



## D2.5 Gamified Educational Materials Package

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## List of abbreviations

|              |                                                  |
|--------------|--------------------------------------------------|
| <b>AI</b>    | Artificial Intelligence                          |
| <b>ATM</b>   | AgriTech Manager                                 |
| <b>ECTS</b>  | European Credit Transfer and Accumulation System |
| <b>EQF</b>   | European Qualifications Framework                |
| <b>IoT</b>   | Internet of Things                               |
| <b>LMS</b>   | Learning Management System                       |
| <b>MSc</b>   | Master of Science                                |
| <b>SCORM</b> | Sharable Content Object Reference Model          |
| <b>VET</b>   | Vocational Education and Training                |

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## 1. EXECUTIVE SUMMARY

**D2.5 Gamified Educational Materials Package** documents the finalised educational materials prepared under **Task 2.5 Preparation of gamified educational material, learning resources, didactical tools** and available through the [AGRITECH e-learning platform](#) at the time of submission. Building on the preceding WP2 **competency framework, learning ecosystem, curriculum** and **Educational HUB** work, the package covers the **AGRITECH VET** pathway at **EQF Level 5** and the **MSc** pathway at **EQF Level 7** and is organised around the **seven AGRITECH modules (M01-M07)**.

The package combines structured instructional resources with interactive evaluated activities, didactical guidance and multilingual provision. This version of D2.5 records the materials that are completed and available on the platform.

### 1.1 Purpose of D2.5 Gamified Educational Materials Package

The purpose of **D2.5 Gamified Educational Materials Package** is to document and present the completed educational materials package resulting from **Task 2.5**. The current version covers the finalised **VET** and **MSc** materials available at submission, including *manuals*, *Genially presentations*, *interactive quizzes* and *knowledge-check activities*, *scenario-based interactive* assessment activities, didactical guidance and the *corresponding multilingual versions*.

These materials are linked to the seven AGRITECH modules and to the learning outcomes defined in **D2.3 AgriTech Curriculum**. Manuals and presentations provide the main instructional and reference content. The quizzes and scenario-based activities are interactive evaluated components of the learning process. The Capstone Project remains part of the wider assessment structure defined in **D2.3** and is therefore referenced in **D2.5** in relation to the overall evaluation approach.

### 1.2 Deliverable status and completion note

At the time of submission, the finalised **VET** and **MSc** materials described in **D2.5** are available through the **AGRITECH Moodle** environment for all seven modules. Genially was used for the interactive presentations, quizzes and scenario-based activities. Where assessment tracking is required, the relevant activities communicate score or completion information to Moodle according to their configured role in the programme.

**All required translations** for the **VET** and **MSc** materials are completed and uploaded to the platform. The available language versions preserve the common module structure, learning outcomes, learner instructions and assessment logic of the English source materials.

**Quality assurance** during development and pilot testing from March to June 2026 addressed curriculum and EQF-level alignment, educational consistency, assessment and completion logic, access and usability, localisation consistency and implementation feedback.

### 1.3 Main outputs and follow-up

The main outputs documented in this version of D2.5 are the completed VET and MSc manuals and presentations, interactive quizzes and knowledge-check activities, scenario-based interactive assessment activities, didactical guidance for teachers, trainers, facilitators and Educational HUBs, the completed multilingual versions, and the organisation, access and tracking of these materials through the AGRITECH e-learning platform where applicable.



Remaining follow-up concerns operation of the finalised package: access and configuration, assessment tracking, multilingual consistency after later corrections or updates, and implementation feedback. These are operational follow-up actions, not unfinished educational outputs.

During the remaining project period, the partnership **may add further educational materials**, including the *smart games* and *additional interactive exercises*, if they are completed, quality checked and technically integrated. These are not part of the current finalised inventory. If such materials are finalised and uploaded, **D2.5** will be **updated** before project completion to document the materials available at that stage.

## 2. DELIVERABLE CONTEXT AND WP2 ALIGNMENT

Work Package 2 (**WP2**), Innovative Learning Environment, follows a development sequence that connects the AgriTech Manager competency profile, the learning ecosystem, the curriculum, the Educational HUBs and the preparation of learning materials. Each output provides part of the educational basis used to organise and deliver the AGRITECH learning programme.

Within this sequence, Task 2.5 translates the earlier WP2 work into concrete learning resources for use through the AGRITECH e-learning environment. D2.5 documents the finalised Task 2.5 materials available on the platform at the time of submission for the VET pathway at EQF Level 5 and the MSc pathway at EQF Level 7. The deliverable therefore records completed materials, their educational purpose and their relationship with the preceding WP2 outputs.

Figure 1 summarises the relationship between the main WP2 outputs and shows how D2.5 builds on the competency, learning-design, curriculum and delivery components developed earlier in the work package.



*Figure 1. Position of D2.5 within the WP2 development sequence*

The relationship between these deliverables is functional. **D2.1** defines the competence profile, **D2.2** establishes the learning ecosystem, **D2.3** specifies the curriculum and assessment approach, and **D2.4** provides the Educational HUB setting. **D2.5** records the completed learning resources through which these elements are applied in the **VET** and **MSc** learning pathways.

### 2.1 Role of D2.5 Gamified Educational Materials Package within WP2

**D2.5 Gamified Educational Materials Package** is the formal output of **Task T2.5, Preparation of gamified educational material, learning resources and didactical tools**. The task converts the learning objectives, competence requirements and educational approaches established in the preceding WP2 work into materials that learners and teaching staff can use during AGRITECH training.

This version of D2.5 presents the finalised materials available through the AGRITECH e-learning platform for the VET and MSc pathways. The documented package includes manuals, Genially presentations, interactive quizzes and knowledge-check activities, scenario-based interactive assessment activities, didactical guidance and the corresponding multilingual versions. The materials follow the seven-module AGRITECH structure and are linked to the learning outcomes defined in the curriculum.

In practical terms, the AGRITECH Moodle environment provides the online access point for the finalised gamified and interactive materials currently available under Task 2.5. The platform brings together the finalised Genially-based quizzes and scenario-based interactive assessment activities for all seven modules and for both the VET and MSc pathways. Through these activities, learners interact with module content, respond to structured questions and applied professional situations, make decisions, receive immediate feedback and, where configured, have their scores or completion status recorded in Moodle. These activities represent the gamified and interactive materials finalised and available on the platform at the time of submission. They are documented in D2.5 without implying that they replace



the other categories of games, simulations or interactive exercises foreseen under Task 2.5, which may be added to the platform later if they are finalised, quality checked and technically integrated before project completion.

The interactive quizzes and scenarios form part of the programme evaluation process according to their defined assessment role. They operate alongside the Capstone Project within the assessment structure established in D2.3. D2.5 documents these Task 2.5 resources without changing the assessment rules or introducing a separate evaluation layer.

Task 2.5 therefore connects the educational design developed across WP2 with programme delivery. The e-learning platform and the Educational HUBs provide the environments in which the finalised materials can be accessed and used by learners, teachers, trainers and facilitators.

## 2.2 Link with D2.1 Competency Framework

D2.1 AGRITECH Manager Competency Framework provides the competence base for the materials documented in D2.5. The framework defines the knowledge, skills and abilities expected from the AgriTech Manager and organises them into five domains: Technical and Digital Skills; Business and Entrepreneurial Skills; Sustainability and Green Competencies; Policy, Regulation and Compliance; and Soft Skills and Leadership.

For the VET and MSc materials included in D2.5, the Competency Framework provides the reference for selecting the learning focus and the required level of complexity. VET activities are aligned with EQF Level 5 and use more guided application and structured decision-making. MSc activities are aligned with EQF Level 7 and require greater autonomy, analysis of alternatives and justification of decisions. Manuals and presentations provide the knowledge base linked to these competence areas, while quizzes and scenario-based activities allow learners to check understanding, apply concepts and make decisions in contexts related to the AgriTech Manager profile. This keeps the finalised materials directly connected to the competence requirements established in D2.1.

## 2.3 Link with D2.2 Learning Ecosystem Design

D2.2 Learning Ecosystem Design defines the conceptual and operational framework for the AGRITECH Learning Ecosystem. It connects competence development with learning pathways, digital resources, assessment, stakeholder interaction and the digital environment in which learning takes place. The design gives particular attention to practical and interactive learning, including scenario-based activities that place learners in situations related to agricultural and AgriTech practice.

The finalised D2.5 materials apply these principles through a combination of instructional, interactive and assessed resources available in the AGRITECH digital learning environment. Manuals and presentations support preparation and structured study. Quizzes require direct learner interaction and provide knowledge checking and assessment. Scenario-based activities require learners to interpret information, compare alternatives, make professional decisions and receive feedback on those decisions.

The completed multilingual versions support access to the same learning structure in the languages used by the participating institutions. The connection with D2.2 is therefore pedagogical and operational: D2.2 defines how the learning ecosystem should function, while D2.5 documents the completed resources used within that environment.

## 2.4 Link with D2.3 Curriculum



D2.3 AgriTech Curriculum provides the direct curriculum reference for the materials included in D2.5. For the completed materials documented in this deliverable, the relevant pathways are VET at EQF Level 5 and MSc at EQF Level 7. Both pathways follow the same seven-module structure, while the expected depth of knowledge, learner autonomy and complexity of application are adapted to the respective EQF level.

The D2.5 materials are therefore linked to identifiable modules, topics and learning outcomes. The same subject can be addressed differently according to the learner group. A VET activity may use clearer guidance and more structured choices, while an MSc activity may require analysis of several factors, comparison of alternatives and justification of a professional decision.

