Interreg CENTRAL EUROPE

Co-funded by the European Union

RehAllianCE

RehAllianCE Transnational Pilot Action

Manual for Applicants

Version 1.1

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REHALLIANCE – TRANSNATIONAL PILOT ACTION

Enabling internationalisation & accelerating commercialisation for MedTech SMEs

About RehAllianCE

RehAllianCE's objective is to optimise the utilisation of new technologies in rehabilitation, thereby enhancing the quality of life for residents of Central Europe (CE). Rehabilitation is a form of care that aims to help people regain or improve the abilities they require to lead a daily life. One of the challenges is that such care often falls on the family without sufficient support from a systemic or technological perspective. The RehAllianCE partners are working to establish a more efficient connection between the supply and user sides with the goal of facilitating the development of technology-driven rehab products in a transnational pilot action. **The RehAllianCE project assists medical technology (MedTech) small and medium-sized enterprises (SMEs) and SMEs developing products, services and solutions for rehabilitation in achieving breakthroughs and accelerating the commercialisation of their products.** To meet this need, the project partners provide services tailored to the specific requirements of SMEs seeking assistance with the validation of technology-driven products and guidance on market access in the rehabilitation sector. The services are part of the so-called RehAllianCE Transnational Pilot Action (in the following also called "transnational pilot action" or "pilot action") and include support in testing new technologies for rehabilitation, such as rehabilitation robots, exoskeletons, assistive devices, health apps, wearables and telemetric tools. The support provided to the SMEs does not end with the implementation of the services. In fact, the objective is to further expand the services with a view to facilitating the more rapid integration of new technologies in rehabilitation in the future. To this end, it is essential that the **RehAllianCE partners receive an evaluation of the services from the SMEs in order that they may adapt the offering in accordance with actual demand.**

About RehAllianCE Transnational Pilot Action

The RehAllianCE Transnational Pilot Action aim to evaluate the test facilities of the RehAllianCE Service Providers PBN, CUAS and NSB to identify the optimal conditions for accelerating the commercialisation of new technologies for the rehabilitation sector. As part of the evaluation of the test facilities, at least **8 rehabilitation SMEs or from related fields have the opportunity to take advantage of selected services within the pilot action**, which will contribute to the further development and testing of new models for the validation of advanced technology-based rehabilitation solutions. **SME from Interreg Central Europe (CE) Programme Area[1] are eligible to apply for technological and/or consulting services which are offered in an Open Call.**

SMEs do not pay for the services as the project partners provide staff and expertise. Since the services are granted under GBER Article 20a to the SME that is the final beneficiary of project activities, the services **cannot exceed a value of € 22,000.**

[1] https://www.interreg-central.eu/list-of-regions/

In the event the 8 selected SMEs do not apply for the maximum available funding of € 22,000, the partners will contact the SME with the next highest score in order to award the remaining funding.

In case of insufficient and/or low-quality applications, the call will be re-opened for a second selection round.

Main requirements for participants

European SMEs from Interreg Central Europe Programme area[2] regions developing products, services and solutions for **Rehabilitation (Rehab)** may apply to participate in the **RehAllianCE Transnational Pilot Action Open Call**.

Please check if your company meets the SME definition of the EU (more details via SME self-assessment).

Partner regions and RehAllianCE partners

The RehAllianCE partnership consists of 6 Partners from 6 Central European regions (see table below), that are working on the RehAllianCE project under the European Union's Interreg CENTRAL EUROPE funding programme for transnational collaboration. RehAllianCE will provide targeted support to SMEs to test and explore new technologies, such as rehabilitation robots or exoskeletons, assistive devices, wearables or telemetric tools.

Region | Country	Partner Organisation
Śląskie | Poland	Upper Silesian Accelerator for Commercial Enterprises Ltd. www.gapr.pl
Nyugat-Dunántúl | Hungary	Pannon Business Network Association. www.pbn.hu
Kärnten | Austria	Carinthia UAS -non-profit limited liability company www.fh-kaernten.at
Baden-Württemberg | Germany	BioRegio STERN Management GmbH www.bioregio-stern.de
Lombardia | Italy	NSBPROJECT www.nsbproject.com
Veneto | Italy	Local Health Authority 4 Veneto orientale www.promisalute.it/

Contact partner for open call

Pilot action applicants can contact the open call coordinator for general information about the pilot action, services, application process, development of project idea, feedback and guidance on how to fill in the application forms via the email address below.

[2] https://www.interreg-central.eu/list-of-regions/

Applications must be submitted via the email address of the open call coordinators before **14 February 2025 at 17:00 Central European Time (CET).**

Open call coordinator details:

BioRegio STERN Management GmbH | Friedrichstr. 10 | 70174 Stuttgart, Germany

Klara Altintoprak

Email: rehalliance-submission@bioregio-stern.de

Services along the development phases

The RehAllianCE Service Providers CUAS, NSB and PBN offer technological and/or consulting services along the development phase of rehabilitation products. SMEs seeking support to improve the time-to-market of their product can choose from this range of services.

The services provided under the RehAllianCE Transnational Pilot Action are divided into three subgroups, Pilot Action A, B and C. Clicking on a service in the scheme below will direct you to a detailed description of the service:

