

Open-Digital-Industrial and Networking pilot lines using modular components for scalable production

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Summary:

The purpose of this document is to describe the content available in ODIN public web portal.

¹ (*) Dissemination level: **PU**: Public, fully open, e.g. web; **CO**: Confidential, restricted under conditions set out in Model Grant Agreement; **CI**: Classified EU RESTRICTED, EU CONFIDENTIAL, **Int** = Internal Working Document, information as referred to in Commission Decision 2001/844/EC.

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2. EXECUTIVE SUMMARY

This document reports on the work performed with respect to the design, development and actual deployment of the ODIN web portal (www.ODIN-H2020.eu) to public use. Based on the initial communication and dissemination strategy of ODIN, the web portal is identified as the main enabler for raising awareness about the project's objectives, activities, and outcomes.

Through the ODIN public web portal, open access to information with respect to the project's activities, progress and results will be provided. Public material will be available such as publications, press/promotional material (brochures, leaflets, posters, press releases, newsletters, videos) and deliverable documents to share the ODIN goals and accomplishments. Detailed information with respect to any event such as conferences, workshops, seminars and fairs that ODIN will organize/participate, will be published in the portal with the collaboration and contribution of all partners. Social networking channels (LinkedIn, Twitter, Facebook, YouTube) will be used and will be regularly updated with the ODIN activities and achievements to keep up to date the main target audience and stakeholders of ODIN as well as the general public.

This document provides an overview of the project website, its structure and its main features, both in terms of backend and front-end. Each section is presented separately based on the general site map of the portal agreed among the partners. The way the content is organized in the various sections and the technologies used are explicitly described as well as the user rights management. Last but not least, the various social media tools and extensions to support the objectives of the project communication strategy are presented. The present document is also accompanied by a set of screenshots for a more comprehensive visual presentation of the project web portal.

3. INTRODUCTION

The current document provides an overview of the ODIN website and the overall objective is to create a modern and user-friendly web portal by following the latest online standards in web design and development. The portal offers an easy and effective navigation and a clear and easy-to-follow structure. The content is well formatted and the look and feel (colours, layout, fonts, responsiveness, images) conveys the nature and overall scope of the project.

The ODIN website is accessible at <http://ODIN-H2020.eu/> and will become the main gateway for all interested parties to access all the information related to the project and its available results.

The website is based on the Content Management System (CMS, type: Drupal) allowing the creation and management of a variety of content types such as blogs, videos, polls and statistics.

The project web portal will provide detailed information on the scope, objectives, consortium, work processes, clustering activities as well as information related to the current status of the project and outcomes. The web portal will also host the project's press releases and periodical newsletters featuring the project status, news, upcoming events, publications and any other related updates based on the progress of the project on each respective period.

INTRA is responsible for the deployment of the portal. LMS has been responsible for purchasing setting up the domain, supporting INTRA. Furthermore, INTRA as the Communication and Dissemination leader of the project will be responsible for the content management. All partners will contribute in content creation, based on their expertise and role in the project.

4. ODIN WEB PORTAL

4.1. Overview

The ODIN web portal was released on February 2021.

The rationale behind the portal is to establish a strong and sustained community of external stakeholders. The project web portal follows a person-centric approach and it is very user-focused. The ODIN logo has been designed in the very early stages of the project (M1) aiming to convey ODIN's philosophy, objectives and targets to all dissemination groups identified by the consortium. To ensure a clear, recognisable brand for all communication activities a sketch board with diverse logo concepts was presented to the consortium during the design process:



Figure 1: ODIN Logo proposals

The most important patterns, colours and elements have been determined based on the nature of the project and its target audience. After weighing up the pros and cons of the different proposals, the consortium decided on the final ODIN logo to be used in the project's communication/dissemination activities. This logo is borrowing design elements and inspiration from production line robotic arms and electronic circuits. It uses bold, heavy capital letters indicating industry usage.



