

**Market consultation**  
**collaboration platform Asset Lifecycle Management**

**Note of information 2**

| <b>Question #</b> | <b>Page</b> | <b>Chapter/Appendix</b>             | <b>Question</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>Answer</b>                                                                                                                                                   |
|-------------------|-------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>107</b>        | 8           | 3.2.3                               | Under chapter 3.2.3 you mention that "Gasunie kindly requests that answers are well-reasoned and explained." However, in the questionnaire, You say "Please answer for each of the following functions (see also Appendix 4) if your software can fulfill the functions. Answer with Yes, No, or Partly". Do you want these columns to be explained, or do you want a "Yes/No/Partly" only?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Only "yes", "no" and "partly". An explanation can be given during the demonstrations.                                                                           |
| <b>108</b>        |             |                                     | What formats do you generally use for exported 3D models? For example .rvm, .ifc, .las or others.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Native CAD and IFC.                                                                                                                                             |
| <b>109</b>        |             |                                     | What internal/external systems would you like to integrate with (except SAP, Intergraph/Hexagon GIS and Esri)?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | The asset registry applications (see Market consultation - Appendix 3 - Glossary).                                                                              |
| <b>110</b>        |             |                                     | For question 11: "Can you provide some references users/companies for your proposed software?". Are you looking at getting the contact information of people using the software. Or do you wish a more detailed overview of a particular use case?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | We would like to see what companies use your software and optional for what business process. Contact details are welcome but not mandatory.                    |
| <b>111</b>        |             |                                     | Do you have any sample 3D/2D/point cloud/GIS, 360 images that may be used for the demonstration? Ideally large datasets.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | When we have received the responses we will look into this and decide if and how we will approach this.                                                         |
| <b>112</b>        |             | Workflow                            | Could you describe other teams and workflows that would leverage the Collaboration Platform besides the daily users of the Workflow feature?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | These will predominantly be user groups that want to check data in regard to assets, with a focus on auditing, contracting, finance and other supporting roles. |
| <b>113</b>        |             | Note of information: Search feature | It was mentioned in the previous note of information to explain how AI can be used in the context of the collaboration platform. One use identified is for example in the search function, having an AI agent that performs more advanced operations (beyond simple search) like parsing structured and unstructured data (e.g. equipment design parameters) or having natural language querying and incorporating that in other EPC/O&M workflows. Would this be something interesting to Gasunie?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | If AI can help in reaching the desired goal we are open for this. But AI in itself is not the goal.                                                             |
| <b>114</b>        |             | Note of information: OT data        | <p>It was mentioned in the previous note of information to provide arguments on why operational data should be part of collaboration platform.</p> <p>What we see in the industry is that companies have a multitude of data sources (IT, OT, Engineering data) disintegrated, causing subject matter experts to spend a lot of time manually searching and cleaning that data. This affects productivity, decision quality and time that should be contributed towards assets availability and reliability, workforce productivity and collaboration across teams, among others. Therefore, the goal for a collaboration platform should be to enable access to all of this data (IT, OT &amp; ET) in a simple way. Facilitating collaboration will give:</p> <ul style="list-style-type: none"> <li>• Faster access to information such as work orders, P&amp;IDs, technical documents, time series, and 3D models while in-field.</li> <li>• Greater efficiency to plan and execute workflow tasks and eliminate paper-based checklists.</li> <li>• Reduced reliance on multiple detailed applications and source systems to improve the efficiency of completing operator rounds.</li> <li>• Optimized time spent looking for equipment in the field.</li> <li>• Increased quality in preparation, planning and reporting of maintenance tasks.</li> <li>• Reduction of user licenses. Some traditional systems may have a limitation on the number of user licenses. With all data in the collaboration platform engineers will be able to leverage support and realize actions related to this data without needing to have access to the entirety of Gasunie's license ecosystem.</li> </ul> | Thank you for this elaboration.                                                                                                                                 |
| <b>115</b>        |             | OT data                             | Regarding OT data, which solutions are you currently using for storing, contextualizing and exploring operational data?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Several tools are used, which end up in a data warehouse (i.e. Azure databases), which then are accessed through BI tooling (PowerBI).                          |

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| 116 | 7     | 2.5 Collaboration Platform | How do you envision the future of project execution tracking within the collaboration platform? Should it be part of the platform or maybe this data should come from another solution? Are there specific features or capabilities you expect to be critical for real-time project updates and synchronization with asset data?                                                       | Some aspects of project execution will not be fulfilled by the collaboration platform (e.g. finance, recourse planning, etc.). Because of this, the possibility to integrate with other solutions is important.                                                                                                                                                                                                                     |
