



DIGICIRC

WP3 – ENABLE: Creating LSD Enabler Tools

D3.8: DigiCirc InfoPortal



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 873468.

D3.8: DigiCirc InfoPortal

Document Information

Grant Agreement Number	873468	Acronym		DigiCirc
Full Title	European cluster-led accelerator for digitization of the circular economy across key emerging sectors			
Start Date	1 st May 2020	Duration		32 months
Project URL	https://digicirc.eu/			
Deliverable	D 3.8 - DigiCirc InfoPortal			
Work Package	WP 3 - ENABLE: Creating LSD Enabler Tools			
Date of Delivery	Contractual	31 st March 2021	Actual	31 st March 2021
Nature	Other	Dissemination Level		Public
Lead Beneficiary	DRAXIS			
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Document History

Version	Issue Date	Stage	Description	Contributor
0.1	12/02/2021	Draft	TOC	Panagiota Syropoulou
0.2	26/02/2020	Draft	First version of document	Panagiota Syropoulou, Davide Guariento, Dimitra Stefanatou, Joana Vide Pereira, Javier de Diego Rodríguez, Julia MORAWSKI, Tiina Puotinen
0.5	12/03/2021	Draft	Second version of document	Giorgos Letsos, Nikos Tsompanidis
0.8	19/03/2021	Draft	Third version of document	Panagiota Syropoulou
1.0	26/03/2021	Pre-Final	Document ready for internal review	Panagiota Syropoulou, Giorgos Letsos, Nikos Tsompanidis
2.0	31/03/2021	Final	Document ready for submission	Panagiota Syropoulou, Melanie Pellen, Igor Milosavljevic

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List of acronyms

Acronym	Designation
CE	Circular Economy
CPU	Central Processing Unit
EIT	European Institute of Innovation and Technology
IoT	Internet of Things
HDD	Hard Disk Drive
I/O	Input/Output
RAM	Random Access Memory
SME	Small and Medium Enterprise

1 Executive summary

The DigiCirc project aims to boost the circular economy, by developing and deploying digital tools, to support innovative SMEs to develop and market solutions based on circular value chains. This is conducted through three acceleration programs on the following themes: "Circular Cities", "Blue economy" and "Bioeconomy". DigiCirc will identify key technology, market and industry insights in each DigiCirc thematic area to set challenges relevant on the European-level to guide innovation efforts in the accelerators and also to provide first-hand input which will be distilled to create the DigiCirc **InfoPortal**, directly providing SMEs with access to knowledge.

This document outlines the iterative process to collect the material serving as input for the InfoPortal, engaging several partners of the DigiCirc projects and building on the work prepared for the consultation process of the engagement campaign for WP2. Furthermore, the design process for the InfoPortal is presented and the main features of the portal are described and displayed in detail including representative visual examples.

2 Introduction

One of DigiCirc's objectives is to produce an information portal with key insights relevant to Circular Economy (CE) innovation, providing access to knowledge in the accelerator which is designed to have a long-term impact potential. In order to achieve that, the DigiCirc **InfoPortal** provides an intuitive public platform with consolidated conclusions about the state of the art in the CE innovation ecosystem for the duration of the project, including investment landscape mapping, regulatory watch, market trends observatory and cross-sector technology watch.

- *Investment landscape mapping:* A comprehensive mapping is performed towards constructing an up-to-date picture of the current and upcoming investment opportunities for beneficiaries. An overview of opportunities will be presented as information articles.
- *Regulatory watch:* Regulatory frameworks for Circular applications (e.g., waste regulations, required licenses, etc.) and relevant digital law in several EU countries are available.
- *Market trends observatory:* Market awareness is strengthened by this InfoPortal module, by providing market knowledge and intelligence such as future gaps and opportunities, market success stories and major marketplace developments as explanatory articles etc.
- *Technology watch:* Monitoring of the development of enabling technologies for CEs is set up in support of project domains' industries and the future technology changes and innovations foreseen as of potential benefit to SMEs are identified and presented as articles, infographics, videos etc.

In section 3 of the document, the process used to transform the insights produced by these four research modules into content for the InfoPortal is described in detail. First of all, the conceptual approach and the template for post formation is presented followed by a timeline up to the end of the project and a quantitative estimation of the portal's material. Section 4 focuses on the structure of the portal and the design process up for the implementation. Finally, section 5 introduces the final web-based user-friendly information portal, explaining in detail the features and functionalities of the tool. The document concludes with section 6 and the next steps for the InfoPortal tool well into the project's lifetime.

The InfoPortal is publicly available [here](#) and it is accessible by anyone interested in the circular economy sector.

3 Content of the InfoPortal

The InfoPortal is designed to accommodate the information produced in T2.2 and T2.4 and more specifically, information related to investment landscape mapping, regulatory watch, market trends and technology watch. This information is prepared for the activities related to WP2, but some adjustments were necessary in order to format it in a suitable way to be presented in the InfoPortal. Furthermore, additional information related to the three DigiCirc domains was considered relevant for the InfoPortal and this was taken into consideration while defining the structure of the portal. The participation of the majority of the DigiCirc project partners was requested for this activity, since various teams have performed research based on their expertise for the WP2 tasks and they would be best suited to adapt this research for the InfoPortal tool.

3.1 Collecting the InfoPortal material

The information in the InfoPortal is organized in **posts**. Each post is an entry in the portal and presents some piece of information in the scope of the InfoPortal content. In order to form the information produced in WP2 into posts for the portal, a template was created to guide the process and ensure homogeneity. The template and the accompanying instructions were circulated to the project partners, to assist them with creating the posts based on their research.

