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D.6.1 Package of testing materials for qualifications recognition scheme and maturity level

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D.6.1 Package of testing materials for qualifications recognition scheme and maturity level

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Colophon

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Glossary

BIM – Building Information Modelling

BIM-EPA – BIM Energy Performance Alliance

BEM – Building Energy Modelling

CPD – Continuous Professional Development

GSL – Guided Self Learning

ICT – Information and Communication Technologies

NZEB – Nearly Zero Energy Building

PBL – Project-Based Learning

WP-Work Package

D – Deliverable

MS- Milestone

WIP-work in Progress

BMC- Belfast Metropolitan College

IST-Instituto Superior Técnico

LO- Learning Outcomes

OA- Ordem dos Arquitectos



Abstract

This report explores the approach and methodology for selecting a package of materials regarding the representation of the *Qualifications Recognition Scheme and Maturity Level* - being developed by WP 3, with direct contribution from other WPs (refer to ARISE deliverables 3.1 and 3.2 reporting), with the objective of conducting testing with market stakeholders.

It will summarise the proposed strategy for ARISE presentation and demonstration of the concept, and format of the *Qualifications Recognition Scheme and Maturity Level*, in both Consortium, and associated partner's countries.

It will further identify the type of research data to be collected, and identify a possible range of participants, for this first stage in ARISE's overall *direct market stimulus to increase demand for upskilling in sustainable energy skills* strategy.

This is to be the first pre-production stage for testing ARISE's overall methodology, and, in detail, the tools for maturity assessment, and consequent tailored signposting of users to a tailor fit pathway of qualifications scheme for recognised competencies.

The work developed here is directly and indirectly associated with WP 6 two main objectives:

- 1) *Validation of the developed matrix of competences and qualifications to increase market competence, including digital tools of delivery and certification, in terms of meeting market demand and industry needs concerning transferability and recognition.*

- 2) *Build the capacity of the market drivers and actors, on both demand and supply side, to appreciate the benefits of the developed digitalisation skills and certification program, and to apply them in mutual collaboration.*



The package of materials is intended to be presented to market stakeholders, for testing and feedback, thus providing improvements as necessary. This should increase long term impacts, as well as create a positive reception towards it, from the market stakeholders. This addresses objective 1.

While being presented with the proposed format of the *Qualifications Recognition Scheme and Maturity Level* – and its designed Framework, several actors will be introduced to the concepts and benefits of digitalisation skills (BIM in particular), and associated energy efficiency.

Also, following introduction to the ARISE certification program, participants will recognise and understand its significancy and advantages in terms of recognition and validity of skills, improvements of the workforce, and contribution to increase in employability and job mobility.

This addresses both objectives 1 and 2.



1. Introduction

This report is part of Task 1 of WP6 - *Development, Quality Control, and Deployment of sample competences training scheme package*. It is connected to and builds towards the achievement of Stage 1 of *milestone 6.1 - Completion of initial testing of concepts, methodology and matrix of competence*. It includes pre-production and readiness for market testing of the competences/ qualification scheme matrix (in collaboration with WP3, WP5).

WP6 and D.6.1 Goals are:

- 1) To confirm: *Suitability of maturity level matrix and framework content, as well as training material approach, methodology & Format.*
- 2) To confirm: *Benefits and impact of the application of acquired skills.*
- 3) To facilitate the follow-up Feedback (D 6.2) and recommendation to other WPs for improvement of their outputs.

2.Scope and context

2.1 Integration, inter-relation, interdependency, coordination, and synergies with other ARISE WPs deliverables

WP6 works closely, and interdependently with other WPs, particularly WP3 and WP5 deliverable outputs, to inform 6.1 deliverable of selection package.

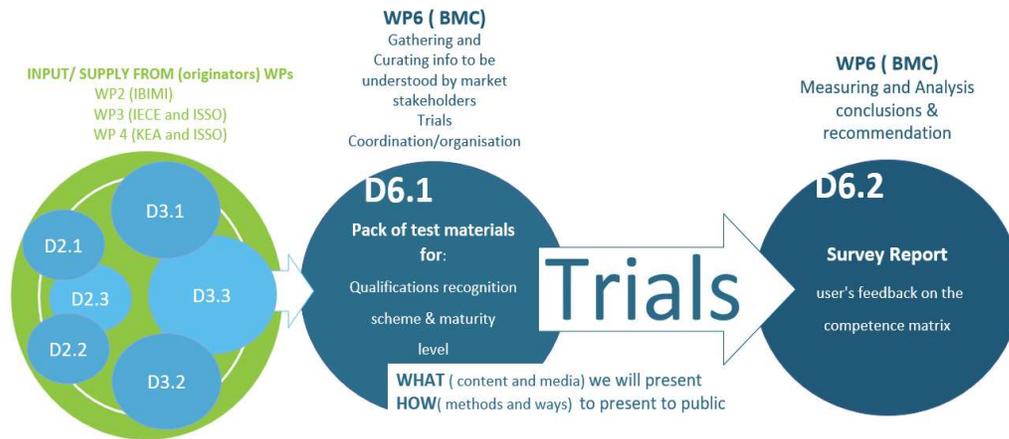


Fig 01. Diagram of Deliverables Sequence workflow, interdependency, and interoperability

