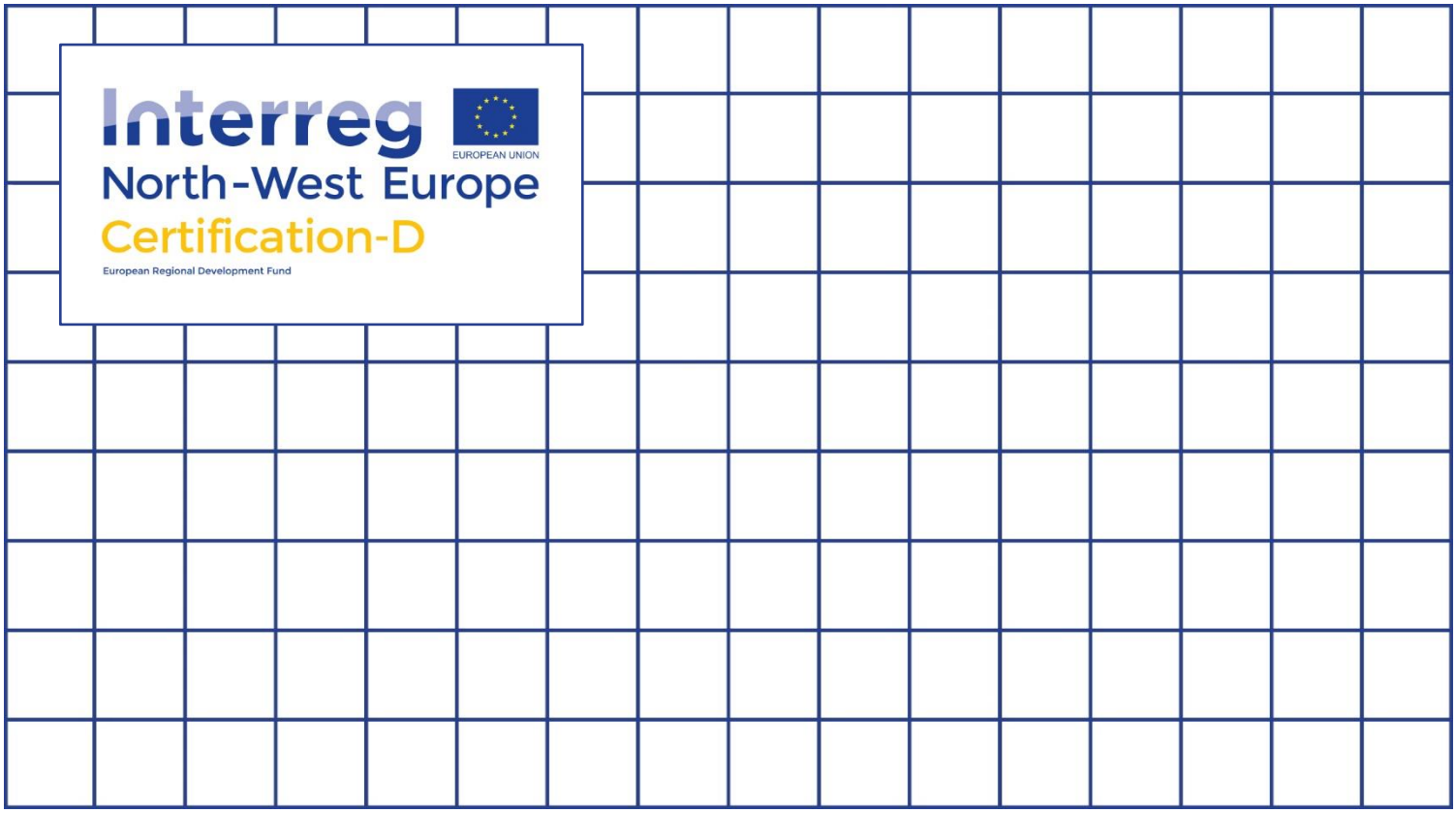

MID-TERM REPORT

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Mid-term report

Objective

The Certification-D project aims to support small and medium-sized enterprises (SMEs) that develop and/or distribute products for People with Dementia (PwD). From research and our own experience, we know that these products are often unknown or not trusted. Therefore, we have chosen the approach of strengthening this trust by putting products through a certification process and providing them with a mark. It is therefore an upstream respectively partial objective to develop a certification procedure and a mark for such products.

