EUROPEAN COMMISSION   E+ Capacity Building in Higher Education

SEA-ABT: SOUTH EAST ASIA ACADEMY FOR BEVERAGE TECHNOLOGY

Project number: 561515-EPP-1-2015-1-AT-EPPKA2-CBHE-JP

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Deliverable D7.1
Quality plan

Prepared by: Luis Mayor (IFA)

Contributors: Saverio Mannino (IFA), Gerhard Schleining (BOKU)

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Dissemination Level		
PU	Public	
PP	Restricted to other programme participants (including Commission services and projects reviewers)	
CO	Confidential, only for members of the consortium (including EACEA and Commission services and projects reviewers)	**X**

Summary:

This plan serves as guideline for all project partners of the SEA-ABT project. It defines quality management processes and minimum quality criteria for the assessment of 4 objects of consideration:

1. The project management and quality related processes (section 1).
2. The development and implementation of educational products for Higher Education (HE) and Continuing Professional Development (CPD) (section 2)
3. Testing of selected educational products (section 3)
4. Social aspects: team work and team spirit of the project (section 4)

Contents

Project Coordinator:
GERHARD SCHLEINING | BOKU – Universitaet fuer Bodenkultur Wien |
gerhard.schleining@boku.ac.at

1 SPECIFICATION OF QUALITY RELATED PROJECT MANAGEMENT PROCESSES AND QUALITY CRITERIA FOR THEIR ASSESSMENT

1.1 Introduction

Work package (WPL) and task leaders (TL) will be responsible for ensuring

    a) the timely delivery of all deliverables and
    b) the quality of all deliverables, based on the requirement outlined in the detailed description of work of the proposal.

In order to support and document the related activities, the following documents will be created:

- A template for deliverable reports
- Deliverable Management Master Files for each WP, maintained by the WPLs
- Task reports prepared by TLs, evaluated by WPLx and WPL7

The WPLs should ensure to contact all TLs at regularly intervals to determine the progress of task completion and discuss any problems the task leaders might be facing that might cause a delay in the delivery of deliverables or the completion of tasks.

1.2 Quality monitoring of deliverables and milestones

A set of quality criteria is being proposed to ensure the proper functioning of work packages and timely completion of each task report that should be submitted on the project website.

1.2.1 Task Reports prepared by TLs

All tasks should have reports prepared by TLs which outlines:

- what has been done in the past 6 months
- deviations from the DoW with explanations and proposed solutions
- what are the plans for the next 6 months

A template is available in Dropbox/E-SEA-ABT/deliverables, which is to be used by TLs. It should be saved after each update with the date at the end of the filename. After each 6 months the WPL should be notified for reviewing and acceptance.

	Task **1.1**:	**Inventory of existing teaching capacities and related needs**		
	duration	**M2-M6**	**Updated:**	**YYYY-MM-DD**
Taskleader	Name			
	Email			

Summary

Please summarize here the actual status of the task.

M6 Quality Task Report

Please report on the **progress of the task** in the **past 6 months** in relation to the expected/foreseen progress. Please describe the activities of the partners involved in your task, any deliverables produced and milestones reached *(500-1000 characters).*

Please report on any **deviations** occurred. Is the task on time? Please justify those deviations and explain any counter actions planned or taken. *(~500-1000 characters)*

Please report on the **foreseen activities** for the **next 6 months** (only to be filled if task continues, *500-1000 characters)*

Fig.1. Template for biannual task report

1.2.2 Deliverable Reports prepared by TLs

A template is available in Dropbox/E-SEA-ABT/deliverables, which is to be used by task leaders in the preparation of the deliverable report.

The deliverable report should contain:

- a cover page, which will have the deliverable title, the names of all contributors to the work. The main authors of the report should also be highlighted.
- an introduction section which outlines what has been done.

1.2.3 Deliverable Management Master Files

For the purpose of monitoring that deliverables are finalized on time and ensuring they meet certain quality indicators, for each WP a **Deliverable Management Master File** have been prepared and saved at dropbox/E-SEA-ABT/deliverables/**DeliverableManagementMasterFile_WPx.xls**

Each Deliverable Management Master File lists all deliverables per WP in numerical order and details:

- The code and deliverable title
- the author responsible for finalizing the deliverable;
- the dissemination level;
- the actual % of completion
- planned month of delivery;
- when the deliverable is ready for review;
- deadline for reviewing;
- the two nominated reviewers and the stage of the review process;
- any comments provided to the review process; and
- quality indicators.

