

## Call for tender for IT/e-learning services: EL@N Training IV project

Brussels, 17/12/2021

### I. General project background

#### 1. Objectives and activities of the project

The Council of the Notariats of the European Union (hereinafter referred to as to "CNUE") is leading a EU-funded project under the Justice Programme JUST-JTRA-EJTR-AG-2020: "EL@N - EU L@w for Notaries – Notaries for EU L@w" (hereinafter referred to as to "Formation IV/Training IV") All its activities are to be implemented under the grant agreement number 101008418.

The project started officially on 15<sup>th</sup> November 2020 and will last for 24 months, until 14<sup>th</sup> November 2022. It aims to train more than 1000 notaries in EU Law in three priority areas – company law, family law and data protection - by combining face to face seminars and e-learning.

The project is structured on 2 principal axis: the organisation of seminars (A) and the creation of the e-learning platform and its content (B) which are sustained by transversal technical support activities: management, linguistic aspects, evaluation, communication.

The project is implemented by a steering committee (as management and coordination structure) that comprises a scientific (and technical) team made up of notaries, academics e-learning methodologists, IT&C experts with the support of the CNUE working groups, responsible for the methodology, training pedagogy and production of scientific contents/training materials both at onsite and online levels.

**The project working-languages are English and French.**

The project consortium is made up of the following partners (CNUE notariats):

- Bundesnotarkammer (BNotK), Germany
- Conseil Supérieur du Notariat (CSN), France
- Consiglio Nazionale del Notariato (CNN), Italy
- Consejo General del Notariado (CGN), Spain
- Lietuvos Notaru Rumai (LNR), Lithuania
- Koninklijke Notariële Beroepsorganisatie (KNB), the Netherlands
- Conseil National du Notariat Hellénique (CNNH), Greece
- Ordem dos Notários Potugueses (ONP), Portugal
- Notarska Zbornica Slovenije (NZS), Slovenia
- Kunsill Naturili Ta' Malta (KNM), Malta
- Österreichische Notariatskammer (ÖNK), Austria

#### 2. The two project's axes

Allemagne ■ Autriche ■ Belgique ■ Bulgarie ■ Croatie ■ Espagne ■ Estonie ■ France ■ Grèce ■ Hongrie ■ Italie ■ Lettonie  
Lituanie ■ Luxembourg ■ Malte ■ Pays-Bas ■ Pologne ■ Portugal ■ République tchèque ■ Roumanie ■ Slovaquie ■ Slovénie

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- ➔ **A)** The organisation of training seminars builds on the experience from the previous CNUE training projects. 10 face-to-face, practical oriented and interactive cross-border training seminars with easy linguistic access for 50-100 notaries will be organised in the member states on the topics: family law, company law and data protection. The development of the training methodology and program of the seminars will be prepared by the scientific team of the steering committee (the academic advisors, in cooperation with the project coordinator and with the participation of notaries from the consortium and the training working group). The involvement of prestigious academics is essential since the instruments studied are new and complex. The presence of the notarial practitioner component in the scientific team is important since the seminars aim to prepare the proper application of the new instruments. Complementarity with the methodology of the e-learning component will be had in mind since the seminars should refer to practical and interactive aspects and cross-border exchanges less feasible in the e-learning format.

More precisely, the training seminars will be organised as follows (subject to possible changes):

- 3 seminars on EU family law in the Netherlands, Slovenia, Italy
- 4 seminars on EU company law in: Austria, Germany, France, Greece
- 3 seminars on EU data protection law in Malta, Portugal, Lithuania.

- ➔ **B) The creation of the e-learning platform is the cornerstone of the project** and intends to be a great leap forward in the training of EU notaries aims at putting in place the technical and academic foundation of a structure that could acquire in the long run and make available to all EU notaries e-learning modules, online courses and webinars on all EU law areas in which they are competent. Initially, under this project's duration, the e-learning content (like in the case of the seminars) will focus on the three selected topics: family law, company law and data protection. The above mentioned scientific (and technical) team will feed the Learning Content Management System (LCMS). Technically, this LCMS and the tools for webinars and MOOCs (regarding the above three topics) will be integrated in a LMS (Learning Management System) to which the user will accede via a web interface. The compatibility will be ensured among these three main technical components (LCMS - templates and content, LMS and tools for webinar/MOOCs) as well as the required secured hosting and maintenance. The LMS and LCMS will be in such a way to easily acquire additional e-learning content on further topics and in multiple languages (in the future). Likewise synergies will be sought via the platform with existing resources from other projects relevant for training of notaries in EU law.

N.B. The methodologies for the seminars and the e-learning platform are complementary. Materials from the seminars will be used on the platform i.e. training materials, didactic documents and other complementary products such as the recording of videos and related visuals, ie. online lectures or interviews with University professors. *More information in the annex.*

## II. The call for tenders

### 1. Purpose and activities

Having regard to the above, CNUE is inviting candidates with demonstrated ICT expertise on e-learning services to tender on the creation of an e-learning platform for the Notaries of Europe. **The selected contractor will be in charge of the development, implementation and maintaining of the e-learning platform of CNUE and its content, including the "Learning Management System" and "Content Management System", the SCORM files and other tools for synchronous and asynchronous learning, as**

well as for the creation of a 'web interface', covering the technical costs associated to the e-learning modules.