| 117 | 7     | 2.5 Collaboration Platform | How do you currently handle the commissioning process and reporting work of Gasunie inspectors who sign off subcontractor work reported as executed? Do you foresee this process being tracked and validated within a collaboration platform?                                                                                                                                          | Commissioning is an important part of the asset lifecycle. Commissioning itself will not be executed by the collaboration platform. However, commissioning cannot be executed without data from the collaboration platform. Also, the results of commissioning should be able to access from the collaboration platform. So, we think a integration between the commissioning solution and the collaboration platform is important. |
| 118 | 6     | 2.4 Current Situation      | Is your asset investment platform currently integrated with other asset management-related systems or is meant to be integrated in near future? How do you see relationship between collaboration platform and asset investment platform in the future?                                                                                                                                | Yes, there is a connection between the asset investment platform and the asset management systems (SAP). This extent of this connection is being investigated at the moment.                                                                                                                                                                                                                                                        |
| 119 | 7     | 2.5 Collaboration Platform | How do you foresee managing access for external users (e.g., contractors or partners) involved in executing investments ordered by Gasunie? What are your expectations regarding access control, data security, and collaboration within the platform?                                                                                                                                 | We're working on this and foresee the following: external parties can access Gasunie by adding their credentials to the Gasunie Active Directory through a portal (centralized). Role based, only if necessary. Data security: ISO27001.                                                                                                                                                                                            |
| 120 | 7     | 2.5 Collaboration Platform | When it comes to ideas for new assets, do you envision these ideas being created directly within the collaboration platform, or would they be populated via integration with other systems? If other systems are involved, what are those systems, and how do you see them interacting with the platform (considering the idea progressing into design/realization or being rejected)? | Other systems. What systems, if known, and how they will interact will be described in the European tender.                                                                                                                                                                                                                                                                                                                         |
| 121 |       | Answer to question 82      | We do you mean what the expected lifespan of the collaboration platform will be? What is Gasunie's vision how the collaboration platform wil evolve, progress with technology? And how will it remain maintainable in years to come?                                                                                                                                                   | This needs to be determined.                                                                                                                                                                                                                                                                                                                                                                                                        |
| 122 | 4     | 2,2                        | Would it be acceptable if the solution is an integration of a combination of applications, where all relevant information is retrievable (through interfaces between these applications) in 1/2/3 clicks or should all relevant information be presented in the (one) collaboration platform?                                                                                          | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 123 | 4     | Section 2.3                | "Relevant asset data is always up-to-date and accessible, also for partners, unless...". Can you explain what is meant with ",unless..."?                                                                                                                                                                                                                                              | All data is open and available, unless there are reasons not to do so.                                                                                                                                                                                                                                                                                                                                                              |
| 124 | 6     | Section 2.4                | Can you give an indication of the numbers of assets involved (current and historical) and the degree of change?                                                                                                                                                                                                                                                                        | Order of magnitude: X00.000                                                                                                                                                                                                                                                                                                                                                                                                         |
| 125 | 11    | Appendix 3                 | To what extend do you consider the current Asset registry applications (Hexagon Intergraph G/Technology solution, SAP, Meridian-based application and Document Management application) suitable for their function in a future situation where a collaboration platform is implemented?                                                                                                | The collaboration platform has the possibility to take over some functions from the existing asset registry applications, but that has to be determined. If the collaboration platform can take over some functions from the existing asset registry applications, it will be an opportunity.                                                                                                                                       |
| 126 | 13-17 | Appendix 4                 | Can you give an indication of the numbers of object-types and Exchange Information Requests, involved (current and historical) and the degree of change?                                                                                                                                                                                                                               | This is not possible. The way of working with EIRs is developing as we speak. So at this moment we don't have enough experience to give representative numbers). Regarding OTL, we're also developing this. However, if we look to the current predecessor of the OTL (the Gasunie data model), the order of magnitude for objects is X00.                                                                                          |
