

# **Towards a sustainable Open Data ECOsystem**

# D1.4 Training Week 2 "Towards a user driven open data ecosystem"



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Author	Francisco J Lopez-Pellicer, UNIZAR
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# **Abbreviations**

D Deliverable

ESR Early Stage Researcher

M Milestone

ODECO Open Data ECOsystem

WP Work Package

Nr	Partner	Partner short name	Country
Bene	eficiary		
1	Technische Universiteit Delft	TU Delft	Netherlands
2	Katholieke Universiteit Leuven	KUL	Belgium
3	Centre National de la Recherche Scientifique	CNRS	France
4	Universidad de Zaragoza	UNIZAR	Spain
5	Panepistimio Aigaiou	UAEGEAN	Greece
6	Aalborg Universitet	AAU	Denmark
7	Università degli Studi di Camerino	UNICAM	Italy
8	Farosnet S.A.	FAROSNET S.A.	Greece
Part	Partner organisations		
1	7EDATA	7EDATA	Spain
2	Digitaal Vlaanderen	DV	Belgium
3	City of Copenhagen	COP	Denmark
4	City of Rotterdam	RDAM	Netherlands
5	CoC Playful Minds	CoC	Denmark
6	Derilinx	DERI	Ireland
7	ESRI	ESRI	Netherlands
8	Doctrine	DOCTRINE	France
9	Maggioli S.p.A	MAG	Italy
10	National Centre of Geographic Information	CNIG	Spain
11	Open Knowledge Belgium	ОКВ	Belgium
12	Spatineo	SPATI	Finland
13	SWECO	SWECO	Netherlands
14	University of Paris Nanterre	UPN	France



## 1. Introduction

The training week programme in the ODECO project is organised in five training weeks planned to be executed through the entire duration of the project by the various beneficiaries:

- 1. Training week 1: 'Understanding open data as an ecosystem' (+ Consortium Meeting 1) (AAU M12);
- 2. Training week 2: 'Towards a user driven open data ecosystem' (+ Consortium Meeting 2) (UNIZAR M18);
- 3. Training week 3: Towards a circular open data ecosystem' (+ Consortium Meeting 3) (UNICAM M24);
- 4. Training week 4: 'Towards an inclusive open data ecosystem' (+ Consortium Meeting 4) (KULEUVEN M30);
- 5. Training week 5: 'Towards the open data ecosystem' (+ Consortium Meeting 5) (UAEGEAN M36).

Each training week include the following elements to enhance collaboration and communication among the ESRs as well as the whole project team:

- Network events;
- Master classes;
- Professional skills training;
- An outreach activity.

This report is a record of Training week 2 planned and conducted by UNIZAR from Mar. 27th – Mar. 31st, 2023, at Universidad de Zaragoza in Zaragoza Spain. The issues/subjects covered by the second training week were mutually defined by the beneficiaries of the project regarding the specific needs of the Early Stage Researchers (ESRs) between M19 – M23.

#### 1.1. Training week programme objective

The overall objective of the Training Week 2 is to get ESRs acquainted with users of open data, their interests, needs and role in the open data ecosystem. The programme thus aimed to stimulate collaboration between ESRs and external partners (organisations, academia, and industry) with an explicit or implicit open data focus. Additionally, the Training Week should also support the ESRs in gaining leadership and social media perspective through training on diverse topics such funding opportunities, gender dimension, dissemination, and research of social media. Finally, the objective was to engage ESRs in an outreach event related to the use of open data for storytelling.

#### 1.2. Setup of the programme

Below is the training program as it was planned in the Description of Action.

