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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 report will underline the progress and results of User Acceptance Testing (UAT) for JIDEP, conducted from M25 to M29, to ensure the system meets requirements and is ready for deployment. This phase focused on validating functionality, usability, and performance from an end-user perspective, with active involvement from key stakeholders and use case leaders. JIDEP has three different use cases, and all of the use case leads have been involved in this testing phase. All critical defects have been resolved, and non-critical defects have been documented for resolution in subsequent iterations. Stakeholders have reviewed and approved the test results, confirming the system meets the defined acceptance criteria.

1. Introduction

This report summarises the User Acceptance Testing (UAT) for the Digital Product Passport platform. Designed to track product lifecycles, sustainability, and traceability, the platform was evaluated from a user's perspective. Stakeholders tested all features and workflows, including data input, processing, and output validations. The goal was to ensure a seamless user experience across various scenarios. This report highlights any issues identified and assesses the platform's readiness for deployment.
The UAT involved key stakeholders and participants representing the primary users and contributors to the platform's testing. These included:

- **ADS:** Kasparas Kižys
- **ALMAS:** Laura Di Cesare
- **CRF:** Andrea Pipino
- **ZORLU:** ZEYNEP KORKMAZ
- **TPI:** UTKU TIRIC
- **University of Pardubice:** Tomáš Syrový

This collaborative effort ensured that all relevant perspectives were incorporated during the UAT process, providing a robust evaluation of the Digital Product Passport platform. Overall, the UAT results indicate that the Digital Product Passport platform is ready for deployment, meeting the expectations of both users and stakeholders.

2. Test Overview

The User-Acceptance Testing (UAT) for the Digital Product Passport platform was conducted in a controlled and diverse environment to ensure comprehensive validation of the system's functionality and performance. Below is the detailed summary:

2.1 Test Environment

The UAT was performed on the **manual-test.jidep.co** platform, simulating a production-like environment to test all functionalities effectively. The platform was accessed and tested across multiple operating systems to ensure compatibility and reliability:

- Windows 10
- Windows 11 Pro
- Windows 11 Pro Enterprise (ENT)
- Windows 11 Pro Education (Edu)

2.2 Test Documentation

The UAT Requirements-Based Test Cases Table systematically documented all UAT test cases. This documentation included:

- Detailed test scenarios
- Step-by-step instructions for execution
- Expected outcomes and success criteria
- Prioritisation of features to be tested

2.3 Test Result Reporting

The results of the UAT, including successes, errors, failures, and other observations, were meticulously recorded in the UAT Test Results Table.

3. Test Scenarios and Test Cases

The User-Acceptance Testing (UAT) process focused on validating ten critical functionalities of the Digital Product Passport platform. These scenarios covered the platform's user management, material passport creation, search, publication, modification, and data visualization capabilities. Each scenario was tested for functionality, usability, and alignment with business requirements.
The following test scenarios were executed:

1. User Registration
2. User Authentication
3. Creation of Material Passport for CFRP Car Beam (Standard Configuration)
4. Creation of Material Passport for CFRP Car Beam (Green Configuration)
5. Search and View External Material Passports
6. Publication of Material Passports on the Marketplace
7. Removal of Material Passports from the Marketplace
8. Modification of an Existing Material Passport (Green Configuration)
9. QR Code View of a Material Passport
10. Viewing Existing Material Passport Data

3.1 Overview of Test Cases

For each test scenario, multiple test cases were designed and executed to validate key functionalities and edge cases:

