



Project:	Network of Competence on Internet of Things [NEON]
Project ID:	618942-ЕРР-1-2020-1-АТ-ЕРРКА2-СВНЕ-ЈР
Work Package 1:	Consolidation of ex-ante analysis and preparation of implementation actions
Title:	D1.2 Consolidated project plan of implementation actions
Lead Organization:	UNI-KLU
Participating Organization:	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.
Editors:	A. Tonello, N. Letizia
Contributors:	Juan Cousseau, Maria Julia Garcia, Emma Schneider

Disclaimer:

"The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein."

	Work Package and Outcome ref.nr	WP1 D1.2			
	Title	Consolidated analysis of educational/industrial needs on IoT in Argentina and Uruguay			
		□ Teaching material □ Event			
	Туре	🗆 Learning material 🛛 🖾 Report			
		Training material Service / Product			
Deliverable data	Description	This deliverable will present a consolidated plan of all implementation actions to be performed during the project. This includes the development, dissemination and exploitation plans, the final project plan for the set, timing and responsibilities of all deliverables, and the final review of all project tasks assignments and responsibilities.			
	Date	14.07.2021			
	Language	English and Spanish			
Target groups	 ☑ Teaching staff □ Students □ Trainees ☑ Administrative staff 				
	□ Technical staff				
	 ☑ Other (Industry representatives) 				
Dissemination level	Department / Faculty	□ Local			
	oxtimes Institution	\Box Regional \boxtimes International			
Lead Organization	UNI-KLU				
Participating Organization	ALENET, TEAC, EYCON, A	UNS, UNMDP, UdelaR, UCU, INCUTEX, ALASSIO, ALLIANSYS SRL, Santex, TELECOM ARGENTINA S.A, 1 ingeniería y sistemas S.R.L., UTE, CONAE			
Task	T1.3 Preparation of impl (Task leader: UNI-KLU).	ementation actions of the network of competence			

		Revision History		
Version	Date	Author(s)	Organization(s)	Brief description of change
1	14.03.2021	A. Tonello	UNI-KLU	Super draft
2	02.07.2021	Nunzio A. Letizia	UNI-KLU	Table of contents
3	15.07.2021	Nunzio A. Letizia	UNI-KLU	Section 1-4
4	05.09.2021	Nunzio A. Letizia	UNI-KLU	Section 5-6
5	25.10.2021	Juan P. Oliver	UdelaR	FirstreviewprocessforQualityControl(QC)
6	27.10.2021	Nunzio A. Letizia	UNI-KLU	Updated version of the document

Table of Contents

1.	Intro	oduction	5
2.	Obje	ectives of the deliverable	5
3.	Mar	nagement structure and procedures	5
3	3.1.	Governance procedures	6
4.	Revi	ew of WP activities, milestones and deliverables	8
2	4.1.	Time plan of work packages	8
2	1.2.	Tabulated summary of WPs, activities and deliverables	9
5.	Con	solidated actions within WP2-WP81	٤5
5	5.1.	Tasks, deliverables, dates and indicators of progress 1	16
5	5.2.	WP2: Network of Competence on IoT development	23
5	5.3.	WP3: Modernization actions	23
5	5.4.	WP4: Identified laboratories to be created/modernized	23
5	5.5.	WP5: Training and internship implementation with industry	23
5	5.6.	WP6: Quality plan	24
5	5.7.	WP7: Dissemination plan	25
5	5.8.	WP8: Management plan	25
6.	Plan	ned meetings and events	26
7.	Con	clusions	28
Ref	erenc	es2	28

1. Introduction

This deliverable presents a consolidated plan of all implementation actions to be performed during the project. This includes the development, dissemination and exploitation plans, the final project plan for the set, timing and responsibilities of all tasks and deliverables, and the final review of all project tasks assignments and responsibilities.

2. Objectives of the deliverable

The objectives of the deliverable D1.2 are summarized as follows:

- a) Report on the management structure of the NEON project, with a list of responsible persons in each board. The report also discusses the governance procedures illustrated in the partnership agreement;
- b) Quick review of the WP activities, milestones, tasks and deliverables with the respective deadlines;
- c) Actions to be performed in each WP;

UNI-KLU

UdelaR

UNMdP

d) Revisitation of the planned events and meetings as a consequence of travel limitations during the pandemic.

3. Management structure and procedures

During the first project meeting and as a result of WP1 activities, the consortium agreed to the governance structure presented in the following picture.

			Manager	nent Boar	d (MB)			
Quality (QCMB)	Control an	d Monito	ring Board	1 •	• Proj	ect Coordina ect Secretar Incial Officer	iat (PS)	
unive 2 rep 	esentatives rsities () resentative	s of stude			Section Residence	ntry()	r partner	
 1 external auditor 2 HEREs (not employed by EACEA Control, QCM reports, recommend improvements, self-assessment process, indicators progress as per LFM 						pment Boa h WP leader		
				à,		progress, ac stacles to Mi		nts
WP 1 2 3 4 5 6 7 8								
WP leader	UNI-KLU	UNS	UNC	UdelaR	UNMdP	UC3M	UCU	UNI-KLU
Fask leaders	UNS, UC3M,	UNS, UNC,	UNC, UNS,	UNC, UNS,	UNS,	UC3M, UNS,	UNI-KLU,	UNI-KLU

UNMdP

UNMdP,

UNC

UCU, UdelaR

UCU, UdelaR,

UNC UNS

UNMdP

In particular, the following persons have been appointed members of the boards.