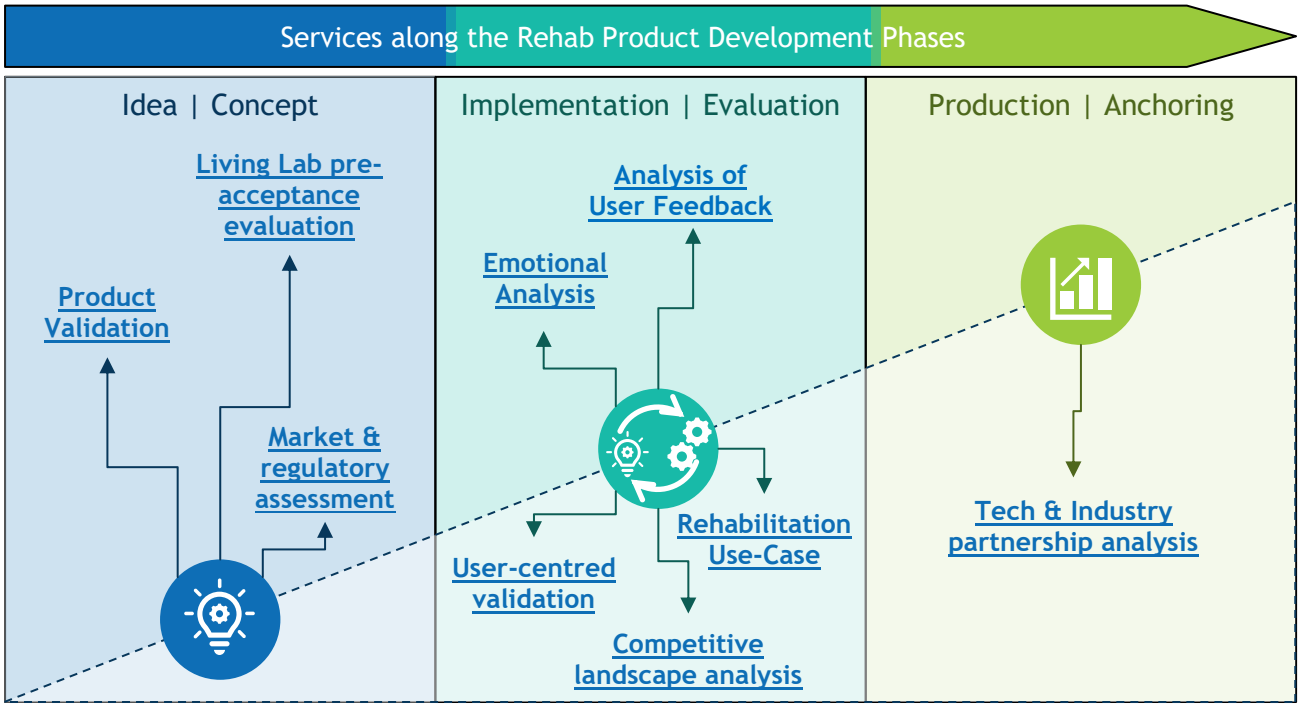

Figure 1: Services provided by RehAllianCE Service Providers along the development phases of rehab products. Clicking on title directs to full-service description. Scheme based on Oberzaucher 2023[3]

Technological focus

Developers and manufacturers from MedTech and/or rehab sector that employ new technologies benefit from the services provided within the RehAllianCE pilot action. The rehab solutions should contribute to

[3] Oberzaucher, Johannes. 2023. Umsetzung und Herausforderungen im Projektbereich „Digitalisierung von Pflegeprozessen". IARA-Forschungskolloquium. 13. 12. 2023. [online, 4. 4. 2024] https://www.iara.ac.at/forschungskolloquium-team-13122023/#

Pichler, C./Sidiropulu-Janku K./Ströckl D.-E./Hagendorfer-Jauk, G./Oberzaucher, J./Perchtaler M. (2023): Matchmaking Algorithm as a Tool to Tackle the Aging-Related Social Network Shrink: Results and Recommendations From the Transdisciplinary HannaH Technology Development. Official Conference Proceedings: The European Conference on Ageing & Gerontoloty Gerontology 2023. https://doi.org/10.22492/issn.2435-4937.2023.8

decreasing numbers of healthcare professionals in rehabilitation and mitigate the burden of increasing numbers of patients due to demographic changes. The technology-enabled products should help to provide support at home and rural areas with less access to comprehensive healthcare services. The RehAllianCE partners have identified five technology-enabled healthcare priorities that can help improve rehabilitation interventions and outcomes for the general population:

Rehab robots or exoskeletons

Rehabilitation robots are advanced systems designed to help patients regain mobility and strength after injury or illness. They assist with repetitive, controlled movement therapy, often used in treating neurological conditions like stroke or spinal cord injuries. A key category includes **exoskeletons**, wearable devices that support and enhance limb movement, aiding in motor skill relearning and walking. These devices adjust to the user's needs, optimizing recovery. In healthcare, rehab robots and exoskeletons are used under therapist supervision to improve rehabilitation efficiency, promote neuroplasticity, and reduce the physical strain on both patients and providers.

Assistive devices

The term "assistive technology" is used to describe devices that assist people with disabilities and the elderly. Individuals with disabilities frequently encounter difficulties in performing routine tasks independently or with assistance. The term "activities of daily living" encompasses self-care activities such as toileting, mobility, eating, bathing, dressing, grooming, and personal device care. Assistive technology facilitates the ability of individuals with disabilities to perform everyday tasks. These technologies enhance the capacity of individuals to complete tasks that were previously challenging or impossible. They achieve this by modifying the manner in which individuals interact with the technology they utilize.

Group of devices: mobility aids, visual aids, hearing aids, voice aids, communication devices, daily living devices, cognitive devices

Health Apps

Mobile health stands for the support of medical procedures and healthcare measures by devices such as smartphones, tablets or personal digital assistants (PDAs) as well as lifestyle and health applications that can be operated via sensors. Mobile health apps facilitate diagnosis, treatment decisions and disease education. The potential of mobile health in medicine is significant. Health apps can enhance patient safety and improve the efficiency and effectiveness of healthcare. Health apps can be deployed in the wellness, prevention, diagnosis, therapy or monitoring phases, for example using non-invasive sensors to measure vital parameters such as blood glucose, heart rate, movement patterns or temperature.

Telemetric tools

Telemetric tools are technologies and systems which collect, transmit and measure data from remote sources, using sensors and other devices. They can be applied to the health care sector to monitor and control patients' vital signs and other health-related data remotely. Telemetry can be very useful to monitor patients' health status in real time, reducing the number of physical visits required. Some examples of telemetric tools are sensors attached to or embedded in wearable devices, implants, or standalone gadgets,

which can measure physiological parameters such as heart rate, blood pressure, blood glucose levels, oxygen saturation, and body temperature. Data collected is transmitted wirelessly, stored securely and then accessed to be analysed by healthcare professionals. The use of these devices can be very useful to monitor patients with chronic diseases, old people or post-operative patients.

