Annex 1 to the Tender Procedure Regulation

**Technical specification**

1. **GENERAL INFORMATION**
   1. Subject of the Contract – development and maintenance services for the E‑Learning module of the open source ERP system Odoo 15.0 Community Edition (hereinafter – the System), meaning as follows:
      1. Configuration works – configuration of the System in line with the Client's needs and requirements according to the Technical Specification.
      2. Maintenance works – the latest versions of the System are delivered as part of the maintenance works, debugging must be provided, if there are any errors or deficiencies in System, or malfunctions or problems in the System are diagnosed, user and technical support centre services are offered, support must include operational, development and modification consultancy for the further development, enhancement, implementation of various changes or any other assistance to the System.
   2. From the date of conclusion of the Contract, the Tenderer must provide the Services within the following timeframes:
      1. Basic System function development within a maximum of 4 months as per Client’s provided timetable. (Requirements within technical specification that are not listed as part of section 1.2.2. and 1.2.3 sub-points).
      2. Full system development within a maximum of 8 months (requirements listed under technical specification sub-points 2.1.4., 2.2.4., from 2.2.5 to 2.2.7., 2.2.9., 2.3.1., from 2.4.2. to 2.4.4., 2.4.8., 2.4.11., 2.4.13., 2.4.14., 2.5., 2.6.., 2.7.2., 2.9.4., 2.10.).
      3. Maintenance work, including development work (changes at the Client's request), must be provided within 12 months of the signing of the acceptance and transfer deed (3rd point within technical specification).
   3. The following documentation must be submitted along with the acceptance and transfer deed:
      1. User's manual of the full functionality of the System, including video recordings and explanatory notes.
      2. Administrator's manual of the full functionality of the System, including video recordings and explanatory notes.
      3. Installation manual, if any.
      4. System versions, if any.
      5. Finished System code must be uploaded to the cloud service link provided by the Client.
      6. Tenderer must submit the documentation to the Client in Latvian in an electronic editable format (MS Word or MS Excel).
      7. The Tenderer may combine several manuals into one by agreement with the Client.
   4. As part of this Contract, the Tenderer must provide a team of the following specialists: at least one programmer who has developed as a programmer this or an equivalent System in the last 3 (three) years, a project manager and a tester who has participated in the implementation of such project.
   5. The system must be implemented in the test and production environment.
2. **SYSTEM REQUIREMENTS**
   1. **General requirements**
      1. The Tenderer must ensure that at least 3500 concurrent user sessions are available simultaneously.
      2. The System should operate smoothly during its performance, meaning that the availability of the System must not be lower than 98% per month, except in the case of planned interruption or development work of the System for reasons beyond the control of the Tenderer.
      3. The System interface must be in Latvian (user and administrator interfaces) with the ability to switch to another language, e.g. English.
      4. The following must be provided on the user's web-site:
         1. keyboard-only navigation by pressing the 'Tab' key;
         2. 100%, 150%, or 200% zoom of the content;
         3. contrast adjustment (white text on black background, black text on yellow background, yellow text on black background);
         4. reset settings.
      5. Only authenticated and authorised users must be allowed to work with the System and real-time data synchronisation and user right changes in Active Directory (AD) must be ensured.
      6. The System must be user-friendly to the extent that the basic functions, such as logging into the System, navigating to the home screen, understanding the principles of moving from one section to another, and menu content locations are intuitive and do not require instructions.
      7. The Tenderer must ensure that the System can be used with the most popular browsers [Mozilla](https://lv.wikipedia.org/wiki/Mozilla) [Firefox](https://lv.wikipedia.org/wiki/Mozilla_Firefox), [Google Chrome](https://lv.wikipedia.org/wiki/Google_Chrome), [Microsoft Edge](https://lv.wikipedia.org/wiki/Microsoft_Edge), Apple Safari without installing additional plugins. The System must also be compatible with Android and Safari operating systems for tablets and smartphones and with Google Chrome and Apple Safari versions.
      8. The protection of natural persons' data must be ensured in accordance with the requirements of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC and the Personal Data Processing Law, by limiting access to personal data to authenticated System users who require access to the data to carry out their duties and making an appropriate entry in the audit log on each occasion to that effect. In the event of the conclusion of the Contract, the Tenderer must sign a Data Controller and Data Processor Agreement.
      9. The storage, deletion, or minimisation of data at the request of the Client must be ensured within the specified time limits (to be specified during the validity period of the Contract), provided that this is not in conflict with the laws and regulations of the Republic of Latvia and the European Union.