Management Board (MB)

- Andrea Tonello (UNI-KLU) [PC]
- Emma Schneider (UNI-KLU) [PS and FO]
- Juan Cousseau (UNS)
- Matias Miguez (UCU)

Development Board (DB)

- Nunzio A. Letizia (UNI-KLU) [WP1 leader]
- Juan Cousseau (UNS) [WP2 leader]
- Jorge Finochietto (UNC) [WP3 leader]
- Leonard Steinfeld Volpe (UdelaR) [WP4 leader]
- Patricio Donato (UNMDP) [WP5 leader]
- Ana Garcia Armada (UC3M) [WP6 leader]
- Matias Miguez (UCU) [WP7 leader]
- Andrea Tonello (UNI-KLU) [WP8 leader]

Quality Board (QB)

- Ana Garcia Armada (UC3M) [QCB leader]
- Emma Schneider (UNI-KLU)
- Fernando Gregorio (UNS)
- Leonardo Steinfeld Volpe (UdelaR)
- External advisor member
- Expert HERE
- Expert HERE
- Student representative
- Student representative

3.1. Governance procedures

The governance procedures are detailed in the partnership agreement. The Project Management activities will be implemented in accordance with Work Package 8 of the submitted proposal through the tasks assigned to the Management Board (MB) and the Development Board (DB). The MB will be led by the coordinator's Project Manager (PM), and will include one representative per project partner country. The DB will be led by one project partner representative and will include the work packages leaders. The MB and DB members have been assigned during the online kick-off meeting, initially planned in Klagenfurt but organized virtually.

The MB will form the primary decision making body of the partnership and is responsible for monitoring the project progress, the achievement of milestones and the delivery of planned results as well as for monitoring the financial aspects and the use of resources. To closely monitor the development activities, the MB will consult the DB. The DB will report the progress of activities, achievements and possible difficulties to the MB who will analyse the situation and eventually propose a contingency plan so that the project can make progress and achieve the planned goals. The coordinator will coordinate closely with all beneficiaries to ensure that the project progresses

efficiently. The coordinator's team will be led by the PM, and assisted by the Project Secretariat (PS), a Financial Officer (FO), the MB, and the DB. The MB will have at least one meeting per year (face-to-face or teleconference), and eventually other meetings via teleconference. The DB is responsible for organizing more frequent meetings or conference calls to discuss development activities and report to the PM and MB especially if difficulties are encountered. Any extraordinary meetings called by the PM, or the MB or the DB may be held by teleconference or other telecommunication means. The activity of the PM will be aided by the PS that will work on administrative and organization of activities as, distribute meeting minutes, maintain the project calendar, coordinate the exchange of information, coordinate the organization of meetings, seminars, workshops, plenary meetings and maintain the book keeping necessary for budgeting and financial activities, manage resolution of conflicts.

In accordance with WP6, a quality control management board (QCMB) has been formed and it comprises representatives of the partners participating in the project and by external auditors outside the consortium to follow up the quality and monitoring of the work packages and carry out inter-party peer review. The QCMB will review each project activity and will also report to the MB and DB the outcome of the evaluation, the identification of deficiencies, and delays so that the appropriate countermeasures can be taken. The QCMB leader will be responsible for organizing monthly meetings of the QCMB also via teleconference, the preparation of the agenda and the delivery of minutes.

Any member of the MB or DB ("Member") should be present or represented at any meeting and may appoint a substitute or a proxy to attend and vote at any meeting, and shall participate in a cooperative manner in the meetings. A Beneficiary that can show that its own allocated work, time for performance, costs, liabilities, intellectual property rights or other legitimate interests would be severely affected by a decision of the MB, may exercise a veto with respect to the corresponding decision. Each member of the MB/DB will have one vote.

An agenda will be drawn up by the PM, or PS, or assigned person, issued to each of the MB and DB meetings no later than 7 calendar days prior to the MB/DB meeting. During a meeting, the members of the MB/DB present or represented can take a majority vote in order to agree to add a new item to the original agenda. The MB/DB leaders, or the PS, or assigned person at the meeting, shall be responsible for organizing the minutes of the MB/DB and decisions will only be binding once the relevant part of the minutes has been accepted following the procedure:

- He/she shall send the draft minutes to all Members within 2 weeks of the meeting;
- The minutes shall be considered as accepted if, within 15 calendar days from sending, if no Member has sent an objection in writing to the PM or PS with respect to the accuracy of the draft of the minutes.

