



Dedicated to stimulate demand for sustainable
energy skills in the construction sector

www.busleague.eu

Report:	D4.2 Established Energy Skills Quality Repository
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CHANGE RECORDS

Version	Date	Author	Changes
Version 0.1	4-11-2021	Jan Cromwijk	Deliverable Outline
Version 0.2	2-3-2022	Layla van der Schaaf (ISSO)	First draft of D4.2
Version 0.3	2-3-2022	Jan Cromwijk	Review of the first Draft
Version 0.4	20-4-2022	Jan Cromwijk	Further elaboration
Version 0.5	15-6-2022	Jan Cromwijk	Added EU and NL implementation
Version 0.6	12-9-2022	Manuel Esteban	Added French input for final draft
Version 1	12-9-2022	Jan Cromwijk	Final quality check Finalised deliverable

SUMMARY

Each country in BUSLeague provides learning content and access to learning content for construction workers, specialist workers, professionals, DIY homebuilders and members of the supply chain. The BUILD UP Skills advisor-app content catalogue functions and the possibility to link content with relevant tasks and subtasks will be used to make the repository easily accessible. This also opens the way for issuing digital experience points, recognitions or skill badges. Requirements for learning analytics defined in BUSLeague will be implemented in order to evaluate the usefulness of the repository.

I Introduction to the BUILD UP Skills advisor-app

In this chapter first an introduction is given on the BUS-app functionality for implementation of content repositories

1.1 Introduction to BUS-app content repository functionality

The BUS-app content repository has multiple functionalities. These will be discussed in the following paragraphs.

1.1.1 How to map content in the BUS-app content repository

The content is mapped in the following sequence:

1. Create a specialism you want to recognize
2. Create a profession you want to recognize
3. Create a sector the profession is linked to

This is further described in the BUS-app manual in [chapter 9](#).

1.1.2 How to find content with the BUS-app

Participants have two options to search for content:

1. Based on a specific interest

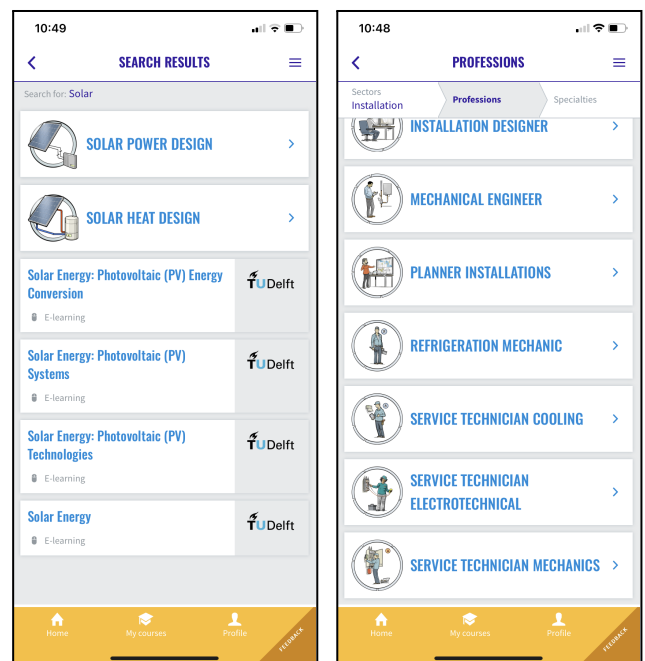
The participant can use the search bar if he/she knows a concrete topic about which he/she wants to upskill.

This function can be found at the top of the start screen.

2. Based on profile

The second option is to search for topics that are related to the specific profile of the learner. Relevant content is recommended based on the learners' sector and profession.

This function can be found at the start screen.



1.1.3 How to register the use of content in the BUS-app

Learning institutes and organisations can upload content by selecting 'courses' at the top menu.

This is further described in the BUS-app manual [in chapter 4.8](#).

IE

New course +

Sectors

Professions

Specialisms

Courses

Institutes

Accreditations

Sources

Type

Name

Institute

Next click on ‘New course’ to create a new course item.

Fill in the details needed. When a course is published by a course provider, then the region admin needs to approve

IE

New course +

Sectors

Professions

Specialisms

Courses

Institutes

Accreditations

Sources

Status

DRAFT

Language

English

Select a language the content has

Name

Solar installer

Add a name

Description

The purpose of this award is to equip you with the relevant knowledge, skill and competence to implement micro scale solar photo-voltaic (p-v) projects, up to 11 kilowatt, according to the applicable standards, legislation, guidelines, and manufacturer's specifications, whilst working autonomously.

Add a description

Type

Course

Select a course type

Collection

☐ Construction Worker Skills

The Construction Worker Skills Register encourages engagement in training and skills development within the building sector.

