



# A Pathway Towards a Sustainable Open Data ECOSystem



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# ODECO



**Towards sustainable Open Data ECOSystems**



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# ODECO's overall objective

To train a new generation of creative and innovative early-stage open data researchers, able to face current and future challenges, in the establishment of sustainable open data ecosystems supporting the EU ambitions to become a worldwide leading information economy.



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# Open data and open data ecosystems

## Open data

Data without any restrictions in the (re-)use and provided free of charge

## Open data ecosystem

“a cyclical, sustainable, demand-driven environment oriented around agents that are mutually interdependent in the creation and delivery of value from open data”



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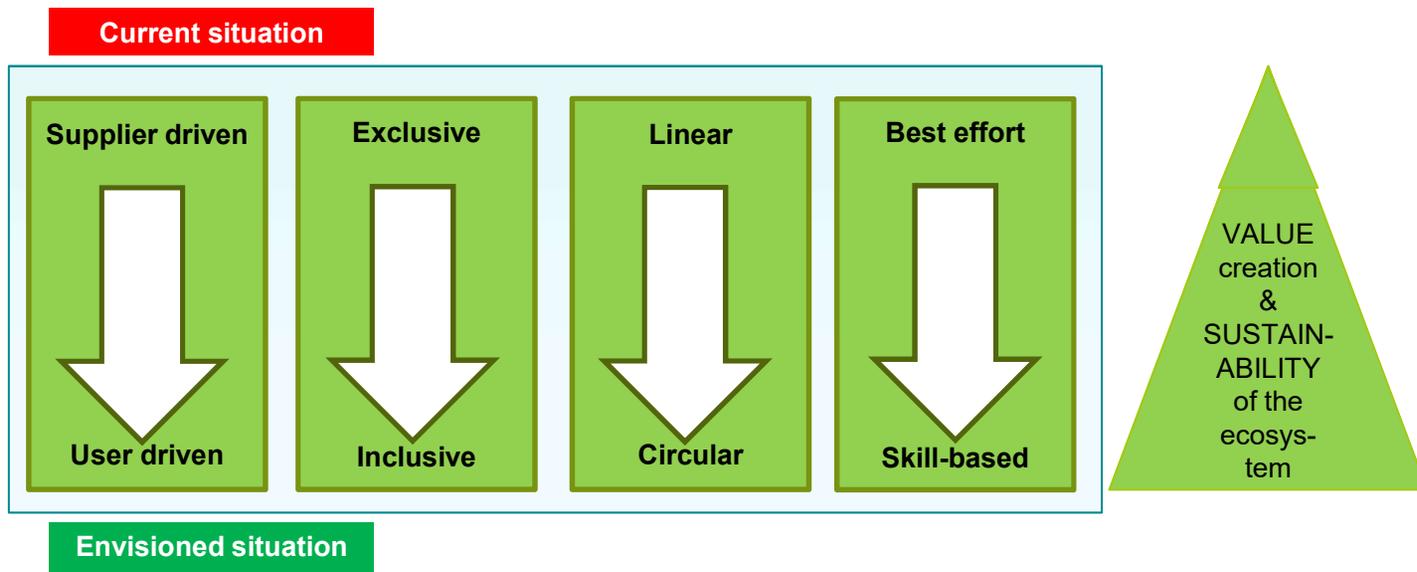
# Challenges

1. lack of skilled people to use open data.
2. current open data ecosystems lag behind in value creation.
3. existing open data ecosystems are neither user-driven nor balance demand-supply.
4. existing open data ecosystems are linear.
5. current open data ecosystems are exclusive.