D2.3 also defines the assessment approach used by the programme. Within this structure, the quizzes and scenario-based activities documented in D2.5 are interactive evaluated components, while the Capstone Project provides the final applied assessment defined by the curriculum. Task 2.5 supplies the learning and assessment resources without changing the learning outcomes, module structure or assessment logic established in D2.3.

## 2.5 Link with D2.4 Educational Ecosystem and HUBs

D2.4 Educational Ecosystem and HUBs provides the operational setting in which the AGRITECH learning approach can be applied. The Educational HUBs are conceived as physical or digital environments where learners, educators and professionals can access learning resources, take part in practical activities and exchange knowledge related to AgriTech.

The finalised materials documented in D2.5 support this setting by providing a common set of VET and MSc resources that can be accessed through the AGRITECH e-learning environment and used within participating institutions and Educational HUBs. Depending on the activity, the materials can support individual study, facilitated teaching, interactive assessment and follow-up discussion.

The shared module structure and multilingual versions allow teachers, trainers and facilitators to direct learners to the relevant materials while maintaining the learning outcomes and assessment requirements defined in the curriculum. D2.4 therefore provides the delivery setting, while D2.5 provides the completed educational resources used within that setting.



### 3. SCOPE AND PEDAGOGICAL APPROACH

This chapter defines the scope and pedagogical approach of the finalised materials documented in D2.5. At the time of submission, the package covers the AGRITECH VET pathway at EQF Level 5 and the MSc pathway at EQF Level 7. The materials included in this deliverable are those completed and available through the AGRITECH e-learning platform.

The package follows the seven-module structure defined in D2.3 and includes manuals, Genially presentations, interactive quizzes and knowledge-check activities, scenario-based interactive assessment activities, didactical guidance and the corresponding multilingual versions. The different material types support instruction, learner interaction and evaluation within the same learning sequence. Where score or completion tracking is required, the relevant interactive activities are integrated into the learning management system according to their defined assessment role. Detailed descriptions of the finalised materials are provided in Chapter 4.

#### 3.1 Target users and learning context

The materials documented in D2.5 are intended for learners following the AGRITECH VET programme at EQF Level 5 and the MSc programme at EQF Level 7. They can be used for individual study, facilitated teaching and blended learning through the AGRITECH e-learning platform, participating institutions and Educational HUBs.

At VET level, the materials use clearer guidance, practical examples, structured tasks and decision situations suited to EQF Level 5. Learners are expected to understand the relevant concepts and apply them in defined operational contexts. At MSc level, the materials require greater autonomy and analytical depth. Learners may need to compare alternatives, interpret more complex information, consider technical and management implications and justify professional decisions.

The same seven modules are used for both pathways, while the wording, depth of content, complexity of questions and expected level of judgement are adapted to the relevant learner group. This allows the learning materials and interactive activities to remain aligned with the common AGRITECH curriculum while respecting the different EQF expectations of the two programme levels.

#### 3.2 Learning objectives and ATM competence alignment

The materials documented in D2.5 are linked directly to the learning outcomes defined in the AGRITECH curriculum and to the AgriTech Manager Competency Framework developed in D2.1. The framework groups the competences expected from an AgriTech Manager into five domains: Technical and Digital Skills; Business and Entrepreneurial Skills; Sustainability and Green Competencies; Policy, Regulation and Compliance; and Soft Skills and Leadership.

Alignment begins with the learning outcomes of the relevant curriculum module. The learning content and the action expected from the learner determine the appropriate material or activity. Manuals and presentations provide structured explanation and reference content. Interactive quizzes check understanding through direct learner responses. Scenario-based activities address application and decision-making by placing learners in professional situations in which they interpret information, compare alternatives and select a response.

The same alignment process is applied at both programme levels. VET activities focus on understanding, guided application and practical decisions in clearly defined situations. MSc activities use greater complexity, broader consideration of consequences and a higher level of learner autonomy.

The content and interaction therefore remain connected to the same competence domains while the expected depth of performance reflects the relevant EQF level.

Task 2.5 does not introduce new learning outcomes or competences. The finalised materials provide concrete ways for learners to study, practise, apply and, where defined by the curriculum, demonstrate the learning outcomes already established in D2.1 and D2.3.

### 3.3 Gamification principles applied in Task 2.5

Gamification within the finalised Task 2.5 package is applied through the interactive quizzes and scenario-based activities available on the AGRITECH platform. These activities use learner interaction, structured choices, feedback, progression and level-appropriate challenge to support engagement with the module content and to provide evidence of learning where they form part of the assessment process.

The manuals and presentations provide the instructional layer of the learning sequence. Genially presentations provide a concise visual format for facilitated teaching and help introduce concepts, processes and selected problem contexts before learners move into interactive activities.

**Manuals** provide the main reference material for self-directed study and later consultation. They organise the technical and management content of each module in a structured form and provide the knowledge base from which subsequent questions, decisions and applied activities can be developed. Manuals are therefore part of the Task 2.5 learning package but are not treated as gamified resources in themselves.

**Presentations** provide a concise and visually structured version of the module content for facilitated learning. Presentations for the seven AGRITECH modules were developed using Genially and support trainers in introducing concepts, explaining processes and focusing attention on key points before learners move to practical or interactive activities. Where relevant, they can also introduce the problem, case or decision context used in a subsequent scenario or activity. The presentations are part of the digital learning package, although they are not classified as gamified resources themselves.

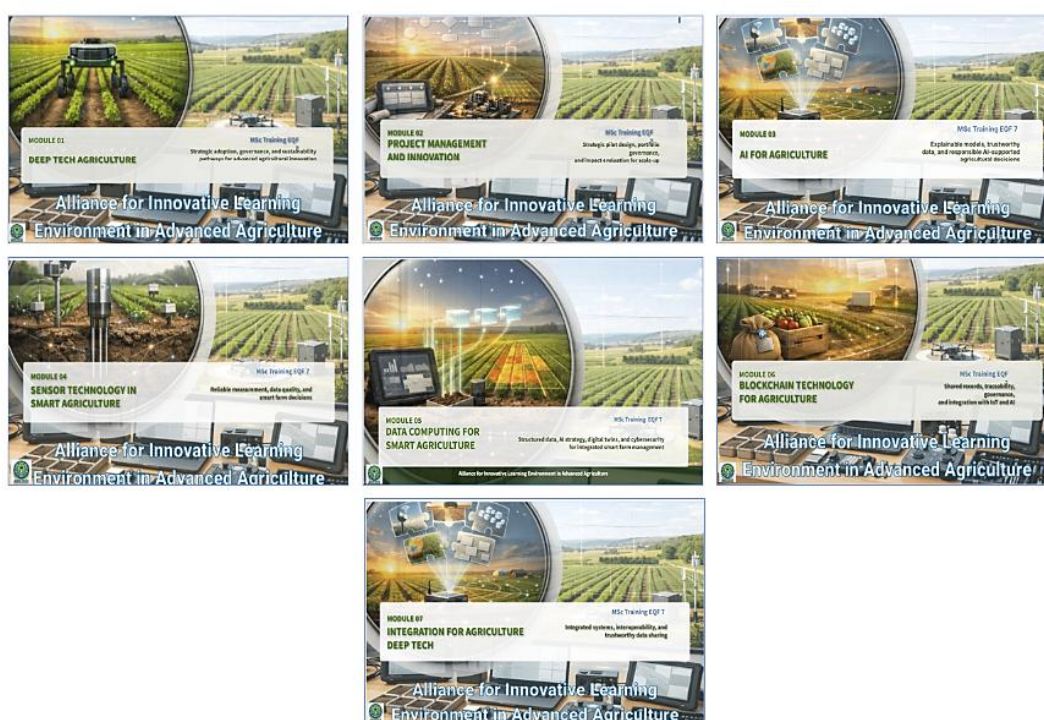


**Figure 2. Genially presentations developed for the seven AGRITECH modules**



The interactive **quizzes** use structured question formats, including single-choice, multiple-choice and true/false questions. Learners respond directly to the content and receive a recorded score and completion status where the activity is configured for assessment through the learning management system. The quiz content and difficulty are adapted to the VET or MSc pathway and to the learning outcomes of the relevant module.

The **scenario-based activities** provide applied interaction through professional situations and decision points. Each scenario requires learners to interpret a situation, compare plausible responses, make a decision and receive explanatory feedback linked to that choice. Correct, partially correct and incorrect feedback states help learners understand the consequences and quality of different professional responses.

Across the finalised interactive activities, the main gamification principles are purposeful learner interaction, meaningful choices, immediate explanatory feedback, progression through the activity, level-appropriate complexity and the possibility to repeat or revisit an activity where appropriate. Genially provides the interactive environment, while the educational and assessment role of each activity is defined by the **AGRITECH curriculum** and **assessment structure**.

### 3.4 Supplementary materials vs. evaluated learning activities

The actual finalised package distinguishes materials according to their educational and assessment role. Manuals, presentations and didactical guidance support learning and delivery. They provide content, explanation, reference material and support for teachers, trainers and facilitators, and they do not themselves contribute directly to the learner evaluation result.

The quizzes and scenario-based activities documented in D2.5 are interactive components of the programme evaluation process. The quizzes provide structured knowledge assessment and communicate score and completion information to Moodle where configured accordingly. The scenarios assess applied understanding through professional situations, learner decisions and feedback, following the assessment and completion logic defined in D2.3.

The wider AGRITECH assessment structure also includes the **Capstone Project** as the final applied assessment defined by the **curriculum**. The Capstone Project is referenced in D2.5 to position the quizzes and scenarios within the overall evaluation process; it is not presented as a gamified material produced under Task 2.5.

