

PROF-TRAC project Executive summary

Professional multi-disciplinary training and continuing development in skills for NZEB principles

PROF-TRAC

PROF-TRAC is an international project financed by the European Commission. REHVA and its Member Associations play a key role in the successful implementation as a network of training providers targeting building services professionals across Europe. The project started in March 2015 and will last 3 years. 12 REHVA member associations are involved as project partners or have signed a letter of support stating their interest in joining the scheme - as listed at the end of this document. Other REHVA members will be invited during the project to join.

Background:

Nearly Zero Energy Building construction and renovation requires a large contribution from the building sector and is a challenge for the construction industry. A successful design and construction process towards nZEB construction and renovation requires innovative design processes and technologies based on an integrated design approach and multi-disciplinary work teams. However this approach is not yet common as the building sector still works in a fragmented process. Especially the collaboration between architects, technical experts and managers is necessary to develop mutual understanding of each other's disciplines and combine skills to achieve optimal nZEB construction and retrofitting in terms of quality, energy efficiency and cost effectiveness.

Major barriers of the transformation:

- Many professionals in the buildings sector have limited knowledge and skills in energy efficient building design and nZEB principles.
- Lack of collaboration between the different disciplines and professionals. Most of the available trainings focus on one specific target group and on one technique or concept.
- Lack of harmonised certification and qualification schemes with mainstreamed training materials for building professionals on nZEB. Lack of skills-mapping and qualifications for the specific subject and target groups.
- Training materials for education and post-initial education are created on an ad-hoc basis without consensus on an underlying qualification framework. Training materials for education and post-initial education should be coordinated and updated for a life-long- learning process.

PROF-TRAC offers a solution to overcome these barriers by developing an Open Training Platform and Qualification scheme for Continuing Professional Development for professionals in the building sector. This platform targets technical experts, architects and managers involved in nZEB design and construction. The developed European qualification scheme will be part of a life-long-life learning process for continuous development and up-skilling of professionals.

PROF-TRAC objectives and main activities:

1. Mapping of the required skills and current skill gaps of professionals in nZEB.

Mapping and assessment of the:

- professions involved in nZEB construction and retrofitting and comparing the required skills versus present skills
- existing qualifications, knowledge sources, education programmes, post-initial training supply and accreditation/ certification structures

For the skills mapping PROF-TRAC will adapt methodologies developed within current national BUILD UP Skills actions. The methodology will be jointly developed coordinated by ISSO using the experience of REHVA members (ATECYR, DANVAC, HKIS, TVVL) and other training providers. The developed methodology will be offered for free for REHVA members and professional organisations that are willing to join the scheme.

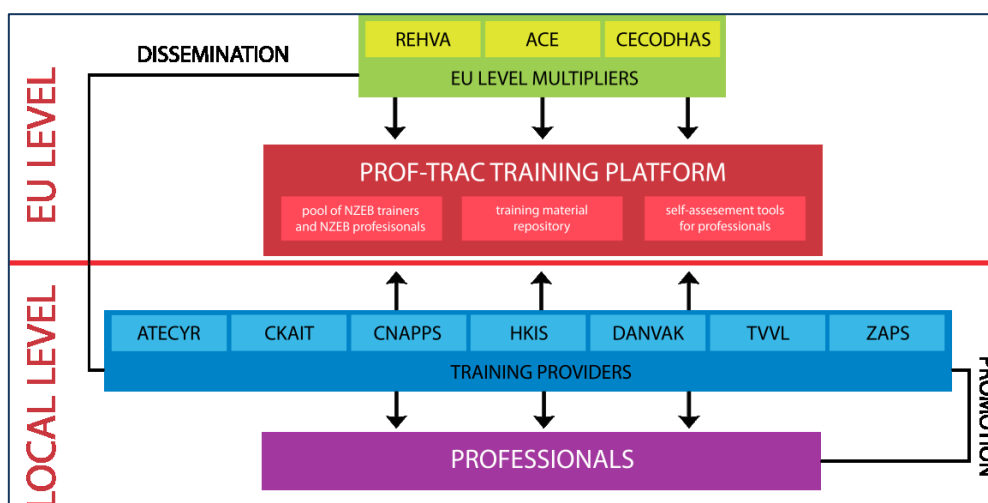
2. Development of an Open Training Platform and Qualification scheme

The core of the PROF-TRAC project is the development and continuous update of an online open training platform developed by REHVA and other project partners.

Functions of the Open Training Platform:

- To serve as a European Mutual Learning Platform on NZEB construction and retrofitting for building professional with online training.
- To set-up a voluntary EU level training and qualification scheme according to the European Qualifications Framework for Lifelong Learning to be adopted at national level.
- To provide EU level training programs and modules to interested training organisations in Europe in order to develop and harmonise national training schemes in nZEB.
- Recruitment and organisation of train-the-trainers programs and webinars.
- Maintaining the repository the project completion and further exploitation of the results.
- Information pool about the European training programme, promotion of trainers and national training organisations.
- Information about professional profiles needed for NZEB construction.
- Information pool of certified buildings professionals who have successfully completed the training tools.
- To provide free self-assessment tools for professionals to evaluate their skills and knowledge gaps in nZEB.