Code	Deliverable name	Responsibility	Dissemination level	Achieved	Planned date	Ready for review	Deadline for reviewing	Reviewer 1	Done	Reviewer 2	Done	Comments	Quality Indicators
D1.1	Information collection system	IU, Sasitorn	P		2	18/05/2016	02/06/2016	Gerhard	27/06/2016	Navaphattra	24/11/2016	Latest version uploaded in the "review" folder - latest version 2016-11-24. Sent to reviewers 2016-11-28	should describe: the structure (fields), input form and display options on an online database for needs and expertise within the consortium
D1.2	Full inventory of available capacities and identified gaps	IU, Challeeda	R		4	18/05/2016	02/06/2016	Paola	08/01/2017	Gerhard		Uploaded in the "review" folder - latest version 2016-10-29. Sent to reviewers 2016-11-28. Paola complete review, Chaleeda made revisions 2017-01-13.	should describe: existing LifeLongLearning (LLL) elements, approaches and structures at the partner Universities, details on available training tools and teaching techniques at the partner countries (including identified gaps and demand) as well as in the programme countries (with best practise examples and experience), what and how it could be fed in D1.1 database
D1.3	Report on regional, national, gender and ethical aspects	IU, Challeeda	P	100%	5	18/05/2016	02/06/2016	Paola	08/01/2017	Navaphattra, Jeed	10/01/2017	Uploaded in the "review" folder - latest version 2016-10-30. Sent to reviewers 2016-11-26. Review done early January and returned to author 2017-01-10	should describe: any regional, national, gender and ethical aspects which were identified in task 1.1 and 1.2 including important aspects such as critical thinking and language skills, issues of sustainability (environmental, economic and social), and work to collaborate with national and international stakeholders (e.g. companies and political players in Thailand) will be discussed.
D1.4	Specifications for all modules, courses and educational products	IU, Sasitorn	R		6			Gerhard, Paola, Frank	01/12/2016	Navaphattra, Jeed	24/11/2016	Latest version uploaded in the "review" folder - latest version 2016-11-24. Sent to reviewers 2016-11-28. Frank completed review 2016-12-01. SASITON TO UPDATE!	should describe: specifications for academic and CPD training to be developed within the project describing the target groups, prerequisite knowledge, the learning outcomes, the nature and the relation to other modules, courses, products, related certification/accreditation foreseen, linked learning/teaching tools, most efficient and synergetic ways to include companies in educational activities etc. Different training activities/modules will be considered for different target groups (industry staff).

Fig. 2. Example of the structure of a Deliverable Management Master File

Any updates should be made in the Deliverable Management Master Google Sheet directly. Working on one single sheet will make it easier to keep an overview of the progress of the finalization process.

It is the *responsibility of each WPL*

1. to nominate the author responsible for each deliverable;
2. to nominate 2 reviewers; and
3. to indicate quality indicators (taken from the DoW)

When nominating an author responsible for a deliverable and the two reviewers, please update such changes directly in the sheet and notify these persons per email with WPL7 in copy.

Procedure for finalizing deliverables:

1. When the first draft of a deliverable is finalized and the deliverable is ready for review, the author should mark this stage in the Deliverable Management Master File. Thereafter the deliverable should be placed in the sub-folder "Deliverables ready for review" and the deliverable should be sent to both reviewers per email.

2. The reviewers can give their feedback per email, phone, skype, at meetings or simply directly to the author to discuss their views and inputs.

3. Once the deliverable has been reviewed by both reviewers and any requested justifiable updates have been made by the author, the deliverable may be placed by the author in the sub-folder "Deliverables accepted". Please make sure to inform also WPL7.

1.3 Task leader's responsibilities

The TL is responsible for:

- completing the task according to the set of qualitative and quantitative quality indicators
- organizing the work of all conributors
- preparing and updating the task reports on a regular basis in order to have always an actual status of the task available for the WPL and WP7L.

1.4 WP leader's responsibilities

The role of the WP leader is to ensure that all task leaders are managing their respective tasks adequately. It is the responsibility of the WPL to ensure that the final deliverables are submitted on time. If a delay in the completion is foreseen, the WPLx should report this to the WPL7 in advance of the due date. The WPL should indicate a new completion date and explain the reasons for the delay. This will be done by the TL, through the task reports.

For the purpose of monitoring that deliverables are finalised on time and ensuring they meet certain quality indicators, for each WP Deliverable Management Master Files have been prepared. It is the responsibility of the WP leader to:

- Update the respective WP Deliverable Management Master File
- Nominate 2 reviewers for each deliverable
- Indicate qualitative and quantitative quality indicators

Quality indicators should be prepared prior to the start of the task or during the initial phase of the task, which should be used to assess the successful completion of the task.

Qualitative Quality indicators, such as start and end dates, will be used to ensure proper task time management. **Quantitative** Quality indicators should be based on the aims of the task and should provide a simple way in which those aims are achieved. They can be a product (e.g., an e-learning module) or a completed list (e.g., a set of learning outcomes). These set of quantitative criteria can also be used as milestones. It is suggested that the quantitative criteria are selected based on the discussion with key contributors of the tasks and a final decision made by the TL and WPL. The WPL will decide how many of these quantitative criteria should be required. However, it is suggested to have at least one.

The following are suggested as qualitative and quantitative criteria:

1. The proposed start and end dates of the task.
2. List of contributors within the tasks and their roles
3. If possible, a list of milestones with the proposed dates
4. Quantitative criteria and any relevant information that would explain how they are used in ensuring aims are achieved.

1.5 Evaluation of task reports

WPLs will also be provided with the opportunity to identify any problems faced by TLs and in the timely completion of tasks. The WP7 leader will discuss with the WPLx how any problems might be overcome and put in place an action plan to address the issues. Any task that is delayed should be identified in the biannual task report and new completion dates and plans on how to complete the task should be outlined. This will allow the WP7 leader to assess if this will cause a delay to other tasks requiring the completion of that task.

2 PROCESSES AND ASSESSMENT CRITERIA FOR THE DEVELOPMENT AND IMPLEMENTATION OF MODULES, COURSES AND OTHER TRAINING PRODUCTS/ACTIVITIES FOR HIGHER EDUCATION (HE) AND CONTINUING PROFESSIONAL DEVELOPMENT (CPD)

2.1 PROCESSES AND CRITERIA FOR HE

To develop a systematic approach to curriculum development based on a training and education model the University must have in place a set of processes for managing quality in learning and teaching. In general curriculum developments needs learning outcomes and related assessments, course outlines, lesson plans with specific instructional techniques, grading systems, and evaluation methodologies.