This process will consist of: the selection and implementation of the most appropriate Learning Management System (LMS) and Learning Content Management System (LCMS) able to receive the SCORM files with the e-learning modules for each of the three legal topics (and potentially additional topics in the future); selection and integration in the LMS of the SCORM files, of webinar/MOOCs or other online activities which are the most compatible with the structure, the methodology, the multilingualism, hosting and creation of the web interface with the accreditation/attestation system. Afterwards, the transposition of the scientific content on the topics of data protection, company law and family law in the e-learning modules (SCORM files). This will result in the production and delivery of SCORM files on these topics. SCORM files will be then transferred to the LMS and LCMS alongside the previously recorded video materials such as interviews or online lectures with University professors and other trainers.

The language component of the IT/e-learning platform will be also an important aspect so as to make it as multilingual as possible. The e-learning content and interfaces require a multilingual accessibility and will be translated in various CNUE languages.

## 2. Main deliverables<sup>1</sup>:

- Development and implementation of an e-learning platform for the European Notariat with the complete technical infrastructure including the relevant (licensed) LMS and LCMS software, a web interface and able to receive a significant amount of e-learning modules, webinars, MOOCs, etc. in a multilingual format;
- Creation of a user-friendly web interface available in a multilingual format, with a front end and back end, ensuring the secure access of the notaries users to the e-learning content;
- Creation and delivery of e-learning modules (containing SCORM files) for each of the topics data protection, company law, family law, containing course materials, presentations, videos, mini-lectures from experts, including self-assessment evaluation instruments (such as quizzes, interactive activities etc.)<sup>2</sup>;
- Transposition of the SCORM files into the LMS and CMS in addition to the transfer of videos and other visuals into the technical infrastructure.
- Feeding the online learning platform with all the training content of the project, i.e. training materials, videos, syllabus, curricula and other didactic documents for training, as provided by the scientific team.
- Launch of the online learning platform in a multilingual format firstly in a test version and subsequently in its live definitive version;
- Management and supervision of the technical infrastructure as an online learning platform, including its smooth running;
- Providing proposals/solutions for the hosting of the platform;
- Ensuring on medium and long run technical support and improvements of potential glitches and IT malfunctioning that might occur throughout the project;
- Provide training and advice to the relevant personnel and to the scientific and steering team of the CNUE on how to use the online learning platform in general and the LMS in particular.

<sup>1</sup> See the *annex on the methodological and technical guidelines and specification*

<sup>2</sup> The scientific content of the modules will be provided by the experts of the Scientific committee.



- Participate in the relevant project committee meetings, either in Brussels or online, notably so as to provide IT advice and technical counselling to the scientific team members on the preparation, creation, development, use and implementation of an online learning platform.

*More details are provided in the annex on the methodological and technical guidelines and specifications, which are integral part of this announcement.*

### 3. Requirements for the CNUE e-learning platform<sup>3</sup>

The future CNUE e-learning platform **should use open source technology** and be able to:

- Generate reports and analytics: easy-accessed dashboard with possibility of download of progress reports and other learner data. Statistics are also important to understand the real user engagement and to improve the content/system accordingly.
- Check and verify online identification in a secured manner for accreditation and registration purposes, respecting data protection standards.
- Offer and host educational content (training authoring capability): the LMS should allow CNUE Secretariat and project partners to easily create, edit/update and upload content (text, audio, videos, visuals, etc).
- Provide customization and branding options (CNUE visual identity and the official EU-funding logo), including multiple languages
- Propose and integrate ICT settings for training purposes, and other technicalities and functionalities following an innovative approach but through an easy-to-understand and user-friendly format.
- Generate attestations: the system should be able to generate attestations for the participation in learning activities for the notaries-attendees;
- Provide and host scalable and easily updatable content
- The platform must be accessible on desktop and mobile devices: tablet and smartphone.
- Explore possibilities for community and collaboration exchanges : learners may want to reach out to internal team or other users. Collaboration area can foster a sense of community and keep learners engaged.

### 4. Selection criteria

The key criterion is the *quality of the proposal and its ability to respond to the CNUE specific needs* in matters of e-learning *and to ensure the best value for money relationship. This criterion will be evaluated in light of the project's objectives, methodology, activities and expected results.*

The contractor has to provide evidence for:

- Multiannual professional experience in the development of e-learning platforms or similar infrastructures, including technical methodology and LMS and LCMS development and implementation. Evidence of track record will have to be included in the bid, especially at European-projects level, see point 12 below .
- Expertise in the production, organization and delivery of online (law) training courses targeted to legal professionals, e.g. notaries, lawyers or judges .
- Ability to communicate regularly, in a reliable and proficient manner in English, ; knowledge of other EU languages such in particular French is an advantage.
- Ability to propose ICT solutions towards the online infrastructure's development
- Ability to meet tight deadlines, ideally within previous European-funded projects

<sup>3</sup> This part should be read in conjunction with the *annex on the methodological and technical guidelines and specification*



- Availability to provide ICT/technical advice to the scientific team and partners, and to attend all project meetings throughout the project lifetime, that is, until 14<sup>th</sup> November 2022