This mid-term report on findings, learnings, results and success stories (deliverable M.2.2) belongs to the Work Package Management. It also serves to prepare the International Mid-term Conference “SMEs & Carers: professional requirements” Düsseldorf organized by LP ARCK in cooperation with the EAGP (European Association of Geriatric Psychiatry).

Certification-D s supported by the Interreg NWE Programme through the Certification-D Project (www.nweurope.eu/Certification-D). The Interreg NWE Programme is part of the European Cohesion Policy and is financed by the European Regional Development Fund (ERDF).”

Management and Communication

Lead Partner (LP) ARCK is in charge of the project and finance management for the Certification-D project. ARCK also does most of the practical communication work for the project whilst OCMW Genk is the Work Package Leader Communication (WPL C).

Due to COVID-19 and the restrictions for personal meetings, we switched to online partner meetings and a first online conference from March 2020 till August 2021. So far, we only held the kick-off meeting and a partner meeting at LUCA (C-mine Genk) face-to-face. Further, we organise – so far – bi-weekly OSGs (Online Steering Group meetings). And, of course bi- and trilateral online meetings are held as required - even at short notice. Partner meetings concentrate on the implementation work packages (see the following chapters).

Regularly all Project Partners (PPs) participate in all transnational meetings and events. WPLs support the LP with presentations, moderating their sessions and in contributing to the minutes. Further, all PPs fulfil their local/regional project management tasks as good as possible under COVID restrictions. Most of them have set up local teams that meet (bi-) weekly.

Due to the restrictions imposed by COVID, no face-to-face meetings can take place: the lack of real-world meetings leads to a lack of direct partner-to-partner communication. Online meetings allow us to achieve structured coordination and work results, but not personal exchange and by-the-way development of other/new/innovative approaches.

PPs worked on their partner reports and support LP ARCK with the project report as well as on the risk reports. As not all partners are equally experienced in the management of (international) projects and some project participants are unpredictably (over)burdened by COVID, reporting does not yet function perfectly.

All relevant documents, deliverables, minutes and presentations – internal documents of interest for the partnership as well as all public documents of Certification-D – are stored and made available to the partners in a protected board on Meistertask.

PPs promote the project at online meetings and conferences. PPs communicate the project to different target groups: PwD and their (in-)formal caregivers, SMEs and industry, patient organisations, research and healthcare institutions to build up a Certification-D Network (see also “Long term effects”) and to promote our Voucher Scheme (see below).

We work on increasing awareness by introducing and advertising the Certification-D project on a local-regional level. Press releases in all programme languages (Dutch, English, French and German) were prepared and sent out. In addition, on a transnational level: the website and the Twitter account are updated regularly to inform our networks and beyond about the process, outcomes, and events of the project. Further, we set up a YouTube channel – so far promoting our Living Labs (LLs) in Angers (FR), Eindhoven (NL), Genk (BE) and Krefeld (DE) and our Call for Vouchers, wave 1 and wave 2. Some PPs published alreadyarticles, e.g. PP Ulster (UK) produced and published a review paper in a credible journal specifically focused on current technologies in the area of dementia.

Demands & use (WP T1)

Work package T1 (WP Leader LUCA) looks at the demands for and use of products for PwD in their home environment. With implementing WP T1 the basic catalogue of functional and non-functional requirements for products for PwD is to be drawn up by the collaboration of PwD, caregivers, research institutions, SMEs and evaluated, improved, and established in expert circles (all PPs involved) by testing existing products in Living Labs (real contexts).

The leading PPs with Living Labs (LLs) will also improve and adapt their LLs toward sufficient LLs for PwD. The LL-PPs will identify leaders in creating and operating LLs and identify best practices beyond Certification-D. The PPs will support associated partners representing follower regions (no or less developed Dementia LLs) in order to support existing and/or establish new LLs.