Test Scenario	Test Case Description
UAT1: User Registration	Verify new user registration with valid credentials and required fields; check for error messages with invalid inputs.
UAT2: User Authentication	Test successful login with correct credentials, failed login with invalid credentials, and logout functionality.
UAT3: Material Passport Creation	Validate the creation of a material passport for a CFRP car beam in the standard configuration. Ensure data integrity and required field validation.
UAT4: Green Configuration Passport	Confirm the creation of a material passport for a CFRP car beam using the green configuration. Validate the reuse of data from UAT3 and ensure the process flow remains consistent.
UAT5: Search and View	Verify the ability to search and view material passports created by other users: test filters, search criteria, and accessibility of external data.
UAT6: Publication on Marketplace	Validate the process of publishing material passports to the marketplace, including confirmation messages and publication status updates.
UAT7: Removal from Marketplace	Confirm that published material passports can be successfully removed from the marketplace. Ensure no residual data is accessible post-removal.
UAT8: Modification	Test modifications to an existing material passport (green configuration). Validate updates to fields, notifications of changes, and data accuracy post-modification.
UAT9: QR Code View	Verify the generation of a QR code for a material passport and ensure accurate redirection to the corresponding data.
UAT10: View Existing Data	Validate the display of existing material passport data. Ensure the accuracy and completeness of displayed information for users

3.2 Prioritisation Criteria

Test Scenario	Priority	Reason for Priority
UAT1: User Registration	High	Critical for onboarding new users and initiating platform usage.
UAT2: User Authentication	High	Essential for secure access to the platform.
UAT3: Material Passport Creation	High	Core functionality for the platform. Material passport creation is a primary use case.
UAT4:Green Configuration Passport	Medium	Builds on the functionality tested in UAT3. Adds value but is not a blocker if delayed.
UAT5: Search and View	High	Necessary for collaboration and visibility of external passports.
UAT6: Publication on Marketplace	Medium	Important for visibility of material passports but not a blocker for platform usability.
UAT7:Removal from Marketplace	Medium	Supports user control over content but is not critical for initial

		platform operation.
UAT8: Modification	Medium	Necessary for data updates but not a blocker unless critical data needs to be corrected.
UAT9: QR Code View	High	Value-added feature but essential for platform functionality.
UAT10: View Existing Data	High	Key for user engagement and ensuring that stored data can be accessed and utilised effectively.

4. Test Results

The User-Acceptance Testing (UAT) for the Digital Product Passport platform included 10 test cases, of which an average of eight passed while two failed due to functionality issues or inconsistencies. A total of 14 defects were identified and categorised as Critical(4), Major(3), and Minor(7) based on their impact on the system. Critical and major defects affecting core functionalities were resolved immediately, while minor defects have been documented for resolution in subsequent updates. The overall test execution demonstrated an 80% success rate, reflecting significant progress toward deployment readiness while highlighting areas for improvement. We have included screenshots provided by our partners in the appendices section of this report. These screenshots illustrate that critical and major issues have been addressed appropriately.

5. Conclusion

This version of the User-Acceptance Testing (UAT) Report serves as the initial version, capturing the results and observations from the testing conducted. The platform has been thoroughly evaluated, critical functionalities validated, and key outcomes documented. While most test cases have passed, non-critical defects and potential enhancements have been identified for future iterations. The platform demonstrates significant readiness for deployment, with ongoing improvements planned. The report's final version will be delivered in M34, incorporating updates, resolutions of deferred defects, and insights from post-deployment monitoring to ensure comprehensive validation and system optimisation.

6. Appendices

6.1 Initial Testing Phase:

Tested by: Laura Di Cesare(ALMAS)