Wearables

Wearables are electronic devices that can be worn on the body, often integrating with other technology to offer various functionalities. These devices include smartwatches, fitness trackers, smart glasses, and health monitors, among others. They are designed to collect data such as heart rate, steps taken, and sleep patterns, and often sync with smartphones or computers for data analysis and notifications. Wearables have applications in health and fitness, communication, and entertainment, providing users with real-time information and feedback. The popularity of wearables is driven by their convenience, portability, and the growing interest in personal health and technology integration.

Open Call Date

Opens on	Application deadline	Announcement of selected applicants	Agreement singature	Expected starting dates of pilot action
November 25, 2024	February 14, 2025 17:00 CET	At the latest on March 28, 2025	April 2025	April/May 2025

How to participate in a RehAllianCE Tansnational Pilot Action

- Check your eligibility:
  - Does your company meet the SME definition of the EU?
  - Is your company located in the Interreg CE Programme Area?
- Browse the service catalogue
- Select a service you want to apply for (Note: **SMEs do not pay for the services as the project partners provide staff and expertise.** Since the services are granted under GBER Article 20a to the SME that is the final beneficiary of project activities, the services **cannot exceed € 22,000**.)
- Complete application form (the application form for each service can be found in the service descriptions below)
- Submit your application until given deadline: **February 14, 2025, 17:00 CET**.
- The SMEs will be selected according to the compulsory criteria and selection criteria defined in each service description by the RehAllianCE Service Providers, namely CUAS, NSB and PBN. The selection results will be jointly confirmed by the selection committee consisting of at least one representative per RehAllianCE partner. If the number of applications that achieve the required score of service-specific selection criteria exceeds the number of available services, the applications with the highest scores will be prioritised. In the event of applications with an identical score for the same service, priority will be given to SMEs with the higher score in the following service-specific selection criteria:
  - **Innovation & Impact**: applies to applications for validation services

- **Clinical feasibility**: applies to applications for consulting services
- If this does not allow to determine the priority, a further prioritization can be done by considering the **Social Impact** of the technology, solution, product on the rehabilitation.

- Selected SMEs will be announced on March 28, 2025 at the latest.

Rules of procedure and Data Protection Regulation

Rules of procedure

The SME signs a cooperation agreement with the respective service provider offering the service the SME has applied for. This agreement will serve to protect the information and data obtained from applicants during the application and evaluation processes. In addition, the SME must agree to provide feedback via standardised questionnaire after completion of the service(s). The evaluation will be used to develop new service capacities and improve service quality in the MedTech and/or rehab sector.

Applicants have to agree to this procedure during the application process. Agreement to this procedure is given through the respective application form.

The applicants agree to complete the application form accurately and truthfully.

Data Protection Regulation

Data submitted via application form to partners of the RehAllianCE consortium will be treated according to the EU Regulation 2016/679 (General Data Protection Regulation - "GDPR").

Compulsory criteria to participate in RehAllianCE Transnational Pilot Action

An applicant for the RehAllianCE Transnational Pilot Action has to fulfil following compulsory criteria to participate in the pilot action:

- Being an SME from Interreg CE Programme area region
- Developing new technology-driven rehab products, services or solutions (see Technological focus)
- Providing time and resources to participate actively in the transnational pilot action
- Willing to provide feedback on services to improve innovation capacities for development of rehab products, services or solutions (see section Evaluation of services by SMEs)
- Agreement with the rules of procedure and data protection regulation to participate in the transnational pilot action

In addition, an applicant must fulfil service-specific selection criteria. Detailed selection criteria for the RehAllianCE Transnational Pilot Action divided into three different subgroups Pilot Action A, B and C are described within the individual services below.

Evaluation of services by SMEs

The objective of this evaluation is to assess the quality of services provided for SMEs by the RehAllianCE Service Providers CUAS, NSB, and PBN. In return for the exclusive use of the services provided by the transnational pilot action, SMEs are required to complete a standardised questionnaire with the purpose of ongoing optimization and development of the validation and consulting services.

Questions related to validation services provided by PBN

- Is the company planning to continue implementation of the solution at the company?

- Were there any challenges in collaboration among the solution provider(s)?
- What are the key takeaways (lessons learned) for further cooperation with solution providers, based on the experience you had during this process?
- In general, have you been satisfied with the overall process of collaboration? Provide suggestions for further improvements.

Questions related to validation services provided by CUAS

- To what extent were the initial goals achieved by the end of the project?
- What were the key successes and achievements of the rehabilitation project?
- What challenges did you encounter during the project concerning the evaluation strategy, and how were they addressed?
- Were there any unexpected outcomes (positive or negative)?
- How did patient outcomes compare to your initial expectations?
- How was patient feedback during the project gathered in the evaluation process and was it included sufficiently in the ongoing feedback and development?
- How effectively was the project team able to coordinate and communicate throughout the project?
- What lessons have been learned from this project that will inform future rehabilitation services?
- What recommendations would you make for improving similar rehabilitation evaluation processes in the future?

Questions related to consulting services provided by NSB

- How effectively does the consultancy service help SMEs identify potential customers and relevant market segments?
- How well does the consultancy support SMEs in understanding and navigating the regulatory environment?
- How effectively does the consultancy service evaluate the competitive dynamics within the target market?
- How effectively does the consultancy facilitate synergies and partnerships to support market entry and growth?

About the RehAllianCE Service Providers

PBN - Panno Business Network Association

Pannon Business Network is the collaborative center for applied research, training and advanced manufacturing to catalyze value creation by digitalization in Hungary. Linked to industry, academia and citizens, it is facilitating digital, human-centred, resilient and green transformation with focus on business and healthy ageing through its connected divisions. PBN provides smart spaces for the digitalization in manufacturing through its digital innovation hub, **am-LAB**, as well as for the digitalization in home care in the frame of the smart senior room, **at.home**.