The WP T1 was implemented according to the work plan:

- Delivering a basic catalogue of functional and non-functional requirements for products for PwD, based on the three catalogues resulting from the Delphi study: The results of the first testing of the basic requirements list in the LLs were documented and analysed. Based on these results small changes were made. On the monthly LL meetings – still ongoing, the catalogue was presented and finalized, and agreed upon by all LL partners.
- Setting up and testing the first products in the LLs to evaluate the three requirement lists, collaborating with PLWD, care-, research-institutions and SMEs.
  - LL BE: Products from three SMEs were tested and provided input for the adaptation of the LL protocol.
  - LL DE: The first products were tested, and following evaluations are ongoing. The feedback provided input for the adaptation of the LL protocol.
  - LL FR: Four products were tested using the updated protocol. These ongoing tests provide insights into the effectiveness of the LL protocol.
  - LL NL: Setting-up the LL to be ready for the start of the testing of the voucher scheme.

- Providing a protocol for the four LLs to involve PLWD for analysis in the real context, considering the current COVID-19 regulations: During the LL meetings, the protocol was discussed, based on the analysis of the first LL tests. The feedback of the analysis was used to optimize the protocol. The current COVID-19 regulations were taken into account, to provide a LL protocol with enough flexibility for each LL to adapt to the changing COVID-19 regulations.
- The set-up of monthly LL meetings with all LL partners (still ongoing) to maintain a sustainable NWE Dementia LLs Alliance: In these meetings all LL partners exchange lessons learned, update on their current state and give input on issues to be solved among the LL partners. A database of the tested products was made, to be updated by each LL partner.
- Communication on the LLs at national and international conferences and events to increase the awareness of the NWE Dementia LLs Alliance: The project and work of and in the LLs was presented (online) at the Alzheimer Europe congress in Bucharest, the Inspire Health and Care conference in Belgium, the monthly event for people with young onset dementia in Belgium, and the conference “Improving Design for People with Dementia”.

Summing up, one can state the consortium (all PPs) was involved in identifying the initial functional and non-functional considerations for the design of products that relate to supporting PwD in Enabling/Assistive Products, Safety/Security, and Quality of Life/Leisure support products and systems.

The LLs were and are involved in the evaluation of these functional and non-functional requirements for these areas as well as creating base requirements and considerations for designing tools for PwD. LL TU/e focuses on products that relate to supporting PwD in Enabling, LL ARCK and CENTICH focuses on Safety/Security products (including accompanying IT solutions), and LL LUCA on Leisure support products and systems.

The results were brought back to the consortium (all PPs) also to prepare the voucher scheme (WP T4) and for implementation of the certification process and mark (WP T3).

Product & service optimization (WP T2)

In WP T2 selected products for PwD and their extended care network (family, carers, doctors, and others involved) will be improved through LL evaluation and resulting insights and design improvements. Based on the basic catalogue (WP T1) and supplementary Dementia Friendly Guidelines (WP T2, deliverable 2.1) products – which can be systems and/or services – provided by the SME network will be evaluated in real-life LLs, with the involvement of the extended stakeholder network. The insights gained will be used to improve product (re-)design through co-creation, integration of products with existing services and the extended multi-stakeholder Network.

There are three types of SMEs involved:

1) partner SMEs in the project,
2) SMEs attracted by the voucher scheme, and
3) other SMEs interested in the resulting certificate.

A selection of SMEs will gain concrete points of improvements for their product offering to make it more dementia friendly, increasing their competitiveness and the adoption potential of the technology.

Selected products from SMEs will be evaluated by applying LL methodology adapted to the dementia context. In this process, products will be evaluated together with the extended stakeholder network of the dementia care context. In this the design-driven LL approach is applied, meaning that the participants have an active role in in the evaluation, and the insights collected through the testing in the LLs will be used as basis for a design support service.

In this approach an active and creative attitude from participants is facilitated, to contribute to a certain product or process. Additionally, the LL evaluation method is based on the specific needs of the product. The design support provided will be agreed with the company depending on the phase in the design process, or the extension of the improvement required.

WP T2 aims to fulfil the second sub-objective: Selected products for PwD will be collaboratively improved on the basis of the basic catalogue and supplementary product group-specific requirements in living labs, and the knowledge gained will be used to improve product (re-)design, integration of products in services of Complete Support Network

systems and to support SMEs outside the project. E.g. project partner Climax Deutschland GmbH is currently extending the use case for their product. Initially developed for elderly people Climax is now creating a platform for localization and geofencing which can be used as well by private and institutional caregivers –as well as by monitoring centers.

