



MARKET CONSULTATION

SMART DESIGN SOLUTION

A digital, integrated engineering and work preparation platform that standardizes and accelerates the creation of high-quality low voltage, medium voltage and gas underground network designs, and enables future automation such as revision processing.

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1. GENERAL

1.1 Why a market consultation?

Before (potentially) publishing a tender, we start with a market consultation.

The purpose of this market consultation is:

- **Gathering information**
We want to gather information on available products, services, technologies and/or market practices. This will help us develop our procurement strategy and formulate clear specifications and requirements.
- **Gaining insight into the market**
This allows us to better analyse the market structure, identify potential suppliers and assess whether there is sufficient competition and capacity in the market.
- **Receiving feedback**
From the market on possible solutions, risks, costs and other relevant aspects. This helps us refine our project plan and identify potential challenges.
- **Promote dialogue and cooperation between Enexis and the market**
It enables both parties to communicate openly, ask questions and discuss possible solutions. This leads to a better understanding of each other's needs and finding innovative solutions.

In short: through this market consultation, we hope to maximise the value and effectiveness of our anticipated tender.

1.2 Our Communication Platform: TenderNed

To make the procedure as efficient as possible, information exchange from and about this market consultation will take place via TenderNed platform (<https://www.tenderned.nl/cms/nl>) (hereinafter referred to as TenderNed).

If you have any questions about the operation of the platform, please use the platform's on-line help. You can also contact TenderNed's helpdesk at 0800-836 33 76, Calling from abroad? +31 70 379 88 99 or at [Hulp bij het gebruik van TenderNed | TenderNed](#).

2. DESCRIPTION OF THE SITUATION

2.1 Background

Enexis is seeking a Smart Design Solution (SDS): a digital, integrated engineering and work preparation platform that standardizes and accelerates the creation of high-quality low voltage, medium voltage and gas underground network designs, and enables future automation such as revision processing. The solution should help internal and external users make optimal design decisions using multiple internal and external data sources, streamline the design-to-execution chain, and support our large-scale infrastructure build-out.

2.2 Current situation

How We Work Today: End-to-End Engineering & Preparation Process (As-Is)

Initial Desk Study (project intake & risk identification)

Every project starts with a desk study with a high level design, in which the engineer analyses the assignment and identifies potential risks.

This includes checking for:

- asbestos and chromium-6;
- possible land acquisition:
- contaminated or constrained soil conditions:
- required environmental or situational assessments:
- underground & aboveground infrastructure:
- safety-related elements such as secondary protection;
- work near high-voltage or medium-voltage substations;
- and activities on third-party sites.

The engineer also drafts:

- a short description of the intended work, and
- an initial Health & Safety plan.

To perform this study, engineers consult a combination of internal technical data sources, geospatial information, project records, and publicly available environmental and land-ownership information.

Identifying Permit Authorities

Once the desk study is complete, the engineer determines which authorities must grant permits or exemptions.

This is done by consulting national and local digital permitting portals, as well as regional environmental or planning information platforms.

Preliminary Design (PD)

The engineer then prepares a Preliminary Design, using widely adopted CAD and GIS design tools (the specific toolset may vary per region).

To create the PD, the engineer uses among others:

- Internal network information (current asset layout and condition),
- Project portfolio information (coordination with other ongoing internal and external work),
- Visual and geospatial imagery (satellite, aerial, and street-level images),
- Network capacity and engineering guidelines, and
- Property and land-use information from public or semi-public data sources.

Occasionally, external design information from municipalities, developers, or other third parties is incorporated into the draft.

Detailed Project Drawing & Digital Documentation

After completing the PD, a technical support engineer further develops it into a detailed project drawing, which is stored in a structured digital project folder.

This folder contains the complete project documentation, including designs, assessments, agreements, and safety documents.

If strategic materials must be procured early, they are reserved or requested through our internal material management processes.

Site Walk-Down (Field Inspection)

For most projects, a **physical site inspection** is organised with:

- the contractor,
- local authorities, and
- Enexis representatives.

During this visit, the parties:

- verify the findings of the digital desk study in the physical environment,
- confirm or refine the preliminary design, and
- discuss execution, safety, environmental considerations, and legal constraints.

The outcomes are recorded in a **field inspection report**, which becomes part of the digital project folder.

Afterwards, the engineer prepares a **project budget** following our standard estimating and approval procedures.