   2. **Upload of Training content**
      1. The training content must consist of text, presentations, images, videos, infographics, diagrams and tests.
      2. The Tenderer must ensure that the content is uploaded by sections, topics, and visualised by a table of contents.
      3. There must be provided the ability to create a content or a section with one or more related hashtags (tag, keyword). If a specific hashtag is added to the content, it must be visually displayed next to the relevant content and there must be an option to search the content by such a hashtag, e.g. ‘mandatory training’ hashtag.
      4. Ability to define the following settings for the content:
         1. a time limit – unlimited or a specific date until which the content is available;
         2. the frequency and regularity of assigning, e.g. 1 x year, 1 x quarter, biennially, when this option is specified, the System must instruct the users according to this requirement.
      5. [Gamification](https://www.google.com/search?rlz=1C1GCEA_enLV1024LV1024&q=gamification&spell=1&sa=X&ved=2ahUKEwi9rKWPkOr9AhU5QPEDHSPxCvoQkeECKAB6BAgKEAE) tools to attract users, e.g., accumulating points/badges for successfully learned content and passed test, etc., must be provided.
      6. Ability to create a copy of existing content with all relevant attachments, hyperlinks, settings, properties and flows which can be used as a template for creating other content must be provided.
      7. Ability to add a video file (YouTube and MS Stream) to the specific content, either as a hyperlink, as embedded content or as a video file, e.g. *.MP4,* must be provided.
      8. Ability to add files in any format, e.g., *jpg, png, PDF, pptx* (with/without animations) *MS Office* and other formats without restrictions, with an option to download and use the files on the user's computer must be provided.
      9. Ability to add available SCORM courses or other interactive materials (formats that support interactive options, e.g., narrated presentation with voice over) must be provided.
   3. **Assignment of training content to System users**
      1. The assignment of the training material and the test must be ensured in the following ways:
         1. Manually by setting deadlines and selecting the audience according to the relevant criteria, e.g. active, new employees, position, department, sub-department, work number, position code, employees group, etc.
         2. Automatically – to all or only new users (employees), to the audience of the relevant group.
      2. There must be an option of manual or automatic training completion request, provided that the deadline of training has not expired. If the training has expired, the user must not be able to see it.
   4. **Creating tests**
      1. Ability to create tests by selecting different types of questions, e.g., multiple-selections (menu), typing an answer in the field (text), ordering the answers in the correct order, entering a date, Yes/No questions, question or answer that includes a image, table, etc. must be provided.
      2. Ability to use a pre-defined question repository and to automatically generate questions from the question repository must be provided.
      3. Ability to create and maintain question repositories on different topics and sub-topics. Each topic must have its own question repository and there must be an option to specify sub-topics for each topic. The created question repository can ne used to prepare tests by choosing inclusion of questions from a topic or a sub-topic.
      4. Ability to provide answers in a random sequence (the answers available for the same question must be presented in a random order instead of pre-defined, one respondent must see one order, another one - another, using the same principle for re-sitting the test).
      5. Preview of the test questions must be provided.
      6. Correct/incorrect answers must be displayed – only the overview and the detailed view of the correct and incorrect answers, e.g., 19/20 questions are answered correctly, a review of the questions and answers must show which question was incorrectly answered, the wrong and correct answers must be visually highlighted.
      7. A summary of the test results and a visual representation (dashboard) in the chart form (e.g., pie chart) must be available at the end of the test – Correct, Incorrect, Partially Answered, Unanswered questions. To provide a visual insight, at the end of each completed test, information on learning progress or performance must be displayed to the user.
      8. An automatic numbering of questions and marking as ‘mandatory’, with the option to change it to ‘optional’ must be provided. Answering the questions tagged as ‘mandatory is mandatory, whereas answering the questions tagged as ‘optional’ is optional.
      9. A validation for the questions tagged as ‘mandatory’ questions must be provided. The test can only be completed and submitted if the user has answered the required questions which the user can identify by a special tag or visual property, e.g., a question marked with a red asterisk could be one of the most common types, showing the user which questions require an answer.
      10. Ability to set a minimum pass mark (e.g. 70%, 80%, or 90%) for the test.
      11. A value input option (in points or percentage) must be provided for each test question.
      12. An option to set the deadline for the test completion (date, time) must be provided.
      13. An option to set the duration of the test (how much time can be spent on the test from its opening to submission) must be provided.
      14. An option to set the number of allowed test attempts – only one or several attempts, must be provided.
      15. The scoring type – automatic scoring based on the number of correct/incorrect answers, or manual scoring (the instructor evaluates and marks correct/incorrect/partially correct, determines the score and may add a comment) must be provided.
      16. Ability to give an additional explanation, comment on the correct answer when displaying the answers.
   5. **Creation, recording and issue of certificates**
      1. Ability for a user with an appropriate role (administrator) to create electronic certificates, defining their visual and content form (training name, unique number, date, company logo) of the acquired training must be provided.
