Procuring organization

Karolinska Universitetssjukhuset
Inger Malmgren

Procurement

Digital health platform
K 2023-6925
Version 2: published 1/2/2024 8:40 PM
Tender closing date: 1/17/2024 11:59 PM

Legend

The text is included in the advert		The text is included in the qualification	
The text will be part of the contract		The text will be published in the contract catalogue	
The text/question contains requirements to be met		**ESPD** The text/question contains ESPD requirements	
The question is weighted and included in the evaluation		The question is weighted and included in the evaluation	
The question is asked for information only		The question is answered by the buyer	
The question is marked for special follow-up		Updated section or question	

1. 1. Procurement document

1.1 Instruction

The Karolinska University Hospital (Karolinska) has made a selection from submitted applications. The selected candidates have received an invitation to submit a tender through TendSign. It is stated in the invitation in which areas you have the opportunity to submit tenders.

The procurement document with its appendices includes all information, requirements, terms and conditions required to submit a tender.

Karolinska has been awarded a budget of 160 million SEK for requested assignments.

Please read the instructions in this procurement document and the appendices carefully. The instructions are meant to be a guide for you to understand and respond to our requests in a correct manner.

1.2 Step 2: Restricted procedure

This is step II in the restricted procedure regarding the procurement Digital Health Platform. The tender areas is divided in the following areas:

1. OpenEHR-based software

2. Software for openEHR content Creation and Transformation

3. Consulting services

Please note that you can only submit tenders in the areas (1-3) for which you have been

selected.

Please read the instructions in this procurement document and the appendices carefully. The instructions are meant to be a guide for Tenderer to submit tender in a correct manner.

> **a. Indicate the tender area(s) that you received an invitation to submit a tender for.**   (i)
>
> Text field
>
> 💬 *Supplier comment allowed*

> **b. Indicate the tender area(s) that you are submitting tender(s) for.**   ⚠
>
> Text field

1.3 Contracting Authority

Karolinska Universitetssjukhuset
(Karolinska University Hospital)
Eugeniavägen 18 b
171 76 Solna
Sweden

1.4 Karolinska's contact person

Department of IT

Espen Sigvartsen
Head of department 'Datalager och applikationsutveckling'
Tel +46 70-845 42 18
E-mail: espen.sigvartsen@regionstockholm.se

1.5 Scope of the contract   ⚠

The purpose of the procurement is to enter into Framework Agreement with Suppliers concerning following tender area(s):

1. openEHR-based software

2. Software for openEHR content Creation and Transformation

3. Consulting services

Each tender area (1-3) will be evaluated separately.

Karolinska will in tender area 1 make a contract award decision, including 3-5 Suppliers. If there are insufficient number of tender that meet the set of shall requirements, Karolinska can proceed with the procurement and sign framework agreement with fewer Suppliers.

Karolinska will in tender area 2 make a contract award decision, including 5-8 Suppliers. If there are insufficient number of tender that meet the set of shall requirements, Karolinska can proceed with the procurement and sign framework agreement with fewer Suppliers.

Karolinska will in tender area 3 make a contract award decision, including 8-12 Suppliers. If there

are insufficient number of tender that meet the set of shall requirements, Karolinska can proceed with the procurement and sign framew ork agreement with fewer Suppliers.

Karolinska will make contract award decision and sign framework agreements on behalf of the following contracting authorities. They will be entitled to make call-off from the contracted framework agreements and award contract(s) based on the framework agreements:

- Södersjukhuset AB (SÖS), org.nr 556595-7403
- Södertälje sjukhus AB, org.nr 556775-9922
- Danderyd Sjukhus AB (DS), org.nr 556575-6169
- Tiohundra AB, org.nr 556595-7395
- St Eriks Ögonsjukhus, org.nr 556574-3589
- Ambulanssjukvården i Storstockholm AB (AISAB), org.nr 556461-6695
- Region Gotland, org.nr 212000-0803
- Hälso- och sjukvårdsförvaltningen (HSF), org.nr 232100-0016
- Stockholms läns sjukvårdsområde (SLSO, org.nr 232100-0016

The term "Karolinska" thus covers Karolinska University Hospital including the above-mentioned contracting authorities.

1.6 The procurement document's parts

The tenderer is obliged to check that a complete procurement document has been received in accordance with the bullet list below.

- "Procurement document", dated (2023-12-23 this document)
- Appendix 1 - Tecnical specification "openEHR-based software" (tender area 1)
- Appendix 2 - Contracting authorities which are entitled to make call-off from the framework agreements
- Appendix 3 - Technical specification "Consulting Services"
- Appendix 4 - Draft Framework Agreement
- Appendix 5 - Terms of conditions
- Appendix 6 - Truth Affirmation
- Appendix 7 - Price Table for openEHR-based software

The procurement document and its appendices are shown under the "Public Procurement Document" tab in TendSign's procurement system.

1.7 Availability of procurement document　　　　　　　　　　◇

The procurement will be handled using the online procurement system TendSign. The system contains tools to facilitate the procurement process for the contracting authority as well as for the Tenderers. It is free for Tenderers to register and use the system. For any questions regarding the handling and operation of the system, please contact TendSign support.

1.8 Questions and responses regarding the procurement　　◇

Questions about possible ambiguities in the procurement document may be sent to the Karolinska University Hospital's contact person under the 'Communication' tab in TendSign's procurement system. Questions must be submitted to the Karolinska University Hospital no later than ten (10) days before the deadline for submission of tenders.

Answers to questions from tenderers and other details about the procurement will be communicated to registered tenderers during the tendering period through TendSign's procurement system. Therefore, prior to tender submission, the tenderers are urged to check if new details about the procurement have been added. Tenderers who have not downloaded the procurement document with its appendices directly from TendSign must check whether any clarifications have been made or any supplements distributed.

Answers and clarifications will be published at the latest six (6) days before the tender submission deadline.

2 Submission of tender(s)

Tender documents must have been received by Karolinska no later than 1/17/2024 11:59 PM. Documents not received on time will not be considered. Tenderers are responsible for submitting tenders to Karolinska within the allotted time.

2.1 How to submit tenders

Tenders must be submitted electronically through TendSigns procurement system.

Please note that tenders submitted by mail, fax or e-mail will not be considered.

2.2 Opening of tenders

The tender documents will be opened on the 1/18/2024, at the administrative department of Karolinska, at Eugeniavägen 18 in Solna, Sweden.

The opening of tenders is not public. In the event a tenderer demands it, a representative appointed by the Stockholm Chamber of Commerce may attend the opening meeting at the tenderer's expense.

2.3 Validity period period of tenders

The tender shall be binding to the 7/31/2024. If a tender is submitted, this requirement is deemed to have been met. If the procurement is subject to review of the contract awars decision, the validity of tenders will be automatically extended by 90 days.

2.4 Form of procurement

This procurement is carried out as an restricted procedure, step II in accordance with the Swedish Public Procurement Act (2016:1145).