However, the first element of program planning is the rationale, or explaining why an educational program is being developed. The rationale has two step: target audience identification and needs assessment. The second element is the goals identification. Goals must be specific, measurable, attainable, realistic and, timely.

The new program proposal must contain at least:

- Title of the proposed program
- The rationale
- The degree attainment
- Duration
- Learning outcomes
- Mode of study: full time or part time
- Mode of delivery
- Departments involved
- Business plan information including costs and risks

2.1.1 Assessment criteria according to the European Qualification Framework

To comply with the European Qualification Framework, the documentation should at least demonstrate that:

1. The responsibilities and/or legal competence of all relevant national bodies involved in the referencing process are clearly determined and published by the competent public authorities.
2. There is a clear and demonstrable link between the qualifications levels in the National Qualifications Framework and the level descriptors of the EQF.
3. The qualifications system is based on the principle and objective of learning outcomes and linked to arrangements for validation of non-formal and informal learning and, where these exist, to credit systems.
4. The procedures for inclusion of qualifications in the National Qualifications Framework or for describing the place of qualifications in the national qualification system are transparent.
5. The referencing process shall include the stated agreement of the relevant quality assurance bodies.
6. The referencing process shall involve international experts.

The principal aim of these criteria and procedures should ensure that the information and documentation published is:

- able to be validated by the competent authorities
- relevant
- transparent
- suitable for comparison
- trustworthy

Apart from transparency and comparability of fundamental importance are the learning outcomes approach and the principle that qualifications Frameworks, are underpinned by a robust quality assurance system .

2.1.2 Assessment criteria for the application of the EQAS-Food framework for high quality food studies programmes

In order to be qualified according to the **European Quality Accreditation System for Food Studies (EQAS-Food,** https://www.iseki-food.net/accreditation**),** the requirements stated in the document "**EQAS Food Award Procedures, Criteria and Standards**" (https://www.iseki-food.net/webfm_send/2440) will be considered.

The LO for the EQAS Award are grouped into five subject areas. Programmes that want to be awarded the label must demonstrate how they fulfil the majority of the LO in each of these five areas (Tables 1 to 5 of the framework document "**EQAS Food Award Procedures, Criteria and Standards**"):

    i.   Food Safety and Microbiology - Essential to produce safe foods; microbiology, toxicology and applied safety management belong to this group of outcomes.

    ii. Food Chemistry and Analysis - Analysis of foods, chemical composition, physical properties and sensory characteristics of foods.

    iii. Food processing and engineering - How to process foods with optimized product quality and hygiene, with knowledge of the food product and of the processing plant, with adequate water and waste management.

    iv. Quality management and food law

    v.   Generic Competences - Communication abilities, ethics and personal

The achievement of any of these outcomes by the student can be in one or several modules since no restriction to the design of programmes is implied by EQAS-FOOD.

A self-assessment report must show how the learning-outcomes as defined in Section 2 of the framework document "**EQAS Food Award Procedures, Criteria and Standards**" are achieved, addressing the following areas:

● The rationale of the programme and how it is related to food science and technology.

● Educational process: How the study programme is sufficient to achieve the objectives.

● The human and physical resources and partnerships and show that they are adequate to deliver the programme.

● Management System: How the standing and quality of the programme is managed and how it is perceived by alumni and employers of those graduates.

A **module handbook** must be provided with the following content for each module:

Module name	
Module level, if applicable	
Abbreviation, if applicable	
Sub-heading, if applicable	
Classes, if applicable	
Semester	
Module coordinator	
Lecturer	
Language	
Classification within the curriculum	For all degree programmes in which the module is taught (including those being discontinued), indicate the degree programme, area of specialisation (where applicable), compulsory / optional, semester.
Teaching format / class hours per week during the semester	Indicate the number of class hours per week during the semester and group size, broken down by teaching format: lecture, exercise, lab, project, seminar, etc.
Workload	(Estimated) workload divided into face-to-face teaching and independent study, in hours.
Credit points (ECTS or equivalent)	
Requirements under the examination regulations	

Recommended prerequisites	e.g. prior knowledge
Targeted learning outcomes	Basic question: Which learning outcomes should be attained by students in the module? e.g.: - Knowledge: information, theoretical and/or factual knowledge - Skills: cognitive and practical skills which make use of the knowledge - Competences: integration of knowledge, skills and social and methodological abilities in work and study situations. Example: "The students know / are able to…"
Content	The description should indicate the weighting and level of the content.
Study / exam achievements	
Forms of media	
Literature	

2.2 PROCESSES AND ASSESSMENT CRITERIA FOR THE DEVELOPMENT OF CONTINUING EDUCATION (CE) AND LLL

Based on the quality concept for continuing education and LLL of BOKU as best practice approach the following criteria for the development of a concept for integration of modules in CPD programs are set.

This concept has taken into account the key international experiences and initiatives, and more specifically, the standards and guidelines developed by European Network for Quality Assurance in Higher Education (**ENQA**, http://www.enqa.eu/). These standards are also in line with the principles of the ISO 9000 series, including customer focus, leadership, involvement of people, process approach, system approach to management, continual improvement, factual approach to decision making and mutually beneficial supplier relationships.

Further the principles of **ECVET**, the European Credit system for Vocational Education and Training), are considered in order to make the qualification transparent.

This system takes into account the interaction of the education/training institution with all relevant stakeholders. Criteria address not only content, quality and delivery of knowledge, but also outputs/performance of the courses offered.