| 127 | 13-17 | Appendix 4                 | Both Integration functionality and functionality that requires a UI (e.g. Viewer, 3D Visualization) is described. Is it correct that all asset data should be accessible to partners by both integration (e.g. API) and a UI?                                                                                                                                                          | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 128 | 14    | Appendix 4                 | Does the function Search of the collaboration platform also include the ability to search by geographic criteria (e.g. assets located within a specific area)?                                                                                                                                                                                                                         | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                 |

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| 129 | 4 | Section 2.3                             | Qua IT-landschap en visie in algemene zin, heeft de Gasunie een specifieke voorkeur voor best-of-breed oplossingen of juist niet?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Yes, best of breed                                                                                                                                                                                                                                                                                                                                                                                      |
| 130 | 7 | Section 2.5                             | Om hoeveel assets gaat het bij de Gasunie? Kennen deze assets meerde gelaagdheid/hiërarchie? Zonder in detail te treden, wat is wenselijk dat er qua informatie wordt vastgelegd en beheerd? Worden bijvoorbeeld ook (externe) monteurs/installateurs (middels werkorders) aangestuurd?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Order of Magnitude X00.000. The assets do have a hierarchy. Within Gasunie, we do work with work orders, however, these will not be done in the collaboration platform (as there is already a system in place for this). We do envision an integration between the work order system and the collaboration platform, which would allow easy information retrieval necessary related to the work orders. |
| 131 | 6 | Section 2.4                             | Aanname: De Gasunie maakt gebruik van een project administratie applicatie voor de vastlegging en controle van kosten en opbrengsten voor specifieke projecten in een aantal asset lifecycle fases (idea, design, supply chain, realization). Vraag: Hoe lang duren deze projecten en zijn hier voorbeelden van? In hoeverre blijven assets (na oplevering, in fase Operate & Maintain) onderdeel van het 'project domein' of in hoeverre gaat dit over een 'service domein'?<br>- Op welke onderdelen/KPI's stuurt Gasunie tijdens een project<br>- Wordt vanuit deze projecten ook de productie aangestuurd? Oftewel, produceert Gasunie zelf onderdelen voor Assets of worden deze ingekocht bij leveranciers? Ziet Gasunie dit ook als project gestuurde productie? | A project will take between 1 and 3 years. Project information will be archived and relevant asset information will be passed to Operate & Maintain. Gasunie does not produce any of the products themselves.                                                                                                                                                                                           |
| 132 | 5 | Section 2.4                             | Hoe gaat Gasunie nu om met stakeholder management? Is dat op een manier zoals ze dat ook in te toekomst willen (blijven) doen, of loopt Gasunie daarin aan tegen de (technische) beperkingen van de huidige systemen?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | In general: Gasunie is turning to building teams for engineers and contractors for collaboration regarding asset realization. The collaboration platform should address and lighten the technical limitations for this collaboration.                                                                                                                                                                   |
| 133 | 4 | Section 2.3                             | In hoeverre zijn ontwikkelingen rondom AI van belang voor Gasunie? En in hoeverre wegen deze mee in de uiteindelijke keuze voor een partner? In hoeverre moet de toekomstige oplossing/platform functies en mogelijkheden bieden of vooruitlopen op het gebied van AI?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | If AI can help in reaching the desired goal we are open for this. But AI in itself is not the goal.                                                                                                                                                                                                                                                                                                     |
| 134 | 4 | Section 2.3                             | In hoeverre is het voldoende aan (Europese) wetgeving rondom duurzaamheid (ESG) van belang in de keuze voor een software/platform oplossing als ook in de keuze voor een partner met kennis van zaken?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ESG is important for Gasunie and in the European tender we expect that this will play a part. It has to be decided in what way. Please visit this site for more information: <a href="https://www.gasunie.nl/en/organisation/corporate-social-">https://www.gasunie.nl/en/organisation/corporate-social-</a>                                                                                            |
| 135 | 4 | Section 2.3                             | Heeft Gasunie een voorkeur voor Cloud of On-prem oplossingen?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Cloud                                                                                                                                                                                                                                                                                                                                                                                                   |
| 136 | 7 | Section 2.5                             | Wat is de reden dat operationele systemen (zoals SCADA) buiten de scope zijn gelaten?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | First, we need a solid foundation before we are able to connect operational data; and we consider static asset data as the fundamental basics.                                                                                                                                                                                                                                                          |
| 137 | 7 | Section 2.5 (row 7)                     | Wat wordt bedoeld met 'template' in deze zin: "Gasunie develops the template and platform in order to collaborate. The collaboration platform supports this template.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | It means that we define how the data should be structured and what data is necessary. We will do this with the help of an OTL and EIR.                                                                                                                                                                                                                                                                  |