The template comprises of four main sections: the author's information, the title, some keywords and the main text. References and links can be included as part of the main text. Additionally, the template specifies four different **types of posts**:

- Short article prepared by a project partner on a topic of their choosing.
- Link to a report/legislature/article/use case etc. with a short description of its contents.
- Video accompanied by a short description of its contents.
- Infographics accompanied by a short description.

The template and the instructions are presented below:

[Name], [Affiliation]

The name and affiliation should be of the writer/composer/provider of the information

[Title]

The title of your post should be short (up to 5 words), informative and it should capture readers' attention.

[Keywords]

Please include some relevant keywords (eg #recycle, #mobility #IoT, #shared_use etc.)

[Main text]

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- 1) *For the short article prepared by you on a topic of your choosing.*
 - a. *Please consider that the article should be as clear as possible, relevant to the topic and within DigiCirc project.*
 - b. *So please use simple and non-technical language.*
 - c. *Keep it short and less than 2 pages. Make sure to avoid repetition, keep sentences and paragraphs short.*
 - d. *If you would like to use some photos/videos/infographic, please consider that it is publicly available, with as high resolution as possible and always accompanied by the relevant source.*
- 2) *For a scientific article/report/legislature/use case etc.*
 - a. *Please write a small paragraph explaining to the reader what they will read, by whom is this, how relevant it is to the specific subject and domain and what is the connection with the DigiCirc project.*
 - b. *A small paragraph of 120 words is more than enough.*
 - c. *If you provide the link for the article please consider that it is publicly available, or else provide the relevant file to be uploaded.*
- 3) *For the video/infographic.*
 - a. *Please write a small paragraph explaining to the reader what they will see, how relevant it is to the specific subject and domain and what is the connection with DigiCirc.*
 - b. *A small paragraph of 120 words is more than enough.*
 - c. *For the infographic please send us the file in as high resolution as possible, accompanied by the relevant source.*
For the video please send us a file accompanied by the relevant source or a URL.

3.2 Calendar for material collection and InfoPortal posts per domain

The timing of preparing the material is of great importance, since it is necessary to be aligned with the other activities and key dates of the project. More specifically, the approach for the InfoPortal material collection is based on a thrice repeated process, according to:

- i. The ongoing research for WP2 for each one of the three DigiCirc domains.
- ii. The start and end dates of the open call for each DigiCirc domain.
- iii. The start and end dates of the accelerator for each DigiCirc domain.

Based on the key dates of the aforementioned activities, a calendar was prepared with a two-fold purpose; (i) to define the dates when the collection of the material should be complete for each domain and (ii) to define the time period for populating the InfoPortal with posts, per domain. More specifically, the material collection took place in February for the Circular cities domain [Phase 1], for the Blue economy domain it will take place in May [Phase 2] and for the Bioeconomy domain it will take place in August [Phase 3]. Furthermore, posting activities for the Circular cities domain have already begun and will continue up to July 2021, for the Blue economy domain the posts will be published from May 2021 to July 2021 & from November 2021 to March 2022 and finally for the Bioeconomy domain posting will take place from August 2021 to October 2021 & from January 2022 to May 2022. The purpose of collecting generic posts for all domains in each phase is to include representative information for all domains in the InfoPortal, even before their respective phase. The calendar with the time plan is presented in Figure 1.

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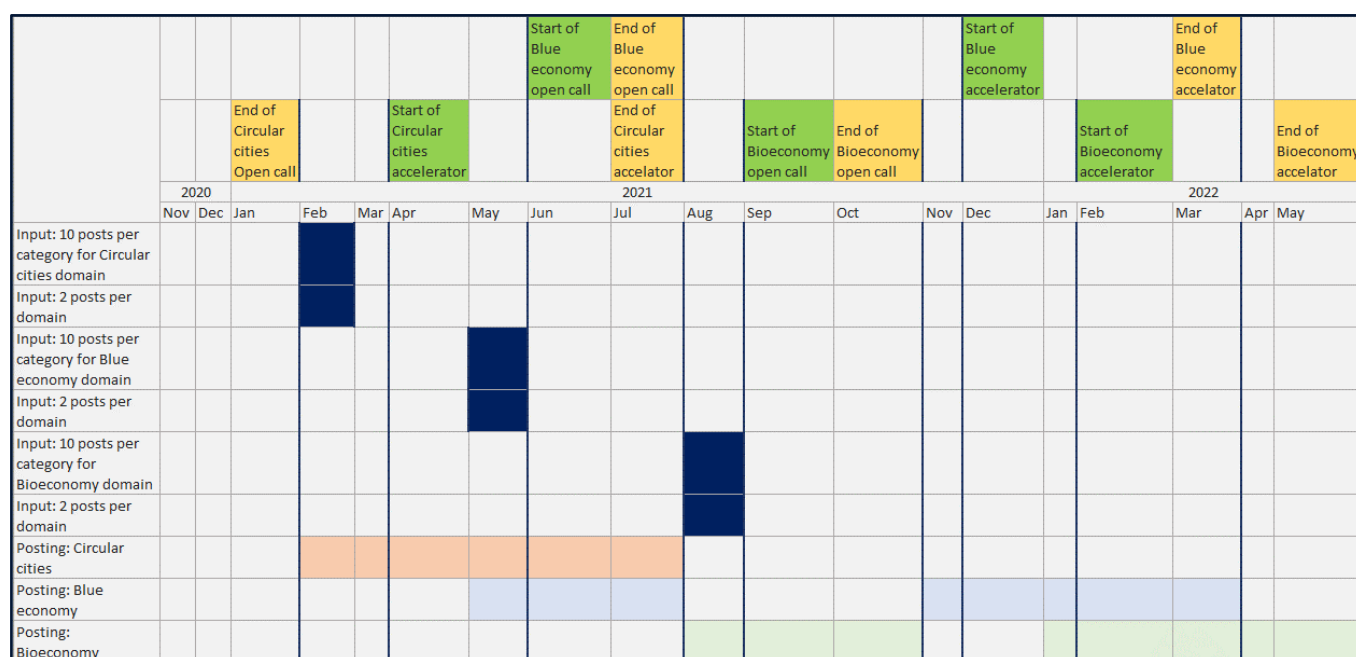


Figure 1: Calendar for material collection and InfoPortal posts per domain

An additional calendar depicting the key dates for material collection for each category is presented in Table 1.

