# **PROJECT DELIVERABLE REPORT**

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## **Dissemination Activities Report**

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Author(s)	Dr Faranak Bahrami, Dr Nithin Jayasree
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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			

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## **Executive Summary**

This report summarises the recent updates on the dissemination activities of the JIDEP project. Dissemination and exploitation activities will run in parallel with project implementation and will be separately supported by the project participants. Dissemination actions in JIDEP are based on continuous efforts implemented throughout the project to create opportunities to engage stakeholders and create awareness.



Brunel Composites Centre (BCC)

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## 1. Introduction

## 2. Dissemination Activities

#### **Interviews** 2.1

As part of the dissemination activity plan, several interviews were carried out with the consortium partners and the end-users of the JIDEP project in the partner meeting at Brunel Composites Centre, Cambridge and the review meeting at the University of Trento, Italy.

Representatives from nine project partners contributed to the interview by discussing the benefits and importance of a system such as JIDEP and other technical aspects of such a platform.

The interviews were consequently shared on social platforms (LinkedIn page and Facebook) and JIDEP website where they could be viewed by the public.



Figure 1 JIDEP partners at the 2nd partner meeting of the project in Cambridge, UK.



During the interview, FHV (the project coordinator) discussed the benefits of having a digital collaborative space where industrial data can be shared.

#### The full interview with FHV can be found at:

https://www.linkedin.com/feed/update/urn:li:activity:7075496518060789760



Figure 2 Interview with the JIDEP project coordinator FHV.

The interview with ADS delved into the current issues with the recycling of composite materials. ADS explained how composite materials are currently placed in the landfield which is a major problem. Furthermore, the interview discussed how a central platform for material data exchange (e.g. JIDEP) is necessary for companies such as ADS, where they can sell their recycled composite materials.

The full interview with ADS can be found at: <u>https://www.linkedin.com/feed/update/urn:li:activity:7075514237418102786</u>



Figure 3 Interview with the JIDEP partner ADS.



Zeev Pritzkar explained how a DLT platform will be used in the JIDEP project to create a secure data-sharing platform. The DLT platform will be used in JIDEP for three reasons:

- Prove the provenance of the data
- Secure the integrity of the data by verifying that the data has not been tampered with
- Facilitating and enforcing the data licensing

#### The full interview with AVO can be found at:

https://www.linkedin.com/feed/update/urn:li:activity:7075497852948369408



Figure 4 Interview with the JIDEP partner AVO.

TVS, another of the technical partners of the JIDEP project, explained the definition of the material passport. Fahim Chowdhury explained that a digital material/product passport is where the material data can be placed to ensure traceability, transparency and other information in a supply chain. The information can contain a wide range of details e.g. physical properties, mechanical properties, chemical composition, safety information, etc.

The full interview with TVS can be found at: <u>https://www.linkedin.com/feed/update/urn:li:activity:7075500849044545536</u>



Figure 5 Interview with the JIDEP partner TVS.



The interview with UCAM looked into the other technical parts of the JIDEP project which is the ontology modelling. Feroz Farazi also explained about the importance of the FAIR principles which ensure that the data is Findable, Accessible, Interoperable, and Reusable.

The full interview with UCAM can be found at: <u>https://www.linkedin.com/feed/update/urn:li:activity:7075490587818254336</u>



Figure 6 Interview with the JIDEP partner UCAM.

UNITN which is JIDEP's 'Generic Components and Business Logic' work package leader discussed the benefits of large-scale adoption of a marketplace to reuse materials.

#### The full interview with UNITN can be found at:

https://www.linkedin.com/feed/update/urn:li:activity:7075492219347984385





As part of JIDEP's two-day event in Brunel Composites Centre (BCC), Cambridge, an interview series features discussions with the key technical players of JIDEP were conducted, this video present the interview with Simone Bocca, from Università di Trento.



Figure 7 Interview with JIDEP partner UNITN.



UPCE who is responsible for the development of a chemical paste technology for use with Printed Circuit Boards (PCB), discussed the important parameters of the soldering paste in order to provide a second life to the electronic components. Syrovy Tomas also explained how the JIDEP platform could assist with upscaling the process of obtaining components for recycling.

#### The full interview with UPCE can be found at: https://www.linkedin.com/feed/update/urn:li:activity:7075517273444085760



Figure 8 Interview with JIDEP partner UPCE.