      2. Ability to store and enter information on the user's (employee's) education (diploma/certificate – both electronic and hard-copies) in *PDF*, *Word*, *jpg*, *png*, *edoc*, etc. formats, validity periods of educational documents with the ability to have a System notification on the expiry of a specific document and the need to renew it must be provided.
      3. Ability to download/save a certificate of training must be provided.
   6. **System reminders, notifications**
      1. Depending to the role (administrator) users must have the ability to manage the reminder texts, frequency, recipients (users and/or their line managers), including defining the method of sending the reminder: automatically or manually.
      2. An automatic reminder from the System when a certificate is about to expire must be provided. This means that if a certificate has an expiry date, automatic messages or reminders must be sent from the System to the user and their line manager when the expiry date is approaching/comes.
   7. **Reports and reviews**
      1. Ability to generate various types of reports and reviews on:
         1. Attendance of specific training programmes for a specific user or for all users, including at least the following information:
            1. training title;
            2. a person in charge of the training;
            3. an e-mail address of the user;
            4. work number of the user;
            5. name, surname of the user;
            6. position of the user;
            7. department/unit of the user;
            8. date and time of the training;
            9. time stamp of the last activity of the user;
            10. time spent learning the content of the training;
            11. progress – total score (%) of the training content completed.
         2. Test results for a specific user or for all users, including at least the following information:
            1. title of the test;
            2. date and time of the test;
            3. test submission date and time;
            4. an e-mail address of the user;
            5. work number of the user;
            6. name, surname of the user;
            7. position of the user;
            8. department/unit of the user;
            9. the total number of attempts (indicating single attempts – the test has been passed at the first attempt, and repeated attempts – multiple re-sittings of the test);
            10. status of the test (started, completed, not started);
            11. time spent on the test;
            12. evaluation – test score in %;
            13. average score for a specific test among the users;
            14. time stamp of the last activity of the user.
         3. Training carried out in the System at different periods, e.g. month, quarter, year, including at least the following information:
            1. review period;
            2. training title;
            3. a person in charge of the training;
            4. date and time of the training;
            5. date and time the training was completed;
            6. total number of users who have participated in the training;
            7. total score (%) of the training content completed by the users.
      2. The line manager, i.e., the user having at least one reporting user of the System, must have ability to create and view reports on the status and progress of the content (training).
      3. Ability to generate a detailed report on the test questions: which are answered correctly and by how many users, which are more frequently answered incorrectly and, if wrong, which wrong answers predominate.
      4. Ability to export reports and reviews to *csv*, *xls* or other format files with the option to set a time stamp.
      5. Ability to print a confirmation of successful or failed completion of the test must be provided for the user.
   8. **Integration with the Client's Information Systems (IS) and other related modules of the open source ERP system Odoo 15.0 Community Edition:**
      1. Regular exchange of data via API or equivalent method following the Client’s specified criteria and frequency must be provided.
      2. Data integration with other Odoo modules, e.g. Employee, must be provided:
         1. data retrieval on the employee (user), department on at least 3 levels, the direct reporting (line manager), and predefined groups of employees and linking them to the specific module by integrating them into the System;
         2. the data of the users (employees) or any subsequent changes must be transferred to the System, including administration of access rights (granting, blocking, deleting, archiving), ensuring compliance with an updated information;
         3. ability for users with appropriate role (administrator) to add new and change existing data;
         4. automatic or semi-automatic creation of users or employees groups, i.e. groups of users by common property(-ies) or corresponding to a specific data field.
   9. **User management and training**
      1. Ability to manage users, defining permissions and access levels, must be provided, e.g.:
         1. key user (administrator) with the rights to post content, request training completion, create tests, reports, define access levels for other users of the System, etc.;
         2. System users with the rights to request training attendance and performance data of other System users;
         3. other System users.
      2. An online or, if necessary, face-to-face training to key users (administrators) on the System use, e.g. request training completion, uploading content, creating tests, must be provided, etc.
      3. Prior to acceptance of the configuration work, user training in the System’s test environment to verify the relevance to the user manuals and full functionality of the System must be provided.
      4. An event log with audit records must be provided.
      5. An automated or semi-automated grouping of users by position, department, group, or other criteria must be provided.
      6. The content must be displayed in the System’s user profile by the following groups:
         1. Courses to be completed mandatory – learning content, relevant and assigned to the user.
         2. Courses completed – learning content, relevant and already completed by the user.
         3. All available courses – all learning content published in the live environment and available for training.
      7. The content must be available at any time and from any device (including mobile phone).
      8. Each user must have a option to see information on unread/completed content.
   10. **E-signature functionality** 
       1. The System must have an electronic signature functionality in accordance with the guidelines of the State Joint stock company “Latvian State Radio and Television Centre” ([*VAS LVRTC - Integration Guidelines - Certification Services - eParaksts wiki*](https://wiki.eparaksts.lv/)).
