



Market consultation

Kadaster Signing Solution

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1 GENERAL

1.1 Introduction

The Netherlands' Cadastre, the Land Registry and Public Registers Department in short 'Kadaster' wishes to obtain a clear picture of the market offer of solutions and possibilities in the field of 'Signing functionality' by means of this market consultation.

1.2 Background and objectives

With this market consultation, advice is sought from several market parties. The purpose of this market consultation consists of the following aspects:

- determine whether this market consultation will lead to a call for tenders;
- which procurement strategy is most appropriate;
- obtain a (modular) cost indication as a substantiation in a business case.

The results of the market consultation may be incorporated in the tender documents, without being traceable to the participants of the market consultation.

1.3 Client

The client is the "**Kadaster Signing Services**".

Kadaster is looking for an **on-premise signing software solution** which realize electronic signatures based on the following ETSI profiles: PAdES, XAdES, CAdES, and JAdES.

Qualified remote signing services are not within the scope of the required functionality. The "Signature Creation Services" should be possible to be configured in order to connect with the existing contracted Kadaster Qualified Trust Services Providers (QTSP's) and Qualified Timestamps Authority (QTSA's) remote SaaS services.

The signing solution must be able to produce electronic signatures using both the Kadaster eSeal custodian certificate and also a personal signing certificate.

1.4 Kadaster organisation

Kadaster collects data on registered property in the Netherlands, keeps it in public registers and on cadastral maps, and often makes this data available to individuals, businesses, and other stakeholders in society for a fee. Kadaster protects legal certainty.

Our information is available predominantly through online web services, including information on energy labels of houses and underground cables and pipelines. Our main customer groups are civil-law notaries, local authorities, businesses, financial institutions and private individuals.

For further information please referred to the website www.kadaster.nl.

1.5 Preconditions for market consultation

1. This market consultation explicitly does not serve to make a pre-selection of candidates in the context of any follow-up process to be carried out. Nor will the parties involved in the market consultation be excluded in any way from possible participation in a possible follow-up process.
2. By participating in the market survey, market parties do not end up in an advantaged or disadvantaged position at the time of a possible follow-up process.
3. Participants in the market consultation cannot derive any rights from participation in the market consultation or from any information provided during the market consultation. Market parties cannot send an invoice or otherwise claim compensation (monetary or otherwise) for their contribution to the consultation.
4. The information from the market consultation will be used to perfect a business case and possibly to refine the objectives and requirements of a possible follow-up process.
5. Participating market parties agree that information they provide can be processed anonymously in any follow-up process, such as a schedule of requirements to be further elaborated by Kadaster.
6. Information provided in the context of the market consultation may differ from information to be provided in the possible tendering procedure;
7. The input of participating parties will be treated confidentially as much as possible, taking into account the legitimate (business) interests of the parties;
8. Financial input is always kept very confidential and only used for budgeting;
9. Claims regarding the use of information, confidentiality, or requests for reimbursements in connection therewith will not be honoured;
10. The documents submitted by participating parties are considered public documents, free of copyright. If copyrights apply, Kadaster will be indemnified by the participating party(ies), see also section 2.8;
11. Kadaster is in no way bound by the results of the market consultation or obliged to realise and/or tender the project to which the market consultation relates.
12. The answers you give to the questions asked will not be subject to any value judgement by Kadaster. Kadaster reserves the right to:
 - a. to carry out the proposed procurement process in a manner different in form and content from the process that may have been communicated.
 - b. temporarily or permanently suspend this market consultation.
13. By participating in this market consultation, the parties unconditionally agree to the terms and conditions as stated in this document.

1.6 Reading guide

Chapter 2 describes the procedure to be followed in this market consultation. Chapter 3 describes the questions we have for the market parties.

2 THE PROCEDURE TO FOLLOW

2.1 General

The requesting department is:

Land Registry/Procurement & Contract Management

Contact:

Mr. N. Stoker (IT Purchasing Advisor)

Contact via the messaging function on TenderNed.

2.2 Announcement

This market consultation will be published via www.TenderNed.nl.

2.3 Market consultation

This market consultation consists of a questionnaire that can be answered by market parties (chapter 3).

If you have any questions about this market consultation, you can send them to us via TenderNed (see section 2.9). Kadaster will answer these questions and place them anonymously on TenderNed.