As a provider of CE products, SEA-ABT will have a policy and procedures for QA, including approval, monitoring and periodic review of the courses, assessment of outputs, quality assurance of teaching staff, QA of learning resources, information systems and public information. These principles are also in harmony with

2.2.1 Principles of the Quality Assurance system for CE

It is essential in Continuing Education to understand customer needs, meet customer requirements and strive to exceed customer expectations. Training activities and related resources are to be managed as a process in order to achieve the desired results more efficiently. Dedicated involvement of participants in this process is the moving power to make SEA-ABT training successful products. Continual improvement of the overall training performance should also be a permanent objective of the consortium (Fig. 3).
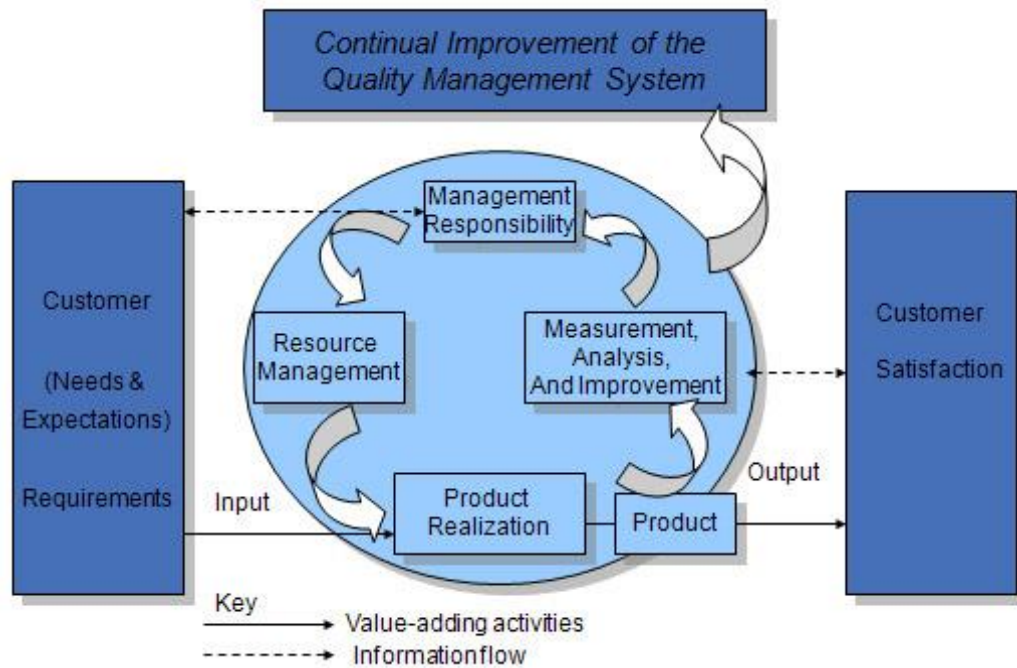
Figure 3. Model of a process-based quality management system

Continual improvement will be achieved by analysing all relevant input and output data and information on a regular basis and by effective decisions on such grounds.

The concept for internal quality assurance of training courses/modules was developed based on the ENQA standards. Contents of quality assurance principles and suggested SEA-ABT criteria for evaluation of compliance are presented in Table 1.

Table 1. Quality assurance principles and criteria for quality assessment of SEA-ABT Continuing Education

ENQA Standard / SEA-ABT principle	Contents	SEA-ABT criteria
1. Policy and procedures for quality assurance	Policy and associated procedures for the assurance of the quality of SEA-ABT training activities	The consortium organizes and carries out training in accordance to its goals and objectives.
	Interactions consortium members.	The consortium supports training activities of its partners.
		SEA-ABT disseminates training opportunities and implements novelty research results in its courses.
		A system for evaluation, maintenance and improvement of continuing education is in place.
	Strategy and policy for the continuous enhancement of quality. The strategy, policy and procedures should have a formal status and be publicly available. They should also include a role for trainees and other stakeholders.	The consortium publicly presents its mission, policy and strategy regarding continuing education.
2. Approval, monitoring and periodic review of training activities	SEA-ABT should have formal mechanisms for the approval, periodic review and monitoring of continuing education activities.	A QA group elaborates and observes procedures for development, approval, monitoring and improving of education activities.
3. Assessment of trainees	Trainees should be assessed using published procedures which are applied	A QA group develops and publishes procedures for the assessment of

	consistently.	trainees knowledge and skills acquired from SEA-ABT training.
4. **QA of teaching staff**	SEA-ABT should have ways of ensuring that staff involved in education are qualified and competent.	A QA group ensures the professional level, qualification and development of its trainers.
		The consortium collaborates with external organizations when necessary.
		A QA group designs, implements and organizes train-the-trainer activities.
5. **Learning resources and trainee support**	SEA-ABT should ensure that the resources available for the training activities are adequate and appropriate for each module offered.	Each training partner manages the infrastructure, technical and information resources necessary for carrying out the suggested training activities.
		Additional resources will be acquired when needed
		Training partners collaborate with other consortium partners.
		SEA-ABT attracts trainees and aids their professional realization (an idea to set up a "job offer/seek" space in SEA-ABT website.
		The consortium disseminates training opportunities.
6. **Information systems**	SEA-ABT should collect, analyse and use relevant information for the effective management of its training activities.	A QA group elaborates adequate organization for management of training activities.
7. **Public information**	SEA-ABT should regularly publish up to date information, both quantitative and qualitative, about the training courses offered.	The consortium actively promotes training opportunities offered and disseminates relevant information.