Table 1: Calendar for material collection per category

Categories	February 2021	May 2021	August 2021
Technology watch	10 posts about Circular cities	10 posts about Blue economy	10 posts about Bioeconomy
Regulatory watch	10 posts about Circular cities	10 posts about Blue economy	10 posts about Bioeconomy
Market trends	10 posts about Circular cities	10 posts about Blue economy	10 posts about Bioeconomy
Investment landscape mapping	10 posts about Circular cities	10 posts about Blue economy	10 posts about Bioeconomy
Circular Cities domain	2 general posts	2 general posts	2 general posts
Blue economy domain	2 general posts	2 general posts	2 general posts
Bioeconomy domain	2 general posts	2 general posts	2 general posts

3.3 Collected posts for the Circular cities domain

In this section, the collected material from phase 1 for the Circular cities domain is presented. In Table 2 one can see the post title and the category it belongs to. At the moment of the InfoPortal's release approximately half of these posts are included in the tool and the rest of them will be posted throughout the next time period according to the calendar of Figure 1.

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Table 2: Collected material for Circular cities per category

Post title	Category
Software applications for Circular Cities presented in the 4th Circular Change Conference	Technology watch
VR-Digital Twin in Circular Economy	Technology watch
Data-driven tools for circular cities	Technology watch
Smart technologies for a Circular City	Technology watch
Digitalisation for Circular Cities	Technology watch
Big data analytics for sustainability	Technology watch
Sustainability through IoT solutions	Technology watch
Blockchain advances in Circular Economy	Technology watch
Circularity in manufacturing electronics	Technology watch
Tracking assets with IoT	Technology watch
Smart city solutions for circular economy	Technology watch
Digital tool for developing regional circular economy action plans	Technology watch
Everything Is Connected	Regulatory watch
Human-Centric 21st Century Tetrahedron	Regulatory watch
Feedback by Arthur's Legal on the Roadmap on new Circular Economy Action Plan	Regulatory watch
Circular Economy Action Plan	Regulatory watch
Circular Economy Guidebook for Cities	Regulatory watch
Commission's mission to launch 100 climate-neutral cities by 2030	Regulatory watch
Creating a digital roadmap for a circular economy	Regulatory watch
The Circular Economy: Going digital	Regulatory watch
Analysis of EU circular economy policies: words versus actions	Regulatory watch
The legal transition towards a Circular Economy – EU environmental law examined	Regulatory watch
Circular cities in practice	Market trends
Circular cities: Cities of tomorrow	Market trends
Barriers & opportunities for circular cities	Market trends
Attitudes, behaviors and business opportunities	Market trends
Breaking barriers to circular cities	Market trends
Circular cities week report	Market trends
Building design and construction strategies for a circular economy	Market trends
Circular investment opportunities: Mobility	Market trends

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The economy that runs on waste: accumulation in the circular city	Market trends
The 15 circular steps for cities	Market trends
EIT Urban Mobility – Grants & Subsidies	Investment landscape mapping
Horizon Europe	Investment landscape mapping
Loans Guarantees for Circular Cities initiatives	Investment landscape mapping
European Urban Innovative Actions	Investment landscape mapping
Investment Funds - European Circular Bioeconomy Fund	Investment landscape mapping
COSME – EU support for Business	Investment landscape mapping
ERA-NET Cofund on Raw Materials	Investment landscape mapping
ERA-NET Cofund Urban Transformation Capacities	Investment landscape mapping
Case Study – Circular Glasgow	Investment landscape mapping
Circular Cities Funding Guide	Investment landscape mapping
A new Circular Economy Action Plan for a Cleaner and More Competitive Europe	Circular Cities domain
Urban Agenda for the EU on circular economy	Circular Cities domain
Digitalization for a Sustainable Blue Economy	Blue economy domain
Relevance of Sustainable Development in Blue Economy	Blue economy domain
How to establish an eco-industrial park	Bioeconomy domain
Sustainable wood construction	Bioeconomy domain

4 InfoPortal design

4.1 Structure

The basic entities in the structure of the InfoPortal are categories, thematic areas, posts and types of posts.

The InfoPortal consists of five main **categories**:



These five categories are cross-referenced with the three **thematic areas**:



Each post is assigned to one category and one thematic area. Additionally, each post is assigned one of the following types:

- Article
- Report
- Video
- Infographic

This structure plays an essential part in the functionality of the InfoPortal, because the filters are created based on this structure allowing the user to easily navigate in the tool and locate the posts of their interest.

4.2 Design process

The InfoPortal tool aims to cover certain requirements regarding the presentation of the information and its use by the beneficiaries. More specifically, it should:

- include a neat and intuitive interface;
- include interactive modules;
- info pages using simple clear language and graphics to convey messages;
- provide access to knowledge for the five categories;
- link directly to full reports and other valuable resources;
- present the information of the categories as short explanatory articles, overviews over infographics, link to relevant reports, link to relevant high-quality videos/article, etc.;
- provide the information to all inside and outside the project;
- provide an “exploration-like” user experience;
- provide features like filters and keywords to ensure relevance and simplicity.

