Statement of requirements- Integrated assessment platform

Exams System Module Requirements

ePortfolio & CPD/PCS Module Requirements

Event (Mandatory courses and CPD-SS) & Registration Requirements

Functional and Non – Functional Requirements

Version control: CAI2019/08/03

Functional Requirements
Please insert your company name here:

	Assessment platform Exams Management - Item Bank, Written and OSCE/SOE		
ID	**Detail**	**Additional information**	**Supplier response**
1	Must be able to store different question formats – i.e. Multiple True False, Single Best Answer, Extended Matching questions, Multiple Choice Questions (MCQ), Short Answer Questions (SAQ), Constructed Response Questions (CRQ)		
2	Version control of questions including answer key/ mark scheme – important to see previous versions, and when and by whom any changes were made.		
3	Must be able to generate exam papers using multiple criteria defined by the user, such as topic area, statistical conditions, types of questions, total number of questions, date last used (inclusive of Written, OSCE/SOE)		
4	Version control of exam papers (Written, OSCE &SOE) and individual questions – important to see previous versions, and when and by whom any changes were made.		
5	Must be able to store artefacts (including x-rays) in a variety of formats, which can be linked to multiple or individual questions.		
6	System must provide paper and pen and computer based testing		
7	Candidates at the same sitting, to be able to take the exam onscreen, or on paper. The proposed system must allow exams taken on paper to be electronically scanned by the administrator using OMR, OCR or similar methods		
8	The chosen supplier would have a system that is able to deliver electronically for OSCE, SOE and MMI.		
9	Onscreen or online exams should be available via browser or iPad versions.		
	Authorised User to be able to preview exam as it will be seen by candidate/examiner before it is printed or exported as a live test		

10	The ability to mark candidates' paper based responses automatically, for Multiple True False, Single Best Answers, and Extended Matching Questions.		
11	The ability for examiners to mark SAQ and CRQ onscreen and submit their scores and comments onscreen.		
12	Authorised user to be able to monitor the progress of SAQ and CRQ marking, by individual examiner or question number.		
13	The ability to mark candidates' exam papers automatically, for Multiple True False, Single Best Answers, and Extended Matching Questions, which have been completed onscreen.		
14	Statistical analysis of scores per question, candidate total score, candidates' scores in each question.		
15	Authorised users can export candidates' marks and examiners' comments in a range of formats.		
16	Question and exam statistics can be exported, and imported into the Question Bank.		

	Assessment platform ePortfolio & CPD/PCS		
ID	**Detail**	**Additional information**	**Supplier response**
17	Ability to create custom roles and permissions		
18	Ability to have fully customisable fields, forms, blueprinting and workflow		
19	Ability to edit User profiles		
20	Ability to create custom & mandatory fields which dictate which information should be filled in.		
21	Ability to create to-do lists, goals and personal development plans		
22	Ability to build, manage, amend and review multiple curricular side by side (without development)		
23	Ability to create personalised dashboards per role or persona		
24	Ability to embed custom reports into forms.		
25	Ability to report on goals and progression.		
26	Ability to view, report and create placements/rotations by date and location.		
27	Mobile enabled with full functionality must be available		
28	Ability to work offline from Mobile		
29	Ability to utilise free text search and multi-faced filtering		
30	Ability to export information to CSV		
31	The system must allow administrators to create approval workflows behind each form type ensuring that each form, when submitted, is routed to the correct people for sign off/ information if required.		
32	The system must have the ability to remind end users about specific tasks that they must complete by a specific date. The reminder functionality should allow an administrator to create an activity e.g. an evaluation form		

33	Administrators must be able to build and filter reports based on all information gathered in the system. All reports must be publishable via the tailored / personalised dashboards.		
34	Ability to provide multi-source feedback and 360 feedback.		
35	Ability to view progression including Exam results and bookings/events in one place.		