Table 1: Initial programme for the Training Week 2

Day	Activity		
Day 1	ESR progress presentations to the ODECO network & Social event (evening)		
Days	ODECO Master Class II		
2 & 3	Users, and user engagement: concepts, approaches, and activities (TU Delft and		
	KU Leuven) (1 day);		
	Open data in practice: Understanding users (needs) & providers (needs) from		
	multiple perspectives (RDAM, Farosnet, CNIG, 7EDATA, SPATI, MAG) (1 day).		
Day 4	Professional Skills Training		
	Leadership (coaching, negotiation, change management) (UNIZAR), social media for		
	research (input and/or dissemination) (UNIZAR)		
Day 5	Outreach event		
	ODECO Datathon 'Improving existing data ecosystems' organized by all ESRs, with		
	support from CNIG, ESRI, MAG, SWECO, 7EDATA and OSF.		



However, after analysing the feedback of Training Week 1 we decided that was better to:

- Reorder the activities, moving ODECO Network Day to Day 4
- Interleave Masterclass and Professional Skills Training.
- Organise Social events from Day 1 to Day 4.

In addition, SPATI, MAG, and RDAM were not available for the masterclass so new participants were invited to share their experience with open data in practice (Aragon Government, GPT laboratory from UNIZAR).

Regarding to the outreach event, it was designed by ESR 02 and ESR 08 with the support of their supervisors. The event was designed to maximise the learning outcomes of the ESR as ERSs have requested more training on practical open data use. In practice, the resulting outreach event would require a negligible support from partners if required.

After applying the above changes, training week was planned as four and a half days programme with social events on full days with the following themes for each day:

Table 2: Programme for the Training Week 2. brief version

Table 2: P	: Programme for the Training Week 2, brief version			
Day	Activity			
Day 1	Masterclass (I)			
	Understanding users (needs) & providers (needs) from multiple perspectives.			
	Aragon Open Data, data story telling (Aragon Government)			
	aGROSLab: an agricultural SAAS using Open Data (7eData)			
	<ul> <li>Using Open Data for developing learning activities: the eSTEM project experience" (UNIZAR)</li> </ul>			
	Design of a user-oriented semantic searcher (CNIG)			
	Open Data in the journalism sector (FAROSNET)			
Day 2	Professional Skills Training			
	Leadership (coaching, negotiation, change management), social media for research (input			
	and/or dissemination).			
	<ul> <li>Social media as input for research (UNIZAR);</li> </ul>			
	Dissemination of research in social media (UNIZAR);			
	<ul> <li>Leadership – funding opportunities (UNIZAR);</li> </ul>			
	<ul> <li>Leadership – Gender dimension (UNIZAR).</li> </ul>			
Day 3	Masterclass (II)			
	Understanding users (needs) & providers (needs) from multiple perspectives.			
	<ul> <li>Users, and user engagement: concepts, approaches, and activities (TU Delft and KU Leuven)</li> </ul>			
	Understanding disadvantaged users (TU Delft and KU Leuven)			
	Circular Economy (GPT - UNIZAR)			
	Professional Skills Training			
	Ethics (CNRS)			
Day 4	ODECO Network Day			
	ESR progress presentations to the ODECO network (+ Consortium Meeting 2)			
Day 5	Outreach event			
	ODECO Datathon 'Improving existing data ecosystems'			

The detailed program for the various days will be presented in the following sections.

The invitations for Training Week 2 were sent out three months before the event to ESRs and beneficiaries.



#### 1.3. Location

The location of the Training Week was the training room ("Aula") of the R&D&I Building, Campus Rio Ebro, Zaragoza. The training week was organised with the support of the Aragon Institute for Engineering Research (I3A), the UNIZAR institute to which ODECO UNIZAR supervisors and ESRs belong.

#### 1.4. Credits

It was agreed by the SB to issue a **Certificate of Achievement** for the training week at UNIZAR for 50 hours workload as each country has different standards for what workloads reflect ECTS (European Credit Transfer and Accumulation System).

The **Certificate of Achievement** was given to all ESRs during the training week.

#### 1.5. Supervisors attending the training week

Twelve supervisors were present during the training week, either physical at the meetings (8) or online on a zoom link (4).