## 5. Content of the bids

- The detailed technical solutions proposed for the creation, development, implementation, hosting and maintenance of the e-learning platform according to the methodological and technical specifications above and in the annex.
- The detailed cost estimation for the technical solution proposed, including a budget listing with the costs by task as well as an estimation of the number of working days and the number of people participating in the tasks.
- A feasible implementation plan
- Information about the human resources (including CVs) to be assigned for the provision of the requested services; the proposed methods of undertaking the work.
- A detailed explanation of the qualifications and the expertise of the potential contractor (CVs), e.g., information on references from the contractor on similar projects already handled, to demonstrate his/her experience and capability to succeed in performing the tasks as set out in points 5 and 6 of this tender.
- A detailed professional portfolio demonstrating clearly that the tenderer fulfils the selection criteria; Samples (images, links to websites / platforms / applications to download, textual description etc.) of previously developed interactive online training courses / educational online games and / or similar online educational / pedagogical activities.
- Desirable: referees contact details to support the bid and to attest the previous professional experience in the field of development interactive online training courses or similar online educational / pedagogical activities.

## 6. Presentation of the bids

Interested entities should reply to this call **electronically by 1 February<sup>th</sup>** at the latest:

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Avenue de Cortenbergh, 120, 1000 Bruxelles, Belgique

Subject: ICT/e-learning services subcontracting– Formation IV project  
[info@cnue.be](mailto:info@cnue.be)

## III. Annex

**CNUE E-Learning Platform: Methodological & Technical guidelines and specifications<sup>4</sup>**



Co-funded by the  
European Union

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<sup>4</sup> The annex is an integral part of the call for tenders. An *in extenso* version will be made available upon request to the interested entities.

# CNUE E-Learning Platform Methodological & Technical Guidelines and specifications

Excerpts of the contribution by Lect. Dr. Alex Grech



# I. PURPOSE

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## PRE-REQUISITE FOR E-LEARNING PLATFORM:

### STRUCTURAL DESIGN INFORMATION ARCHITECTURE SYSTEM INTEGRATOR PROJECT OWNERSHIP

The point of departure for CNUE is that an optimum e-Learning Platform should facilitate a **Virtual Learning Environment** where CNUE may organise a mix of cohort-based offline and online training courses and facilitate digital learning that is live, social, and engaging.

This document proposes a draft **Information Architecture (IA)** for the e-Learning platform. Within the context of this document, IA is the **Structural Design** of shared information environments, focusing on the key elements of **Content** and **Technology**. In the case of IA and content, it is the art and science of organising and labelling content, bringing together potentially disparate features such as a website, an intranet, and software to support usability and findability.

The challenge is to arrange the constituent features of the information architecture so that they are understandable to the stakeholders, and specifically to the technology partner that has to operate as a **System integrator** with a knowledge of structural design, focused on bringing the core principles of design, architecture and information science to the digital landscape. System integration means the process to pull together all the different component of the e-Learning Platform – from decisions on sign-up forms and the onboarding process and types of platforms, video-streaming and conferencing to decisions on how and where to store course materials. CNUE and the selected technology partner need to work on this project in an iterative manner., particularly if CNUE aspires to facilitate an emerging community of practice for notaries in Europe.

The following table levers on the material shared by CNUE over the past months. It represents an initial attempt at a **Needs Analysis**, whose finalisation will have an impact on the design of the e-Learning Platform. Requirements labelled as Content ('C'), Technological ('T') and Operational ('O') are a preliminary attempt at categorisation for the Information Architecture.

# E-Platform Preliminary Needs Analysis

## Based on input from Internal Stakeholders (I)

REQUIREMENTS	TYPE	PRELIMINARY CONSIDERATIONS
Overall Design of Learning System & choice of Technology	C, T	<p>There is a need for a <b>Human-centred Design</b>.</p> <p>The e-Learning Platform should be <b>Scalable</b>.</p> <p>Ideally, the platform should use <b>Open-Source</b> technologies.</p> <p>Typically, an open-source learning management system will have the following characteristics:</p> <ul style="list-style-type: none"> <li>• <b>Licence cost</b> - No cost, no proprietary investment, leaving more budget for customization.</li> <li>• <b>Source code</b> - Open, developed by the community.</li> <li>• <b>Development team</b> - Freelance developers, with different levels of expertise.</li> <li>• <b>Ownership</b> - No vendor lock, owned by the community.</li> <li>• <b>Ease of LMS implementation and deployment</b> - Can be difficult and requires advanced technical skills.</li> <li>• <b>Client support/maintenance services</b> - Relies on community forums, online documentation, development community; more important LMS solutions offer services, training, and support from a variety of vendors.</li> <li>• <b>Support/maintenance cost</b> - Paid support.</li> <li>• <b>Ease of customization</b> - The code is open, with customization performed by freelance skilled developers according to specific needs. Strong link with end-user groups/communities who suggest changes and modifications.</li> </ul>

# E-Platform Preliminary Needs Analysis

## Based on input from Internal Stakeholders (2)

REQUIREMENTS	TYPE	PRELIMINARY CONSIDERATIONS
Role of Trainer	C	The role of the trainer is synonymous with an expert coach delivering a task-oriented service, over a short-term period, to support the development of specific skills. The trainer will have expertise in a subject matter.
Target Learners	O	Notaries in the EU member states.
Number of Seminars	C, T	<b>10 face-to-face seminars</b> between May and September 2022 (in Austria, France, Germany, Greece, Italy, Lithuania, Malta, the Netherlands, Portugal and Slovenia)
Topics for Seminars	C	Modules on <b>Data Protection</b> , <b>Family Law</b> and <b>Company Law</b>
Duration of Seminars	C, T	On average, seminar presentations will use mixed media and last an average of 20 minutes