This classification keeps the role of each material clear within the learning pathway. The platform provides access to instructional resources and interactive evaluated activities within the same module structure, while the assessment requirements remain those established in D2.3.

## 4. DESCRIPTION OF THE EDUCATIONAL MATERIALS PACKAGE

The educational materials package developed under Task 2.5 brings together the learning resources prepared to support delivery of the AGRITECH curriculum and its VET and MSc pathways. The package combines structured learning materials, including manuals and presentations, with interactive quizzes and knowledge-check activities and scenario-based interactive assessment activities. These resources are organised around the curriculum modules and learning outcomes described in D2.3 and are intended to support learning before, during and after facilitated training activities.



**Figure 3. AGRITECH e-learning platform learner journey and access to learning materials**

AGRITECH e-learning platform provides the digital access point through which learners can navigate the available modules, consult learning resources, complete activities and follow their progress. The following sections describe the main categories of finalised materials, their educational purpose, their use within the learning process and their availability on the platform.

### 4.1 Overview of included materials

The educational materials package developed under Task 2.5 combines several types of resources that support the delivery of the AGRITECH curriculum. The package covers the VET and MSc pathways and includes manuals, presentations, quizzes and knowledge-check activities and scenario-based interactive assessment activities. The materials are organised according to the AGRITECH module



structure and are intended to support different stages of the learning process, from introduction of the subject and individual study to knowledge checking and applied decision-making.

The manuals and presentations provide the main instructional content for each module. Manuals are designed for structured self-study and later consultation, while presentations provide a more concise format for facilitated teaching. Quizzes and knowledge-check activities allow learners to verify their understanding of selected topics and receive feedback. Scenario-based activities extend this process by placing learners in practical situations where they have to interpret information, consider alternatives and make decisions related to the subject being studied.

| Material category                           | Main purpose                                                                                                | Current status                         |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------|----------------------------------------|
| <b>Manuals</b>                              | Structured learning, self-study and later consultation of the module content.                               | Finalised and uploaded for VET and MSc |
| <b>Presentations</b>                        | Facilitated teaching and concise presentation of the main concepts and processes addressed in each module.  | Finalised and uploaded for VET and MSc |
| <b>Quizzes / knowledge-check activities</b> | Assess learner understanding and provide feedback through interactive questions and knowledge checks.       | Finalised and uploaded for VET and MSc |
| <b>Scenario-based activities</b>            | Support applied assessment through practical situations, choices, decision-making and explanatory feedback. | Finalised and uploaded for VET and MSc |

**Table 1. Overview and current status of the educational materials developed under Task 2.5**

All material categories listed in Table 1 are finalised for the VET and MSc pathways and are available through the AGRITECH e-learning platform at the time of submission. The following sections document the interactive assessment activities in greater detail and then provide didactical guidance and multilingual information for the completed package.

## 4.2 Quizzes and knowledge-check activities

**Quizzes** developed under Task 2.5 are used to check learners' understanding of the content covered in the AGRITECH modules and form part of the programme evaluation process by providing evidence of achievement of the required learning outcomes. The questions are linked to the corresponding module content and require learners to interact actively with the material by selecting or confirming responses. The question structure is designed to include different forms of knowledge checking instead of relying on a single repeated format.

Across the seven AGRITECH modules, the quiz structure uses three principal question types: single-choice, multiple-choice and true/false questions. Each module contains ten questions, normally organised as five single-choice questions, three multiple-choice questions and two true/false questions. This common structure provides consistency across the programme while allowing the content and cognitive demand of individual questions to be adapted to the subject of each module.

The VET quizzes were developed following the same general structure and interaction logic, with the wording, content depth and level of complexity adapted to the EQF Level 5 learning context. To avoid repetitive documentation, the screenshots presented in this section are taken from the MSc Module 1 quiz and are used as representative examples of the three question types implemented across the programme.

**Single-choice questions** are used where one answer represents the best or correct response. They are suitable for checking conceptual understanding, recognising the correct step in a process or

selecting the most appropriate response to a practical situation. In Module 1, for example, single-choice questions are used to check understanding of deep-tech adoption, strategic sequencing, barriers to adoption, compliance principles and applied decision-making.

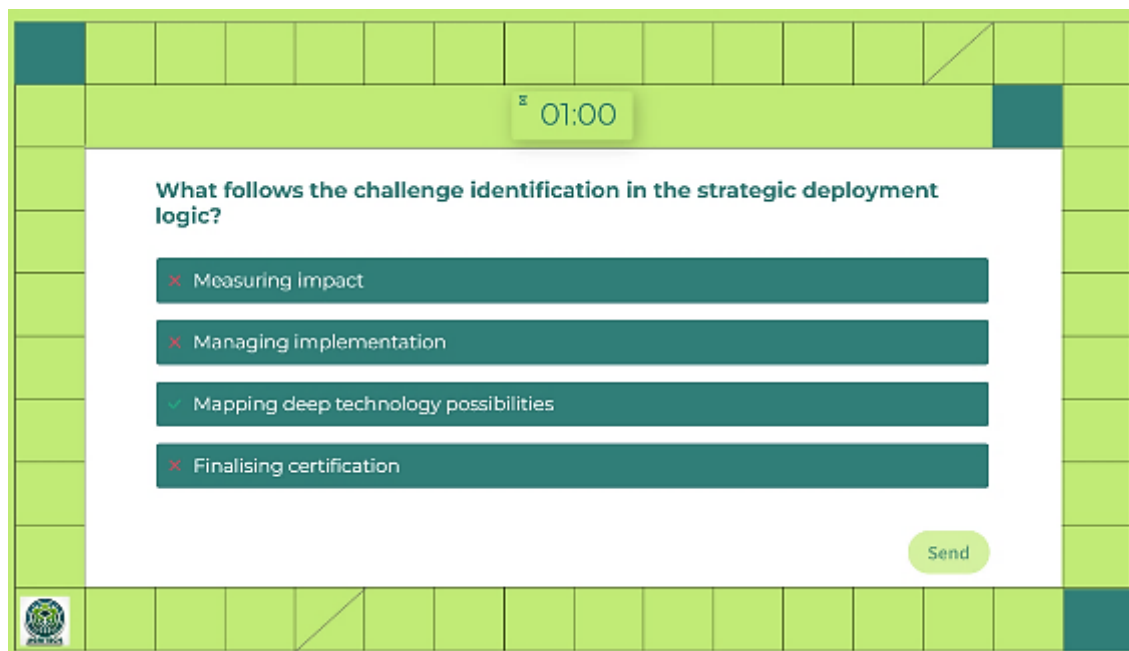


**Figure 4. Example of a single-choice question**

**Multiple-choice questions** are used where more than one answer may be valid. This format is appropriate for structured sets, components or characteristics that learners are expected to recognise together. In Module 1, multiple-choice questions are used, for example, to identify characteristics of enterprise architecture, the foresight lenses and other structured sets presented in the module.

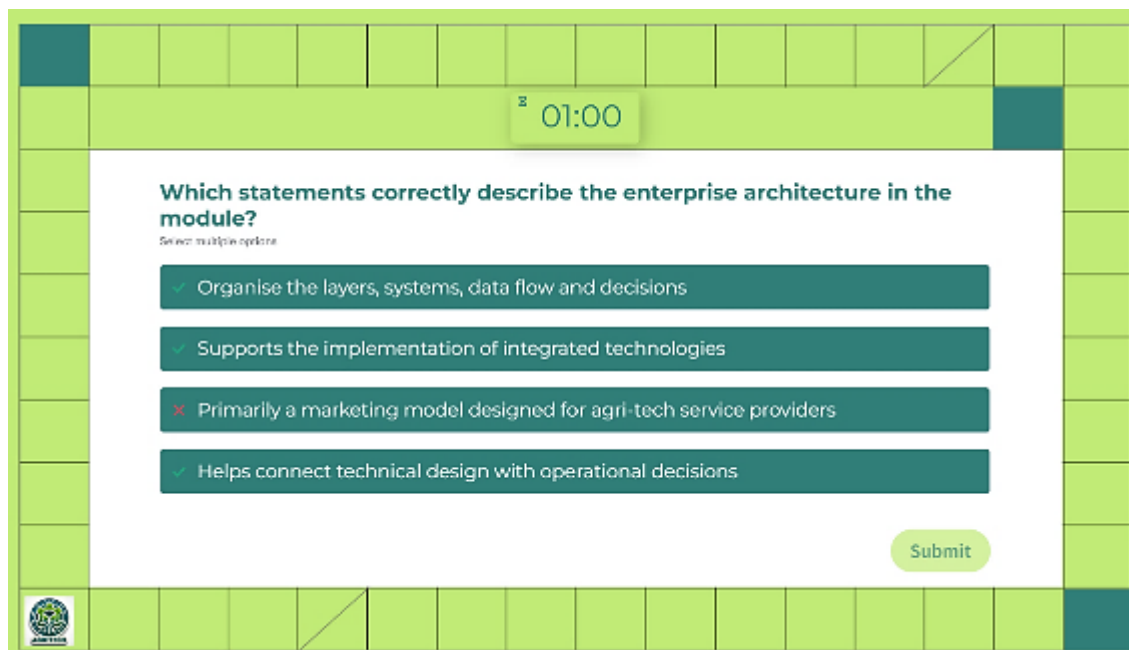


**Figure 5. Example of a multiple-choice question**

**True/false questions** provide short checkpoints for clearly defined factual or conceptual statements. They are used to confirm whether learners can recognise a correct principle, definition or relationship. In Module 1, this format is used, for example, to check understanding of interoperability and the ADKAR

change-management model. The shorter interaction also provides variation between questions requiring more detailed consideration.

