**WS 2: NZEB design and construction: skill gaps and interdisciplinary training of professionals (PROF/TRAC)**

*Monday, May 23, 10.30-12.00 (Meeting room: Harlekinsalen)*

**Workshop organiser**

PROF/TRAC, [www.proftrac.eu](http://www.proftrac.eu)

**Presenters**

Philippe Moseley, EASME  
Peter Op't Veld, HIA  
Anita Derjanecz, REHVA

**Introduction and Background**

A successful design and construction process towards nZEB requires innovative design processes and technologies based on an integrated design approach and multi-disciplinary work teams based on collaboration between architects, technical experts and managers. PROF / TRAC develops an Open Training and Qualification Platform for professionals dealing with nearly Zero Energy Buildings targeting technical experts, architects and managers involved in nZEB design and construction. The European training and qualification scheme will be part of a life-long life learning process for continuous development and up-skilling of professionals. The workshop presented the PROF/TRAC project that develops an Open Training Platform and Qualification Scheme for continuous professional development for engineers, architects and managers involved in nZEB design and construction. PROF/TRAC identified skills gaps and professional profiles needed for nZEB construction and refurbishment, and develops a voluntary training and qualifications scheme. The project has already involved REHVA Member Associations and other training providers (universities, research institutes and chambers of architecture) from seven countries.

**Summary of the Presentations**

Philippe Moseley (EASME) described the European Union support for improved construction skills. Why spend EU funds on construction skills? There are many reasons for that:

- Tackling climate change through reduced energy consumption and renewable energy;
- Designing and constructing to higher standards (energy efficiency and air tightness);
- Implementing the technological change, we are experiencing (BIM, IoT, connected grids, prefabrication and 3D printing);
- Addressing the fragmented industry (SMEs and separated disciplines).

Following the new key targets of the 2030 climate and energy framework, the three directives which are most relevant to the building stock's energy performance are under review in 2016, although it is not expected that the EED will be revised soon.
Data collection, public consultation and ex-post evaluation phases have been completed for the EPBD. EBPD public consultation has showed that the directive is not effective as it could be, especially regarding the renovation of existing buildings mainly due to low activity in construction sector, slow and scattered implementation and poor compliance.

Action 5 of the Strategic Energy Technology (SET) Plan is addressing the abovementioned issues focusing on key areas:

- Developing packages for deep renovation in existing buildings;
- Reducing cost of NZEB by 10% in new buildings by 2025;
- Improving quality, reducing construction time and performance gap (cross-cutting themes).

Upcoming H2020 Call for Proposals are covering these topics which are also are directly linked to the BUILD UP Skills initiative.

Peter Op ‘t Veld introduced the PROF/TRAC (PROFessional multi-disciplinary TRAining and Continuing development in skills for NZEB principles) project which has been created in order to remove the the barriers to NZEB construction and retrofitting such as the mismatch the between needed and available skills and the lack of collaboration between different disciplines and building professional.

Overall goal of PROF/TRAC is to offer a solution for these barriers by developing and maintaining an Open Education Platform and European qualification scheme for Continuing Professional Development of practicing professional (middle and senior) in the building sector.

This will be achieved through four pillars:

- Use of successful structures (e.g. BuildUp Skills) for mapping qualifications and identifying skills gaps;
- Adaptation and implementation of existing training structures (e.g. IDES-EDU project) and qualification schemes;
- The direct involvement of the most important European umbrella organisations for the sectors;
- A Train-the-Trainer (TtT) programme to create national ‘ambassadors’ to trigger a “snowball effect”.

The presentation provided details on the methods to reach the objectives and the main results of the work that has been carried so far. First outcomes of the project already include:

- Guide basis for the skills mapping, as well as results from some countries;
- Development of the IT structure of the platform including also the database of training materials.

Additionally, the PROF / TRAC skills mapping app will be available in June while the next TtT sessions is going to be hosted in Zagreb from the 19th to the 21st of September 2016. The TtT course is open for registration at affordable price and information are available on PROF / TRAC website.
Anita Derjanecz illustrated the benefits of joining the scheme as training providers for REHVA Member Associations:

- Becoming part of a harmonized EU qualification scheme endorsed by the EC along with the possibility of use the PROF/TRAC brand;
- Methodology for skills mapping and roadmap development;
- Participation in the Train-the-Trainer sessions to be trained;
- Joining an international, interdisciplinary community of professionals and training providers;
- Being promoted as training provider in the European PROF/TRAC platform and website.

The commitments of REHVA Members, after joining PROF/TRAC, have also been highlighted:

- Delegating 2-3 professionals who will attend the Train-the-Trainer session;
- Becoming ambassadors of PROF/TRAC platform, using the brand and promoting the scheme;
- Adapting the training courses to the national market (e.g. translation of the material). National standards could be implemented in a later stage;
- Organising the training courses. Course fees can be requested to cover the organization cost and, after the end of PROF/TRAC project, it would be possible to make profit from it;
- Reporting back to REHVA the outcomes of the courses (e.g. number of professionals that were successfully trained).
Discussion and main results

The interest to the project was very high, a lot of questions have been answered and a lot of successful topics have been discussed.

Overall experience of REHVA members who participated in the first Train-the-Trainer course was very positive. All participants find the database very useful due to its clear structure. Skills mapping allows for clear diagnosis of the professional situation on a national market. Knowledge sharing during the course was found very helpful for the development of national course strategies and the participation of different type of professionals from the same organisation has been highlighted as additional value. An example of a Spanish course was also presented to give an idea at how the PROF/TRAC teaching material is used actively.

Multiple discussions between the experts at the TTT course included such topics as:

- How can we share the effort in developing of national courses?
- What professionals to target by the national courses?
- How to attract the professionals to the courses?
- What must be the structure of the national course?
- How can we bring the engineers and architects together?

Conclusion and future work directions in the field

This workshop has succeeded in engaging REHVA members in taking active part to the scheme:

- Four REHVA members (ETE, FINVAC, EKVU and AiCARR) will join the scheme and participate to the 2nd or 3rd TtT sessions;
- REHVA will send the PROF / TRAC Agreement and further information to the interested members;
- ISHRAE (Indian Society of Heating, Refrigerating and Air Conditioning Engineers) has also expressed vivid interest in the scheme.

Acknowledgements

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A special thanks to all the workshops participants without whom the workshop would not have been possible.

References

Further information at www.proftrac.eu
Workshop presentations and photos are available at www.rehva.eu/events/clima2016/clima-2016-workshops/ws-2-proftrac/ws2-presentations-and-photos.html