WP T2 is a follower of WP T1 and thus started this year. WPL TU/e created a Gantt-chart on the structure of WP T2. Further drafts of the tools and platforms to be developed in WP T2 were drafted and presented during the partner meetings. TU/e and Fontys, supported by LUCA, implemented a workshop with SMEs to develop the Design Toolbox. Further two workshops were held to discuss the development of the dementia friendly guideline online tool: definition of contents with experts, overview of first prototype with SMEs. ARCK presented the roadmap for working on the integration of products and (social) services (Activity 4).

Certification & Upscaling for NWE (WP T3)

This WP contributes to sub-objective 3: A Business Development Strategy for Market Uptake will be developed, a certification procedure with mark will be developed, tested, finally set up and scaled up with many SMEs, patient organisations, research and healthcare institutions to increase the innovation potential of SMEs, which will be sought in NWE (mapping) and integrated into a network (networking). Certification is the term we use to describe the procedure by means of which compliance with certain requirements, which we develop in the implementation WPs T1, T2 and T3 is verified.

LP ARCK leads this WP, PP GGT is responsible for activity 3 “Certification process & mark”. All PPs are analysing the market environment and mapping potential companies in order to contact potential SMEs to register for the voucher scheme (WP T4) and being potential participants in our Certification-D network. Thereby we also expanded and maintained our network of SMEs, research and healthcare institutions at local, regional and European level in order to secure upscaling.

ARCK carried out researched on how and to what extent training already takes place and where points of reference can be found. We tendered a training programme and training events. After the award, we started working on the training of certified support systems. We tendered a training programme and training events. After the award, a kick-off event was held with great response and later a second virtual conference was successfully organised.

GGT, responsible for “Certification” (Activity 3), carried out a survey of SMEs as part of the Feasibility Study. This survey was supported by the PPs. In the case of the companies, it was determined which reasons speak for the acquisition of a mark as part of the project. In addition, it was determined whether there is a willingness to pay for the receipt of the mark and the amount of the corresponding costs. The results were compiled were presented at the online conference “Users & producers demands and use”. The statements of the SME interviewees, in particular regarding the wishes for a quality mark, were also forwarded as input to WP T2.

Based on the survey results, the planned certification process was further refined, on which PPs provided feedback and a framework for the certification process was created. The procedure is structured in several stages and includes a self-declaration by the manufacturer in the first step. This was initially created as an example for the “Safety & Security” product group and evaluated together with the project partner Climax (as a SME). The self-declaration was adapted as part of the evaluation and transferred to the "Leisure" and "Enabling" product groups.

The next step was and still is to test the products in the LL together with PwD. For this purpose, questionnaires were created, on the basis of which the respective product is tested in the LL. The draft version was first tested with the ARCK LL and then transferred to the other product groups. These questionnaires were used in a first test run in the LLs and examined there for their practical suitability. An evaluation showed the need for adjustments, which resulted in a redesign of the certification process: In order to reduce the complexity of the survey at the PwD, a technical test was defined as an additional process step and its content was designed. Meaningful measurable parameters were determined that can be used for a technical investigation in the laboratory. In the future, this technical examination will be carried out directly at the certification body.

In the course of the redesign, the scope of the PwD survey was reduced because detailed technical questions can be skipped - especially in favour of a more detailed evaluation of the usability of the respective product. The updated questionnaires were communicated to the LLs, where they are used, tested and evaluated as part of the ongoing test processes. The results will be available in the next reporting period. Any necessary adjustments can then be made.

All PPs contributed to the implementation of the ongoing tasks e.g., providing feedback on the Certification procedure and corresponding documents, to the market analysis and the business development strategy in their respective contexts, expanding and maintaining the network of SMEs, patient organisations, research and healthcare institutions at local, regional and European level in order to secure upscaling.

ARCK also organised an event for the LL-PPs with ENoLL (European Network of Living Labs) on the certification of our LLs: The Belgian LL is in the process of registering to ENOLL, in order to ensure their sustainability for future certification. The Dutch LL will be supported by an already ENoLL-certified TU/e LL. The French LL is already member of another LL network in France. After reviewing the benefits and the costs, ARCK decided against it - at least at this stage.

Voucher Scheme (WP T4)

Through the Voucher Scheme, additional SMEs will be involved in the project from outside the project. By this we include a broader range of SMEs that are developing technology and services for PwD.

