

Invitation to pre-procurement demo

Region Östergötland (RÖ) hereby invites suppliers of openEHR platforms and openEHR tools to conduct an online pre-procurement presentation and demo.

Background

RÖ is a Swedish healthcare region that serves approximately 500 000 inhabitants. In addition, RÖ provides other nationwide healthcare related services.

RÖ has now initiated a procurement process for an openEHR platform and openEHR tools. RÖ is interested in two different main areas of use and associated tools for development and maintenance:

- Normal hospital EHR use cases
- Use cases such as patient registries, biobank information, and patient owned data

In 2018 RÖ conducted an openEHR RFI and in 2019 RÖ tested an openEHR platform to see how it fits use cases, organization and workflows. For more background see:

- https://discourse.openehr.org/t/swedish-openehr-platform-procurement-q1-2020/247
- https://openehr.atlassian.net/wiki/spaces/resources/pages/416514052/Procurement+of+openE <u>HR-related+systems+and+services</u> (including documents linked or available as downloads)

RÖ now wants to procure a permanent full-scale openEHR solution and therefore invites suppliers of openEHR platforms and openEHR tools to conduct an online pre-procurement presentation and demo. Other Swedish regions have shown interest in RÖ's procurement process, RÖ thus intends to keep the process as transparent as possible.

Purpose of the presentation and demo session

The purpose with the pre-procurement demo is to give RÖ's procurement team insight into interesting features that could be included as evaluation criteria in the upcoming formal procurement call. There is no obligation to participate in these pre-procurement sessions in order to respond to the upcoming actual procurement call and participation will not affect your later evaluation score. In other words, a fail during this demo is no catastrophe.

Questions to answer before the demo

Provide brief written responses to these questions when applying for a presentation/demo time, and feel free to elaborate more during the presentation. If there is competition for available presentation/demo slots, these written responses will be used as prioritization criteria. Responses to question 4 to 11 will also be openly published after all presentations are done.

- 1. What is the name, e-mail address and telephone number of your contact person for the presentation/demo?
- 2. Is "Skype for Business" OK to use for you, or do you need some other teleconference system, such as Skype or Zoom?



- 3. Have you understood that the first hour with presentation/demo will be recorded and openly published on the internet? (See information below)
- 4. What is the name and address of your company?
- 5. What is the name and intended purpose of the products/tools/platforms you want to present?
- 6. Will you present/demo a product that can be used as an EHR/CDR platform? If yes, briefly answer the following.
 - I. Does the platform:
 - a. support responding to ad-hoc and stored AQL-queries?
 - b. provide archetype/template-based validation of input data?
 - c. support most of openEHR's standardized REST APIs?
 - d. support openEHR "Task planning"?
 - e. support openEHR based decision support like GDL or GDL2? If so, describe?
 - f. support anything like openEHR "Simplified Data Template (SDT)"? If so, describe.
 - II. Do you or your business partners:
 - a. provide 24/7 support for critical issues in production EHR systems if contracted to do so?
 - b. provide different service levels (likely at different price points) to choose from?
 - c. have experience of deploying the these products/platforms to customers providing healthcare to more than 500 000 inhabitants? If so how big are the largest deployments?
 - III. Do you provide any prebuilt products or EHR-modules based on the platform, for instance end user applications for surgery, emergency wards, medications, primary care.
- 7. Will you present/demonstrate tools that can support software developers, informaticians and clinical "super-users" in developing and configuring openEHR-based applications? If yes, please briefly describe if they support ...
 - a. creation of openEHR template based entry forms
 - b. openEHR "Task planning"
 - c. openEHR based decision support like GDL or GDL2
 - d. easy retrieval and storage of assets (archetypes, templates, forms etc.) in some commonly used openly specified version control system (e.g. GIT-based ones) or asset management systems
 - e. multilingual openEHR models and tool-interfaces that can be easily localized to Swedish
- 8. Can applications based on output from tools you intend to present be published as open source, without restrictions on usage? This implies e.g. that generated code, forms, configuration information etc. and exported (possibly in compiled form) runtime components (like form renderers) should be perpetually allowed to be included in open source based systems and in associated, possibly public, versioning systems (like GitHub).
- 9. Are your products (or some of them) open source? If yes, answer the following.
 - a. Describe what open source licence you use.
 - b. Can you or your business partners be contracted for varying support and bug-fixing service levels?
 - c. Can you or your business partners be contracted in order to preform feature extensions to the platform/product that customers want to prioritize?
- 10. Describe regulatory issues:
 - a. Are any of the products, tools or modules you will provide certified (CE labelled) according to EU Medical Device Directive 93/42/EEC or the EU Medical Devices Regulation (MDR)? If yes, please state which product or module that fulfil which regulation.
 - b. Do you have experience of the process to CE label a software as a medical device?



