After positive evaluation result, the WP leader will mark the milestone as completed within the WP page on the Intranet.

Current milestone quality revisions starts with a detailed list of the documents and proofs supporting the completion of the milestone, and are subsequently focused on the following assurance points (APs in the sequel):

1. Was the milestone successfully completed? That must be understood in sense of the degree to which the activities included in the milestone comply with the objectives specified in the project proposal.
2. Was the milestone completed by the specified deadline? Indicating the degree of adherence to the planned date for the achievement of the milestone in the project schedule.

Only those milestones that are considered particularly relevant are subjected to quality revision. This is an action taken for efficiency purposes. Even though several milestones have been accomplished, many of them have been reviewed regarding the second year. Results for the first year can be found in D6.3a section 4.3.

4.3 PROJECT'S EVENTS

The quality of the project events were ensured by collecting questionnaires. This was useful to bring awareness of the level of satisfaction of beneficiaries and other target groups to the organizers of the events. Specific templates are available on the intranet. Moreover, the format of the questionnaires was adapted to "Google Forms" to simplify the process of collecting responses via virtual platforms.

The section below represents the results for the evaluation of the Klagenfurt Meeting & Workshop in May 2022 organized by UNI-KLU and the Madrid Meeting & Workshop in November 2022 organized by UC3M, which shows a general satisfaction of the participants in Fig. 4.1 and 4.2, respectively. The results are presented from 1 (worst) to 5 (best).

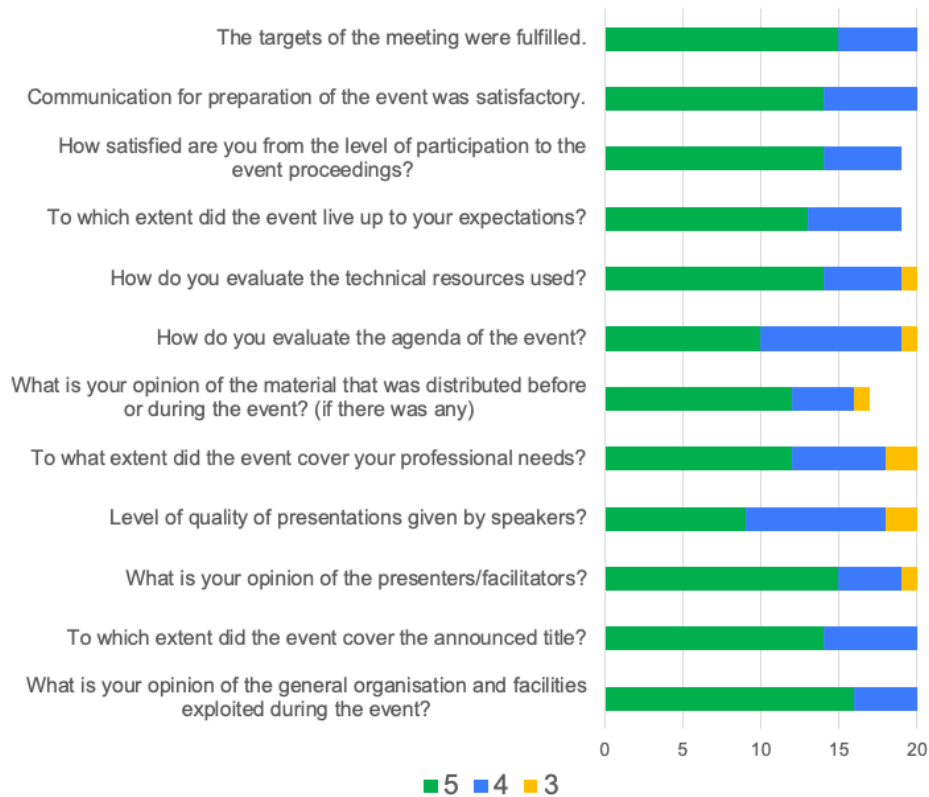


Fig. 4.1: Results of the evaluation survey for the Klagenfurt Meeting & Workshop May 2022.