Based on these requirements and the structure described in section 4.1, a set of wireframes was prepared to provide a visual representation of the functionalities. Figure 2 shows the conceptualized welcome page of the tool, which includes a search functionality and direct links to the five categories. Figure 3 shows a page where the available posts are presented, which could be the search results page. The filters are available there, to easily navigate through the results. These wireframes served as a baseline for the InfoPortal tool research and development.

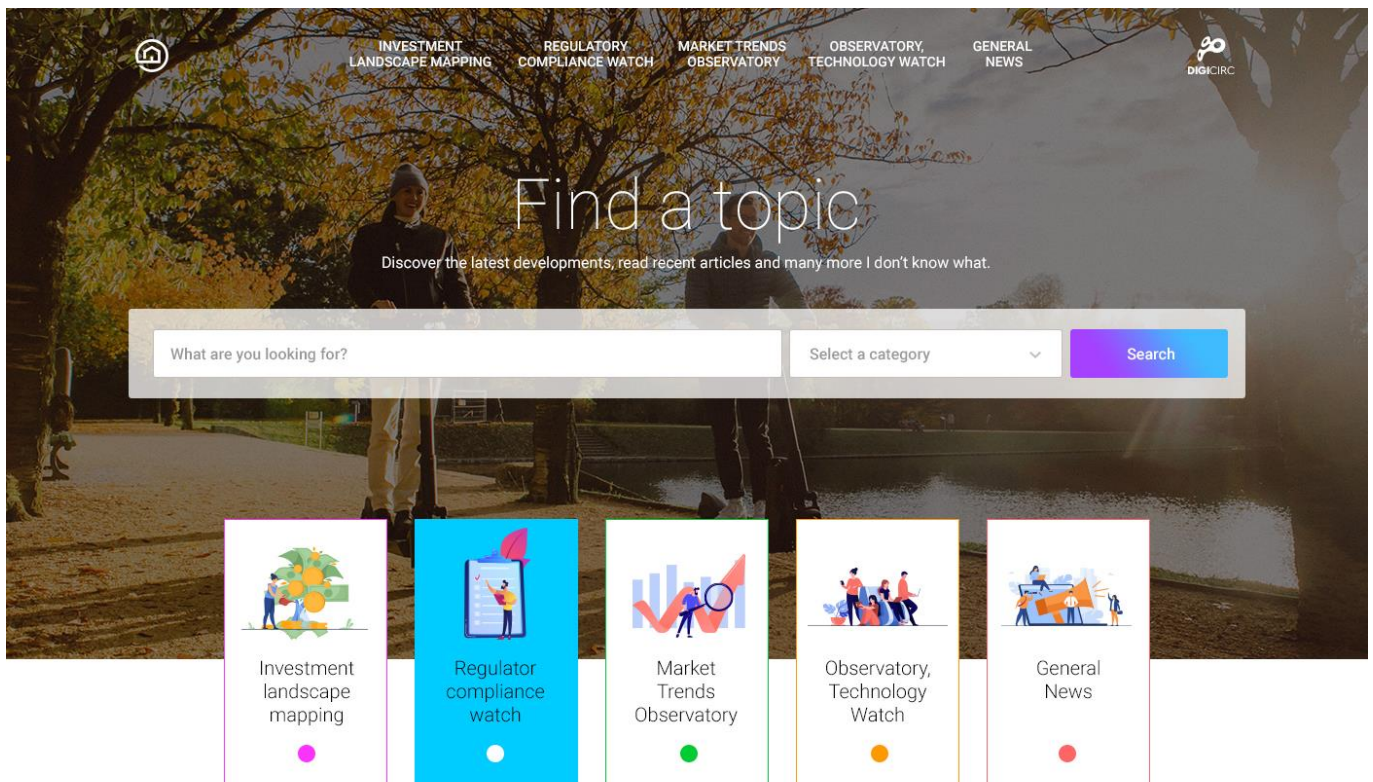


Figure 2: Wireframe 1 for the InfoPortal - Welcome page

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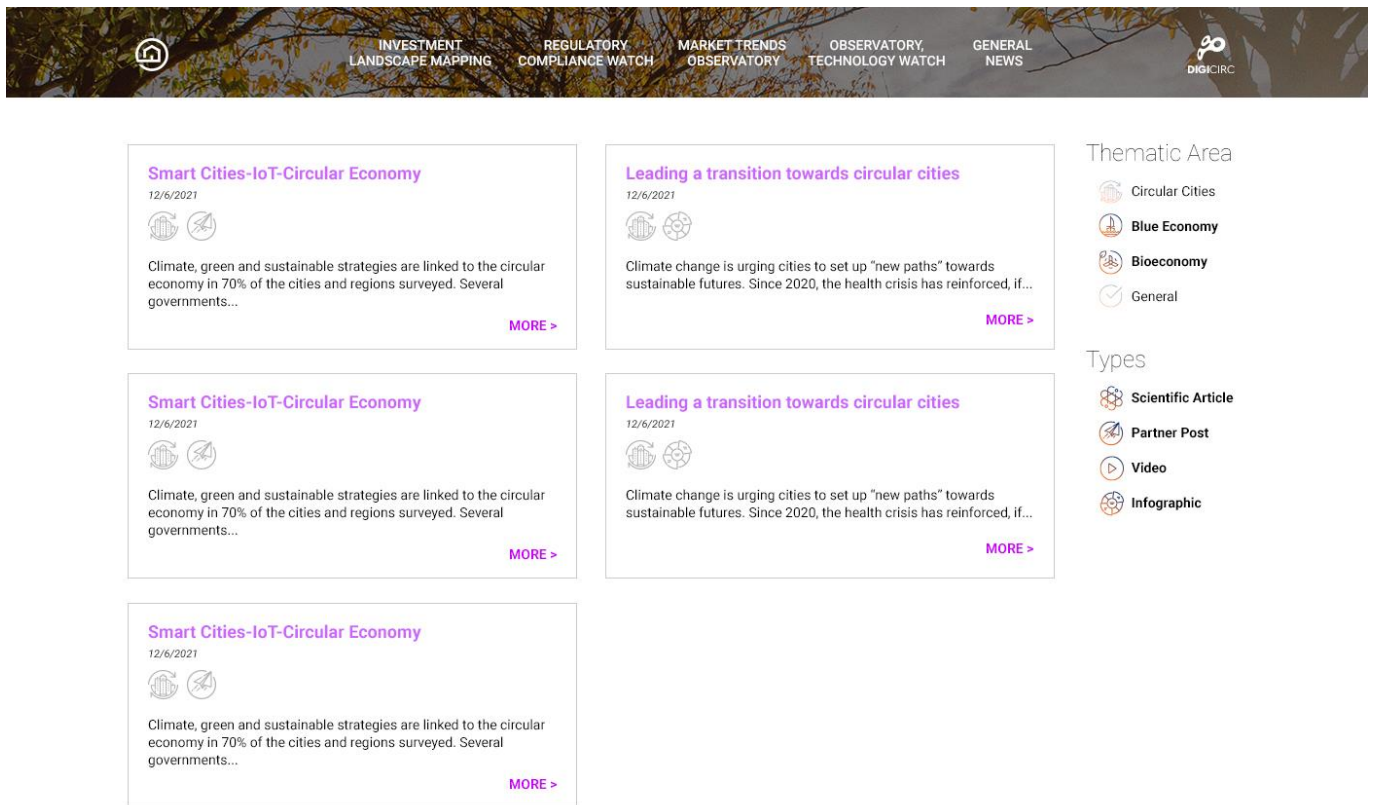


Figure 3: Wireframe 2 for the InfoPortal - Search result page

5 Main features of the InfoPortal

5.1 Welcome page

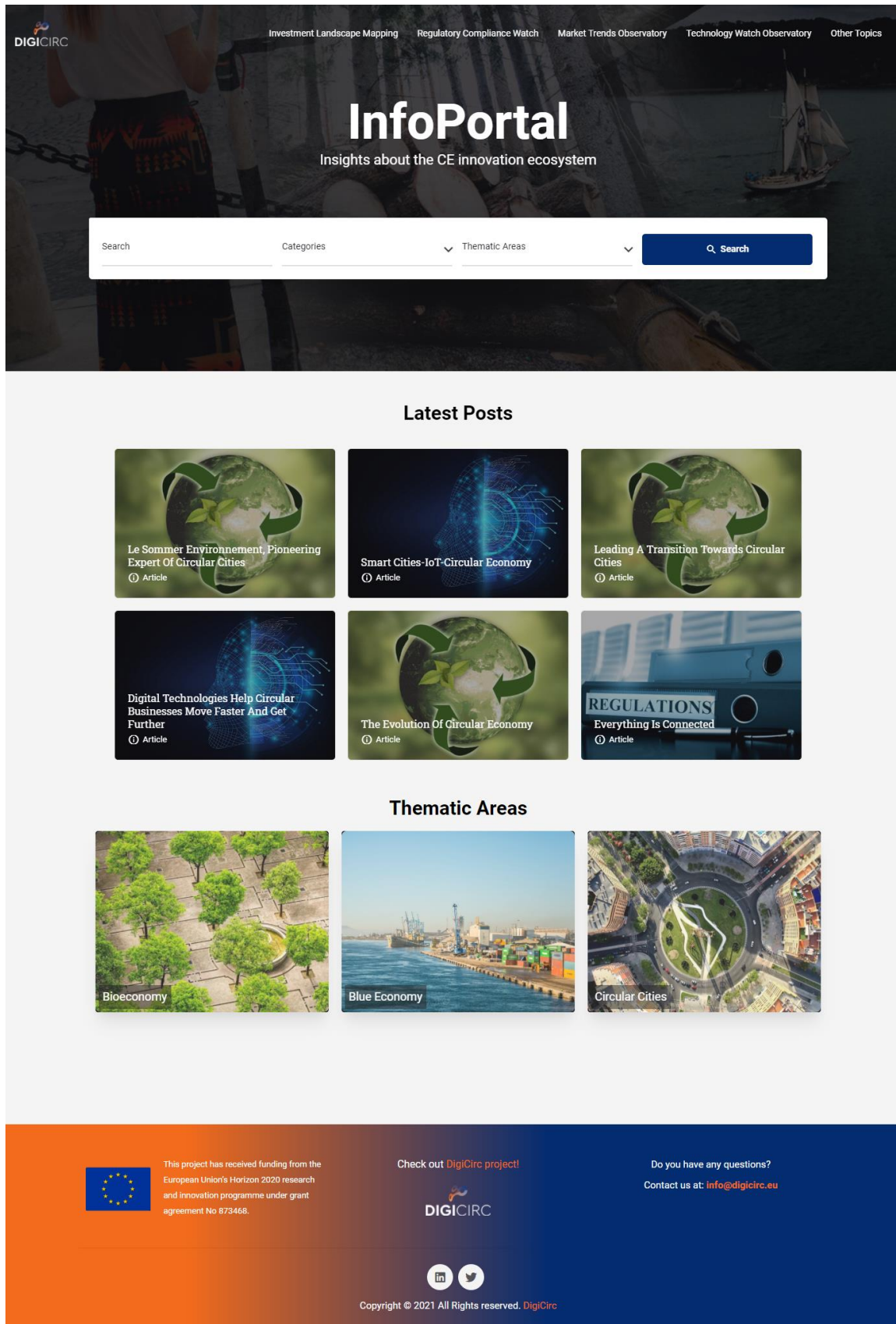


Figure 4: Welcome page of the InfoPortal

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The welcome page of the InfoPortal includes a menu for allowing the user to directly view the posts of their interest, featuring the five categories: Investment Landscape Mapping, Regulatory Compliance Watch, Market Trends Observatory, Technology Watch Observatory and Other Topics. The main feature of the welcome page is the Search functionality, that directly produces a list of posts based on the user's search input. A selection of category and thematic area is available beside the search bar, directing the user to the posts related to this input. Cards for the six latest posts published in the InfoPortal are included in the next part of the page. Furthermore, cards for the three thematic areas are provided below the latest posts, that will lead the user to posts related to each thematic area.

