



Pilot activity final report

Template for project partners

Activity 3.1, pilot actions implementation and monitoring.

Project identification

Project	Danube Digital transformation Network of Active SMEs training and knowledge transfer centres (Danube DNA)
Programme	Interreg Danube Region Programme 2021–2027
Activity	3.1 Pilot actions implementation and monitoring
Activity Leader	SERDA, Sarajevo Economic Region Development Agency
Lead Partner	University of Novi Sad, Faculty of Technical Sciences

Reporting partner

Project partner	VSTE – Institute of Technology and Business
Country	Czechia
Pilot coordinator (name, email)	Michal Řepka, repka@mail.vstecb.cz
Pilot activity title	EM4 System Condition
Digital solution validated	EM4 System Condition
Pilot implementation period	12/2025 – 05/2026
Date of submission	

Participating SME(s)

For the size breakdown, enter the number of SMEs in each category. A blank counts as zero, and micro, small and medium should add up to the total.

Number of participating SMEs	1
Of which micro	0
Of which small	1
Of which medium	0
Sector(s)	Machinery

1. Description of the implemented solution

Describe the digital solution validated and which of the six jointly developed solutions it corresponds to. Outline the SME context, the scope of the pilot, and how the solution was deployed in the real SME environment.

The pilot activity is the implementation of EM4 System Condition, a energy measurement system developed by Austrian partner FH CAMPUS 02. One of the main purposes of the system is to monitor energy consumption and machine and equipment operating time, which is very relevant today, especially for engineering companies with high electricity consumption.

The implementation has been realised in the small company INOS-Servis s.r.o. located in Vlachovo Březí. The company INOS-SERVICE s.r.o is located in Vlachovo Březí (South Bohemia, the Czech Republic), and operated in machinery industry. The company has approx. 100 employees. Its main activity is the production of metal parts parts for single-purpose machines and custom metal fabrication. The main technological operation is energy-intensive welding. Monitoring energy consumption and machine usage will help the company to analyze consumption and take subsequent measures to reduce it. An implementation partner - an independent expert - was selected to implement the Austrian solution. The goal is to enable the deployment of the solution in other companies without dependence on the solution authors.

2. Results achieved

Complete each field below. Keep this narrative; report numeric indicators in the KPI table in Section 3 rather than repeating them here.

Expected result	Measurement of welding equipment usage (time) and energy consumption.
Achieved result	Measurement of welding machine energy consumption with data transfer via LoRa connection and cloud-based presentation layer (dashboard with current and historical data).
Evidence supporting the achievement	Access to the dashboard in cloud (an account name and password needed)
Benefits for the participating SME(s)	Energy consumption measurement with possibility to access historical data and make further analysis.

3. KPI values

Report the key performance indicators for your pilot. Add rows as needed. Complete the achievement rate where applicable ($\text{achieved} / \text{target} \times 100$); leave it blank for binary or qualitative indicators. Ensure values are consistent with the narrative above and supported by source of verification.

Indicator (KPI)	Baseline	Target	Achieved	Achievement rate (%)	Source of verification	Comment
SMEs participating	0	1	1	100%	Pilot report	Target achieved
Industries represented in pilot actions	1	1	1	100%	Pilot monitoring	Machinery

Indicator (KPI)	Baseline	Target	Achieved	Achievement rate (%)	Source of verification	Comment
Identified optimization potential	0	1	1	100%	Pilot reports	
SME satisfaction with pilot solution		1	1		Feedback forms	Positive

4. SME feedback

Summarise the feedback provided by the participating SME(s), based on the responses submitted through the mandatory SME survey completed by the participating SME(s). Continuation and sustainability aspects are covered in Section 7.

Main strengths identified by SMEs	Energy consumption measurement for selected machines with possibility to add further sensors. Cloud based dashboard with real time information and historical data, with possibility of aggregation and visual presentation
Main weaknesses identified by SMEs	Insufficient sampling rate that not allowed to track time of devices usage.
Suggestions for improvement	Higher data sample rate.
Would the SME(s) recommend the solution to another SME?	Yes
Reason for the answer above	System is flexible and robust, different sensors could be connected, easy implementation, cloud based dashboard, data analytics.

5. Challenges during implementation

List the main challenges encountered across the pilot phases (preparation, tender, contracting, implementation and monitoring). For Impact select Low, Medium or High; for Resolved enter Yes or No. Add rows as needed.

Challenge	Impact (Low / Medium / High)	Mitigation measure	Resolved (Yes / No)
Finding proper company	Medium		Yes
Frequency of data collecting	High	Solved by PP10	Yes
Sustainability of the system	Minor		Yes

6. Lessons learned

Provide up to three prioritised lessons from your pilot, using the structure below. A lesson is more than a challenge: it states what you would keep or change, and whether it transfers to other partners. Complete Lesson 1 as a minimum; Lessons 2 and 3 are optional.

Lesson 1 (required)

Lesson title	Finding a proper company for implementation of the pilot.
---------------------	---

Thematic area	Stakeholder and SME engagement
Priority	High
Situation	When offering an SME system, it is necessary, in addition to the technical details of the solution and its implementation, to present and explain the financial side from the beginning, describe the benefits, and introduce possible problems. Sustainability must also be addressed. One of the possible problems in the implementation of pilot solutions in the Danube region that must be taken into account is the different economic levels of the participating countries. Prices considered normal in a country with a higher standard of living may be too high for an SME in another country,
What happened	The companies contacted were concerned about the high costs and were considering how to proceed in the area after the project was completed.
What worked or what you would do differently	Be prepared for the fact that there are different price levels on the market in individual countries in the region. Prepare arguments summarizing the benefits of the solution.
Transferability	High

Lesson 2 *(optional, complete only if applicable)*

Lesson title	Methodology for presenting the benefits of the pilot solution.
Thematic area	Stakeholder and SME engagement
Priority	Low
Situation	Presentation of pilot implementation benefits to the companies.
What happened	Some of the companies we interviewed were more interested in "how much will it cost" and "who will maintain it after the project is over" than the technical benefits.
What worked or what you would do differently	The presentation of benefits must also address costs and sustainability in addition to technical details
Transferability	High

7. Sustainability and future use

Set out whether and how the solution will continue to be used beyond the project. This is a key consideration for Interreg and for the consolidated lessons learned.

Will the SME(s) continue using the solution after project completion?	Yes, at least to the year 2027. Further use depends on the evaluation of benefits as well as the costs of the system.
Reason for the answer above	The company needs a slightly different type of data than the device provides - more than energy consumption, the company is interested in information about the running time of the equipment.
Resources required for continuation	It is rent from Austrain supplier to the end of 2027. Financial resources in case long term sustainability are needed.
Main barriers to long-term adoption	Only finance.
Overall sustainability outlook	Medium

8. Recommendations for future projects

Set out forward-looking recommendations for upscaling the solution and for other partners planning similar pilots. Focus on what would improve feasibility, sustainability and transferability across the Danube Region.

Start with simple configurations.
 Prepare for different price levels in participating countries.
 Develop a detailed methodology for presenting the benefits of the device and a long-term usage strategy to companies.

Completed by

Name and position	Roman Danel, PP5 project manager
Organisation	VSTE – Institute of technology and business in Ceske Budejovice, Czechia
Date	V1 - 15.6.2026, V2 – 24.6.2026