ID	Test Cases	PASSED / FAILED	Tested By	Date Tested	Issues / Comments
UAT1	*User registration*	PASSED	Laura Di Cesare	24/06/2024	-
UAT2	*User authentication*	PASSED	Laura Di Cesare	24/06/2024	-
UAT3	Material passport creating for CFRP car beam in standard configuration	PASSED	Laura Di Cesare	24-25-26/06/2024	-Sub assembly level definition not clear -Manufacturer/supplier definition not clear -bug in setting of % vs fraction
UAT4	Material passport creating for CFRP car beam in "green" configuration starting from data of UAT3 (copy paste + changes)	PASSED	Laura Di Cesare	24-25-26/06/2024	-Unexpected Circularity index calculation = 0 -necessary to upload again the picture
UAT5	Search and view of "external" (from other users) Material passports in the platform	FAILED	Laura Di Cesare	24-25-26/06/2024 2/07/2024	No shared passports in collaborative space
UAT6	Publication of Material passports in Market place	PASSED	Laura Di Cesare	24-25-26/06/2024	
UAT7	Remove of Material passports from Market place	FAILED	Laura Di Cesare	24-25-26/06/2024	Not possible to remove or change price of own material passport in Market place
UAT8	Modification of existing Material passport (CFRP car beam in "green" configuration)	PASSED	Laura Di Cesare	24-25-26/06/2024 2/07/2024	-Unexpected Circularity index calculation = 0

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UAT9	QR code scan to view existing material passport	PASSED	Laura Di Cesare	24-25-26/06/2024 2/07/2024	
UAT10	View of existing material passport data	PASSED	Laura Di Cesare	24-25-26/06/2024 2/07/2024	"download kg" not working and not clear the meaning

6.2 Final Testing Phase:

Tested by: Tomáš Syrový (University of Pardubice)

ID	Test Cases	PASSED / FAILED	Tested By	Date Tested	Issues / Comments
UAT1	*User registration*	Passed	Tomáš Syrový	25.7.2024	
UAT2	*User authentication*	Passed	Tomáš Syrový	25.7.2024	
UAT3	Material passport creating for PCB in standard configuration	Passed	Tomáš Syrový	21.8.2024	
UAT4	Material passport creating for CFRP car beam in "green" configuration starting from data of UAT3 (copy paste + changes)	Passed	Tomáš Syrový	26.8.2024	
UAT5	Search and view of "external" (from other users) Material passports in the platform	Passed	Tomáš Syrový	26.8.2024	
UAT6	Publication of Material passports in Market place	Passed	Tomáš Syrový	26.8.2024	
UAT7	Remove of Material passports from Market place	Passed	Tomáš Syrový	26.8.2024	
UAT8	Modification of existing Material passport (CFRP car beam in "green" configuration)	Passed	Tomáš Syrový	26.8.2024	
UAT9	QR code scan to view existing material passport	Passed	Tomáš Syrový	26.8.2024	
UAT10	View of existing material passport data	Passed	Tomáš Syrový	26.8.2024	

Tested by: TIRIC UTKU(TPI)

ID	Test Cases	PASSED / FAILED	Tested By	Date Tested	Issues / Comments
UAT1	*User registration*	PASSED	UTKU TIRIC	10.09.2024	
UAT2	*User authentication*	PASSED	UTKU TIRIC	10.09.2024	
UAT3	Material passport creating for CFRP car beam in standard configuration	PASSED	UTKU TIRIC	10.09.2024	
UAT4	Material passport creating for CFRP car beam in "green" configuration starting from data of UAT3 (copy paste + changes)	PASSED	UTKU TIRIC	10.09.2024	
UAT5	Search and view of "external" (from other users) Material passports in the platform	PASSED	UTKU TIRIC	10.09.2024	
UAT6	Publication of Material passports in Market place	PASSED	UTKU TIRIC	10.09.2024	
UAT7	Remove of Material passports from Market place	PASSED	UTKU TIRIC	10.09.2024	
UAT8	Modification of existing Material passport (CFRP car beam in "green" configuration)	PASSED	UTKU TIRIC	10.09.2024	
UAT9	QR code scan to view existing material passport	PASSED	UTKU TIRIC	10.09.2024	
UAT10	View of existing material passport data	PASSED	UTKU TIRIC	10.09.2024	

References

Acronyms and Abbreviations

BUL	Brunel University London
DLT	Distributed Ledger Technology
FAIR	Findability, Accessibility, Interoperability, and Reusability
UAT	User Acceptance Test