Invitation to Tender
European Open Procurement Procedure
Learning Management System
University of Twente

Authors:	Bob Theloesen, Procurement Officer
	Jaap Hiddink, Project Manager
Date:	August 26th, 2016
Reference:	CVBUIT-2104

Contents

Contents 2
Definitions 4
Foreword 7
Reader's Guide 7
1. European Public Procurement Procedure Learning Management System 8
  1.1 Introduction to procurement procedure 8
  1.2 Contracting Authority 8
    1.2.1 Sustainability and CSR 9
    1.2.2 Centre for Educational Support 9
    1.2.3 Facility Service Centre 9
    1.2.4 LISA 10
  1.3 Contents of Contract, vision on the LMS 10
    1.3.1 Current situation 10
    1.3.2 Scope of the Contract 10
    1.3.3 Vision on the LMS 10
    1.3.4 Out of scope of the Contract 11
    1.3.5 LMS Implementation strategy outlines 11
  1.4 Form of Agreement 12
  1.5 Supporting parties in procurement procedure 12
  1.6 Use of online tool 12
2. Procurement procedure 14
  2.1 General 14
  2.2 Timetable 14
  2.3 Communication during procurement procedure 15
    2.3.1 Contact Details 15
    2.3.2 Submission of questions and comments 15
    2.3.3 Memorandums of Clarification 16
  2.4 Submission of Quotation 16
  2.5 Receipt and Evaluation of Quotations 17
  2.6 Award of Contract 18
3. Tenderer Requirements 19
  3.1 Exclusion Grounds 19
    3.1.1 U1: European Single Procurement Document 19
  3.2 Suitability Requirements 20
    3.2.1 Suitability to pursue the professional activity 20
    3.2.2 Financial and economic strength 20
    3.2.3 Technical and professional ability 21
    3.2.4 Official documentation Suitability Requirements 24
4. Minimum Requirements and Contract Award Criterion 25
  4.1 Evaluation of minimum requirements 25
  4.2 Minimum Requirements 25
    4.2.1 MR1: List of Requirements 25
    4.2.2 MR2: Draft Agreement 25

4.2.3 MR3: SLA meeting minimum requirements ... 26
4.3 Evaluation of Contract Award Criteria ... 26
4.4 Contract Award Criteria ... 28
4.4.1 AC1: Additional options for functionalities for instructors and students ... 28
4.4.2 AC2: Additional functions ... 31
4.4.3 AC3: Integration ... 33
4.4.4 AC4: Innovation and strategic developments ... 35
4.4.5 AC5: User experience ... 39
4.4.6 AC6: Sustainability: the most energy-efficient networks/infrastructure ... 41
4.4.7 AC7: Price ... 42
Annex A: Principles and Conditions of Procurement ... 45
A.1 Quotation Submission Conditions ... 45
A.1.1 Submission of Quotation via Online Tool ... 45
A.1.2 Formal Requirements ... 45
A.1.3 Period of Validity of Quotation ... 45
A.1.4 Joint Quotation ... 46
A.1.5 Quotation involving subcontracting ... 46
A.2 Principles ... 47
A.3 Quotation Conditions ... 48
A.3.1 Proactive Tenderer Actions ... 48
A.3.2 General Procurement Conditions of Contracting Authority ... 48
A.3.3 Reimbursement of Costs ... 48
A.3.4 Conditional Quotation ... 48
A.3.5 No more than one Quotation ... 48
A.3.6 Reservation of Rights by Contracting Authority ... 48
A.3.7 Intellectual Property ... 49
A.3.8 Applicable Law ... 49
Annex B: List of Requirements ... 50
Annex C: Project reference architecture ... 51
Annex D: Current performance and usage ... 53
Annex E: Draft Agreement ... 54
Annex F: User experience ... 55

Definitions

Some terms used in this Invitation to Tender are defined below. Defined terms are written with a capital letter and have the same meaning in the singular and plural.

Agreement
The Agreement(s) which Contracting Authority shall in principle conclude with the Tenderer(s) who submit(s) the best price –quality ratio tender.

Alternative
An alternative solution requested by the Contracting Authority for the product or service requested in the List of Requirements.

Annex/Attachment
An annex or attachment to one of the Procurement Documents. An annex or attachment forms an integral part of the Procurement Documents.

Contract Award Criterion
Criterion on the basis of which Contracting Authority evaluates the Tender in order to determine which Tender is eligible for the Contract. The contract award criterion in this procurement is that of the Best Price-Quality Ratio.

Contracting Authority
The party who awards the Contract, the Universiteit Twente.

Contractor
The Tenderer to whom the Contract is awarded.

Contracts
The delivery, maintenance and servicing of Learning Management System

Invitation to Tender
A description of the service, the accompanying annexes/attachments and the conditions governing the service. The Draft Agreement forms part of the Invitation to Tender.

List of Requirements
The document containing the specifications for the performance of the Contract.

Lot
A demarcated part of the Contract for which a Tender can be submitted.

Memorandum of Clarification
Document containing the answers to questions from Tenderers, as well as any changes to the Invitation to Tender and/or other Procurement Documents.

Memorandums of Clarification form part of the Invitation to Tender and prevail over all other parts of the Invitation to Tender and accompanying Annexes/Attachments.

Offer
An offer to perform the Contract(s).

Procurement Act
The Dutch Procurement Act of 1 July 2016, setting out revised rules for public procurement procedures (revised Procurement Act 2012), Bulletin of Acts, Orders and Decrees 2016, 241, including amendments therein.

Procurement Documents
Collective name for all documents that Contracting Authority has drawn up for the public procurement of Learning Management System, including the Invitation to Tender, the Agreement, the List of Requirements and the Memorandum of Clarification.

Proportionality Guide
Guide of April 2016 (1st revision) as drawn up by the Proportionality Guide Writing Group, part of the Procurement Act.

Quotation
An offer to perform the Contract.

Revised Documentation
Those documents that have been marked as "Revised Documentation" by Contracting Authority. Revised Documentation concerns additions and amendments to the Invitation to Tender, the List of Requirements, the Draft Agreement and the Annexes.

Standard Form
Mandatory form which accompanies this Invitation to Tender and must be completed by a Tenderer.

Tenderer
A natural person or legal entity offering to perform the Contract by means of a Quotation.

Variant
An alternative solution requested by the Contracting Authority for the product or service requested in the List of Requirements.

Working Days
A calendar day which is not *(i)* a Saturday or Sunday, *(ii)* an official public holiday in the Netherlands or *(iii)* the equivalent of a public holiday pursuant to Article 3 (3) of the General Extension of Time-Limits Act.

Year
Consecutive period of twelve (12) months.

Interpretation

Textual references in the Procurement Documents must be interpreted as follows, unless stated otherwise:

- all gender references are inclusive;
- all references to a time period refer to a consecutive period of time;
- the use of all words with the meaning of "including" shall be understood as “including, but not limited to”;
- all references to any law or regulation or provision from a law or regulation shall be deemed to include any legally valid amendment and renewed adoption of said law, regulation or provision as well as any provision of a law or regulation enacted to replace or amend the original provision, without prejudice to any applicable transitional laws.

Foreword

This Invitation to Tender belongs to the public procurement procedure for Learning Management System as initiated by Contracting Authority.

Contracting Authority has decided to conduct a public procedure in order to enable all potential suppliers to tender for this contract.

If you have not received the Invitation to Tender in full or in good order, please report this as soon as possible, but no later than 21 September 2016, before 09:30h, via the "My Messages" Module of the online tool, specifying which documents were missing, incomplete or damaged.

To ensure a smooth evaluation process, you are required to adhere to the instructions stated in this Invitation to Tender. Should you have any questions, please submit them as described in chapter 2 of this Invitation to Tender.

Reader's Guide

This Invitation to Tender starts with an overview of important terms, followed by the above foreword and the reader's guide.

Chapter 1 explains the object of the procurement procedure, introduces Contracting Authority and provides further information on the procurement procedure and form of the contract.

Chapter 2 outlines the tender phase of the procurement procedure. Contracting Authority has set out the timetable in further detail in this chapter.

Chapter 3 outlines the Requirements that the Tenderer must meet.

Chapter 4 outlines the Minimum Requirements and the Contract Award Criterion.

The Annexes provide further relevant information about the principles and conditions of the procurement procedure and the performance of the Contract.

1. European Public Procurement Procedure Learning Management System

1.1 Introduction to procurement procedure

The purpose of this open procurement procedure of Contracting Authority is to award the Contract to one (1) supplier, taking effect on the 1st of February 2017.

In view of the nature and estimated size of the Contract, Contracting Authority conducts a open procurement procedure in conformity with the Renewed Procurement Act of 1 July 2016, comprising new rules on open procurement procedures ('Aanbestedingswet 2012'), Bulletin of Acts, Orders and Decrees 2016, 241, including any amendments therein.

The choice for an open procedure comes from our market assessment where we expect a limited number of suppliers responding.

This Invitation to Tender/Contract is not divided into lots, nor is this contract suitable for division into lots. The various aspects of the Contract are inextricably linked and, from an operational and strategic perspective, the Contracting Authority deems it important that the different aspects of the Contract are executed by a single Contractor or Consortium. In this way the UT is not responsible for integrating these different aspects of the contract. Furthermore, the LMS market and suppliers in that market are well suited to handle such a project.

Contracting Authority shall award the Contract to the Tenderer who submits the Quotation with the Best Price-Quality ration, unless the procurement procedure is terminated before a contract is awarded.

1.2 Contracting Authority

The University of Twente (UT) is an enterprising research university founded in 1961. The UT provides education and research in academic disciplines varying from public administration to technical physics and biomedical technology. UT is the only Dutch university with a campus: studying, working, living, engaging in activities and relaxing are largely concentrated at a single location, the country estate of Drienerlo. This campus thus provides an ideal setting to promote the academic, entrepreneurial and personal development of students. The site is owned by the UT and covers about 150 hectares. The buildings have a gross floor space of about 200,000 m². The UT currently has about 9,000 students and about 3,000 employees, with an average of 2,000 students living on campus. The UT aims to expand to 10,000 students within the next 5 years.
The UT comprises the following five faculties and nine service departments:

Faculties:
The education of the University of Twente is provided by five faculties:

- Behavioural, Management and Social Sciences (BMS)
- Engineering Technology (CTW)
- Electrical Engineering, Mathematics and Computer Science (EEMCS/EWI)
- Geo-Information Science and Earth Observation (ITC)
- Science and Technology (TNW)

The following service departments support our on-campus education and research:

- General Affairs (AZ)
- Library, ICT Services & Archive (LISA)
- Centre for Educational Support (CES)
- Facility Service Centre (FB)
- Financial and Economic Affairs (FEZ)
- Human Resources (HR)
- Marketing & Communication (M&C)
- Strategy & Policy (S&B)

1.2.1 Sustainability and CSR

Contracting Authority is an enterprising university whose innovative solutions help society address key sustainability issues. Our combination of technological and social sciences makes for a unique approach: high Tech / human Touch. We develop and apply sustainable innovations in close cooperation with our direct environment. Students and staff play an active role in this context. Our green campus includes a Living Lab for research and education and inspires us to conduct our operations in a sustainable manner. The environment and climate are a central focus not only in our education and research, but also in our support operations. What this means in practice is stated in our sustainability mission.
Our sustainability ambitions therefore go beyond our statutory obligations. Multi-year arrangements have been made with the government to save energy both directly on campus and indirectly in the chain. The Energy Efficiency Plan (EEP) sets out the measures that Contracting Authority aims to implement in the 2013-2016 period. Measure 12 concerns sustainable procurement. Contracting Authority is striving to reduce its CO2 footprint. With an average procurement volume of € 75,000,000, it is important for Contracting Authority that suppliers have insight into the life cycle of their products and/or services.
The term Corporate Social Responsibility (CSR) is used alongside sustainability in this procurement procedure. CSR refers to all initiatives, other than in the field of sustainability, which are distinctive versus standard entrepreneurship in their consistency with current local or national societal objectives.