5.2 Search results page

The screenshot displays the DigiCirc InfoPortal search results page. At the top, a navigation bar lists five categories: Investment Landscape Mapping, Regulatory Compliance Watch, Market Trends Observatory, Technology Watch Observatory, and Other Topics. Below this, a search bar is accompanied by a 'Filters' button. The filter panel on the left includes a search input field, a 'Reset Filters' button, and sections for 'Categories' (with checkboxes for Other topics, Technology Watch Observatory, Regulatory Compliance Watch, Investment Landscape Mapping, and Market Trends Observatory), 'Type' (with checkboxes for Article, Report, Video, and Infographic), and 'Order by' (set to Latest). The main content area shows 'Showing 10 results out of 38'. The results are presented in a grid of 10 cards, each featuring a thumbnail image, a title, and a link to the full article or report. The cards include titles such as 'Le Sommer Environnement, Pioneering Expert Of Circular Cities', 'Smart Cities-IoT-Circular Economy', 'Leading A Transition Towards Circular Cities', 'Digital Technologies Help Circular Businesses Move Faster And Get Further', 'The Evolution Of Circular Economy', 'REGULATIONS Everything Is Connected', 'Circular Cities: Restorative and Regenerative by design', 'Circular cities week report', 'Breaking barriers to circular cities', and 'Attitudes, behaviors and business opportunities'. At the bottom of the page, there is a footer with the European Union flag, funding information, a 'Check out DigiCirc project!' link, the DigiCirc logo, social media icons, and copyright information.

Figure 5: Search result page with the filters and the list posts

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To find posts in the InfoPortal the user can type any combination of search words (e.g., “sustainability”, “recycle”, etc.) in the search box on the welcome page, they can select one of the categories or one of the thematic areas. The portal will then return all corresponding search results as a tile list (Figure 5). Each tile represents one post and the user can see its title, the post type and distinguish the category by the image.

On the search result page, the user can limit the results using the filters on the left column (Categories, Thematic Areas and Type). The user can combine filters, selectively adding and removing them, and modify and repeat the search with existing filters still in place (Figure 6).