The MB will be responsible for managing any dispute in accordance with Article 16. The following decisions shall be made by the MB:

- Proposals for changes to be made to Annex I Description of the Action to be agreed by the Executive Agency;
- Withdrawal of a Party from the Project and approval of the settlement on the conditions of the withdrawal;
- Identification of a breach by a Party of its obligations under this Agreement or the Grant Agreement;
- Declaration of a Party to be a defaulting Party;
- Remedies to be performed by a defaulting Party;
- Termination of a defaulting Party's participation in the Project and measures relating thereto;
- Proposal to the Executive Agency for a change of the coordinator;
- Proposal to the Executive Agency for suspension of all or part of the Project;
- Proposal to the Executive Agency for termination of the Project and this Agreement.

The DB will be responsible for the coordination of project development, implementation and dissemination activities realization as described in the WPs 1 to 7. The DB shall:

- Support the coordinator in preparing meetings with the Executive Agency and in preparing related data and project deliverables relating to the tasks in WPs 1 to 7;
- Assist with the quality assurance audits in consultation with the QCMB;
- Prepare the content and timing of press releases and joint publications by the Partnership.

For the modernization of laboratories and teaching infrastructures, equipment will be purchased according to the approved project budget. Equipment purchase is an action targeting the two South American partner countries, Argentina and Uruguay. Each Argentinian and Uruguayian university of the consortium will follow a well-documented purchase and, wherever necessary, tendering procedure independently to acquire the items necessary for the modernization or creation of the respective laboratory.

4. Review of WP activities, milestones and deliverables

In this section we schematically report the WP activities, milestones, deliverables and planned delivery dates. Given the number of activities planned in the project and the number of partners involved, the objective is to facilitate the understanding of the overall structure and main responsible organizations. This has been achieved starting from the project proposal and through the discussion among partners during the first kickoff meeting, the following monthly calls and during the preparation phase done in WP1.

The WPs are the following:

- WP1: Consolidation of ex-ante analysis and preparation of implementation actions;
- WP2: Development of network of competence on IoT;
- WP3: Teaching methodologies, material and modernization of study programmes;
- WP4: Development and implementation of laboratories;
- WP5: Training and internship implementation;
- WP6: Quality Control and Monitoring;
- WP7: Dissemination and exploitation of project outcomes;
- WP8: Project coordination and management.

WP1 will not be discussed in this deliverable since it can be considered concluded with D1.1 and this deliverable D1.2.

4.1. Time plan of work packages

The time line of the WPs is the following:

WP1			
WP2			
WP3			
WP4			
WP5			
WP6			
WP7			

WP8						
	Month 1-6	Month 7-12	Month 13-18	Month 19-24	Month 25-30	Month 31-36

Period with planned activities

4.2. Tabulated summary of WPs, activities and deliverables

A visual summary of tasks, and deliverables is given in the tables below.

WP1: Consolidation of ex-ante analysis and preparation of implementation actions

Period	M1 – M6
Participating org. Leader UNI-KLU	<u>UNI-KLU</u> , UC3M, UNC, UNS, UNMDP, UdelaR, UCU, INCUTEX, ALASSIO, ALENET

Tasks	Task leader	Description
T1.1	UNS	Survey and analysis of IoT courses in ICT study programmes in relation to modern society and industry needs in the IoT domain.
T1.2	UC3M	Consolidate guidelines for curriculum modernization in cooperation with Industry.
T1.3	UNI-KLU	Preparation of implementation actions of the NoC.

Deliv	Description
D1.1	Consolidated analysis of educational/industrial needs on IoT in Argentina and Uruguay
D1.2	Consolidated project plan of implementation actions

WP2: Development of network of competence on IoT

Period	M1 – M12
Participating org. Leader UNS	UNI-KLU, UC3M, UNC, <u>UNS</u> , UNMDP, UdelaR, UCU, INCUTEX, ALASSIO, ALENET

Tasks	Task leader	Description
T2.1	UNS	Develop a management platform to coordinate the NoC and to serve as knowledge base.
T2.2	UNI-KLU	Develop policies and procedures to regulate the NoC.
T2.3	UNC	Define the governance of the NoC.
T2.4	UdelaR	Partners and network implementation.

Deliv	Description	
D2.1	Report on management platform to coordinate the NoC	
D2.2	Report on the creation of the legal framework for the NoC	
D2.3	Report that defines the governance of the NoC	
D2.4	Report on network implementation	

WP3: Teaching methodologies, material and modernization of study programmes

Period	M1 – M32
Participating org. Leader UNC	UNI-KLU, UC3M, <u>UNC</u> , UNS, UNMDP, UdelaR, UCU, INCUTEX, ALASSIO, ALENET

Tasks	Task leader	Description
T3.1	UNC	Adoption of new learning/teaching methods, tools, ICT best practices in teaching.
T3.2	UNS	Creation and / or modernization of teaching material related to IoT.
T3.3	UNMdP	Improvement and implementation of new learning/teaching methods, tools, ICT best practices in teaching.