1.2.2 Centre for Educational Support

The Centre for Educational Support (CES) provides all study support activities in the University of Twente. Activities consists of, but are not limited to, study counselling and assistance, registration of diplomas and academic scheduling, the facilitation of sports and culture on campus. For all areas of activities CES makes connections in- and outside the University of Twente.

CES acts as the system owner for the LMS. The management of the Contract will also be positioned at CES. Contract managers maintain the contacts between the UT and the Contractor. They monitor the performance of the Contract and issue contracts to the Contractors.

1.2.3 Facility Service Centre

The Facility Service Centre (FB) is a proud, proactive department that delivers services in conformity with customer expectations. The FB collaborates with internal and external partners in order to best fulfil the customer's needs and to increase the usage and delivery of campus services as well as the primary process – thus co-shaping the university's future by facilitating and innovating. The core values of the Facility Service Centre are future driven, innovative, proactive, co-creation, client orientated and quality awareness. An enjoyable and collaborative working environment enables the FB to continue developing the organization and its own services.

Purchasers
The Purchasers maintain the contacts between Contracting Authority and Contractor.

1.2.4 LISA

LISA (Library, ICT services and Archive) is the bureau for ICT services of the UT. Services include managing workplace infrastructure and hosting of software systems. For the LMS relevant services are the programming and operation of interfaces, project management for implementation as well as contract and supplier management.

1.3 Contents of Contract, vision on the LMS

This section offers detailed information regarding the Contract, including the current situation at the University of Twente, the scope (and out-of-scope) of the Contract and the vision on the LMS, and more information regarding the Agreement.

1.3.1 Current situation

Our current LMS solution is Blackboard Learn. In Annex C you will find the architecture that is covering our present situation as well as the desired solution for this tender. In Annex D we have listed the statistics for the current use.

1.3.2 Scope of the Contract

The subject of this tender is the procurement and subsequent implementation of a Learning Management System and delivery of related hosting and support services:

- Licenses for the LMS application including all software needed to function (client software, databases, management software etc.);
- Hosting of the LMS (including operating system, network, security and additional services as backup and recovery);
- Hosting and operation of interfaces between the LMS and other (software) systems;
- Implementation of the above;
- Support services for the above.

1.3.3 Vision on the LMS

Prior to this procurement procedure the UT has adopted and affirmed the vision on the position and function of the LMS as the center of the digital learning environment.

The vision follows two trends:

1. In the teaching and learning field, we see both forms and clients diversify. Classical campus teaching is making way for blended learning, student driven learning etc. Furthermore, our students are no longer only the youth coming to learn after

secondary school. More and more professionals are finding their way into lifelong and distance learning with the UT;
2. In terms of technology the classical LMS is accompanied and challenged by niche contenders specializing into teaching and learning elements, as with for instance peer reviewing and competence management. These specialist applications can offer functionalities that deliver beyond what a classical LMS can provide. We believe we need those applications to get the best out of our teaching and learning in addition to a solid and reliable LMS backbone.

Both trends mean having just the one (LMS-)application for teaching and learning is no longer the best IT support option for our university.
Our vision therefore states we will use the LMS as the core application within the digital learning environment and limit the use to what the LMS does best:
- Course management;
- Content management;
- Enrollment management;
- Group management;
- Communication and collaboration;
- Assignments;
- Grading and grade management.

For all other functions the UT has the choice of either using what is available within the LMS, or use external learning tools and integrate those into the LMS to provide a flexible and fully functional digital learning environment. Integration and integration ability are therefore important topics in both our requirements and our acceptance criteria.

1.3.4 Out of scope of the Contract

The following services are not part of the scope of this tender, thus in principle it will be managed within the University of Twente itself. If during the execution of the project capacity is requested for these services, one can regard this as overtime.
- Building and servicing of Interfaces and provisioning with other systems;
- Support of lecturers and students in the use of the LMS.

1.3.5 LMS Implementation strategy outlines

The project "Implementation strategy of the LMS within UT" is still a work in progress. All of the implementation needs that we are now aware of are listed under award criterium AC7 (price).

As soon as we have chosen the Contractor as our LMS partner we would want to rely on his expertise how to implement the solution successfully. The Contractor has implemented his LMS for a number of our peers and we appreciate working together. This will include determining the best way to train users, to migrate data and to handle communication/PR matters.

1.4 Form of Agreement

The Agreement has a term of five years and takes effect on 1st February 2017 with a possible unilateral extension by Contracting Authority.

After this initial term, the Contracting Authority will have the unilateral option of extending this Agreement with one or more extensions of 12 (twelve) months with a maximum of 60 (sixty) months. The Contracting Authority intends to inform Contractor whether this option to extend will be exercised at least three months before the expiry of the term. If the Contracting Authority does not exercise an option to extend, the Contracting Authority is not held to terminate the Agreement ("opzeggen"). The Agreement will then be terminated by operation of law ('eindigen van rechtswege') by expiry of the term.

Contracting Authority has the intention to enter into an Agreement with one (1) supplier for the whole scope of the contract as described in section 1.3.2. The Draft Agreement is added to this Invitation to Tender as Annex E.

1.5 Supporting parties in procurement procedure

UT is supported by Significant B.V. for expertise on tendering. Significant will not support any potential Tenderers for this tender procedure.

1.6 Use of online tool

Contracting Authority is conducting this procurement procedure with the aid of an online tool: the Negometrix E-Sourcing tool (hereinafter: online tool). This online tool facilitates the exchange of information between Contracting Authority and Tenderers, while also making it easier to evaluate the Tenderers' answers.

Contracting Authority will make all Procurement Documents available via the online tool. Tenderers can access the online tool after sending Contracting Authority an email expressing their interest in the procurement procedure and receiving access authorization from Contracting Authority. Tenderers can only submit their tender via the online tool. Tenders which are submitted in any other fashion will be declared invalid and put aside.

This is a platform on which Contracting Authority has prepared a complete digital Invitation to Tender and where Tenderers can digitally provide answers to the questions posed.
You will find this platform at www.negometrix.com. You need not install anything on your PC to participate, but your organization must register once to access the Negometrix platform.

- The platform uses the term "tenders". Each tender concerns a digital Invitation to Tender. By clicking on the relevant tender under "My Tenders" you get access to: Your Offer. You will find this under the "Offers" tab page. Here you will find all relevant tendering information, such as the digital List of Requirements, pricing model and attachments (if any). The Offer consists of:
    - Questionnaires (referred to as "Surveys" in the tool)
    - Award Criteria Sheet
    - Timetable: You will find this under the "Planning" tab page.
    - Attachments: You will find these under "My Documents"

Completion of digital tender
To submit a Quotation you must answer all criteria as mentioned in the questionnaire(s) under the "Offers" tab page. The system indicates whether a question is a KO (Knock-Out) question. Non-KO questions may concern a wish. If so, the weight attached to this wish is also indicated. In the case of questions that require evaluation by the Contracting Authority, you can see how the evaluation will be performed as well as the possible scores.

Some questions may require that you upload an attachment by pressing the button "Add Attachment". A pop-up screen will appear. You must first select the folder for the relevant tender on the left-hand side. Next you click on the "Offer phase" folder (depending on the phase of the tender). Here you select "Offer of (**your company name**)". After selecting this folder, click on "Upload" at the top of the screen and then on "Scroll". Select the correct document on your hard drive and click on "Save". The document is then uploaded to the "Offer of (**your company name**)" folder. After uploading the document, you select it by ticking the check box in front of the document and clicking on "OK" at the bottom right corner. The document has now been linked to the relevant question.
A percentage bar indicates your progress in answering the questions in the questionnaire.

Uploading documents (outside of the questionnaire)
Should you wish to upload attachments that are not linked to a specific question, go to "My Documents" and select the folder of the relevant tender on the left-hand side. Click on the "Offer phase" folder and then select the "Offer of (**your company name**)" folder. You can upload the documents here. Please note: Documents uploaded under the folder with only your company name or your own name will not be visible to the Contracting Authority.

Communication
All communication about the tender must take place via the platform using the "My Messages" function. To send a message, click on "New Message", then select the relevant tender and the recipient.

The Tenderer is responsible for the timely and complete submission of a Quotation. Neither the Contracting Authority nor Negometrix will be liable for any mistakes made by Tenderers that have prevented the timely and full submission of information via the online tool. Therefore, in case of doubt, please contact the Negometrix Service Desk.

Telephone: +31 (0)85 20 84 666
E-mail: servicedesk@negometrix.com (or select Service Desk as recipient in "My Messages").

2. Procurement procedure

2.1 General

In view of the nature and estimated size of the Contract, Contracting Authority conducts an open procurement procedure in conformity with the Procurement Act of 1 July 2016, comprising revised rules on open procurement procedures (revised Procurement Act 2012), Bulletin of Acts, Orders and Decrees 2016, 241, including amendments therein.

Contracting Authority has sent the notice of the procurement procedure to the Publications Office of the European Union on Friday 26th of August 2016. The notice was published on TenderNed (www.tenderned.nl) and on the Tenders Electronic Daily (TED) database (http://ted.europa.eu) by means of the Negometrix Online Tool.

By sending this Invitation to Tender, Contracting Authority requests the Tenderer to submit a Tender in accordance with the Invitation to Tender. The Contracting Authority shall award the Contract to the Tenderer who makes the Quatation with the Best Price-Quality ratio unless this procurement procedure is terminated before the contract is awarded.

Should a Tenderer have any questions regarding the Procurement documents or discover any imperfections, procedural errors and/or contradictions, Tenderer must notify Contracting Authority of this in writing, stating reasons, as promptly as possible but no later than Thursday 22 September 2016, 09:30 CEST (2nd deadline for submission of questions and comments). If a Tenderer does not inform Contracting Authority within the set time limit in the prescribed manner, Tenderer is not entitled to submit any subsequent claims. These Tenderers therefor forfeit their rights to raise objections regarding any imperfections, procedural errors and/or contradictions. ("rechtsverwerking"). By submitting the Quotation, the Tenderer unconditionally accepts this Invitation to Tender, the conditions and requirements set forth herein and the Memorandum(s) of Clarification and all conditions stated therein regarding this procurement procedure.

2.2 Timetable

The overall planning is indicated in the timetable below. Contracting Authority reserves the right to alter the timetable.

Phase	Date
Dispatch of notice	Friday 26 August 2016
1st Deadline for submission of questions and comments based on the Invitation to Tender	Thursday 8 September 2016, 09:30 CEST
Publication of first Memorandum of Clarification, including any revised documentation	Friday 16 September 2016
2nd Deadline for submission of questions and comments based on the Invitation to Tender	Thursday 22 September 2016, 09:30 CEST
Publication of second Memorandum of Clarification, including any revised documentation	Thursday 29 September 2016
Closing Date Submission of Quotations	Tuesday 18 October 2016, 11:00 CEST

Opening of Quotations	Tuesday 18 October 2016, 11:30 CEST
Assessment Phase	18 October 2016 – end of November
Verification session	First half of December
Provisional Contract Award	Half December 2016
Final Contract Award	End of January 2017
Implementation	Beginning of February 2017
Effective Date of Agreement	To be determined

2.3 Communication during procurement procedure

2.3.1 Contact Details

The communication regarding this procurement procedure takes place via the Negometrix online tool, quoting "European open procurement Learning Management System University of Twente."

2.3.2 Submission of questions and comments

Rules for Question & Answer (Q&A) module:

All communication about this procurement procedure must take place via the digital Negometrix platform.