# E-Platform Preliminary Needs Analysis

## Based on input from Internal Stakeholders (3)

REQUIREMENTS	TYPE	PRELIMINARY CONSIDERATIONS
Requested needs for 'live' seminars in countries	C, T	<p>The platform should be capable of supporting the following functionality <i>during</i> the seminars:</p> <ul style="list-style-type: none"> <li>• <b>Email alert</b> to participants 72 hours before the seminar, with information about the event and any relevant links, such as any material that needs to be read beforehand or tasks to be completed (tests etc.)</li> <li>• Seminar <b>Registration</b></li> <li>• <b>Streaming and recording of seminar video presentations</b> in French, subtitled in English (or vice-versa)</li> <li>• <b>Quizzes / Tests/ Exercises</b> to be completed by attendees as part of some <b>activity-based learning</b> during the seminar</li> <li>• <b>Smartphone applications</b> with link to the platform for case responses. Cases may be submitted to participants remotely via the platform either before or during the actual training session, with the option of collecting results via the platform.</li> <li>• <b>Online chat</b> facility to enable participants to ask questions and interact with the trainer and with other trainees.</li> <li>• <b>Breakout rooms</b> (by inference from above)</li> <li>• <b>Storage</b> of seminar video presentations and supporting material (slides, quiz results etc.) for access beyond the timeframe of the seminar</li> </ul>
Repository for Seminar Modules on Platform	T	To facilitate online asynchronous learning, the e-Learning platform must include a <b>repository for a variety of multimedia</b> (video recordings, slides and other materials).

### 3. INFORMATION ARCHITECTURE FOR THE e-LEARNING PLATFORM

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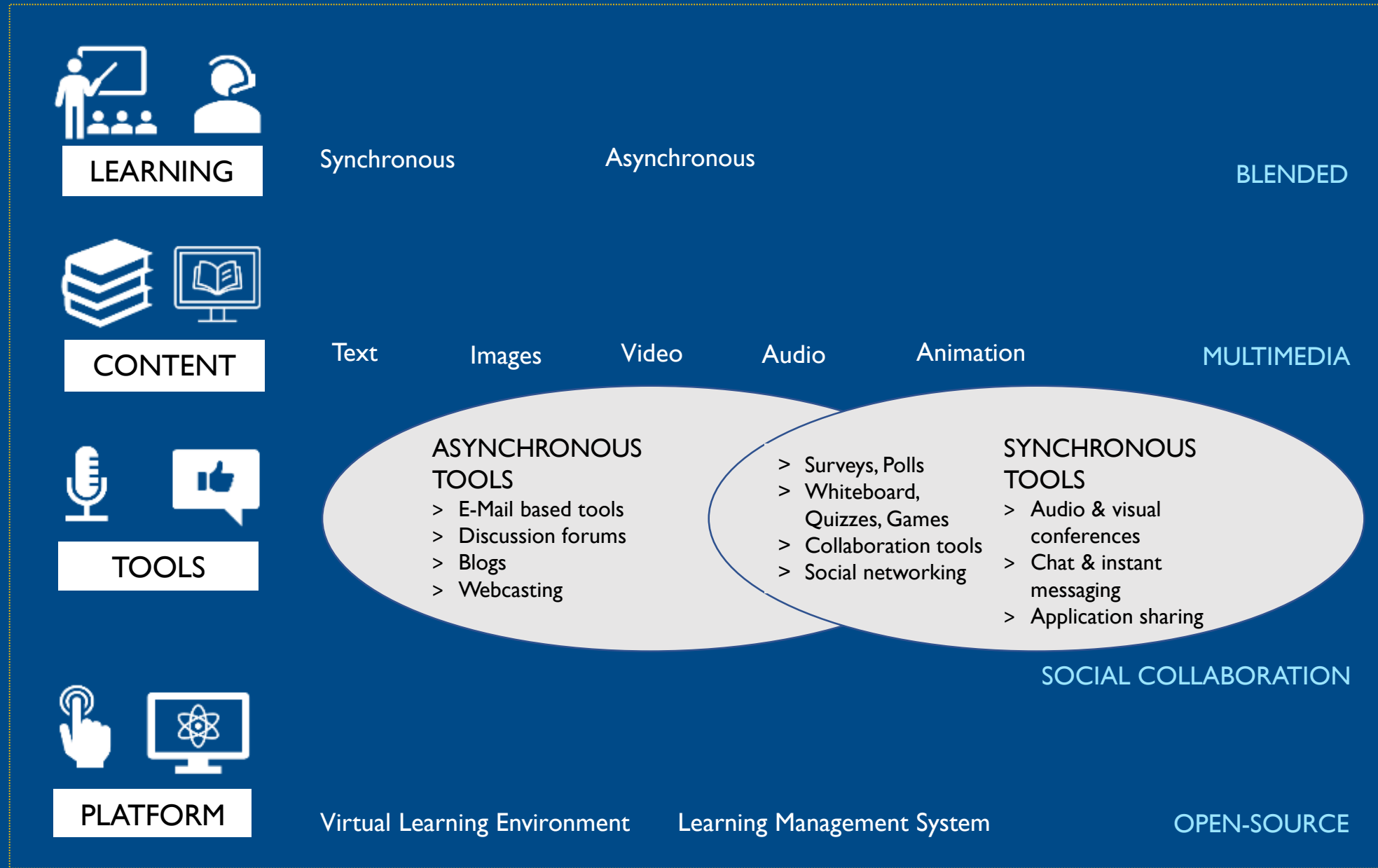
This section represents a high-level checklist for the information architecture for the CNUE e-Learning Platform