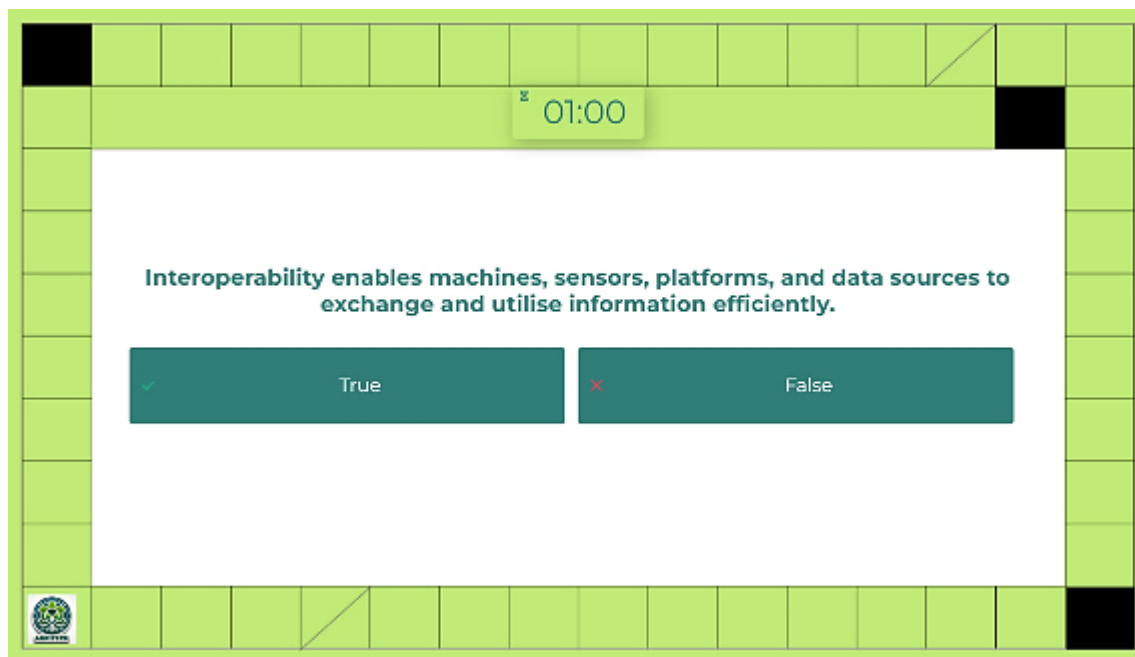


**Figure 6. Example of a true/false question**

The quizzes developed for all seven AGRITECH modules follow the same general technical implementation for both the MSc and VET pathways. They were developed in Genially and exported as SCORM packages for integration into the AGRITECH e-learning platform. Each module quiz contains ten questions, with one minute allocated to each question, while the content, wording and level of difficulty are adapted to the relevant programme level and module learning outcomes. The SCORM configuration enables the activities to communicate the learner's score and completion status to the learning management system, supporting consistent tracking of quiz performance across the entire programme.

### 4.3 Scenario-based interactive assessment activities

Scenario-based interactive assessment activities are used across all seven AGRITECH modules for both the VET and MSc pathways. The same scenario architecture is applied at both levels so that learners encounter a consistent interaction pattern throughout the programme. The module topic, professional context, wording and expected level of judgement are adapted to the relevant curriculum level, while the sequence of the activity remains the same.

Each module scenario is organised as a guided Genially assessment activity built around two consecutive Challenges. Each Challenge places the learner in a realistic AgriTech situation, introduces a problem or operational pressure, and asks the learner to choose a professional response. The two Challenges allow one module scenario to address more than one applied aspect of the module while keeping the activity coherent and easy to navigate.

The screenshots below use the MSc Module 1 scenario as a representative example. The same structure is used for the other MSc and VET module scenarios; therefore, screenshots from every module and both programme levels are not repeated in this deliverable.

The scenario begins with a dedicated opening screen that identifies the module assessment scenario and gives the learner a clear entry point into the activity. The Start control initiates the guided sequence.



**Figure 7. Opening screen of a module assessment scenario**

After entering the activity, the learner is introduced to Challenge 1. This screen establishes the professional setting, the people involved and the immediate problem that requires attention. In the Module 1 example, “The Precision Diagnostic” places the learner in an automated vertical-farming facility facing a critical mineral deficiency and asks for a longer-term technology adoption response. The purpose of this screen is to provide enough context for the learner to make a reasoned decision rather than answer an isolated theoretical question.



**Figure 8. Example of Challenge 1: professional context and decision problem**

The same scenario then continues with Challenge 2, which introduces a second applied problem connected to the module learning content. In the example shown below, “Deep-Tech Barriers & Integration” moves from the initial technology-adoption problem to interoperability between new AI-enabled sensors and legacy irrigation equipment. Using two Challenges allows the scenario to test related aspects of the module within one continuous activity.

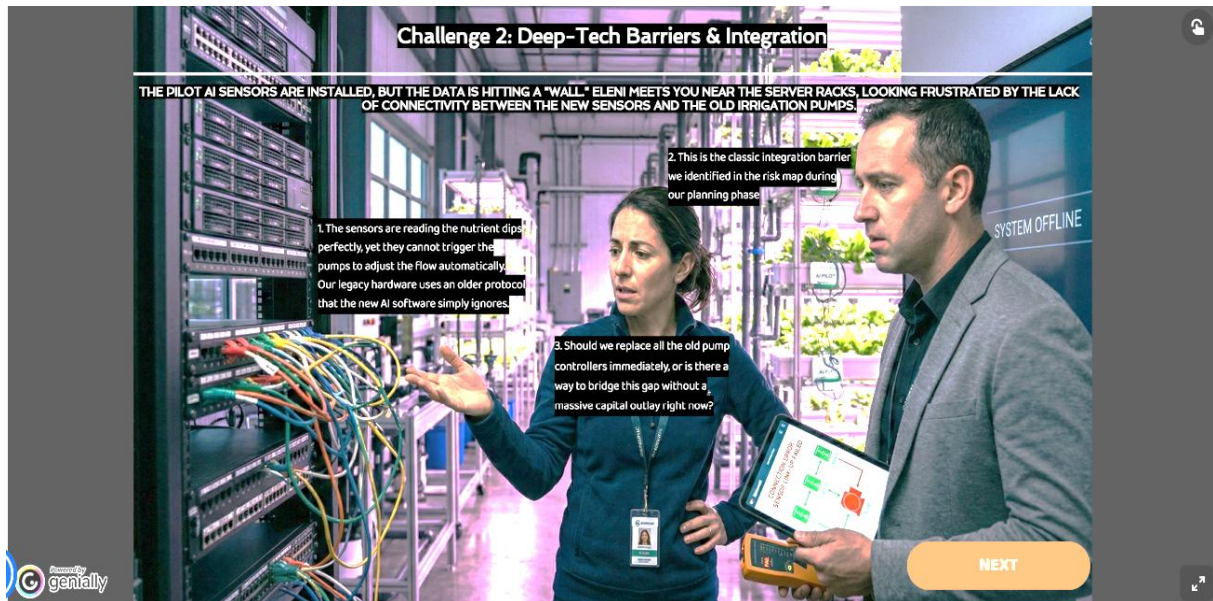


**Figure 9. Example of Challenge 2: a second applied problem within the same Module**

Each Challenge leads to a learner decision screen. The learner is asked what response should be taken and selects from three plausible alternatives. The options are designed to represent different levels of professional adequacy: a strongest response, a response that contains some reasonable elements but remains incomplete, and a weak or incorrect response. This format requires the learner to compare alternatives and judge their consequences instead of relying on simple recognition or recall.

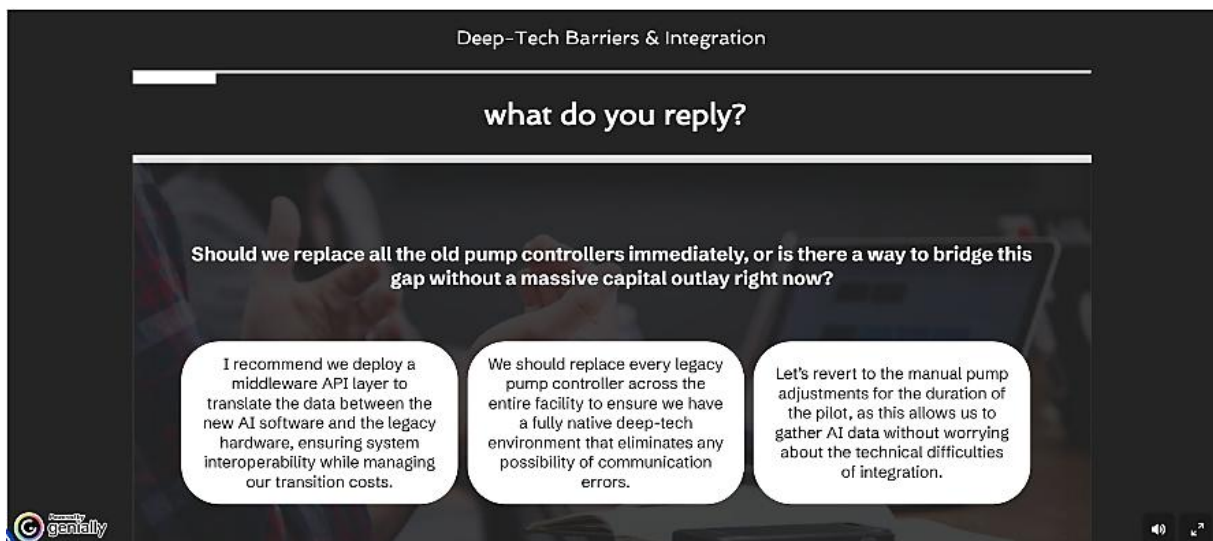


**Figure 10. Learner decision screen with three alternative professional responses**

The feedback mechanism is a central part of the scenario design. After a response is selected, the learner receives an explanation linked to that specific choice. Three feedback states are used: correct, partially correct and incorrect. This provides more information than a simple right/wrong indication and helps the learner understand why one professional response is stronger than another.