	Assessment platform Registrations, Exams and Events Booking (Mandatory courses and CPD-SS)		
ID	**Detail**	**Additional information**	**Supplier response**
17	Ability to create custom roles and permissions		
18	Ability to register new users		
19	Ability to edit User profiles		
20	Ability to create custom & mandatory fields which dictate which information can be input on users' profiles. (e.g. enabling the capture of any information that is desired. For example: Reasonable adjustments, Candidate ID etc.)		
21	Capability to Administer new exams/events/assessments to be published		
22	Ability to choose which methods of payment are accepted for exam/session/events/assessment		
23	The Scheduling, publishing, retracting exams/assessments/events should be enabled from within the platform.		
24	Ability to set eligibility requirements and check against them.		
25	Ability to modify an exam/session/assessment/event when closed or whilst still open		
26	Ability to create and manage a list of venues.		
27	Live information on the application levels for each exam/assessment/events published		
28	Ability to assign or reassign candidates to sessions and venues		
29	Ability to utilise free text search		
30	Ability to export information to CSV		
31	Processing of immediate payments		
32	Ability to take credit card payments through sending a payment request to candidates when they have been successfully booked onto an exam/assessment		
33	Refunds with approval workflow must be available		
34	Ability to reconcile transactions from bookings & payments		
35	Ability to send message to the candidate through the system		
36	Ability to accept or reject applications		
37	View of all current and historic applications must be available		
38	Ability to create blueprints and templates		
39	Ability to request changes to a booking via workflow		
40	Pre-set email notifications based on action within the system		

41	Ability to define available places per session/exam/event or the ability to list availability as unlimited. When all available places have been taken no further applications should be able to be made.		
42	Ability to add Venues to each exam/session/event, either before publishing, or afterwards		
43	IMC / GMC numbers to be validated against IMC/GMC data to determine how the candidate application should proceed, and where possible automatically registered (made eligible to apply for exams/events)		
44	Comments must be able to be attached to any application which will notify those involved		
45	Applications should be able to be manually accepted or rejected with a reason (if desired)		
46	All application forms can be viewed and extracted as a report along with information on the relevant candidate		
47	Ability for Candidates to edit their personal information through the booking system		
48	Ability for Candidates to be restricted to only be able to edit certain elements of their profile		
49	Candidates must be able to choose a qualification goal to work towards		
50	Candidates can view the list of exams/events which they are eligible to book onto		
51	Candidates must be able to apply and submit an application form for any exam/event which is open and for which they are eligible.		
52	Candidate must be able to upload files where requested as part of their application		
53	Ability for Candidates completing application forms to be informed clearly when there are mandatory fields requiring their input		
54	Whilst the exam/event is open the candidate must be able to cancel or request an automatic refund		
55	Actions requiring a user's input should appear for them in a central 'to do list' style area within the system		
56	Automated emails must be able to be sent dependent on certain actions e.g. Application status updated, Request for payment, Payment receipt		

Non Functional

Non-Functional Requirements
Please insert your company name here:

ID	Category	Subcategory	Detail	Supplier response
1	Hosting	Availability	The system must be backed up daily as a minimum	
2	Hosting	Availability	Disaster recovery measures must be in place so that failure of the primary service does not result in data loss	
3	Hosting	Availability	Mirroring infrastructure should be in place so that in the event of a primary infrastructure failure downtime is minimised	
4	Hosting	Compliance	All data is held within the EU in accordance with Data Protection Act protocols, or an equivalent assurance	
5	Hosting	Compliance	Data at rest and in transit meets industry standard security levels such as ISO27001	
6	Hosting	Environment	Application provided on a Software as a Service basis	
7	Hosting	Environment	Separate development and training environments provided alongside Live.	
8	Hosting	Environment	Application is a single dedicated instance, rather than a shared platform containing specific data and functionality	
9	Ownership	Data	The CAI will retain ownership of all personal and administrative data entered into the system	
10	Software	Accessibility	A user environment which meets a minimum of conformance with Level AA of the Web Content Accessibility Guidelines 2.0	
11	Software	Auditing	The System must record an audit trail of all data changes logging user, date and previous states	
12	Software	Authentication	The system will offer a native user list and secure authentication process for non-College staff, ie Examiners	
13	Software	Authentication	Offers standard SSO / Active Directory (AD/ADFS/AAD) authentication for College staff to access the system	
14	Software	Authentication	Two factor authentication using a physical or virtual token	
15	Software	Configuration	System allows for the definition of drop down list values and other object properties by a College administrator	
16	Software	Design	Primary browser-based front end presented in HTML5	