Deliv	Description	
D3.1	Web repository for class and lab sessions material	
D3.2	Report on the modernized teaching methodologies applied to IoT courses	
D3.3	Teaching and training materials for new and modernized IoT courses	
D3.4	Delivery of teaching and training classes for new and modernized IoT courses	

WP4: Development and implementation of laboratories

Period	M1 – M23
Participating org. Leader UdelaR	UNI-KLU, UC3M, UNC, UNS, UNMDP, <u>UdelaR</u> , UCU, INCUTEX, ALASSIO, ALENET

Tasks	Task leader	Description
T4.1	UNC	Creation of joint university-industry labs and modernization of the lab Infrastructure.
T4.2	UNS	Pilot lab development (Domain 1). The purpose is to develop a complete undergraduate or graduate lab with pedagogical/technological tools in the domain of IoT.
T4.3	UNMdP	Pilot lab development (Domain 2). 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 hardware for IoT.

Deliv	Description
D4.1	Report on the laboratory infrastructure and equipment at each LA university
D4.2	Report on the created five joint university-company labs ruled by an agreement

WP5: Training and internship implementation

Period	M1 – M35
Participating org. Leader UNMdP	UNI-KLU, UC3M, UNC, UNS, <u>UNMDP</u> , UdelaR, UCU, INCUTEX, ALASSIO, ALENET

Tasks	Task leader	Description
T5.1	UNS	Creation of a section in the project website where training and internship opportunities are listed.
T5.2	UNMdP	Implement framework for student training in cooperation with EU partners and industry.
T5.3	UNS	Implement framework for student internships in companies.
T5.4	UNC	Offer techno-economic, entrepreneurial and IPR related training modules.
T5.5	UNMdP	Implement teacher staff training on technology and modern prototyping tools for IoT.
T5.6	UNMdP	Implementation of three workshops on IoT and ICT technologies.

Deliv	Description		
D5.1	Report on the training/internships website section		
D5.2	Report on the framework for training and internships		
D5.3	Report on organized hackathons for students of the region		
D5.4	Report on student training modules on technical and entrepreneurial subjects		
D5.5	Report on teacher training modules		

WP6: Quality Control and Monitoring

Period	M1 – M35
Participating org. Leader UC3M	UNI-KLU, <u>UC3M</u> , UNC, UNS, UNMDP, UdelaR, UCU, INCUTEX, ALASSIO, ALENET

Tasks	Task leader	Description
T6.1	UC3M	Establishment of the QCM Board and appointment of external experts for QC (1 QC expert and 2 external advisors).
T6.2	UNS	Consolidation of areas to be monitored, indicators, and correction strategies both internal and external.
T6.3	UC3M	Internal control of project progress and outcomes.
T6.4	UCU	Monitor graduates profile, improvements in the skills, correspondence to industry needs.
T6.5	UCU	Collect questionnaires and surveys via social networks (LinkedIn, AngelList).
T6.6	UdelaR	Monitor student enrolment statistics in the region.
T6.7	UCU	Establish a monitoring system for employment statistics of graduates.
Т6.8	UdelaR	Establish a monitoring system for entrepreneur attitude and newcos (by means of surveys, databases, etc.).

Deliv	Description
D6.1	Establishment of Quality Control (QC) board and appointment of external experts for QC
D6.2	Development of guidelines for QC
D6.3	Reports on project implementation
D6.4	Report on graduates profile improvements and correspondence to industry needs
D6.5	Report on tools for monitoring students enrolment and employability/employment/entrepreneurial statistics of graduates
D6.6	Reports on stakeholders reached beyond the project consortium

WP7: Dissemination and exploitation of project outcomes

Period	M1 – M35
Participating org. Leader UCU	UNI-KLU, UC3M, UNC, UNS, UNMDP, UdelaR, <u>UCU</u> , INCUTEX, ALASSIO, ALENET

Tasks	Task leader	Description
T7.1	UNI-KLU	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.
T7.2	UCU	Preparation of exploitation and dissemination plan.
T7.3	UdelaR	Create promotional and dissemination material targeting high schools' students and society at large (exploiting also media).
T7.4	UdelaR	Organize an annual open event outreaching a wide audience that includes public authorities, industry, students, pupils and non-expert people.
T7.5	UNC	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.
T7.6	UNI-KLU	Establish agreements for future double degrees, joint teaching, student mobility beyond the project duration, bilateral agreements within Erasmus+ KA1.
T7.7	UNS	Create an agreement for the maintenance of the web platform beyond the project life time.
T7.8	UNI-KLU	Create partnerships for follow-up projects.
T7.9	UNMdP	Participate in an event of dissemination of project results.

Deliv	Description
D7.1	Central project web platform linked to the e-platforms developed in other WPs
D7.2	Report on exploitation and dissemination plan
D7.3	Preparation and delivery of dissemination and informative material
D7.4	Report on open events to reach the community at-large and disseminate the results at ICT conferences
D7.5	Report on yearly webinars (hosted in turn by the HEIs partners) broadcasted to all locations
D7.6	Establishment of agreements for future double degrees, student mobility beyond the project duration
D7.7	Report on agreement for the maintenance of the web platforms beyond the project life time
D7.8	Report on partnerships for follow-up projects involving industry

WP8: Project coordination and management

Period	M1 – M36
Participating org. Leader UNI-KLU	<u>UNI-KLU</u> , UC3M, UNC, UNS, UNMDP, UdelaR, UCU, INCUTEX, ALASSIO, ALENET