Table 3: Supervisors attendance for the Training Week 2

Beneficiary	Supervisors	
TU Delft	Bastiaan van Loenen	
	Ingrid Mulder	
	Anneke Zuiderwijk (online participation)	
KUL	Glenn Vancauwenberghe	
	Joep Crompvoets (online participation)	
CNRS	Melanie Dulong de Rosnay (online participation)	
UNIZAR	Javier Nogueras	
	Francisco J Lopez-Pellicer	
UAEGEAN Euripidis Loukis		
AAU Rikke Magnussen (online participation)		
UNICAM	UNICAM Andrea Polini (day 1: online participation, day 2 to 5: at Zaragoza)	
FAROSNET	Antonis Fourlis (day 1: online participation, day 2 to 4: at Zaragoza)	

#### 1.6. Social activities

To strengthen team building and networking between ESRs and supervisors, social activities had been planned for every evening from Day 1 to Day 4. The social activities are an important element in the training week and are highly appreciated by all participants. The positive dynamics and team building between ESRs during the Training Week is a direct consequence of this program of social activities.

Table 4. Social activities for the Training Week 2

Day	Activity	
Day 1	Visit to the Aljafería Palace, a fortified medieval palace built during the second half of the	
	11th century that currently houses the Cortes (regional parliament) of the autonomous	
	community of Aragon.	
Day 2	Touristic route through the centre of Zaragoza, landmarks visited: the Basílica del Pilar,	
	the La Seo Cathedral, 16th century palaces and the Roman Theatre.	
Day 3	Visit to the Mobility City Museum at Expo 2008 Bridge pavilion (designed by Zaha	
	Hadid).	
Day 4	Gala dinner at "Tres Mares Restaurante Náutico" on the right bank of Ebro River,	
	behind the Basílica del Pilar and overlooking the Puente de Piedra.	



# 2. Day 1 - Masterclass (I)

#### 2.1. Objectives, activities, assignments, and program

The overall objective of Day 1 was for the ESRs to get acquainted of users' needs and data providers' needs related to open data from multiple perspectives. The program consisted of five 15-30 min. talks followed by 15-30 minutes of discussion between representatives from organizations, ESRs and beneficiaries.

The speakers represented Spanish private and governmental organizations with focus or projects related to the use of open data. They had been asked to talk about lessons learned in their respective context related to users' needs and data providers' needs related to open data.

The programme thus aimed to stimulate collaboration between ESRs and external partners (organisations, academia, and industry) with an explicit or implicit open data focus. The visiting organisations both participated online and physically, and the interactive programme created highly interesting discussions both between ESRs and partner organisations, and between partner organisations that created networking meetings both during and after the training week.

Table 5. Program Day 1

Time	Activity	Responsible	Description
8:30	BREAKFAST		
9:00	INTRODUCTION		
9:30	Aragon Open Data, data story telling	Julian Moyano, Aragon Government	Julian Moyano leads the Open Data Aragon initiative of the Aragon Government, which maintains the open data portal of the Aragon Government. He shared insights and experience related user needs obtained from his work at Aragon Open Data.
10:30	aGROSLab: an agricultural SAAS using Open Data	Jesús Gerique, 7eData  * Jesús Gerique was unable to attend and F. Javier Zarazaga Soria, UNIZAR, presented his slides on behalf of him	Jesús Gerique is the CEO of 7eData. aGROSLab is a SAAS developed by 7eData that uses open geospatial and phytosanitary data. He shared his experience on reusing such data.
11:00	Using Open Data for developing learning activities: the eSTEM project experience"	F. Javier Zarazaga-Soria, UNIZAR	F. Javier Zarazaga-Soria is a member of the ESRASMUS+ project eSTEM, led by University of Pisa, which provides STEM teachers with ML tools capable of transforming open data into training materials. He shared insights and experience related to the challenges that teachers face with these tools.
11:30	BREAK		