To be fit for purpose, the information architecture needs to support **blended learning**, **multimedia content**, **social collaboration tools** and be deployed on an **open-source platform**.

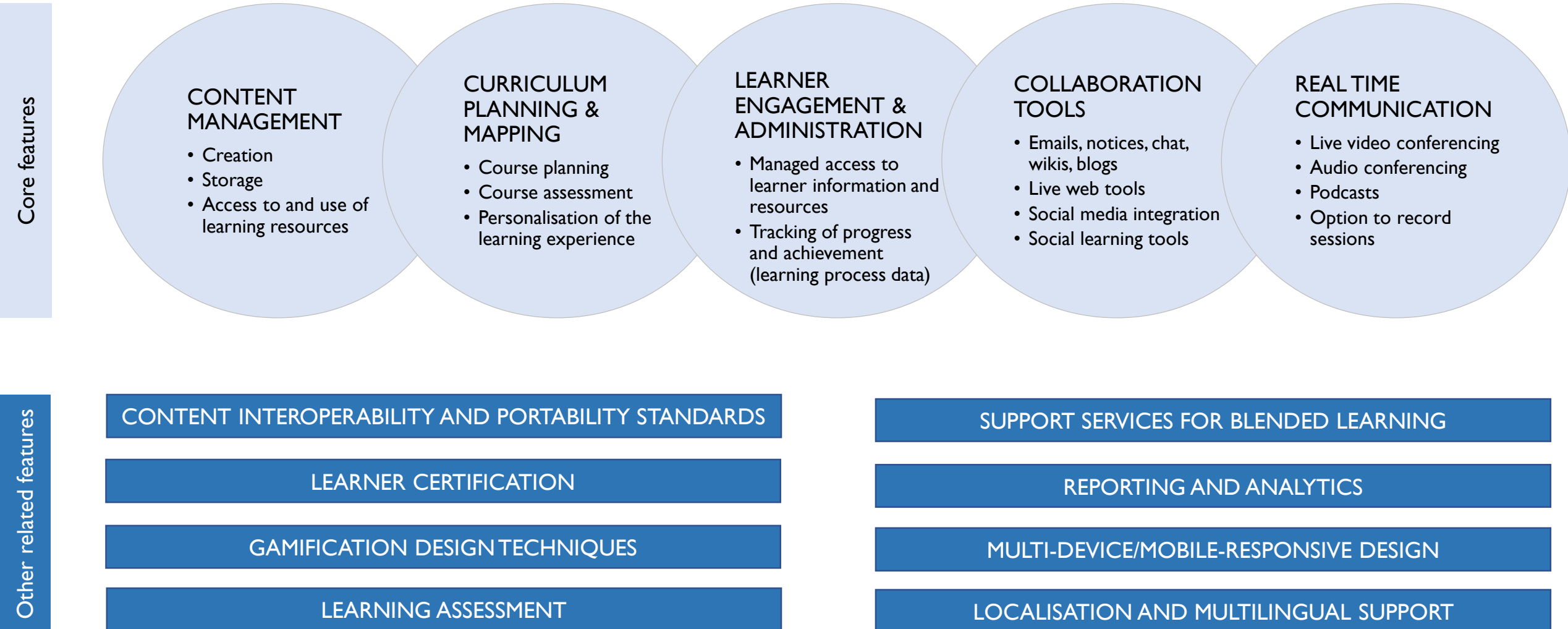
The information architecture levers on a set of **features**:

CORE FEATURES	RELATED FEATURES
Content Management	Content interoperability and portability standards
Curriculum Planning & Mapping	Learner certification
Learner Engagement & Administration	Gamification design techniques
Collaboration Tools	Skills and competences management
Real Time Communication	Support services for blended learning
	Reporting and analytics
	Multi-device/mobile-responsive design
	Localisation and multilingual support

# A Methodological Approach to an Information Architecture for the e-Learning Platform



# The Information Architecture proposed for the CNUE e-Learning platform levers on the following core features of an e-Learning platform