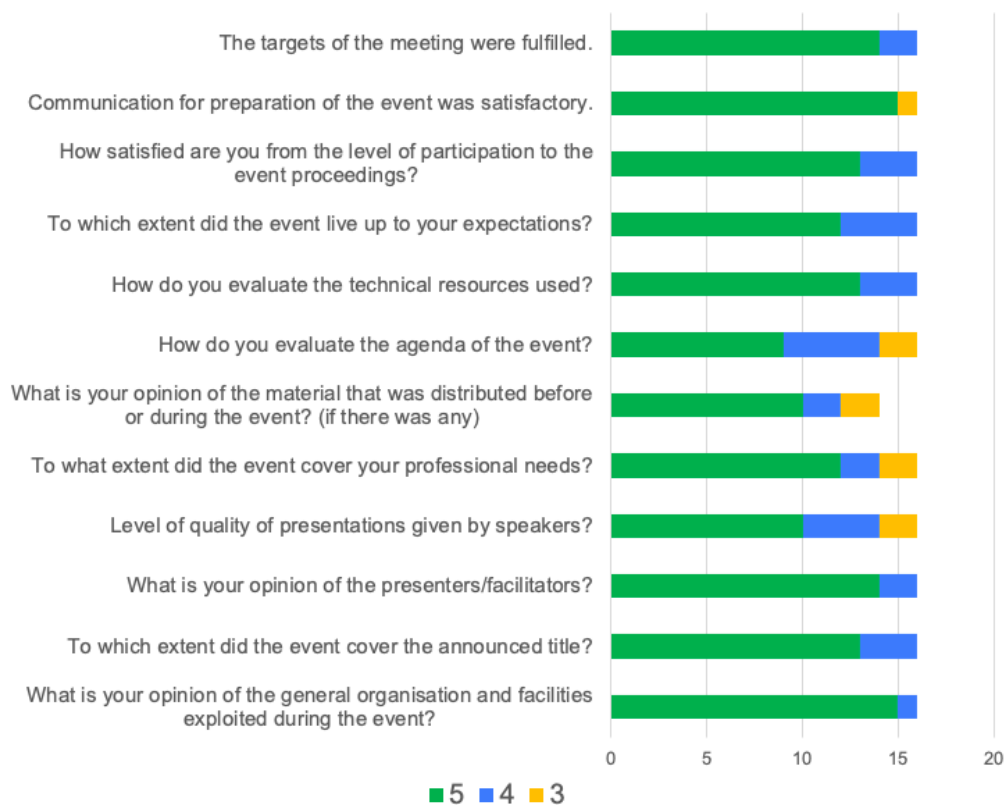


Fig. 4.2: Results of the evaluation survey for the Madrid Meeting & Workshop Nov. 2022.

5 STATE OF AGREED PROJECT METRICS AND INDICATORS

The indicators of achievement and or/performance include both, the ones listed in the original project proposal (from the LFM which is also reported in ANNEX A of the D6.2 Quality Plan) as well as the ones listed in ANNEX B of the Quality Plan. The tables to track these indicators were introduced in D6.3a ANNEX B. The ANNEX A of the present document includes the detailed current results of the numerical indicators by each partner, using the tables from D6.3a. In this section, we analyze the outcomes of the project to date in terms of these metrics. For this purpose, Table 5.1 records the metrics together with the value of the indicators (ratios arising from both metrics and objectives, as a percentage of progress).