If there are additional questions after submitting the written answer, these will be sent to all parties that participated in the market consultation. Kadaster reserves the right to request an oral explanation in response to the submitted answer. If applicable, you will be contacted about this.

2.4 Submission of market consultation data

We ask you to answer in the Dutch language. We also ask you to answer the questions briefly and concisely and not to use "link's" referrals in your answers.

2.5 Communication during the market consultation

During the market consultation, all communication related to this topic will take place via the messaging module in TenderNed.

2.6 Deadline for submission of the reply

We request that you submit the answer at the latest, digitally via TenderNed, according to the schedule as stated in paragraph 2.9.

Method of delivery of the response

Via TenderNed's messaging module.

All documentation may be submitted as a PDF file.

2.7 Conditions for answering

Participation in the market consultation is free of obligation for both participants and Kadaster. Parties (including parties that do not participate in the market consultation) cannot derive any (mutual) obligations or rights towards Kadaster from this market consultation.

No costs can be charged to Kadaster for the answer and the work to be carried out and materials to be provided.

2.8 Confidentiality

In accordance with Article 5.1(1)(c) of the Open Government Act, Kadaster treats all information provided by market parties in the context of this market consultation as confidential, unless the market party itself indicates that (part of) that information can be made public.

2.9 Planning

Activity	Date
Publish Market Consultation	December 9, 2024
Submission of questions about consultation by market parties no later than 14:00	December 24, 2024
Questions from market parties answered	January 10, 2025
Written response of market parties	January 17, 2025

2.10 Formal requirements

It is explicitly not the intention to submit quotations, we urge you to limit yourself to answering the questions asked in Chapter 3.

Please answer briefly and sweetly. Of course, you are not obliged to provide answers and you are also free to skip certain questions. We prefer to receive the contribution to the market consultation/answering the questions in MS Word or Excel format, whereby the order of the questions must be adhered to. Additional and other documentation may be provided as a PDF file. In the letter accompanying the contribution to the market consultation, we would like to receive the following information from the contact person on the side of the market parties, name, position, office address, telephone number and e-mail address.

3 Description of the use cases

Based on the answers given, Kadaster will consider whether it sees added value in conducting individual interviews. When Kadaster sees the added value of this, it selects a number of entrepreneurs to participate. The entrepreneur can see this as an explanation, not as a pre-sorting for a tender! If Kadaster has additional questions in response to the responses received, these will be addressed in the discussions.

Kadaster Signing functional requirements:

3.1 Usecase: Qualified signing with Kadaster custodian eSeal certificate, QES signing.

The Kadaster 'QES' signing functionality is divided into the following parts:

- **'Signature Creation Service'**
 - "Signature Creation Service" implements the following ETSI profiles:
 - PAdES-B-LT /LTA
 - XAdES-B-LT /LTA
 - JAdES-B-LT /LTA
 - CAdES-B-LT /LTA
 - The signing profiles are realized conform ETSI EN 319 142-1
 - This signing service is realized conform ETSI TS 119 432 V1.1.1
 - Each signing-profile is available as an API that Kadaster client business applications can use
 - The communication with the API is secured based on the SSL/TLS protocol
 - Authentication/Authorization for each (different) Kadaster client business-application which will use this service is possible
 - The "Signature Creation Service" uses for the realization of the ETSI profiles also a qualified timestamp signing service (QTSA)
 - Kadaster has already contracted QTSA's remote service. There is also the option to connect with existing Kadaster contracted QTSA remote services, based on configurations

- **"Signing eSeal Service"**

Existing functionality:

Kadaster has already contracted and using QTSP remote SaaS providers of the eSeal Signing Service functionality.

- eSeal Signing Service implements PKCS#1 (hash-signing) qualified signing based on a standard API conform CSC (<https://cloudsignatureconsortium.org/>) specifications
- The signing result is a qualified electronic signature (QES) conform ETSI TS 119 432 specifications
- Performance of each eSeal (hash-signing) request has an average of 500 milliseconds

Functionality required:

- The communication between 'Signature Creation Service' with the 'eSeal Signing Service' is secured based on SSL/TLS protocol using the specifications of each QTSP service provider
- There is the option to connect from the "Signature Creation Service" with existing Kadaster contracted QTSP "Signing eSeal services", based on configurations
- The signing solution using Kadaster signing certificate does not require human actions during normal operations