| 138 | 9 | Section 3.3                             | Aanpak en tijdslijnen: welke diepgang wordt er van de demo verwacht? Wanneer wij de tijdslijnen bekijken, wordt op 8-10 bekend gemaakt wie de demonstraties mag gaan geven, welke plaats gaan vinden in de week van 21-25 oktober. Onze ervaring is, dat er vaak meer dan 1,5 week voorbereidingstijd noodzakelijk is om te komen tot een klant specifieke en hoge kwaliteit demo.                                                                                                                                                                                                                                                                                                                                                                                      | We understand that a demo in the proposed window could compromise the quality of the demo. But due to internal time constraints we will hold on to the 1.5 week period. However, if the window is problematic for more suppliers in a way that the goal of the demo is not met, we will reconsider our approach.                                                                                        |
| 139 |   |                                         | As a part of the markt consultation we would like to arrange a day at Gasunie, to do a better exploration and understanding of what is needed and which software solutions will be applicable. If you agree to this please contact xxxxxxxx                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Thank you for the invitation. But we will adhere to the consultation guidelines and therefore cannot accept such invites.                                                                                                                                                                                                                                                                               |
| 140 |   | Appendix 4 - 12. Concurrent Engineering | Is it the objective that all design stakeholders must collaborate in the Gasunie environment or should the system allow design stakeholders to work in their own environment with automatic but controlled (approvals) data transfer and complying with your requirements like "Changes are visible to others".                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Yes, the latter                                                                                                                                                                                                                                                                                                                                                                                         |
| 141 |   | Appendix 4 - 12. Concurrent Engineering | Is a system important for Gasunie that can do both of the above in order to align collaboration with the needs and requirements and/or any contractual obligations of all stakeholders?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | See above. At the moment it's not a requirement that the system must support both ways of working.                                                                                                                                                                                                                                                                                                      |

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| 142 |    | Appendix 4 - 12. Concurrent Engineering | Is it important for Gasunie to demonstrate that our concurrent engineering capabilities are also 19650 compliant (and not just the CDE environment)                                                                                                                                                                                                        | Yes                                                                                                                                                                                                                                                                                                            |
| 143 |    | Appendix 4 - 7. Validation              | In the document we find no requirements regarding design coordination. What is the importance for Gasunie that during all phases (Idea, design, supply chain, realization) design problems (for example clash detections) are automatically detected and can be solved with a workflow in order to exclude risks during implementation?                    | See compare function.                                                                                                                                                                                                                                                                                          |
| 144 |    | Appendix 4 - 7. Validation              | What is the importance of coordination within the system itself with integrated capabilities?                                                                                                                                                                                                                                                              | The question is not clear for us.                                                                                                                                                                                                                                                                              |
| 145 |    | Appendix 4 - 7. Validation              | What is the importance that Gasunie, as client, also has the opportunity to have insight into this at a high level?                                                                                                                                                                                                                                        | It's not clear to us what you mean with "high level".                                                                                                                                                                                                                                                          |
| 146 |    | Appendix 4 - 2. Classification          | Is it relevant for Gasunie that classifications are also available within the system in such a way that they can be quickly applied in the 3D components within the models?                                                                                                                                                                                | Yes, this is relevant                                                                                                                                                                                                                                                                                          |
| 147 |    | Appendix 4 - 2. Classification          | The document mentions validation of asset data. What added value does it have if the 3D objects within the models can also be validated on the correct data and this directly in the system without having to open the source application?                                                                                                                 | We cannot give a value, but validation of object is part of the functions.                                                                                                                                                                                                                                     |