2.5 Tender requirements

The electronic procurement document contains a number of mandatory requirements under the 'Public procurement tab' in TendSign procurement system. A precondition for taking a tender into consideration, evaluating and accepting it, is that all 'shall/must' requirements have been met.

For fair and efficient consideration and evaluation of the tenders, tenderers are required to

provide responses to the items under each tab in TendSign procurement system.

2.5.1 Formal requirements

Firstly, the tenders are checked in order to establish whether they meet the formal requirements. Tenders not meeting these requirements may be excluded from further consideration.

Tenderers must confirm the fulfilment of formal requirements in Mercell ́s procurement system.

After this phase, the tenders are considered in the following phases described in sections 2.5.2-2.5.4 below.

2.5.2 Consideration of 'shall' requirements

In this stage, the tenders are checked in order to establish wheter the meet the 'shall/must' requirements. Tenders not meeting this requirements will be excluded from further consideration.

The shall/must requirement for each tender area can be found under the public procurement tab.

Only tenders meeting these requirements will move on to the awarding phase described below.

2.5.3 Criteria for the award

In the awarding phase, the demanded criteria of the award will be evaluated. Karolinska will adopt the tenders that contains the most economically advantageous tenders based
on the ground best price-quality ratio.

- Karolinska will accept 3-5 tenders within tender area 1 openEHR-based software
- Karolinska will accept 5-8 tenders within tender area 2 Software for openEHR Creation and Transformation
- Karolinska will accept 8-12 tenders within tender area 3 Consulting services

For more information see ' Awarding of framework agreement' for each tender area.

2.5.4 Contract award decision

Decision regarding this procurement will be communicated in writing to all tenderers through Mercell's procurement system ten (10) days prior to entering into a framework agreement with accepted suppliers. Notice that the contract award decision will be sent to the e-mail addresses stated by the Supplier in Mercell's procurement system. Notice of award will also be published at http://www.merccell.com

Suppliers have the possibility to request a review of any contract award decision in the administration court, "Förvaltningsrätten in Stockholm", Sweden, which may

make an interim decision in the case. A binding Civil law agreement arises only through the parties signing the commercial Framework Agreement.

2.5.4.1 Same lowest tender price

If several tenders receive the same lowest total evaluation price, Karolinska will, by lottery procedure, rank the suppliers as one (1) and two (2) etc.

2.6 Konfidentiality

All information regarding the Tenderers or their tenders, or information related to the tenders is confidential pursuant to the Swedish Public Access to Information and Secrecy Act (2009:400) (OSL) until an award decision has been made or the tender procedure has otherwise been concluded (e.g. by termination).

When the tender procedure is concluded, all submitted tenders shall become official public documents pursuant to Chapter 2 of the Freedom of the Press Act (1949:105). Details of e.g. a company's or an individual's business or operating conditions (31 Ch. 16 § OSL) might in some cases be kept confidential. The Tenderer who wish to request that certain information in the
tender be kept confidential must submit a written request for confidentiality at the time of tender submission. Such a request must contain:

1. A description, with clear references, of what specific data or information the Tenderer considers sensitive.
2. A statement of the substantial risk of damage to the Tenderer if the data or information in question becomes public.
3. A description of the real damage that the Tenderer would suffer if the data or information in question becomes public.

The Tenderer is responsible for requesting confidentiality protection and for motivating in detail the reason/-s why the information should be kept confidential. Karolinska cannot make all the information provided in the tender confidential, and absence of motivation or clarification of the information provided may lead to the disclosure of the information. The Tenderers are advised to avoid general terms and expressions such as "the whole tender" or "all the technical details."

Because of its obligation to review the application of secrecy at each individual disclosure request, Karolinska cannot promise secrecy or enter into any non-disclosure or confidential disclosure agreements regarding the tenders.

Please note, that the tenders containing reservations such as that answers to mandatory questions can be given only after the conclusion of the confidentiality agreement will be rejected. The Tenderer should instead request that such information is kept confidential.

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a. Does the tenderer request commercial confidentiality?   ⓘ

Yes/No

💬 *Supplier comment allowed*

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b. If the answer is "yes", describe, with clear references or markings, what specific data or information in the tender considered sensitive and substantiate the grounds for the request.   ⓘ

Text field

💬 *Supplier comment allowed*

2.7 Truth affirmation

The tenderer shall submit a signed truth affirmation to the tender, showing that the tender is truthful.

Attach the signed truth affirmation to the tender

Attachment

💬 *Supplier comment allowed*

2.8 Definitions

Definitions regarding the procurement.

TERM	DEFINITION
Call-off	Call-off refers to the measures taken by the Customer in order to purchase Contract Objects through the award of Contracts in accordance with the Framework Agreement.
Call-off request	Call-off request refers to the request that the Customer sends to the Framework Agreement Supplier in connection with Call-off.
Call-off response	Call-off response refers to the offer or confirmation that the Framework Agreement Supplier submits to a call-off request. Call-off response also refers to a response to the Customer that the Framework Agreement Supplier cannot offer what the Customer requests.
Contract award decision	The decision made by a contracting authority following the evaluation of tenders which confirms the successful tender and thus the tenderer with whom the contracting authority intends to enter into the contract.
Contracting authority	A contracting authority means a State or municipal authority.

Consultant	Physical named person employed by the Supplier or otherwise offered by Sub-contractor.
Framework agreement	A framework agreement means a contract concluded between one or more contracting authorities and one or more suppliers with the aim of establishing the terms of contracts to be awarded during a certain later time period.
Framework Agreement Supplier	Framework Agreement Supplier refers to the tenderer who, after completing the procurement, has entered into a Framework Agreement with the Legal, Financial and Administrative Services Agency and subsequently signed a Contract with the Customer.
Procurement documents	A procurement document means each document used by a contracting authority to describe or determine elements of the procurement.
Supply contract	A supply contract means a contract having as its object the purchase, lease, rental or hire-purchase of a product. A supply contract may include, as an incidental matter, siting and installation operations.
Supplier	Tenderer who after a finalized procurement process has entered a Framework agreement with the Contracting authorities
Framework agreement supplier	Tenderer who after a finalized procurement process has entered a Framework agreement with the Contracting authorities.
Stand still period	The standstill period is a period of at least 10 calendar days, during which the contract award process is suspended, i.e. you must not enter into the contract.
Subcontractor	Subcontractor means a legal entity or person engaged by a Framework Agreement Supplier to fulfil all or part of the obligations arising from the Framework Agreement and the Contract. Licensors are not considered to be Subcontractors.

Tenderer	The Tenderer means the individual or firm that submit tender .

2. 2.1 Requirements specification: Tender area 1

2.1 Tender area 1: openEHR-based software

This document specifies the overall requirements for the tender area:

1. openEHR-based Software

This document specifies the "shall" requirements for tender area 1, openEHR-based software.

2.2 Introduction - Tender area 1

Karolinska has decribed the tender area 1 in appendix 2.1.1.1 Introduction- Tender area 1 openEHR-based software

2.3 Instructions

Each requirement specification has the form of a questionnaire which is to be used for responding to questions and requirements.