# CNUE e-Learning Platform

## Information Architecture Features and Component considerations

CONTENT MANAGEMENT	FEATURES AND COMPONENT CONSIDERATIONS	TECHNOLOGY
<b>Content Creation</b>	<p>Content creation is synonymous with a number of learning content elements which are summarised in different sections of this document and in the checklists in the <b>Annexes</b> to this document.</p> <p>The core component of the CNUE e-learning platform, to facilitate content creation as a core functionality, is the LMS. The optimum solution would be Moodle, the world's most widely used open-source learning platform .</p> <p>Moodle will interface seamlessly with an existing CNUE portal, with a webpage developed to incorporate relevant hyperlinked content.</p> <ul style="list-style-type: none"> <li>• Prior to the live sessions, the portal also serves to advertise the time and dates of training sessions, explaining the scope and the issues to be addressed, introducing speakers and relaying relevant links for further information.</li> <li>• Following the live / synchronous training event, this webpage serves an archival purpose, where the recording of the webinar, the PowerPoint presentations and a Q&amp;A summary are shared. This enables trainees, including those who could not attend the live session to access training material at their convenience.</li> </ul>	Web Portal + Moodle

# CNUE e-Learning Platform

## Information Architecture Features and Component considerations

CONTENT MANAGEMENT	FEATURES AND COMPONENT CONSIDERATIONS	TECHNOLOGY
<b>Content Storage</b>	<p>The LMS needs to be capable of storing a number a significant volume of data.</p> <p>E-learning content will be hosted on a web server, with learners accessing it from the e-Learning platform. Since this will be offered through an Internet connection, there is the potential to track learners' actions in a central database through online registration.</p> <p>CNUE will seek the advice of the technology partner to determine the hosting options available – between self-hosted solutions vs. Software as a Service (SaaS). LMS software can be deployed internally within the organization's IT structure or hosted on cloud (SaaS), with functionalities hosted on the vendor's infrastructure and accessed by logging into its site, where all communication and training take place.</p>	Web Portal + Moodle + Decisions on web server
<b>Access to and use of Resources</b>	<p>Content will be delivered using different media elements, such as text, graphics, audio and video.</p> <ul style="list-style-type: none"> <li>The e-Learning course can combine several types of media, including text, images, animations, audio and video.</li> </ul>	Web Portal + Moodle

# CNUE e-Learning Platform

## Information Architecture Features and Component considerations

CURRICULUM PLANNING & MAPPING	FEATURES AND COMPONENT CONSIDERATIONS	TECHNOLOGY
<p><b>Course Planning &amp; Assessment (cont.)</b></p>	<p>Regardless of the approach selected, there are some typical elements that are generally present in e-learning training regimes. They include:</p> <ul style="list-style-type: none"> <li>• Expositive methods – which emphasise the ‘absorption’ of new information. Expositive methods include presentations, case studies, worked examples and demonstrations.</li> <li>• Application methods – which emphasize the active processes that learners use to perform procedural and principle-based tasks and build new knowledge. Application methods include the demonstration-practice method, job aids, case-based or scenario-based exercises, role play, simulations and serious games, guided research and project work.</li> <li>• Collaborative methods – which emphasize the social dimension of learning and engage learners in sharing knowledge and performing tasks in a collaborative way. They include online guided discussions, collaborative work and peer tutoring.</li> </ul> <p>From a structural planning perspective, training courses tend to follow the following taxonomy:</p> <ul style="list-style-type: none"> <li>• Introduction: providing the learning objectives for the lesson and an overview of how the knowledge gained from the lesson can be used by the learner (motivational step);</li> <li>• Core content: a set of screens combining text and media elements, examples and practice questions;</li> <li>• Summary: a short description of the topic covered, or lessons learned, to help the learner memorize the lesson’s key points.</li> <li>• Additional resources: downloadable material (e.g. checklists, tables), a glossary providing key terms and related explanations, and a bibliography and/or links to web resources, where learners can find out more about the topic.</li> </ul>	<p>Each instructional method can be delivered in different formats, using different types of media and communication tools.</p> <ul style="list-style-type: none"> <li>• Presentations can be delivered as a PowerPoint file or as a recorded (or live) video presentation.</li> <li>• An online discussion can be conducted in a discussion forum or through via Zoom, MS Teams, Skype etc.</li> </ul>

# CNUE e-Learning Platform

## Information Architecture Features and Component considerations

LEARNER ENGAGEMENT & ADMINISTRATION	FEATURES AND COMPONENT CONSIDERATIONS	TECHNOLOGY
<b>Managed access to learner information and resources</b>	<p>As a general rule, CNUE should ensure that most content is downloadable.</p> <ul style="list-style-type: none"><li>• Even in contexts with highly developed infrastructures, learners do not have continuous access to the Internet. They should be able to download online content and work on it offline.</li></ul>	
<b>Tracking of progress and achievement (learning process data)</b>	<p>Although the framework is blended learning, the assumption is that notaries are subscribing to a regime of self-paced e-learning, in that they are free to learn at their own pace.</p> <ul style="list-style-type: none"><li>• It is uncertain if notaries will be able to define personal learning paths based on their individual needs. It is more likely that these needs have to be complemented by facilitation, social interaction with other learners and possibly, the instructor, and online collaboration activities.</li></ul>	To be determined