- **each comment/question must contain one question only**; in other words, do not submit batch files or batch questions.
- **each individual question can be posed immediately;** Tenderer need not wait until the deadline before submitting questions.
- **contracting authority can also answer questions earlier**; it is important for tenderers to regularly check Negometrix for published questions and answers, but Tenderers are automatically notified of any changes within the Q&A module. The questions and answers are provided in the Q&A module (Memorandum of Clarification) according to the set timetable on Negometrix and can be viewed and downloaded there. The Q&A module is fully integrated into the Negometrix platform. For further instructions on how to use this module, please see the **Instruction Questions & Answers module**, which can be found within the instructions on http://www.negometrix.com. The Contracting Authority will answer the questions and publish the answers using this same Q&A module. The Memorandum of Clarification is an integral part of the Procurement Documents.

Technical questions about the Negometrix platform can be directed at all times to the Negometrix Service Desk, which can be reached on working days between 8 a.m. and 6 p.m. Contact details: Tel: +31 (0)85 20 84 666, Email: servicedesk@negometrix.com

2.3.3 Memorandums of Clarification

The first question round for Tenderers closes on **Thursday 8 September 2016, 09:30 CEST**. Contracting Authority closes the Q&A round by answering all questions on or before Friday 16 September 2016 via the "Questions & Answers module". Contracting Authority will also mention any changes in the Procurement Documents in this Q&A module. The Memorandum of Clarification and the questions and answers as published on Friday 16 September 2016 form part of this Invitation to Tender and prevail over the Invitation to Tender.

The second question round for Tenderers closes on **Thursday 22 September 2016, 09:30 CEST**. Contracting Authority closes the Q&A round by answering all questions before or on Thursday 29 September 2016 via the "Questions & Answers" module. Contracting Authority will also mention any changes in the Procurement Documents in this Q&A module. The Memorandum of Clarification and the questions and answers as published on Thursday 29 September 2016 form part of this Invitation to Tender and prevail over the Invitation to Tender. Questions in response to the first Memorandum of Clarification as published by the Contracting Authority can be posed until the close of the second question round. All additional questions that are received on time by the Contracting Authority will be answered in the second Memorandum of Clarification.

Contracting Authority shall make the Memorandums of Clarification available to all Tenderers via the online tool.

2.4 Submission of Quotation

Tenderer submits the Quotation no later than Tuesday 18 October 2016, 11:00 CEST via the online tool. Late or incomplete Quotations will not be taken into consideration.

Handling of Complaints
A Tenderer who believes that Contracting Authority has failed to provide a satisfactory answer to a question for the Memorandum of Clarification can submit a complaint. Contracting Authority has a complaints handling procedure for this purpose. Complaints can be submitted via klachtenmeldpunt-fb@utwente.nl

Quotations that are not submitted on time or in conformity with Annex A will not be taken into consideration by Contracting Authority.

Tenderers carry responsibility for the timely and complete submission of their Quotations.

Contracting Authority and Negometrix are not responsible for any mistakes made by Tenderers that prevent the timely and complete submission of information via the online tool. Therefore, in case of doubt, please contact the Negometrix Service Desk

Telephone: +31 (0)85 20 84 666
Email: servicedesk@negometrix.com (or select the Service Desk as recipient in the "My Messages" module)

By submitting the Quotation, the Tenderer unconditionally accepts this Invitation to Tender, the conditions and requirements set forth herein and the Memorandum(s) of Clarification and all conditions stated therein regarding this procurement procedure.

2.5 Receipt and Evaluation of Quotations

After receipt of the Quotation no later than Tuesday 18 October 2016, 11:00 CEST, Contracting Authority will open the Quotations on Tuesday 18 October 2016, 11:30 CEST Tenderers cannot be present at the opening of the Quotations.

Contracting Authority will make a written report of the opening, which will be published on the Negometrix platform

Contracting Authority will first check all Quotations that are submitted on time for completeness and compliance with the formal requirements as described in Annex A, principles and conditions. Contracting Authority can decide to disregard Quotations that are incomplete or not compliant with the formal requirements.

Contracting Authority then checks whether the Quotations meet the minimum requirements and conditions. The minimum requirements are described in chapter 3 of the Invitation to Tender, the conditions are described in Annex A.

Contracting Authority then evaluates the Quotations that have passed the minimum requirements and conditions test on the basis of the Contract Award Criteria. Chapter 4 describes these Contract Award Criteria and the method used by Contracting Authority to determine which Tenderer has made the best price – quality ratio Quotation.

The Contracting Authority requires the best price –quality ratio Tenderer to participate in a verification test, according to the timetable in section 2.2. The goal of the verification is to determine if the Tenderer is truly able to meet the requirements and conditions of performance as set out in the Invitation to Tender and its Quotation when executing the Contract.
The verification test will comprise a verification regarding the:

- List of Requirements (Annex B) or parts thereof;
- Functionalities of his Learning Management System (LMS) included in the Quotation of Tenderer or parts thereof; and
- The interfacing with other systems as mentioned in Annex C.

Interface quality and provisioning capability are considered sufficient when the LMS system and interfaces:

- are properly documented;
- are stable in operation;
- handles faults, incomplete and/or invalid data without disrupting operation and function of the LMS system.

Specific preparation is expected from the Tenderer for this verification test. The Contracting Authority has the right to test all aforementioned items in the verification test or just require a test of parts thereof. Contracting Authority will provide the final list of items to be included in the verification test to the Tenderer in a timely manner, so the Tenderer can prepare for the verification test. The Contracting Authority is aware that some requirements can be difficult to test at the moment of the verification test (e.g. the links to the other systems). In the case of such requirements, the Tenderer must make plausible in the verification test that such requirements can be achieved by the Tenderer.

The verification test is held at the offices of the Contracting Authority. The Contracting Authority will not provide Tenderer with (financial) compensation for participating in the verification test.

If the result of the verification (test) is that the (Quotation of the) Tenderer does not meet the requirements and conditions of performance set by the Contracting Authority or as offered in its Quotation, its Quotation will be declared invalid and put aside.

2.6 Award of Contract

After the evaluation, Contracting Authority shall notify all Tenderers in writing of its contract award intention via the online tool. This contract award intention confers no rights on any party.

Tenderers who disagree with the contract award intention after having received an explanation of the reasons for rejection from Contracting Authority can initiate interim injunction proceedings with the competent court. This must be done within 20 days of the notification of the contract award intention. Failure to do so within the set time limit shall lead to the forfeiture of all rights in relation to this procurement procedure. In connection with this, Contracting Authority shall consider the dispatch date of the contract award intention as day zero. If a Tenderer initiates interim injunction proceedings against the contract award intention within the set time limit, Contracting Authority shall suspend the contract award until the court has reached a decision.

The contract award is expected to take place 20 days after Contracting Authority has given notice of the contract award intention.

Contracting Authority reserves the right not to award the contract and/or to partly or wholly terminate the procurement procedure without awarding a contract.

3. Tenderer Requirements

The following sections outline the information that a Tenderer must submit for the evaluation on the grounds of the Tenderer Requirements. All requirements must be met, including the Exclusion grounds, Suitability requirements and the signing of the Declarations. All these requirements are knock-out criteria.

In order to reduce the administrative burden on Tenderers, it is sufficient to enclose a completed and legally signed *Standard Form A European Single Procurement Document* for the required official documentation concerning the Exclusion Grounds and Suitability Requirements (with the exception of the references). It should be signed by the Tenderer, and be attached on Negometrix platform by **question 2.1.1**.

Tenderers must submit the information mentioned in this chapter in conformity with the structure and sequence of the online tool.

Contracting Authority requests the following general information and has set the following exclusion grounds (U) and suitability requirements (SR):

No.	Description	§
U1	European Single Procurement Document	3.1.1
SR1	Financial strength	3.2.2
SR2	Liability and relevant insurance policies	3.2.2
SR3	References	3.2.3
SR4	Data protection ISO-27001	3.2.3
SR5	Sustainability to pursue the professional activity	3.2.3

PLEASE NOTE! This Declaration should be opened in Adobe Reader. If another program is used (such as 'Preview', which appears on many Apple devices) errors may occur.

3.1 Exclusion Grounds

3.1.1 U1: European Single Procurement Document

In the past four years, the Tenderer has not been convicted of any the Reasons for Exclusion stated in the "Procurement Act 2012 Declaration" ("European Single Procurement Document").

The Tenderer is not in any of the circumstances listed in 'Part III Exclusion Grounds' sections: *A: Grounds relating to criminal convictions, B: Grounds relating to the payment of taxes or social security contributions* and *C: Grounds relating to insolvency, conflicts of interest or professional misconduct* of Standard Form B European Single Procurement Document. One of the values of Contracting Authority is to do business with financially sound organisations and organisations who are of irreproachable behaviour, therefor Contracting Authority declares the above mentioned exclusion grounds applicable for this Tender Procedure.
The exclusion grounds mentioned in sections and *D: Purely national exclusion grounds* are NOT applicable for this Tender Procedure.

To show this, the Tenderer signs the *Standard Form A European Single Procurement* Document and be attached on Negometrix platform by **question 2.1.1**.

In the case of a Quotation by a Consortium, each member of the Consortium should complete and sign a version of the *Standard Form A European Single Procurement Document* individually.

In the case of a Quotation by a main/subcontractor construction, only the main contractor should submit a *Standard Form A European Single Procurement Document*.

Failure to submit a European Single Procurement Document or a correctly completed European Single Procurement Document, as described above, shall lead to exclusion.

3.2 Suitability Requirements

Suitability requirements are requirements which a Tenderer must meet in order to qualify for award of the Agreement. The requirements relate to financial and economic strength, technical and/or professional ability and/or professional competence. Failure to comply with the suitability requirements shall result in exclusion from the Tender Procedure.

3.2.1 Suitability to pursue the professional activity

Requirement: The Tenderer must be registered with the relevant professional or trade register in accordance with the applicable requirements in their country of origin.

In order to demonstrate this, the Tenderer should supply a recent statement (not older than six months) proving that the Tenderer is registered in the national professional or trade register in accordance with the prevailing regulations of the country where the Tenderer is based or, if such a statement cannot be issued in said country, the Tenderer should provide a sworn statement or certificate. Submission of a certified copy of this registration will suffice. It should be clear from the statement that the person who has signed the registration is a legally authorised representative of the Tenderer.

The Tenderer should add the copy on Negometrix platform by **question 2.2.1**. The Contracting Authority uses this to check the Official's authority to sign and whether the registration has been legally signed.

3.2.2 Financial and economic strength

<u>SR1: Financial strength</u>
In this Invitation to Tender, the Contracting Authority sets a limited number of minimum requirements in terms of financial and economic strength. In both the short and long term, the Contracting Authority wishes to contract a supplier who has sufficient solvency.

Tenderer's financial and economic strength is assessed on the basis of the two most recent financial years.

The requirements for financial strength are:

- Tenderer has an average solvency ratio: [net equity / total assets (= balance sheet total)] at the end of the financial year of at least 20%

Net equity as defined in article 2.373 Netherlands civil code.

Tenderer can prove the above in any case by means of:
Tenderer's full annual accounts, including notes and statement of sources and application of funds in the 3 most recent financial years. The annual accounts must be accompanied by an auditor's report or, if applicable, a composition statement.

By signing the Tenderer's statement (Standard Form A), a Tenderer declares that it complies with the requirement stated above. If this declaration is missing, the Quotation will be excluded.

Using the consolidated revenue of the parent company:
Provided a declaration as meant in Article 2.403 of the Netherlands Civil Code, regarding joint and several liability of the parent for the debts of its consolidated companies, and a guarantee showing that the Tenderer's parent company guarantees unconditionally that every obligation in relation to the Agreement will be met on time, completely, and in an appropriate manner for the entire duration of the Agreement, are attached, the consolidated revenue may be used to demonstrate that this Suitability requirement has been met.

<u>SR2: Liability and relevant insurance policies</u>
The Tenderer should have adequate business liability insurance cover.
Tenderers should have business and other liability cover of at least € 2.500.000 per year with a minimum coverage of € 1.000.000,- per event.