Time	Activity	Responsible	Description
12:00	Design of a user- oriented semantic searcher	Ana Velasco / Paloma Abad, CNIG	Ana Velasco and Paloma Abad participate in the development of a dataset search engine for the CNIG whose usability has been assessed by ESR 02 during his secondment at CNIG. She explained the lessons learnt related to user needs from this evaluation.
13:00	LUNCH		
15:00	Open Data in the journalism sector	* Online participation	Antonis Fourlis is Journalist - Huffpost Greece Editor in Chief and ANT1 anchor & producer. He has shared his personal experience on how data journalism is re-inventing journalism.
16:00	END		
18:00	SOCIAL EVENT		Visit to the Aljafería Palace, a fortified medieval palace built during the second half of the 11th century that currently houses the Cortes (regional parliament) of the autonomous community of Aragon.

#### 2.2. Evaluation of Day 1

**ESR.** ESR candidates Ramya Chandrasekhar (position 4) and Hector Ochoa (position 13) attended the second training week. During the introduction point of the agenda, they took the opportunity to introduce themselves to the rest of the group. Although Umair Ahmed (ESR 14) was unable to attend physically due to a travel delay, he followed the activities of the first day online.

**Content.** The partner collaboration day was overall very well received by the ESRs. As during Training Week 1, ESRs expressed that the presentations of speakers were remarkably interesting and that it was again a great opportunity to meet with partners to develop collaboration. The ESRs were initiative-taking on the discussions of open data user needs and were highly interested in the experience of the visiting organisations with open data.

**Training materials.** All training material used during the presentations was kept in an MS Teams archive for future use by the ESRs.

**Deviations.** Jesús Gerique, 7eData, was unable to attend and F. Javier Zarazaga Soria, UNIZAR, presented his slides on behalf of him.



# 3. Day 2 - Professional Skills Training

#### 3.1. Objectives, activities, assignments, and program

The objective of Day 2 is to provide professional skills training in research/ education ethics, professional integrity, team working, group dynamics and in organizing (public) events.

Due to temporal constrains an online lecture on Ethics by CNRS was re-scheduled to Day 3.

Table 6. Program Day 2

	Togram Day 2	Decrease distant	Description.
Time	Activity	Responsible	Description
8:30	BREAKFAST		
9:00	INTRODUCTION		
9:15	Social media as input for research	Ricardo Zugasti, UNIZAR	Ricardo Zugasti tells his personal experience in researching social media in Spanish Electoral Campaigns and how the methodology of content analysis is applied to the study of messages posted on social media.
10:15		Joseba Bonaut, UNIZAR	Joseba Bonaut explains how to use big data tools to mine social media to map hate speech in Spain.
11:30	BREAK		
12:00	Dissemination of research in social media	Melania Bentué / Maria Melus, UNIZAR	Melania Bentué, community manager of the I3A (with the support of trainee Maria Melus), describes different ways of disseminating research results and good practices in social media
13:00	LUNCH		
15:00	Leadership - Funding opportunities	F. Javier Zarazaga-Soria, UNIZAR	F. Javier Zarazaga-Soria, IAAA head, explains where to look for funding and how to develop proposals. He stresses the close relationship of this task with negotiation and change management.
16:00	Leadership - Gender dimension	María Villarroya, UNIZAR	María Villarroya, 1st director of the Gender Equity observatory at UNIZAR and current director of the Internationalization Office at UNIZAR, presents the gender perspective and gender dimension in research projects and how to integrate this dimension into coaching and research management



Time	Activity	Responsible	Description
17:00	END		
18:00	SOCIAL EVENT		Touristic route through the centre of Zaragoza, landmarks visited: the Basílica del Pilar, the La Seo Cathedral, 16th century palaces and the Roman Theatre.

**Training materials.** For the session "Social media as input for research" the following material was provided to the ESRs.