- Each qualified signing (based on Kadaster eSeal certificate) and the timestamp-signing (based on QTSA certificate) are verified on-the-fly against the ETSI verify-profiles
- A log/audit trail is generated and archived as proof for signing operations
- Signing operations are authorized and counted for each Kadaster client- business-application. This is mandatory for internal Kadaster services auditing
- Performance of signature creation ETSI profiles has an average of 3 seconds. This includes minimum at least one timestamp signing as well
- The number of signing requests per second is between 2-7
- The signing solution is highly available, in case of failure, load balancer functionality is included
- The signing solution is scalable, if the count of the requests increases additional signing service instances can be added as needed
- The “Signing-creation-service” can be installed on-premise in the Kadaster private-cloud environment

3.2 Usecase: Verification of signed XML, PDF, JSON, Binary-data

Verification of ETSI profiles:

- PAdES-B-LT /LTA
- XAdES-B-LT /LTA
- JAdES-B-LT /LTA
- CAdES-B-LT /LTA
- Certificate verification is based on CRL and OSCP online requests
- Monitor validity of the certificates
- Each verification transaction response is signed using an RSA private key 2048 key-length
- A log/audit trail is generated and archived as proof of verification signing operations
- Each verification-profile is available as an API that Kadaster client business applications
- The communication with this service is secured based on the SSL/TLS protocol
- Authentication/Authorization for each different Kadaster client business-applications is possible
- Verification services can be installed on-premise in Kadaster private-cloud environment
- Performance of verification signing requests has an average of at most 1.5 seconds
- The number of verification signing requests per second is at least 5
- Verification services are highly available, in case of failure, load balancer functionality is possible
- Verification services are scalable, if the count of the requests increases additional signing service instances can be added as needed

3.3 Usecase: Local signing with a personal certificate with a web application

The signing is QES (qualified) or AES (advanced)

The web application provides the following functionality:

- Signing with personal qualified certificate on user USB token
- Remote signing with a personal qualified certificate. Remote signing is realized conform CSC standards (<https://cloudsignatureconsortium.org/resources/>) through a SaaS remote service (QTSP)
- The option to connect based on configuration from the signing web application with different QTSP providers during the remote signing
- Ability to sign a PDF according to the ETSI PAdES-B-LT /LTA profiles
- Ability to sign an XML according to the ETSI XAdES-B-LT /LTA profiles. The XML is displayed on the web-page in a user-friendly format. It is possible to structure the XML in a readable format eventually based on HTML /XSLT transformation
- Ability to verify each signing transaction based on the ETSI verification profiles
- Usage of a QTSA in realization of the signing ETSI profiles

- Option to connect (based on configuration) with different QTSAs which are already contracted by Kadaster
- Multiple users and signing-workflow realization in the web application
- The users can sign multiple times on the same PDF document
- “Batch-signing” is possible, more documents (PDF, XML) can be signed in one signing-transaction
- “Evidence-report” pdf signed document as eIDAS proof of “local signing” transactions
- Each signing – transaction (based on a certain ETSI profile) is verified as described in usecase 1.2
- The web-signing application can be installed on-premise in the Kadaster private-cloud environment
- The login in the web-applicatie supports different authentication mechanism OAuth2, OpenID SAML, allowing users to authenticate using also their existing Kadaster-accounts
- The web-signing application is available as an API that Kadaster client business applications can use in the Kadaster private-cloud environment

4 Questions to the market parties

4.1 General:

1. The above requirements have been added to the Excel file. Could you please fill in columns D, E, and F.
2. Describe your solution in a maximum of 4 A4 pages
3. Describe your support model in a maximum of 2 pages A4

4.2 License (cost)

4. What licensing models do you use and what are the advantages and disadvantages of this?
5. In order to be able to determine which procurement strategy best suits the purchase of Signing Solution from the current market, we ask for pricing. Please provide all specifications in a modular way, such as the payment model, support, one-time configuration, training users, specialists, etc. This is very important for Kadaster. Kadaster will treat the information you provide in this regard with the utmost confidentiality.

4.3 Remainder

6. What is the timeline for implementation (from purchase to production)? And what is the global route?
7. Can you give an example of a roadmap and indicate how functionalities are implemented/integrated?
8. Which topics are important but not addressed? Indicate for each subject what the importance is and how Kadaster can deal with it in a possible tender.
9. Can you provide a reference that is in line with the previous functional and technical requirements and the question posed by Kadaster?