Figure 2: Final ODIN logo

The ODIN website got inspiration from the project logo which set the tone of the colors and schemes that were used. The main content of the portal includes:

- ✓ An introduction to the rationale behind the ODIN project and a short description of its objectives and expected outcomes.
- ✓ A description of the use cases.
- ✓ A separate sub section where the consortium and their organisation descriptions/url's/logos are displayed.
- ✓ A separate section to present the clustering activities of ODIN with other similar projects, networks and initiatives.
- ✓ Visitors are enabled to follow ODIN's progress and dissemination activities through the "News" section.
- ✓ It provides access to the recent blogs, publications, public deliverables, press releases, newsletters, promotional material and videos of the project via its "Knowledge Center" section.
- ✓ A section where project results will be publicly available.
- ✓ Sub sections within the "Knowledge Center" including the communication/dissemination material of the project.
- ✓ A distinct place in the footer where the EU emblem, the social networks/feeds and the privacy notice are properly displayed.
- ✓ The main content of the website (challenge behind the project, project description, main objectives and use cases) has been also translated to German and Spanish. Users can use the flag icons for language navigation.

ODIN targets on the needs and requirements of three end users from different sectors: white goods, aeronautics and automotive. The other main dissemination groups identified for the ODIN web portal are:

- The European producing companies
- Purchasers of innovative products and services in the manufacturing sector
- Industrial associations and related networks
- Political decision makers and dedicated research communities.

The main objective of the website is to successfully disseminate the project results to the targeted stakeholders during the lifetime of the project. All partners will contribute to the content creation and formulation of the right key messages.

4.2. Main Features

4.2.1. Technical Details

The following subsection provides information of technical nature around the ODIN web portal.

- Ultra-fast Full SSD servers
- Account isolation
- Reverse Proxy: Nginx
- Backend Server: Apache
- Mod Security
- Antispam Solutions
- HTTP/2 supported
- Automatic Malware Detection
- DB engine: Maria DB
- PHP: PHP 7
- PHP OPcache
- Ruby on Rails, Node.js, Python, Perl
- FTP Access
- Access/Error log files
- Webmail/SMTP/IMAP/POP3
- Mailbox size
- Unlimited Subdomains/Domain Alias
- MySQL, MSSQL (Windows)
- ImunifyAV (Linux)

The ODIN website is created using Drupal 8 as the backend CMS. Drupal is a flexible, modular, easy-to-use framework, trusted by some of the largest websites worldwide and supported by a large and dedicated community. Drupal employs a CKEditor, a powerful WYSIWYG editor, for content authoring and text formatting. Thus, content editing is as simple as editing a Word document. Drupal offers maximum flexibility for the creation and management of file repositories. Administrators can upload and maintain files of various types (docx, xlsx, odt, pdf, jpg, png, mpeg, avi etc). At the same time media can be made available via channels created on specialised websites. Audio/video files uploading/publishing is also supported by the ODIN web portal via the portal's backend. Administrators can view previews and create new page revisions, without affecting the ones already published.

4.2.2. Graphic Design

In pursuance of a consistent visual identify, the design of the web portal follows the same style of the logo. Overall, the graphic design of the web portal is aligned with ODIN, its nature, aims and objectives. Selected, high resolution images are used to enhance the visual identity of the project.

The custom Drupal theme created for the ODIN website ensures that all templates are fully responsive and correctly rendered on any mainstream browser and device.

The footer of the web portal displays properly the EU Emblem and provides links to the Privacy Notice, copyright, and the social media accounts of the project.



Figure 3: Web portal footer area

4.2.3. Filters

Content Types (predefined collections of taxonomy terms, tags, text fields and areas etc) are used for content creation and structuring and are properly designed to incorporate the required fields to properly structure the ODIN website.

In Drupal, a Content Type is a pre-defined collection of data types (Fields) which relate to each other by an informational context. In this sense, "context" means "parts that should be considered as a correlated whole." Content Types are how site editors can input original content on a Drupal site; while Views, for example, is one way you can serve up content to the end users.