The quality assurance system for CE includes 4 dimensions of quality that are based on different phases of CE programs:

Table 2. Phases of CE programs and quality dimensions and measures

Development of a program	Information for potential participants	Implementation of the program	Learning outcomes
Quality of conception	Quality of information	Quality of implementation	Quality of outcomes
Directive	Transparency	Admission interview	Program statistic (Feedback structure)
		Qualifications of teachers	Review of final thesis
		Didactic principle	Graduates survey
		Examination regulation	Questioning of superiors
		Participants survey	Questioning of colleagues
		Complaint management	
		Teachers survey	

The **development** and **implementation** of CE programs will be regulated by a directive. The "**Directive for CE**" introduces a number of measures - including, for example, the needs analysis, the definition of goals and goal-oriented design of the course or the planning and availability of the required resources.

The **quality of conception** ensures that the program is designed according to the needs.

The **quality of information** ensures that potential participants and participants get all relevant information about the program in a timely and comfortable way.

The **quality of Implementation** relates to the implementation of the program in the strict sense and ensures the quality of the teaching-learning processes.

The **quality of outcomes** correlates direct with the learning outcomes. After a programme the feedback of the learning effects are important to optimize future programmes.

CE will be divided in 4 categories. Category 1 to 3 are programmes which are only for enrolled students (ECTS are given). Category 4 are short time courses, everybody can attend, without credit points. All programmes have to be cost covering.

2.2.2 Processes of the QA system for CE

The SEA-ABT QA system for continuing education should ensure fulfillment of all above principles. The development steps will include:

2.2.3 Appointment of an SEA-ABT Quality Assurance Group (QA group)

3 persons will be nominated from different partners in a management board meeting to form the QA group, which will be responsible for the quality assessment of SEA-ABT CE activities.

2.2.3.1 Development of the QA system for CE

IFA will develop the QA system for CE activities. The final document will be delivered after its revision and validation by the **QA group**.

2.2.3.2 Collection and analysis of customers' requirements and other relevant information (legislation, methods, innovations, etc.)

The QA-group is responsible for collecting and analyzing customers' requirements and other information relevant to CE. The group should:

- o Identify the relevant stakeholders and target groups
- o Identify SEA-ABT requirements
- o Define the needs and expectations of potential trainees (e.g. courses content and organisation, facilities, teaching and training methods, price, etc.);
- o Analyse the relevant information for training in the field of food quality and safety (topics, innovations, emerging issues, etc.);
- o Define the criteria and procedures for evaluation of trainers and trainees
- o Assess the competition and estimate the marketing chances of SEA-ABT training courses, advantages and weaknesses;
- o Advertise SEA-ABT training courses;
- o Collect and analyse feedbacks for training courses

Some of the questions above are partly answered in the SEA-ABT DoW document, or answers will be found in project deliverables. Partners in charge of delivering information for the quality assessment reports may include information from the DoW or from other SEA-ABT deliverables (or just make specific references to them).

2.2.3.3 Identification of processes and sub-processes and the connections between them

The QA-group is responsible for identifying all processes and sub-processes related to development, approval, organization, carrying out and improvement of training courses. It should also ensure collection and analysis of all feedback information.

The general processes of SEA-ABT quality assurance in continuing education and the connections between them are presented in Figure 4.
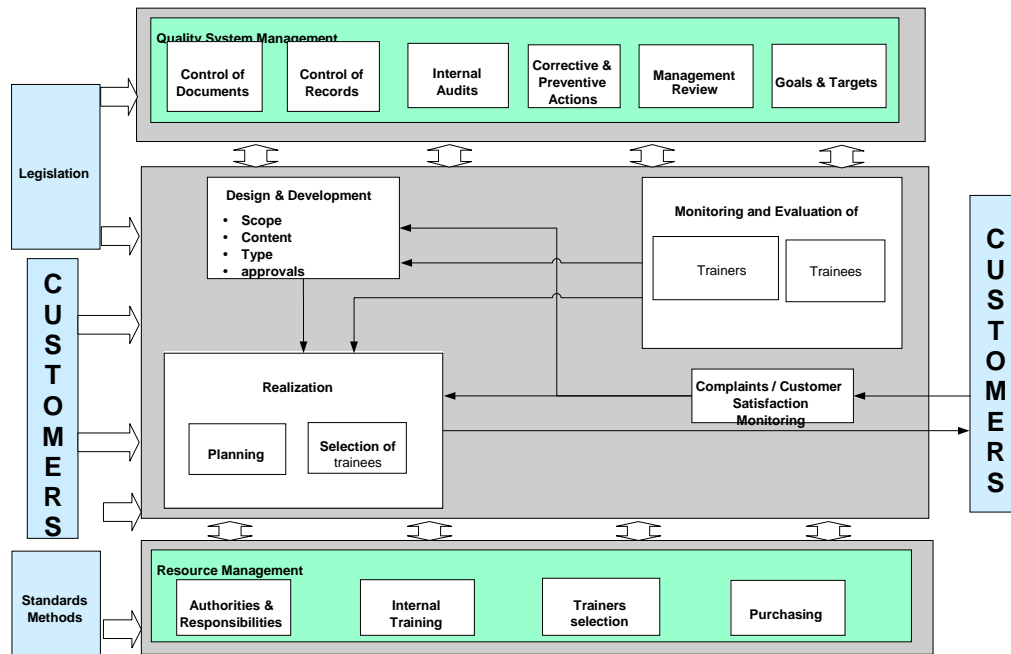
Figure 4. Process map of SEA-ABT continuing education quality assurance