Correct-choice feedback explains why the selected action is the strongest response and links the decision to the relevant technical or management principle. In the example below, the successful use of a middleware layer is connected to interoperability between modern software and legacy hardware. The feedback therefore confirms the decision and reinforces the module concept through its practical consequence.

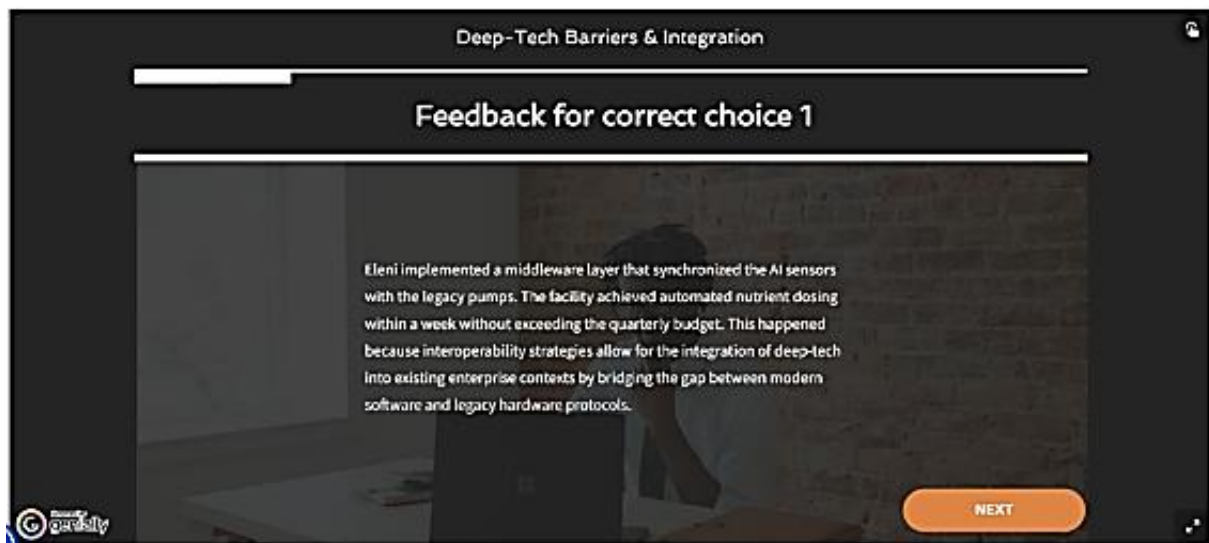


**Figure 11. Example of feedback for a correct choice in the scenario**

Partially correct feedback is used when a response contains a reasonable element but does not address the problem sufficiently. This intermediate feedback is important because professional decisions are not always divided into obviously correct and obviously wrong options. In the example below, increased manual sampling generates additional information but does not solve the underlying systemic technology gap. The learner is therefore shown both the value and the limitation of the selected approach.



**Figure 12. Example of feedback for a partially correct choice**

Incorrect-choice feedback explains the likely consequence of a weak decision and identifies the reasoning problem behind it. The example below shows that replacing the entire pump infrastructure would generate unnecessary cost and operational downtime because the integration barrier had not first been addressed. The feedback therefore uses the consequence of the decision to explain why the option is unsuitable.



**Figure 13. Example of feedback for an incorrect choice**

After both Challenges have been completed successfully, the learner reaches a final completion screen. This confirms completion of the module scenario and provides the option to restart the activity. The completion message closes the guided assessment sequence and gives the learner a clear indication that the scenario requirements for that module have been met.

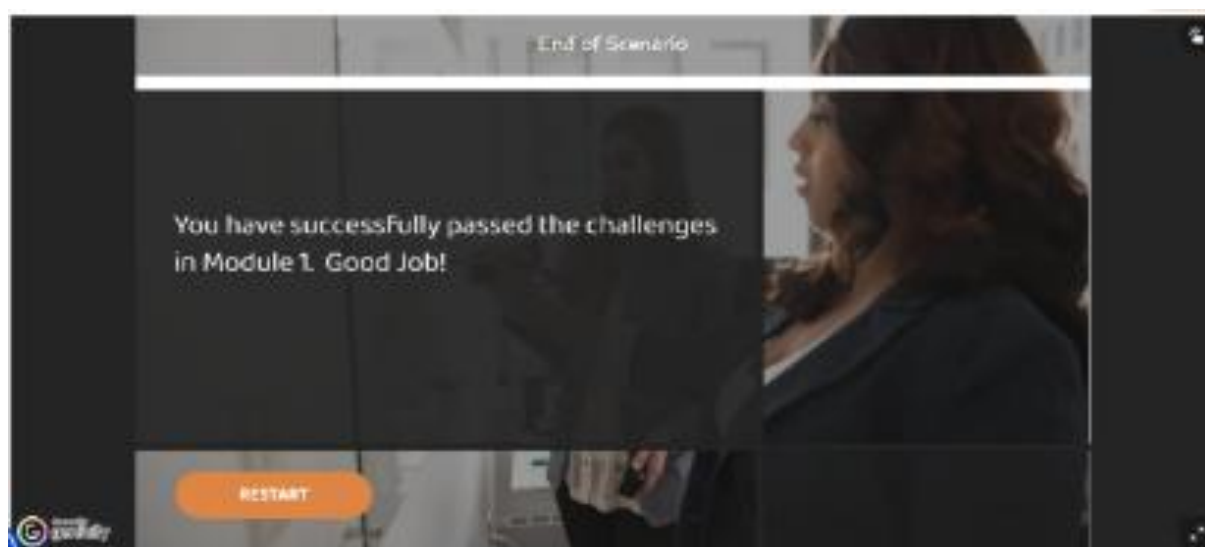


**Figure 14. Scenario message after successful completion**

This common structure is used for the scenario activities developed for all seven modules at both VET and MSc levels. Consistency in navigation, decision format and feedback makes the interaction familiar across the programme, while the module-specific context and level adaptation preserve the intended learning demand. The scenarios therefore provide an applied assessment format in which learners use module knowledge to make decisions and receive explanatory feedback on the quality of those decisions.

| Module                    | Challenge 1              | Main focus                                                                                                                                      | Challenge 2                      | Main focus                                                                                      |
|---------------------------|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------------------------------------------------|
| M01 Deep Tech Agriculture | The Precision Diagnostic | Diagnosing the farm problem, selecting an appropriate deep-tech adoption pathway and considering sustainability and implementation constraints. | Deep-Tech Barriers & Integration | Integrating new technologies with existing farm systems, interoperability and transition costs. |

|                                                         |                                                               |                                                                                                              |                                                                      |                                                                                                                             |
|---------------------------------------------------------|---------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <b>M02 Project Management &amp; Innovation</b>          | <b>Framing the Pilot</b>                                      | Defining measurable pilot objectives and linking technical implementation with operational needs.            | <b>Stage-Gate Governance</b>                                         | Using evidence, milestones and predefined criteria to support continuation, adjustment or scale-up decisions.               |
| <b>M03 Fundamentals of AI for Deep Tech Agriculture</b> | <b>Balancing Multispectral Data and Ground Truth</b>          | Combining different data sources, checking AI inputs and avoiding over-reliance on a single data type.       | <b>Managing False Positives in the Field</b>                         | Interpreting AI outputs under real field conditions, managing uncertainty and setting appropriate intervention thresholds.  |
| <b>M04 Sensor Technology in Smart Agriculture</b>       | <b>The Selection Dilemma</b>                                  | Selecting suitable sensors for a defined agricultural monitoring problem.                                    | <b>The Installation</b>                                              | Sensor placement, installation conditions and the reliability of field measurements.                                        |
| <b>M05 Data Computing for Smart Agriculture</b>         | <b>Structured Data Architecture</b>                           | Organising agricultural data flows, processing and storage to support timely decision-making.                | <b>The Regional Nutrient Exchange</b>                                | Combining data from several farms while supporting shared analysis, privacy and regional decision support.                  |
| <b>M06 Blockchain Technology for Agriculture</b>        | <b>The Integrity Threshold</b>                                | Maintaining trustworthy traceability records and linking IoT information with blockchain-based verification. | <b>The Value-Alignment Paradox</b>                                   | Encouraging participation in shared traceability systems through appropriate incentives, governance and value distribution. |
| <b>M07 Integration for Agriculture Deep Tech</b>        | <b>From Silos to Synapses: Designing the Autonomous Field</b> | Connecting sensors, AI, communication systems and actuators into an integrated operational architecture.     | <b>Crossing the Brand Boundary: Organising Mixed-Fleet Logistics</b> | Achieving interoperability between equipment, data formats and software platforms from different providers.                 |

**Table 2. Scenario topics by AGRITECH module for VET and MSc pathways**

Each module scenario is organised around two consecutive Challenges addressing different aspects of the module content. The same thematic structure is used for the VET and MSc pathways, while the wording, degree of technical detail and expected level of professional judgement are adapted to the relevant EQF level. Table 2 summarises the principal topics addressed by the two Challenges in each module.