A key feature of PBN is its extensive international reach by having realized over 100+ international applied research projects with 500+ European partners. Backed by a wealth of industrial experience and knowledge on Hungarian and regional SMEs, the committed team of 30 with engineering and economic background are motivated to foster the reorientation of the regional economy towards health manufacturing industry.

CUAS - Carinthia UAS -non-profit limited liability company

With its regional roots and an international orientation CUAS is active in the priority fields of health and social affairs, business and various technology topics of engineering and constructions. Its core tasks are higher education, applied research, knowledge transfer and training. Four research centres and 19 research groups conduct research addressing socially and industrially relevant topics.

The Institute for Applied Research on Ageing (IARA) bundles different research groups and departments of CUAS. IARA deals with the effects of demographic change on society and contributes to socio-technical competences in participatory development of (tele-) rehabilitation approaches, interdisciplinary development and evaluation in living lab settings, as well as economic process analysis.

NSB - NSBPROJECT Venezia

NSBproject (NSB) is an Italian consulting company focused on digital technology innovation. Its EU Department focuses on 4 domains, namely: smart industry, smart agriculture, biobased economy and digital health. Within the digital health domain, over the last 10 years it has been supporting public and private organizations in matching the demand side with promising supply side representatives. NSB also supports SMEs and Large Enterprises in exploring healthcare markets in Europe and in starting interactions with public and private healthcare providers, with the following services: innovation readiness analysis (to assess whether an innovative solution is ready for a specific market); target market analysis (demand and competitive landscape), identification of market entry points; connection and engagement of healthcare ecosystems; awareness raising activities about the potential of innovative healthcare technologies among healthcare ecosystem players.

REHALLIANCE – TRANSNATIONAL PILOT ACTION

Service Catalogue

Description of services and terms of conditions for participants in transnational pilot action

The transnational pilot action is subdivided into three groups A, B and C, in which the information on the services offered by the service providers PBN, CUAS and NSB is given in detail. In the following three sections applicants will find all the important information on how to apply for the services, as well as their scope and number available.

Pilot Action A - Rehab Product Validation Service - PBN

Pilot Action B - Rehab Product Validation Service - CUAS

Pilot Action C - Rehab consulting services - NSB

Pilot Action A - Rehab Product Validation Service - PBN

Pilot Action A - PBN's 'at home' smart senior demonstration laboratory & services

Pannon Business Network announces an open call for SMEs from Central Europe developing cutting-edge assistive technologies. This unique opportunity is part of the RehAllianCE Transnational Pilot Action, allowing SMEs to validate their solutions in real-world settings and accelerate their market entry. The program focuses on assistive technologies that improve the quality of life, independence, and daily functioning of elderly individuals and those with disabilities.

What you receive

Product validation of different maturity levels

Emotional analysis

Analyses of user feedback & UX improvement

Rehab Product Validation Service - PBN

How it works

Who should apply

SMEs from Central Europe (CE) working on assistive technologies are eligible to apply for the transnational pilot programs. The assistive technologies should be designed to support individuals with disabilities and the elderly in performing activities of daily living (ADLs). These activities include self-care tasks such as toileting, mobility, eating, bathing, dressing, personal hygiene, and personal device care.

The technologies should aim to enhance users' independence, improve their quality of life, and reduce the need for external assistance. SMEs should demonstrate how their solution aligns with the rehabilitation goals and principles and offers innovative improvements over existing solutions.

- Assistive Technologies: This includes, but is not limited to:
  - Mobility Aids: Wheelchairs, walkers, powered scooters.
  - Visual Aids: Screen readers, magnifiers, tactile devices.
  - Hearing Aids: Devices for sound amplification and support.
  - Voice and Communication Aids: Speech-generating devices, text-to-speech software.
  - Daily Living Aids: Tools that assist with self-care tasks such as dressing, eating, and personal hygiene.
  - Cognitive Devices: Technologies to assist with memory, attention, and cognitive functions.
- Technology Maturity: The solution should have reached at least Technology Readiness Level (TRL) 5, indicating that it has been validated in a relevant environment and is prepared for advanced testing. Technologies closer to market readiness (TRL 7 or above) are encouraged to apply.

How applicants are selected

The selection process focuses on innovative, technology-driven solutions in assistive technology. These devices are critical in supporting individuals with disabilities and the elderly in performing activities of daily living (ADLs), which include tasks like toileting, mobility, eating, bathing, dressing, personal hygiene, and personal device care. The evaluation process will ensure that selected SMEs provide technologies that enhance users' capacity to complete previously difficult or impossible tasks. The selection will be based on the following key criteria:

- Technology Type: Assistive Technology for ADLs
  - SMEs must develop assistive technologies that serve to the needs of individuals with disabilities or the elderly, enhancing their ability to perform everyday activities independently or with minimal assistance.
- Examples of qualifying assistive technologies include:
  - Mobility Aids: Devices such as wheelchairs, walkers, and powered scooters that assist users in moving independently.
  - Visual Aids: Technologies that improve sight or provide alternative ways of interacting with the environment, such as screen readers, magnifiers, or tactile devices.
  - Hearing Aids: Devices that amplify sound or otherwise support individuals with hearing impairments.

- Voice and Communication Aids: Solutions that assist individuals with speech impairments in communicating, such as speech-generating devices or text-to-speech software.
- Daily Living Aids: Tools that help users with basic self-care tasks such as dressing, eating, and personal hygiene.
- Cognitive Devices: Technologies that support memory, attention, and other cognitive functions, helping users navigate daily routines and maintain independence.