# CNUE e-Learning Platform

## Information Architecture Features and Component considerations

COLLABORATION TOOLS	FEATURES AND COMPONENT CONSIDERATIONS	TECHNOLOGY
<b>Emails, notices, chat, wikis, blogs and discussion forums</b>	<p>Collaborative learning activities range from discussions and knowledge sharing to working together on a common project or for a common objective.</p> <p>There are several tools that trainers in individual countries may choose to facilitate seamless interaction between trainers and trainees; and horizontal interaction between trainees.</p> <ul style="list-style-type: none"> <li>• E-mail remains the simplest mechanism for direct, one-to-one and one to many communications between the trainer and learner.</li> <li>• Discussion forums are ideal when responding is optional and the subject is not critical.</li> </ul>	<p>Web Portal</p> <p>Social software, such as chats, discussion forums and blogs, are used for online collaboration among learners.</p>
<b>Live web tools</b>	<ul style="list-style-type: none"> <li>• Online discussions are designed to facilitate communication and knowledge sharing among learners. Learners can comment and exchange ideas about course activities or contribute to group learning by sharing their knowledge.</li> <li>• Collaborative project work involves collaboration among learners to jointly perform a task or an assignment and reach a common objective. Collaborative activities can include project work and scenario-based assignments.</li> <li>• Webinars and virtual classrooms remain popular instructional methods as they are the most similar to traditional classroom training, since they are live events led by an instructor or a subject matter expert. An instructor teaches a group of learners remotely, and in real time, using a combination of materials (e.g. PowerPoint slides, audio or video materials).</li> </ul>	<p>Chat: Zoom, WhatsApp, Signal, Google Chat, MS Teams</p> <p>Live Surveys: Zoom or Sli.do</p> <p>Breakout Rooms: Zoom</p>

# CNUE e-Learning Platform

## Information Architecture Features and Component considerations

COLLABORATION TOOLS	FEATURES AND COMPONENT CONSIDERATIONS	TECHNOLOGY
<b>Social media integration</b>	Social media links should be very prominent on the portal, since informal interaction between participants is likely to happen via social media platforms and (possibly) the Moodle Forum	Web Portal + Moodle
<b>Social learning tools</b>	Trainees are encouraged to interact with others during the live sessions or online, outside the sessions. They collaborate and network on social platforms to discuss problems, queries, and experiences. Social collaboration platforms are also built within the LMS so that the learners do not have to discuss on public platforms and the learning which emerges from mutual collaboration resides and grows within the LMS.	Various, including LinkedIn and Twitter

# CNUE e-Learning Platform

## Information Architecture Features and Component considerations

REAL TIME COMMUNICATION	FEATURES AND COMPONENT CONSIDERATIONS	TECHNOLOGY
<b>Live video conferencing</b>	<p>As a general guideline, the duration of an e-learning lesson should be limited to a maximum of about 30 minutes of learning time.</p> <p>There needs to be an option to record some or all the in-person sessions organised by the various notary organisations in the individual countries.</p>	Zoom
<b>Audio conferencing</b>	<p>It is up to CNUE to ensure each seminar location has a decent live webinar set up, including mics and cameras.</p> <p>Alternatively, trainers can use Zoom for recording, with a decent mic and webcam in place.</p>	Determine recording arrangements in individual countries.
<b>Social networking</b>	Ideally, CNUE should set up a unique Twitter handle and an appropriate hashtag to be used during the training programmes. For example #CNUETRAIN	Twitter
<b>Podcasts</b>	CNUE trainers should also explore the option to edit components of the training programmes and upload these as podcasts.	Anchor

# CNUE e-Learning Platform

## Information Architecture Features and Component considerations

CONTENT INTEROPERABILITY AND PORTABILITY STANDARDS	FEATURES AND COMPONENT CONSIDERATIONS	TECHNOLOGY
<b>Interoperability Standards</b>	The e-Learning platform needs to be capable of supporting a set of standards for content objects (courseware packages), to ensure that content is sharable and compatible on different platforms.	AICC, SCORM, xAPI (formerly Tin Can, IMS LTI).
<b>Portability Standards</b>	<p>The capacities of learners' computers, as well as their infrastructure and connectivity, need to be considered when creating e-learning courses in development contexts, and before making any decisions on technology. Understanding whether learners have easy access to network systems is crucial when deciding on the delivery format. Being aware of bandwidth limitations is particularly important.</p> <p>As a general rule, it is pertinent to assume that:</p> <ul style="list-style-type: none"> <li>• Users of the e-Platform may have limited Internet access</li> <li>• Training materials and related content needs to be provided offline in a downloadable format</li> <li>• Training materials need to be delivered through mobile technology. In this case, a mobile responsive format – which can be properly visualised on tablets and mobile phones – may need to be adopted.</li> </ul> <p>The technical requirements of trainees, including multimedia capabilities, tend to influence the selection of the media mix.</p> <p>Nevertheless, using several different media tools does not necessarily improve the mobile interfaces effectiveness of an e-learning activity. Good instructional design is more critical to achieving learning effectiveness than using sophisticated multimedia effects. If delivery on mobile phones is to be considered, it is more practical for CNUE trainers to collect information about the type of smartphone used by participants, and the relevant data plans to determine connectivity.</p>	N/A