1. All questions are to be responded to by ticking the 'yes' or 'no' box.

2. If a requirement has been met, the supplier must describe in which way this has been done when a response is requested.

3. Responses may not be omitted.

4. The responses are to be written in a text field immediately following the stipulated requirement. The size of this field adapts to the length of the response written. To move between the various fields, use the mouse cursor or the arrow or tab keys. Click or use the space key in order to tick the boxes.

5. Appendices with explanatory text and illustrations may be submitted as supplementary information. However, responses in the various text fields must be sufficient for assessing if the supplier meets the stipulated requirements.

6. "Shall" or "must" indicates an absolute requirement e.g. a mandatory requirement.

7. "Should" indicates a requirement that is requested but not mandatory and will therefore be evaluated as an "Added value".

8. After this document and the appendices have been completed, it shall be submitted electronically as appendices together with the tender through the procurement system TendSign.

9. Requirements requesting attachments accept multiple files. Use the file naming pattens explained in the questions.

2.4 Acceptance of the commercial terms

The supplier shall accept the commercial terms. The tender shall not contain information contrary to the commercial conditions set out below:

- Framework agreement openEHR , see appendix 1,2
- Processor agreement including instructions, see apendix 1.2.1
- Non-disclosure agreements, including confidentiality, see apendix 1.2.2

> **Have these requirements been met?**
> Yes/No. Yes is required

2.4.1 Service Level Agreement (SLA)

The supplier shall accept the commercial terms. The tender shall not contain information contrary to the commercial conditions set out below:

- Service Level Agreement, see apendix 1.2.3

Note that the SLA will be specified and detailed in call-off.

> **Have these requirements been met?**
> Yes/No. Yes is required

2.5 Requirements regarding openEHR-based software

The tenderer shall fulfill the shall-requirements in Appendix 2.1.1.2 Requirements Specification Tender area 1 openEHR-based Software.

The requirements will be specified and detailed in call-off".

> **a. Have these requirements been met?**
> Yes/No. Yes is required
> 💬 *Supplier comment allowed*

> **b. Attach the completed Appendix 2.1.1.2 Requirements Specification Tender area 1 openEHR-based Software to the tender**
> Attachment
> 💬 *Supplier comment allowed*

2.6 Information regarding requirements for call-off

Requirements listed in file 'Appendix 2.1.1.3 Referral of potential requirements that may be used in later call-off – Tender area 1 openEHR-based Software' have rows that are marked as "Referral" in column "Row Type" and "Info, optional comment" in column "Requirement priority", which means they are sent to you for referral purposes only. You can chose to leave a comment in the column "Optional comment" regarding those requirement to help us improve them so they become better aligned with market maturity, before we decide to

use them in the coming call-off. For example you can comment on clarifications, conflicting requirements, impractical requirements, unrealizable requirements. These optional comments will not be evaluated and thus will not affect points, but may inspire changes or clarifications in the coming call-off phase where requirements similar to these are likely to be marked as "Shall" or "Should" instead of "Info, optional comment".

Shall and Should requirements are grayed out in the list. Do not comment on the Shall and Should requirements. These requiremenents are shown in the list below to give you the correct context for the Referral requirements.

> **Attach the completed Appendix 2.1.1.3 Referral of potential requirements that may be used in later call-off – Tender area 1 openEHR-based Software to the tender.** ⓘ
>
> Attachment
> 💬 *Supplier comment allowed*

2.7 Reliance on capacity of other companies

The Candidates have in step 1 indicated the name of the companies whose capacity they relied on to meet the requirements of technical and professional capacity as well as for subcontrator(s).

If the capacity of another company, including the capacity of another group or associate have been invoked, the tenderer **shall** attach a binding agreement, or a written unilateral commitment or other legal commitment (signed by the authorised representative of the invoked entity), demonstrating that the Company **will** have the invoked capacity for the performance of the contract regarding the framework agreement.

A letter of intent or other non-binding declaration of will is not sufficient to prove that the tenderer has the capacity of another.

Please attach the requested information for the tender below.

> **If applicable, attach requested information above.** ⓘ
>
> Attachment
> 💬 *Supplier comment allowed*

2.8 Definitions

Term	Definition
ABAC	Attribute-based access control (ABAC), is an access control paradigm whereby a subject's authorization to perform a set of operations is determined by evaluating attributes associated with the subject, object, requested operations, and, in some cases, environment attributes

Term	Definition
Access and Filtering Process	A process that regulates what Personal data the User can access and how the User is allowed to handle the Personal data. The process results in a step-by-step access to a patient's Personal Data. To go to the next step, an Active Choice is required. The different steps are eg: - the user may read compositions created on the PDL care unit the user is logged in on - the user may read if there are any Blocked och unblocked Personal Data on another PDL care unit - the user may read the compositions created on other PDL care unit with Blocked och unblocked Personal Data.
Active Choice	An IT function by which an authorized healthcare personnel decides whether he or she is entitled to access additional patient data and indicates the reason for the decision. The active choice and the reasons are registered by the authorized healthcare personnel ticking boxes in dialogue boxes. An Active Choice may result in the override of a Patient Block. Reasons can be either patient consent or emergency opening. The Active Choice action needs to be logged.
Active Choice with Validity Period	In certain cases, the Patient block override needs to be valid for a validity Period during more than one session. The validity period needs to be configured by the Customer.
Application Portal	A framework to where the user can select patient, select view and look at existing data and/or add new data. Often simple applications built/configured using low code tools for data entry forms, dashboards, other views, and overviews will be enough.
Audit Record Repository	Audit Record Repository receives event audit reports and stores them.
Audit Log handler	Logical component in the Solution that ensures detection of defined trigger events and creation, storage and forwarding of Audit Records.
Audit record	Record of a specific event in the life cycle of an electronic health record
Auxilliary API	CDR API's not included in the openEHR specification.

Term	Definition
Brute force	A brute force attack is a hacking method that uses trial and error to crack passwords, login credentials, and encryption keys. Source: https://www.fortinet.com/
Bioinformatics/omics	A field of science that develops methods, software tools, and standards for understanding, storing, and sharing biological data such as genomics, proteomics, metabolomics and, microbiomics.
CDR (Clinical Data Repository)	Clinical Data Repository. Software that stores EHR content, and in the case of openEHR implements the openEHR ITS-REST service specifications including query capabilities.
CDR API	The standardised openEHR REST APIs defined at https://specifications.openehr.org/releases/ITS-REST/
CDR Policy engine	A policy engine connected to the CDR, which should support filtering and validation functions by checking the user claims against the metadata associated with compositions (and other VERSIONED_OBJECTs) and in some cases metadata fetched from external APIs.
Clinical Context Manager	Services used to be able to maintain a given patient context/selection across multiple simultaneously running applications on the end user's device.
Component	Logical entity that holds functional and non-functional requirements. These are not one-one-mapped to actual products that are offered by the Vendor.
Compositions	Content of one version in a VERSIONED_COMPOSITION. A Composition is considered the unit of modification of the record, the unit of transmission in record Extracts, and the unit of attestation by authorizing clinicians. In this latter sense, it may be considered equivalent to a signed document.
Consultant	Physical named person employed by the Supplier or otherwise offered by Sub-contractor.
Consulting Services Provider	"Consulting Services Provider" shall refer to a legal person or a sole trader who provides Consulting Services. Consulting Services Providers may either have their own employed Consultants or, alternatively, resell Consulting Services as intermediaries.
Demographic data	Personal data not affected by its health status, e.g. contact person, address, education, family situation, language preferences.