WP6 have compiled a selection of materials to present to the public to clarify D3.3 output and collect feedback accordingly. Specifically, the deliverable 6.1 consists of development of pilot samples of the matrix of competencies and learning outcomes. However, following review we have embedded several inputs from different WPs to provide context and illustration of application. We have moderated concepts from the qualification's framework defined by WP3, and related training and assessment materials developed by WP5, for the ARISE pilots. Findings from WP2, provides the context in which ARISE operates, identifying the target audience from the onset, including the aims of ARISE, how it relates to other EU implemented qualifications and certification's, enabling comparison and correlations.

practical application to stakeholders. This will enable users to understand the practical applications and impact on learning of the maturity level-based skills and qualifications developed in ARISE. Furthermore, we believe it would provide more meaningful feedback, whilst optimising interest in the project, and is strategy to avoid user fatigue as outlined in 2.5 below.

Following collaboration with WP5 to produce a small sample of training materials, in conjunction with their presentation and visualisation of the proposed framework and its task-based concept; it is intended that this will provide the target audience with a clear vision of the correlation between the framework concept task-based activities and learning outcomes, alongside practical training application.

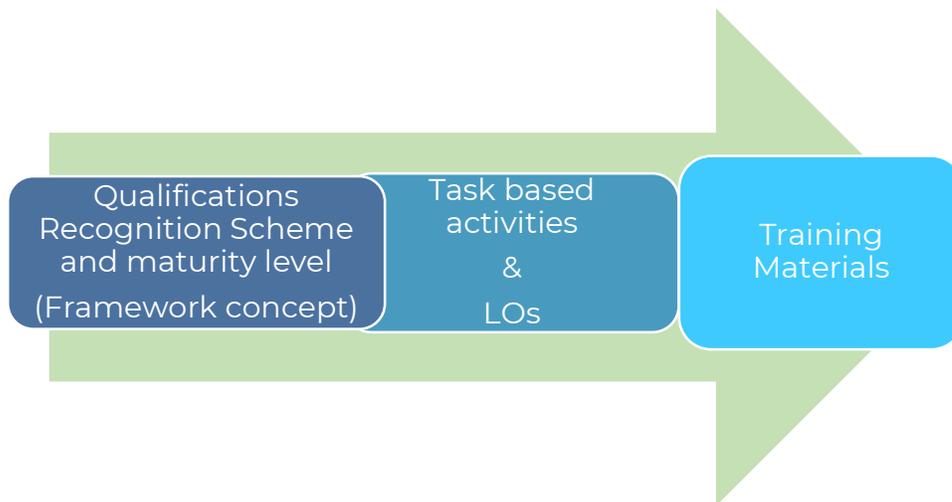


Fig 03. D6.1 Conceptual contents to convey to target audience

The selected materials for the initial stage of testing, includes covering areas, such:

- Basic BIM terminology and methodology
- Essential Digital Skills
- BIM and Digitalisation benefits (with emphasis to sustainability and energy efficiency and cost savings)
- Basic BIM Modelling intro



These topics, and associated materials, are suitable for online and blended delivery, thus compatible with a CPD format and enabling the ARISE micro module approach. The samples will also be offered with from EF level 1 to 4, in response to target audience. It is planned that regardless of previous academic experience, this will make it more accessible to both white-collar works, and non-technical audience (example clients). However, this will be subject to further review later within the project lifetime.

2.2 The Test subject

As previously indicated this report aims to define a strategy and methodology for the initial approach and material selection, including collation of some of future testing. This will test the ARISE task-based qualification framework, which forms the baseline for the *Qualifications Recognition Scheme and Maturity level*; and the *D3.3 Qualification framework of sustainable energy skills leveraged by digitalisation including BIM*. These are a direct result of the work developed by WP3, based on initial outcomes of task 3.1 and deliverable 3.1 - *Levelling skill maturity, followed by deliverable 3.2 Maturity based model of digitization skills in sync with sustainable energy skills, which is finalised in Deliverable 3.3*.

It is based on the qualification method of *task-based skills/Unit of Learning Outcomes framework for renewable energy*, where digitalization is the key accelerator, with special focus in BIM.

The ARISE framework is being designed to take account of, and to align with BIM maturity levels (also known a BIM Stages in ISO 16950). The concept of WP3 is to cater for main AEC professions /roles/ categories (designers, contractors, clients, public administration), throughout the building life cycle (design, construction, operation), for an inclusive reach to maximise market impact. Task 6.1 preparation and selecting a sample of materials for a trial package regarding matrix of competencies, learning outcomes, training models, and methodology (Deliverable 6.1), will enable evaluation of the framework.



WP6 *competences/qualification scheme matrix trail's materials package* is intended to specifically test the proposed *Qualification framework of sustainable energy skills leveraged by digitalisation incl. BIM* (mainly outputted from Deliverable 3.3). It will specifically include presentation materials referring to:

- matrix of competencies overall concepts (WP2 & WP3)
- Framework of competencies (WP 3)
- learning outcomes (WP3)

And additionally, in following stage/ deliverable, the

- training models and tools (WP5)
- training Methodology (WP5, enabled by and in WP4 platform)

The work of WP6 is closely linked, both a precursor and interdependent on work developed in WP5, relating to training materials. These will directly link to the framework, specifically with *Task 5.2 Design of a selection of initial set of learning materials and assessment strategies for trials*.