Tasks	Task leader	Description
T8.1	UNI-KLU	Creation of a project management (PM) board
T8.2	UNI-KLU	Creation of an e-platform for project management (e.g., wiki page)
T8.3	UNI-KLU	Monitor and coordinate the overall project
T8.4	UNI-KLU	Maintain flow of information between partners and the funding agency
T8.5	UNI-KLU	Organize regular meetings (face to face and remote)
T8.6	UNI-KLU	Monitor the financial aspects of the project, funding, and prepare the reports

Deliv	Description
D8.1	Report on the project management (PM) board and its establishment
D8.2	Report on the project management (PM) e-platform for sharing documentation
D8.3	Mid-term report
D8.4	Final report

5. Consolidated actions within WP2-WP8

The consolidated actions within WP2-8 follow the proposal and have been agreed as summarized in the following table of tasks, deliverables, dates and indicators of progress. The GANTT of activities is reported in the appendix and can be found also in the Confluence system for the project management.

5.1. Tasks, deliverables, dates and indicators of progress

Task leader	Activity description	Outcome	Indicator	Task ID	Responsible person	Start date	End date
WP2					Juan Cousseau		
UNS	Manage task T2.1: Develop a management platform to coordinate the NoC and to serve as knowledge base		MS2.1	T2.1		15/01/2021	15/04/2021
UNI-KLU	Manage task T2.2: Develop policies and procedures to regulate the NoC	D2.2	MS2.2	T2.2		15/01/2021	15/07/2021
UNC	Manage task T2.3: Define the governance of the NoC	D2.3	MS2.3	T2.3		15/01/2021	15/09/2021
UdelaR	Manage task T2.4: Partners and network implementation	D2.4	MS2.4, MS2.5	T2.4		15/01/2021	15/01/2022

Task leader	Activity description	Outcome	Indicator	Task ID	Responsible person	Start date	End date
WP3					Jorge Finocchietto		
UNC	Manage task T3.1: Adoption of new learning/teaching methods, tools, ICT best practices in teaching	D3.1/D3.2	MS3.1, MS3.4	T3.1		15/07/2021	15/01/2022
UNS	Manage task T3.2: Creation and / or modernization of teaching material related to IoT	D3.3	MS3.2, MS3.3, MS3.5, MS3.6	T3.2		15/07/2021	15/09/2022
UNMdP	Manage task T3.3: Improvement and implementation of new learning/teaching methods, tools, ICT best practices in teaching		MS3.7	Т3.3		15/07/2021	15/03/2023

Task leader	Activity description	Outcome	Indicator	Task ID	Responsible person	Start date	End date
WP4					Leonard Steinfel Volpe		
UNC	Manage task T4.1: Creation of joint university-industry labs and modernization of the lab infrastructure	D4.1	MS4.1, MS4.2, MS4.3	T4.1		15/01/2021	15/01/2022
UNS	Manage task 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	D4.2	MS4.4	T4.2		15/01/2021	15/12/2022
UNMdP	Manage task 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 hardware for IoT		MS4.4	T4.3		15/01/2021	15/12/2022

Task leader	Activity description	Outcome	Indicator	Task ID	Responsible person	Start date	End date
WP5					Patricio Donato		
UNS	Manage task T5.1: Creation of a section in the project website where training and internship opportunities are listed	D5.1	MS5.1, MS5.2	T5.1		15/01/2021	15/07/2021
UNMdP	Manage task T5.2: Implement framework for student training in cooperation with EU partners and industry	D5.2, D5.5	MS5.3, MS5.4, MS5.5, MS5.7, MS5.8, MS5.9, MS5.11, MS5.12,	T5.2		15/01/2021	15/12/2023
UNS	Manage task T5.3: Implement framework for student internships in companies	D5.2	MS5.10, MS5.12,	T5.3		15/01/2021	15/12/2021
UNC	Manage task T5.4: Offer techno-economic, entrepreneurial and IPR related training modules	D5.4	MS5.6,	T5.4		15/01/2021	15/07/2023
UNMdP	Manage task T5.5: Implement teacher staff training on technology and modern prototyping tools for IoT	D5.5	MS5.3 <i>,</i> MS5.5	T5.5		15/01/2021	15/12/2023
UNMdP	Manage task T5.6: Implementation of three workshops on IoT and ICT technologies	D5.5	MS5.13, MS5.14, MS5.15	T5.6		15/01/2021	15/12/2023

Task leader	Activity description	Outcome	Indicator	Task ID	Responsible person	Start date	End date
WP6					Ana Garcia Armada		
UC3M	Manage task T6.1: Establishment of the QCM Board and appointment of external experts for QC (1 QC expert and 2 external advisors)	D6.1	MS6.1, MS6.2, MS6.4	T6.1		15/01/2021	15/02/2021
UNS	Manage task T6.2: Consolidation of areas to be monitored, indicators, and correction strategies both internal and external	D6.2	MS6.2,	T6.2		15/01/2021	15/05/2021
UC3M	Manage task T6.3: Internal control of project progress and outcomes	D6.3	MS6.3, MS6.5	T6.3		15/01/2021	15/04/2023
UCU	Manage task T6.4: Monitor graduates profile, improvements in the skills, correspondence to industry needs	D6.4	MS6.5, MS6.6	T6.4		15/01/2021	15/11/2023
UCU	Manage task T6.5: Collect questionnaires and surveys via social networks (LinkedIn, AngelList)	D6.5	MS6.6	T6.5		15/01/2021	15/01/2023
UdelaR	Manage task T6.6: Monitor student enrolment statistics in the region	D6.5	MS6.6	T6.6		15/01/2021	15/01/2023
UCU	Manage task T6.7: Establish a monitoring system for employment statistics of graduates	D6.5	MS6.6	T6.7		15/01/2021	15/01/2023
UdelaR	Manage task T6.8: Establish a monitoring system for entrepreneur attitude and newcos (by means of surveys, databases, etc.)	D6.6	MS6.7	T6.8		15/01/2021	15/01/2023