Term	Definition
Digital Health Platform	Karolinska's new platform that offers integration and data storage services. Partially consists of a clinical data repository (CDR) based on an international standard (openEHR), development tools and a traditional enterprise data warehouse (EDW). Is used as a base for the realization of applications in a health care setting.
Distributed Transaction Manager component (DTM)	Component that realizes the EHR/Subject X-ref Service. This component guarantees that EHR IDs in the CDR and business identifiers in the PMI are not left in a partially consistent state and manages rollbacks in case of transient errors.
DICOM	DICOM is the international standard to communicate and manage medical images and data.
EHR	Electronic Health Record
EHR/Subject X-ref Service	Service that helps developers manage transactional semantics between the CDR and PMI components. Realized by a Distributed Transaction Manager component.
Emergency access or emergency opening	The reason health care personnel state to access personal data in an emergency. If the patient's consent cannot be obtained because the patient is temporarily incapacitated, for example due to unconsciousness, the healthcare personnel can still access personal data. This applies only in those situations and for the personal data that can be assumed to be relevant to the care the patient urgently needs when there is a danger to the patient's life or a serious risk to the patient's health.
Form Application Runtime	Application that is used to execute form specifications
HL7 FHIR	HL7 Fast Healthcare Interoperability Resources.
HL7 v2	HL7 Version 2.
Identity Provider	Service that manages and stores identities used for authentication/authorization to Web-based Applications
Interactive Form Editor	Web-based Application to build and export openEHR-based form specifications
Interactive Query Editor Component	Web-based Application to build and execute AQL queries to the CDR Query Service
Logical component	Collections of functions and behavior that breakdown a larger functional area

Term	Definition
Open Source (Software)	Software that in its entirety is licensed using one or several licenses approved by the Open Source Initiative http://www.opensource.org/licenses/
openEHR	Even though openEHR is an organization, see https://openehr.org/, the word is in this, and associated documents, usually referring to the technical specifications or clinical content models defined by the openEHR organization and community. Thus "openEHR-based" refers to something based on the openEHR specifications and "openEHR models" refers to models (templates, archetypes etc.) based on such specifications and on associated work by the openEHR community including Karolinska.
openEHR RM and AM	openEHR Reference Model and Archetype Model.
Patch	Corrections, security fixes and functional improvements of Software. The offering of an Upgrade with the sole purpose of correcting errors shall be defined as a Patch.
Patient blocks	A patient's prohibition to healthcare personnel to access the patient's personal data A patient can request to block their personal data from persons outside the PDL care unit/PDL care process where the personal data was created.
Patient consent (opt-in and opt-out)	A patient's permission to healthcare personnel to access the patient's personal data or manage it in a certain way. Can be either the patient's active consent to something (opt-in) or the patient's right to oppose to something (opt-out).
Patient Master Index (PMI) component	A component that stores patient demographic data, including identifiers such as EHR-id and the patient's social security number.
Personal data	Information that can be used to distinguish or trace an individual's identity, either alone or when combined with other personal or identifying information that is linked or linkable to a specific individual.
Physical component	Realization of Logical Components
Predefined system accounts	Administration accounts that cannot be deleted
Production environment	Deployment environment requiring regulatory compliance where sensitive information is managed.

Term	Definition
Pseudonymization	Separation of personal health data and personal identifiers such as Swedish personal number.
RBAC	Role-based access control (RBAC) is an approach to restricting system access to authorized users' roles.
RPO	Recovery Point Objective (RPO) is a time-based measurement of the maximum amount of data loss that is tolerable to an organization. Also called backup recovery point objective.
RTO	Recovery Time Objective (RTO) is the duration of time and a service level within which a business process must be restored after a disaster in order to avoid unacceptable consequences associated with a break in continuity.
Secure application	A Secure Application provides security and privacy services for both grouped IHE actors and for functionality provided by related software and services within control of the Secure Application. In the Solution the CDR, Active choice repository and PMI are example of secure applications.
SNOMED CT	Systematized Nomenclature of Medicine - Clinical Terms.
Software	Software is a set of instructions, data or programs used to operate computers and execute specific tasks.
Software as a Service	Software as a service (SaaS) is a software licensing and delivery model in which software is licensed on a subscription basis and is centrally hosted
Solution	What the Vendor is offering. This is referring to the realization of the requirements attached to logical components or component combinations in the Reference Architecture.
Stand alone modules	Piece of software that can be used isolated from other realizations. A Standalone module offers functionality and API.
Supplier	Tenderer who after a finalized procurement process has entered a Framework agreement with the Contracting authorities.
Targeted Solution	Term used when the requirements on the Procurer might be subject to change, and consequently the reference architecture and associated requirements on the might change. E.g. due to interpretations of the Swedish law.
TendSign	TendSign is a procurement system where you will find information related to a specific procurement process, additional information, clarifications, as well as a questions and answer section.
Test environment	Controlled deployment environment where no sensitive information is managed. Low uptime requirements.

Term	Definition
Trigger event	A designated event that triggers audit records to be created.
Upgrade	New version of Software delivering new or improved functionality.
Web-based Application	Application that runs inside a user's web-browser

3. 2.1.1 Awarding of Framework agreement: Tender area 1

2.1.1 Method of assessment

In the evaluation of the tenders, the following will be taken into consideration:

1. **Tender amount** = Total price in accordance with the price form. See 3.2.2 Price below.
2. **Quality** = Total added value = <mark>xx</mark> SEK, broken down by quality criteria in section 2.1.2.2 Quality criteria below.

2.1.2.1 Award of framework agreement - Tender area 1 openEHR

Karolinska will accept the economically most advantagous tenders, on the evaluation basis, best "price - quality ratio".

The assessment will be carried out using the so called "Value added model". The assessment will be conducted in two (2) steps, as indicated below. The Value added model is based on the principle fulfillment of award criteria ("should-requirements") results in "Added value" to the tender amount. The result is referred to as the 'comparator figure' of the tender. The lowest comparator tender is the most economically advantageous tender.

Example:

Tender amount - quality score x 60 percent =comparison amount

The reduction of the "tender amount" is merely a technical award procedure aimed to identifying the economically most advantageous tenders in the call for tenders. Please note that the offered tender prices will be ceiling amounts in the framework agreement.

If two or more tenders obtain the same comparator sum, they will be distinguished, by ranking the offer first with the highest 'Value added price'. If several tenders have received the same deduction of Value added price, they will be distinguished by drawing lots.

Karolinska will accept 3-5 tenders within tender area 1 OpenEHR .