Table 5.1: Indicators of progress of the project up to the second year

WP2 - Development of network of competence on IoT	
Metric (TARGET/ACHIEVED)	Indicator
Number of partners of the network of competence (10/10)	100%
WP3 - Teaching methodologies, material and modernization of study programmes	
Metric (TARGET/ACHIEVED)	Indicator
Number of courses included in the study programmes (5/20)	400%
Number of labs included in the study programmes (5/7)	140%
Number of study programmes involved/modified (2/13)	650%
Number of the study programmes included in the web portal (central platform) (6/13)	216.6%
Number of courses on the web portal on IoT (10/17)	170%
Number of contributions to textbooks published on IoT (1/2)	200%
Number of students enrolled in the courses on IoT (100/259)	259%
Satisfactory survey responses of the new learning on IoT (33/11)	33.3%
Students' satisfaction survey reports (2/1)	50%
WP4 - Development and implementation of laboratories	
Metric (TARGET/ACHIEVED)	Indicator
Number of partner country HEIs students trained (120/58)	48.3%
Number of partner country HEIs academic staff trained (60/24)	40%
Number of partner country HEIs administrative staff trained (10/9)	90%
Number of trainings (5/4)	80%
Number of labs created (5/5)	100%
Number of partner country non-HEI individual trained (20/20)	100%
WP5 - Training and internship implementation	
Metric (TARGET/ACHIEVED)	Indicator
Number of partner country HEIs students trained (120/58)	48.3%
Number of partner country HEIs academic staff trained (60/24)	40%
Number of partner country non-HEI individual trained (20/20)	100%
Number of university-industry labs ruled according to an agreement (5/1)	20%
Number of trainings (5/4)	80%
Number of labs created (5/5)	100%
Number of collaborating enterprises (5/20)	25%
Number of signed agreement about long-term cooperation between HEIs and non-academic partners (4/12)	33.3%

<i>Feedback, questionnaires results from clusters and other industrial partners (20/146)</i>	730%
WP6 – Quality Control and Monitoring	
Metric (TARGET/ACHIEVED)	Indicator
<i>Number of milestones reached (64/44)</i>	68.75%
<i>Number of meetings (12/44)</i>	366.6%
<i>Number of webinars (3/1)</i>	33.3%
<i>Number of deliverables (35/21)</i>	60%
<i>QCMB established (1/1)</i>	100%
<i>Quality Plan (1/1)</i>	100%
<i>Quality expert reports (3/1)</i>	33.3%
<i>Minutes from QCMB meetings (8/5)</i>	62.5%
WP7 – Dissemination and exploitation of project outcomes	
Metric (TARGET/ACHIEVED)	Indicator
<i>Project webpage (1/1)</i>	100%
<i>Number of visits to project website (100/411)</i>	411%
<i>Central web platform (1/1)</i>	100%
<i>Number of visits to web platform (200/1002)</i>	501%
<i>Designed, printed and disseminated project promotion material (10/10)</i>	100%
<i>Newsletter, e-bulletins, newspapers (3/2)</i>	66.6%
<i>Reports from presentation meetings, presentations for media and interested groups (6/2)</i>	33.3%
WP8 – Dissemination and exploitation of project outcomes	
Metric (TARGET/ACHIEVED)	Indicator
<i>Number of direct beneficiaries in the partner country(ies) per year: academic staff from HEIs (50/54)</i>	108%
<i>Number of direct beneficiaries in the PC(/year): administrative staff from HEIs (10/14)</i>	140%
<i>Number of direct beneficiaries in the PC(/year): HE students (400/275)</i>	68.75%
<i>Number of direct beneficiaries in the PC(/year): non HE individuals (100/52)</i>	52%
<i>Partnerships agreement (9/9)</i>	100%
<i>Inter semi-annual financial reports (6/4)</i>	66.6%
<i>PM board meetings and minutes (8/14)</i>	175%
<i>PM board reports (3/2)</i>	66.6%
<i>External audits (1/1)</i>	100%

Based on the results of Table 5.1, it can be concluded that most of the indicators developed according to the plan. Moreover, the achieved results of several indicators surpassed the expected values of the targets, obtaining more than 100% of the achievement.