2.2.4 Processes and documents for the QA of CE activities

Table 3: Processes and related documents to be developed

Process step	Related documents to be developed
1. Submission of an application for training activity	**Application form** will include all relevant criteria for evaluation, e.g.: o Title; o Learning outcomes (relevance to industry, policy and regulations, professional realization of trainees) o course description; o General structure and content; o Budget; o Time schedule o Training facilities o Availability of accommodation; o Teaching staff; o Teaching techniques; o Training materials; o Minimum/maximum number of trainees; o Administrative and technical support; o Other relevant information;
2. Review of the application by QA group, experts might be invited, On-site visit maybe carried out	**Approval document** with final decision for approval / minor or major changes / rejection
3. Preparation	o **Leaflet** for advertisement o **List of Participants** o **Training Material**
4. Evaluation by QA-GROUP	**Evaluation forms** for: o students o trainers o training organizers o **evaluation report** by QA group

3 PROCESSESS AND ASSESSMENT CRITERIA FOR THE PILOTING PHASE

3.1 Introduction

A piloting phase demonstrates the feasibility of a module, course or educational product before it is fully implemented. Selected academic modules and CPD courses developed in the SEA-ABT project will be piloted and improved according to content, didactical and organizational aspects.

The steps of the piloting phase for the SEA-ABT project are:

1) Selection of the educational modules and courses.

2) Dissemination of the piloting educational activities.

3) Preparatory work for feedback collection.

4) Implementation.

5) Assessment.

6) Improvement and reporting.

3.2 Selection of the educational modules and courses

From the repository of developed courses, a selection will be made to be implemented during the test-run. The selection may vary from partner to partner. This selection will be based on special requests from the Universities and input from the companies. Furthermore, compliance with any other running courses at that time will be ensured to best fit this test-run into the running semester of the Universities. Besides those issues, courses that best fit a test run or that clearly require the feedback of a test-run will be selected.

Criteria for the selection of modules/courses for piloting:

- expected high number of participants, ensuring enough feedback for quality assessment
- the set of selected courses will cover different teaching tools
- best/fit or need of a test-run
- compliance with other running courses at the university

Procedures

A report on the selected modules and courses will be prepared by partners organizing piloting activities. This report will include the list of selected activities and the criteria used for the selection of each activity. Task 5.1. leader will check the report with WP5 leader and will decide whether accept the list as it is or will recommend some changes. The final list will be the basis for the preparation of Deliverable 5.1

3.3 Dissemination of the piloting educational activities

The courses will be advertised to the students, companies and staff with the support of WP Dissemination. For this, the project website and the SEA-Academy web-platform and its function to inform students and companies/company staff will be used (and thus its functionality tested in a real life situation). Any further available communication channels from the partners will be used for the advertisement.

Quality criteria for dissemination:

- Dissemination material contains enough relevant course information
- Target groups are achieved
- Language of dissemination is appropriate

Procedures

Each partner organizing piloting activities will prepare a dissemination plan, including target groups, dissemination channels and dissemination material. WP8 (Dissemination & Exploitation) leader will give advice in the preparation of the dissemination plan and will review it after its preparation. WP8 leader will accept the plan as it is or will make recommendations for improvement. Finally the dissemination plan will be implemented.

3.4 Preparatory work for collection of feedback from the piloting activities

At the same time than the dissemination stage and in collaboration with WP7 (Quality Plan), evaluation forms for students, trainers, trainer organizers and companies will be prepared by the organizers of piloting activities. In some cases feedback will be collected without questionnaires (i.e. comments by email, in-person or virtual interview...) and then only guidelines for feedback collection will be given.

Questionnaires and guidelines will be based on the following <u>criteria</u>:

- **Content.** The course provides (online) learners with engaging learning experiences that promote their mastery of content and are aligned with the required standards for accreditation/certification.

- **Instructional design.** The course uses learning activities that engage students in active learning; provides students with multiple learning paths to master the content based on student needs; reflects multicultural education and is accurate, current and free of bias; and provides ample opportunities for interaction and communication student to student, student to instructor and instructor to student.

- **Student assessment**. The course uses multiple strategies and activities to assess student readiness for and progress in course content and provides students with feedback on their progress.

- **Technology.** The course takes full advantage of a variety of technology tools, if it is a web based activity it has a user friendly interface and meets accessibility standards for interoperability and access for learners with special needs.

- **Course evaluation and management.** The course is evaluated regularly for effectiveness, using a variety of assessment strategies, and the findings are used as a basis for improvement. The course is kept up to date, both in content and in the application of new research on course design and technologies.

Table 4: descriptors for the quality criteria

Quality criteria	Descriptors
Content ▪ academic content standards and assessments ▪ course overview and introduction ▪ legal and acceptable use policies ▪ teacher/trainer resources	• The course goals and objectives are measurable and clearly state what the participants will know or be able to do at the end of the course. • The course content and assignments are aligned with the required standards for certification. • The course content and assignments are of sufficient rigor, depth and breadth to teach the standards being addressed. • Information literacy and communication skills are incorporated and taught as an integral part of the curriculum. • Sufficient learning resources and materials to increase student success are available to students before the course begins. • A clear, complete course overview and syllabus is available. • Course requirements are consistent with course goals, are representative of the scope of the course and are clearly stated. • Information is provided to students on how to communicate with the teacher. • Issues associated with the use of copyrighted materials are addressed • Academic integrity and netiquette (Internet etiquette) expectations regarding lesson activities, discussions, e-mail communications and plagiarism are clearly stated. • Teacher/trainer should have a qualified background, be available for questions, open to adapt to the learners, etc. • Privacy policies are clearly stated. • Instructor resources and notes are included.
Instructional design ▪ Instructional and audience analysis ▪ Course, unit and lesson design ▪ Goals/objectives ▪ Instructional strategies	• Course design reflects a clear understanding of student needs and incorporates varied ways to learn and multiple levels of mastery of the curriculum. • The course overview describes the objectives, activities, resources and mode of assessment. • The course is designed to teach concepts and skills that students will