2.1.2.2 Qualitive criteria

Quality criteria will be evaluated, below.

Should requirements

Tenders will be rated in the form of points which, depending on the points obtained, will be converted into Value added deductions. The scoring of the respective should-requirements is set out in Appendix 2.1.1.2 Requirements Specification – Tender area 1: openEHR-based Software. Maximum is 345 points.

Example: If the points obtained are 110 points. Value added points deductions are calculated in accordance with the formula below.

Price reduction = 40 % ' ((221/345) ' 100 000 000) = 64 057 971 SEK

The total score given is 40 % of the Tender amount of the tender.

2.1.2.3 Price

Please provide the prices requested in appendix 2.1.1.4 Price Form - Tender area 1 open EHR-based software and attach to the tender.

Prices provided shall include all costs associated with the services requested in the procurement.

Tender amount = Total price of the bid prices submitted.

Delivered prices will become ceiling prices in the framework agreement and will be fixed in two years after the signature of the framework agreement.

Ceiling prices is the highest price that can be offered in a call-off.

Attach the completed Appendix 2.1.1.4 Price Form - Tender area 1 openEHR-based software

Attachment

4. 2.2 Requirements specification, tender area 2

2.1 Introduction for tender area 2: Software for openEHR content Creation and Transformation

This document specifies the overall requirements for the tender area:

2. "Software for openEHR content Creation and Transformation"

2.2 Abstract

The tools that have been offered by tenderers within tender area 2, during the first (invitation) phase of this procurement, vary greatly in type, intended use, user requirements and deployment. Thus, it is impossible to list and evaluate many functional requirements in a fair way during this phase of the procurement (the phase that leads to framework agreements).

Instead detailed functional requirements will be listed in when doing call-offs from the framework agreements. This will be narrower call-offs, likely several times later during the 2+1+1-year timeframe, once a certain kind of tool (for example a terminology management tool) is needed and sought for by one or more of the contracting authorities that then have specific needs/requirements when making a call-off of the same type.

In the current phase of the procurement, that can result in framework agreements, we primarily want to see:
- Product descriptions such as brochures and instruction manuals and optionally links to websites and videos
- Available price models and associated list prices that can be used to calculate economic feasibility and maximum prices in call-offs
- System environment requirements (operating systems, needed hardware capacities etc.)

Please note that all suppliers now invited to submit tenders have already pre-qualified for participation and the content of supplied information material within Procurement Area 2 will not be evaluated/graded right now in this phase other than for completeness (so all questions must still be properly answered to pass). The content will then be read again later and analysed by contracting authorities when considering doing a call-off.

2.3 Instructions

Each requirement specification has the form of a questionnaire which is to be used for responding to questions and requirements.

- Requirement responses, to "shall" requirements, shall not be omitted. ("Supplier comments" are optional and their content is not part of evaluation.)
- If a requirement has been met, the supplier must describe in which way this has been done when such a response is requested.
- Some requirements have response text fields immediately following the stipulated

requirement. The size of this field adapts to the length of the response written.
- In order to move between the various fields click by using the mouse cursor or use the arrow or tab keys.
- Click or use the space key in order to tick selection boxes.
- "Shall" and "must" indicates an absolute requirement e.g. a mandatory requirement.
- Requirements requesting attachments accept multiple files. Use the file naming pattens explained in the questions.

2.4 Acceptance of the commercial requirement

The supplier shall accept the full commercial terms. The tender must not contain information contrary to the commercial conditions set out below:
— Framework agreement; Software for openEHR content Creation and Transformation
— Processor agreement including instructions
— Non-disclosure agreements, including confidentiality
— General Conditions regarding Contract.

> ### Have these requirements been met?
> Yes/No. Yes is required

2.5 Requirements regarding public product information

The responses in this subsection (2.5) will be openly published and should thus not contain any confidential information.

Note that URLs will just be checked for existence, the content will not be evaluated.

It is wise to keep the URLs you refer to publicly accessible during the entire framework agreement period since authorities within the agreement, that want to procure (call-off) later, will read your response later and may want to reach more information via the URLs before deciding to start a call-off procedure.

The requirements will be specified and detailed in call-off"

> ### a. The tenderer shall list the name of each product offered in the framework agreement for tender area 2.
> Text field
> *Supplier comment allowed*

> ### b. The tenderer may also list a URL to a product description website for each product.
> Text field
> *Supplier comment allowed*

c. The tenderer shall for *each* **offered product attach one PDF file (recommended size: no more than six A4 pages per product) containing a description of the product (for example a product brochure, whitepaper, or other description).**

When uploading files, state the filename of each supplied file with the requirement number, and then the name of the product. For example: 2.5.c.Splendid_Terminology_Manager-Brochure.pdf

Attachment

Supplier comment allowed

d. The tenderer may, here list titles and URLs to publicly available online video demonstrations of the offered products and major product features.

Structural examples of title and URL:
Splendid Terminology Manager, overview: https://youtu.be/fuBDe0lJ55I
Splendid Terminology Manager, terminology
mapping: https://youtu.be/KZ3C2zUokWM

Text field

2.6 Requirements regarding extended product information

a. The tenderer shall for each offered product (listed in your response to requirement 2.5.a), attach (end)user manuals.

When uploading files, start the filename of each supplied file with the requirement number, and then the name of the product. For example: 2.6.a.Splendid_Terminology_Manager-usermanual.pdf

Attachment

Supplier comment allowed

b. The tenderer shall for *each* offered product (listed in your response to requirement 2.5.a) attach installation/administrator manual or other technical descriptions.

This information *shall* for *on prem* installations include description of system environment requirements needed to run the Solution, including operating system, other runtime dependencies and minimum hardware requirements.

If the product is a *cloud service*, then information about the cloud hosting service used (company name, location) and information about integration possibilities with our own IAM (for login etc) and information about integration possibilities with locally installed openEHR solutions (like a CDR), *shall* be included.

When uploading files, start the filename of each supplied file with the requirement number, and then the name of the product. For example: 2.6.b.Splendid_Terminology_Manager-adminmanual.pdf

Attachment
Supplier comment allowed

2.7 Requirements regarding pricing information

The tenderer shall for each product attach a PDF file (recommended size no more than three A4 pages) containing a detailed description of the price model/models and list prices that are available during call-off in the framework agreement. Prices provided shall include all costs associated with the offered product(s) in the procurement.

Delivered prices will become ceiling prices in the framework agreement and will be fixed in two years after the signature of the framework agreement.

When uploading files, start the filename of each supplied file with the requirement number, and then the name of the product. For example: 2.7 Splendid_Terminology_Manager-pricemodel.pdf

a. Have these requirements been met?
Yes/No. Yes is required

b. Attach requested information.

Attachment
Supplier comment allowed

2.8 Reliance on capacity of other companies

The Candidates have in step 1 indicated the name of the companies whose capacity they relied on to meet the requirements to technical and professional capacity as well as for

subcontractor(s).