To realize this, we set up a Voucher Scheme protocol to find, include and support SMEs through testing of specific products in the system of LLs set up in WP T1 and implemented in WP T2. The call for the participation in wave 1 and wave 2 of the Voucher Scheme consisted – due to restrictions caused by COVID-19 – in digital promotional material. Most promotion was done by LinkedIn and Twitter, further through our website and participating in events to meet voucher scheme-relevant SMEs.

The activities conducted have seen the involvement of all PPs in the design of the voucher and the recruitment of SMEs for the competitive voucher scheme wave 1. Currently the call for the involvement of SMEs in wave 2 is still open (ends on Sept, 30th 2021).

The vouchers provided through our scheme allow SMEs to make use of the LLs and design services that are set up and offered in the project (see WP T2). The successful SMEs are offered vouchers to give products to LLs being tested. The voucher valued about 50.000 € in average. Each LL (ARCK, Krefeld, DE; CENTICH, Angers, FR; LUCA, Genk, BE; TU/e, Eindhoven, NL) offers vouchers over two years (2021 wave 1 and 2022 wave 2). There will be a total of 24 vouchers offered to SMEs in all NWE member states.

The testing will be provided on two levels:

1) An expert evaluation to spot points of improvements through an expert panel and
2) A field evaluation of a product offering. The SMEs will get the time needed to execute the support on these two levels, and a custom insights report summarizing the findings and advice. It will be mainly the PPs with LLs to carry out the support of non-PPs SMEs. But the PP-LLs will be assisted by the SME-PPs.

All PPs have been involved in the voucher scheme set-up and application: PPs provided feedback on the documents for the selection: call 1 and 2, sign-up form 1 and 2, selection from sign-up form 1 and 2, selection form for interviews 1 and 2, selection committee and interviews agenda.

PPs communicated the call via their networks, e.g. LUCA: In4Care, HappyAging, Expertise Centrum Dementia, POM Limburg and Blue Health Innovation centre; CENTICH: Chamber of commerce, Atlanpole Biotherapy, VYV Group, Hospital of Angers, National French expert centre for autonomy and health, Living Lab French network, and directly invited SMEs to participate to the launch event and to apply for the selection, in which PPs have been involved by participating to interviews and evaluating the outcomes

LL-PPs have worked on the cooperation agreement with the selected companies and have prepared the testing of the selected products for their countries.

TU/e, Fontys, ARCK and GGT have been involved in the creation of a calculation scheme for recording costs in the LLs. This scheme was tested with two LLs, adapted, and rolled out for further work in all LLs. With the help of the scheme, the process costs can be recorded step by step and displayed on a comparable level. This information is required to be able to quantify the costs of the certification process (WP T3).

Long term effects

Long term effects (LTE) are thus interrelated with the three sub-objectives and the implementation WPs T1 to T4. The overall LTE of the project are situated on three main areas: Employment and turnover for SMEs producing products for PwD will increase; increased use of products for PwD resulting in more comfortable and safe conditions for living at home for PwD; the introduction and acceptance of a certification with standards for products for PwD.

The results and LTE will be ensured by the realisation and permanent implementation of four activities.

1. The establishment of a sustainable NWE Dementia Living Labs Alliance (DLLA), started by the involved DLLs of the PPs. Within the network (WP T3) of organisations, suppliers and consumers of PwD products further DLLs will be found and integrated in the long term in the Alliance. The DLLA concept has been discussed through meetings and is actually ongoing to be finalised. CENTICH and ARCK will look after the new DLLA and guarantee the sustainability.

2. The Online Database “Dementia Friendly Guidelines and Products” will be the 1st European database for the identification of innovative, reliable and certified products for PwD. It will give visibility to the SME's by assuring users that the product complies with recognized objective criteria and related obligations. It provides a guarantee of the knowledge, skills and qualities required for product development and efficiency.

The DLLA concept includes the basics that will be used to define the business plan and specially the business plan for the online database “Dementia Friendly Guidelines and Products”. Thus, this one hasn't been delivered yet. A workshop has been held by LUCA to

translate the requirement lists (see WP T1) into an accessible tool for dementia friendly guidelines.