- Pallarés-Navarro, Sandra; Zugasti, Ricardo. "Santiago Abascal's Twitter and Instagram strategy in the 10 November 2019 General Election Campaign: A populist approach to discourse and leadership?". Communication & Society. 35 (2), 2022, 53 69
- Bonaut-Iriarte, J., Zurutuza-Muñoz, C. & Vicent-Ibañez, M. "Hate speech on Twitter aimed at sportspeople for their political opinions during Covid- 19 in Spain," Congreso CICID (2021)

#### 3.2. Evaluation of Day 2

**ESR.** ESRs 6 and 10 proposed a role game after the lunch break to promote communication and interaction in an informal way between the participants of the training week.

**Content.** The physical lectures were well received. The ESRs were satisfied with the contents of the program. In addition, the lectures of Ricardo Zugasti, Joseba Bonaut, F. Javier Zarazaga-Soria and Maria Villarroya were open to other PhD students of the Systems Engineering and Computer Science Doctoral Programme of the University of Zaragoza.

**Training materials.** All training material used during the presentations was kept in an MS Teams archive for future use by the ESRs.



# 4. Day 3 - Masterclass (II)

#### 4.1. Objectives, activities, assignments, and program

Day 3 is a continuation of Day 1. That is, the main objective is to get the ESRs to get acquainted of users' needs and data providers' needs related to open data from multiple perspectives. In addition, there is an operational objective: to train ESRs to address Task 2.1 of WP2 which started in M18.

Task 2.1 will identify and classify needs related to the provision of open data of a wide variety of representative user types: non-specialist data users, local government, journalists, students, NGOs, central/regional government, companies, artificial users, and data intermediaries. In addition, special attention will be provided to the needs of disadvantaged groups to access and use open data. Therefore, we have included two training activities ("Users, and user engagement: concepts, approaches, and activities" and "Understanding disadvantaged users") to train ESRs.

As a complement to the lectures of Day 1, we have arranged a visit to a laboratory to gain insight of how circular economy research is done (production of bioproducts and biofuels from biomass and waste by GPT research group). The purpose of this activity is to show ESRs that researchers require access to open data and have specific user needs.

Finally, a talk on ethics has been included. This talk is part of the professional skill training. It was planned to be held during Training Week 1 but was cancelled due to last-minute changes (see deliverable D1.4).

Table 7. Program Day 3

Time	Activity	Responsible	Description
8:30	BREAKFAST		
9:00	INTRODUCTION		
9:15	Users, and user engagement: concepts, approaches, and activities	Ingrid Mulder, TU Delft Glenn Vancauwenberghe, KUL	Activity focused on increasing ESRs' understanding of the needs of the representative user types mentioned in Task 2.1: non-specialist data users, local government, journalists, students, NGOs, central/regional government, companies, artificial users, and data intermediaries.
11:00	BREAK		
11:30	Understanding disadvantaged users	Ingrid Mulder, TU Delft Glenn Vancauwenberghe, KUL	Activity focused on increasing ESRs' understanding of the needs of disadvantaged groups such as the elderly, women and the disabled.
13:00	LUNCH		
15:00	Ethics - CNRS	Melanie Dulong de Rosnay, CNRS	A session on applying Ethics principles to the individual ESR research. ESRs had to
		* Online participation	study the slides of the Copenhagen lecture, apply them to their research as homework for the training week (i.e.: what ethical issues



Time	Activity	Responsible	Description
			may you run into and how to
			address these)
16:00	Circular economy	Isabel Fonts, UNIZAR	Visit to the laboratory of the
		Javier Abrego, UNIZAR	GPT research group of
			UNIZAR to gain insight of
			how circular economy
			research (production of
			bioproducts and biofuels from
			biomass and waste) requires
			access to open data and has
			specific user needs. It is also a
			practical example on the
			circularity of materials.
			Although from a different
			perspective, ODECO also
			promotes the circularity in
			terms of datasets.
17:00	END		
17:30	SOCIAL EVENT		Visit to the Mobility City
			Museum at Expo 2008 Bridge
			pavilion (designed by Zaha
			Hadid).

