

OUTPUT FACTSHEET

Project index number	CE0100054	Acronym	SUSTANCE			
Output type ("x" to be included)	Strategy/ action plan	X	Pilot action		Solution	
Output number (O.xx)	O.1.2	Output title	Transnational action plan for better ICT solutions for Public transport			
If the output target is > 1 in the AF, please specify the output(s) described in the factsheet	D.1.4.3 Transnational action plan for better ICT solutions for public transport					
Output delivery date	07/04/2026					
Project website	https://www.interreg-central.eu/projects/sustance/					

Summary description of the output

Please present the output by addressing the following topics.

Territorial challenges and needs in the regions specifically addressed by the output

(max. 700 characters)

Rural and cross-border areas in Central Europe suffer from a chronic lack of reliable and effective public transport services. Part of these problems are related to the absence/weaknesses of digitalised info-mobility and PT management tools. Fragmented Public Transport (PT) data, absence of real-time information, low accessibility to PT data make PT appear unreliable compared to private cars. These digital/ICT weaknesses limit access to TEN-T nodes, fueling car dependency and social exclusion in the peripheral areas. There is a need for integrated info-mobility systems and Demand Responsive Transport (DRT) solutions to bridge the last-mile gap in low-density territories, ensuring that rural transport is not just available, but digitally discoverable and easy to use.

Main aim(s) of the output and how it contributes to tackle the identified challenge(s)

(max. 500 characters)

This output, starting from the Sustance ICT pilot actions tested in Emilia-Romagna Region, Istria Region and Croatia (Rail service), provided a summary of the key ICT proposed solutions for overcoming the main identified challenges. The output aims to transform peripheral PT through digitalization, making it a "smart" and competitive alternative to cars. It focuses on integrating advanced ICT solutions to improve info-mobility, promote flexible DRT services, better integrated info-mobility system and implement MaaS (Mobility as a Service) frameworks. The goal is to ensure equitable digital access even in the most remote areas, reducing the complexity of multimodal travel for both residents and tourists.

Technical description of the output (e.g. scope, main features, innovative elements etc.)

(max. 1500 characters)

The output is based on the SUSTANCE pilot action methodology, which evaluates PT efficiency using connectivity and info-mobility indicators. Key technical components include:

- Digital DRT Solutions: Development of an open-source booking and management web-app in Emilia-Romagna) to manage on-demand services, reducing operational costs and improving user experience.
- MaaS Integration: Implementing platforms in Istria that unify trip planning and ticketing across different operators and modes at the regional level.
- Data Standardization: Adoption of NeTEx and SIRI standards to ensure data interoperability between different nations, enabling reliable cross-border travel planners.
- Green Mobility Platforms: Tools like "Train'n'Green" developed by HZPP to integrate bike+train information, vital for sustainable rural tourism.

The plan proposes different strategic measures: ranging from "quick-win" digital timetable optimisations to long-term ICT investments for real-time fleet management. It emphasizes the use of open-source solutions to lower entry barriers for smaller regional authorities and ensures that ICT infrastructure is capable of handling real-time data provision for third-party apps. Many innovative aspects are developed, as for example the development of an open-source tool for the digitalisation of DRT service.

Involvement of target groups during output development and/or implementation

(max. 700 characters)

The development of this Output involved policy makers, transport operators, and ICT stakeholders through transnational workshops and local round tables. These sessions validated SUSTANCE ICT solutions as a tool for better PT accessibility. Target groups, including commuters and tourists, tested the pilot solutions, confirming that digital information increases trust in PT. Regional authorities were actively engaged in defining roadmaps to ensure that ICT tools are calibrated to the specific peripheral areas, ensuring local ownership and long-term support.

Cooperation dimension of the output, i.e. joint development within the partnership and, if applicable, joint implementation (see output indicator definitions in chapter I.3.3 and Annex 2 of the programme manual)

(max. 700 characters)

Cooperation was the driver for overcoming the national, regional and local technical barriers mapped by SUSTANCE project. Partners from different countries jointly developed SUSTANCE ICT solution in 3 different pilot actions. The transnational dimension allowed for the harmonization of data across borders (Italy, Slovenia, Croatia), proving that ICT integration is feasible despite different regulatory frameworks. Shared learning prevented the duplication of costs for proprietary software, favoring collaborative development and shared data standards.

Results - expected change and lasting effects in the territories generated specifically by the output, its uptake by relevant organisations and benefits for target groups

(max. 1000 characters)

The output ensures a more reliable and accessible rural PT, with a measurable increase in info-mobility and on-demand solutions provision. Lasting effects include:

- Increased Attractiveness: Reduced perceived complexity of multimodal trips attracts new user segments, especially tourists.
- Operational Efficiency: ICT tools for monitoring and booking optimize vehicle usage, reducing dead mileage and carbon emissions.
- Digital Sustainability: Adopting EU standards (NeTEx/SIRI) ensures that digital infrastructures are ready for future European-wide integration.
- Modal Shift: The integrated digital ecosystem provides a genuine alternative to private cars, supporting the green transition in low-density areas.
- Institutional Capacity: Regional authorities are now equipped with a methodology to plan and monitor digital mobility services effectively.

Ownership and durability of the output after the project end, considering financial and institutional support including, if applicable, maintenance

(max. 700 characters)

Durability is secured by integrating ICT solutions into regional/local development roadmaps and with the signature of a SUSTANCE Letter of Support of the developed solutions. Ownership of digital tools and harmonised data remains with regional authorities and operators, who are committed to post-project maintenance. Part of this tool are developed with an open-source license to allow full replicability for all the interested stakeholders. Moreover, scalability is guaranteed by the use of open-source technologies and shared data frameworks, allowing for continuous updates with incremental investments rather than complete system overhauls.

Transferability of the output to other territories, sectors or target groups and planned measures for supporting such transfer

(max. 700 characters)

The SUSTANCE ICT model for rural public transport is highly transferable due to its reliance on open-source solutions and EU-wide data standards (NeTEx/SIRI). Furthermore, the operational manuals for digital DRT and MaaS integration serve as a technical blueprint for peripheral areas facing similar low-demand challenges. The methodology's focus on low-cost "quick-win" digital upgrades makes it particularly attractive for smaller authorities looking to enhance PT attractiveness without massive infrastructure investments, ensuring replicability across all the peripheral/rural areas in EU.

Related final deliverable(s) (Number(s) and title(s) to be included)	D.1.4.3 Transnational action plan for better ICT solutions for public transport
Output web link (if applicable)	/
GPS coordinates (if applicable)	/