Figure 1 PROF-TRAC Training and Qualification Scheme



3. Train the Trainers programme for the developed curriculum and qualification schemes

PROF-TRAC will develop an EU level Train the Trainers (TtT) programme and implement 5 rounds of international TtT sessions organised by REHVA and other umbrella organisations representing the building sector (architects – ACE; building owners & managers - Housing Europe) during the 3 years of the project. PROF-TRAC will enable massive up skilling by training a large group of ‘frontrunners’ in this programme in order to create a snowball effect. The ‘trained trainers’ will act as ambassadors for the developed nZEB qualification scheme and will take care of a further roll-out and implementation of the action on national scale, customized to national needs according to the specific skills and qualifications required as well as to the climatic and building circumstances in their countries. Involved REHVA members can send their employees and experts in charge for training courses to 2 face-to-face trainings co-financed by REHVA or can attend webinars.

4. Development of a repository of the training material for use in education and post-graduate training

In order to make the PROF-TRAC action sustainable after the project duration a repository will be created in the Open Training Platform to store, update and maintain the training material. This will be a sustainable structure elaborated by the project partners, towards the project end with the following goals:

- To define a business plan to sustain the Training platform after project closure lead by REHVA
- To provide continuous access for training providers joining the Scheme and the Platform during and after the project.
- To create a sustainable system of co-creation in which teachers and market actors can notify each other on required new knowledge and necessary updates e.g. according to changes in standards and regulations.
- Development of small measurement tests to enable professionals to select the right modules.

PROF-TRAC Work Plan

The work plan contains the following work packages (leaders in brackets):

WP1 Coordination, Management and Quality Control (HIA)

WP2 Mapping of Skills and Qualifications (ISSO)

WP3 Development of a European Training and Qualification Platform (REHVA)

WP4 Train the Trainers Programme (CVUT)

WP5 Pilots (IVE)

WP6 Exploitation and Replication (REHVA)

WP7 Dissemination and Communication (ACE)