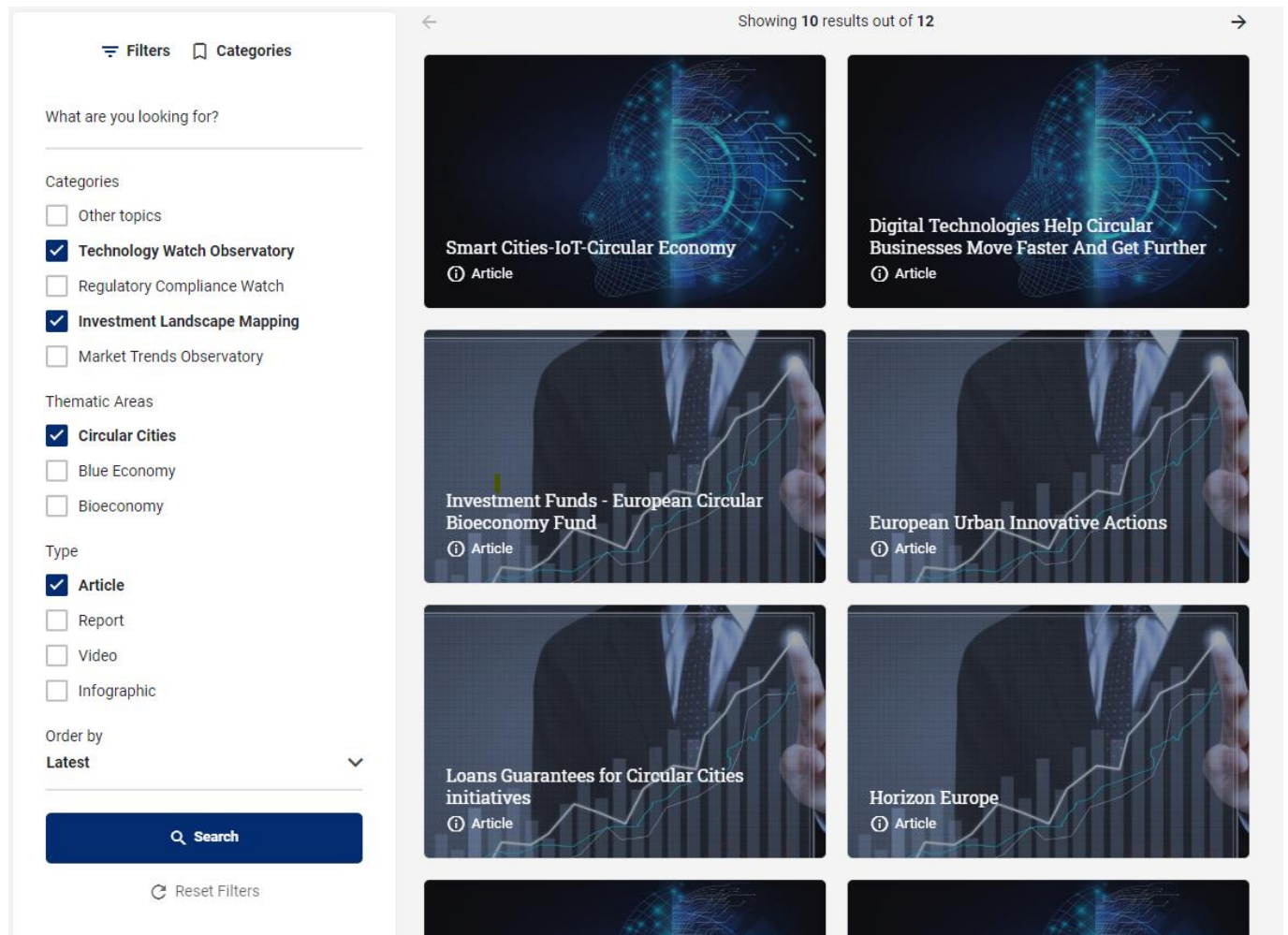


Figure 6: Search results page with applied filters

Additionally, the user can switch to Categories view in the filters, as an alternative option to search by category, which also allows the user to see how many posts are available in each category (Figure 7).

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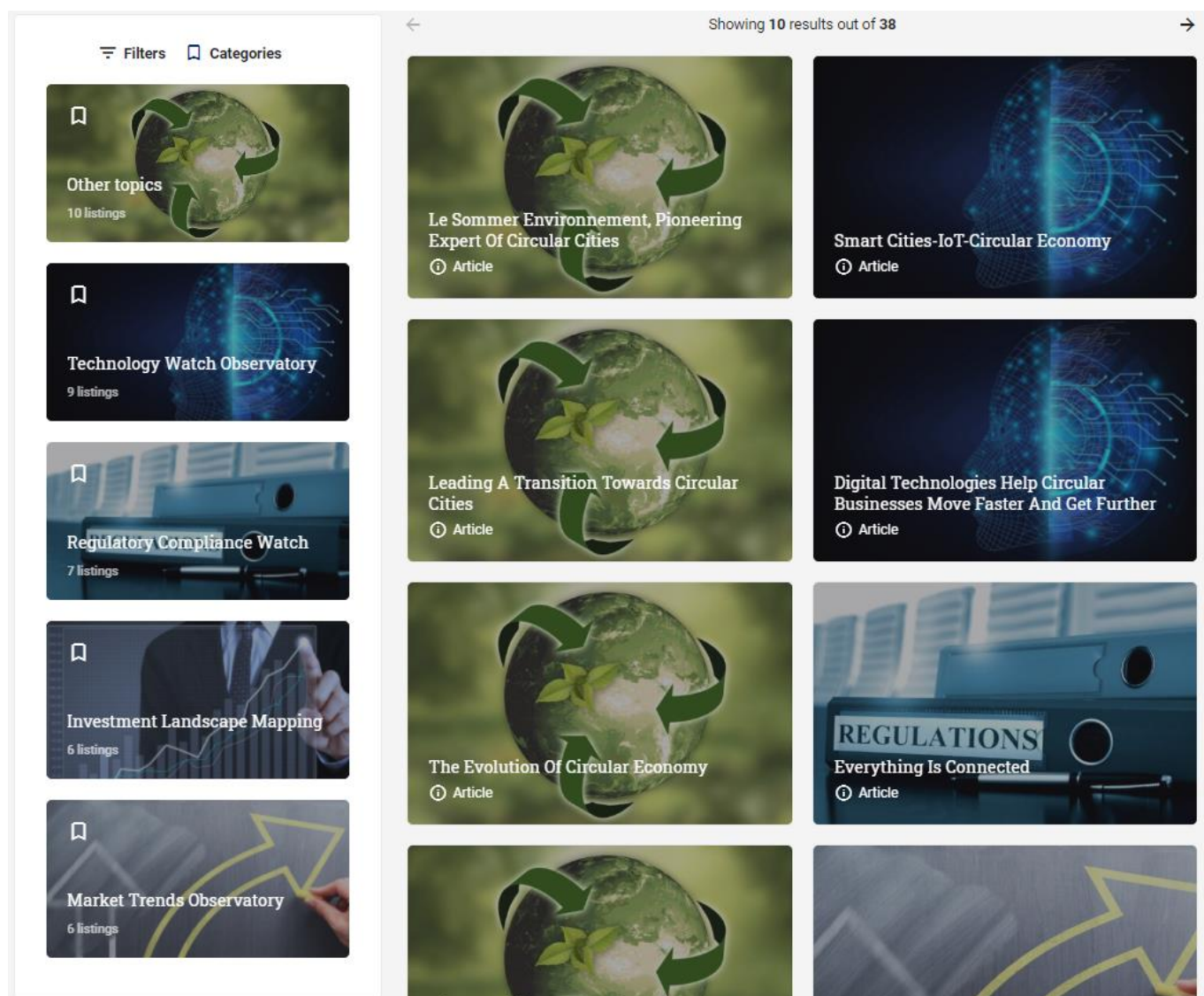



Figure 7: Search results page – Filter by category

5.3 Post page

Once the user finds a post they are interested in and select it, the InfoPortal will display the page of the post. On the overview page of a post, the user will first see the title and in the section following the title, all the content. The section is divided into two parts; the left part displays the keywords and main text of the post and below appear the images or videos accompanying the text, while the right part displays the associated information, i.e., author, category and thematic area. Most often, there are links available in the main text of the post, which redirect the user to external sources where they can get additional information. Figure 8 shows a post page from Technology watch category featuring a video and Figure 9 shows a post page from Regulatory watch featuring a gallery of figures accompanying the text summary.