It should also be noted that the work developed in WP2, is a contributor to WP6 as it sets premises and gaps to which WP3 frameworks aims to address. This includes

- D 2.2: First overview of EU directives implementation report - document detailing relevant EU directives and alignment with ARISE direction
- D 2.3: First overview of the national/regional qualification framework report- document detailing EU frameworks and gaps for ARISE to address.
- D 2.4 : First overview of other EU wide certification schemes report - overview of other EU wide certification schemes report detailing schemes and gaps for ARISE to address.
- D 2.5 : Overview of pathways of integration of previous EU project resources report- Overview of pathways of integration of previous EU project resources report. Report on gaps and methodologies for ARISE to address.



As part of task 6.1, and related to deliverable 6.1 output, a continuous review of the development of all these points, along with associated tasks, and their respective reports was conducted. This considered and integrated the key findings, as a summarised context, within the Framework for future trials. This is also dependent on specific audience, time of interventions, and format (e.g., live workshops, or online videos, which will be adapted accordingly).

2.3 Trial's package Target audience

The intended target audience matches the grant agreement descriptions, as outlined in *Table 1: ARISE Measurable Objectives in and Key Performance Indicators (KPIs)*: "AEC industry individuals, professional associations, SMEs, and other AEC stakeholders, such as owners and Public authorities". This is cross referenced to D3.2 matrix definition of profession roles and categories. However, sample of testing will initially focus on cohorts, to enhance focus and facilitate initial reach. This will be detailed further in 2.4 below.

The following is an example of an excerpt of a stakeholders and categories table, as defined in *D3.2's Maturity levels skills mapping spreadsheet*.

Profession	ARISE Category
Civil Engineer	Contractors
Mechanical Engineer	Designers
Electrical Engineer	Designers
Structural engineer / Construction engineer	Designers
Data analyst / Software engineer	Designers
Landscape Architect	Designers
Material Purchaser / Material Scout	Contractors
Project Manager	Contractors



Onsite Manager	Contractors
Foreperson	Contractors
Procurement Coordinator (Tenders)	Contractors
Building Owner / Operator	Clients
Project Developer	Clients
Financial Manager	Public Administration
Building Energy Consultant	Public Administration
Policy Maker	Public Administration
Public Procurement Advisor	Public Administration
Building Inspector	Public Administration
Quantity Surveyor	
Engineering Manager	

2.4 Deliverable 6.1 examples of ARISE related Targets & KPIs

As per the grant agreement Objectives and KPIs, our ultimate ambition is for our target audience to matches the reach grant’s number descriptor: *“AEC industry individuals, professional associations, SMEs, and other AEC stakeholders, such as owners and Public authorities”*

At end of project, we are aiming towards a reach of *“1000 upskilled. Measured by register of participation in upskilling initiatives in a variety of formats such as events (virtual), website, social media interactions, uptake in courses and modules on ARISE platform training.”*

Therefore, our trials aim to start to address this directly, and help recruiting these 1000 upskilled individuals. We have also incorporated and embed components of digitalisation awareness and upskilling within the materials. This will enable these activities (trials), to be registered retrospectively on the ARISE platform, as these

become an upskilling activity. The package also includes other objectives related to the target audience, including:

- Obtain Support, and/or recognition and endorsement by professional organisation, or workers' associations for the ARISE programme, and/or engagement with such entities, for endorsement of ARISE programme,
- Active engagement across a range of AEC sectors. Active engagement with at least 15 national professional organizations and workers' associations to gain endorsement/ support for Arise, and/or number of agreements signed, and/or individual companies and SMEs in all partner countries and across Europe.

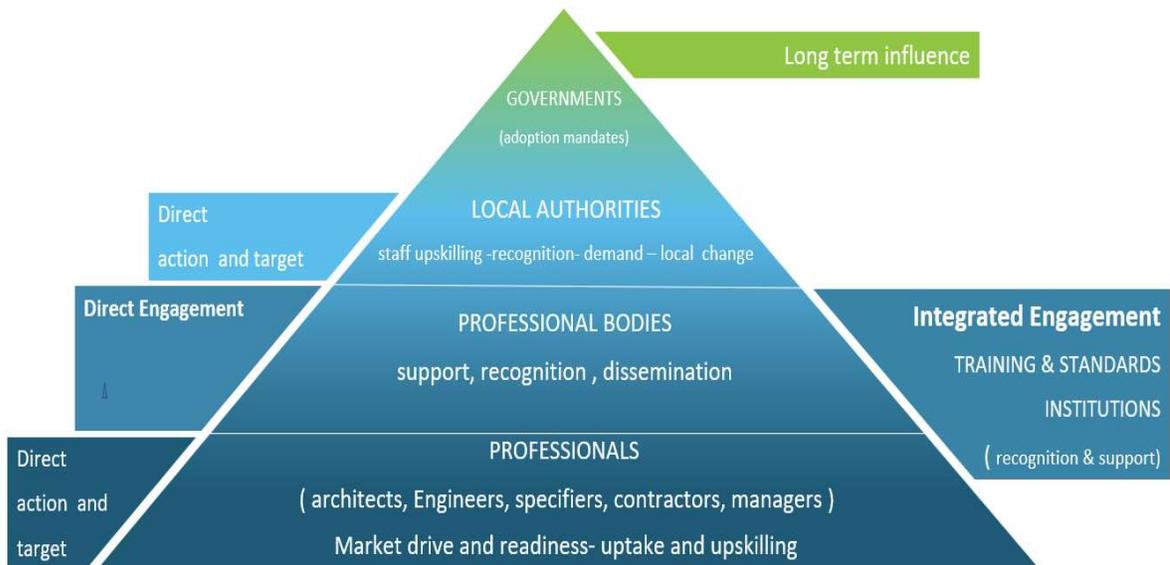


Fig 04 Target Audience

The 6.1 trials will engage with those specific audience, as a first contact between them and ARISE, and request for support and engagement.