- Maturity Level (TRL 5 or Higher): The assistive technology must have reached at least Technology Readiness Level (TRL) 5, meaning that the solution has been validated in a relevant environment and is prepared for advanced testing. Technologies that are further along the readiness spectrum (e.g., TRL 7 or higher) will receive additional consideration, particularly if they are nearly ready for market deployment.
- Commitment to Active Participation: SMEs must demonstrate their commitment to engaging actively in the pilot program. This includes:
  - Time and Resource Allocation: The SME must dedicate the necessary time and resources to participate in pilot activities, including meetings, testing sessions, and evaluations.
  - Prototype or Product Transfer: SMEs must be prepared to provide their product or prototype for testing at designated facilities, ensuring that the technology is available for comprehensive evaluation. **Note: if the company needs to send prototypes for testing, the company should bear the transport costs.**
  - Collaboration and Feedback: A willingness to collaborate with RehAllianCE partners and provide detailed feedback throughout the process, enabling continuous refinement of both the product and services.
  - Travel Availability: Where applicable, SMEs may need to travel to testing sites. Flexibility and availability to travel will be considered in the selection process. **Note: if the company wishes to travel to PBN for any reason, they should cover these costs themselves.**
- Innovation and Impact on ADLs: SMEs must demonstrate that their assistive technology represents an innovative solution to challenges faced by individuals with disabilities or the elderly in performing ADLs. The technology should aim to:
  - Enhance Independence: Allow users to perform daily tasks with greater autonomy, reducing the need for external assistance.
  - Address Unmet Needs: Provide new or significantly improved solutions for challenges that current assistive technologies do not adequately address.
  - Market Potential: Show clear potential for widespread adoption, scalability, and commercial success.
- User-Centred Design and Usability: Assistive technologies must be designed with the needs and preferences of the end-users in mind. Solutions that prioritize intuitive, easy-to-use designs, and have been developed or refined based on user feedback, will be prioritised.
  - Testing with End Users: Technologies that have already been tested with real users (e.g., elderly individuals and people with disabilities) and have incorporated feedback will be given additional consideration.
  - Ease of Use: Products must be user-friendly, with a design that takes into account the limitations of the target audience, whether physical, sensory, or cognitive.

- Ethical Standards, Safety, and Regulatory Compliance: SMEs must ensure that their assistive technologies comply to the highest ethical and safety standards, especially when targeting vulnerable populations such as the elderly or individuals with disabilities.
    - Regulatory Compliance: Products must comply with relevant healthcare regulations, such as medical device standards, and meet all necessary safety requirements.
    - User Privacy and Data Protection: Technologies that collect user data (e.g., wearables, or monitoring devices) must have strong data protection and privacy measures in place, in compliance with regulations like the GDPR.
- Potential to Improve Quality of Life: Assistive technology should clearly demonstrate its ability to improve users' quality of life by enabling them to perform essential activities of daily living more easily and independently. Products significantly enhancing users' comfort, safety, or convenience will be prioritised.

SMEs must meet all compulsory criteria and score at least 18 out of 25 points across the service-specific selection criteria to be eligible for participation in the transnational pilot action.

Compulsory criteria that must be met
Being an SME from Interreg CE programme area
Developing new technology-driven rehab products, services or solutions (see Technological focus)
Providing time and resources to participate actively in the transnational pilot action
Willing to provide feedback on services to improve innovation capacities for development of rehab products, services or solutions (see Evaluation of services by SMEs)
Agreement with the rules of procedure and data protection regulation to participate in the transnational pilot action

Service-specific selection criteria	Points (/25)
Maturity Level (TRL 5 or Higher)	0 - 1
Commitment to Active Participation	0 - 4
Innovation and Impact on ADLs	0 - 5
User-Centred Design and Usability	0 - 5
Ethical Standards, Safety, and Regulatory Compliance	0 - 5
Social impact: Potential to Improve Quality of Life	0 - 5

Scope of the validation service

Service A.1: Product Validation of Different Maturity Levels Before Market Access

Description:

This service is designed to validate products or services that have reached a Technology Readiness Level (TRL) of 5 or higher. We focus on testing these products through various pilot programs to ensure they are ready for market entry. The primary target group for these tests is elderly people, members of the Silver Club, which enables the assessment of user-specific requirements for the aging population.

Key Features:

- Group Testing: Conducted with Silver Club members, focusing on elderly users to ensure the product meets their unique needs.
- Comprehensive Feedback: The data collected is both qualitative (personal experiences, opinions) and quantitative (measurable outcomes) to provide an all-rounded evaluation of the product's readiness for the market.

Service A.2: Emotional Analysis – qualitative analysis (descriptive)

Description:

This service offers a deep dive into the emotional responses of users when exposed to various stimuli, which can be screen-based or physical. The emotional reactions are analyzed through three distinct modules.

- Module A.2.1: Facial Recognition Emotional Analysis
  - Technology: Real-time monitoring of 21 different facial expressions (e.g., Smile, Brow Furrow) using facial recognition technology. This helps detect basic emotions such as joy, anger, surprise, sadness, and fear.
  - Use Case: Understand how users emotionally respond to stimuli during product use.
- Module A.2.2: EEG Headset Emotional Analysis
  - Technology: The Enobio 8 wireless EEG headset is used to collect brain activity data, helping to assess neurological responses to stimuli in both controlled environments and natural settings.
- Module A.2.3: Respiratory Emotional Analysis
  - Technology: Monitoring of respiratory patterns to detect emotional states. The breathing rate and other respiratory factors provide another layer of emotional feedback that complements facial and brainwave analysis.

Service A.3: Analysis of User Feedback & Improvement of UX (quantitative analysis)

Description:

This service provides a detailed analysis of user feedback gathered during the product testing phases, focusing on the improvement of user experience (UX) to optimize satisfaction and ease of use.

Key Features:

- Feedback Integration: A combination of emotional analysis and functional data is used to refine the product's user experience.
- UX Optimization: Focus on increasing engagement and ease of use, while addressing any emotional or functional friction points to ensure higher satisfaction rates.

Value of the validation service

SMEs do not pay for the services as the project partners provide staff and expertise.

Applicants must select a full-service package. The services provided cannot exceed €22,000 (according to chapter I.4.4.3 of the Programme Manual Interreg CENTRAL EUROPE 2021-2027 for indirect State aid (SA) granted under GBER Article 20a to an undertaking that is the final beneficiary of project activities).