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Investment Landscape MappingRegulatory Compliance WatchMarket Trends ObservatoryTechnology Watch ObservatoryOther Topics

Digital tool for developing regional circular economy action plans

Summary

#circulareconomy, #cities, #action_plans, #materials #sustainability

The Circle City Scan Tool enables local governments to discover and prioritise circular opportunities for their city or region, based on proprietary and publicly available socioeconomic and material flow data, relevant circular case studies, and users' input as to which sectors, materials, and impact areas are a priority in local agendas. A prototype of the tool is available online for all to freely explore and there is a possibility to join a beta programme for contributing. This video presents the scope of the tool and a walk-through demo.

[Read more](#)

Author

Circle economy organisation

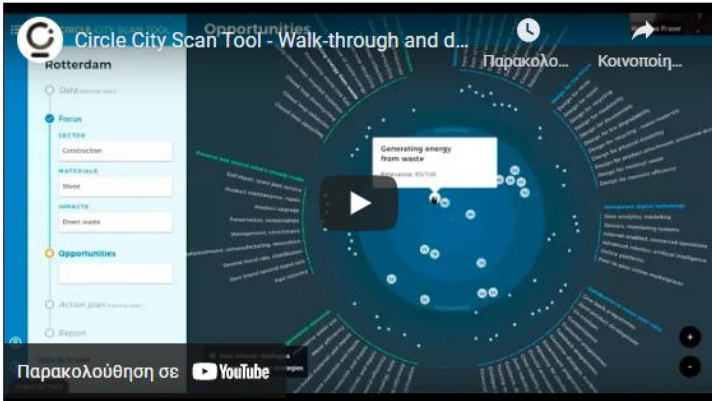
Category

Technology Watch Observatory

Thematic Area


Circular Cities

Video




Circle City Scan Tool - Walk-through and demo

Παρακολούθηση σε YouTube





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Check out [DigiCirc project!](#)




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Contact us at: info@digicirc.eu




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Figure 8: Post overview page - Video

D3.8: DigiCirc InfoPortal

Investment Landscape MappingRegulatory Compliance WatchMarket Trends ObservatoryTechnology Watch ObservatoryOther Topics



Circular Economy Guidebook for Cities

Summary

#CircularEconomy, #SustainableBusinessModels, #CircularityChallenges, #DigitalRoadmap, #ClimateNeutralCities #DigitalAge, #Collaboration

The Guidebook by Collaborating Centre on Sustainable Consumption and Production dives into challenges that need to be addressed in order to enable cities to pursue circularity which include the need for technical innovation, redesigning fair and sustainable procurement models, motivating citizens to embrace a more sustainable lifestyle and the like. It also highlights that to achieve progress with circular cities, collaborative action between the different stakeholders including citizens, policymakers, organisations, academia and entrepreneurs is essential. The recommendations, systematic approaches and use cases to achieve progress with circular cities that have been presented in the Guidebook could be of relevance to DigiCirc and the consortium members.

You can read the full Guidebook [here](#).

Author

Piyush Dhawan, Janpeter Beckmann

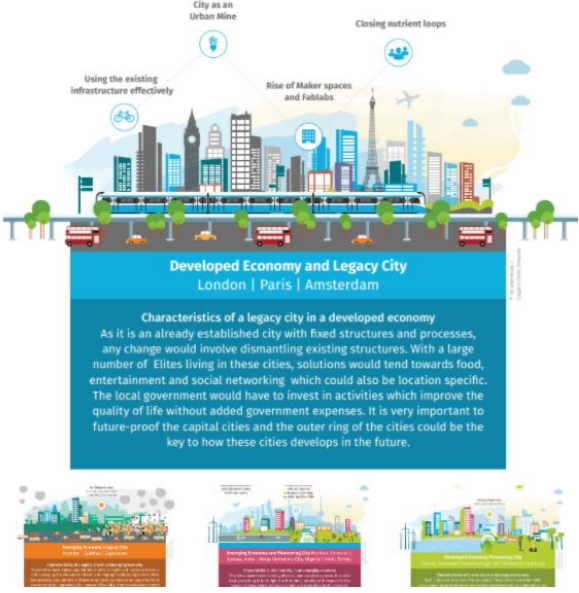
Category

Regulatory Compliance Watch

Thematic Area


Circular Cities

Gallery




Developed Economy and Legacy City
London | Paris | Amsterdam

Characteristics of a legacy city in a developed economy
As it is an already established city with fixed structures and processes, any change would involve dismantling existing structures. With a large number of Elites living in these cities, solutions would tend towards food, entertainment and social networking which could also be location specific. The local government would have to invest in activities which improve the quality of life without added government expenses. It is very important to future-proof the capital cities and the outer ring of the cities could be the key to how these cities develops in the future.





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Figure 9: Post overview page - Figures

6 Next Steps

During the next period, and as the accelerator for the Circular cities domain progresses, additional posts will be published in the InfoPortal for all 5 categories, as described in section 3.2. At mid-May phase 2 will begin, with the expected input for the Blue economy domain from the consortium partners, which will be reviewed and then the posts will start being published in the InfoPortal. As with the Circular cities domain, approximately half of the posts will be published before the Blue economy open call and the rest will be frequently posted throughout the open call and accelerator. The same process will apply to the Bioeconomy domain in phase 3, which will begin in August 2021 and continue until May 2022, where the InfoPortal is expected to be in its final form.

The current version of the InfoPortal incorporates all envisaged functionalities and features and no additions or changes are expected to be implemented. However, the user experience is the most accurate assessment measure and any feedback by the beneficiaries collected during the accelerators will be evaluated for implementation.



End of Document

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