For example, early contacts were made to start building relation and collaboration, as detailed further in 3.1 below.



2.5 Testing expected Barriers & Mitigation strategies

2.5.1. Lack of Audience Reach and participation

The ability to build required audience number, as per project objectives, and achieve tracking and engagement of AEC professional for the project can hinder WP6's ability to present and test the project deliverables. However, as one of the risks previously identified by Project Management, Communication and Dissemination Team, the strategy devised and being implemented by WPs 1 and 6, should in time mitigate this risk, helping WP6 to achieve its audience.

In this initial testing, we require a significant but limited (although representative) sampling, to validate results of research/ feedback survey regarding framework. Regardless, a high engagement and participation in these trials is still our preference and goal. We will endeavour to achieve as many stakeholders as possible. However, a pre-determined elevated number, as per grant agreement, will only be required at a later stage-when trailing delivery, training contents, and case studies-to ensure market reach and impact related to ARISE Objective and KPIs. Promotion of the trials within participating stakeholders' networks can bring in more audience organically.

Our delivery methodology includes:

- The use of social media channels and the ARISE website, with a landing page, available trial material, and suitable SEO setup.
- Participation in recognised and well-established event will help us reach a wider audience
- The setup, promotion, and deliver of webinars, or live workshops will entice and reach further numbers.
- Engagement with professional Bodies, Educational institutions, and relevant other agencies, requesting support and help in communication and dissemination to their members and networks, will allow ARISE



awareness to grow, and to more easily invite stakeholders to participate in our trials.

- Use of pre-established networks and followers from previous H2020 projects, that are part of BIM EPA, can bring towards ARISE trials, already recurrent interested users.

2.5.2 Lack of interest and resistance to change

Some of the barriers that prevent a more widespread adoption of digitalisations (one of ARISE goals) may be the same. Aside from the lack of skilled workers (the issue ARISE is addressing), many AEC workers are highly resistant to change (Bajpao & Misra, 2021). Authors also highlight staff ageing and generation with a paradigm shift among the technology practitioners are still one of the biggest challenges for its adoption. However, the proposed delivery of the trial materials during the initial phase not relying solely on digital delivery but utilising a blended approach including some face to face actions, intends to reach and convert these more resident workers. Furthermore, the delivery of trials will follow pedagogical best practices and clear communication.

Alemayehu et al. (2021) also highlight resistance to change along with several barriers, including lack of top management support, low awareness benefits, and staff resistance to change. Individual practitioners and organisations often required to be reminded of the need for awareness-raising and up-skilling within the AEC sector. (Georgiadou, 2019). Also, studies indicate that, any proposed change should be managed carefully from a high managerial level, following best practices to ensure effective training for everyone in the team. (Farghaly, et al., 2021).

WP6 approach to address these points include:

- We will endeavour to contact and reach SMEs, and managerial roles, so these can incentivise workers to participate.



- We will aim to clearly highlight the benefits for stakeholders, to achieve more interest and engagement.

We will build our continuous direct market actions/ repeated trial actions it helps to start creating market acceptance and (ARISE) brand recognition, increasing interest and acceptance organically.

2.5.3 Continuous Engagement Fatigue

Related to task D6.1 and this package of materials, although a separate deliverable, is the survey with which we close off the Trials (D6.2). When selecting the materials to present to market stakeholders, including a comprehensive summary of the ARISE Framework, we are mindful of the upcoming survey. Therefore the presentation of samples and the request for feedback is interlinked, with a review of related survey techniques, barriers, and best practice also being undertaken.

Some findings and key considerations, to try and mitigate the barriers, even at an inception stage, that we will adopt:

a) Avoiding Over Surveying

Survey fatigue occurs when individuals or SMEs are continually asked to engage in surveys. Whilst we are seeking multiple organisations to engage in our surveys, it is important to select the right time to use one. A survey should not just be the default, but should be targeted and focused. This had impact in our first approach and required us to rethink and adapt – refer to 3.2. Therefore, we will devise other activities to engage with our target audience, and use surveys to capture hard data towards the end of our consultations.

b) Avoiding Question Fatigue,

Repeated questions, although presented in different ways, or by different groups, excessive or unnecessary questions can frustrate participants, leading to survey drop-outs and incompletions.



To avoid that, we carefully consider the information we require, and formulated focused, targeted questions. We have considered how each question will help in reporting and decision-making, and if not then it will not be included.

Overall Approach:

One of the reasons to delay deployment of testing, until a comprehensive and holistic package was ready, is to build momentum and maximise impact of trials interventions and actions.