Task leader	Activity description	Outcome	Indicator	Task ID	Responsible person	Start date	End date
WP7					Matìas Miguez		
UNI-KLU	Manage task 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		MS7.1, MS7.2	T7.1		15/01/2021	15/07/2021
UCU	Manage task T7.2: Preparation of exploitation and dissemination plan	D7.2	MS7.3, MS7.4, MS7.11	T7.2		15/01/2021	15/01/2022
UdelaR	Manage task T7.3: Create promotional and dissemination material targeting high schools' students and society at large (exploiting also media)	D7.3	MS7.11	T7.3		15/01/2021	15/06/2022
UdelaR	Manage task T7.4: Organize an annual open event outreaching a wide audience that includes public authorities, industry, students, pupils and non- expert people	D7.4	MS7.8, MS7.9, MS7.10	T7.4		15/01/2021	15/11/2023
UNC	Manage task 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	D7.5	MS7.5, MS7.6, MS7.7	T7.5		15/01/2021	15/12/2023
UNI-KLU	Manage task T7.6: Establish agreements for future double degrees, joint teaching, student mobility beyond the project duration, bilateral agreements within Erasmus+ KA1	D7.6	MS7.13, MS7.14	T7.6		15/01/2021	15/07/2023

UNS	Manage task T7.7: Create an agreement for the	D7.7	MS7.12	T7.7	15/01/2021	15/12/2023
	maintenance of the web platform beyond the					
	project life time					
UNI-KLU	Manage task T7.8: Create partnerships for follow-up	D7.8	MS7.14	T7.8	15/01/2021	15/07/2023
	projects					
UNMdP	Manage task T7.9: Participate in an event of	D7.8		T7.9	15/01/2021	15/07/2023
	dissemination of project results					

Task leader	Activity description	Outcome	Indicator	Task ID	Responsible person	Start date	End date
WP8					Andrea Tonello		
UNI-KLU	Manage task T8.1: Creation of a project management (PM) board	D8.1		T8.1		15/01/2021	15/02/2021
UNI-KLU	Manage task T8.2: Creation of an e-platform for project management (e.g., wiki page)	D8.2		T8.2		15/01/2021	15/03/2021
UNI-KLU	Manage task T8.3: Monitor and coordinate the overall project	D8.3, D8.4	MS8.1	T8.3		15/01/2021	15/12/2023
UNI-KLU	Manage task T8.4: Maintain flow of information between partners and the funding agency	D8.3, D8.4	MS8.4	T8.4		15/01/2021	15/12/2023
UNI-KLU	Manage task T8.5: Organize regular meetings (face to face and remote)	D8.3, D8.4	MS8.2, MS8.3	T8.5		15/01/2021	15/12/2023
UNI-KLU	Manage task T8.6: Monitor the financial aspects of the project, funding, and prepare the reports	D8.3, D8.4	MS8.5 <i>,</i> MS8.5	Т8.6		15/01/2021	15/12/2023

5.2. WP2: Network of Competence on IoT development

WP2 (led by UNS) aims at developing the the legal framework, policies and governance of the Network of Competence (NoC). The main tasks are the creation of a management platform to coordinate the NoC, develop policies and procedures to regulate the NoC, define the governance, create the first list of partners that will collaborate in the NoC.

- The NoC management platform is developed and led by UNS. It is accessible at the following link: <u>http://neon-iot.org/</u>
- Policies and procedures to regulate the NoC are available on the project management platform (Confluence), as well as the governance definition.
- The list of partners is available at the following link: http://neon-iot.org/index.php/partners/

5.3. WP3: Modernization actions

WP3 (led by UNC) aims at developing and implement the training and teaching material shared by the NoC. The main tasks are: the adoption of new learning and teaching tools and ICT best practices; the creation or modernization of teaching material related to IoT. A web repository shared between partners will be created to organize the new material developed by the consortium.

- Adoption of new learning and teaching tools and ICT best practices will follow the guidelines developed in Sec.5 of [1].
- Similarly, the creation of modernized teaching material related to IoT is based on the 4 pillars identified in Task 1.2 "consolidate guidelines for curriculum modernization in cooperation with industry". Please refer to Sec.5 of [1] for details.
- The shared web repository is located in the NoC management platform.