In Drupal the “Views” module provides a GUI for creating complex content queries, configuring sorting, filtering options, and formatting. Thus “Views” is a powerful tool that allows for creating lists of content and configuring additional filters that will make content overview easier when content accumulates throughout the course of the project.

Drupal Search default behaviour is to search for text/keywords appearing in any textual field. The module marks altered content and indexes it during predefined cron runs. Drupal search can be enhanced to further enable faceted filtering, spell check and search on documents.

4.2.4. Site map

The soft launch of the ODIN website has a simple Information Architecture which will be regularly updated based on the identified needs of the project throughout its life course:

HOME (landing page)
Discover ODIN
The Consortium
Twitter feed
Newsletter registration (sign in form)
Project Information (GA no, Call/Topic, Funding, Duration)
Contact form
Header/Footer (EU emblem, Privacy Notice, Social media buttons, Cookies banner, logo/website URL.)
MAIN MENU
TAB
THE PROJECT
The Challenge
Discover ODIN
Objectives
The Consortium
USE CASES
ODIN NETWORK
KNOWLEDGE CENTER
Blog
Deliverables
Publications
Press Releases
Newsletters
Project material
Videos
NEWS
CONTACT

Figure 4: ODIN Site map

5. MAIN CONTENT

5.1. Landing page

The landing page has a flat design with modern look. It includes a brief description of the project, the consortium, the project information data and the newsletter registration sign in form. It also exposes the logo of the project, the EU emblem, the social media buttons, the contact form, the twitter feed, and the header/footer material.