**Current situation**





# ODECO: 15 PhD projects

PhD no.	Project title
	<b>Enhancing inclusiveness &amp; circularity:</b>
1	Strategies for building data capacity
2	User interface design: optimising findability
3	Value assessment and (re-)distribution in sustainable open data ecosystem
4	Open licensing of Non-Government Data
5	Technical interoperability in the open data ecosystem
6	Maximising availability and use of local government open data
7	Interdomain semantic interoperability
8	Technical aspects for inclusiveness across user domains in data portals
	<b>Enhancing user driven &amp; inclusiveness:</b>
9	Enhancing open data ecosystem: data journalist perspective
10	Open data usage in elementary schools
11	Investigating the influence of resources provided by NGOs on the usability of open government data
12	Enhancing open data ecosystem: government as a user perspective
13	Investigating the co-creation of public services by governments and companies
14	Enhancing open data ecosystem: Algorithm and intelligence perspective
15	Enhancing open data ecosystem: intermediary perspective



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# ODECO training programme

1. Individual PhD Research Trainings
2. Online Training Programme
3. Network wide Training Weeks
4. Communication and Public Engagement Activities



**MOOC ‘The Open Data Ecosystem’** integrating contributions from the different PhD projects on **various aspects of open data ecosystems**.

- ESRs will learn how to **develop new - online - training material** based on their research.

## **Curriculum on open data ecosystems**



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# ODECO in Europe: how are we doing?

Case	Country
1. Open geographic data system	The Netherlands
2. Open geographic data system	Spain
3. Open research data system	Europe
4. Open education data system	Denmark
5. Open agricultural data system	Italy
6. Open media data system	Greece
7. Open legal data system	France

Case #	1	2	3	4	5	6	7
Country	NL	ES	EU	DK	IT	GR	FR
Domain	Geo	Geo	Research	Education	Agri	Finance	Law
Provider/ User driven	Provider	Provider	Provider	Provider	Provider/ user	Provider	Provider
Exclusive/ Inclusive	Exclusive	Exclusive	Exclusive	Exclusive	Exclusive	Exclusive	Exclusive
Linear/ Circular	Linear	Linear	Linear	Mostly linear	Linear	Linear	Linear
Ecosystem?	No	No	No	No	No	No	No



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# ODECO and the Open Data Directive

- ODECO:
  - User-driven
  - Inclusive
  - Circular
- Is the Open Data Directive:
  - User-driven
  - Inclusive
  - Circular?



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# Open Data Directive: User-driven

- Data:
  - Open data, free of charge, open licence, open format
  - High value datasets...
  - “One size fits all”
- Focus on the professional and/or commercial re-user
- Process: user taking part in decision making processes...

# Open Data Directive: Inclusiveness

- Spirit (open data) v. the letter (text) of the directive
- Inclusiveness:

Member States shall make practical arrangements facilitating the search for documents available for re-use, such as asset lists of main documents with relevant metadata, accessible where possible and appropriate online and in machine- readable format, and portal sites that are linked to the asset lists. Where possible, Member States shall facilitate the **cross-linguistic search** for documents, in particular by enabling metadata aggregation at Union level.

# Open Data Directive: inclusiveness

Data from	2003	2013	2019
Public sector information	Y, only if they want	Y, access=reuse	Y, HVD free of charge
Research data (publicly funded)	N	Y, only if they want	Y, free of charge
Libraries	N	Y, only if they want	Y, max price
Public undertakings	N	N	Y, only if they want

# Open Data Directive: inclusiveness

Data from	2003	2013	2019	2025?
Public sector information	Y, only if they want	Y, access=reuse	Y, HVD free of charge	Y, HVD free of charge
Research data (publicly funded)	N	Y, only if they want	Y, free of charge	Y, free of charge
Libraries	N	Y, only if they want	Y, max price	Y, free of charge
Public undertakings	N	N	Y, only if they want	Y, max price
Private sector	N	N	N	Y, only if they want



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# The Digital Europe Programme (2021)

The Digital Europe Programme (2021) asserts the aim of “building a thriving ecosystem of **private actors** to generate **economic** and **societal** value from data.”

The document declares “the objective to deploy and operate an EU online marketplace for cloud and edge services (...) **to the public sector, services of general interest** and, where applicable, the private sector in particular SMEs”



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# Open Data Directive: circularity

- ...



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# ODECO

- ODECO: User-driven, Inclusive, Circular
- 7 case studies: Supplier driven, Exclusive and Linear
- Open Data Directive: User-driven, Inclusive, Circular



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# Interested: let us know

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# Literature

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Thank you for your attention



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