Select a Collection

Institute

Chevron training

Select a training institute

Website

https://chevrontraining.ie/solar-pv-course/

Add a link to the website

Accreditation

SEAI

Select an accreditation, when applicable. If a qualification is linked it can be downloaded

Specialisms and technologies

Design solar power systems

Link to Specialisms

Based on the links the professions list is populated

Professions

Service monteure-installatie

Unlink professions not within the target group AND/OR link to professions not linked to the specialisms selected

Exam

When applicable add a link to an exam

Points

For completing course

400

Enter the number of retraining points

0.5 day = 50 points

1 day = 100 points

2 day = 200 points

3 day = 300 points

max 900 points for 9 days or more

Add a number of XP

Save

Publish

1.1.4 How to recognise persons with the BUS-app

In the BUS-app you can accredit the learner by selecting 'accreditations' in the top menu.

The screenshot shows the 'Accreditations' form in the BUS-app. The left sidebar contains a menu with options: Manage, Regions, Courses, Questions, Inspections, Users, Tour, EULA, and Qualifications. The top navigation bar includes: Sectors, Professions, Specialisms, Courses, Institutes, Accreditations (selected), and Sources. The form fields are: Name (NEWCOM nZEB Flatroofer), Picture (NEWCOM logo with text 'New qualification schemes to build high quality'), Website (https://www.newcomtraining.com/index.php?id=15), Contact (empty), E-mail (empty), and Qualification scheme (a dropdown menu showing 'Qualification test 1 taak min 1 subtaak', 'Qualification test 1 taak min 1 ulo', 'NEWCOM Building Inspector Testpublicatie', and 'NEWCOM Building Inspector Test 2'). A 'Download' button is next to the dropdown. A 'New accreditation +' button is in the top right corner.

Next you can fill in the different information fields.

The screenshot shows the 'Accreditations' form in the BUS-app for 'KNX opleidingscentra'. The left sidebar menu is the same as the previous screenshot. The top navigation bar includes: Notifications, Sectors, Professions, Specialisms, Courses, Institutes, Accreditations (selected), and Sources. The form fields are: Name (KNX opleidingscentra), Picture (Browse button and KNX logo), Website (https://www.knx.org/nl/gemeenschap/opleidingscentra), Contact (empty), Email (info@knx.nl), Professional card section (Qualification scheme: NEWCOM Building inspector (1 aug 2018) with a download button; Expires after: 3 years; Professional card layout: Q NEW with an edit button), Title (empty), and Pass name (empty).

This is further described in the BUS-app manual in [chapter 4.6](#).

If accreditations or recognitions for courses or course providers are available, they can be added. An accreditation can be linked to a qualification by linking it to a published qualification. When linked to a published qualification scheme personal recognition cards can be issued.


The screenshot shows the top part of the 'Accreditations' form in the BUS-app. It includes a dropdown menu for 'IE' (Ireland) with a flag icon, a 'New accreditation +' button, and the top navigation bar with: Sectors, Professions, Specialisms, Courses, Institutes, Accreditations (selected), and Sources. Below the navigation bar is a 'Name' label and an empty text input field.

Click on the button 'New accreditation +' and fill in the required fields.

New accreditation +

Sectors Professions Specialisms Courses Institutes **Accreditations** Sources

Name

Picture 

Website

Contact

E-mail

Card

Qualification scheme

Expires after

Optional: Select a to be recognized qualification and layout for a Skills-card linked to the accreditation

When an accreditation is linked to a recognition a Skills-card can be added.

Card

Qualification scheme

Expires after

Card layout

Title

Pass name

Layout name

Header image
 Max 800px wide and 100px high

Background color

Primary color

Footer image
 Max 800px wide and 100px high

QR code for validation

Logo from accreditation

Color for ECVES

Select a published qualification scheme for personal recognition

Set expiration date

Select or create a skills-card layout

NEWCOM New qualification schemes to build high quality

Competence Card

Pass name

Jan Cromwijk @ ISS01

Jan Cromwijk

date of birth: 1 February 1977

NEWCOM

valid from **28/9/2020** to **28/9/2023**

nZEB ventilation designer

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1.1.5 How to find recognised persons with the find your craftsman website

This is further described in the BUS-app manual [in example 14](#)

1. Find recognized persons

When all steps are done, you can find recognized persons on the mobile app available at: <https://testapi.buildupskillsadvisor.eu/expertSearch/index/3?language=en>

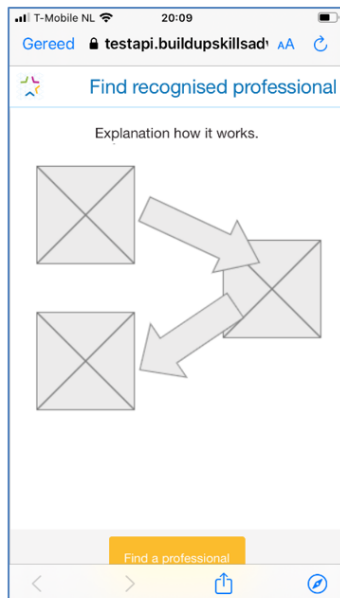
The region number of AT is 363197.