#### 4.4 Didactical guidance for Teachers, Trainers, Facilitators and HUBs

The educational materials developed under Task 2.5 are intended for use both in individual learning and in activities supported by teachers, trainers and facilitators through the AGRITECH Educational HUBs and participating institutions. The materials provide a common resource base across the partnership, while their use can be adapted to the learning objective, available time, learner group and delivery format. Manuals, presentations, quizzes and scenarios can therefore be combined according to the needs of a particular session or course.

A typical learning sequence may begin with the relevant manual or presentation to introduce the subject, followed by discussion or explanation of the main concepts. Interactive activities can then be used to move learners from explanation to application. Quizzes provide a structured knowledge check, while scenarios require learners to interpret a practical situation, compare alternatives and make a professional decision. The sequence can be shortened or extended according to the training context, and it is not necessary to use every resource in every session.

Teachers, trainers and facilitators should select the materials corresponding to the relevant programme level. VET activities are designed for EQF Level 5 and therefore use clearer guidance, practical examples and more operational decision-making. MSc activities at EQF Level 7 can require greater autonomy,



analysis of alternatives and consideration of technical, organisational, sustainability and management implications.

The learning outcomes remain those defined in the AGRITECH curriculum. Teachers, trainers and facilitators may adapt examples, discussion questions and local cases to their delivery context where this does not change the intended learning outcome or assessment requirement. This allows the same educational package to be used in different institutional and HUB settings while preserving the agreed curriculum structure.

Before using the digital materials, teachers, trainers and facilitators should check that learners can access the relevant module and understand how to navigate the activity. Where an activity contributes to formal assessment, learners should be informed about its completion requirements before starting. For scenario-based activities, discussion after completion can be useful because the reasoning behind a correct, partially appropriate or weak decision is part of the learning process.

Educational HUBs can use the materials in workshops, demonstrations, mentoring activities and blended sessions involving learners, educators and professionals. Feedback collected during these activities can help identify unclear instructions, access problems or content requiring adjustment and can support quality assurance and implementation feedback for the educational package.

#### 4.5 Multilingual and localisation status

AGRITECH educational materials were developed from common English source versions and translated and localised for use by the participating institutions and Educational HUBs. The purpose of this process is to make the materials accessible in the languages used for national delivery while preserving the same module structure, learning outcomes, assessment logic and interaction flow across the programme. Localisation covers learner-facing content in manuals, presentations, quizzes and scenarios, together with the instructions and labels that form part of the learning activities.

At the time of submission, all required translations for the VET and MSc materials are finalised and uploaded to the AGRITECH platform. The completed language versions correspond to the language requirements of the participating institutions and retain the same module structure, learning outcomes, assessment logic and interaction flow as the English source materials.

| Programme level | Current language status                                                              |
|-----------------|--------------------------------------------------------------------------------------|
| VET, EQF 5      | English source; Greek, Italian, Czech, Hungarian and Romanian translations finalised |
| MSc, EQF 7      | English source; Greek, Romanian, Hungarian, Czech and Italian translations finalised |

**Table 3. Current multilingual and localisation status of the AGRITECH educational materials**

The platform provides language selection for **English, Czech, Italian, Hungarian, Romanian and Greek**. AGRITECH e-learning environment includes a language-selection function. As shown in Figure 15, the current selector lists English, Czech, Italian, Hungarian, Romanian and Greek. The completed VET and MSc translation sets are available through the relevant programme and module areas on the platform. Localisation preserves the learning purpose of the common source materials. Terminology, learner instructions and assessment meaning are kept consistent across the finalised language versions, while minor wording adjustments can be used where needed for clarity in a national learning context without changing the agreed curriculum content or learning outcomes

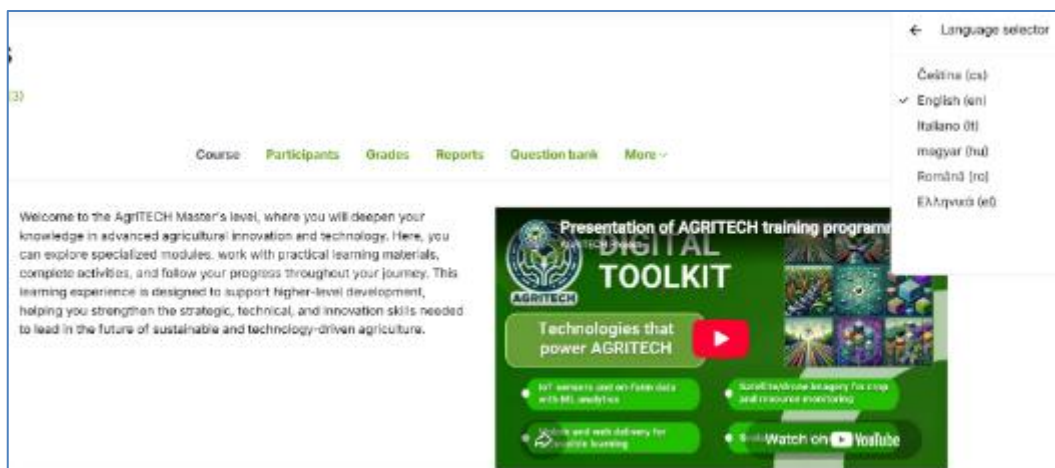


**Figure 15. Language selector in the AGRITECH e-learning environment**

All required VET and MSc translations are finalised and uploaded to the platform. Any later correction to learner-facing content should be applied consistently across the corresponding language versions

## 5. E-LEARNING PLATFORM INTEGRATION AND ACCESS

AGRITECH Moodle environment provides the digital access point for the finalised educational materials included in D2.5. This chapter describes how the available resources are organised and accessed, how they are integrated into the platform, and how assessment scores and activity completion are recorded where applicable. The focus is on the **VET** and **MSc** materials available on the platform at the time of submission.

### 5.1 Platform access and organisation of the materials

The AGRITECH Moodle environment is the main access point for the digital educational materials developed under Task 2.5. As presented earlier in Figure 3, learners access the platform through an account and navigate to the relevant programme level and module. The materials included in this version of D2.5 cover the **VET** pathway at **EQF Level 5** and the **MSc** pathway at **EQF Level 7**.

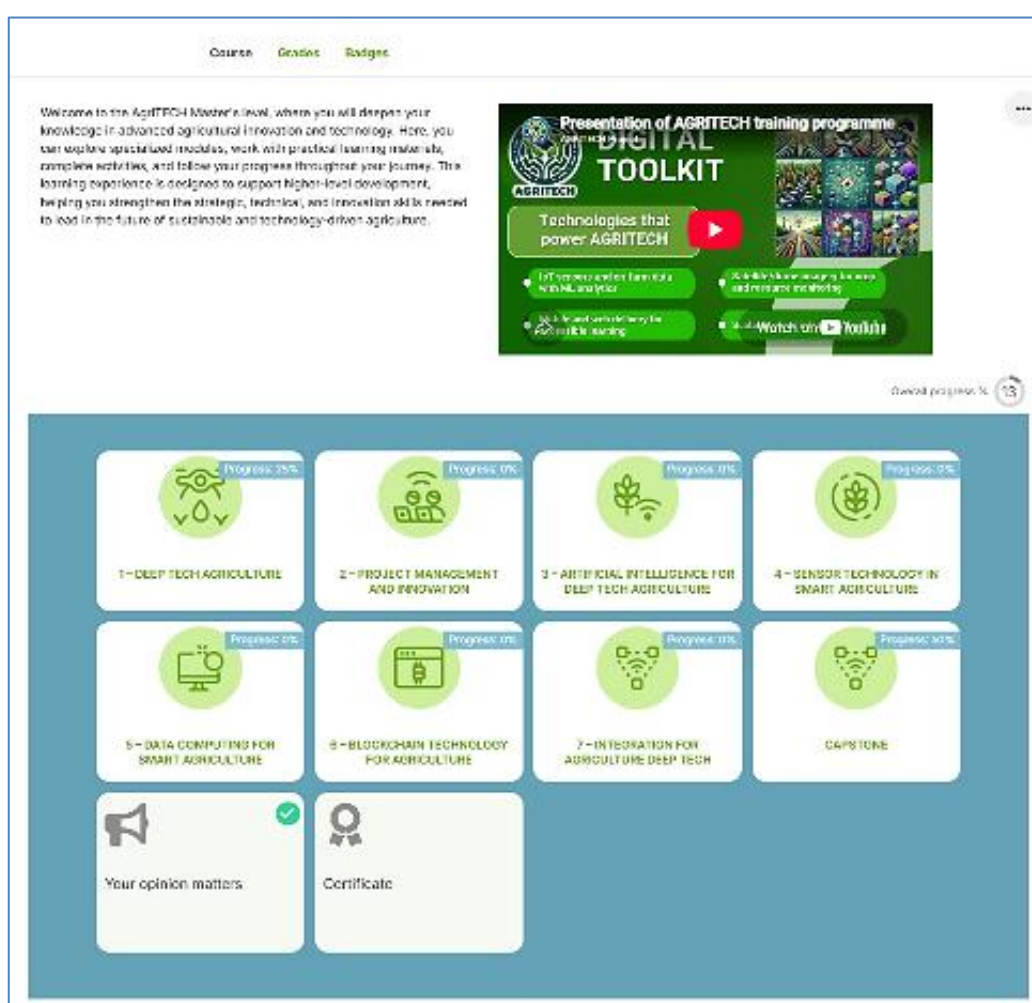
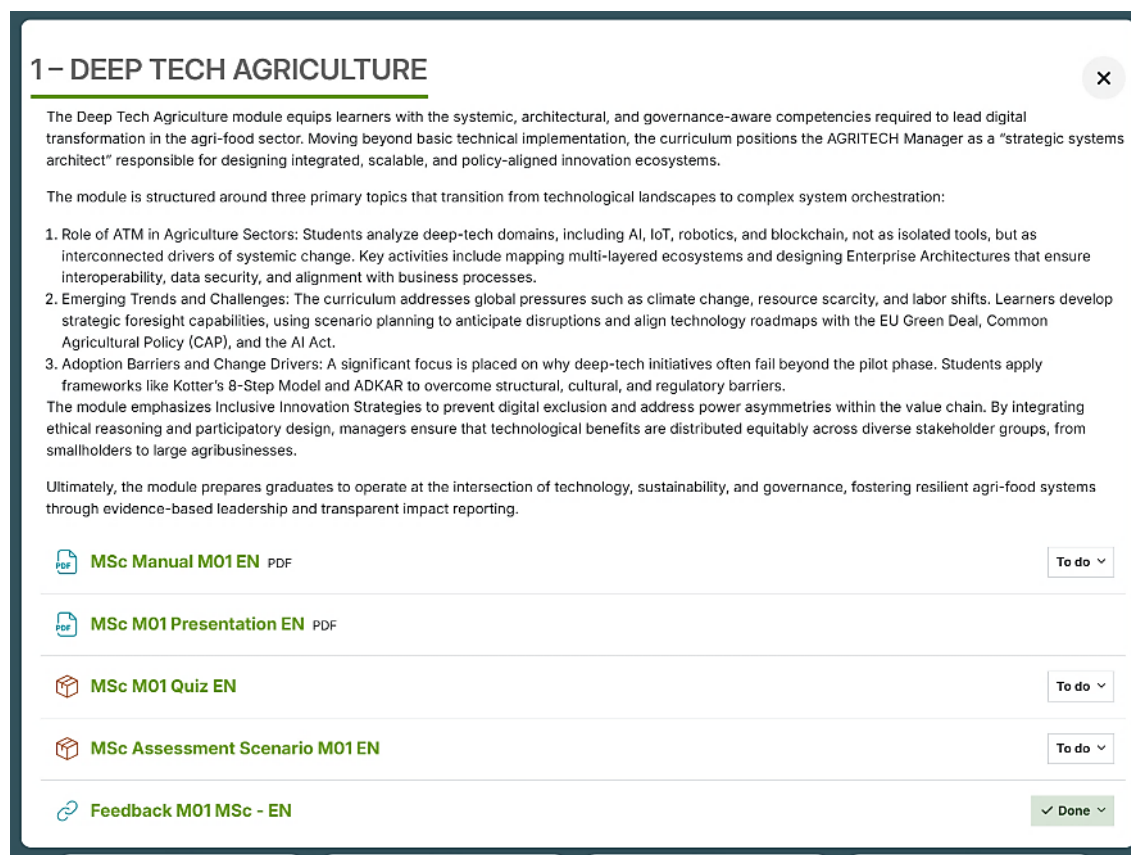