17	Software	Design	The system must run in browser/app without plug-ins or other locally installed objects	
18	Software	Design	Mobile version(s) will allow the creation and editing of data offline which then resynchronises when a connection is available	
19	Software	Design	A user help facility shall be accessible from any screen by clicking a single icon, menu identification or key	
20	Software	Design	Mobile applications are operating system agnostic with a single app deploying across iOS and Android, or mobile is offered in browser via HTML caching	
21	Software	Design	Continuous Development must be included within the Platform offering.	
22	Software	Inter-operability	Single sign on capability utilising common protocols such as Shibboleth - across the whole e-assessment platform	
23	Software	Inter-operability	Ability to fully integrate into the CAI CRM as a central master record	
24	Software	Inter-operability	Out of the box full integrated platform across Exams Management, ePortfolio, CPD/PCS, Registrations/Exams & Events Booking	
25	Software	Inter-operability	Compatibility with common browsers such as Chrome, Safari, Internet Explorer and Firefox	
26	Software	Inter-operability	A documented API for data input/output and web service integration	
27	Software	Inter-operability	Integration with our chosen Payment Provider platform of provision of your integrated / recommended.	
28	Software	Inter-operability	Out of the box integration to Microsoft Office products	
29	Software	Maintenance	All supporting operating system and server versions must be regularly patched by the provider	
30	Software	Maintenance	The supplier must carry out upgrades outside of office hours, with any down time minimised	
31	Software	Security	Platform has a roles based security access model for controlling data access and process availability by user type	
32	Software	Security	Any mobile version storing data locally must do so within a secure container on the device which cannot be improperly accessed by the device's native functions	
33	Software	Security	Ability to remote wipe data stored on a mobile device if it is lost or compromised	
34	Software	User interface	Usage on mobile devices of varying sizes will be responsive, resizing and orienting to display clearly	

35	Supportability	Availability	The platform must be available 99% or above outside of scheduled downtime	
36	Supportability	Documentation	Complete, accurate and up to date operation and procedure manuals must be provided and maintained for all aspects of the platform and must be presented in a clear and easy to understand format at College administrator and technical levels	
37	Supportability	Documentation	Software upgrades and/or releases must be accompanied by detailed and updated training and release notes prior to implementation	
38	Supportability	Off-site	Provision of a high quality service desk for all CAI administrator queries	
39	Supportability	System	A configurable, user friendly message should be displayed during scheduled maintenance periods	

NOTES

Accepted payment methods can be chosen per exam

Ability to set application period per exam

Ability to schedule automatic open and close of application periods

Ability to manually extend or close an application period

Supplier to code the list of eligibility requirements in the backend which CAI can then make use of within the application. These will include:

- Candidates must have successfully registered to be able to apply for exams
- FCAI- MCAI must be used within 10 years toward
- 6 attempts rule

Venues can be added before, during and after candidates have booked onto the exam/assessment

Exam/assessment dates can be changed

Exam venue capacity information can be changed

New venues can be created, edited and archived

Venue information to include custom information such as title, address, venue code

Number of confirmed and pending bookings visible to administrators

Administrators can take manual payments for a particular application. This will allow them to (externally to the booking system) offer that candidate an alternative method of payment.

Notice of how many days an application has been in a state of pending manual payment to enable administrators to make decisions on how long to offer this possibility to the candidate.

Applications can be selected as approved or rejected

Applications can be filtered by any of the data contained within them, for example: SAT Level, CSCST date etc.

Candidates can be moved between venues/sessions

Lists of candidates for an exam can be output/downloaded to CSV

Candidates to have the ability to book and payment taken immediately for specific exams

Candidates to be prompted to pay once they have been confirmed onto an exam.

Manual request for payments can be sent to candidates.

Candidates receive these notifications and requests through email.

Refunds (full or partial) can be automatically generated for a particular candidate or exam/session.

If refunds require an approval then the nominated approver receives a notification that requires their action to continue.

Funds to reach CAI in the shortest time possible from the payment provider, in-line with the agreed payment provider service collaboratively selected. Usually, no more than three working days

Reporting data from the booking system can be downloaded as CSVs

Care is updated with all relevant/required information from the booking system to enable other college functions to continue unaffected.