The interview with TPI looked further into the issues that can arise from the high demand for glass fibres especially in the wind turbine industry. TPI also discussed the benefits of having a collaborative space where the company can be notified about the availability of recycled fibres.

The full interview with TPI can be found at: https://www.linkedin.com/feed/update/urn:li:activity:7075494653994627072



Figure 9 Interview with JIDEP partner TPI.



ZOREN which is one of the use cases in wind energy, discussed their current challenges in recycling wind turbine blades. ZOREN also explained how a collaborative space where they can notify the relevant industries about end-of-life wind turbine blades can be beneficial.

#### The full interview with ZOREN can be found at: <u>https://www.linkedin.com/feed/update/urn:li:activity:7075503208273457155</u>



Figure 10 Interview with JIDEP wind energy end-user ZOREN.

The end-user CRF and ADL were interviewed during the JIDEP review meeting in Trento, Italy. In the interview with CRF, Andrea Pipino explained the importance of recycling most of their vehicle's mass to support the company's sustainability targets and further discussed the benefits of a platform where Carbon Fibre Reinforced Plastic waste can be advertised to companies who can recycle these materials.



Figure 11 Interview with JIDEP end-user CRF.



In with Laura Di Cesare, the head of composites R&D at ADL, the importance of using recycled carbon fibres was discussed. Laura also discussed how the quality of recycled fibres is important to ADL. In this interview, the benefits of having a platform where companies like ADL can receive notifications in regard to the availability of high-quality fibres were also discussed.





Figure 12 Interview with JIDEP end-user ADL.



## 2.2 Past Events

On 13th- 15th June 2023 JIDEP was one of the proud sponsors of the International Physical Internet Conference (IPIC). The JIDEP project was also featured on the website under the 'Projects' section.

The Physical Internet Initiative seeks to revolutionise the movement, storage, realisation, supply, and utilisation of physical objects worldwide, aiming for enhanced logistics efficiency and sustainability. The International Physical Internet Conference provides a platform for researchers, industry professionals, government officials, and citizens to collectively explore, discuss, and introduce cutting-edge concepts, methodologies, projects, and technological advancements related to the implementation of the Physical Internet. Topics include Logistics Nodes, Networks, System of Logistic Networks, Access and Adoption, Governance, as well as new business models and enabling technologies. With participants from around the globe, the conference offers a unique opportunity to exchange knowledge, network, and address the latest challenges in interconnected logistics.



Figure 13 Screenshots for, the IPIC2023 website, indicating JIDEP as a sponsor and featured under the 'Projects' section.



## 2.3 Upcoming Events

## 2.3.1 Dissemination Planner

Table 1 indicates the upcoming dissemination events for the JIDEP project. The dissemination planner can be found in the JIDEP share folder, where all the partners can update accordingly. As can be seen in Table 1, most of the events have already been confirmed and the related partners are currently in the planning stage.

Dissemination Name	Date	Location	Status	Partners Involved	Type I	Type II
TWIN	TBC - Dec 2024	Cambridge	Confirmed	BUL, TVS, all	Demo	Workshop
Processes4plane t	твс	твс	Not Confirmed	твс	TBC	
ЕММС	твс	Online	Confirmed	BUL, UCAM	Hackathon	N/A
International Composites Summit 2024	5th Sep 2024	Milton Keynes, UK	Confirmed	BUL, TVS, all	Demo	Workshop
Advanced Engineeting show	30 & 31 October 2024	NEC, Birmingham	Confirmed	BUL, TVS all	Demo	Workshop
JEC Forum DACH	23rd Oct 2024	Stuttgart,Germany	Confirmed	BUL, TVS, all	Demo	N/A
Eucia	TBC - Decembe r	TBC	Not Confirmed	BUL, TVS, all	TBC	N/A

Table 1 U	pcoming	Dissemination	Events
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Industry 4.0 Summit	Nov-24	Tyrol, Austria	Confirmed	FHV	Demo	N/A
Lange Nacht der Forschung	24th May 2024	Vorarlberg, Austria	Confirmed	FHV	Booth	Presentation
AM printing of desoldering paste for the disassembling of electronic components from PCBs	8th - 11th Sep 2024	Zurich	Confirmed	UPCE	Presentation	N/A
Blades2build- JIDEP joint workshop	23rd Sep 2024	Online	Confirmed	TVS	Workshop	N/A

## 2.3.2 Engagement with Stakeholders

As the main industry that the JIDEP project is currently targeting is the composites material industry, BUL has identified various channels to disseminate the JIDEP to the correct audience. Below the current plan for each of these institutions has been discussed.