Training materials. For the session "Circular economy" the following material was provided to the ESRs.

 J. A. Garcia-Nunez, M. R. Pelaez-Samaniego, M. E. Garcia-Perez, I. Fonts, J. Abrego, R. J. M. Westerhof, and M. Garcia-Perez. "Historical Developments of Pyrolysis Reactors: A Review". Energy & Fuels 2017 31 (6), 5751-5775. DOI: 10.1021/acs.energyfuels.7b00641

#### 4.2. Evaluation of Day 3

**ESR.** After the coffee break in the morning ESRs 2 and 8 briefly introduced the tools that were going to be used in the Datathon session (Day 5).

**Content.** Overall, the activities were well received by the ESRs. The training related to Task 2.1 was well received by ESRs. The visit to the laboratory of the GPT research group surprised the ESRs by realising how dependent the research was on open data and that most researchers were unwitting users and providers of open data.



# 5. Day 4 - ODECO Network Day

#### 5.1. Objectives, activities, assignments, and program

The overall objective of Day 4 is to monitor the progress of the ESRs since the last Training Week. Based on the feedback received from Training Week 1, the structure of this day is different from the structure of the Training Week 1. The goal of this change is to meet the ESRs' suggestion of shorter ESR presentations and longer feedback sessions.

Table 8. Program Day 4

Time	Activity	Responsible	Description
8:30	BREAKFAST	·	
9:00	INTRODUCTION		
9:15	ESR presentations	ESRS	Each ESR should present in 5 minutes key aspects they have experienced the last 6 months (proud of, challenging), and what topic they are looking forward to.
11:00	BREAK		
11:30	Small group discussions	Self-organised	ESRs organise small groups to discuss and get feedback on specific topics, ongoing WP work and any other business.
13:00	LUNCH		
15:00	Speed dating	Self-organised	Supervisors and ESRs discuss training week talks, ongoing WP work and any other business. They change seats every 10 min. to ensure increase change of multiple meetings between supervisors and ESRs.
16:45	BREAK		
17:00	ODECO supervisory board meeting		
19:00	END		
21:00	SOCIAL EVENT		Gala dinner at "Tres Mares Restaurante Náutico" on the right bank of Ebro River, behind the Basílica del Pilar and overlooking the Puente de Piedra.

#### 5.2. Evaluation of Day 4

**Content.** Overall, the activities were well received by the ESRs. Small group and speed dating discussions were mostly related to Task 2.1. During the coffee break in the morning a picture of the group was taken by the communication staff of I3A, who also contributed to the dissemination of ODECO and its 2<sup>nd</sup>



training week thanks to a press release<sup>1</sup>. Andrea Polini also had the opportunity to present in the afternoon the details of the 3<sup>rd</sup> ODECO training week in Ascoli Piceno (11-15 September 2023) and the conference BIR 2023 that will take in place in parallel at the same location (13-15 September 2023).

Training materials. All ESRs slides were kept in an MS Teams archive for future use by the ESRs.

 $<sup>^1\</sup> https://i3a.unizar.es/es/noticias/el-i3a-acoge-15-estudiantes-de-doctorado-dentro-del-proyecto-europeo-odeco$ 



# 6. Day 5 - Outreach event

### 6.1. Objectives, activities, assignments, and program

The outreach event is the ODECO Datathon "Improving existing data ecosystems". This activity is open to all the students of the Engineering and Architecture School (EINA) of UNIZAR and was included as an activity of the 14th Edition of the Engineering and Architecture Week (27-31 March).

The aim of this event is to evaluate ESRs creativity in using open data. Each team of 3-4 members will be given an open dataset to work with, and the task is to prepare a visualization that tells a compelling story or reveals interesting insights about the data. This relates to the lecture on Open Data Aragon and storytelling of Day 1.