6 QUALITY RECOMMENDATIONS OF THE QCMB

Based on the analysis of the outcomes of the project and quality aspects, the QCMB provides suggestions and recommendations for improvement and how to accomplish them, which are detailed below and includes improvement measures proposed by internal reviewers and external experts.

- QCMB proposes that industry cooperation should be closely monitored to assure they are properly involved in the project.
- The external expert E. Ballesteros gives quality recommendations: the deliverables and quality procedures must be focused on the final outcome of the project. There must be an aligned view between the internal (partners) and external (stakeholders) results and the general view of the project.
- The time duration of QCMB evaluation or consortium acknowledgement steps may be extended in some cases, since the current limitation of 5 days might be insufficient for particular deliverables.
- The QCMB chair A. Garcia Armada suggests that QCMB should assign appropriate QC activities to the students belonging to QCMB. She suggests that the students can perform course evaluations.
- Regarding the new quality indicators introduced in the technical report, QCMB detects that the average time of reviewing and approval is high (estimated average time of 40 days, with respect to the ideal 15 days). The main sources of delay are:
 - The first step (reviewing by partner not directly involved in the development of the document). In this step, the reviewer is informed via email to perform the revision of the document. A. Garcia Armada suggests that the email must be sent, not only to the reviewer, but also to the corresponding leader of the partner's institution. This measurement is approved by QCMB for future quality reviews.
 - In case the document is submitted to corrections (this is an expected source of delay).

7 CONCLUSIONS

This deliverable has presented an overview of the activities carried out up to the second year in project NEON. During this period, the tools for quality measurement and assessment have been put in place and carried out. The project is progressing in agreement to the plan, and measurements have been taken to improve the detected weak aspects.

8 ANNEXES

Annex A shows the current status of the tables to track the project advancement (Annex B of D6.3a) using the indicators of progress previously defined in the quality plan (D6.2 Annex B). Annex B includes a new template for the evaluation of internships, available in the intranet:

https://intranet.aau.at/display/projneon/Templates?preview=/628457973/979665265/NEON_Internship_Evaluation_Template.docx.

8.1 ANNEX A

1. Indicators of progress

Indicators of progress				Results by each WP								Total result
ID	Description	Source	Target	WP1	WP2	WP3	WP4	WP5	WP6	WP7	WP8	
1.1	Number of milestones reached	WP6	64	7 of 7	3 of 5	4 of 7	3 of 4	13 of 15	5 of 7	7 of 14	2.5 of 5	44
1.2	Number of meetings	WP6	12	2	2	2	3	2	5	2+14	2+10	44
1.3	Number of webinars	WP6	3	-	-	-	-	-	-	1 of 3	-	1
1.4	Number of deliverables	WP6	35	2 of 2	4 of 4	3 of 4	1 of 2	2 of 5	3 of 6	3 of 8	3 of 4	21 of 35 (published)
OBSERVATIONS:												

2. Indicators of dissemination

Indicators of dissemination				Total result
ID	Description	Source	Target	
2.1	Project webpage	WP7	1	1
2.2	Number of visits to project web	WP7	100	411
2.3	Central web platform (NoC website)	WP7	1	1
2.4	Number of visits to web platform	WP2-WP7	200	1002
2.5	Designed, printed and disseminated project promotion material	WP7	10	10
2.6	Newsletter, e-bulletins, newspapers	WP7	3	2
2.7	Reports from presentation meetings, presentations for media and interested groups	WP7	6	2
OBSERVATIONS:				

3. Indicators of quality

Indicators of quality				Total result
ID	Description	Source	Target	
3.1	QCMB established	WP6	1	1
3.2	Quality Plan	WP6	1	1
3.3	Quality experts reports	WP6	3	1 (9/07/2022)
3.4	Feedback, questionnaires results from clusters and other industrial partners	WP5	20	146
3.5	External audits (by external experts)	WP8	1	0
3.6	Field visits	WP6	2	2/2
3.7	Minutes from QCMB meetings	WP6	8	5/8
OBSERVATIONS:				