Instead of several iterations, continuous and repeated testing/feedback actions, that can fatigue the stakeholders and possibly result in disengagement with the project, we have reduced number of interventions. It is planned that these will be comprehensive and detailed, thus improving the potential engagement with stakeholders and obtaining substantive feedback and completion of surveys.

c) Avoiding Long Surveys

Long surveys can make participants tired and reduce attention, resulting in a higher rate of non-completion, reduced responses, and insights. Given that we may wish to gain repeat feedback further in the project, a long survey, may make users unlikely to participate. This would result in loss of important feed should alternations be made to the materials or framework following initial survey feedback.

The aim is to keep our surveys to the minimal necessary questions/points, to increase the likelihood of capturing the information that will be critical to the project outcomes and KPIs. This includes the use of skip logic to take people on a shorter path, so they only answer the questions that are relevant to them. We will also use page breaks to group like questions together. Participant's expectations will be managed at the commencement of the survey, including a realistic indication of the time required to complete. expectations and tell your community how long the survey is expected to take before they begin.

We also anticipate the use of smaller workshops and training sessions to provide support to participants and encouragement. For example, this will include:

- User data collected when doing pre-register or to access training materials for the first time. This will be in accordance with GDPR regulations and stored correctly.
- Interactive feedback questions set within the workshop or conference delivery, which will not only collect feedback but engage the audience.
- Within the training materials feedback and survey questions could be including in such a way as to require completion before progressing to the next section or receiving certificate of attendance or completion.
- Questions will be targeted to specific audiences and participants.
- Use of alternative formats, such as recorded forums or discussion boards to compliment the traditional online survey forms. Such discussion boards and forums could be curated to track and manage interventions to extract conclusions.

Challenge- public engagement and reception

How to collect data without causing fatigue (too long surveys?)

Design “rewards” scheme to keep users interacting and continuing with ARISE through the project

E.g.

Could be access to preliminary introduction training?

At later stage, ARISE CPD style “credit” points?

Aim to break surveys down during events and training into bite size chunks., and not as one long full survey at the end.

Users will have to do feedback survey to get a “reward”



Fig 04 Preview of discussion with consortium regarding survey and solutions



d) Avoiding Disingenuous Surveys

Disingenuous responses can produce to biased results and compromise the validity of the data collected. To prevent this, we tried to avoid many questions directing to a specific a preferred option, with no trainee input. We have opened to two-way engagement, then you are probably better off just informing your community through good communications.

All these survey techniques and decision will be explored and clarified further in D6.2 report.

2.5.4 Type of data to collect

The selection of materials will stimulate market stakeholders and enable them to provide feedback that is both qualitative and quantitative in nature. We will aim to also collect demographical data in relation to trial participant, to better tailor our replies and improvements to specific audience roles and needs.

Detail on Data collection will be addressed in future D 6.2 Report

3 Material package -Approach -Implementation- Methodology and Selection

3.1 Inception works- early intended approach:

At the initial stage, we had formatted and compiled information for a preliminary internal planning session with Consortium partners, highlighting methods and medium to best present the framework to stakeholders. This, and further continuous updates, were presented during Partner's meetings in Rome, North Macedonia, and Dublin.

We planned at start of the project, to implement a soft-landing strategy throughout, with input and information continuously provided from relevant WPs,



to which our WP6 is interdependent. If approved, this will allow sufficient time to produce the trial materials ready for deployment, when the time comes.

Also, earlier in the project, WP6 intended to present findings and concepts very early to market. So that stakeholders would, from very early stage, contribute and provide feedback. This would result in multiple interaction, with possibly of replication of presentation/ tutorials, lessons, and materials. As noted above (2.5.3) this could potentially lead to survey fatigue.

In June 2022, BMC used direct contact with a cohort of fourteen AEC professionals (mainly white collar-engineers and architects) that were studying in BIM Modelling and Principles. We presented the ARISE project to them, including the then draft concept of the Qualifications scheme, with an early illustration of the 3.2 approach and its explanation, and how that would derive into a framework of qualification afterwards. We asked the cohort to complete a registration form (which captured their demographic details, while respecting GDPR) and indicate their interest in participating in further tests. We also sought their feedback in relation to the skills framework and how it aligned with their own profile, knowledge, role and professional ambitions. We witnessed a lack of engagement to follow up with the registration form despite that, during the presentation session, they seemed interested in the overall

However, clearly having to take a step of completing the online registration form and survey was clearly a step they weren't take at that time. This highlights the outworking of the risks and barrier analysis already noted in this report and resulted in use reassessing our strategy.

3.2 Reassessment Correction and realignment

As discussed, and agreed at the partners meeting in Dublin, September 2022, deliverable 6.1 will continue beyond month 14 to update and improve output, dependant on the availability of outputs from deliverables 3.2 and 3.3. A continuous



process of collaboration and communication between WP3 and WP7, facilitated also with WP5, will contribute to improve D6.1 to its final iteration. This will also assist in producing more impactful trials and follow up feedback.