### 2.3.2.1 European Materials Modelling Council (EMMC)

The BUL has become a member of EMMC since early 2024. The EMMC is a non-profit association whose initiatives are closely linked to those of the JIDEP project. EMMC currently has fifty-five members who are mostly related audiences for the JIDEP project, especially in terms of ontology modelling.

The UCAM has been reusing the 'Elementry Multiperspective Material Ontology (EMMO)' which was created by the EMMC to provide a formal way to describe the fundamental concepts of physics, chemistry, and materials science. EMMO has been designed to provide a solution for semantic interoperability, creating a generic common ground for describing materials, models, and data that can be adapted by all domains. UCAM has utilised this model in developing the composite materials and materials passport ontology to describe various end-of-life products, components, and materials of the automotive and wind turbine industries (JIDEP end-users).

Currently, BUL, UCAM, and EMMC are in the planning stage of a Hackathon event which will take place through EMMC and their network. The Hackathon will challenge participants from diverse backgrounds, such as Material Science, Chemical Engineering, Computer Science, and Finance, with rule-based software development to calculate the Material Circularity Index (MCI). OntoMatPassport, an ontology defined for representing material passports and material life cycles, possesses all required classes and properties to calculate, publish, and manage the MCI of any product.



This Hackathon will showcase and disseminate the JIDEP ontology and its use in combination with tules in developing a programming language-agnostic circularity calculator, an innovative idea proposed in the JIDEP proposal.

#### 2.3.2.2 Composites UK

Composites UK is the trade association for companies working in the UK's fibre-reinforced polymer composite supply chain. BUL has initiated several parallel discussions with key stakeholders, including Alan Banks, Chairman of Ford Motor Company, and the directors of Composites UK. These directors include Jen Hill, CEO of B&M Longworth UK, and Malcolm Forsyth, Sustainability Manager of the Sustainability Group Sub-Forum.

During these discussions, the JIDEP platform was pitched directly for immediate awareness. As a result, multiple dissemination events have been organised, including the International Composites Summit (ICS) and the Advanced Engineering Show. The JIDEP platform will be introduced to all key players in the UK composites sector at these events.

#### 2.3.2.3 <u>TWI Innovation Network</u> (TWIN)

TWIN is an innovation ecosystem that promotes collaboration between TWI industrial members and TWI Innovation Network (i.e. BCC/BUL). TWI industrial members include OEMs, contractors, academia, suppliers, governments and research organisations.

BUL has managed to obtain a approval for an event through TWIN. This event will be held at the TWI headquarters in Cambridge, UK, where all the TWI industrial members and innovation networks will be invited for a demonstration of JIDEP platform and project. This is a great opportunity for the JIDEP project to disseminate the efforts of the project to a wide range of stakeholders. BUL is currently in the planning stage of this event and it is aiming to hold this event around the end of 2024.

#### 2.3.2.4 <u>European Composites Association</u> (EuCIA)

Headquartered in Brussels, the European Composites Industry Association (EuCIA) represents European national composites associations and industry-specific sector groups at the EU level. With the support of its members, EuCIA is actively contributing to building an economically and environmentally sustainable European composites industry. EuCIA closely monitors relevant standards and legislation, actively communicates how composites contribute to a more sustainable world and promotes educational activities. Our initiatives aim to ensure the healthy growth and continued competitiveness of more than 10,000 companies and an estimated 150,000 employees involved in composites manufacturing across Europe.

BUL has held multiple meetings with Roberto Frassine, the president of EuCIA, who is extremely enthusiastic about the JIDEP concept and has even offered to feature it on the EuCIA website. Several events are planned with EuCIA, including a dedicated workshop for the EuCIA member base and a feature at the JEC Bach Forum in Stuttgart.

## 3. Conclusion

This report highlighted the latest dissemination activities in the JIDEP project. The dissemination activity is an ongoing work package which runs through the whole life of this project. The report also highlighted the upcoming dissemination activities that the consortium is currently planning. The report has highlighted the efforts in making contact with major organisations both in the UK and EU for dissemination activities.

