



An integrated toolbox for improved verification and prevention of adulterations and non-compliances in organic and geographical indications food supply chain

Grant Agreement Number: 101083579

D.4.3: Data Harmonisation Platform and Verification Engine

Document Identification			
Status	Final	Due Date	Monday, 31 March 2025
Version	1.0	Submission Date	31/03/2025
Related WP	WP4	Document Reference	D.4.3
Related Deliverable(s)	D1.2, D1.3, D2.2	Dissemination Level	SEN
Lead Participant	NTT DATA	Document Type:	Other
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This project has received funding under grant agreement No 101083579. It is funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Executive Agency (REA). Neither the European Union nor the granting authority can be held responsible for them.

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Document History			
Version	Date	Modified by	Modification reason
0.1	19/12/2024	Alfonso Sillero	ToC created
0.2	10/03/2025	ICCS	Integration of ICCS' part
0.4	15/03/2025	NTT DATA	Integration of NTT DATA's part
0.5	25/03/2025	Nejc Vesel	Peer review
0.6	25/03/2025	Jara Quintana Dimitris Lygkonis	Incorporation of suggestions by Nejc Vesel
0.7	27/03/2025	Panagiotis Madesis	Peer review
0.8	28/03/2025	Alfonso Sillero	Incorporation of suggestions by Panagiotis Madesis
0.9	28/03/2025	Alfonso Sillero	Final version to be reviewed by authors and Quality Manager
1.0	31/03/2025	Dimitra Tsiakou	Final version to be submitted

Quality Control		
Role	Who (Partner short name)	Approval Date
Deliverable leader	NTT DATA	31/03/2025
Quality manager	EBOS	28/03/2025
Project Coordinator	ICCS	31/03/2025

Executive Summary

This document details the specifications and functionalities of the Harmonisation Platform and the Verification Engine, two of the key components of the THEROS Toolbox. These two components, as described later, have undergone both integration and internal testing to guarantee their functionality, interoperability and robustness.

The **Data Harmonisation Platform**, acts as a central hub for the processing, integration and management of data from the other tools, reassuring the interoperability between diverse data sources and systems. It facilitates the gathering, transformation and diffusion of data to the other partners, improving transparency in the organic produce and Protected Designated Origin (PDO) chain.

On the other hand, the **Verification Engine**, is a key element to validate the integrity and authenticity of the products tracked on the platform. It verifies the business rules defined by the data providers to ensure that products comply with the required standards and requirements, guaranteeing their origin and quality.

Readers of this deliverable will be able to understand the central components of the THEROS toolbox, which aims to modernize the process of verification and prevent the adulteration of the supply chain of quality labelled foods. It tackles challenges such as data integration from different suppliers, interoperability and the need for strong verification mechanisms in the organic product and PDO sector.

As a brief conclusion, the Harmonisation platform has successfully integrated the THEROS Toolbox components in a unified system, establishing a strong data management frame; while the Verification engine has successfully tested the integration of the components that share data with it, providing a strong tool for traceability and verification of the regulatory requirements.