The Tenderer should be able to provide a copy of a valid and relevant insurance cover document for the liability insurance (as far as service provision as mentioned in this Invitation to Tender is concerned) or a declaration from an insurance company confirming the cover in relation to this liability.
If your insurance does not currently meet this minimum level of cover, you should state that in the event of your being awarded the Order, you will raise your level of cover to the aforementioned minimum amounts. This increase should be included in your pricing. No additional costs may be charged subsequently for this.

By signing the Tenderer's statement (Standard Form A), a Tenderer declares that it complies with the requirement stated above. If this declaration is missing, the Quotation will be excluded.

3.2.3 Technical and professional ability

<u>SR3: References</u>
In order to qualify for selection, each Tenderer must at least comply with the requirements with respect to customer references. With the reference, the Tenderer demonstrates that it has the core competence(s) necessary for the performance of the Contract. If the Tenderer relies on the competence of other entities (therefore entities not forming part of the Tenderer), after the award decision has been made, he must demonstrate that he can have

the means necessary for the performance of the Contract, in accordance with section A1.4 of Annex A.

Please note: The "Self-declaration for procurement procedures by contracting authorities" must show the other entities to be relied on.

The Tenderer submits at least one customer reference for each core competence in respect of a contract performed over the past 3 years, counting back from the closing date for submitting the Quotation (as referred to in section 2.2). The contract to which the reference pertains needs to have a minimum contract term of 6 months. One customer reference may be used to demonstrate several core competences.

The following core competence(s) apply:

1. <u>Core competency 1: Complexity</u>
   Tenderer must have experience in implementing and operating the offered solution at least two (2) faculties/schools of a Research University.
2. <u>Core competency 2: Ability</u>
   Tenderer must have experience in a minimum of one LMS project being responsible for giving support and advice to the customer with regard to the best way of implementing an LMS, converting the data to the LMS, supporting the customer in executing the implementation strategy and (functional and application) management of the LMS.
3. <u>Core competency 3: Number of users in a similar organisation</u>
   Tenderer must have experience in implementing a system for a similar organisation comparable in size (number of users). This means the Tenderer needs at minimum one implementation of a LMS, at a Research University, with a minimum of 1,000 users.
4. <u>Core competency 4: Experience with an LMS within a digital learning environment</u>
   Tenderer must have experience in providing a LMS that works as a core system in an environment where three or more external cloud applications not being made by or operated by Tenderer are linked to the LMS.

For submitting the customer reference(s), Tenderer is required to use and complete one Standard form B per customer reference. Tenderer can use a minimum of one Standard form B (all competences are demonstrated in one customer reference) and a maximum of four Standard forms B (in case Tenderer demonstrates one core competence per customer reference). In case of multiple customer references, please number them 1,2,3,4. Each Standard Form B should be signed by the Tenderer, and be attached on Negometrix platform by **question 2.2.2.**

If you are able to demonstrate with one reference that you possess more than one of the aforementioned core competencies, then you may merge the core competencies in this single reference. State clearly that this concerns a single merged reference with the relevant core competencies.

Any falsehoods, inaccuracies or incompleteness in respect of the references provided may result in exclusion from the procedure. The Contracting Authority reserves the right to check the correctness of the references if necessary and to report any inaccuracies contained in these references. If it appears that the Tenderer wrongly relies on a reference and consequently no longer has the minimum number of references required, this will result in the Quotation being declared invalid.

The Tenderer gives his consent to the Contracting Authority to ask the quoted reference client for additional information about the implementation of the service provision. If there are any doubts about said implementation, or if any doubts about same should arise at a particular time, the Contracting Authority reserves the right to regard the reference in question as irrelevant and not to include it in the assessment.

SR4: Data protection ISO-27001

The Contracting Authority sets high demands in relation to the data protection. The Tenderer should demonstrate the availability of a sound data protection system by presenting a copy of a valid quality certificate (NEN ISO 27001 or equivalent), drawn up by a recognised quality control organisation.

If the Tenderer does not have a certified data protection system, information should be provided showing clearly that the measures taken are equivalent to a formal certification of the standard of the NEN-EN-ISO.

By signing the Tenderer's statement (Standard Form A), a Tenderer declares that it complies with the requirement stated above. If this declaration is missing, the Quotation will be excluded.

SR5: Sustainability to pursue the professional activity

The Tenderer is required to have a corporate sustainability policy.

Tenderer can prove the above in any case by means of:

- A copy of a policy statement signed by the management, which shows that management has not only implemented a corporate sustainability policy, but also actively checks, operates and implements business practices on the basis of its policy, or
- A copy of an up-to-date manual for environmental protection, signed by the management and preferably based on generally accepted sustainability norms or standards, or;
- A copy of a valid certificate issued by an independent body, such as NEN-EN-ISO 14001, (version 2004) or equivalent, which states that Tenderer adheres to the body's prescribed standard. More information about ISO 14001 can be found at www.nen.nl.

By signing the Tenderer's statement (Standard Form A), a Tenderer declares that it complies with the requirement stated above. If this declaration is missing, the Quotation will be excluded.

3.2.4 Official documentation Suitability Requirements

As soon as the provisional award has been made, the Tenderer that is awarded as the Quotation with the best price-quality ratio sends the following official documentation, at the request of the Contracting Authority within 10 Working Days. None of the documentation may be older than six months at the time of the submission of the Quotation (unless explicitly stated otherwise).

For the purpose of financial and economic capacity:

1. A balance sheet or overview from which the requested revenue details may be derived.
2. Copies of the requested insurance policies or statements.

For the technical and professional ability:

1. Copy of the requested data protection certificate ISO 27001 or content of equivalent data protection system (and a description of how it is equivalent).
2. Copy of the corporate sustainability certificate ISO 14001 or content of equivalent manual for environmental protection (and a description of how it is equivalent).

The information requested should be submitted in full, and on time. If any information is not submitted in full or on time, or if the contents of the documentation are not the same as that stated in the Invitation to Tender, the Quotation will be rejected and excluded from any further participation in the tendering procedure.

The provisional award will then be made to the second-ranking best price – quality ratio Tender, who will then be asked to submit the relevant documentation. Tenderer can already optional upload these documentation on Negometrix platform by **question 2.1.1**.

The Contracting Authority reserves the right to request further documentation in addition to the aforementioned information. In that case, the Tenderer should provide this within five working days of the request by the Contracting Authority to the Tenderer.

4. Minimum Requirements and Contract Award Criterion

This chapter describes the Contract Award Criterion and indicates the information that a Tenderer must submit, as well as the manner in which Contracting Authority evaluates this information.

4.1 Evaluation of minimum requirements

Contracting Authority evaluates on the basis of the minimum requirements and assesses the Quotations on the grounds of the Contract Award Criterion.

Contracting Authority uses 3 minimum (knock-out) requirements (MR) as shown in the tables below.

Minimum Requirement	Description	Compliant?	§
MR1	List of Requirements	Yes/No	4.2.1
MR2	Draft Agreement	Yes/No	4.2.2
MR3	SLA meeting minimum requirements	Yes/No	4.2.3

4.2 Minimum Requirements

Tenderer must confirm its compliance with the List of Requirements and that it agrees to the Draft Agreement.

Selected Tenderers can pose questions and offer comments about the List of Requirements and Draft Agreement until Thursday 22 September 2016 before 09:30 CET.

Contracting Authority will take this feedback into consideration and reserves the right to alter the List of Requirements and/or Draft Agreement. Contracting Authority is not in any way obliged to adopt text suggestions by Tenderers. If Contracting Authority does not agree with a suggested amendment, the original text will continue to apply in full.

Contracting Authority will make an (amended) List of Requirements or Draft Agreement available to all selected Tenderers as Revised Documentation together with the Memorandum of Clarification. Tenderers who do not confirm that they can comply with the amended List of Requirements and/or do not agree to the amended Draft Agreement will not be considered any further.

4.2.1 MR1: List of Requirements

The List of Requirements is contained under question 1.1.1 of the online tool and may be amended by means of a Memorandum of Clarification. The Tenderer must confirm compliance with this List of Requirements by completing and uploading the *Standard Form C Statement of agreement to List of Requirements* under **question 3.1.1** of the online tool.

4.2.2 MR2: Draft Agreement

The Draft Agreement is contained under question 1.1.1 of the online tool and may be amended by means of a Memorandum of Clarification. The Tenderer must confirm agreement with its contents by completing and uploading the *Standard Form D Statement of agreement* *to the Draft Agreement* under **question 3.1.2** of the online tool. The Draft Agreement is added to this Invitation to Tender as Annex E.

4.2.3 MR3: SLA meeting minimum requirements

Contracting Authority asks Tenderer to submit a draft SLA as part of its Quotation that meets the minimum requirements within *Annex B List of Requirements*. The draft SLA needs to be added to the Negometrix platform under **question 3.1.3**

During the evaluation period the offered SLA will be assessed whether it meets the requested functional and technical requirements and whether it is a realistic and professional Quotation. One will score a 'Sufficient' if the evaluation committee holds the opinion that the specified aspects match the requested requirements.

The offered draft SLA by the tenderer applies specifically as a draft. Contracting Authority explicitly reserves the right to reach mutual agreement regarding the final details of the SLA with Tenderer after final award.

4.3 Evaluation of Contract Award Criteria

The UT has formulated a number of Award Criteria based on quality and price. The UT intends to award the Contract, under the conditions described in this Invitation to Tender, to the Tenderer with the best price – quality ratio tender on the basis of the award criteria. Tenderers that comply with the Grounds for exclusion, the suitability requirements and (minimum) award requirements are subsequently assessed on the award criteria as set out in Table 1 below:

Award Criterion	Description	Minimum average score	Weighting
AC1	Additional options for functionalities for instructors and students	-	10%
AC2	Additional functions	-	5%
AC3	Integration	-	20%
AC4	Innovation and strategic developments	-	18%
AC5	User experience	100	30%
AC6	Sustainability	-	2%
AC7	TCO-Price	-	15%

Table 1: Overview Qualitative and Quantitative Award Criteria

Assessment

Regarding the effect of the Qualitative Award Criteria Tenderer must consider the following:

- the maximum specified number of pages per award criterion;

- upload the elaboration by using the relevant question on Negometrix platform.

Quotations will be compared based on the sub criterion, to determine the best price – quality ratio tender. The contract will be awarded to the Tenderer with the highest number of weighted points. In order to calculate the total scores Contracting Authority uses the award criteria as shown in Table 1.

In the event of equal score of the numbers 1, the Tenderer will be selected which has the highest score (in order of importance) on AC5. If this does not lead to a clear and unique number 1, scores on each award criterion are assessed one by one in descending order of importance until a decision is reached. If this offers no solution, then it will be determined by lottery who will be provisional number 1.

The evaluation of the minimum requirements and the award criteria AC1 to AC5 is done by an evaluation committee. Per award criterion the evaluation committee may have different compositions. The members of the evaluation commission will receive an instruction for evaluation which is fully coherent with the content of award criteria. Each member of the evaluation committee will score the award criteria with corresponding points:

Quality of the elaboration	**Points**
No information/Not in coherence with the award criterion/content not (fully) relevant	0
Major reservations	50
Minor reservations	100
Good	150
Very good	180
Excellent	200

Table 2: Quality of the elaboration

During a plenary meeting the individual scores assigned to the Award Criteria AC1, AC2, AC3 and AC4 will be discussed. During this plenary meeting the members of the evaluation committee are allowed to adjust their scores upward but also downward. The scores assigned to Award Criterion AC5 will not be discussed with all participants in this evaluation, only individual outliers will be discussed in a plenary meeting by the evaluation committee.

Individual scores will be averaged into an overall score, with the score of each individual member weighted equally. The average score will not be rounded.

If Tenderer has a user experience (AC5) score of less than 100 (minor reservations) the offer is put aside.