5.4. WP4: Identified laboratories to be created/modernized

WP4 (led by UdelaR) aims at conceiving and developing laboratories in collaboration with industry. Every LA university defined the characteristics of the new or improved laboratory. Specifically, the planned five modern industry-academia labs (one per Latin American university partner) are the following:

- **UNS**: Signal Processing for Communications laboratory.
- **UNMdP**: Communications Technology applied to IoT.
- **UCU**: IoT for agribusiness laboratory.
- UdelaR: IoT laboratory.
- **UNC**: Digital Communications Laboratory.

5.5. WP5: Training and internship implementation with industry

WP5 (led by UNMdP) aims at implementing training and internship activities. The main tasks are the implementation of a framework for student training in cooperation with EU partners and industry, the implementation of a framework for student internships in companies and training for teachers and staff members. Industry partners related to the project are listed below: **Full partners**:

- Incutex, (INCUTEX): They help and provide support during the organizations of project related events and promote them via communication channels. They connect the project participants with stakeholders and enlarge the network. They also provide feedback on desirable academic training needed and offer internship opportunities to students of academic partners in the domain of IoT engineering and management skills.
- Alassio S.A., (BQN): They provide support during the organizations of project related events and promote them via communication channels. They connect the project participants with stakeholders and enlarge the network. They also provide feedback on desirable academic training needed and offer internship opportunities to students of academic partners in the domain of hardware and software development for portable POS devices.
- ALENET S.A., (Nettra): They provide support during the organizations of project related events and promote them via communication channels. They connect the project participants with stakeholders and enlarge the network. They also provide feedback on desirable academic training needed and offer internship opportunities to students of academic partners in the domain IoT solutions for remote monitoring and remote control for a wide range of applications.

Associated partners:

- TEAC Foundation, (TEAC): They will be part of all the activities related to academia industry interaction. The main idea is to serve as a facilitator of activities between the companies that are part of the Foundation and the academic activities planned.
- EYCON S.A., (EYCON): They provide feedback on desirable academic training needed and offer internship opportunities to students of academic partners in the domain of logistics and/or smart cities.
- ALLIANSYS SRL, (ALLIANSYS): They provide feedback on desirable academic training needed in the domain of smart cities.
- Santex, (Santex): They offer internship opportunities to students of academic partners in the domain of software solutions related to ICT projects.
- TELECOM ARGENTINA, (S.A TELECOM): They provide feedback on desirable profile objective for their employees and consider offering internship opportunities to students of academic partners in the domain of telecommunications.
- CONTROLNET S. A., (CONTROLNET S.A.): They provide feedback on desirable academic training needed and offer internship opportunities to students of academic partners in the domain of IoT transportation solutions.
- ABM ingeniería y sistemas S.R.L., (ABM): They provide feedback on desirable academic training needed in the domain of IoT in sport and training.
- Administración Nacional de Usinas y Trasmisiones Eléctricas, (UTE): They will collaborate in projects of IoT applications, e.g., smart grids and help the dissemination of activities.
- CONAE, (CONAE): They will collaborate in the development of the NoC.

5.6. WP6: Quality plan

The Quality Plan introduces the main definitions of quality management procedures, processes of planning and execution of project activities. The goal of the document is to ensure the project maintain its quality by defining the minimum set of procedures and requirements that are needed in order to ensure an effective quality assurance and control.

Quality expectations of the NEON project are first and foremost defined in terms of the project's ability to achieve the general objective in an operational setting defined by the four NEON axes:

- 1. Cooperation between HEIs and industry to modernize the study programme with IoT content and skills.
- 2. Adoption of modern teaching methodologies and tools, the upgrade of the lab infrastructure, and the creation of joint university-industry labs.
- 3. Implementation of training of both teachers and students.
- 4. Cooperation between HEIs in EU and LA of good practices in engineering education and experience on ICT, especifically IoT.

The quality plan has been consolidated and it is part of deliverable D6.2. [2]

5.7. WP7: Dissemination plan

WP7 includes all the dissemination activities done to promote the NEON project and its outcomes. They will be carried throughout the entire duration of the project by means of:

- Permanently updated interactive project Web site. The site will be constantly updated and will present all relevant information about the current, past, and planned project activities as well as important links. It can be accessed through the following link: https://www.project-neon.eu/
- Preparation of the reports and white papers.
- Preparation of special sessions devoted to the project at the selected conferences, and relevant papers describing project outcomes.
- The presentation of the project results to the industry through promotion materials, banners and papers, and university-to-business meetings.
- Presentation of the NoC during open days at each university.
- Promote the developed courses and laboratories.
- Set the base for future exploitations: cooperation and agreements, methods to monitor employment status and opportunities, continuous training of staff, continuous modernization of infrastructure.

Furthermore, the project outcome will be presented at three annual open events in Mar del Plata, Montevideo and Bahia Blanca. The open events are designed to disseminate to society at large the project activities and outcomes, outreaching a wide audience that includes public authorities, industry, students, pupils and non-expert people.

The open events that will be carried out through the project are leaded by UdelaR, as task leader of T7.4, and they will take place in:

- Mar del Plata, UNMdP, on October 15th of 2021.
- Montevideo, UCU, on October 15th of 2022.
- Bahia Blanca, UNS, October 15th of 2023.