3. A competitive certification agency with the process and mark, developed in WP T3. In WP LTE, the necessary framework conditions are developed so that GGT and other agencies can economically certify further products by using the PPs Living Labs in the long term: The four LLs are testing the selected products from voucher wave 1. They already consolidate their process and their network through relationships with different stakeholders (PwD associations, NGOs, SMEs, Care Services ...) for a sustainable activity.

4. A training programme to disseminate certification and products is also developed and implemented during the project lifetime. ARCK with TU/e, LUCA and OCMW will focus on this. ARCK is currently mainly working on the deliverable and concept, adapted concept to the latest experiences. The programme will be supervised by the DLLA after the end of the project.

The Associated Partner EAGP is involved to support the deployment of the certification process, the DLLA and the training program in other regions. The EAGP is the umbrella organisation of the European national associations and is characterised by intensive cooperation between the professional actors at European level. This makes it possible to quickly disseminate new developments such as Certification-D throughout Europe. E.g. this has already been fully achieved through the EAGP jubilee congress/Certification-D mid-term conference.

Outlook

To summarize and highlight, we can state that the project is on a good way:

- WP T1 was completed in the previous reporting period. The NWE Dementia Living Labs Alliance, by the hosting of monthly LL meetings was maintained. The testing of products from Voucher wave 1 in the set-up LLs, according to the LL protocol is implemented.
- We started WP T2 activities and created drafts of the tools and platforms to be developed. A workshop with SMEs creating the Design Toolbox was held. Two workshops were organized to discuss the development of the dementia friendly guideline

online tool. The roadmap for working on the integration of products and (social) services is drafted.

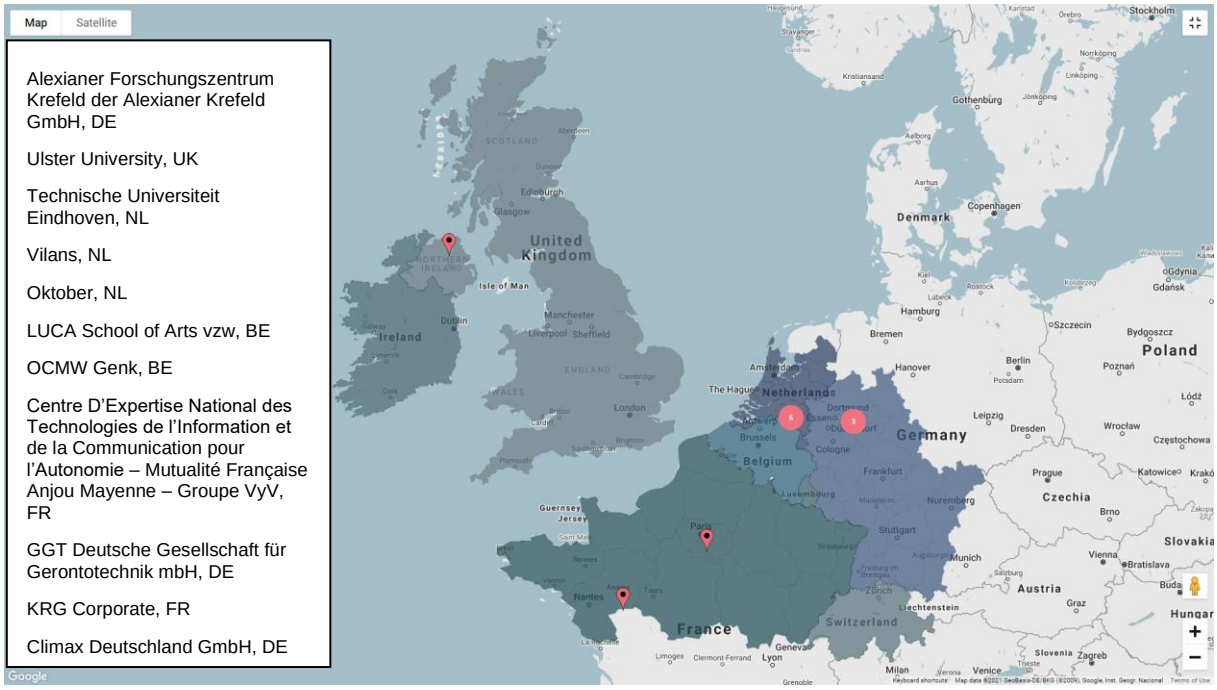
- WP T3: We proceed analysing the market environment and mapping potential companies being potential participants in our Certification-D network. Working on the training of certified support systems and on the product database for PwD is under implementation. A framework for the certification process is created. The procedure is structured in several stages and includes a self-declaration by the manufacturer in the first step.
- The WP T4 activities conducted have seen the involvement of all PPs in the design of the voucher (call, sign-up form, selection from sign-up form, selection form for interviews, selection committee and interviews agenda), and the recruitment of SMEs for the voucher scheme wave 1. PPs communicated both calls via their network and directly invited SMEs to apply for the selection.