As an example of how this scoring system works, an assessment of AC4 (innovations and strategic developments):

Group member 1 gives 100 points;

Group member 2 gives 150 points;

Group member 3 gives 100 points;

Averaging 116.7, with a weight factor of 18% totals 21 points for AC4.

4.4 Contract Award Criteria

4.4.1 AC1: Additional options for functionalities for instructors and students

The requirements list contains the essential functions that we want from the LMS. These functions represent the essence of the system for teaching and learning.

With this Award Criterion we would like to invite you to list the additional options you can offer on the required functions. Here you have the opportunity to really excel on the functions that are the most important to us.

Rather than mentioning "we got that!" we would like you to give one, maybe two examples of what these features look like. Please list the answers in the same order as the topics are given. We would like to ask you for the answers to not exceed 16 pages single sided on A4/Letter in total for this Award Criterion.

The Tenderer should upload his elaboration on Negometrix platform under **question 4.1.1**.

The topics are listed in descending order of importance, the most important first.

A. General

i) Customisation / personalisation: describe the options a user has to personalise and customise the LMS:
  - Can a user specify how (often) he wants to receive notifications from the LMS?
  - Can an instructor switch between a 'basic view' and an 'advanced view', regarding the tools and options within tools that are visible in the interface?
  - Does the LMS offer a view tailored for instructors and one tailored for students?

ii) For a user it is important to have a personal overview of upcoming events, deadlines, tasks and newly added information in his course(s). Describe the way the LMS offers such an overview and provide visual examples.

B. Content

i) Instructors and students can use a search function to search for content in a course. Our ideal search engine can search in courses and content simultaneously. Searching can be limited to content type, period (from/to), owner, etc. Describe the options for the search function in the LMS.

ii) Describe the options in the LMS to embed content from or created by other applications in the course. Embedding means that the content can be presented and 'played' in the course. *For example: Youtube video, Vimeo video, Issuu publications, Slideshare presentation, Articulate*.

iii) Does the LMS offer functionality for an instructor to present the same content in several courses, while the content only needs to be added/edited in one source course?

C. Assignments, Grading and feedback

i) Describe whether instructors have an option to make submitted assignments visible to all students in the course (i.e. students can see what other students have submitted).

ii) Describe whether instructors can apply 'anonymous grading' to submitted assignments. This means that the name and username of students are not visible for the instructor while he views and grades the assignments.

iii) Describe whether instructors can provide a model answer as feedback for students. This means that all students automatically see the model answer as feedback on their submission.

iv) Describe whether instructors can provide feedback by means of Rubrics.

v) If a grade/feedback is provided for a group assignment, that grade/feedback is assigned to all group members.

vi) Describe whether instructors can add a grade/feedback that is not related to an assignment or test etc.

vii) Describe whether instructors can add a calculated grade: a grade that is calculated automatically by specifying the involved grades and the formula.

D. Import/export facilities

i) The system has an import/export feature in Comma Separated Values (.CSV) or Extensible Markup Language (.XML) and .PDF format for all data in the system, including groups.

ii) Data can be imported/exported file by file or in bulk, simultaneously.

iii) The system facilitates an easy way of uploading and downloading large data sets.

iv) Administrators can batch create multiple users simultaneously, by uploading a file. The following user properties can be assigned by the file upload:
- username
- first name
- last name

- mail address
- password

E. Course templates

i) Does the LMS provide templates for instructors and administrators that help structure course contents? Describe the available templates and provide visual examples.
We are thinking for example of:
   - It is possible to create an template to visualize elements;
   - Within this template sections can be rearranged;
   - Within this template it is possible to turn off all non-relevant sections;
   - As a lecturer it is possible to choose from a selection of templates.

ii) Creating a template does not require any programming.

iii) Suppliers are invited to show us how the solution on offer provides templates for the following educational formats:
   - Team based learning;
   - Problem based learning;
   - Active learning;
   - Distance learning;
   - Student driven learning;
   - Open courses.

F. Enrollment management

i) Students should be able to unenroll themselves from the course (i.e. delete their enrollment).

ii) Describe the options in the LMS for making an overview of the enrolled instructors and students in the course visible for students. Describe the user information that can be shown in the overview and what options an instructor has to customise the overview.

iii) Administrators can batch enroll multiple users in multiple courses with assigned roles by uploading a file with the specified information.

G. Group management

i) Instructors can make the option available for students to create groups by themselves.

ii) Instructors can make an overview of groups and the enrolled users in the groups visible for students.

H. Communication

i) Instructors can send an email to selected user(s) in the course. The recipient of the mail can see the name/mail address of the sender.

I. System administration

i) Does the LMS provide an option to restrict the use of a tool/function to a list of courses that the administrator has specified? (needed for pilots when a tool should not be available in other courses).

ii) Administrators have an option to:
- archive courses, with the purpose of storing the course contents and making the courses invisible to the enrolled users; and
- restore the archived courses into a course that is accessible again for the enrolled users.

Basis for assessment Award criterion AC1
The Award Criterion AC1 will be assessed integrally and one overall score shall be awarded. When assessing AC1 the following factors will be considered:
- *Quality of the content of all aspects and the extent to which the elaboration is concrete, transparent and tailored to the Contract (see section 1.3);*
- *The extent to which all of the requested components are worked out;*
- *The amount of elements A till I and functionalities (as numbered with the Roman numbers) that are in the LMS.*
- *The extent to which the elements A till I and the functionalities are integrated in the LMS in a way that adds value for the UT;*
- *The extent to which Tenderer substantiates the elaboration with dominant and verifiable information.*

4.4.2 AC2: Additional functions

As a rule of thumb, the essential functions are the functions that are used everywhere within our university. We have listed these functions in the requirements.

Especially in areas where we do distance education and blended learning additional functions are used. Both distance education and blended education requires a more extensive use of IT, the LMS and the digital learning environment.

Our vision on the LMS gives us the choice how to implement the additional functions:
- We can use functions inside the LMS;
- We can use additional software components of other makers (learning tools) and integrate those into our LMS.

Most LMS's have more functions than the essential functions. In this section we are looking for these additional functions. Tenderers are invited to give us insight on what additional functions within the LMS they can offer to:
- support a variety of educational formats, and;
- support distance and blended learning development.

The topics are listed in descending order of importance.

Please give us per element one or two examples of how these functions work in your solution. Please use no more than 12 pages single sided on A4/Letter for this Award Criterion.

The Tenderer should upload his elaboration on Negometrix platform under **question 4.2.1**.

A. Digital Online Testing

UT uses digital testing tool to improve the quality of assessment process and reduce workload on staff. For example a core module (each year about 100 to 200 students) intensively uses digital testing. Digital testing solutions should:

- allow instructors to prepare and distribute online tests;
- allow students to easily take exams online;
- allow test data to be easily exported and archived;
- support grading, feedback and mark registration process.

B. Student view

Does the LMS provide a 'student view' for the instructor? Meaning: an instructor should be able to view the course in the way a student sees it, as well as being able to interact with the course tools as a student would. *For example: an instructor can submit an assignment the way a student does and then switch back to the instructor view to view the submitted assignment.*

C. Sign up functionality

Does the LMS contain a 'sign up' functionality? Such a functionality supports complex signing up processes for course related activities and has more advanced functionality than the function to self enroll in a group. Moreover, the sign-up tool supports signing in *on behalf of a group*.

Use cases:

- The instructors wants the project groups to sign up for a project topic of their choice among a list of 10 topics, with first, second and third choice
- The instructor has 8 time slots for each day in a week that student can sign up for to have an appointment with the instructor. The lists can be created easily in a batch (not necessary to specify all 40 slots manually)

Describe the options the LMS offers to support this.

D. Discussion board

UT uses discussion board for regular face-to-face courses as well as distance courses. Discussion board is a central place for instructors and students carry on discussions (non-real time) online. The discussion is recorded on the course site for all to view and respond to at their convenience.

E. Breakout Room

To explain what we are looking for an example: UT has a core module with 150-200 students, from 6 domains. They get the same lectures. However, they sometimes work on domain specific topics and get the supervision from teachers from their own domain. We would want a "private place" for selected students and teachers from a "public place" that is the regular course, including the grading.

Breakout rooms should have

- Options to divide one course into sub- courses;
- Multiple criteria to divide course, such as topic based or group based.

Describe the options the LMS offers to support this.

F. Virtual workspace

Describe the functionality the LMS offers for a 'virtual workspace'. Such a virtual workspace facilitates online collaboration within a group and provides a place where groups can present their work online to instructors and communicate about it. It contains minimally advanced functionality for file management. Provide also a visual example of a the virtual workspace in use.

G. Offline version of the course

- Possibility for users to download/export course content and view it offline;
- Possibility for users to study/work offline;
- Once connected to Internet, course content, announcements, calendar items, tasks and etc. get synchronized.

Basis for assessment Award criterion AC2

The Award Criterion AC2 will be assessed integrally and one overall score shall be awarded. When assessing AC2 the following factors will be considered:

- *Quality of the content of all additional functions and the extent to which the elaboration is concrete, transparent and tailored to the Contract (see section 1.3);*
- *The extent to which all of the requested components are worked out;*
- *The amount of additional functions A till G that are in the LMS;*
- *The extent to which the additional functions A till G are integrated in the LMS in a way that adds value for the UT;*
- *The extent to which Tenderer substantiates the elaboration with dominant and verifiable information.*

4.4.3 AC3: Integration

We see a rapid changing educational application landscape; in which we see a growth of specialized learning tools outside the LMS environment. We expect this trend to take a leap into the future.

This development creates several challenges for different users. It creates a big administrative overhead, Students get lost in all the different applications, and Lecturers loose the overview of student activities. The challenge is to bring together this Learning Tools in which Lecturers are able to enable the tool of interest for their course, without the help from central IT, students get offered one uniform environment to the different applications, and the administrative overhead is being reduced to the minimum.

We currently see that Learning Tools are not being used often, when they are not an integral part of the LMS.

Therefore, we see the LMS as an integration platform for all these existing and upcoming systems, which is visually the starting point for the users. Students and Lecturers want one uniform environment for their learning activities and study information. With other words, integration is functional, visual and personal.

We see 2 levels of integration which are important for an LMS, interoperability being the most valued:

1. **Visual Integration & Identity Management**

The visual integration is meant to give the users the experience of using external Learning Tools as an integral part of the LMS. Identity Management Integration assures the users to not be required to use credentials to use external learning tools. Also administrative overhead can be reduced.

2. **Interoperability**

Interoperability stands for the exchange of learning information between the LMS and the external learning tools. The LMS is seen as the central collection and management point of this information.

Ideally:

- When the education is modular and project-based, management of this (project) groups is done in one location, and can be exchanged and used between the different involved educational systems. (E.g. LMS, Learning Tools, SIS etc.);
- Learning achievements coming from different educational systems and external learning tools are administrated in one location in the LMS. This means for instance that grades and feedback coming from external peer review or testing applications can be shown and managed in the LMS grade center.

Please give us per element one or two examples of how this integration works in your solution. Please use no more than 8 pages single sided on A4/Letter for this Award Criterion.

The Tenderer should upload his elaboration on Negometrix platform under **question 4.3.1**.

Basis for assessment Award criterion AC3

The Award Criterion AC3 will be assessed integrally and one overall score shall be awarded. When assessing AC3 the following factors will be considered:

- *Quality of the content of all additional functions and the extent to which the elaboration is concrete, transparent and tailored to the Contract (see section 1.3);*
- *The extent to which all of the requested components are worked out;*
- *The amount and quality of integration is rewarded. Where visual integration is better than no integration;*
- *The extent to which the solutions clearly and convincingly provide full interoperability;*
- *The extent to which Tenderer substantiates the elaboration with dominant and verifiable information.*

.

4.4.4 AC4: Innovation and strategic developments

This Award Criterion is about the major educational developments at the University of Twente. It starts with the vision of our University on the Twente Educational Model and Student driven learning. The following paragraphs zoom in on innovations and ambitions that are connected with our educational vision.