- Service A.1: Product Validation of Different Maturity Levels Before Market Access with real test environment.
- Service A.2: Emotional Analysis – qualitative analysis (descriptive):

- Module A.2.1 – Facial Recognition Emotional Analysis
- Module A.2.2 – EEG Headset Emotional Analysis
- Module A.2.3 - Emotional Analysis – Respiratory Emotional Analysis

- Service A.3: - Analysis of User Feedback & Improvement of UX (Quantitative Analysis)

Available Services

Three validation services will be provided to one SME.

Open Call Date

Opens on	Application deadline	Announcement of selected applicants	Agreement singature	Expected starting dates of pilot action
November 25, 2024	February 14, 2025 17:00 CET	At the latest on March 28, 2025	April 2025	April/May 2025

Pilot action start

Individual appointments between applicant and experts. Expected starting dates of the pilot action: April/May 2025.

Pilot action duration

Maximum duration of a pilot action is 9 months. The services provided to SMEs should be completed at the latest in January 2026.

Pilot action location

On-site: Nyugat-Dunántúl | Hungary

Contact or responsible partner

PBN – Pannon Business Network Association

Name of contact person: Krisztina Bardos

Job title: project manager

Email address: digital@pbn.hu

Find out more and apply

For accessing the validation service, the applicant has to fill and submit the application form. to the RehAllianCE Open Call Coordinator before February 14, 2025 at 17:00 CET to email address: rehalliance-submission@bioregio-stern.de

LINK to application form

General workflow of winners

Once approved, the SME is required to complete the following steps:

- Signature of Cooperation Agreement between SME and PBN
- Start of the pilot action: Start date is indicated in the Cooperation Agreement

- Complete pilot action: maximum 9 months after start date
- Feedback and evaluation of the validation service by the SME with the purpose of ongoing optimization and development of the validation services. Possible questions are listed in section Service Evaluation.

Pilot Action B - Rehab Product Validation Service - CUAS

Pilot Action B - CUAS PROLIDA Living Lab methods and services

The IARA Prolida Living Lab - Professional Living, Innovation and Development Lab for an Ageing Society - focuses on innovative solutions in the field of ageing that are developed in the context of real-world conditions. The Prolida Living Lab includes Active and Assisted Living Lab (AAL), the User Experience Lab (UX) and the Instrumental Activities of Daily Living Lab (IADL).

Three services are provided:

Service 1: Living Lab pre-acceptance evaluation. Methods included: UX (some Qn questionnaire), Acceptance (TUI), Ethics (MEESTAR)

Service 2: User-centered validation service. Methods included: Movement analysis, Ethics (MEESTAR)

Service 3: Rehabilitation Use-Case validation (max n=10 persons). Methods included: UX, Domain specific focus group, transnational rehabilitation process analysis (criteria-based analysis including analysis of refunding **situation**)

What you receive

Rehab service analysis & (re)design

UX, acceptance, & ethical analysis

Multidimensional technology validation

Rehab Product Validation Service - CUAS

How it works

Who should apply

SMEs from the Interreg Central Europe Programme area[4] are eligible to apply for the technological or consulting pilots in one open call. The potential services or solutions should be part of a health, robotics and/or ICT sectors and have a clear relevance to rehabilitation. They should aim to improve the quality of life, functional abilities, or overall well-being of individuals undergoing rehabilitation. The SME should demonstrate how their solution aligns with the goals and principles of rehabilitation. They should offer innovative solutions or significant improvements over existing approaches.

The services or solutions should demonstrate a strong user-centric approach. This means considering the needs, preferences, and feedback of individuals undergoing rehabilitation in the design and development process. The services or solutions should be based on scientific principles, evidence-based practices, or validated theories.

Product safety is paramount, especially in the field of rehabilitation. SME should demonstrate that their service poses no harm to users and adheres to ethical guidelines and regulations. This includes privacy, data protection, and informed consent.

An applicant for the RehAllianCE Transnational Pilot Action should be prepared to spend time and share resources in actively participating in the project. SME should demonstrate a commitment to providing ongoing support and refinement post-testing. An applicant will provide feedback on services to improve innovation capacities for development of rehab products (find further information in section Service Evaluation), services or solutions and must agree with the terms of conditions to participate in the pilot action.

Note: CUAS does not cover travel expenses or transport costs in cases where travel of personnel or transport of products or prototypes is required.

How applicants are selected

Applicants will be selected based on the above-mentioned prerequisites that SMEs should meet. SMEs that best meet the given criteria will be included in the shortlist, from which two will be selected in the end. All criteria will be taken into account: innovation and potential impact of the service on the field of rehabilitation, scientific validity, readiness to transport equipment to CUAS and active participation in the project. They may be assessed on the potential impact their product could have on rehabilitation outcomes, user experience, or efficiency of rehabilitation processes and on how well they involve users in product testing and validation. Also, important aspects in the selection are safety and ethical issues, potential collaboration with other partners, post-testing support, costs and marketing potential.

SMEs must meet all compulsory criteria and score at least 18 out of 25 points across the service-specific selection criteria to be eligible for participation in the transnational pilot action.

Compulsory criteria that must be met
Being an SME from Interreg CE programme area
Developing new technology-driven rehab products, services or solutions (see Technological focus)
Providing time and resources to participate actively in the transnational pilot action

[4] https://www.interreg-central.eu/list-of-regions/

Willing to provide feedback on services to improve innovation capacities for development of rehab products, services or solutions (see Evaluation of services by SMEs)
Agreement with the rules of procedure and data protection regulation to participate in the transnational pilot action

Service-specific selection criteria	Points (/25)
Maturity Level (TRL 5 or Higher)	0 - 1
Commitment to Active Participation	0 - 4
Innovation and Impact: Services or solutions from health, robotics and/or ICT sectors with clear relevance, innovation and potential impact to the rehabilitation including costs and marketing potential	0 - 5
Social impact: Improve of the quality of life, functional abilities, or overall well-being of individuals undergoing rehabilitation over existing approaches	0 - 5
User-centric approach, safety and ethical issues	0 - 5
Scientific validity	0 - 5

Scope of the validation service

Service B.1: Living Lab pre-acceptance evaluation:

The pre-acceptance evaluation is a critical phase within the Living Lab approach. It occurs before the full-scale deployment of a technology, product, or service and involves a structured assessment of its potential acceptance and impact. It serves as a critical step in ensuring that new rehabilitation technologies, products, or services are user-centric, practical, and well-received by their intended audience. It provides an opportunity to validate assumptions, identify challenges, and make data-driven improvements, ultimately increasing the likelihood of success upon full deployment.