# CNUE e-Learning Platform

## Information Architecture Features and Component considerations

LEARNING ASSESSMENT	FEATURES AND COMPONENT CONSIDERATIONS	TECHNOLOGY
<b>Evaluation Strategy and Methods to assess training and learner progress</b>	<p>Assessment tests may be integrated into the e-learning course or provided as stand-alone learning features. They have the potential to increase learners' engagement and to support the learning process through the provision of personalised feedback.</p> <p>In practice, assessment tests may be incorporated for different purposes:</p> <ul style="list-style-type: none"> <li>• Prerequisite tests - used to verify if learners have the minimum required knowledge to participate in a certain learning course.</li> <li>• Pre-assessment tests (or entry tests) - used to assess a learner's knowledge and skills before beginning a course, in order to personalize learning activities.</li> <li>• Diagnostic tests - used to assess the achievement of a unit's learning objectives after the completion of a specific learning unit.</li> <li>• Post-assessment test - used to assess the achievement of the course's learning objectives after the completion of the entire course.</li> <li>• Certification tests - used to verify specific skills and knowledge</li> </ul>	<p>Software that support quizzes, assessments and knowledge checks such as Sli.do and Mentimeter.</p>

# CNUE e-Learning Platform

## Information Architecture Features and Component considerations

LEARNER CERTIFICATION	FEATURES AND COMPONENT CONSIDERATIONS	TECHNOLOGY
<p>Learners and employers increasingly value verifiable micro-credentials.</p>	<p>Certification and badgification plug-ins are some of the many tools designed to acknowledge and validate training achieved inside the Moodle platform. Certification and open badge requirements are related to new HR policies, educational institutions and formal/informal education worldwide.</p> <p>Digital badges are part of a taxonomy of digital and micro-credentials. They are online visual representations of skills and competences earned through learning, and can be used by CNUE as motivation to encourage learners to enrol in and complete learning activities. Digital credentials are:</p> <ul style="list-style-type: none"> <li>• Verifiable - in that digital credentials are embedded with metadata hard-coded into the badge (or other image) that links back to the issuing authority, assessment criteria and learning outcomes.</li> <li>• Sharable – in that they may be displayed on social and professional networking platforms, such as LinkedIn, Facebook, Twitter and other organizational and personal webpages. They can be inserted onto traditional paper curriculum vitae and added to e-mail signatures.</li> <li>• Stackable – in that they showcase a granular collection of a learner's acquired skills and competences through learning activities.</li> </ul> <p>Since CNUE is likely to be using Moodle, it should also consider the fact that in 2020, IMS Global learning Consortium certified Moodle 8 and Moodle 9 as Open Badges v2.0 Issuers. The feature awards learners with digital certificates and/or open badges to validate competences and achievements earned within the learning environment. They are automatically generated, information-rich, contained within a record about a learner, issuing institutions and training and assessment criteria. Such certificates are easily verified at any time on their own unique URL.</p> <ul style="list-style-type: none"> <li>• Beyond badges, blockchain technologies are increasingly being deployed by both mainstream education and TVET sectors to provide decentralised, tamper-proof, self-sovereign, transparent, verifiable accreditation of learning. Used in conjunction with digital wallets, blockchain provides learners with a portfolio of personal accredited learning to share on a needs basis with third parties.</li> </ul>	<p>Moodle</p> <p>Digital Badges</p> <p>Digital Wallets (online software applications designed to collect a learner's digital credentials earned from various organisations or learning providers).</p>

# Content Checklist

CONTENT	MEDIA TYPE	TECHNOLOGY
Course Syllabus	Text HTML	Moodle + Portal
Parts or all of the course <ul style="list-style-type: none"> <li>Copies of lectures in the form of text, audio, or video presentations</li> </ul>	Mixed	Various
Administrative information about the course <ul style="list-style-type: none"> <li>Prerequisites, credits, registration, payments, physical sessions, and contact information for the instructor</li> </ul>	Text HTML	PDF Web Page
Notice board for current information about the ongoing course	Text HTML	Moodle + Portal
Additional resources, either integrated or as links to outside resources. <ul style="list-style-type: none"> <li>Supplementary reading, or innovative equivalents for it.</li> </ul>	Text HTML Hyperlinks	Moodle + Portal
Assessment <ul style="list-style-type: none"> <li>Tests, assignment submissions, presentation of projects</li> <li>Features to support peer assessment</li> </ul>	Various	Zoom, Sli.do, Surveys
Self-assessment quizzes <ul style="list-style-type: none"> <li>Ideally scored automatically</li> </ul>	Social Media	Various, including Survey Monkey and Sli.do

# Content Checklist

CONTENT	MEDIA TYPE	TECHNOLOGY
Support for communications <ul style="list-style-type: none"> <li>E-mail, threaded discussions, chat rooms.</li> <li>Sometimes with the instructor or an assistant acting as moderator.</li> </ul>	N/A	Twitter and other media, Additional elements include wikis, blogs, RSS and 3D virtual learning spaces.
Links to outside sources <ul style="list-style-type: none"> <li>Pathways to all other online learning spaces are linked via the VLE / LMS</li> </ul>	Text HTML Hyperlinks	Moodle + Portal
Management of access rights <ul style="list-style-type: none"> <li>Instructors, their assistants, course support staff, and students</li> </ul>	Text HTML Hyperlinks	Moodle + Portal
Documentation and statistics as required for institutional administration and quality control <ul style="list-style-type: none"> <li>Authoring tools for creating the necessary documents by the instructor, and, usually, submissions by the students</li> <li>Provision for the necessary hyperlinks to create a unified presentation to the students.</li> <li>Slides (PowerPoint)</li> </ul>	Text, Visuals, Videos etc.	Portal Zoom Sli.do

# ANNEX I MIND MAPS