Introduction Student Driven Learning (SDL) and Twente Educational Model (TEM)

High tech human touch is the slogan of our University. In education this translates into our Twente Educational Model (TEM). We educate our students to be specialists in their own field but also teach them the skills to be able to use and apply that knowledge in other disciplines. We aim at educating so-called T-shaped professionals. For our digital learning environment this means that there should be attention on both the content and academic skills.

In TEM a project is at the centre of each module. By programming the other module components around these projects, an integrated complex is created. Students' learning needs are primarily driven by the project, in which they can also apply knowledge gained from the other module components. In a module various components are logically clustered around one central subject or theme. With our current LMS we run into challenges in how to work across disciplines and faculties. For example, the fixed course structure is limiting the transfer of contents and skills to other disciplines. We also have a challenge opening up and sharing our learning resources to other, non-enrolled, users and between lecturers. (See flexibility, OER).

As a second phase in TEM the UT will transition from traditional learning formats into a more student driven approach. Some lecturers will change from an 'expert' role to that of a 'coach', 'facilitator'.
Student Driven Learning is a model of actively engaging students in the role of either researcher, designer or organizer. Students are stimulated to organize their own learning around the questions they come up with through working on realistic cases and problems.

Ideally, a group of (talented/motivated) students should be able to build their own 'course' around a specific problem or topic or project. They could add existing learning units, activities, book rooms and add and share their own content. They could then invite teachers for their course to act as coaches and tutors to overview the learning process and to facilitate the learning process.

We want to shift the focus in the LMS from 'management' to 'learning'. We believe it is not enough to simply give students the same sort of access to the LMS as is offered to lecturers. Student driven learning goes further since the education is no longer lecturer centered but centered on (individual) learning objectives of students. Our new LMS should therefore be able to facilitate learning units based upon learning objectives and have a strong integration to our 'campus' activities. The LMS should be the bridge and the platform to connect the digital world to our campus and lecturers.

A. Shifting from courses to learning

UT still relies on traditional learning and teaching formats, like a course, final project, traineeship etc. but we also see educational developments that ask for other formats. It is no longer the case that students will always follow an entire course. Passing an exam is important but it is even more important that students achieve their personal learning objectives. (See our University college ATLAS for a good example.) Ideally we want this shift from 'course' to 'learning' to take a leap.

The focus on personal learning objectives creates the need for other teaching formats than the traditional course setup, as well as other support of these formats.

The solution we have come up with defines so called 'learning units' as the smallest elements of our education. Learning units could be a base for a variety of different outcomes. Each learning unit will be linked to one or more learning objectives. In the learning management system all the information is presented for one learning unit. Furthermore, we see a shift from traditional grades towards skill based education. Skills are usually part of the final terms of a programme and overarch the courses.

Supporting the shift from courses to learning is the most important innovation we are looking for in our LMS and our LMS partner.

B. Collaboration in project groups

Since a project is at the heart of each TEM module, projects play a very important role in our educational system. Students work together in these projects. Within the project, a group of students apply knowledge (as described in the introduction) from other module components. Projects can have many characteristics, for instance groups can be cross-disciplinary, consist of multiple students and some projects are more controlled by lecturers while others follow a more free format.

We currently run into challenges with our TEM projects in the LMS. Group creation tends to be difficult, a course overarching project is difficult to manage and the group collaboration functions are currently not well adopted or not present. Our new LMS must support collaboration between students in a project based setting better.

Lecturers, on the other hand, require an overview of students products and group collaborations. Lecturers should be able to fulfil the role of coach and/or facilitator in a project using these overviews.

C. Educational resources

At the University of Twente we have the ambition to share educational resources. Students should be able to share their materials based upon their personal learning objectives. These materials can be OER but also other internally created materials. An LMS should be the system which makes it easy to search, access and share these materials.

We believe that the LMS should not only support lecturers' materials but also third party content or content generated by students. The traditional way of curating content for a course, that seems to be the main role of a lecturer for some time now, will be much more dispersed to other users, such as students and possibly librarians. For all these reasons the LMS should not be like a 'walled garden' where everything that happens is restricted to a course.

The educational model of the University of Twente creates challenges with open content. Within the integrated modules of our educational model there is a growing need to share materials across modules and courses. Especially to encourage transfer of content between disciplines. Our new LMS should support flexibility in the openness of resources. By default materials should be made open to the whole UT community (or if specified the world).

Open materials increases flexibility for students to learn and if implemented right it can also improve the study success. Lecturers save time because they can use quality materials from other Universities around the world. For these reasons we believe that open educational resources are important in the future and our University can profile itself with high quality open educational resources.
The LMS should support multiple user groups and developments in the future. For example students from outside the UT without authorization to our network, students who only want to take a small part of the course or students who want to share materials themselves.

This brings us to a challenge with metadata. To be able to search effectively you need good metadata. When a user shares, updates, archives, exports or imports materials metadata should remain intact. Ideally the LMS is able to attach metadata automatically regardless of the action on the content. The metadata can be used for multiple purposes not only searching but also for instance on learning analytics.

D. Flexible setup for engaging students

In a classical educational approach the learning paths are usually very strict. Students follow the path as it has been laid out by the lecturer. Most of the time the lecturer defines the criteria and the buildup is quite sequential. In our new LMS a strict approach is still very much needed but the LMS should not be limited to this strict approach.

In the future of our digital learning environment we see a need for a more flexible approach to enhance learning. In order to make our education less teacher centered but also for motivation we think about the following learning paths

- Individual timelines
- progress bars
- social learning paths
- gaming elements
- achievements and badges

In addition teachers should be able to add exceptional learning paths for individual students. Instructors can be alerted with a potential "risk" students list.

Distance students often have professional and other duties next to their study, which causes a higher dropout rate than face-to-face students. To help keep them engaged and motivated with their study at distance, it's desirable to provide both them and teachers with an individual progress overview.

Based on the learning activities that students have completed, such overview is constantly updated to indicate individual learning progress.

E. Mobile

The UT supports choice for students in the way they learn. Students are encouraged and should be facilitated to learn independent of place and time. This means that students should be able to learn on campus, but also at home, or in the public transportation, but certainly at any time and with any device they want. Some students are married with their smartphones. This creates great opportunities for learning. Think about the communication, social learning and interaction between students which is amplified through the smartphone. Our new LMS should amplify possibilities in mobile learning independent of place (campus or home) or time.

We believe it is not enough to simply make a desktop version available on a mobile device. Optimal learning with a mobile device might be different from learning with the regular LMS. Screens are more compact and probably should contain less information, while new functions can be exploited. Changes need to be applied to optimize the LMS for a mobile experience functionally and visually.

We currently see a lot of our students in our lecture halls with a laptop. Although we understand that a laptop will remain very important, we wonder whether this is because a laptop is easier or whether our digital learning environment does not support mobile devices good enough. At least the mobile solution should enable students to work with a mobile device if the student wants to do so. The LMS should not hold students back to migrate from a laptop to a mobile device.

The UT has the policy to support use of mobile devices. This means that the LMS should work as well on mobile devices as on desktops. With mobile devices we mean, although the market can change rapidly, iOS and Android tablets and phones.

F. Improving learning and teaching by learning analytics

Learning analytics holds great potential for personalized learning in the near future. Although we have not formed a clear vision on learning analytics (or educational data mining) we would like our new LMS to accelerate this development.
On a basic level we have some experience in using statistics on content, this is relatively easy to accomplish. We think however that learning analytics should go a lot further then some basic content analysis to be really meaningful.
If you connect learning analytics to our educational model TEM it doesn’t take long to see these possibilities. Learning analytics could for instance help us in understanding the behavior of our students. Think about the relation of different student activities to assessment. Learning analytics would also make it possible to deconstruct certain elements to get a better insight in deep learning processes. This insight can help us in optimizing learning, student empowerment or further defining our educational model.
In a student driven approach we see possibilities to give students insight in their learning in relation to their peers. Information on all kind of levels could be used to encourage students or help them choose the right strategies and content. Analytics could also have an impact on our campus activities, for example with dashboards on room, content and lecturer availability.

Since the LMS is a platform which brings together students, lectures, learning activities, etc., the need arises to have the option of extracting data from the LMS system in an automatic way, in order to analyze, combine, or store and analyze this data into external systems.

Since our LMS will be our primary system for learning at our University we see a crucial role for providing the most (but not all) data for advanced learning analytics. The LMS system should support this with a well-documented (in terms of data model description) export possibility for all data through external tooling.

What is asked
The UT does not expect 'off the shelf' solutions for all these above mentioned innovations A till E. The UT would like to know how your solution and organization can support and engage us in taking the next step in our teaching, using the digital learning environment. Therefore the UT is interested in (1) the functions that you are currently offering and (2) how you can help the UT develop in the upcoming years.

We encourage you to use this section as an opportunity to tell us more about you as a company and how can we work together and innovate our education.

Again, topics start off with the most important ones.

Please illustrate your answers with a few relevant examples.

Please use no more than 15 pages single sided on A4/Letter for this Award Criterion.

The Tenderer should upload his elaboration on Negometrix platform under **question 4.4.1**.

Basis for assessment Award criterion AC4
The Award Criterion AC4 consists of the bullets ('innovations') A - F and will be assessed integrally. One overall score shall be awarded. When assessing AC4 the following factors will be considered:

- *Quality of all additional functions and the extent to which the elaboration is concrete, transparent and tailored to the Contract (see section 1.3);*
- *The extent to which all of the requested elements mentioned above are worked out and substantiated with verifiable information;*
- *The extent to which the innovations A - F are present and integrated in the LMS in a way that adds value for the UT;*
- *The extent to which Tenderer can help the UT develop from where the UT is now with a specific topic to where the UT wants to or can be in some years from now. Proven services based on past projects give a higher score than planned developments.*

4.4.5 AC5: User experience

User experience is the extent to which the Tenderer's system is user friendly, intuitive, efficiency promotive and flexible, and supports the needs of the users. A high quality user experience is one of the critical success factors for using the LMS.

For the user experience award criterion, the Tenderer should:

1. Make an LMS environment available to the UT based on the functionalities required by the UT and which are included in the Total Sum (Award Criterium AC7) offered by Tenderer;
2. The LMS environment should have a limited set-up as described in Annex F of this Invitation to Tender;
3. Include user codes to this LMS environment and a URL from where the environment is to be accessed, containing at least the number of user codes below for the following user roles:
    a. Teachers: 25 user accounts
    b. Students: 25 user accounts
    c. Functional and application management: 10 user accounts

The above mentioned number of user codes is indicative for the number of accessors. Tenderers cannot derive any rights from this number.

Subsequently, the assessors will assess in a structured and scripted way the user experience in the LMS based on the assessment criteria below.

The user experience is assessed based on the extent to which the total user experience of the system is demonstrated and concretised. The following aspects, among others, are relevant:

1. *User friendliness*: the extent to which and the ease with which future users see their education, learning and work processes supported. Therefore this concerns the entire spectrum of the required functional areas. Particular attention shall be paid to:
    i. Ease of use (number of necessary actions)
    ii. Screen layout (clarity of the application)
    iii. Intuitive level (the extent to which training and/or a manual is necessary, to what extent are matters logical and self-evident)
    iv. User support and complaint management (online help function)
2. *Efficiency*: the extent to which the system supports education, learning and work processes efficiently. In this regard, particular attention shall be paid to:
    i. Speed and simplicity of input (e.g. interfacing with cloud application)
    ii. Number of clicks needed to fulfil the action
    iii. Processing speed (incl. speed with which the screen loads, for example)
    iv. Ease and speed of output realisation
    v. Usability (the level of connection with and support of processes)
    vi. Support of texts edited in other applications (e.g. MsWord, MsPowerPoint)
3. *Flexibility*: the extent to which the system is flexible for users. In this regard, particular attention shall be paid to:

i. Ease of personalising the own user experience within the established functional set-up (e.g. setting the number of messages and which messages, form of messages, setting preferences for the home page like choosing different colour schemes, changing colour schemes of courses);
ii. Possibility of entering and using the LMS from a mobile device (without installing program items like an app).

