NEWCOM

New qualification schemes to build high quality

A way to needed & transparent nZEB competences for professionals

Austrian Energy Agency (AEA)
Georg Trnka | December 2020
BUILD UP Skills Initiative
Process in Austria

Endorsed national roadmap
National qualification-platform
Working paper
Status quo report

Development and implementation of new trainings

Set up large-scale qualification schemes to implement missing qualifications for building professionals. Focus on the possibility of mutual recognition between member states.

BUILD UP Skills Austria (11/11 – 05/13)
BUILD UP Skills CrossCraft (11/13 – 06/16)
NEWCOM (09/17 – 11/20)
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Main project activities

• Development of needed qualification schemes for building professionals.
• Implementation of respective “train the trainer” trainings in the participating countries.
• Preparation of mutual recognition of the developed qualification schemes between partner countries.
• Development of strategies to raise the market demand for the developed qualification schemes to guarantee the sustainability beyond the project lifespan as well as the replication across the EU.

By “NEWCOM” the number of blue collar workers with special nZEB competence is increased, the quality of buildings (focus energy efficiency) raised and the market recognition of well-skilled professionals across the building sector in the European market boosted.
Current barriers to the construction of high quality (highly efficient) buildings (new buildings and renovations):

- Insufficient quality assurance (in the field of energy efficiency) in construction.
- Lack of interest on the part of construction companies in increasing the competence of their employees.
- Lack of interest of professionals in further training.
- Lack of demand from building owners for sustainable and energy-efficient buildings.
- Declining demand for personal certification (according to ISO 17024) in the field of building services engineering and the passive house standard.
- At present, there are hardly any offers for cross-craft further training courses throughout the EU.
- Cooperation between different trades is becoming increasingly rare in the building sector.
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Main Results

1. Development of **new training schemes with clear competence descriptions** on the base of units of learning outcomes (ULOs) for
   - **Flat roofing** and waterproofing
   - **Comfort ventilation**
   - **Quality assurance** (planning/construction/operation)

2. Implementation of respective „Train the Trainer“ trainings in the partner countries.

3. Development of the NEWCOM competence database for the Europe-wide comparability of acquired skills.
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New training modules

• **Flat roofing and waterproofing** – acquisition of competences with respect to a “lifelong service approach” such as correct planning and installing of green roofs and renewable energy systems on the roof, avoiding of humidity in the structure of the roof, implementing of energy efficiency measures on the roof as well as further nZEB features.

• **Comfort ventilation installation** – acquisition of competences regarding correct planning and installing of ventilation systems with heat recovery, noise protection and controlled air flow distribution as well as smart demand controlled systems.

• **Quality assurance** – acquisition of competences in terms of managing of cross-craft interfaces, ensuring of indoor air quality, quality of thermal building envelop and energy system, optimizing of the building as to energy use and ecology, and evaluating of the cost-optimal measures in view of the life cycle of the building.
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Implementation of „Train the Trainer“ trainings

Number of participants

Comfort ventilation | Flat roof | Quality assurance
---|---|---
Austria | Netherlands | Slovakia | Hungary

153 Participants

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Foto: © EASt
Foto: © TNO
Foto: © TNO
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Competence database

- **Aim** is a Europe-wide comparability of acquired skills.
- **Competence database links the skills acquired** by further education **to the professional.**
- A professional card can be **issued** on base of the acquired skills.

The **NEWCOM competence database** can be expanded to nearly every field of work and could be used throughout Europe.
Functions
Competence database

1. **Linking** of the **acquired skills** to the **professional**.

2. **Presentation of acquired skills** in a **validated format** (professional card).

3. **Clear competence descriptions** on the base of units of learning outcomes (ULOs).

4. **Comparability of content** of different trainings/training modules.

5. **Possibility to search for professionals with specific competences**.
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Competence database

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2. Presentation of acquired skills in a validated format (professional card).

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BUILD UP Skills advisor app & NEWCOM competence database

- The **BUILD UP Skills advisor app** was developed with support from Europe’s Horizon 2020 programme and first released in 2015. The **purpose** of the BUILD UP Skills advisor app is to provide construction workers with job-specific advices and short upskilling opportunities.

- By the **linkage** of the **NEWCOM competence database** to the **BUILD UP Skills advisor app** a proven user interface is used for the presentation of acquired skills in combination with further education trainings.

BUILD UP Skills advisor app
National pilot version (Austria)
Functions
Competence database

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2. Presentation of acquired skills in a validated format (professional card).

3. Clear competence descriptions on the base of units of learning outcomes (ULOs).

4. Comparability of content of different trainings/training modules.

5. Possibility to search for professionals with specific competences.
Harmonized competence description
Clear description of training content on basis of ULOs

- **To enable** the international *comparability of trainings* the *content* of training modules *has to be created on the basis of units of learning outcomes*.
- The *database* offers a flexible methodology that *allows the definition of professional activities, related skills, and required competences* in the field of the construction of nZEBs.
- It is *composed out of tasks and related subtasks that have to be performed on a certain time in a process* and by (a) certain person(s) with a certain skillset.
- On base of this methodology the *NEWCOM project developed specific ULOs for the description of competences going together with the new developed training schemes*. 
Compare function
Compare content of trainings/qualifications

Because the trainings, training modules and qualifications of the NEWCOM competence database rest upon harmonized competence descriptions an international comparability of trainings gets enabled. These competence descriptions can be viewed and compared by the database users.
Search function
Search for professionals with specific competences

As soon as a professional has proved his competences in connection to a training or qualification the professional can be found by companies and end users.

The professional can show his/her new competences convincingly on the labour market.
NEWCOM competence database
National pilot versions online

https://api.buildupskillsadvisor.eu/login/auth
Benefits

Competence database

• Building professionals can link their earned qualification to their profile in the NEWCOM competence database and produce an individual professional pass showing their competences. This enables building professionals to present their skills on the job market in a comprehensible manner.

• Developed further educations based on the harmonized competence descriptors enables company owners to clearly identify the up-skilling of their employees according to the new training courses.

• To ensure a high implementation quality on the construction site, specific requirements for the qualification of the workforce can be proven by using the NEWCOM competence database.

• The competence of companies who employ skilled professionals is be made visible by the NEWCOM competence database for quality-oriented costumers.
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Disseminations activities

• National und international project websites
• National und international workshops and events
• Publications, newsletters...
• Flyers, Post cards, rollups
• Give aways (measuring tapes, Polo-shirts...)

Further information on the project: www.newcomtraining.com
Project consortium

Coordinator

• Austrian Energy Agency – Austria

Partners

• Energy Agency Styria – Austria
• 17&4 Consulting Ltd. – Austria
• ÉMI Non-profit Limited Liability Company for Quality Control and Innovation in Building – Hungary
• ViaEuropa Competence Centre – Slovakia
• Innovation for life – The Netherlands
• Dutch Knowledge Centre for the building and building services sector – The Netherlands
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Interactive part

Questions to audience

1. What are your experiences with the description and harmonization of competences (units of learning outcomes)?
2. Would it be necessary to describe all occupations by ULOs or would it be sufficient to describe only qualifications according to the further education of already skilled workers?
3. What are your experiences with national or European databases for personal recognition of skills/competences?
4. Does an increased personal recognition of skills of building professionals has automatically a stimulating effect on the market demand on highly energy efficient buildings?