4. Indicators of direct impact

(HEIs)

Indicators of direct impact				Results by each partner (HEIs)							Total result
				EU		LA					
ID	Description	Source	Target	P1: UNI-KLU	P2: UC3M	P3: UNC	P4: UNS	P5: UNMDP	P6: UdelaR	P7: UCU	
4.1	Number of direct beneficiaries in the partner country(ies) per year: academic staff from HEIs	WP8	50	15	-	11	8	15	10	10	54
4.2	Number of direct beneficiaries in the PC(/year): administrative staff from HEIs	WP8	10	7	-	4	2	4	2	2	14
4.3	Number of direct beneficiaries in the PC(/year): HE students	WP8	400	100	-	64	50	44	76	41	275

OBSERVATIONS:
Direct beneficiaries: How many members of the university have been reached out
P1 UNI-KLU is an example (don't count)

(non HEIs)

Indicators of direct impact			
ID	Description	Source	Target
4.4	Number of direct beneficiaries in the PC(/year): non HE individuals	WP8	100
Results by each partner (non HEIs)			
P8: INCUTEX			
P9: ALASSIO			30
P10: ALENET			2
Associated partners			
Ex-P8: TEAC			2
P12: EYCON			1
P13: ALLIANSYS SRL			1
P14: Santex			1
P15: TELECOM ARGENTINA S.A			5
P16: CONTROLNET S. A.			1
P17: ABM ingeniería y sistemas S.R.L.			1
P18: UTE			3
P19: CONAE			5
Others			
OBSERVATIONS:			Total Result
			52

5. Indicators of training activities

(HEIs)

Indicators of training activities				Results by each partner (HEIs)							Total result
				EU		LA					
ID	Description	Source	Target	P1: UNI-KLU	P2: UC3M	P3: UNC	P4: UNS	P5: UNMDP	P6: UdelaR	P7: UCU	
5.1	Number of partner country HEIs students trained	WP4 and WP5	120	0	-	8	30	4	4	12	58
5.2	Number of partner country HEIs academic staff trained	WP4 and WP5	60	4	-	5	4	6	5	4	24
5.3	Number of partner country HEIs administrative staff trained	WP4	10	1	-	2	2	1	2	2	9
OBSERVATIONS:											

(number of trainings)

Indicators of training activities				Total result
ID	Description	Source	Target	
5.5	Number of trainings	WP4	5	4
OBSERVATIONS:				

(non HEIs)

Indicators of training activities			
ID	Description	Source	Target
5.4	Number of partner country non-HEI individual trained	WP4 and WP5	20
Results by each partner (non HEIs)			
P8: INCUTEX			1
P9: ALASSIO			1
P10: ALENET			1
Associated partners			
Ex-P8: TEAC			0
P12: EYCON			0
P13: ALLIANSYS SRL			0
P14: Santex			0
P15: TELECOM ARGENTINA S.A			5
P16: CONTROLNET S. A.			0
P17: ABM ingeniería y sistemas S.R.L.			0
P18: UTE			3
P19: CONAE			4
Others			5
OBSERVATIONS:			Total Result
			20

6. Indicators of modernisation on IoT

Indicators of modernisation on IoT				Results by each partner							Total result
				EU		LA					
ID	Description	Source	Target	P1: UNI-KLU	P2: UC3M	P3: UNC	P4: UNS	P5: UNMDP	P6: UdelaR	P7: UCU	
6.1	Number of courses included in the study programmes	WP3	5	-	-	6	3	3	5	3	20
6.2	Number of labs included in the study programmes	WP3	5	-	-	2	2	1	1	1	7
6.3	Number of study programmes involved/modified	WP3	2	-	-	3	2	3	3	2	13
6.4	Number of the study programmes included in the web portal (central platform)	WP3	6	-	-	3	2	3	3	2	13
6.5	Number of courses on the web portal on IoT	WP3	10	-	-	3	3	3	5	3	17
6.6	Number of participations in textbooks published on IoT	WP3	1	-	-	0	1	0	0	1	2
6.7	Number of students enrolled in the courses on IoT	WP3	100	-	-	60	50	44	76	29	259
6.8	Satisfactory survey of the new learning on IoT (answers)	WP3	33	-	-	1	6	1	1	2	11
6.9	Students' satisfaction survey reports	WP3	2	-	-	0	1	0	0	0	1