11. Optional: If you want to, please supply existing material or links to more information that you believe may help us understand your products and that can give us hints about useful product features. This can for example be marketing material like product brochures, presentation files, user manuals or demo-films. Also, tell us if you have online demo environments that we can explore. (If demo login information is needed, please remember to supply that too. We will not publish the login information.) Please note that there is no guarantee that we will read or evaluate all such optional material given in this pre-procurement phase....

Additional information that will be distributed before the session

At least one week before your session time the following will be provided in order for you to prepare for the demo:

- An openEHR operational template, at least in ".OPT" format, possibly more formats.
- Medical data samples for 3-4 test patients (in Excel)
- An AQL query
- Further demo instructions

Back-end systems that do not support front-end development may use this data to prepare for database import ahead of the demo.

Presentation and demo session format and content

Each demo is a 2-hour online session via e.g. Skype for Business, on the following format:

- Up to 1 hour demo by the supplier, including
 - Addressing the issues listed below
 - If your system supports it, show how to build a form, how to use the form to enter patient data, and how to use AQL queries to fetch data (further instructions about this will be sent out a week before the demo)
- 15 minutes break
- Up to 45 minutes discussion with questions and answers

The sessions will be recorded. The recording of the first hour of each presentation and demo will be made public on the internet when all suppliers have held their sessions. The purpose is to help other organisations interested in openEHR systems. The recording of the 45 minutes discussions will *not* be made public; they will only be available to RÖ and other Swedish healthcare providers possibly joining this procurement process and agreeing to confidentiality.

During the first hour of the presentation and demo session, please cover the following issues; describe them or demonstrate such capabilities.

1. Infrastructure:

- Supported OS
- Support for cluster configurations and redundancy
- Supported database systems/products (DBMS)
- Limitations on using virtualization (hardware/laaS)
- Recommended hardware requirements and suitable setup for a system serving primary and specialized care for approximately 500 000 inhabitants



2. Security:

- Support for role based authorization. Describe (default/typical) roles
- Support for authentication tickets issued by an Identity Provider (e,g. SAML, OAuth2)
- Support for logging access and change
- Support for authorization of APIs, including options for authorization of APIs (Basic auth, API-key, OAuth2 AccessToken etc.)
- 3. Training. Availability of course or on-line training for:
 - Administrators
 - Technicians
 - Tool users
 - Software developers
 - EHR end users (if you provide modules/products for end users)
- 4. Product documentation, such as:
 - User manuals
 - Installation guides
 - System administration guides
- 5. Management, such as possibility to:
 - Export system configuration between different instances of the installation and how it is done
 - Run multiple instances of the installation on the same network without conflicts, and how it is done
 - Run different versions of the same system simultaneously within the same instance
 - Do soft launches of new versions of software
- 6. Integrations and developer support, such as:
 - Describe support openEHR "Simplified Data Template (SDT)" or similar.
 - Does the product support most of openEHR's standardized REST APIs? (Which ones? Using XML, JSON or both?)
 - Does the product provide client libraries for development of software based on the platform, and if so, in what program languages
 - Does the software product have interfaces or tooling to support import and export of HL7v2 and HL7 FHIR messages
 - Describe if the software product provides programmatic interfaces (APIs) for administrative tasks like user administration or patient administration

During the second part of the session (the 45 minutes that will not be published), please cover at least the following subjects if you did not cover them during the first hour.

- 7. Your currently available licensing and business models, such as:
 - If the number of registered or simultaneous users or patients is limited. If so, what the limit and model usually is.
 - Possible differences in license models for research and statistics versus normal clinical healthcare EHR usage.
 - If you, or business partners you work through, already have or plan to have services or products that are covered by Swedish existing agreements that public Swedish healthcare providers (like RÖ) can use. See for example https://www.avropa.se/ and https://www.avropa.se/ and https://www.sklkommentus.se/, which include things like "IT consulting services" and "software and services".
 - If you provide any prebuilt products or EHR-modules based on the platform, for instance end user applications for surgery, emergency wards, medications, primary care, and also state whether there are usually extra costs for some of these or if they usually are included in the standard offer.



Responding to this invitation

To apply for a presentation and demo time, send an e-mail to Brita Petersson at **brita.petersson@regionostergotland.se** at the latest **February 2nd 2020**. Include the following:

- At least 2 time slots that suit you one preferred and one alternative. Available time slots are listed below.
- Answers to "Questions to answer before the demo" (see above)

The following time slots are available, all in CET (Stockholm time zone):

- February 10th, 8:30-10:30 am
- February 10th, 4:00-6:00 pm
- February 14th, 8:30-10:30 am
- February 14th, 2:00-4:00 pm
- February 17th, 1:00-3:00 pm
- February 17th, 3:30-5:30 pm
- February 19th, 8:30-10:30 am
- February 19th, 2:30-4:30 pm

Contact

If you have any questions, please contact Brita Petersson at brita.petersson@regionostergotland.se