Presenting WIP concepts and deliverable to public too early, in the case of D6.1 and related D6.2 may be counterproductive. For example, the early contact noted in 3.1, following informal feedback from some learners indicated a lack of follow up due to:

- Too long lead time between presentation and when they would be beneficiaries of produced results and training
- Lack of clarity and specifics in relation to the completed framework, as it was still in development
- Natural resistance and lack of incentive to fill in Survey. It may be necessary in a future stage, to reinforce to users that survey feedback will be a prerequisite for accessing ARISE, and/or to progress to further training and receive final certificate

An early approach to market would be an ideal strategy to maximise project exposure, given the available time, enabling wider reach and high number of professionals. However, the nature of the target audience, with resistance to change, a busy workload, priority for short term benefits, and not long-time commitments, is a barrier to this approach. A slower paced approach, with an engagement plan fully defined and presentable concepts regarding framework may be the best to ensure engagement and participation.

As previously referred in this report, as work progressed and was being developed, especially the interlinked WPs, such as: the WP2 desktop research; the WP3 Framework of qualifications developments; and the WP5 Materials methodology, we realised that it would be preferable to present to stakeholders a more complete, defined, and holistic of ARISE scope. This will allow them to visualise the concept of the qualification's maturity level clearly, alongside possible material and



methodology of training, and how that interlinks with existing, as investigated by WP3. It will have a more meaningful impact, with stakeholders more aware of what they are testing, and providing feedback on. It will provide a more consistent vision, avoiding some early changes and iterations, that are common while concepts are being drafted (WP3 and WP 5) and research is still being conducted (WP2) at early stages, to cause confusion to recurring trial audiences. This will avoid market fatigue regarding consultations, trials, and survey.

The justified delay in the production of WP3 deliverables (D3.2 and D3.3), meant that we weren't in a position for early engagement with stakeholders. However now that detailed information regarding those deliverables is complete, we can organise the final version of materials and direct market action, to obtain effective feedback.

3.3 Strategy to increase number and spread of audience reach

The proposed strategy to increase number and spread of audience includes

- Intensive WP to WP focused collaboration (work groups)
- Compile required testing resources stepped approach- cascade release to public
- Launch actions engage to build numbers
 - YouTube and website hosted videos- promoted via social media
 - White papers and publications
 - Pre-recorded mini workshop/ webinars available 24/7
 - Live/ face to face sessions
 - Engagement with third party partners for further dissemination
 - Extend trial and delivery period (beyond initial delivery report date- number purpose only)

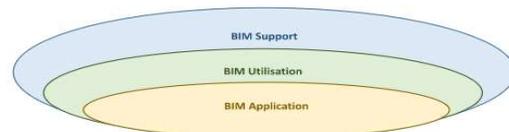
3.4 Preproduction

A continuous revision of other WPs reporting, and coordination actions was conducted. This resulted in a constant selection of WIP developed texts, and illustrations being compiled and updated to form the basis of the materials for market presentation. We have also planned for additional elements and formats, such as short presentation videos on specific components and detailing of the framework. This will be provided by its creators while curated by WP6, with further collaboration required to finalise select training materials for present.

3.5 Proposed Selected Package of Materials

The package of materials will be selected from D3.2 and D3.3, adopted and compiled to clearly illustrate and communicate the concept and specifications. We will utilise the diagrams and visuals developed by WP3, in both deliverable 3.2 and 3.3. For example:

i) Found in Task 3.2.1, *The skills mapping diagram/ table*



ID	Specialism	Group
BA-1	BIM Management	BIM Application
BA-2	BIM Project Management	
BA-3	BIM Coordination	
BA-4	BIM Modelling	
BA-5	BIM Engineering	
BA-6	BIM Programming	
BU-1	BIM data Capturing and Representing	BIM Utilisation
BU-2	BIM Planning and <u>Conceptualizing</u>	
BU-3	BIM Simulating and Quantifying	
BU-4	BIM for <u>Prefabricating</u> and Assembling	
BU-5	BIM for Operating and Maintaining	
BU-6	BIM for Monitoring and Controlling	
BU-7	BIM for Controlling and Extending	
BS-1	Project Data Management in BIM	BIM Support
BS-2	System Administration for BIM	

ii) As found in D3.3 reporting, this Figures 1 and 2, regarding *Tasks, subtasks, and ULOs related to tasks and professionals.*