and activities ■ Communication and interaction ■ Resources and materials	retain over time.
	• The course instruction includes activities that engage students in active learning.
	• Instruction provides students with multiple learning paths to master the content, based on student needs.
	• The teacher engages students in learning activities that address a variety of learning styles and preferences.
	• The course provides opportunities for students to engage in higher-order thinking, critical reasoning activities and thinking in increasingly complex ways.
	• The course reflects multicultural education and is accurate, current and free of bias.
	• The teacher can adapt learning activities to accommodate students' needs.
	• Readability levels, written language assignments and mathematical requirements are appropriate for the course content and the students.
	• The course design provides opportunities for appropriate instructor-student interaction, including timely and frequent feedback about student progress.
	• The course provides opportunities for appropriate instructor-student and student-student interaction to foster mastery and application of the material and a plan for monitoring that interaction.
	• The course provides opportunities for appropriate student interaction with the content to foster mastery and application of the material.
	• Students have access to resources that enrich the course content.
	• teaching materials and equipment should be up-to-date and easy available
Student assessment ■ Evaluation strategies ■ Adequate and appropriate methods and procedures ■ Feedback ■ Assessment resources and materials	• Student evaluation strategies are consistent with course goals and objectives, are representative of the scope of the course and are clearly stated.
	• The course structure includes adequate and appropriate methods and procedures to assess students' mastery of content.
	• Ongoing and frequent assessments are conducted to verify each student's readiness for the next lesson.
	• Assessment strategies and tools make the student continuously aware of his/her progress in class and mastery of the content beyond letter grades.
	• Assessment materials provide the teacher with the flexibility to assess students in a variety of ways.
	• The grading policy and practices are easy to understand.
Technology ■ Course architecture ■ User interface ■ Technology requirements and interoperability ■ Accessibility ■ Technical support	• Prerequisite skills in the use of technology are identified.
	• In case of online courses: it is easy to navigate. Hardware, Web browser and software requirements are specified, the course utilizes the appropriate content specific tools and software, the course provider offers the course teacher and school coordinator assistance with technical and course management.
Course evaluation and management ■ Assessing course effectiveness ■ Updating course ■ Accreditation ■ Data security	• The results of student evaluations are available.
	• The course is evaluated regularly for effectiveness and the findings used as a basis for improvement.
	• The course is updated periodically to ensure timeliness.
	• The teacher meets the professional teaching standards established by a

▪ Sustainablity	licensing agency or the teacher has academic credentials in the field in which he or she is teaching and has been trained to use the course.
	• Student information remains confidential if required by local or international authorities.
	• After each execution a cost report should be provided

Questionnaires/guidelines will be more or less focused on some of the criteria and descriptors listed before, depending on the target groups (students/trainees, teachers/trainers, education/training providers, companies).

Procedures:

Organizers of the piloting activities develop questionnaires and guidelines for feedback collection, with the support of WP7. WP7 leader accepts the questionnaires/guidelines as they are or makes recommendations for improvement. Final questionnaires/guidelines will be used for the evaluation of the piloting activities (step 5).

3.5   Implementation of the piloting activities

Piloting activities are implemented as indicated in the course syllabus. Any deviation is reported, indicating whether it was overcome and how. The reported information will be part of the assessment report (step 5).

Quality criteria

- A representative number of participants from the target groups were participating

3.6   Assessment of the piloting activities

After the implementation, feedback will be collected from the participants by using the questionnaires and guidelines developed in step 3. The feedback, along with any information on contingencies appeared during the implementation and ways to overcome them, will be the basis of the assessment report for each piloting activity. Recommendations for improvement (if any) of the piloted activities will be also given in the assessment report.

Quality criteria

- Significant number of feedback inputs
- All stakeholders have been covered in the assessment step

Procedures

Piloting activity organizer prepares the assessment report and sends it to Task 5.2 leader (Implementation of selected courses and coordination of feedback collection). Task 5.2 leader checks whether the report fulfills quality requirements and accepts it as it is or makes recommendations for improvement (with the support of WP7 Leader). Final reports from all piloting activities are compiled in a single report (Deliverable 5.2) by Task 5.2 leader, who sends it to WP7 leader for further handling.

3.7   Improvement and reporting

Based on the test runs and feedback the developed educational products will be improved (Task 2.4 for HE and Task 3.3 for CPD) according to content, didactical and organizational aspects.

Quality criteria

- Improvements fit as well as possible to those indicated in the assessment report.

Procedures

Based on the recommendations given in the assessment report, HE and CPD products will be improved. A report will be prepared by organizers of the HE and CPD piloted activities, indicating what has been changed. Any deviation from the recommendations of improvement described in the assessment report will be indicated with the corresponding justification.

Task 2.4 leader for HE and Task 3.3 leader for CPD products will check the individual improvement reports, accepting them as they are or making recommendations for improvement (with the support of WP7 leader). Final reports will be compiled in a single report for HE products (Deliverable 2.4) and CPD products (Deliverable 3.3) respectively.