The environments for the user experience may also be used for additional assessment of functionalities mentioned under AC1 and AC2.

The Tenderer should upload his user codes on Negometrix platform under **question 4.5.1**.

Basis for assessment Award Criterion AC5

The assessment of the award criterion user experience will be conducted by a multidisciplinary assessment team consisting of teachers, students and staff members from different departments/services within the Contracting Authority. The members of the assessment team user experience represent the necessary competencies to be able to judge the user experience. The aspects on which a value judgment must be made will be assessed by several assessors in order to guarantee objectivity.

4.4.6 AC6: Sustainability: the most energy-efficient networks/infrastructure

As described in section 1.2.1, the UT values sustainability. By means of this tender the UT also wants to reach its sustainability ambition. Therefore the UT chooses to take into account the energy efficiency of the data center which will be used for hosting the LMS application, thus this will be assessed within the evaluation of this Quotation.
As a data center that will be used to provide data-housing, at least that part which is used for the execution of the Contract, with a year weighted Data Center Infrastructure Efficiency (DCiE) which is greater than 60%, will receive a higher score in conformity with the following linear formula:
Unweighted score = (DCiE-60%) * 10

Tenderer has to fill in *Standard Form E - Sustainability: the most energy-efficient networks/infrastructure.* Tenderer substantiates the DCiE with dominant and verifiable information.
The Tenderer should upload his elaboration on Negometrix platform under **question 4.6.1**.

Explanation

The DCiE is the ratio that consists of the annual electricity usage of the IT equipment divided by the annual electricity usage of the entire data center. This number indicates how much of the electricity is used by the IT equipment, i.e.: a higher value means a better data center efficiency.
Based on the Dutch Paper *'Energiebesparing in datahotels; meer met minder, ECN 2008'* it is expected that the proposed DCiE will vary between 50% and 90%, which means that the unweighted score will range between 0 and 30 * 10.

N.B. The often used EUE (Energy Usage Effectiveness) is equal to 1/DCiE.

4.4.7 AC7: Price

The Award Criterion 'TCO-Price' consists of the parts:

- PART A: TCO-price; and
- PART B: Overtime rates.

Only PART A will be awarded with points.

PART A: TCO-Price

The evaluation of the price is based on the total cost of ownership for a contract period of 10 years. This is based on the cost per student for all costs associated with the execution of the Contract (including licensing-, template-, implementation- and maintenance costs, et cetera) calculated from the year 2017 for a period of 10 years as a starting point. The number of students (10.000) is used as starting point and there will be price-indexation of the periodic license fees (see article 21.2 of the draft Agreement in *Annex E*).

The following principles are leading for the TCO-price:

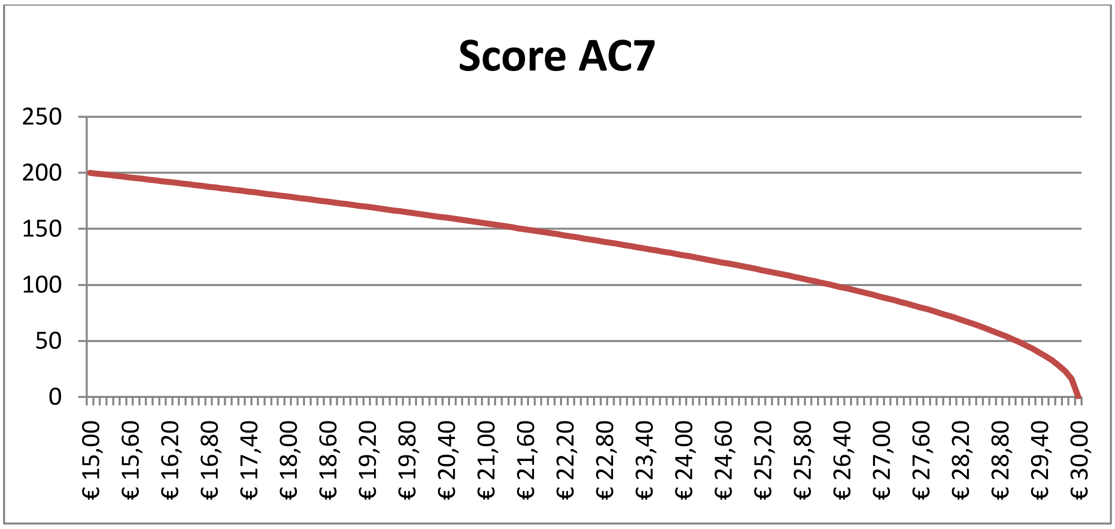
- The total price includes all costs associated with the List of Requirements (Annex B), the offered extras with Award Criteria AC1 until AC6, as well as the implementation costs. These implementation costs must consist of the following activities/elements:
    - Delivery and Configuration of the LMS for all faculties/ schools of the UT for all students, teaching staff and support staff, and consists at least the:
        - Preparation;
        - Realization of the new LMS;
        - Implementation of all central network connections, excluding the UT part;
        - Ensuring overall network connectivity;
        - Migration of users and user data from the current Blackboard LMS;
        - Training of staff;
        - Implementation of support procedures;
        - Testing and securing all system functionalities are as specified;
    - Training:
        - Advanced training of 10 educational support staff on working with the LMS. This training must take place in at least 3 separate sessions on the site of the UT.
- Tenderer must fill in factual prices on the *Standard Form F* . Unreal prices (including negative and / or € 0.00 prices) will be checked and possibly the Quotation may be declared invalid in accordance with the procedure laid down in Article 2.116 of Open Procurement Act 2012.
- Next to the license-, template-, implementation- and maintenance costs all the needed investments of UT to the Tenderer should be included that are necessary (and which belong to the scope of the Contract) in order to realize the project.
- The licensing fees are onetime or may include an annual payment in accordance with article 22.2 i of the Draft Agreement (Annex E).Maintenance of the licensing is an annual activity.
- The prices are to be given for a period of 10 years. The evaluation will also take place with keeping in mind this period. This period is based on the (conservative)

forecast that the Application at least has a minimum (economic and technical) life of this period.

- The SaaS solutions serve at least three environments (Test, Acceptance and Production).
- There is no need to take into account by Tenderer that any volumes changes (students, staff) over several years.
- All amounts should be reported in Euro, by two decimals (excluding VAT).
- A distinction should be made between the phase 2 'Implementation' and Phase 3 'Operation'.
- All costs, including costs for completing Award Criteria needs to be included in *Standard Form F*. Price indexation should NOT be included in the specified prices.

Basis for assessment Award Criterion: TCO-Price (AC7)

Contracting Authority determines per Tenderer *the price per student per year* on the basis of the *Standard Form F* and the elaborated cost structure. The scores graph is shown in the graph below.



Contracting Authority will use the following formula:

$$200 \times \sqrt{\frac{maximum\ price\ per\ student\ per\ year - offered\ price\ per\ student\ per\ year}{maximum\ price\ per\ student\ per\ year - minimum\ price\ per\ student\ per\ year}}$$

Contracting Authority uses for the purposes of this formula a *maximum price per student per year* of € 30.00 and a *minimum price per student per year* of € 15.00. It is allowed to offer a *price per student per year* which is lower than € 15.00 and this will be rewarded with the same number of points as if the *price per student per year* would be € 15.00, i.e. 200 points. All prices have to be completed by the Tenderer in Euros by two decimals excluding VAT and including all other costs.

PART B: Overtime rates

Contracting Authority wants to have an understanding of the rates which the Tenderer uses in for overtime.

The following principles are leading:

- Overtime can be, in mutual agreement, performed by Tenderer in both time-material or fixed price.
- The overtime rates for 2017 and 2018 are set. Raising the rates for subsequent years is possible only on the basis of mutual consent and will be based on the price index for business services (2010 = 100).
- There is for each of the defined roles a maximum of 150 Euro per hour, excluding VAT and including travel-, accommodation costs and other expenses.
- Rates have to be specified for at least the following functions:
  - Project lead;
  - Senior (functional/technical) consultant;
  - Junior (functional/technical) consultant;
  - Technical roles;
  - Developer;

  Rates must be in proportion to skill and experience, e.g. a senior consultant costing less the a project lead, and a junior less than a senior.

  UT has the right to determine skill and experience level of the people that are hired.
- The rates table can be extended by mutual agreement.

Requested information:

Tenderer must fill in within second tab of *Standard Form F* the hourly rates for the above mentioned roles. The above principles needs to be taken into account for the specified rates.

Annex A: Principles and Conditions of Procurement

This Annex describes the principles and conditions that are applicable to this Procurement Procedure. By submitting a Quotation, the Tenderer agrees to all principles and conditions – including (but not limited to) the conditions set out in this chapter.

A.1 Quotation Submission Conditions

A.1.1 Submission of Quotation via Online Tool

The Quotations only become visible to Contracting Authority after the closing date of the registration period. It is also impossible for Tenderers to view the answers of other Tenderers.

A supplier can submit its Quotation by pressing the "Submit" button under Tenders. The supplier will not receive confirmation of this. The button does change to "Unsubmit". There is also a status message above indicating whether or not the Quotation has been submitted.

Please note 1: The fact that the Quotation has been submitted does not indicate whether or not the Quotation is complete. The Tenderer is responsible for the submission of a complete Quotation.
Please note 2: A Quotation can be edited until the closing date of the Offer phase, even after it has been submitted. However, a submitted Quotation must first be withdrawn ("unsubmitted") before it can be edited.

In case of doubt whether the Quotation has been correctly submitted, the Contracting Authority advises Tenderer to contact the Negometrix Service Desk as quickly as possible.

Telephone: +31 (0)85 20 84 666
Email: servicedesk@negometrix.com

A.1.2 Formal Requirements

To facilitate an efficient assessment, Contracting Authority has set a number of requirements regarding the form and structure of the Quotations.

First of all, Tenderers are obliged to use the prescribed Standard Forms. Tenderer must place all completed Standard Forms behind the tab page as mentioned in the Standard "Checklist" Form.

A.1.3 Period of Validity of Quotation

Submitted tenders must remain valid for at least 90 days after the opening date of the Quotations. Contracting Authority can request an extension of this 90-day period. Such a request does not confer any entitlement to the Contract upon Tenderer.
Prices in the Quotation are stated in Euros. All prices are maximum prices and valid during the entire contract period.

A.1.4 Joint Quotation

By submitting a Quotation all members of a combination declare that they are jointly to be liable, both in the context of the tendering procedure as well with the execution of the Contract. A combination designate a coordinator for the procurement and execution of the Contract that is authorized to act on behalf of the combination.

A joint Quotation is only eligible for the contract award if each member of the group demonstrates, in conformity with the rules in this Invitation to Tender, that the exclusion grounds as referred to in chapter 3 of this Invitation to Tender are not applicable to that member.

Contracting Authority provides the possibility for Tenderers, to prove that they meet the Suitability Requirements (paragraph 3.2) fixed by the Contracting Authority by relying on the capacities of third party entities, in so far as they establish that they indeed have the necessary means for the performance of the contract which they do not themselves own. Where a Tenderer relies on the capacities of other entities with regard to criteria relating to economic and financial standing (suitability requirements 1 and 2), the Contracting Authority requires that the Tenderer and those entities are jointly liable for the execution of the contract.

Any changes to the composition of the group of economic operators after the submission of the Quotation without written permission from the Contracting Authority shall in principle lead to exclusion.

A.1.5 Quotation involving subcontracting

A party that submits a Quotation as the main contractor must indicate which subcontractor(s) will be engaged for which parts of the Contract.

The main contractor remains fully liable for the fulfilment of the obligations arising from the Quotation and, if applicable, the performance of the Agreement. The main contractor is also liable for the fulfilment of the obligations of the subcontractors that have been engaged.