Figure 2 PROF-TRAC training scheme and expected number of trained professionals

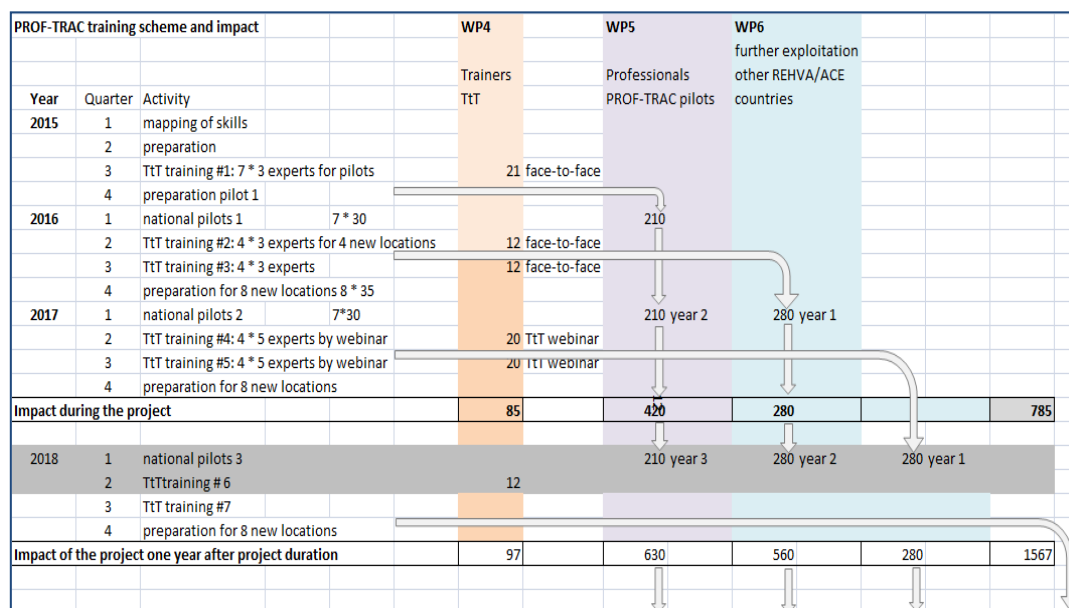
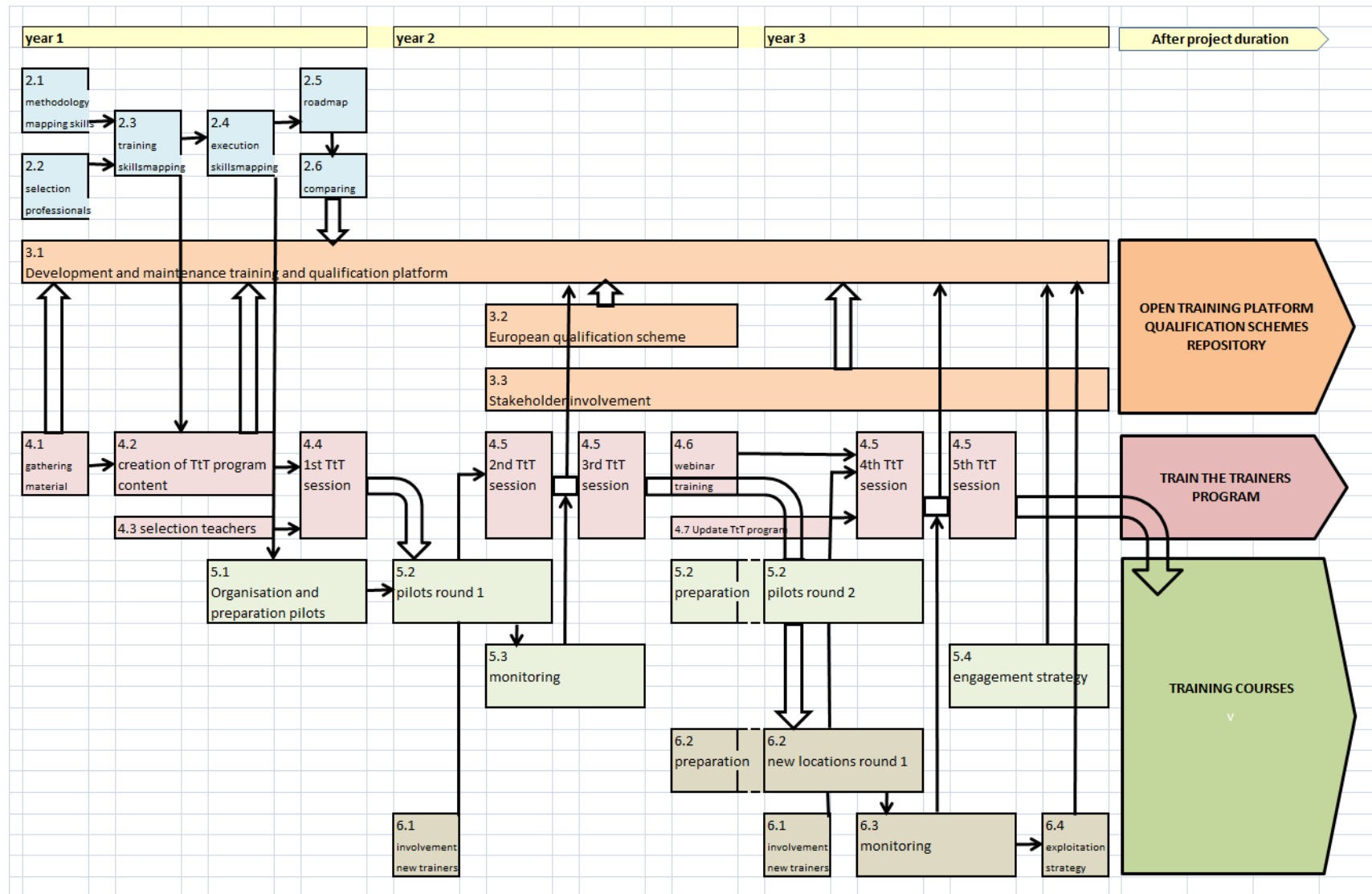


Figure 3 PROF-TRAC detailed work plan



Project partners

Organisation name	Short name	Country
Huygen Installatie Adviseurs	HIA	NL
Federation of European Heating and Air conditioning Associations	REHVA	EU (NL)
Architects' Council Europe	ACE	EU (BE)
CECODHAS Housing Europe	CECODHAS	EU (BE)
ISSO	ISSO	NL
Valencia Institute of Building	IVE	ES
Czech Technical University Prague	CVUT	CZ
Aalborg University	AAU	DK
Danish Society of Heating, Ventilating and Air Conditioning Engineers	DANVAK	DK
Croatian Chamber of Mechanical Engineers	HKIS	HR
Spanish Technical Association of HVAC and Refrigeration	ATECYR	ES
Dutch Society for Building Services	TVVL	NL
Czech Chamber of Chartered Engineers and Technicians	CKAIT	CZ
Chamber of Architecture and Spatial Planning of Slovenia	ZAPS	SI
Italian Chamber of Architects	CNAPCC	IT

REHVA members involved in the project by having signed a Letter of Support:

Organisation name	Short name	Country
Associazione Italiana Condizionamento dell'aria, Riscaldamento Refrigerazione	AiCARR	IT
Association Royale de la Technique du chauffage, de la ventilation et de la climatisation Koninklijke vereniging van de verwarmings-, ventilatie- en klimaatbeheersingstechniek	ATIC	BE
Eesti Kütte- ja Ventilatsiooniinseneride Ühendus The Estonian Society of Heating and Ventilation Engineers	EKVÜ	EE
Finnish Association of HVAC Societies	FINVAC	FI
Norsk VVS Energi- og Miljøteknisk Forening Norwegian Society of HVAC Engineers	NORVAC	NO
Slovenska spoločnosť pre techniku prostredia Slovak Society for Environmental Technology	SSTP	SK
Společnost pro techniku prostředí Society of Environmental Engineering	STP	CZ
Energi- och Miljötekniska Föreningen Swedish HVAC Society - Society of Energy and Environmental Technology	SWEDVAC	SE

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