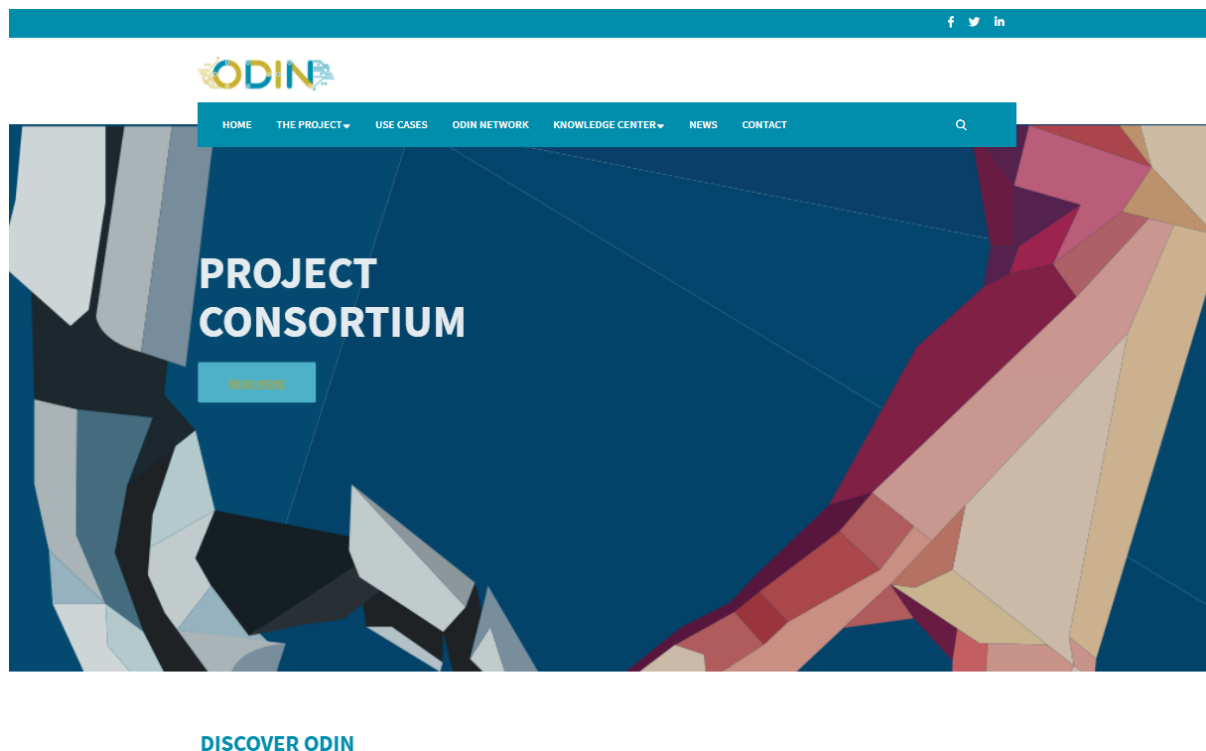


Figure 5: Web portal landing page

5.2. The Project

In this section the rationale behind the project is provided and the objectives are listed with a customized graphic. This page also gives information about the partners, including a short description of their profile with a hyperlink inserted in the logos directing to their official websites.

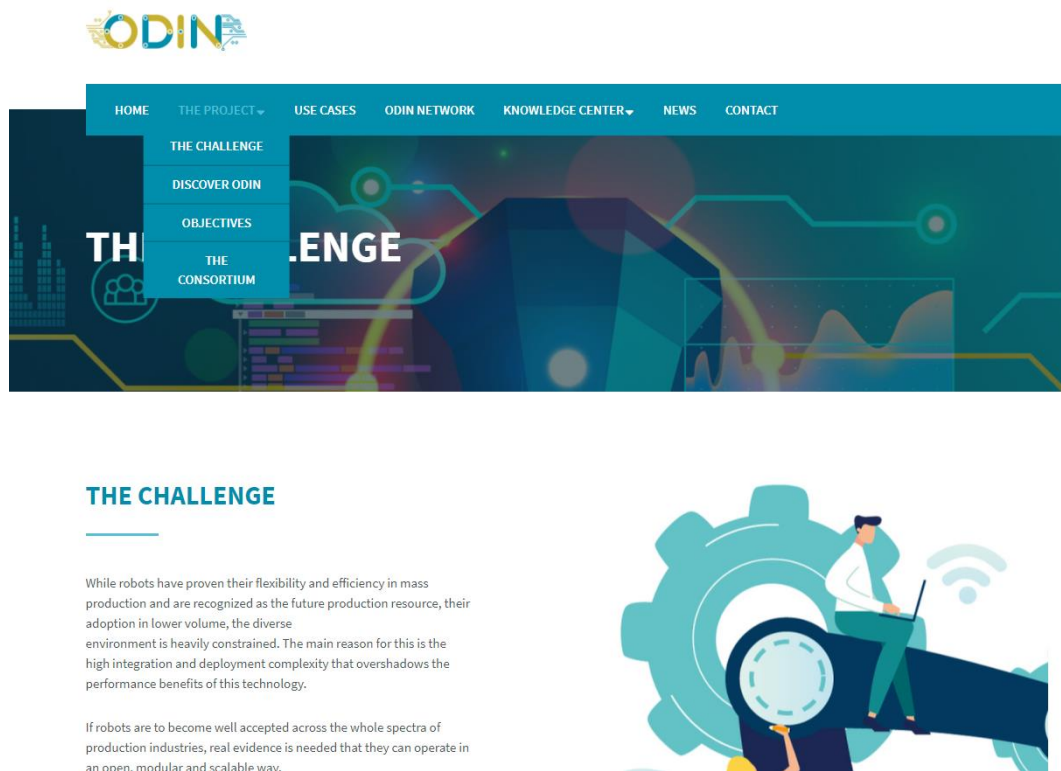


Figure 6: "The project" Section

5.2.1. The Challenge

The first subsection is devoted on describing in detail the challenge which is addressed through the ODIN solution. More specifically, specific demonstration topics are presented which will be showcased during the ODIN project. Finally, the aim of the ODIN solution is highlighted.