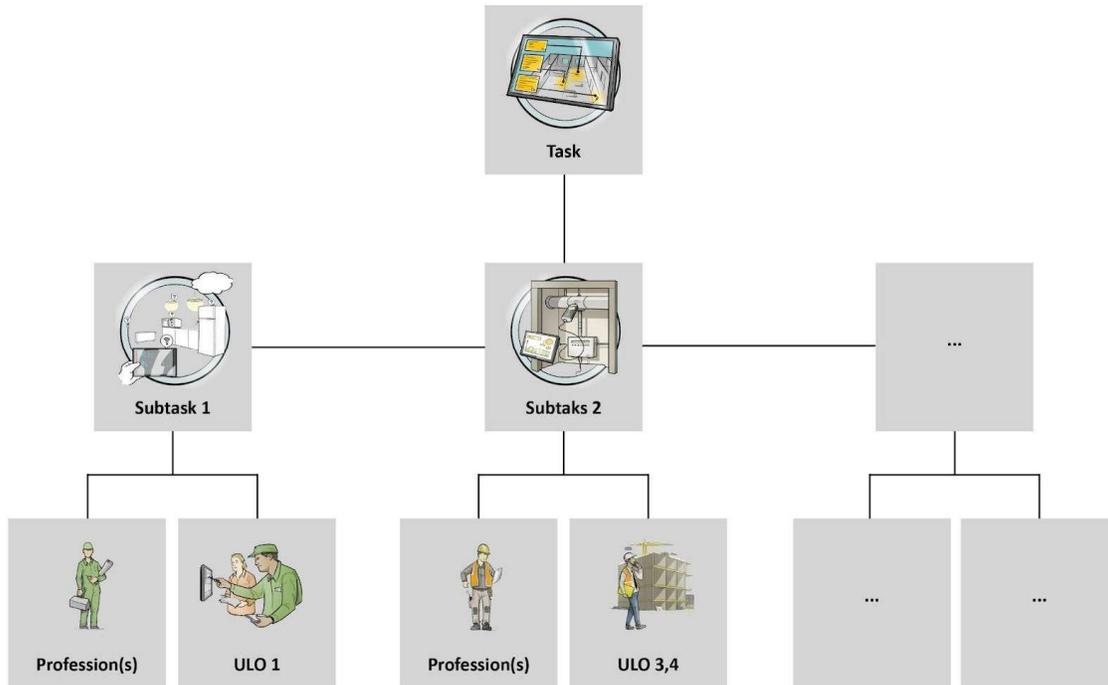


Figure 1. The relationship between tasks, subtasks, and ULOs in the methodology for compiling task-based qualifications.

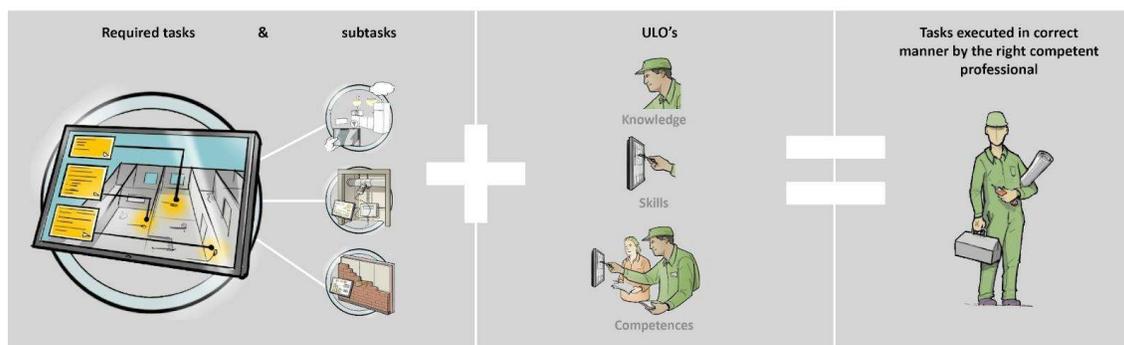


Figure 2. Tasks, subtasks, and ULOs lead the way towards correctly executed tasks by the right professional.



Formats

- Presentation(s)- pdf format converted
- Short video(s) presentations to include
 - General introduction of the concept (suitable for all users)
 - Specific to each role/ profession and tasks

Each to present an appendix summary, that exemplifies specific benefits, and corresponds to training material examples. Short videos should be produced, introducing ARISE's general concepts and the proposed framework of qualification, in general. Video could then be posted not only in our current website, but also in social media platforms to increase reach

- Recent specific snippets of the framework, including case studies examples, based on roles/profession, and explain skills in relation to tasks and activities. These are selected by target audience and packaged in a way to be release to those specific people accordingly.
- Additional presentation documents adapted to different audience profiles. Framework diagram(s) based in work developed in D.3.2 and D.3.3, that offers a visual/ graphical summary representation of the information initially produced in excel format. Diagram to be saved into pdf or similar open-source vector format- to allow navigation and legibility of overall graphic

Indirect source dissemination action

- A landing page in website to be created
- Social media posts

Direct source actions-

- Open table discussion and or focus groups



- Presentation letters to SMEs and professional bodies
- Presentation meetings
- Webinars
- Live face to face workshops
- Blender workshops
- Participation in talks and presentation in industry conferences and events- example: the BIM Coordinators summit in Dublin, was an opportunity used to present ARISE and raise awareness of this trial phase to come.

Although, WP6 leaders weren't scheduled to speak in the conference, ARISE project manager Paul McCormack presented an overview of the project, including role of WPs, calling professional to enable and participate.

Dr James Harty also present the project, in a similar format.

