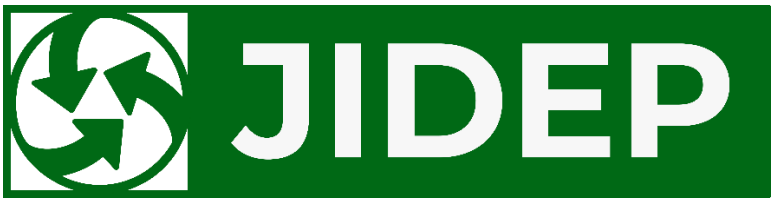
PROJECT DELIVERABLE REPORT

Grant Agreement Number: 101058732



Joint Industrial Data Exchange Platform

Type: DEC

Training and Hackathon Activities

Issuing partner	Brunel University London (BUL)
Participating partners	BUL, FHV
Document name and revision	Project Promotion Materials
Author(s)	Dr Nithin Jayasree, Dr Faranak Bahrami, Laura Gellatly
Deliverable due date	30.11.2023
Actual submission date	19.12.2023

Project Coordinator	Vorarlberg University of Applied Sciences
Tel	+43 (0) 5572 792 7128
E-mail	florian.maurer@fhv.at
Project website address	www.jidep.eu

Dissemination Level		
PU	Public	✓
PP	Restricted to other programme participants (including the Commission services)	
CO	Confidential, only for members of the consortium (including the Commission services)	
SEN	Sensitive, limited under the conditions of the Grant Agreement	

Contents

Executive Summary

This executive summary highlights the establishment of strategic partnerships between various organisations and industry groups, aimed at enhancing collaboration, sustainability, and innovation in the composites and electronics recycling . Key collaborations include Composites UK Sustainability Group, EuCIA, Wind Europe, EMMC, Blades2build, DecomBlades, and the TWI Innovation Network. Planned events and workshops under these collaborations are set to foster knowledge exchange, technological advancements, and address environmental challenges, signaling a significant move towards a more sustainable and innovative future in these industries.

1. Introduction

The landscape of the modern industry is increasingly digital, interconnected, and data-driven, with the advent of Industry 4.0 revolutionising how we conceive production, innovation, and collaboration. At the heart of this transformation is the Joint Industrial Data Exchange Platform (JIDEP), which serves as a conduit for the seamless sharing of industrial data across various sectors. As part of its mission, JIDEP is committed to fostering a culture of continuous learning and cooperative development through targeted training and hackathon activities. These initiatives are integral to the platform's strategy, aiming to cultivate a skilled workforce adept at leveraging the JIDEP tools and methodologies for sustainable and resilient industrial growth.

Training programs, conferences, workshops and hackathons are conceived not merely as events but as critical and creative platforms that bring together diverse minds to solve complex challenges. Through these activities, JIDEP aspires to build a community of practitioners who are not only fluent in the language of Industry 4.0 but are also active contributors to a shared vision of a circular economy and climate neutrality. These engagements are designed to facilitate the exchange of ideas, encourage innovation, and harness the collective expertise to drive forward the goals of the EU climate agenda for 2050.

The training sessions will provide stakeholders with the knowledge and skills necessary to navigate the JIDEP ecosystem, ensuring that the principles of FAIR data management (Findability, Accessibility, Interoperability, and Reusability) are embedded in the workflow of industries. Concurrently, the hackathon event represents a unique opportunity for creative problem-solving and rapid prototyping of solutions that exemplify the transformative potential of collaborative data use.

This introduction outlines the forthcoming sections that will detail the objectives, structure, content, and expected outcomes of the training and hackathon initiatives. By investing in human capital and fostering a culture of innovation, JIDEP is setting the stage for a future where data informs and accelerates our transition to a sustainable and resilient industrial ecosystem.

2. Community Engagement

Contacts were established with various organisations and industry groups to enhance collaboration and knowledge sharing. These include:

1. **Composites UK Sustainability Group** - A leading organisation in the UK focused on sustainable practices in the composites industry.
2. **EuCIA (European Composites Industry Association)** - A prominent association in Europe, representing the interests and promoting the use of composites across the continent.
3. **Wind Europe** - A key entity in the wind energy sector, dedicated to the advocacy and development of wind power in Europe. More information can be found at https://windeurope.org/.
4. **The European Materials Modelling Council (EMMC)** - An influential council in Europe, focusing on the advancement of materials modelling and its applications.
5. **EU-Funded Consortia** - Engagement with significant EU-funded projects, such as:
    - **Blades2build** (https://blades2build.com/) - A project aimed at innovating and improving the manufacturing processes of wind turbine blades.

- **DecomBlades** (https://decomblades.dk/) - Focused on the decommissioning and recycling of wind turbine blades, contributing to the sustainability of the wind energy industry.

6. **TWI Innovation Network** - A network that connects industries and academia to foster innovation and technology development, particularly in the field of engineering, and materials.

Establishing these connections demonstrates a dedication to building collaborative relationships, enhancing eco-friendly methods, and driving forward innovation in both the composite materials and renewable energy fields. The continuous dialogues with these various groups and organisations indicate a concerted effort to organise a series of workshops tailored for the related industries.

2.1 Conferences and Workshops

A selection of key collaboration events that happened in 2023 are highlighted below. All of these events are pivotal to reach a wide audience in both Europe and the wider countries, to communicate JIDEP's overarching objectives and goals.

End-of-Life Issues & Strategies (EoLIS) Seminar, Rotterdam 2023

Figure 1. Zorlu Energy Group presenting the JIDEP workshop during EoLIS (End of Life Issues & Strategies Seminar), November 2023. The session focused on how a digital environment could promote data sharing across the entire supply chain.