**Figure 16. Organisation of the AGRITECH MSc/VET pathway in the Moodle environment**

Within each programme level, the materials follow the seven-module AGRITECH curriculum structure, from **M01** to **M07**. Resources are associated with the module for which they were developed, allowing learners to move from instructional content to interactive and assessed activities within the same learning context. This includes manuals, *Genially* presentations, **quizzes** and **scenario-based**

**interactive** assessment activities. The detailed educational purpose of these materials is described in Chapter 4 and is not repeated here.



**1 – DEEP TECH AGRICULTURE**

The Deep Tech Agriculture module equips learners with the systemic, architectural, and governance-aware competencies required to lead digital transformation in the agri-food sector. Moving beyond basic technical implementation, the curriculum positions the AGRITECH Manager as a “strategic systems architect” responsible for designing integrated, scalable, and policy-aligned innovation ecosystems.

The module is structured around three primary topics that transition from technological landscapes to complex system orchestration:

1. Role of ATM in Agriculture Sectors: Students analyze deep-tech domains, including AI, IoT, robotics, and blockchain, not as isolated tools, but as interconnected drivers of systemic change. Key activities include mapping multi-layered ecosystems and designing Enterprise Architectures that ensure interoperability, data security, and alignment with business processes.
2. Emerging Trends and Challenges: The curriculum addresses global pressures such as climate change, resource scarcity, and labor shifts. Learners develop strategic foresight capabilities, using scenario planning to anticipate disruptions and align technology roadmaps with the EU Green Deal, Common Agricultural Policy (CAP), and the AI Act.
3. Adoption Barriers and Change Drivers: A significant focus is placed on why deep-tech initiatives often fail beyond the pilot phase. Students apply frameworks like Kotter’s 8-Step Model and ADKAR to overcome structural, cultural, and regulatory barriers.

The module emphasizes Inclusive Innovation Strategies to prevent digital exclusion and address power asymmetries within the value chain. By integrating ethical reasoning and participatory design, managers ensure that technological benefits are distributed equitably across diverse stakeholder groups, from smallholders to large agribusinesses.

Ultimately, the module prepares graduates to operate at the intersection of technology, sustainability, and governance, fostering resilient agri-food systems through evidence-based leadership and transparent impact reporting.

-  **MSc Manual M01 EN** PDF To do
-  **MSc M01 Presentation EN** PDF
-  **MSc M01 Quiz EN** To do
-  **MSc Assessment Scenario M01 EN** To do
-  **Feedback M01 MSc - EN** Done

**Figure 17. Example of learning resources and activities available within an AGRITECH MSc module**

Where different language versions are required, learners can use the language-selection function provided by the platform. The interface includes English, Czech, Italian, Hungarian, Romanian and Greek. All required translations for the VET and MSc materials are finalised and uploaded to the platform, as documented in Section 4.5.

The same module-based organisation supports individual learning and facilitated delivery through participating institutions and Educational HUBs. Teachers, trainers and facilitators can direct learners to the relevant programme level, module and activity while keeping access to instructional, interactive and assessed resources within the same Moodle environment.

## 5.2 Integration, tracking and completion

The materials included in D2.5 are integrated into the Moodle environment according to their function within the learning process. Manuals and presentation materials are provided as module resources for consultation, while interactive assessed activities are integrated in forms that allow learner interaction and, where required, learning management system tracking. This keeps instructional and assessed resources within the same module environment without assigning the same technical or assessment role to every material.

The formal module quizzes developed for the VET and MSc pathways were created in Genially and exported as SCORM packages for integration into the AGRITECH e-learning platform. The SCORM configuration allows the quiz to communicate the learner's score and completion status to Moodle. This enables quiz results to be recorded within the learning management system while retaining the



interactive question formats described in Section 4.2. Tracking therefore follows the assessment role assigned to the activity; access to a manual or presentation does not by itself create a formal grade. Scenario-based activities are also interactive assessed components presented within the relevant module and follow the completion logic described in Section 4.3. Learners progress through the two Challenges, receive feedback on their decisions and reach a completion screen once the scenario requirements have been met. Where activity completion is configured in Moodle, the learner can also see status indicators such as **Done** or **To do**, as illustrated in Figure 17.

The platform therefore combines access to learning content, activity completion and assessment tracking within the same learner pathway. Quizzes and scenario-based activities form part of the evaluation process, while manuals and presentations provide instructional support. The Capstone Project remains part of the wider programme assessment structure defined in D2.3; it is not presented in D2.5 as a Task 2.5 gamified material. This distinction preserves the assessment approach defined in D2.3 and avoids assigning an assessment function to every resource available on the platform.

### 5.3 Current technical status

At the time of preparation of **D2.5 Gamified Educational Materials Package**, **AGRITECH Moodle** environment provides access to the finalised VET and MSc learning materials included in the Task 2.5 package. The current module structure allows learners to access manuals, presentations, quizzes and scenario-based activities within the corresponding AGRITECH modules. The platform also provides language selection and activity-completion functions for the resources configured accordingly.

The Genially **quizzes** developed for the seven modules have been exported as SCORM packages and integrated into Moodle, allowing the learning management system to record quiz scores and completion status. **Scenario-based activities** are also available within the module structure and provide completion feedback to learners. These functions support the delivery of the **VET** and **MSc** pathways without changing the assessment rules defined in D2.3 AgriTech Curriculum.

All materials documented in this revised D2.5, together with all required **VET** and **MSc** language versions, are uploaded and available through the AGRITECH e-learning environment at the time of submission. **D2.5** therefore records the completed material set available on the platform and does not include resources that remain under development or are not yet uploaded.

Detailed platform development, testing and technical validation are addressed separately within WP4 and are therefore not duplicated in D2.5. This chapter records platform integration only to the extent needed to show how the finalised Task 2.5 materials are accessed, organised and tracked.

## 6. QUALITY ASSURANCE AND IMPLEMENTATION FEEDBACK

**Quality assurance** for the Task 2.5 materials was applied during preparation, localisation and implementation testing, rather than treated as a separate end-stage exercise. The checks focused on alignment with **D2.3 AgriTech Curriculum**, suitability for the programme levels covered by this deliverable, **VET** at EQF Level **5** and **MSc** at EQF Level **7**, consistency of the learning sequence, and whether learners and teaching staff could understand and access the materials. Evidence came from content checks during development, partner review, pilot testing, learner feedback and comments received from teachers, trainers and facilitators involved in delivery. This chapter reports those activities and the implementation evidence available for the finalised materials documented in D2.5. It does not repeat the formal project-level deliverable review procedure or the wider technical validation of the e-learning platform addressed under WP4.