Of course, COVID has an impact on the daily work of the PPs in terms of project management/implementation, but also on the contacts with the core groups PwD and SMEs: personal contacts with our target groups so far are only possible to a very limited extent. We had to switch to online events and in rare cases one-by-one meetings regarding all national and local/regional regulations as regulations by our organisation.

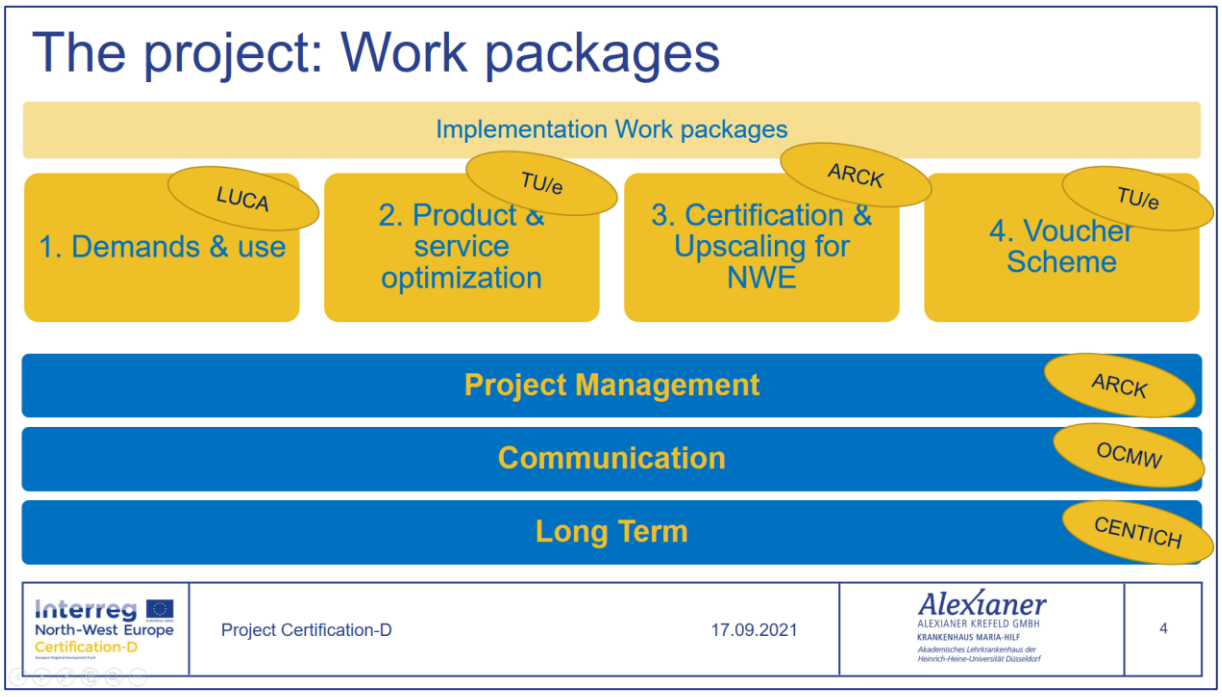
For the future we are quite sure, we will have further face-to-face meetings again, as recently with our mid-term conference and partner meeting. Products of wave 1 are still in the testing phase and we already gained learnings and adapted the certification process. Discussion on the mark has started. Wave 2 is on its way, and it looks as if enough SMEs apply for a voucher.

The implementation of trainings is ongoing as well as improvements. Same for the upcoming aspects on design support. Work on the LT activities started and will be increased in the second half of Certification-D’s implementation.

Project Partners



Source: www.nweurope.eu/Certifcation-D



Source: Zerweck (2021): CERTIFICATION-D. Certification of technological products for People with Dementia (PwD) to support SMEs in innovation and business growth

More info
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