5.2.2. Discover ODIN

This subsection describes the main fields of expertise which will be included in the ODIN solution. Such technologies include the collaborating robots and human-robot collaborative workplaces, autonomous robotics and AI-based task planning, mobile robots and reconfigurable tooling, Digital Twins and Virtual Commissioning and Service-Oriented Robotics Integration and Communication Architectures. Finally, the ODIN Large Scale Pilot concept is presented where different robotics technologies are integrated to perform a production task, meeting the performance requirements of the industrial sector where the line operates.

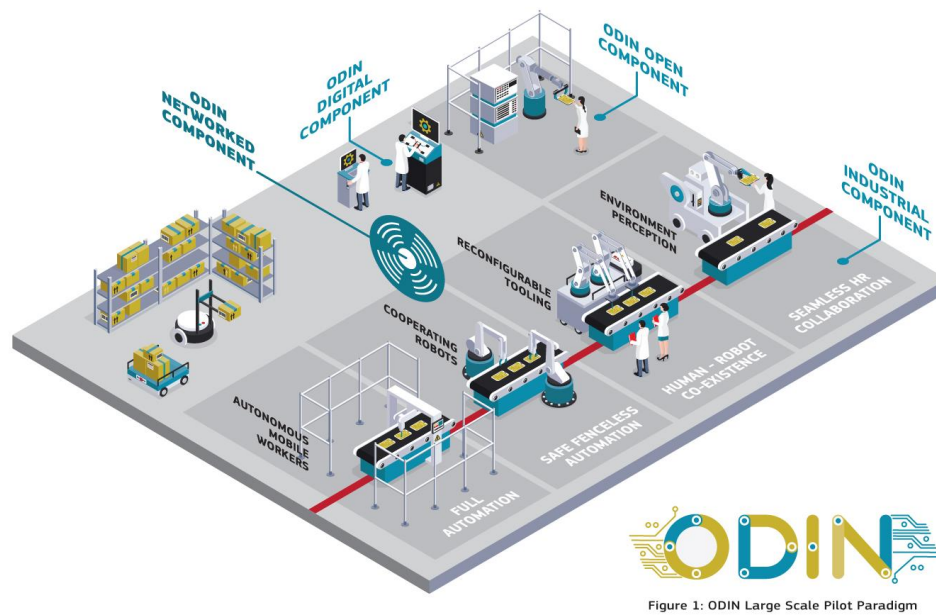


Figure 1: ODIN Large Scale Pilot Paradigm

Figure 7. ODIN Large Scale Pilot Paradigm

5.2.3. Objectives

This subsection includes the information related to the different objectives of ODIN solution. More specifically, the 5 different objectives of ODIN are:

- Enabling the introduction of mobile, autonomous, environmentally aware and collaborative robotics in industrial settings.
- Creating digital validation tools for these robotic systems to allow scalability with minimum complexity and integration risks.
- Commercializing an advanced robotics integration platform able to link the robotics design and development stage with the normal production conditions.
- Deploying full-scale demonstrators in different production sectors to serve as a token of the industrial-grade performance of the ODIN production systems.
- Create an innovation ecosystem to enable the sustainability of open Pilot Lines involving robotic application stakeholders and inspiring further deployment.

OBJECTIVES



Figure 8. Sample from the Objectives subsection

5.2.4. The Consortium

This subsection includes information related to the ODIN consortium partners. For each partner, their logo is presented alongside with a short description of their history and expertise.

THE CONSORTIUM



Laboratory for Manufacturing Systems & Automation (LMS)

Laboratory for Manufacturing Systems & Automation (LMS) is oriented on research and development in cutting edge scientific and technological fields. LMS is involved in a number of research projects funded by the EU and European industrial partners. Particular emphasis is given to the co-operation with the European industry as well as with a number of "hi-tech" firms. LMS is under the direction and technical coordination of Professor George Chryssolouris. It currently employs approximately 70 researchers organized in four different groups: Manufacturing Processes Modelling and Energy Efficiency, Robots, Automation and Virtual Reality in Manufacturing, Manufacturing Systems and Software Development for Manufacturing.