"Turkey Wind Turbines Recycling Workshop", Izmir 2023

Figure 2. Zorlu Energy presenting JIDEP at the "Turkey Wind Turbines Recycling Workshop", November 2023. JIDEP was a key focal point, alongside Blade2Build (https://blades2build.com/), sharing the purposes and aims of both projects and the importance of their objectives.

International Composites Summit (ICS), Milton Keynes 2023

Figure 3. BUL presenting JIDEP at the International Composites Summit (ICS), September 2023. Showcasing JIDEP, it was a key stage for community engagement as the ICS was a new, but highly relevant, audience, that got to listen and engage with the JIDEP project.

Advanced Engineering show, Birmingham 2023

Figure 4. BUL presenting JIDEP at the Advanced Engineering show, November 2023, explaining who we are and what our main objectivs are.

IPIC- International Physical Internet Conference: Expanding the Logistics Scope, Athens 2023

Figure 5. FHV presenting at the IPIC- International Physical Internet Conference: Expanding the Logistics Scope, June 2023. This was one of the first engagements JIDEP had to pleasure showcase at, centering on its solutions within the Physical Internet framework.

2.2 Additional Dissemination Activities

Alongside the beneficial utilisation of conferences and workshops, other dissemination activities have been created to further our engagement with key communities. One such example is the employment of dedicated use-case videos. Having visual tools not only highlights the progress JIDEP has made to achieve its overall goals but it also 'brings-to-life' our mission and values. It allows us to engage with wider audiences, especially those who may not have much background knowledge in this field, but who are still nonetheless relevant audiences for us to reach out to.

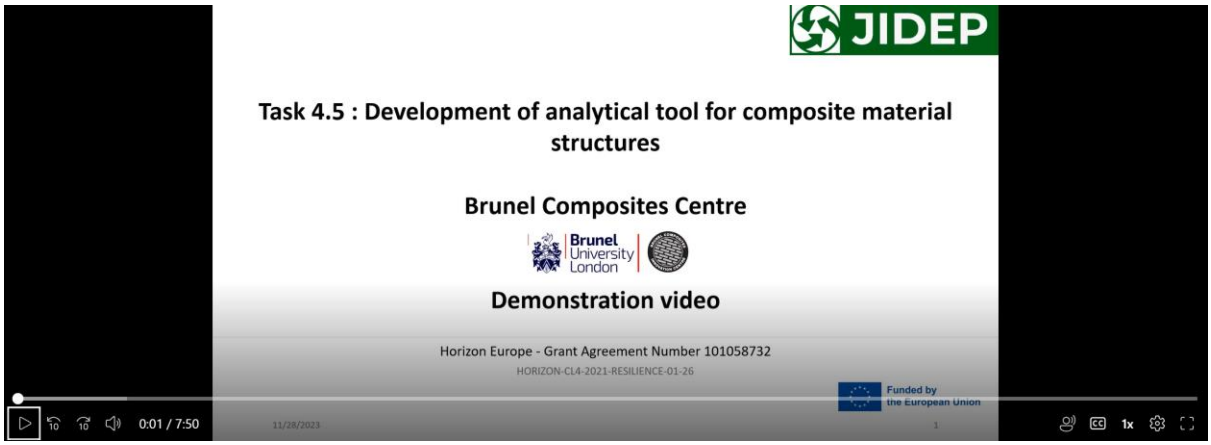


Figure 6. BUL created a demonstration video of the analytical tool for composite manufacturing simulation which was done on the test case provided by ADL and used data from the material passport developed in WP4.

Figure 7. Wind use case video created by BUL with Zorlu Energy discussing the current issues surrounding recycling wind turbines and blades and the need for a process to be put in place.

3. Workshops, Training and hackathons

Further to the engagments we have had so far, as mentioned above, we are planning to have workshops, hackathons and training session. The training sessions aim to equip stakeholders with the knowledge and skills required to navigate the JIDEP ecosystem. The goal is to ensure that the principles of FAIR data management are integrated into the workflow of industries. At the same time, the hackathon event provides a distinctive opportunity for creative problem-solving and rapid prototyping of solutions that showcase the transformative potential of collaborative data use.

Upcoming workshops, training and hackathons (so far):

Community/Organisation	Planned Events	Expected Date
Composites UK - Sustainability subgroup Group	Workshop and training	February 2024
EuCIA (European Composites Industry Association)	Dedicated workshop and training	November 2024
Wind Europe	Additional conferences to attend	Q4 2024
European Materials Modelling Council (EMMC)	Workshop and training	TBC
Blades2Build Consortium	Community engagement	TBC
DecomBlades Consortium	Community engagement	TBC
TWI Innovation Network	Detailed Workshop, training and hackathon	Nov-Dec 2024

4. Conclusions

The establishment of contacts with these diverse organisations and networks reflects a strategic and comprehensive approach towards fostering collaboration, sharing knowledge, and driving innovation in various sectors. The engagement with groups like Composites UK Sustainability Group, EuCIA, Wind Europe, EMMC, and key EU-funded consortia such as Blades2build and DecomBlades, along with the addition of the TWI Innovation Network, illustrates a commitment to advancing sustainable practices and technological advancements. These relationships not only bring together a wealth of expertise and resources but also create a platform for addressing current challenges and exploring future opportunities in the composites, renewable energy, and engineering sectors.

The planned events, ranging from workshops on sustainable composites to technology and innovation conferences, signify the active role these organisations intend to play in shaping the future of their respective industries. These gatherings are anticipated to be pivotal in promoting dialogue, inspiring new ideas, and forging partnerships that can lead to breakthroughs in materials, manufacturing processes, and sustainable practices. Overall, these collaborative efforts are poised to make a significant impact, contributing to the advancement of industries and the pursuit of a more sustainable and innovative future.