The dissemination plan is currently under construction and it is part of deliverable D7.2. [3]

5.8. WP8: Management plan

Management will be carried out within the activities of the WP8. The management boards and the governance procedures are described in Sec. 3 and Sec. 3.1. One project meeting per year will be carried out (online if necessary) and a number of project events have been planned as detailed in

Sec. 6. Regular conference calls will be organized, e.g. once per month, with the management board and the development board. Financial reports to the EC will be done twice (at month 18 and at the end of the project). To allow an effective monitoring of activities and progress of expenses, it has been agreed to collect financial reports every six months. In the first six months, the kick-off meeting has been organized virtually by UNI-KLU and the partnership agreement has also been completed and signed by every partner.

In D8.1 the constitution of the management board is reported as well as a summary of main management activities that will be carried out by the coordinator.

6. Planned meetings and events

NEON has planned several meetings and events. The COVID 19 pandemic may have a strong impact on the organisation of the events listed in the table below.

	Project meetings (WP8)	Date	Location	Partners with budget
MS8.2	Kickoff meeting	M1 (05/02/2021)	Klagenfurt	All
MS8.2	Project meeting	M9	Madrid	All
MS8.2	Project meeting	M20	Cordoba	All
MS8.2	Wrap up meeting	M33	Klagenfurt	All
MS8.3	Project meeting via web	Every year	Online	
	conference (3X)			

	Open events (WP7)	Date	Location	Partners with budget
MS7.8	Open event on studying	M9	Mar del	UNC, UNS, UdelaR,
	ICT		Plata	UCU, Incutex, Alasso,
				Alenet
MS7.9	Open event on	M21	Montevideo	UNC, UNS, UNMdP,
	academia-industry			Incutex
	cooperation			
MS7.10	Open event on	M33	Bahìa	UNC, UNMdP,
	entrepreneurship		Blanca	UdelaR, UCU, Incutex,
				Alassio, Alenet

	Webinars (WP7)	Date	Host	Partners with budget
MS7.5	NoC structure and	M10	UNC	
	partners			
MS7.6	New/modernized IoT	M22	UdelaR	
	courses in Uruguay			
MS7.7	New/modernized IoT	M34	UNMdP	
	courses in Argentina			

	Student mobility (WP5)	Date	Location	Partners with budget
MS5.6	Student	To be defined	Bahìa	UNC, UNMdP
	training/internship		Blanca	
MS5.6	Student	To be defined	Cordoba	UNS, UNMdP
	training/internship			
MS5.6	Student	To be defined	Montevideo	UdelaR, UCU, UNS,
	training/internship			UNMdP

MS5.6	Student	To be defined	Montevideo	UdelaR, UCU
	training/internship			
MS5.6	Student	To be defined	Buenos	UNC, UNS, UNMdP,
	training/internship		Aires	UdelaR
MS5.9	Hackathon for students	M18	Montevideo	UNC, UNS, UNMdP
MS?	Student mobility from	To be defined	Klagenfurt	UNC, UNS, UdelaR
	South America to			
	European HEI			
MS?	Student mobility from	To be defined	Madrid	UNMdP, UCU
	South America to			
	European HEI			

	Teacher training (WP5)	Date	Location	Partners with budget
MS5.13	Workshop on teaching	M7	Klagenfurt	UC3M, UNC, UNS,
	methodologies for IoT			UNMdP, UdelaR, UCU
MS5.14	Workshop on	M19	Madrid	UNI-KLU, UNC, UNS,
	communication			UNMdP, UdelaR, UCU
	technologies for IoT			
MS5.15	Workshop on IoT	M31	Montevideo	UNI-KLU, UC3M, UNC,
	technologies for			UNS, UNMdP,
	agriculture market			Incutex, Alassio
MS5.6	Student	To be defined	Montevideo	UdelaR, UCU
	training/internship			
MS?	Staff mobility from	To be defined	Madrid	UNC
	South America to			
	European HEI			
MS?	Staff mobility from	To be defined	Klagenfurt	UNC
	South America to			
	European HEI			

	Other events and	Date	Location	Partners with budget
	meetings			
WP8	Grant-holders meeting	EACEA	Online (initially	UNI-KLU, UNS
			planned in Bruxelles)	
MS1.1	Meeting of all Latin	M3	Online	
	American universities			
MS2.5	Meeting of the NoC	M7	Online	
	group			
MS6.5	QCM Board meeting	M18	Madrid	UNS, UdelaR, UNI-KLU

7. Conclusions

This deliverable has presented a consolidated plan of all implementation actions to be performed during the project. It has provided an overview of the planned activities, events and responsibles for each task. It has been conceived as an easy-to-read and compact guide in order to facilitate to all partnership members an immediate understanding of the activities, deliverables and milestones which include planned meetings and events.

References

- [1] Project NEON D1.1: Consolidated analysis of educational/industrial needs on IoT in Argentina and Uruguay, 2021.
- [2] Project NEON D6.2: Development of guidelines for QC (QualityControl), 2021.
- [3] Project NEON D7.2: Report on exploitation and dissemination plan, 2021.