If the capacity of another company, including the capacity of another group or associate have been invoked, the tenderer **shall** attach a binding agreement, or a written unilateral commitment or other legal commitment (signed by the authorised representative of the invoked entity), demonstrating that the Company **will** have the invoked capacity for the performance of the contract regarding the framework agreement.

A letter of intent or other non-binding declaration of will is not sufficient to prove that the tenderer has the capacity of another.

Please attach the requested information for the tender below.

If applicable, attach the above requested information.   ⓘ

When uploading files, start the filename of each supplied file with the requirement number, and then the name of the company you invoke capacity from. For example: 2.8.Splendid_Solutions-agreement.PDF

Attachment
💬 *Supplier comment allowed*

---

5. 2.2.1 Awarding of Framework agreement: Tender area 2

Award of framework agreement - Tender area 2: Software for openEHR content Creation and Transformation

Karolinska will not evalute submitted prices in section 2.7.b Requirements regard

Delivered prices in section 2.7.b will become ceiling prices in the framework agre

Does the tenderer accept the conditions written in the sentence
Yes/No. Yes is required

6. 3.1 Requirements specification: Tender area 3

3.1 Introduction for tender area 3 Consulting services 3.

This document specifies the overall requirements for the tender area:3: Consulting Services

3.2 Abstract

Karolinska will purchase resource consulting services and for some use cases also in the form of Assignment consulting services.

The supplier commits to providing at least one of the mandatory competence profiles specified below. The supplier can also submit profiles that are optional.

Optional profile consultants will only be procured by Karolinska in case of that Region Stockholms framework agreement for cosulting services can't be used.

The supplier commits a ceiling price for each competence area and relevant competence levels and for these competence profiles, meeting all the requirements outlined for each competence profile in accordance with this appendix.

3.3 Instructions

Each requirement specification has the form of a questionaire which is to be used for responding to questions and requirements.

1. All questions are to be responded to by ticking the 'yes'` or 'no' box.

2. If a requirement has been met, the supplier must describe in which way this has been done when a response is requested.

3. Responses may not be omitted.

4. The responses is to be written in a text field immediately following the stipulated requirement. The size of this field adapts to the length of the respons written. In order to move between the various fields click by using the mouse cursor or use the arrow or tab keys. Click or use the space key in order to tick the boxes.

5. Appendices with explanatory text and illustrations may be submitted as supplementary information, but responses in the various text fields must be sufficient for assessing how the supplier meets the stipuladed requirements.

6. "Shall" indicates an absolut requirement e.g. a mandatory requirement.

7. "Should " indicates a requirement that is requested but not mandatory and will therefore be evaluated as an added value.

8. After this document and the appendices has been filled out, it shall be submitted electronically as appendices together with the tender through the procurement system TendSign.

3.4 Acceptance of the commercial requirements

The supplier shall accept the full commercial terms. The tender must not contain information contrary to the commercial conditions set out below:
— Framework agreement
— Personal Data Processing Agreement including instructions
— Non-disclosure and confidentiality agreements

3.5 Competence levels

The requested competence profiles should were applicable be provided at competence levels 3-5. An overall description of the different competence levels is provided below.

Level 1	Not applicable	
Level 2	Not applicable	
Level 3	Knowledge	High competence. Education equivalent to a bachelor's o or equivalent knowledge acquired through work experie the field.
	Experience	This level is typically achieved after 4-8 years of experien the field. Serves as a role model for other consultants at levels. Has been at competence level 2 for at least 2 year
	Leadership skills	Assumes responsibility for the competence area, can lea small group.
	Independent	Can work independently.
Level 4	Knowledge	High generalist competence or very high expertise in the Education equivalent to a bachelor's degree or equivaler knowledge acquired through work experience in the fielc
	Experience	Has participated in significant assignments across variou: and completed assignments of very high quality. This lev typically achieved after 9-12 years of experience in the fi Has been at competence level 3 for at least 2 years.
	Leadership skills	Assumes primary responsibility for leading a larger grou
	Independent	Works independently.
Level 5	Knowledge	Highest-level competence. Regarded as an expert in the Sweden or internationally.

Experience	Has participated in significant assignments across variou and completed assignments of very high quality. This lev typically achieved after the consultant has been at level least 3 years.
Leadership skills	Has significant experience and expertise in leadership po
Independent	Works independently.

3.6 Requirements regarding competence areas

The Tenderer shall at least has competence within one of the following competence areas below:

1. Clinical Subject Matter Expert
2. Terminology expert
3. OpenEHR forms developer
4. Information modeling expert

3.6.1 Experience regarding area: Clinical Subject Matter Expert

A Clinical Subject Matter Expert (SME) brings extensive clinical knowledge to the IT-project to ensure that healthcare IT solutions meet the needs of healthcare providers and organizations.

Consultant(s**) level 4** or above shall have at least following competence and knowledge:

- Domain Expertise: Clinical SMEs have in-depth knowledge of clinical workflows, healthcare regulations, and best practices.
- Knowlegde in translation of clinical needs.
- Competence in how to convert clinical requirements into IT specifications and ensure the IT solution supports healthcare demands.

a. Indicate if the requirements for area: Clinical Subject Matter expert is applicable

Yes/No

Supplier comment allowed

b. If applicable, Please attach Curriculum Vitae (CV) for offered Consultant(s)

Attachment

Supplier comment allowed

3.6.2 Experience regarding area: Terminology Expert

Consultant(s) level 3 or above shall have at least following competence and knowledge:

- completed Snomed CT implementation course.
- Competence in working with integrating and implementing the use of SNOMED CT in the health data platform
- Knowledge in how clinical documentation can be coded correctly

OR

- Snomed CT Authoring Level 1 Certificate and access to the Swedish authoring-tool.
- Knowledge in working with terminology bindings and mapping of clinical concepts

OR

- Documented Expertise in other terminologies/ontologies and standards in the medical field such as standards for bioinformatics/OMIC-data and DICOM,
- Knowledgde in how to integrate and implement above mentioned standards

---

a. Indicate if the requirements for area: Terminology expert is applicable ⓘ

Yes/No

💬 *Supplier comment allowed*

---

b. Please attach Curriculum Vitae (CV) for offered Consultant(s) ⓘ

Attachment

3.6.3 Experience regarding area: OpenEHR forms developer ⬦

Consultant(s) level 3 or above shall have at least following competence and knowledge:

- Competence in building openEHR forms with low code tools and openEHR form editors.
- Knowledge in building and describing dependencies in an openEHR form as well as in between openEHR forms.

---

a. Indicate if the requirements for area: OpenEHR forms developer is applicable ⓘ

Yes/No

💬 *Supplier comment allowed*

---

b. Please attach Curriculum Vitae (CV) for offered Consultant (s) ⬦

Attachment

💬 *Supplier comment allowed*

3.6.4 Experience regarding area Information modeling Expert

Consultant(s) level 3 or above shall have at least following competence and knowledge:

- Competence in creating openEHR templates and if needed archetypes as well as document the leverage in a format agreed with the customer.