       2. The retrieval of electronically signed certificates from the System, e.g. creation and submission of the Workplace Safety Briefing and Fire Safety Briefing records in *Pdf, excel, word or edoc format*, in compliance with the templates and fields specified in the laws and regulations of the Republic of Latvia must be provided.
3. **SYSTEM MAINTENANCE**
   1. The Tenderer must carry out the maintenance of the System and provide the warranty in accordance with and following the ITIL ITSM (Support level) guidelines with the following application categories and their priorities:
      1. Failure (crash) – problem causing complete shutdown of the System and/or unavailability of functions (**Category 1**);
      2. Unavoidable error – a problem caused by a System software error or malfunction that results in a significant loss of functionality and there is not known workaround, but it is possible to continue operation in a restricted mode (**Category 2**);
      3. Avoidable error  – a problem that causes minimal loss of features and/or functions, the impact on the System is minor or inconvenient (**Category 3**);
      4. Inaccuracy – a problem that causes no potential damage and is considered a System software bug, inaccuracy, or malfunction that causes minor impact on the operation of the System (**Category 4**);
      5. Consultation – a situation where the Client needs support to resolve specific issues or to obtain additional information about the System and its functionality, including training on the System, and preliminary assessment of changes (**Category 5**);
      6. Changes – a request to make changes or to add functionality, documentation or other additional work to the System, other than the categories described above (**Category 6**).
   2. Upon Client’s request, the Tenderer must prepare the implementation proposal (work task) for Category 6 applications free of charge.
   3. The work task for the change request must be agreed and approved by the Client.
   4. The planned scope of work for change and System development applications (Category 6) must not exceed 10% of the maintenance fee specified in the Contract.
   5. Within the scope of the warranty, 24/7 centralised handling of tickets, problems, and failures for the deliverables developed during the validity period of the Contract must be provided via the following channels:
      1. calls to a specified contact telephone number (for Category 1 and Category 2 cases);
      2. e-mails to a specified e-mail address;
   6. at the time when the ticket was receiced, it must be registered in the Ticketing System of the Tenderer, stating the time when the ticket was submitted and providing a registration confirmation by sending a reply e-mail.
   7. An access to the Tenderer's ticketing System must be provided to the Client.
   8. The warranty must be provided as follows:
      1. for all categories of tickets, except for Category 1 and Category 2, on business days during standard business hours from 8:00 to 17:00;
      2. only the Client must be eligible to take the decision on changing the ticket category from a lower to Category 1 or Category 2 and to initiate its handling outside the standard business hours.
   9. The remediation of reported problems and/or handling of submitted tickets must be carried out in accordance with the mode of operation set out in Paragraph 3.1 of the Technical Specification and in accordance with the following minimum response, workaround, and full remediation times:
      1. response time – the period of time elapsed from receipt of the ticket, when the full ticket information is provided or recorded, until the submission of the response time reply, which must include at least the following information: an explanation of the cause of the problem (if known), an explanation of how the problem will be addressed and resolved or information provided, a timeframe and/or plan for the implementation of the workaround and/or the remediation, the actions required and/or to be taken to help contain the problem or minimise its impact;
      2. the target time for delivery of the permanent solution or resolution time and the target time for delivery of the workaround – means the period of time between the receipt and acknowledgement of the response time reply and the moment when the provider has provided a solution after which the problem reported can no longer be repeated or has taken action to downgrade the ticket in question to a lower category;
      3. the response time for **a Category 1** ticket is a maximum of 2 hours with completion of the workaround within 4 hours and delivery of the permanent solution within a maximum of 24 hours;
      4. the response time for **a Category 2** ticket is a maximum of 4 hours with completion of the workaround within 8 hours and delivery of the permanent solution within a maximum of 24 hours;
      5. the response time for **a Category 3** ticket is a maximum of 8 hours with completion of the workaround within 24 hours and delivery of the permanent solution within a maximum of 48 hours;
      6. the response time for **a Category 4** ticket is no more than 2 business days, with delivery of the permanent solution within a maximum of 3 business days;
      7. the response time for **a Category 5** ticket is no more than 3 business days;
      8. the response time for **a Category 6** ticket is no more than 5 business days, including a preparation of a proposal containing a description of the solution and an assessment of the workload. If the Tenderer has requested additional information from the Client for the preparation of the proposal, the counting of business days must be suspended until the Client has provided the Tenderer with the requested information.