Manuals, presentations, quizzes and scenario-based activities were checked against the seven-module curriculum and relevant learning outcomes. The same programme structure was retained across the VET and MSc pathways, while wording, depth and expected learner judgement were adapted to EQF Levels 5 and 7. Attention was given to instructions and terminology, question and feedback logic, the distinction between instructional resources and interactive evaluated activities, and the correct functioning of assessment and completion logic where applicable. The English source materials provided the reference for localisation so that translated versions preserve the same learning purpose, module identity and assessment logic.

| QA area                                | Checks and evidence used                                                                                                                                                               | Current interpretation / follow-up                                                                                                                                              |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Curriculum and level alignment</b>  | Content was checked against the D2.3 AgriTech Curriculum module structure, learning outcomes and EQF expectations for VET at EQF Level 5 and MSc at EQF Level 7.                       | The finalised package follows the agreed seven-module structure and the level-specific learning outcomes for the two pathways covered by D2.5.                                  |
| <b>Educational consistency</b>         | Instructions, terminology, learning sequence, question logic and feedback were reviewed across material types.                                                                         | Corrections identified during drafting and implementation testing were incorporated into the finalised materials.                                                               |
| <b>Assessment and completion logic</b> | Checks distinguished instructional resources from interactive evaluated activities and verified completion or scoring functions where applicable.                                      | Quizzes and scenarios operate within the programme evaluation process. The Capstone Project remains part of the wider assessment and completion structure defined in D2.3.      |
| <b>Access and usability</b>            | Pilot testing checked access to modules and resources, activity navigation, learner instructions and visible completion behaviour in Moodle.                                           | Issues identified during testing were addressed during package consolidation. Platform-wide technical validation remains within WP4.                                            |
| <b>Localisation consistency</b>        | Localisation checks used the English source as the reference for terminology, instructions, module identity and assessment meaning.                                                    | All required VET and MSc language versions are finalised and uploaded to the AGRITECH platform.                                                                                 |
| <b>Implementation feedback</b>         | Learner feedback and comments from teachers, trainers and facilitators were used where available to identify unclear instructions, level-fit issues and access or navigation problems. | The evidence informed revision. Teaching-staff feedback is not complete across all delivery teams and is treated as implementation feedback, not as a full educator evaluation. |

**Table 4. Quality assurance activities during development and pilot testing of the Task 2.5 materials**



Pilot testing carried out from March to June 2026 added a practical QA layer because the materials were used by the target learner groups under real delivery conditions. Learner feedback was considered together with observations and comments from teaching staff where available. This evidence is useful for judging clarity, usability and level fit, although its coverage is not uniform. Feedback is available from learners participating in the VET and MSc activities, while structured comments were not obtained from every teacher or trainer involved. D2.5 therefore uses this evidence as implementation feedback and does not present it as a complete evaluation of all teaching staff.

Where feedback or testing identified points requiring adjustment, wording, instructions, examples, navigation or presentation were corrected without changing the agreed curriculum. Changes affecting learning outcomes, assessment rules, level expectations or the seven-module structure remain subject to the existing project change-control arrangements.

Quality assurance reported in D2.5 is limited to the educational materials included in this deliverable and their use within the VET and MSc pathways. Wider platform development, technical validation and platform-level testing are addressed under WP4 and are therefore not duplicated here.

## 7. RISKS, LIMITATIONS, AND REMAINING ACTIONS

At the time of submission of D2.5, the VET and MSc educational materials documented in this deliverable are finalised and available through the AGRITECH e-learning platform. The purpose of this chapter is therefore to identify residual operational risks and limitations that may affect access, use, tracking or later maintenance of the completed package. These points concern platform configuration, assessment tracking, consistency across language versions following later updates, and the coverage of implementation feedback. They do not represent unfinished educational materials within the package documented in this version of D2.5.

| Area                                          | Current limitation or risk                                                                                                                                                                                                                                 | Practical implication                                                                                                                                                    | Remaining action                                                                                                                                                                                                               |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Platform access and configuration</b>      | The finalised materials are available on the AGRITECH platform, but individual links, visibility settings, language access, navigation or completion settings may require correction if issues appear during continued use.                                | A learner could encounter an inaccessible resource, incorrect visibility or inconsistent completion behaviour even though the educational content itself is complete.    | Monitor access during continued use and correct links, permissions, navigation, language visibility and completion settings when issues are identified. Wider platform maintenance and technical validation remain within WP4. |
| <b>Assessment tracking</b>                    | Interactive evaluated activities depend on the technical configuration used to record scores or completion status where applicable. Later platform or configuration changes could affect this behaviour.                                                   | Quiz scores or activity-completion information may not be recorded or displayed consistently if the relevant configuration changes or a technical issue occurs.          | Periodically verify scoring and completion behaviour for the VET and MSc evaluated activities and correct technical configuration where needed without changing the assessment logic defined in D2.3.                          |
| <b>Multilingual consistency after updates</b> | All required VET and MSc translations are finalised and available at submission. Any later correction to source material, instructions or platform text could create differences between language versions if the same change is not applied consistently. | Equivalent resources could temporarily differ in terminology, instructions or learner-facing information after a later revision.                                         | When learner-facing content is updated, check the corresponding language versions and apply the same substantive correction before publishing the revised material.                                                            |
| <b>Implementation feedback coverage</b>       | Pilot testing carried out from March to June 2026 generated learner feedback and teaching-staff comments where available, but feedback coverage is not uniform across all delivery teams and possible future delivery contexts.                            | The available evidence supports revision of clarity, usability and level fit, but it should not be treated as a complete evaluation of every later use of the materials. | Continue collecting relevant implementation feedback during subsequent use and apply supported corrections to wording, navigation or presentation without changing the agreed learning outcomes or assessment rules.           |

**Table 5. Residual risks, limitations and remaining actions for the finalised AGRITECH educational materials package**

These residual risks do not change the status of the materials included in this version of **D2.5** as finalised and available for the **VET** and **MSc** pathways. They relate to continued operation, maintenance and use of the package during the remaining project period.

The **AGRITECH** partnership may add further educational materials to the e-learning platform before the finalisation of the project, including the Smart Game and additional interactive exercises, provided that these materials are completed, quality checked and technically integrated. Such possible additions are not part of the finalised material inventory documented in the present version of D2.5 and are therefore not treated as missing outputs or current limitations of this package.



If additional educational materials are finalised and uploaded to the platform during the remaining project period, an updated version of D2.5 will be issued before project completion. The updated deliverable will incorporate and document the additional materials actually available at that stage, together with the relevant quality-assurance and platform-integration information.



## 8. CONCLUSIONS

**D2.5 Gamified Educational Materials Package**, developed under **Task 2.5 Preparation of gamified educational material, learning resources, didactical tools**, documents the educational materials available for the **AGRITECH VET** pathway at **EQF Level 5** and **MSc** pathway at **EQF Level 7** at the time of submission. The package is organised around the seven AGRITECH modules and reflects the competence framework, learning ecosystem and curriculum developed through the preceding WP2 tasks.

The finalised package presented in this version includes the **VET** and **MSc** manuals and presentations, **interactive quizzes** and **scenario-based assessment activities**, didactical guidance and the corresponding multilingual versions. The quizzes and scenarios provide interactive evaluated activities within the AGRITECH assessment process, while the Capstone Project remains part of the wider assessment structure defined in D2.3. All required **VET** and **MSc** translations are finalised and available on the [AGRITECH e-learning platform](#).

The **AGRITECH Moodle** environment provides access to the materials within the relevant programme level and module. Where applicable, the platform supports activity completion and the recording of assessment results. Quality assurance during development and pilot testing from March to June 2026 addressed curriculum and level alignment, educational consistency, assessment logic, access and usability, localisation consistency and implementation feedback. Continued use of the platform may still require operational corrections to links, configuration, tracking or learner-facing information, as described in Chapter 7.

This version of D2.5 therefore records the finalised VET and MSc educational materials actually available on the platform at submission. It does not treat possible later additions as completed outputs. During the remaining project period, the partnership may add further educational materials, including the smart games and additional interactive exercises, if these are completed, quality checked and technically integrated.

If such additional educational materials are finalised and uploaded before the end of the project, an updated version of D2.5 will be issued before project completion. That update will document the additional materials actually available at that stage and the relevant quality-assurance and platform-integration information.



## References

### Project source documents and deliverables

1. AGRITECH Consortium. (2024). Grant Agreement No. 101187399, including Annex 1 - Description of Action. Erasmus+.
2. AGRITECH Consortium. (2024). PROPOSAL\_101187399-AGRITECH-ERASMUS-EDU-2024-PI-ALL-INNO. Erasmus+ Application Submission.
3. AGRITECH Consortium. (2025). D2.1 AGRITECH Manager Competency Framework. July 2025.
4. AGRITECH Consortium. (2026). D2.2 Report on Learning Ecosystem Design. January 2026.
5. AGRITECH Consortium. (2025). D2.3 AgriTech Curriculum. December 2025.
6. AGRITECH Consortium. (2026). D2.4 Educational Ecosystem and HUBs. Project documentation used for HUB and pilot implementation.
7. AGRITECH Consortium. (2026). Pilot testing records and learner, teacher, trainer and facilitator feedback relating to the VET and MSc pathways.
8. AGRITECH Consortium. (2026). D4.1 Platform Development and Piloting. Deliverable under finalisation at the time of preparation of D2.5.

### Platforms and authoring tools

9. AGRITECH e-learning environment. Moodle platform. <https://agritech.cardetprojects.com/>
10. Genially. Interactive content authoring platform. <https://genially.com/>
11. Moodle. Open-source learning management system. <https://moodle.org/>