OR

- Competence in information modeling with openEHR
- knowledge and competence in how to translate archetypes into Swedish based on the process defined by openEHR Sweden

OR

Consultant for working with information modeling using HL7 FHIR

- Competence in information modeling using HL7 FHIR
- Competence in working with profiling based on the Customers need and existing guidelines.
- knowledge in publishing FHIR artifacts and be familiar working with Forge and Simplifier or FHIR shorthand and IG Publisher.

---

a. Indicate if the requirements for area: Information modeling Expert is applicable

Yes/No

💬 *Supplier comment allowed*

---

b. Please attach Curriculum Vitae (CV) for offered Consultant(s)

Attachment

💬 *Supplier comment allowed*

3.7 Option: Assignment and resource tenders

Karolinska has opted to procure certain specified competence profiles, as an option, in the event that Region Stockholm, due to a review or other circumstances, does not procure a framework agreement for IT consultancy services. The option is only applicable during the time that Region Stockholm does not have a framework agreement in the area.

The possibility to exercise the option will cease when Region Stockholm has signed a new procured framework agreement for requested consulting services.

Tenderer could **optionally** submit ceiling prices for the following areas if they would like to offer on assignment call offs.

1. Architecture
2. IT security
3. Management and Governance

4. System/Front-end Development
5. Integration/Back-end Development
6. UX-design
7. Testing (Software testing)
8. Quality assurance
9. Business Development and Requirements

All roles in areas above are listed with a description in 6.6.1 Role descriptions

Use sheet "price matrix" in excel document Appendix <mark>X</mark> rate card and submit ceciling price for applicable roles and levels.

*Note that if the tenderer choose to offer roles used in assignments call offs they need to submit **at least one level per role.***

If applicable please attach one CV per role, If tenderer have multiple consultants to offer per role, Attach only CV for the highest level available and not for all levels on one role.

Recomended naming convention: [Company name_ Consultant name_ Role name_Level.pdf]

3.7.1 Role description

Architecture

The contractor shall provide IT consultants in the field of architecture. For architects, this refers to expertise in translating business and user requirements into a realisable structure and investigating what methods and tools should be used for collecting, processing and using data in information and data systems.

The consultant role in the Architecture competency area is responsible for ensuring that the system engineering solution developed is anchored in the requirements for development and operation of both software and hardware on both the client and server side. This consultant role will ensure that the chosen technical solutions result in an implementation of a system that meets the set requirements and that the chosen solutions connect to the choice of system architecture.

The Architecture consultant role also includes responsibility for the overall architecture, defining architectural patterns and modelling rules for analysis and design, development of design and construction guidelines where appropriate. The consultant should have a good knowledge of the systems involved and the relevant development platforms.

The following competency profiles with specific professional competences and main tasks are part of the competence area Architecture and Informatics.

> **Infrastructure architect**
> Consultants in this competency profile have the skills to structure, document and propose the infrastructure that matches the organisation's needs. The infrastructure architect is involved in many IT-related projects but also works on daily maintenance, improvements and designs and optimises the enabling IT infrastructures.

Solution architect

Consultants in this competence profile possess the competence to plan the realisation of IT solutions based on the needs of the business and the conditions of existing IT services in the organisation. The solution architect ensures that the existing functionality is reused and ensures that the government-wide architecture principles and guidelines on standards are followed in the technical architecture.

Systems architect

Consultants in this competence profile have the skills to structure and design software to fulfil the functional and non-functional requirements of the business and the architectural quality requirements of the systems. The system architect usually works at a more detailed level than the solution architect and the role can therefore be seen as a specialisation.

Business Architect

Consultants in this competence profile have the competence to analyse the region's activities from a holistic perspective. The business architect analyses the dependencies and consequences of different development initiatives and ensures that coordination takes place between ongoing and planned development activities in both projects and administration. The enterprise architect also works with long-term plans and strategies for the development of the organisation.

Information and IT-security

The contractor shall provide consultants in the field of Information Security, which includes IT security. The assignments often require a combination of organisational understanding, deep technical IT and cyber security understanding and knowledge of laws and regulations in the area and aim to achieve a balanced level of security in an organisation.

Assignments may include business development, change management, management systems, follow-up, incident investigation, information security exercises, implementation of security concepts at strategic and tactical level.

Assignments may also include IT forensics, penetration testing, log analysis, vulnerability assessments, IT security audits and authorisation control. The following competency profiles with specific professional competences and main tasks are included in the Information and IT Security competence area.

Information security specialist

Consultants in this competence profile have expertise in information security management systems and systematic process-driven work based on established standards in the field, often with a focus on designing or implementing policies and guidelines and other regulations in organisations. It may also involve the development of action plans, instructions and procedures, training and coordinating change. Other types of common tasks may include identifying and assessing risks and vulnerabilities in the organisation as well as monitoring compliance and auditing.

IT-security specialist

Consultants in this competence profile have the competence to work with IT forensics, penetration tests, analyses, vulnerability assessments, IT security audits, business intelligence, access controls, or in various ways work to ensure that information security is integrated into the business, through requirement levels, regulations, compliance and coordination. The IT security specialist's work may include developing relevant IT security requirements, advising on the design and implementation of security solutions and checking that security requirements are met.

Management & Governance

The supplier shall provide IT consultants in the competence area of Management & Governance related to IT. The consultant offered in this area of expertise must have good knowledge of project and management control models and methodological support. The competence profiles also require experience in budget and follow-up work and, where applicable, the ability to lead teams.

The following competence profiles with specific professional competences and main tasks are included in the competence area Management & Governance.

Project Manager / Technical Project Manager

Consultants in this competence profile have the competence to manage a programme or a (sub)project, where a programme may consist of two or more sub-projects. Programmes and projects are both referred to as projects. In the following, the role of project manager/technical project manager is referred to as project manager only.

The project manager is responsible for delivering on a project directive and is responsible for ensuring that the project objectives in the directive are realised. The project manager is responsible for staffing the project, managing the project members and deploying activities. The project manager is often responsible for the organisation of the programme/project.

Depending on the scope of the project, the concrete tasks of the project manager may vary, but in principle the project manager is responsible for the following:

- carry out planning of the project
- develop a communication plan
- establish the project organisation with clear roles and responsibilities,
- ensure that the solution is delivered according to the agreed design,
- ensure that the solution is developed, configured and tested,
- ensure that the necessary training is carried out,
- ensure that the project stays within the set budget

Other related tasks include producing stakeholder analyses, being responsible for risk management, being responsible for financial follow-up, being responsible for reporting

to the steering committee and keeping the project owner informed of the status and any deviations.

In addition to knowledge of the technology involved in the project, the project manager must also have knowledge of different development methods and other working methods in a technical development project, as well as knowledge of information and IT security.

The project manager can also be an actor in a scope smaller than a project, such as being responsible for an activity or a specific delimited assignment.

System development

The contractor shall provide IT consultants in the area of competence System Development. The consultants will work with system development and system integration of existing or new systems. Systems means everything from simple software to complex systems consisting of software and, where appropriate, associated hardware.