Contracting Authority provides the possibility for Tenderers, to prove that they meet the Suitability Requirements (paragraph 3.2) fixed by the Contracting Authority by relying on the capacities of third party entities, in so far as they establish that they indeed have the necessary means for the performance of the contract which they do not themselves own. Where a Tenderer relies on the capacities of other entities with regard to criteria relating to economic and financial standing (suitability requirements 1 and 2), the Contracting Authority requires that the Tenderer and those entities are jointly liable for the execution of the contract.

Tenderer is required to use the subcontractor’s services in the manner specified for the performance of the Agreement. After submission of the Quotation, changes in this respect may only be made with the written permission of the Contracting Authority.

The main contractor must demonstrate that it will be able to utilize the relevant subcontractors’ resources (expertise, manpower, equipment) for the performance of the Agreement. See chapter 3.

Changes in the composition of main contractor and subcontractor(s) after submission of the Quotation without written permission from the Contracting Authority shall in principle lead to exclusion.

A.2 Principles

The Tenderer must base the Quotation on this Invitation to Tender including all Standard Forms and Attachments. Failure to submit all requested information and the submission of incomplete and/or incorrect information may lead to exclusion from participation in the procurement procedure. The term 'incorrect' includes altering information provided by Contracting Authority to Tenderer in the digital Attachments with this Invitation to Tender.

The selected Tenderer is responsible for checking that the Invitation to Tender was received in full and in good order.

In case of conflict between the Invitation to Tender and the Attachments with the Invitation to Tender – including the Standard Forms – the contents of the Invitation to Tender shall prevail. New documents prevail over older documents of the same type.

Contracting Authority shall treat the Quotation with confidentiality, unless (statutory) obligations require further disclosure.

It is not permitted to approach employees of Contracting Authority directly during the procurement procedure in any manner other than described in this document.

Contracting Authority is not obliged to disclose internal documents, such as evaluation results, comparisons or selection and contract award recommendations, other than the information that is necessary to justify a rejection.

A.3 Quotation Conditions

As well as the above principles, the following conditions apply.

A.3.1 Proactive Tenderer Actions

All information as contained in this Invitation to Tender was delivered and compiled with the greatest care. Contracting Authority rejects all liability for the accuracy or completeness of the information contained in this Invitation to Tender. Selected Tenderers are expected to investigate all relevant circumstances regarding the Contract for themselves (e.g. by asking questions in the Memorandum of Clarification Round via the online Question & Answer module).

A.3.2 General Procurement Conditions of Contracting Authority

The general procurement conditions of Contracting Authority are NOT applicable. The delivery, payment and/or other general conditions of Tenderer are not applicable to Contracting Authority under any circumstances.

A.3.3 Reimbursement of Costs

Tenderers are not entitled to the reimbursement of any costs in connection with this procurement procedure.

A.3.4 Conditional Quotation

A conditional Quotation is invalid and Contracting Authority shall ignore such a Quotation. Contracting Authority understands a conditional Quotation to include: a Quotation that is contingent on one or more conditions or a Quotation that includes assumptions and/or principles which lead to a conditional Quotation.

A.3.5 No more than one Quotation

Natural persons or legal entitles are permitted to submit one Quotation only. In the case of legal entities belonging to a group, only one member of that group may submit a Quotation unless Tenderer can demonstrate that the members are separated by "Chinese walls". The provision of experience and resources by a third party (e.g. as a member of a group and/or a subcontractor) also applies as a Quotation by the third party in question.

A.3.6 Reservation of Rights by Contracting Authority

Contracting Authority reserves the right to:

- amend the procurement procedure and/or change the size of the Tendered Contract;
- terminate the procurement procedure;
- supplement and/or edit the information as contained in the Procurement Documents;
- request additions to or further clarification of a Quotation or other information. The Contracting Authority is not in any way obliged to do this;
- check all information provided by Tenderer with relevant institutions, authorities or contact persons;
- request further supporting documents in addition to the information requested in the Invitation to Tender. If the contents of these supporting documents do not correspond to the contents of the Invitation to Tender, Tenderer can be excluded from further participation in the procurement procedure;

- amend or supplement the Agreement that has been concluded with the selected Contractor due to unforeseen circumstances or for any other reasons.

Contracting Authority shall apply the above provisions with due regard to applicable laws and regulations.

A.3.7 Intellectual Property

Contracting Authority remains the sole holder of all intellectual property rights, including the copyright, pertaining to any documents and information provided by Contracting Authority in connection with the procurement procedure, including the Invitation to Tender as well as the Attachments and the supplied clarifications. This applies to the entire procurement procedure.

Save for exceptions contained in the Copyright Act, nothing from any documents provided by Contracting Authority or any attachments to these may be multiplied by means of print, photocopy, microfilm or otherwise without written permission from Contracting Authority, unless and insofar as this is reasonably necessary for the correct and complete answering of the questions or to be able to submit a Quotation.

The Quotation and all Attachments provided in connection with this procurement procedure to Contracting Authority become its property upon receipt by Contracting Authority. Tenderer grants Contracting Authority the right to use, modify or model any ideas, suggestions, proposals, text suggestions, drawings and any other information and documents supplied as part of this procurement procedure, even if the Contract is not awarded to Tenderer. The use, modification or other form of modelling does not entitle Tenderer to any form of remuneration under any name or title whatsoever. Contracting Authority guarantees that any information, received from Tenderer, which it knows or should know to be confidential, shall be treated as confidential, and with consideration of Tenderer's justified commercial and other interests.

A.3.8 Applicable Law

This procurement procedure is exclusively governed by Dutch law. Any disputes arising from this procurement procedure shall in the first instance be exclusively submitted to the competent court in Almelo.

To ensure the fast and smooth handling of any legal proceedings, Contracting Authority requests each involved party to inform Contracting Authority in good time of the use of legal action, such as by sending the writ of summons to Contracting Authority.

Annex B: List of Requirements

This Annex is published separately on the Negometrix Platform.

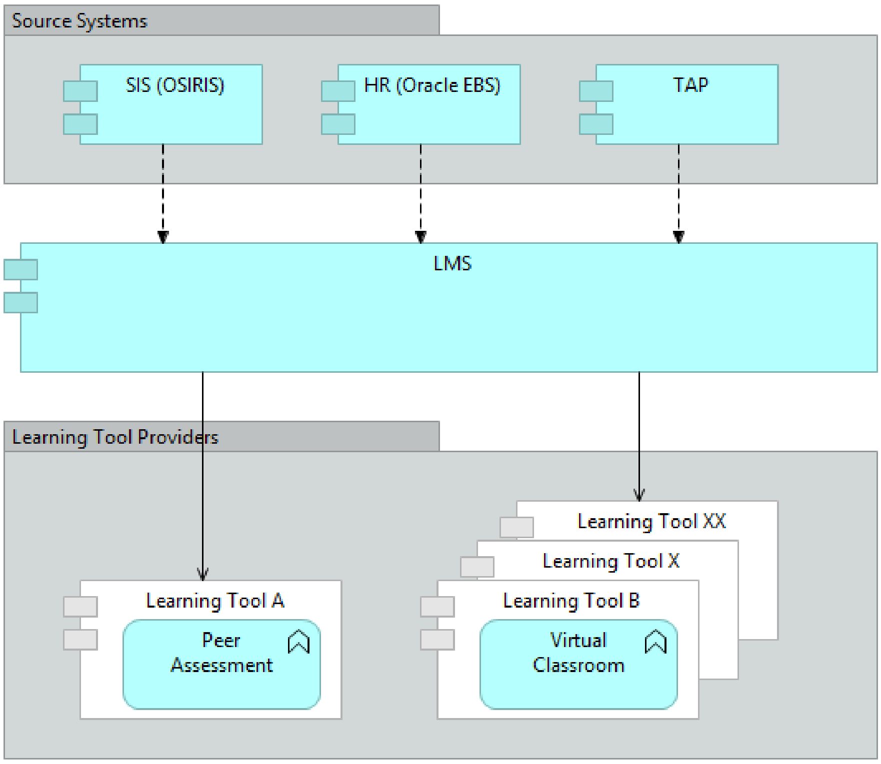
Annex C: Project reference architecture

Application Model

The application model shows the involved information systems, with their relation to the LMS. Two types of integrations have been defined:

- Madatory Integrations
- Integrations with external tools

The systems which are mandatory for integration are shown in blue, whilst the integration with external learning tools are shown white.



Mandatory Integrations

The application systems defined for mandatory integration are institutional systems, that provide the LMS either information or (learning) functionality. Therefore the LMS is required to integrate with these specific systems.
Below an overview is given of the UT systems to which the LMS is required to integrate, including the options for integration.

OSIRIS

OSIRIS is a Student Information System (SIS) that administrates Courses, Students, Lecturers, (Course) Enrollments, Studyprogress and Grades.

System and Interface Properties	
HORA application component	Student Information System

Information	Lecturer, Student, Teaching Unit (Information), Enrollment
Interface	The SIS system can be accessed at database level, or by using a webservice provided by the Contractor.
Interval	On a daily base a "complete refresh" action is required on the information provided by the SIS system. Parallel the (course) enrollments are required to be provisioned to the LMS (near) real time.

Oracle EBS

The Oracle HR system is a system for administrating employees within the organisation.

System and Interface Properties	
HORA application component	Employee System
Information	Employee
Interface	The Information provided by the Employee system can be accessed at database level
Interval	On a daily base a "complete refresh" action is required on the information provided by the Employee System.

TAP

The TAP system is a system for administrating and provisioning of guest and external employees of the organization.

System and Interface Properties	
HORA application component	Account Provisioning System
Information	Guest
Interface	The Information provided by the TAP system can be accessed at database level
Interval	Twice per day a "complete refresh" action is required on the information provided by the Employee System.

Integration with external tools

As defined in the requirements and in this document, there are functions that we consider essential to our LMS and those that are optional. As an example of optional functionality: peer review and virtual classrooms.

For these functions UT can choose:

- If the LMS offers what we want for this optional function we will use the LMS functionality;
- If we want extra functionality we can select a "Learning Tool Provider" and integrate this external tool into our LMS.

In order to realize such integration, the requirements for this are listed in the section "Interface Requirements".

Annex D: Current performance and usage

The performance and usage of the current LMS, the most important figures:

Active users	13.500
Max. concurrent users	2.500
Monthly logins	150.000
Storage used for content	2,5 TB
Number of transactions (daily average)	1.000.000 – 2.000.000
Bandwidth usage	10 – 20 Mb/s
Server response time	50 – 70 ms
End to end latency	250 – 350 ms

Annex E: Draft Agreement

This Annex is published separately on the Negometrix Platform.

Annex F: User experience

The requirements for the LMS test environment that are needed to test the user experience, are set out below. Tenderers need to implement these requirements in the test environment.

The Tenderer is asked to provide an LMS environment that is structured on the basis of the functionalities required by the UT. In addition, there must be a limited set-up within the test environment, primarily to enable assessors to carry out the following processes:

1. The test environment must be accessible for these roles: (A) Student – 25 users, (B) teachers- 25 users, and (C) Functional administrator – 10 users;
2. The LMS overview page must be available and ready for use;
3. The structure and set-up must be in place for at least three courses (incl. descriptions, documentation, etc., as relevant);
4. The standard processes in the LMS must be available and operational for students as well as teachers in relation to courses under (3) by the users under (1). For teachers, the processes must include at least the input and editing of course information (including documents), adding students to groups, providing feedback on student work, and workflow functionality. The processes for students must include creating a group, joining a group, collaboration and communication functionality, group functionality (e.g. working together on a document), submitting one or more documents for review by a teacher, availability of a start page;

The UT will fill the test environment with test data ourselves.

It is up to the Tenderer which other processes he wishes to set up or activate in the test environment, on condition that this functionality will actually be provided at no extra charge to the UT if the contract is awarded.