Final Design (FD), Permits & Materials

Following the site inspection, the technical support engineer updates the drawing to create the **Final Design (FD)** and uploads it to the digital project folder.

Next steps include:

- Submitting permit applications via the formal permitting channels, usually executed by a dedicated permit coordinator,
- Ordering standard materials through the internal materials process, and
- Preparing the required future-state network schematics and work packages, which are entered into our internal GIS asset and network data environment.

Execution & As-Built Processing

The project moves into **execution**, typically in cooperation with an external contractor.

After construction, the project enters the **administrative closing phase**:

- The contractor supplies as-built information,
- A data specialist validates and processes this information into the official network registration,
- The updated network model reflects the actual situation after construction,
- The financial settlement takes place.

What Vendors Should Understand

- We work with structured, repeatable engineering steps: Digital desk study → preliminary design → site inspection → final design → work preparation → execution → as-built → administrative completion.
- In the current situation, the IT-tooling barely supports building further on information and data along the engineering steps as mentioned above.
- We rely on many data sources—internal technical data, geographic information, environmental data, land-ownership information, and project records.
- We avoid single-system dependency: the process is supported by a mix of data and tools, not by one platform.

- Clear roles exist: e.g. engineer, technical support engineer, permit coordinator, executor, contractor, and data specialist.
- Collaboration with contractors and authorities is central, especially during the site inspection and permitting phases.
- Digital project dossiers ensure consistent documentation and traceability throughout the lifecycle.

2.3 Desired situation

A Unified Digital Core for Engineering & Work Preparation

Enexis aims to introduce the Smart Design Solution (SDS) as the central digital platform for all engineering and preparation activities. The goal is to professionalise, standardise, and accelerate the engineering process so the organisation can scale up efficiently to meet a rapidly growing construction demand.

SDS will increase productivity in execution by raising the quality of engineering, improving collaboration and communication with external partners and reducing rework by building on existing information.

In the desired situation, SDS becomes a key enabler of Enexis' engineering vision and directly contributes to the strategic objective of building faster, safer, and more predictably. As more work is being outsourced to contractors, they should have the possibility to gain access to SDS, if approved by Enexis.

End-to-End Impact Across the Entire Delivery Chain

Although SDS focuses on engineering and preparation, the intended impact spans the full value chain:

- Reliable, standardised design packages for execution teams
- Higher first-time-right performance, reducing rework in the execution phase
- Clear, consistent communication with partners and suppliers
- Fast, accurate and automated subsequent processes, including material orders, permit applications and revision, using the design as its basis

In the future state, the design created in SDS becomes the single source of truth reused throughout planning, permitting, materials, execution, and revision—eliminating duplication and inconsistencies. Although SDS is not intended as an everything-in-one platform, it is envisioned to have far-reaching integrations with adjacent engineering and execution systems such as project management and ERP systems.

Designed for Both Enexis and Partners in the Value Chain

A significant portion of engineering work is (and will continue to be) performed by partners in the value chain. The new solution will be a product aligned with sector standards. It will not be a custom-built Enexis product, but a solution suitable for any party that wants to perform engineering and work preparation within this domain.

In the desired situation:

- Contractors can use the same tooling as Enexis engineers.
- Contractors participate in the development of functional requirements, ensuring the tooling fits their workflows.
- Contractors remain free to choose whether they use the tool, but SDS offers clear advantages.

What the SDS Will Enable Functionally

Route, Location & Asset Determination

SDS can be used to explore potential project locations by consulting a broad range of map layers, providing insights that support the digital desk study.

SDS will assist in determining optimal routes for low voltage, medium voltage and gas, station locations, and asset choices—including reuse of existing asset locations—based on a large set of internal (GIS) and external data sources and configurable preference settings.

It will offer data-driven proposals, while allowing users to adjust them to specific project needs.

Modern Design & Drawing Capabilities

Users will be able to:

- Import project plans in GIS formats,
- create and modify designs intuitively supported by automatic design validations,

- use predefined, modular asset “building blocks”,
- generate detailed drawings and plans, and
- work collaboratively and communicate within the same environment.
- All system-generated proposals remain fully editable.

Aligning with Information Model Standards in the Sector

SDS aligns with the sector’s strategy to work as much as possible with information model standards. It supports widely adopted standards such as NLCS++, as well as other developments initiated in the sector by parties such as Taskforce Elektra and TNO IXCESS, enabling:

- continuous enrichment of the design throughout the process, preventing rework along the value chain,
 - reuse of design information without rework,
 - automatic generation of artefacts such as permit inputs, material lists, and financial budgets,
 - the final design becoming the direct basis for automated revision processing.
- This ensures consistent information flow from initial assignment to final as-built state.