The competence area also includes configuration and version management and expertise in the field of middleware. Middleware refers to programs that link or integrate other software such as transaction managers, messaging, web services, and SHS solutions. The following competence profiles with specific professional competences and main tasks are included in the competence area System Development.

Back end developers
The back end developer's work includes system management, development, debugging, documentation, testing and integration of existing or new systems in agile or more traditional methods. The Back end developer is expected to structure and write program code in different java platforms but also have a good knowledge of other programming languages, frameworks, tools, and development environments.

Front end developers
A Front End Developer, is responsible for using their knowledge of programming languages to code user-side applications, including visual elements like menu bars, clickable buttons and the overall layout of websites or web applications. Their duties include communicating with clients to identify their needs, optimizing websites for different formats like desktops and mobile phones and running tests to ensure code strings perform the correct functions. Front developers writes code in front end frameworks like react.js and business logics in C# or other languages

Integration specialist
Consultants within this competence profile possess competences to work on integration issues, including carrying out specifications, development and testing of integration solutions. The integration specialist should also have expertise in developing methodology, tools and processes for integration solutions such as integrating developed systems with other systems, for example in connection with business development, automation and digitalization of services.

The system developer's work includes system management, development, debugging,

documentation, testing and integration of existing or new systems in agile or more traditional methods. The system developer is expected to structure and write program code in the relevant development platforms. Have a good knowledge of programming languages, frameworks, tools, and development environments.

Database engineers

Consultants in this competence profile have expertise in managing databases with responsibility for objects and content. The Database Technician/DBA will work daily on the operation and development of database platforms. The work will consist of upgrading databases, troubleshooting, problem solving, monitoring, performance optimization and proactive work. The work also includes being involved in future solutions and design of database environments.

Test automation engineers

Consultants in this competence profile have the competence to take responsibility for planning and developing test frameworks and/or automated test cases in defined software language. Test automators are responsible for ensuring that the execution of the automated tests fits well into the delivery flow used.

The consultant is responsible for planning for and executing tests with software for automatic test execution of existing IT systems and analyzing, evaluating and reporting test results, outcomes and status.

Scrum Master – Development manager

Consultants in this competence profile have the competence and take responsibility for facilitating the agile elements and ensuring that these are carried out effectively when an agile approach is applied according to the current framework for agile work processes. The Scrum Master works on the continuous development of the agile way of working. The consultant strives for the team to become a high-performing agile team. Ensures that the team's results, status and progress are visible. Represents the team where necessary and ensures that information is disseminated to other teams.

Software testing &quality assurance

The supplier must provide IT consultants in the area of expertise Test. The area refers to work with test methodology and test tools that are used to develop test cases based on requirements, perform tests, evaluate test results and test management of solutions in IT systems and in various business areas. The work may also involve leading a test group. The following competence profiles with specified professional competences and main tasks are included in the competence area Test.

Tester

Consultants in this competency profile have the skills to work closely with the requirements and development teams and follow up on various testing activities. Testers are responsible for analyzing and designing test cases based on business requirements, ensuring that the test environment is configured, performing tests, writing error reports, and detected error symptoms to provide guidance for troubleshooting/correction.
Testers are responsible for conducting retests and regression tests, conducting quality

assessment, communicating with developers for resolution of issues/error reports and reporting to test managers.

Business Development and Requirements

The supplier is expected to provide IT consultants with expertise in the competence area of Business Development, Requirements, and Clinical Subject Matter Experts (SME). This competence area involves work aimed at developing the business or the use of IT. It encompasses activities related to leading and participating in business analysis and requirement analysis following established methodologies, leading and participating in investigations and feasibility studies, developing strategies, and methodological work. The following competence profiles with specific professional skills and primary responsibilities are included in the Business Development, Requirements, and Clinical Subject Matter Experts (SME) area.

Requirements analysts

Consultants in this competence profile have the skills to lead or coordinate the development of requirements for systems, including technical, functional, and non-functional requirements. An important part is the legislative and regulatory requirements that the organization must comply with. The requirements analyst finds out what needs to be done, not how it should be done.

Requirements analysts are responsible for finding and transforming business needs into realizable requirements and need to be able to analyze information flows, workflows (processes), documentation and perhaps even user surveys.

The requirements analyst leads and coordinates the work on system requirements and has the overall responsibility for requirements capture activities (capture, refine, detail, structure, prioritize, manage requirement changes, etc.). The role requires that the consultant communicates cross-functionally, i.e. with several different parts of the organization, in order to ensure that all stakeholders and end users receive the desired benefits.

The requirements analyst is responsible for ensuring that the needs for IT support identified during the business analysis are converted into system requirements. The role also includes leading the work of prioritizing requirements based on various aspects, such as business benefit, complexity, impact, etc. The requirements analyst details the requirements from the first rough draft to being completely described with all the details so that they are testable and measurable.

UX-designer

Consultant with competence in UX-design. Main task will be to ensure that user applications are usable and follow a consistent design.

---

a. Indicate if the requirements for area(s) Assigment call offs is applicable   ⓘ

Yes/No

💬 *Supplier comment allowed*

---

b. Please attach Curriculum Vitae (CV) for offered Consultant(s)   ⓘ

Attachment

💬 *Supplier comment allowed*

3.8 Reliance on capacity of other companies

The Candidates have in step 1 indicated the name of the comanies whose capacity they relied on to meet the requirements to technical and professional capacity as well as for subcontrator(s).

If the capacity of another company, including the capacity of another group or associate have been invoked, the tenderer **shall** attach a binding agreement, or a written unilateral commitment or other legal commitment (signed by the authorised representative of the invoked entity), demonstrating that the Company **will** have the invoked capacity for the performance of the contract regarding the framework agreement.

A letter of intent or other non-binding declaration of will is not sufficient to prove that the tenderer has the capacity of another.

Please attach the requested information for the tender below.

If applicable, attach requested information above.   ⓘ

Attachment

💬 *Supplier comment allowed*

7. 3.1.1. Awarding of Framework agreement: Tender area 3

3.1.1 Award of framework agreement - Tender area Consulting services

Karolinska will accept all tenders that submits valid CV's for the mandatyory roles in section 3.6 in document *6. 3.1 Requirements specification: Tender area 3*

Karolinska will accept the economically most advantagous tenders, on the evaluation basis, best "price" for the optional roles decsribed in section 3.7 in document *6. 3.1 Requirements specification: Tender area 3*

Karolinska will accept upp to 8-10 tenders within tender area 3 Consulting services.

3.1.2 Method of assessment

In the evaluation of the tenders, the following shall be taken into consideration:

1. **Tender amount** =Total price in accordance with the price form, Appendix 3.1.2.1 Rate card.xlsx See also Price below.

3.1.2.1 Price

Please provide the prices requested in appendix 3.1.2.1 rate card.xlsx and attach to the tender.

Prices provided shall include all costs associated with the services requested in the procurement.

Tender amount = Total price of the bid prices submitted.

Delivered prices will become ceiling prices in the framework agreement and will be fixed in two years after the signature of the framework agreement.

> **Attach the completed Appendix 3.1.2.1 Rate Card**
>
> Attachment