4   PROCESSES AND ASSESSMENT CRITERIA FOR SOCIAL ASPECTS

4.1   Introduction

Teamwork involves people working effectively together as a team for a common goal or purpose (Nelson et al., 2007). Teamwork skills and spirit are very important in a project because:

- bring together people with differing expertise and different perspectives;
- strengthen bonds between team members and improve their professional and personal satisfaction;
- generate multiple ideas for solving problems, making it easier to resolve issues;
- foster collaboration;
- enhance efficiency by generating sinergies among team members;

The objectives of these guidelines are to provide quality criteria and processes to assess teamwork and team spirit in the project.

4.2   Quality criteria for the assessent of teamwork in the project

Two sets of quality criteria have been considered:

- Criteria for the assesment of teamwork in tasks.
- Criteria for the assessment of teamwork in meetings.

4.2.1   Teamwork in tasks

The following criteria have been selected as the basis for the assessent of teamwork in tasks:

1) Shared vision/sense of mission. Team members have a clear undestanding of the team's goals and feel involved in the process of achieving them.

2) Roles and resposibilities. Team members must clearly understand their role and what to expect of the other team members.

3) Open communication and positive feedback. Actively listening to the concerns and needs of team members and valuing their contribution and expresing this helps to create an effective work environment.

4) Interdependence. Team members need to create an environment where together they can contribute far more than as individuals.

5) Problem solving in an team context.

6) Interpersonal skills. Includes the ability to discuss openly with team members, be honest, trustworthy, supportive and show respect and commitment to the team and to its individuals. Fostering and caring a work environment is important including the ability to work effectively with other team members.

Table 5: Teamwork quality criteria and descriptors

Teamwork quality criteria	Descriptors
Shared vision/sense of mission	• The team has a clear, expressible vision of the task/WP/project • Everyone in the team feels able to act on the team vision
Roles and resposibilities	• Roles, relationships assignements and responsibilities are clearly defined • Team members clearly understand their role/responsibility in the task/WP/Project
Open communication and positive feedback	• Give and accept feedback in a non-defensive manner • Cultivate a team spirit of constructive criticism and authentic non-evaluative feedback • Team members openly talk about what is and isn't working • Team members encourage each other to share ideas. • People receive frequent and helpful feedback about their work. • Team members see diversity as a strength thet helps to stregnthen the overall outcomes. • Team members encourage diverse points of view and openly negotiate emerging understandings. • Oral and written communication in English is good
Interdependence	• Team members take interest in both the group and each indivisuals achievement • Team members interact to help each other accomplish the task and promote one another's success • Team members are not fully self-directed or completely independent • Individuals experience a wide range of ideas and skills when interacting with team members • Team members interchange or cover the role of other members if necessary and possible
Problem solving	• Team leader is available for consultation of problems • When problems arise, the situation is carefully diagnosed before action is proposed • The team focuses on the causes of the problem rather than people or personalities. • Consensus is sought and members stand behind decisions made by the group.
Interpersonal skills	• Team members are engaged in and motivated with their work • Team atmosphere is informal, relaxed, comfortable and non-judgemental • Members respect and trust each other, and are realistic in mutual expectations

4.2.2 Teamwork in meetings

Quality of the task/WP/project meetings will be assessed on the basis of the following criteria:

- Planning and preparation of the meeting.
- Attendance/promptness.
- Communication.
- Available resources.
- Achievement of the planned objectives
- Management of information after the meeting

Table 6: Meeting quality criteria and descriptors

Meetings quality criteria	Descriptors
Planning and preparation	• Meeting agenda clearly states the meeting purpose and objectives. • The items of the agenda are consistent with the meeting objectives. • Agenda and additional material (if needed) are circulated in adequate advance. • Team members are aware of the meeting agenda. • Team members come prepared for the meettings by consulting information and/or preparing documents
Attendance/promptness	• Team members are prompt and regularly attend the meetings.
Communication	• Team members proactively and regularly contribute to the meeting by offering ideas and asking questions. • Team members respect the points of view of others. • Team members listen when others talk. • Team members incorporate or bulid off the ideas of others. • The opinions of all the members are taken into consideration in an equal and unbiased manner. • Team members communicate in english fluidly • Meeting time is managed wisely. • The chair guides meetings effectively.
Resources	• Virtual meetings: all team members have the adquate infrastructure (IT arrangement, PC, Internet connection, etc.) to participate in meetings. • Presencial meetings: the infrastructure provided is satisfactory (IT arrangement, PC, Internet connection, etc.) • Presencial meetings: meetings take place in suitable rooms • Presencial meetings: the hotel accommodation is satisfactory (room, food, etc.)
Achievements	• The meetings begin and end on time. • Team members are satisfied with meetings. • Team members enjoy the meetings. • Meeting objectives are achieved.
Management of information after the meeting	• Minutes of the meeting clearly reflect meeting outcomes and related future actions. • Video of the meeting is available • Minutes of the meeting are circulated at a reasonable shor time after the meeting.

4.3 Procedures for the assessment of teamwork in the project

WP7 leader will be responsible for developing questionnaires on assessment of teamwork in tasks and tasks meetings to be completed by the TLs. These questionnaires will consist of closed and open questions. Closed questions will be basen on quality descriptors for quality of teamwork in tasks and meetings respectively, whereas open questions will try to find out the overall quality and suggestions for improvement.

WP7 leader will discuss with WP leaders the needs of improvement of quality in teamwork and put in place an action plan to address these needs.