In Summary — What Enexis Is Looking For

Enexis is seeking a future-proof, data-driven, collaborative engineering platform that:

- standardises and elevates the quality of all engineering and preparation work,
- enables faster, safer, and more predictable project execution,
- supports both internal teams and external contractors,
- integrates seamlessly with existing IT and processes,
- eliminates rework by ensuring one coherent information model across the entire chain,
- and forms the digital backbone for large-scale grid expansion.

SDS is not just a tool—it is the **core platform** that will transform how Enexis and its partners design, prepare, and deliver infrastructure projects.

3. QUESTIONS ENEXIS

As an outcome of the consultation, responses are requested to as many of the questions below as possible. We ask you to provide good reasons for your answers, but to limit the answers to 5 pages in order to make them easier to process. If you include annexes, please describe as much as possible in concrete terms which passages of the annexes you refer to and why.

In your written response, in addition to answering the questions, we would like to receive the name and brief description of your company.

Questions to the suppliers:

- 1. To what extent are your current products and/or services able to support the intended future-state scenario?**

Please clearly indicate which requirements can already be met and which cannot (yet), including any relevant constraints or dependencies.

- 2. For any identified gaps between the current capabilities and the desired future state, how would you propose collaborating with Enexis to close these gaps?**

Please outline your proposed approach, including delivery model, required joint efforts, and realistic timelines.

- 3. Based on your knowledge of the market in which Enexis operates, to what extent do you agree with the proposed vision and direction?**

Please provide your perspective on its feasibility and highlight any adjustments or alternative considerations you would recommend, we appreciate critical feedback.

- 4. What would you require from Enexis to successfully implement, tailor, and further develop this tooling in order to maximize its value?**

Please specify the necessary organizational, technical, governance, and collaboration prerequisites, as well as any assumptions regarding roles, responsibilities, data availability, integration capabilities, and change management support.

4. PROCEDURE MARKET CONSULTATION

4.1 Planning

Step	Topic	Dates
1	Publication Market Consultation and invitation of the suppliers	05-03-2026
2	Deadline for submission of questions following consultation paper	13-03-2026
3	Publication Memorandum of Information	18-03-2026
4	Deadline for submission of written response to consultation paper	27-03-2026

4.2 The process

Asking questions

There is an opportunity to request further information regarding this market consultation (up to the date specified in the schedule) by submitting questions via TenderNed

You may also submit an individual question, for example if in your opinion it contains information the disclosure of which could lead to (economic) damage. In that case, you must provide a justification explaining why disclosure would be harmful. We will review this justification and may, on that basis, decide to answer the question individually. If no justification is provided, or if we consider the justification to be insufficient, your request not to publish the question and answer will be rejected. You will then be given the choice either to have the question answered publicly or to withdraw it.

The (anonymised) questions and answers arising from this market consultation will be published on TenderNed.

Responses to the market consultation paper

You can submit your response to this market consultation via TenderNed.

It is also possible that we will schedule an appointment with parties based on the responses we have received.

4.3 Follow-up

The results of this market consultation will be taken into account in determining the final strategy and, where necessary or possible, in drafting the tender documents. If Enexis decides to launch a tender, we will prepare an anonymised summary of the responses received in this market consultation. We will publish this together with the remaining tender documents.

4.4 Legal aspects

1. This consultation is not a call for competition in any (European) tender, nor does it seek to achieve (pre)selection of (market) parties.
2. Parties are free to participate or not in the market consultation. Participating does not give the party concerned a better or worse position compared to a party not participating.
3. The information described in this document is non-binding and preliminary.
4. With regard to information that can be traced to an individual participant in the consultation, Enexis shall observe confidentiality.
5. Enexis shall ensure that a level playing field is guaranteed. No information will be shared on the basis of which one or a few parties could gain a relevant knowledge advantage with regard to the tender. Enexis will include all relevant information relating to the tender in the tender documents. If necessary, this information will first be anonymised.
6. The participant in the consultation agrees that the information not covered by confidentiality as referred to under point 4 may be used and disclosed in the context of a European Tender to be held (or possibly to be held).
7. Costs incurred by you for this market consultation will not be reimbursed.

By participating in this market consultation, you agree to the above legal conditions and what is further described in this consultation document