<https://testapi.buildupskillsadvisor.eu/expertSearch/specialisms/363197?language=en>

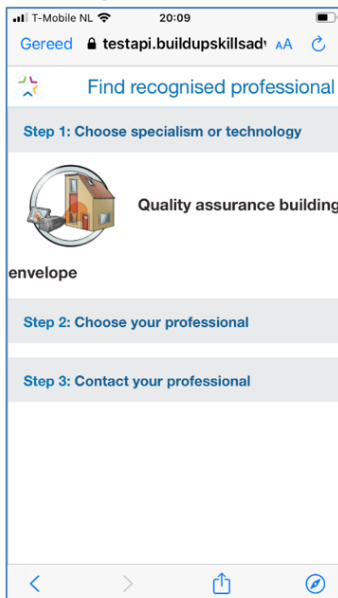
Other region numbers in the TEST environment are:

Ireland	314941
Slovakia	363342
Hungary	363354
The Netherlands	1
Spain	4

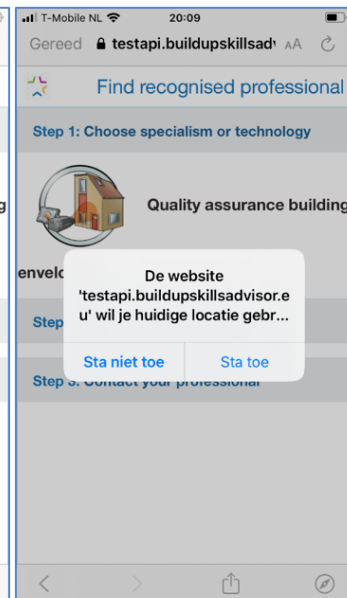
Home screen



Select specialism



Give access to location



Find recognized person

T-Mobile NL20:09

Gereedtestapi.buildupskillsadAA

Find recognised professional

Step 1: Choose specialism or technology

Looking for professionals recognised with Quality assurance building envelope

Step 2: Choose your professional

1 results found

ISSO Jan Cromwijk

Step 3: Contact your professional

<>🔗📝

Contact recognized person

T-Mobile NL20:09

Gereedtestapi.buildupskillsadAA

Find recognised professional

Step 1: Choose specialism or technology

Looking for professionals recognised with Quality assurance building envelope

Step 2: Choose your professional

Picked ISSO Jan Cromwijk, 0km away

Step 3: Contact your professional

ISSO Jan Cromwijk

✉ jrcromwijk@gmail.com

☎

📄

Add to contacts

<>🔗📝

2 Implemented content repositories in the BUS-app

In this chapter first an overview is given of the implemented content repositories and recognition in the BUS-app.

2.1 Content repository on EU-level

For required skill-levels the [skill-levels defined in the PROF/TRAC project](#) will be added to the professions in the EU-region. This will be done in Q3 or Q4 of 2022.

Also an update will be done on the upskilling supply in English available at EU level.

Furthermore all partners will indicate relevant courses available at the EU-level in English for use in national contexts. For example e-learning available in English in the Construction [Blueprint project Online Courses - Construction Blueprint](#) for line MOOCs and at [Course InformationBIMzeED](#) at TUS.

2.2 Content repository on AT-level

In Austria, BUSLeague makes use of the existing BUILD UP Skills advisor-app implementation. Actions specifically undertaken in Austria are:

1. Updating the course catalogue together with the education provider (Energy Agency Styria) inline with the new developed courses for energy advisors.
2. Promoting the app to the trainees of the new developed and implemented courses in Austria to guarantee that the foreseen number of new registrations can be reached.
3. Further promotion of the app and exploring how the app could be used as a mutual recognition register for upskilling in Austria.

2.3 Content repository on BG-level

In Bulgaria, BUSLeague will make use of the structure and content of the BUILD UP Skills advisor-app by:

1. Using the course catalogue to support training activities for various construction sector professions together with the Bulgarian Construction Chamber.
2. Presenting the app's functionalities to initiate, develop and endorse a system for continuous professional development
3. Integrate app's functionalities and content, especially as regards micro-learning, in existing online learning tools
4. Explore opportunities to support personal and mutual recognition and to develop a skills register under the auspices of the Bulgarian Construction Chamber

2.4 Content repository on ES-level

Spain, in the framework of the PROF/TRAC project in 2018, supported the BUS-app in defining skills-levels and professions, as well as translating some content into Spanish. Currently in 2022-2023, BUSLeague will experiment with the BUS-app again to learn about new functionalities and explore opportunities to enrich the existing training ecosystem in Spain.