Table 9. Program Day 5

Time	Activity	Responsible	Description
8:30	BREAKFAST		
9:00	Kick-off	ESRs	Introduction to the datathon. Organisation in teams of 3-4 participants.
9:15	Context and data understanding	ESRs	Each team chooses one of the available themes and explore the available datasets.
10:00	Data preparation	ESRs	Each team prepares its dataset for data analysis (data cleaning, manage missing values, delete duplicate data)
10:45	Data analysis	ESRs	Each team formulates more specific data-oriented research questions and selects a chart type.
11:45	Deliverable preparation	ESRs	Each team creates a final visualization and prepares a presentation
12:30	Presentation and judging	ESRs	Each team has up to 5 minutes to present their work to the jury
13:00	LUNCH		

In addition, in the morning there was also a short session that was not included in the agenda in which the ESRs interacted to better shape the upcoming ODECO deliverable D2.1.

#### 6.2. Evaluation of Day 5

**Content.** The Datathon was well received by the ESRs.

**Training materials.** All materials and datasets were kept in an MS Teams archive for future use by the ESRs.



# 7. Summary & Conclusions

#### 7.1. Summary

Training week 2 was developed and implemented as a five-day course with the following objectives:

- 1. To get ESRs acquainted with sectoral user needs on open data.
- 2. To stimulate collaboration both between the ESRs and external partners such as organisations and industry with an open data focus (started in Training week 1).
- 3. To support the ESRs in gaining an interdisciplinary perspective (started in Training week 1).
- 4. To provide professional skills training in research/ education ethics and professional integrity, team working, group dynamics and in organizing (public) events (started in Training week 1).

The training week ran from Mar. 27th – Mar. 31st, 2023, at Universidad de Zaragoza in Zaragoza (Spain) with the support of the Aragon Institute of Engineering Research (I3A) and included the following days and activities:

- Day 1 Masterclass (I): Understanding users (needs) & providers (needs) from multiple perspectives (Aragon Government, 7eData, UNIZAR, CNIG, FAROSNET).
- Day 2 Professional Skills Training: Leadership (coaching, negotiation, change management), social media for research (input and/or dissemination).
- Day 3 Masterclass (II): Users, and user engagement: concepts, approaches, and activities (TU Delft, KUL), Understanding disadvantaged users (TU Delft, KUL) and Circular Economy (UNIZAR); additionally professional skills training on Ethics (CNRS)
- Day 4 ODECO Network Day ESR progress presentations to the ODECO network.
- Day 5 Outreach event ODECO Datathon "Improving existing data ecosystems".

The training week was overall evaluated positively by ESRs and beneficiaries with minor comments. In addition, I3A contributed to the dissemination of the activities performed during the training week preparing a press release<sup>2</sup>, which was distributed through the newsletter and the web page of the institute.

#### 7.2. Recommendations for the design of the next Training Week

Analysing the evaluation results of each day, the following tips should be considered during the design of the next training week:

- Keep ESR presentations short (5 min) allowing for longer feedback sessions from supervisors in tracks dependent on the needs of ODECO project.
- The partner organisation-networking day has been successful and should be included in the following training weeks as well.
- The cross-disciplinary teaching sessions and the professional training were a success and should be part of future training weeks too.
- A stable web connection and camera should be ensured for online attendance.
- The week should still be a 5-day week but with either longer breaks, shorter days or a break or shift in scenery in the middle of the week.
- The social evening program was a success and should be kept strengthening team building and networking between ESRs.
- Training week organisers must ensure visibility of training week activities and events in parallel events and activities held in the host institution.

<sup>&</sup>lt;sup>2</sup> https://i3a.unizar.es/es/noticias/el-i3a-acoge-15-estudiantes-de-doctorado-dentro-del-proyecto-europeo-odeco



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