A3.1, O3: Number of completed Challenges – Summary (Pilots 1-5)

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Beneficiaries

- Aalborg University, Denmark
- Dublin City University, Ireland
- Kaunas University of Technology, Lithuania
- Linköping University, Sweden
- Tampereen Korkeakoulusäätiö sr, Finland
- Hamburg University of Technology, Germany
- Universidade de Aveiro, Portugal
- Universitat Autonoma de Barcelona, Spain
- University of Stavanger, Norway
- Universita degli Studi di Trento, Italy
- Institut National des Sciences Appliquées de Toulouse, France
- University of Twente, The Netherlands

Abstract

This report presents the titles and types of challenges in all ECIU partner universities. The activity lead WP 3.1. collects the numbers of completed challenges as part of the ECIU-U Project. In this report the data was used to monitor the number of completed challenges in Pilot 5 and all five pilot phases and make sure that we have met our commitments to the deliverables stated in the ECIU U-project proposal.

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1.1 List of tables

Symbols, abbreviations and acronyms

AAU	Aalborg University, Denmark
DCU	Dublin City University, Ireland
EC	European Commission
ECIU	European Consortium of Innovative Universities
KTU	Kaunas University of Technology, Lithuania
LiU	Linköping University, Sweden
TAU	Tampereen Korkeakoulusäätiö sr, Finland
TUHH	Hamburg University of Technology, Germany
UA	Universidade de Aveiro, Portugal
UAB	Universitat Autonoma de Barcelona, Spain
UiS	University of Stavanger, Norway
UNITN	Università degli Studi di Trento, Italy
UT	University of Twente, Netherland

1 Objectives

The objective of this report is to describe number of completed challenges in all ECIU institutions as part of the ECIU-U Project in Pilots 2, 3, 4 and 5. It also presents the titles and types of challenges in all ECIU partners.

2 Introduction

The aim of this report is to describe WP3, activity lead 3.1.3 The deliverable report takes as its starting point the ECIU University proposal to the European Commission (pp. 23-24), and describes Outcome 3 (O3), 'registration and monitoring of challenges'.

2.1 Monitoring the number of challenges

In pilot phase 2, 3, 4 and 5 WP 3.1 collected the numbers and types of challenges that each ECIU partner university has completed (completed by delivering a video solution or final report) during Fall 2022 (Table 2.2). Also, Table 2.3 gives an overview of the titles of the challenges in Pilot 5.
ECIU committed to create, in total, **28** nano challenges, **28** mini challenges, **15** standard challenges and **1** strategic challenge in year 1, year 2 and year 3 in five pilot phases (Table 2.4). However, as Table 2.2 shows, we have completed **18** nano challenges, **33** mini challenges, **75** standard challenges and 1 strategic challenge through the five pilot phases in year 1, year 2 and year 3. The number of standard challenges completed far exceeds the target, which is a very positive outcome.

We are committed to completing 28 nano challenges by the end of the third year and so far we have completed 18 nano challenges. This reflects that nano challenges have proved more difficult to organize than standard challenges, a useful insight for the future organization of challenges.

Table 2.1 Actual numbers of challenges conducted in Pilots 1, 2,3, 4 and 5

Type of challenges	Nano	Mini	Standard	Strategic
Conducted in Pilot 1	1	8	14	-
Conducted in Pilot 2	2	4	22	-
Conducted in Pilot 3	9	18	18	-
Conducted in Pilot 4	2	1	8	1
Conducted in Pilot 5	4	2	13	
Total Challenges completed in Pilot 1, 2 ,3, 4 and 5	**18**	**33**	**75**	**1**
Committed for year 1, year 2, year3	**28**	**28**	**15**	**1**

Table 2.2 Titles and Types of challenge in Pilot 5

Challenge	University	Type
How to make University of Stavanger a greener university?	University of Stavanger	Nano
Ethical Impact of Innovative Technologies	Dublin City University	Nano
Green mobility solutions for solving the negative effects of increasing urbanization	Kaunas University of Technology	Nano
What should the future of European higher education look like?	University of Twente	Nano
Open source, hybrid situational awareness	Tampere University	Mini
Carbon neutral solutions and service		
Prevent damage to properties due to climate change-related events	Linköping University	Standard
A sustainable healthcare centre on Costa del Sol		
Hitchhikers' guides, virtual Charons, and the future of cultural objects.	University of Trento	Standard
The Tanning Industry Challenge		
Design your future! Engaging Communities with Synthetic Biology through Games		
Food and Housing Insecurity in University Students	Dublin City University	Standard
The Emotional Commuter		
Use bioconversion to feed and preserve the world in a sustainable way	Institut National des Sciences Appliquées	Standard
Energy consumption and CO2 footprint reduction in the offices of Lithuanian business companies	Kaunas University of Technology	Standard
Creating an environmentally friendly community for pets, pet parents and cities		
Big Data & Climate Change in Barcelona	Universitat Autònoma de Barcelona	Standard
Engaging energy transition to pursue a new energy system		
Plastic: solution or pollution? Closing the loop towards a circular economy.	Technische Universität Hamburg-Harburg	Standard

Table 2.3 Numbers of challenges by type as stated in the ECIU U-proposal (pp. 24)

	Year 1	Year 2	Year 3	**Total**
Nano	6	11	11	**28**
Mini	6	11	11	**28**
Standard	3	5	7	**15**
Strategic	0	0	1	**1**
Total	15	27	30	**72**

2.2 Strategies for more nano and mini-challenges in pilot phase 5 – Autumn 2022

In order to increase the number of nano-challenges and mini challenges, a greater awareness program should be made amongst scientific staff. This should emphasize the link between the pedagogical process and typical assignments in existing study programs, and mainstream both nano and mini challenges in the learning processes. This could be done:

- Through organizing nano-challenges as workshops, hackathons, creathons or business model workshops as ordinary learning activities.
- By engaging and training more teachers as teamchers for the next pilot phase.
- By including and training students who have already participated in standard and mini challenges as teamchers in upcoming nano and mini challenges.
- By sharing more teaching and educational resources used in pilots 1, 2 3 and 4 for future teachers and teamcher.

3 Appendices

4 Bibliography

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