TECNALIA

TECNALIA is a private, independent, non-profit applied research center of international excellence. Legally a Foundation, Tecnalia is the leading private and independent research and technology organisation in Spain and one of the largest in Europe, employing around 1,300 people (219 PhDs) and with income of €108 Million in 2019. TECNALIA has one GOAL: to transform technology into GDP, meaning wealth to improve people's quality of life through generation of business opportunities for industry. TECNALIA is committed to generate major impacts in economic terms, by means of innovation and technological development, addressed by 7 business divisions covering the economic sectors of Energy, Environment, Industry, Transport, Construction, Health and ICT. TECNALIA has been granted over 396 patents and promoted more than 30 spin-off companies.

Figure 9. Sample from the Consortium subsection

5.3. Use Cases

This section provides information about the three use cases of the project: white goods, aeronautics and automotive sectors.



Figure 10: Sample from the "Use Cases" Section

5.4. ODIN Network

This section provides a description of other similar EU projects, networks and initiatives that will collaborate with ODIN to perform joint communication/dissemination activities and explore synergies in the actual field of work.

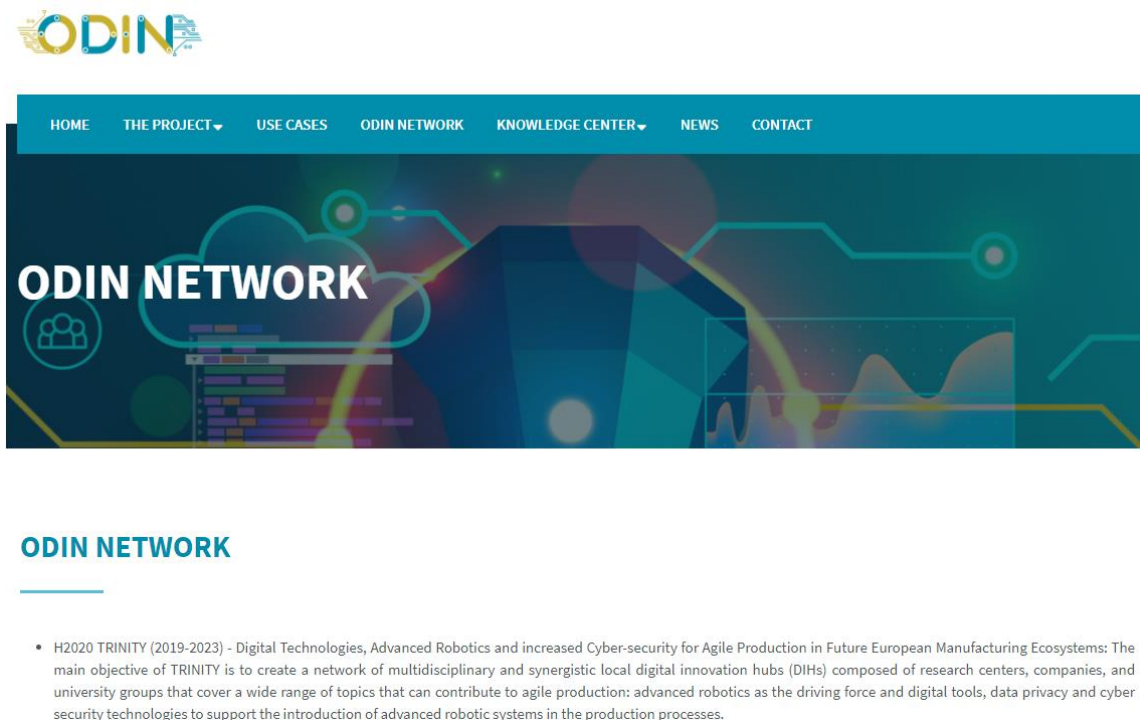


Figure 11: The "ODIN Network" Section

5.5. Knowledge Center

The “Knowledge Center” section will include the results/outcomes of the project, the list of scientific papers related to the project and the dissemination material to be produced throughout the project (newsletters, videos, brochures, posters etc.).