Actions specifically to be undertaken in BUSLeague are:

1. Linking the BUS-app with the new e-learning contents developed for BAUHAUS employees in the implementation pilot in Spain.
2. Experiment with the live register of professionals.
3. Explore the integration of existing Moodle courses into the BUS-app.
4. Promote the BUS-app to key actors to learn from this experience and adapt it to the regional context.

2.5 Content repository on IE-level

In Ireland, BUSLeague makes use of the existing BUILD UP Skills advisor-app implementation. The app was originally developed in 2019 as part of the Sustainable Energy Authority of Ireland (SEAI)'s funded project, BUNRS with support from ISSO.

Actions specifically undertaken in BUSLeague are:

1. Updating the catalogue of upskilling supply by reaching out again to education providers. This includes adding new courses focusing on both energy efficiency and circularity.
2. Promoting the app to public and private training providers through direct emails, phone calls and other projects the partners are involved in. E.g. [DASBE](#).
3. Promoting the app within the industry. This will be done through collaboration with DIY/Hardware stores, and professional representative bodies such as Engineers Ireland, the Royal Institute of Architects of Ireland, the Society of Chartered Surveyors of Ireland and the Construction Industry Federation. TUS works closely with VET providers and the app is a regular topic of conversation from the point of view of creating a pathway for learners particularly around micro credentials. The IGBC will also promote the app among its membership.
4. Testing the interactive tools and functionality available through the app (E.g. MCQs) to create a greater level of engagement.
5. Actively exploring how the app could be used as a live register of building professionals and construction workers who have upskilled in energy efficiency and circularity.
6. Encouragement through BUSLeague partners of the app's potential in the space of personal and mutual recognition through recognised micro credential capturing and storage.

2.6 Content repository on FR-level

In France, BUSLeague creates an opportunity to implement the BUILD UP skills advisor-app in the energy efficiency building sector. This tool represents an improvement opportunity, but also a challenge. The sector faces constraints in terms of the motivation of the workforce and the academic path of the effective hired workers. Given this, the implementation of these kinds

of technologies requires, more than convincing the workers to use the app because of its advantages, to encourage the blue collars to actively use apps in their learning processes and for their profession. Following this statement, the strategy in the short term should focus on the divulgation, framed in the creation of a demand for professionals through the app, and in future steps, linking this demand with an active growing offer of certified workers using the app.

As so, the actions specifically undertaken in BUSLeague are:

1. Divulging the existence and functionalities of the app during the awareness interventions for the general public in the DIY stores. For this, it is proposed that, during the intervention at the DIY stores, the hosts invite the people to download the app on site. [Detail: This seeks to create the demand from the customers as an incentive to use the app.](#) [Functionality target: Finding a recognised professional.](#)
2. Promoting the app between the project managers and exposing to them the advantages for training and skill recognition profiting regional sector or labour policy meetings. For this, it is proposed to contact the labour market-related organisations (Employment houses, guilds, Skill operators) and ask them for spaces of 5 min in a *clause or project evaluation meeting* to present the app and its main utilities. This, addressing mainly to the worksite supervisors. As well, it would be useful to share publicity via mail and linkedIn about the app. [Detail: This seeks to create the demand from the employers as an incentive to use the app.](#) [Functionality target: Content repository.](#)
3. Presenting the app to the blue collars during the training interventions that will take place in the partner DIY stores and encouraging them to download it. [Detail: This seeks to create the offer from the blue collars.](#) [Functionality target: Content repository and Finding a recognised professional.](#)

2.7 Content repository on NL-level

In the Netherlands BUSLeague makes use of the existing BUILD UP Skills advisor-app implementation. Actions specifically undertaken in BUSLeague are:

1. Adding the BUSLeague qualification in order to provide proper linking of upskilling content with relevant learning goals and in some cases recognition schemes.
2. Updating the catalogue of upskilling supply by reaching out again to upskilling providers and signing cooperation agreements on that.
3. Experiment with the micro-learning facilities the BUS-app offers.
4. Experiment with other app's and websites delivering micro-learning services
5. Linking the BUS-app with new e-learning content specifically developed for the Dutch implementation pilots.
6. As formal recognitions are stored in the Netherlands in a branche register (Centraal Register Techniek) we explore the way on how to add upskilling progress to this register.



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