OBSERVATIONS:

7. Indicators of industry co-operation

Indicators of industry cooperation				Results by each partner (HEIs)							Total result
				EU		LA					
ID	Description	Source	Target	P1: UNI-KLU	P2: UC3M	P3: UNC	P4: UNS	P5: UNMDP	P6: UdelaR	P7: UCU	
7.1	Number of university-industry labs ruled according to an agreement	WP5	5	-	-	1	1	1	0	0	3
7.2	Number of labs created	WP5	5	-	-	1	1	1	1	1	5
OBSERVATIONS: Indicator 6.8: number of responses to surveys											

Indicators of industry cooperation				Total result
ID	Description	Source	Target	
7.3	Number of collaborating enterprises	WP5	5	9+
OBSERVATIONS:				

8. Indicators of management

Indicators of management				Total result
ID	Description	Source	Target	
8.1	Partnerships agreement	WP8	9	9
8.2	Inter semi-annual financial reports	WP8	6	4
8.3	PM board meetings and minutes	WP8	8	14
8.4	PM board reports	WP8	3	2
OBSERVATIONS:				

9. Indicators of sustainability

Indicators of sustainability				Results by each partner (HEIs)							Total result
				EU		LA					
ID	Description	Source	Target	P1: UNI-KLU	P2: UC3M	P3: UNC	P4: UNS	P5: UNMDP	P6: UdelaR	P7: UCU	
9.2	Number of signed agreement about long-term cooperation between HEIs and non academic partners	WP5	4		-	-	1	5	3	5	14
OBSERVATIONS:											

10. Curriculum development

Indicators of sustainability				Results by each partner (HEIs)							Total result
				EU		LA					
ID	Description	Source	Target	P1: UNI-KLU	P2: UC3M	P3: UNC	P4: UNS	P5: UNMDP	P6: UdelaR	P7: UCU	
10.1	Number of learners / trainees enrolled (per intake / course delivery)	WP5	10	-	-	69	44	15	76	15	219
10.2	% of the new curriculum taught in foreign language of the total of new curriculum developed by the project	WP5	> 0%	-	-	0	0	0	0	0	0%
OBSERVATIONS:											

11. Development of network of competence on IoT

Indicators of sustainability				Total result
ID	Description	Source	Target	
11.1	Number of partners of the network of competence	WP2	> 10	10+

8.2 ANNEX B

Erasmus + Project No 618942-EPP-1-2020-1-AT-EPPKA2-CBHE-JP
Network of Competences on Internet of Things - NEON

Project Name	NEON
Date and Time	
Place of Internship	
Name (Optional)	
Organisation	
Date of Assessment	

Please mark with X the appropriate column for each item according to your selected evaluation rate from 1 (worst) to 5 (best).

Evaluation Item	Evaluation Rate				
	1	2	3	4	5
What is your opinion about the degree of compliance with the internship plan?					
What is your opinion about the degree of interaction with company personnel during the internship?					
Do you have any expectations of working in the area and/or field in which the internship was performed?					
Do you have any expectations of maintaining an employment relationship, as a graduate, in the company where the internship was completed?					
What is your opinion about the facilities/installations where the internship activities took place?					
To which extent did the activities live up to your expectations?					
Communication for preparation of the internship was satisfactory.					

Comments (Constructive Suggestions):

.....