Key aspects: User Involvement, Real-World Testing, Feedback and Iteration, Assessment of Acceptance, Identification of Risks and Issues, Validation of Assumptions, Data Collection and Analysis, Iterative Refinement.

This service is split into three modules:

- Module B.1.1 User Experience Analysis
- Module B.1.1 Acceptance and Usage Analysis
- Module B.1.1 Ethical Usage Analysis

Service B.2: User-centred validation service:

User-centred validation is a process that ensures a product, service, or system is designed and developed with a deep understanding of user's needs, preferences, and behaviours. In the context of rehabilitation the goal is to develop solutions that effectively support individuals in their recovery and improve their quality of life. It ensures that interventions are designed and refined with a deep understanding of the user's needs, preferences, and experiences.

Key aspects: Understanding User Needs, Improving Outcomes, Customized Solutions, User Engagement, Ethical Considerations, Evidence-Based Practice, Cost-Effectiveness, User Empowerment

This service is split into two modules:

- Module B.2.1 Motion Analysis

- Module B.2.2 Ethical Usage Analysis

Service B.3: Rehabilitation Use-Case validation:

Rehabilitation use-case validation is a critical process that involves evaluating and validating the effectiveness and feasibility of a rehabilitation intervention or technology in a real-world or simulated real-world setting. It focuses on assessing the intervention's ability to support individuals in their rehabilitation journey and improve their functional abilities. It ensures that rehabilitation interventions are effective, feasible, and tailored to the needs of individuals in rehabilitation. Rehabilitation use-case validation involves testing and refining interventions in real-world settings, gathering user feedback, and measuring outcomes to ultimately improve rehabilitation outcomes and enhance the quality of life for individuals undergoing rehabilitation.

Key steps and aspects: Definition of Use Case, User Involvement, Real-World Testing, Outcome Measurement, User Feedback, Iterative Refinement, Ethical Considerations, Validation Report

This service is split into three modules:

- Module B.3.1 User Experience Analysis
- Module B.3.2 Domain Specific Focus Group
- Module B.3.3 Transnational rehabilitation process analysis

Value of the validation service

SMEs do not pay for the services as the project partners provide staff and expertise.

Applicants can combine different modules. The services provided cannot exceed €22,000 (according to chapter I.4.4.3 of the Programme Manual Interreg CENTRAL EUROPE 2021-2027 for indirect State aid (SA) granted under GBER Article 20a to an undertaking that is the final beneficiary of project activities).

The prices of the modules have an average value of approx. € 7.333,33, except the module B.2.1, which has an average value of approx. € 14.666,67.

Service B.1: Living Lab pre-acceptance evaluation service: total value up to € 22,000

- Module B.1.1 - User Experience Analysis
- Module B.1.2 - Acceptance and Usage Analysis
- Module B.1.3 - Ethical Usage Analysis

Service B.2: User-centred validation service: total value up to € 22,000€

- Module B.2.1 - Motion Analysis
- Module B.2.2 - Ethical Usage Analysis

Service B.3: Rehabilitation Use-Case validation service: total value up to € 22,000

- Module B.3.1 - User Experience Analysis
- Module B.3.2 - Domain Specific Focus Group
- Module B.3.3 - Transnational rehabilitation process analysis

Available Services

Three validation services are in place, for which at least two SMEs can apply. If applicants only apply for individual modules and therefore do not reach the maximum value of € 22,000, the remaining services or modules are awarded to the SME with the next highest score.

Open Call Date

Opens on	Application deadline	Announcement of selected applicants	Agreement singature	Expected starting dates of pilot action
November 25, 2024	February 14, 2025 17:00 CET	At the latest on March 28, 2025	April 2025	April/May 2025

Pilot action start

Individual appointments between applicant and experts. Expected starting dates of the pilot action: April/May 2025.

Pilot action duration

Maximum duration of a pilot action is 9 months. The services provided to SMEs should be completed at the latest in January 2026.

Pilot action location

On-site: Carinthia, Austria

Contact or responsible partner

CUAS - Carinthia UAS -non-profit limited liability company

Name of contact person: Dr. Johannes Oberzaucher

Email address: j.oberzaucher@fh-kaernten.at

Find out more and apply

For accessing the validation services the applicant has to fill and submit the application form. Applicants apply for services by submitting the application form to the RehAllianCE Open Call Coordinator before February 14, 2025 at 17:00 CET to email address: rehalliance-submission@bioregio-stern.de

LINK to application form

General workflow of winners

Once approved, the SME is required to complete following steps:

- Signature of Cooperation Agreement between SME and CUAS
- Start of the pilot action: Start date is indicated in the Cooperation Agreement
- Complete pilot action: maximum 9 months after start date
- Feedback and evaluation of the validation service by the SME with the purpose of ongoing optimization and development of the validation services. Possible questions are listed in Service Evaluation

Pilot Action C - Rehab consulting services - NSB

Pilot Action C – NSB's Rehab consultancy program

NSB offers specialized consulting services tailored to the healthcare sector, helping SMEs, as well as public and private organizations, to understand the market needs and solutions/services required to meet them. The list of services is detailed below:

Market and Regulatory Assessment: NSB analyses target markets (who are potential customers and market segments), helping solution providers to identify the most appropriate entry channels and identify possible regulatory constrains (e.g., medical devices regulations and standards, interoperability, rules to enter the market related to procurement procedures).