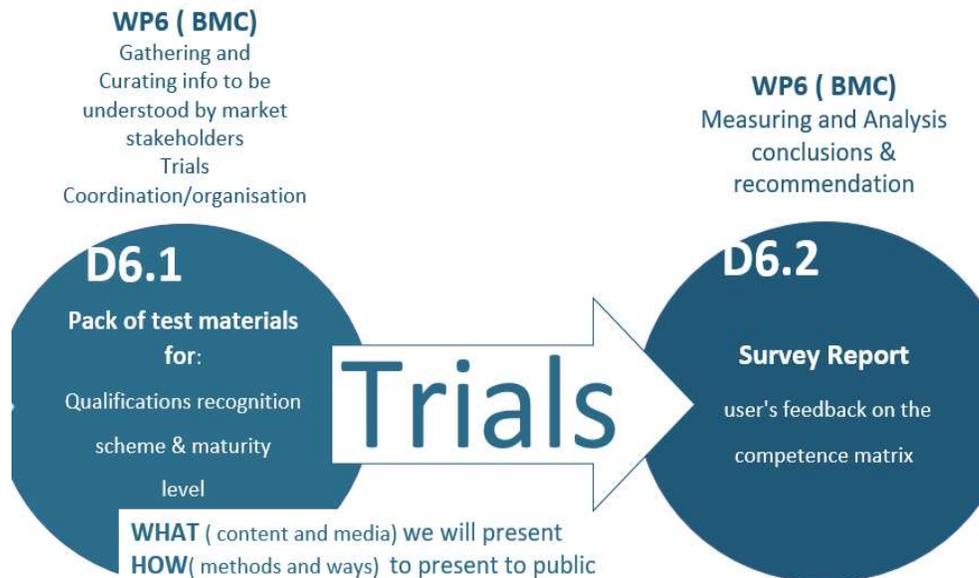
Language

Materials language in English, with possible translation to consortium regional language to be considered, depending on specific target audience, event and format, audience needs/ demands, and ARISE available resources.

To further understand test subject, we identified that a preview of WP3 deliverable 3.4, result of Task 3.3: Upskilling pathways could be interesting. Therefore, further add-on content regarding this item will then be produced as part of the package of materials, testing the task-based qualification framework.

4. Ongoing & Next steps

4.1 Other Related and integrated actions, tasks & deliverables within WP6



Interrelated with D6.2, as integral user's feedback on the competence matrix. The selected package of testing materials will relate to Task 6.2, leading to 6.2 Delivered Survey Report. We prepared a survey format for feedback prior to, and for direct engagements, and/or upskilling actions (impacts and results). This initial assessment of skills and competencies of trainees will highlight the skills gap to inform review and adaptations of training materials when and if required.

A focus group will be formed, including Associated Partners.

4.2 Engagement with target groups

To review current understanding and research on the issues, and to oversee and interrogate the questions with the survey. (Impacts and results). Related to



engagement, it was referred in 2.3 of this report, and will continued as follows below in this report

Follow up

In the upcoming months we plan to deploy the D6.1 samples of the qualification matrix, in direct market actions, and use survey to collect data and feedback.

Cohorts selections

A series of focused professional cohorts will be selected as target audience for direct workshop presentation. Other partners in the consortium will put forward available cohorts in their regions. A wide reaching and more general target audience will be sought via the ARISE website, through a landing page with material presentation and link to survey.

Target audience - contacts and engagement

In early stages, preliminary contacts with possible stakeholders can promote the project. All partners to process possible contacts, and lead in further are to suggestions in their regions, to assist WP to pursue possible participants for the trial. As per bid requirement of 300 upskilled professional, and to spread reach across Europe, WP6 proposed to all partners to engage in an effort to divide this number of upskilled professionals between all regions.

In case, an equal number cannot be reached in all regions, it was suggested in the Dublin partners gathering, that for meeting that 300 number of participants target, contributions per regions would be then proportional to country's GDP.



This referred proposal was unrelated to D6.1, but referring to one of projects KPI's instead. Future market increment commitment at end of project, and the split of investments to be the proportionate to countries GDP

WP6 considers that as a mere possibility, but not the most effective alternative approach in case original even numbers across regions can't be reached.

Also, not always the counties with higher GDP (usual with bigger more competitive economies) are ones whose professionals are in need to embark on the digitalisation pathway and/or require a larger number of upskilling.

[Some examples of audience contact development](#)

NI (UK)

BMC already selected a cohort of 17 professionals for direct testing.

It will also contact with RSUA for support, dissemination and, if possible, collaboration in enrolling members to our trials.

CITB will also be contacted with a proposal for trials to be offered to their own, this will address the blue-collar workers audience.

This are the initial NI engagement / call for action.

ROI

Discussion have been underway with TUD to arrange trial session(s) with some of their cohorts.

PORTUGAL

On behalf of WP6, we contacted Mrs Claudia Antunes, from StartBIM- a digitalization twining, development and enabler company based in Portugal.

She is actively responsible for digitalisation training so Portugal, as well with role of in OA and one of the working group members of Building Smart chapter in Portugal. Her insight into the market and current thinking was of importance to



build possible leads for trial actions, as well as defining approach to best address a architect's nonprofessional body. Antonio Aguiar Costa, from IST and member of the consortium's has also assisted WP6 in the approach to audience evolving in Portugal. He has already informally contacted Ordem dos Engenheiros Norte for possible collaboration. And as member of the Building Smart chapter i. Portugal, will be able to inform us if possible, synergies and collaboration are possible between it and ARISE. He is also looking and possible format, like BMC and TUD for a direct action to a cohort of professionals via IST. (in this case, probably D6.1 materials would need to be adapted to Portuguese)

OTHER REGIONS

Other Partners are equally chasing further leads regarding all professional profiles

5. Conclusion

Deliverable 6.1 deals with the *Development, Quality Control, and Deployment of Sample of Competences Training Scheme Package*,

It involves Pre-production and readiness for market testing of the competences/ qualification scheme matrix (developed by WP3).

Continuous review of other WPs outcomes.

Preparation, and selection of sample materials package regarding engagement with target groups for evaluation of:

- matrix of competencies
- learning outcomes
- training models
- methodology.



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