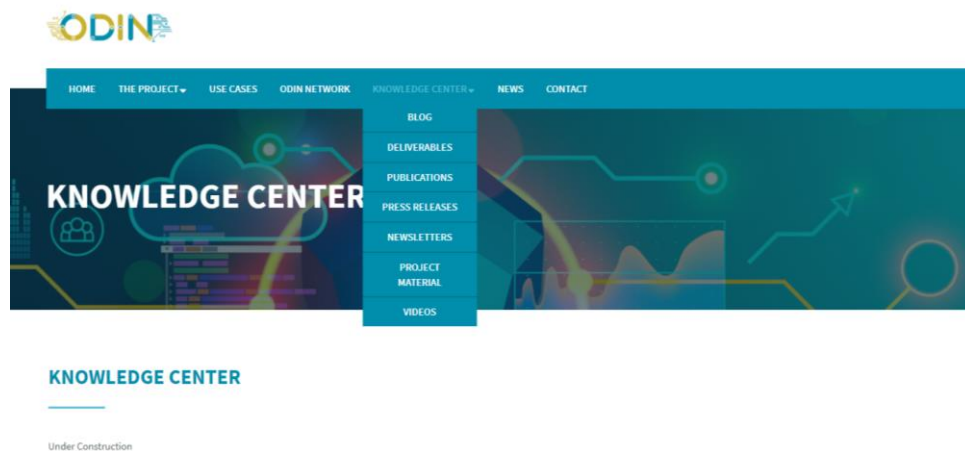


Figure 12: The "Knowledge Center" Section

5.6. News

The News page will display past and forthcoming events, important meetings and all regular updates related to the project.

5.7. Newsletter Signup form


An email sign up form will be used to collect email addresses from external stakeholders. The form has been embedded on the web portal. The form can be found in the landing page but also in other sections as a reminder.

GET THE LATEST NEWS ON ODIN RIGHT TO YOUR INBOX!

Newsletter Permission: The ODIN project will use the information you provide in this form to be in touch with you and to provide updates and news. Please let us know if you would like to hear from us:

☐ ODIN newsletter: You can change your mind at any time by contacting us at info@odinh2020.eu. We will not distribute your email address to any party at any time.

Figure 13: Newsletter Signup form (1st step-consent checkbox)



Get the latest news on ODIN right to your inbox!

The ODIN project will use the information you provide in this form to be in touch with you and to provide updates and news. You can change your mind at any time by contacting us at info@odinh2020.eu. We will not distribute your email address to any party at any time.

Email Address

First Name


Last Name

Subscribe

Figure 14: Newsletter Signup form (2nd step subscription area)

5.8. Contact

The contact form provides an easy way to the visitors to contact the consortium submit their requests.



CONTACT

KEEP IN TOUCH

Your name *

Your email address *

Subject *

Message *

SEND MESSAGE **PREVIEW**

Figure 15: Contact form

6. CONCLUSIONS

This document presented an overview of the ODIN web portal aiming to communicate with the external stakeholders of the project and described its main structure and features, both in terms of backend and front-end.

This deliverable is part of work package WP6 “Impact achievement, Sustainability and Integration in the DIH Networks”, which aims to create a wide network of Digital Innovation Hubs and disseminate successfully the project results to the end users of the ODIN project, the additional dissemination groups identified and the general public.

This structure and content presented will be updated on a regular basis to keep up with the project developments and outcomes.

7. GLOSSARY

CMS	Content management systems
D6.1	Deliverable number 1 belonging to WP 6
WP	Work Package
EC	European Commission
EU	European Union
GUI	Graphical User interface
DIH	Digital Innovation Hub
PU	Public