Competitive Landscape Analysis: NSB evaluates the competitive dynamics (existing competitors, market barriers, etc.) within the healthcare industry, providing insights that help SMEs/organisations to position themselves strategically.

Technology and Industry Partnership Analysis: NSB facilitates possible synergies with existing technologies and existing players in the identified markets to facilitate market entry. This service includes engaging healthcare ecosystems and raising awareness about innovative technologies among key players in the healthcare field.

What you receive

Market & regulatory assessment

Competitive landscape analysis

Tech & industry partnership analysis

Rehab consulting services - NSB

How it works

Who should apply

SMEs from Interreg Central Europe (CE) programme area[5] with specific background: digital healthcare technology providers with

- a focus on the rehabilitation area,
- at least one recent positive reference in the rehabilitation domain

A technology fulfilling the following criteria (type, maturity, focus)

- Technology type: Rehab robots/exoskeletons; Assistive devices, Health apps; Telemetric tools, Wearables (the technology type will be chosen considering the framework's criteria and match between technology-health area)
- Maturity level: TRL 8
- Manufacturing Readiness Level: MRL 6
- Integration Readiness Level: IRL 8
- Product focus (e.g. solution for old people or other target group): Healthcare rehabilitation in different areas (e.g., orthopaedics, neurology, cardiology, etc.), which will be selected based on the results of SMEs' technology offerings and the match with market needs highlighted in the NSB framework. The NSB framework has been designed for evaluating innovative solutions and it is based on a new customized indicator for exploitation and technology transfer activities, innovatively combining various well-established assessments from the literature and the technology transfer landscape, concerning the evaluation of solution readiness levels and the measurement of risks associated with the commercialization of a solution.

Availability to spend time in the pilots' action: Availability to interact online with NSB and provide related documentation and data necessary to guarantee the quality of the service

An applicant will provide feedback on services to improve innovation capacities for development of rehab products, services or solutions and must agree with the terms of reference to participate in the pilot action.

How applicants are selected

SMEs must meet all compulsory criteria and score at least 16 out of 22 points across the service-specific selection criteria to be eligible for participation in the transnational pilot action.

Compulsory criteria that must be met
Being an SME
Developing new technology-driven rehab products, services or solutions (see Technological focus)
Providing time and resources to participate actively in the transnational pilot action
Willing to provide feedback on services to improve innovation capacities for development of rehab products, services or solutions (see Evaluation of services by SMEs)
Agreement with the rules of procedure and data protection regulation to participate in the transnational pilot action

[5] https://www.interreg-central.eu/list-of-regions/

Service-specific selection criteria	Points (/22)
Maturity phase: Technology Readiness Level (TRL 8)	0 - 2
Manufacturing Readiness Level (MRL 6)	0 - 4
Integration Readiness Level (IRL 8)	0 - 2
Commitment to Active Participation	0 - 2
Clinical feasibility: at least one recent positive reference in the rehabilitation domain	0 - 5
Social impact: Improve of the quality of life, functional abilities, or overall well-being of individuals undergoing rehabilitation over existing approaches	0 -5
Match with the technology-rehabilitation areas' needs based on the NSB framework	0 - 2

Scope of the consulting service

Service C: Consulting Service

This service is split into three modules:

Module C.1: Market & regulatory assessment

Analysis of target markets & regulatory assessment, helping SMEs (applicants) to:

- define their potential customers and related market segments,
- understand the regulatory environment and ensure compliance (e.g., medical devices regulations and standards, interoperability, rules to enter the market related to procurement procedures).

Module C.2: Competitive landscape analysis

Evaluation of the competitive dynamics, helping SMEs (applicants) to:

- identify existing competitors,
- highlight market barriers within the healthcare industry,
- provide insights that help SMEs to position themselves strategically.

Module C.3: Tech & Industry partnership analysis

NSB will be a facilitator to create possible synergies and partnerships among existing technologies and players in the identified markets. SMEs will receive support to:

- facilitate their market entry,
- contact relevant players within the European healthcare ecosystems,
- be aware about innovative technologies and strategic trends in the healthcare field.

Value of the consulting service

SMEs do not pay for the services as the project partners provide staff and expertise.

Applicants must select a full-service package. The services provided cannot exceed €22,000 (according to chapter I.4.4.3 of the Programme Manual Interreg CENTRAL EUROPE 2021-2027 for indirect State aid (SA) granted under GBER Article 20a to an undertaking that is the final beneficiary of project activities).

Service C: Consulting Service: total value up to € 22,000

- Module C.1: Market and regulatory assessment
- Module C.2: Competitive landscape analysis
- Module C.3: Tech & Industry partnership analysis

Available Services

Three modules of services are in place, at least five small and medium-sized enterprises (SMEs) will be selected for participation in the transnational pilot action.

Open Call Date

Opens on	Application deadline	Announcement of selected applicants	Agreement singature	Expected starting dates of pilot action
November 25, 2024	February 14, 2025 17:00 CET	At the latest on March 28, 2025	April 2025	April/May 2025

Pilot action start

Individual appointments between applicant and experts. Expected starting dates of the pilot action: April/May 2025.

Pilot action duration

Maximum duration of a pilot action is 9 months. The services provided to SMEs should be completed at the latest in January 2026.

Pilot action location

Online

Contact or responsible partner

NSB - NSBPROJECT Venezia

Name of contact person: Sara Canella

Job title: Project Manager

Email address: s.canella@nsbproject.com

Find out more and apply

For accessing the consultancy services the applicant has to fill and submit the application form. Applicants apply for services by submitting the online application form to the RehAllianCE Open Call Coordinator before February 14, 2025 at 17:00 CET to email address: rehalliance-submission@bioregio-stern.de

LINK to application form

General workflow of winners

Once approved, the SME is required to complete following steps:

- Signature of Cooperation Agreement between SME and NSB
- Start of the pilot action: Start date is indicated in the Cooperation Agreement

- Complete pilot action: maximum 9 months after start date
- Feedback and evaluation of the consulting services by the SME with the purpose of ongoing optimization and development of the validation services. Possible questions are listed in Service Evaluation.