| 148 |    | Appendix 4 - 2. Classification          | Will Gasunie provide a basic library of standardized 3D objects (assets) with the correct representation and information? If so, we assume that a system is important with an integrated 3D component library where Gasunie can pass on/impose part of its library to the design & engineering stakeholder for each project and with integrated workflows. | Yes.                                                                                                                                                                                                                                                                                                           |
| 149 |    | Appendix 4 - 9. 3D Visualization        | Is Gasunie also looking at the possibility of immediately viewing asset and model information in a VR environment where multiple people can simultaneously & collaboratively review the assets in a 3D environment, make comments and report problems to the relevant people and that this information can also be maintained in the assets?               | Markups is one of the collaboration platform functions. The means may vary.                                                                                                                                                                                                                                    |
| 150 |    |                                         | We understand that the system must support the entire asset lifecycle, including the realization phase. Are you looking for a system that has standard capabilities for project management, communication management, QA/QC, Safety, Handover, Planning communication, Photos and Cost & change management?                                                | Projectmanagement and project control functions are no part of the collaboration platform. Photos and QA/QC information related to assets need to be part of the system                                                                                                                                        |
| 151 |    |                                         | What is the advantage for you that we link the execution information (such as construction status, planning, ...) to the asset?                                                                                                                                                                                                                            | The main advantage is that it shows progression (of the asset), contextual information helps us understand the status in which the asset is in. Therefore, it provides valuable data to those interested in the current status of the asset.                                                                   |
| 152 |    |                                         | How important is it for Gasunie that 3D model information can be shown in the realization phase in a relevant way as a construction model for the construction team and in a relevant way for Gasunie to keep an overview of the construction?                                                                                                             | Not clear yet, however currently we tend regard it as important.                                                                                                                                                                                                                                               |
| 153 | 6  | 2.4                                     | How do you plan to fix relations with existing datasets ? Do you already have a plan on mapping existing datasets in different systems with common identifiers in new collaboration platform provided? Have you considered phaseout scenarios or you plan to retain all existing systems?                                                                  | Yes, in the current IT landscape, we already have a mapping table to connect objects from different systems. The collaboration platform must be able to also fulfill his functionality. Currently, not decided yet if we retain all existing systems. Also depends on the outcome of this market consultation. |
| 154 | 6  | 2.4                                     | Do you plan to include data exchange rules?                                                                                                                                                                                                                                                                                                                | Yes                                                                                                                                                                                                                                                                                                            |
| 155 | 6  | 2.4                                     | Do you have specific requirements for data exchange or stick to open standards for data exchange? Do you want to include data exchange platforms or just file based data exchange?                                                                                                                                                                         | In the basis we'll use (open) standard, when necessary, supplemented by specific requirements. T.b.d.                                                                                                                                                                                                          |
| 156 | 13 | Appendix 4-5                            | What kind of transformations of source systems inputs do you anticipate?                                                                                                                                                                                                                                                                                   | To be determined                                                                                                                                                                                                                                                                                               |
| 157 | 13 | Appendix 4-8                            | Do you intend to have just view functionality or include measurements. How do you plan to manage complexities of viewers (licenses)                                                                                                                                                                                                                        | Measurements in 3D models can be relevant for users. How this should be implemented is t.b.d. Measurements of live data (e.g. pressure measurements) is out of scope for this market consultation.                                                                                                             |

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| 158 | 13 | Appendix 4-8                                   | Do you plan to have Annotation / red lining within viewer and where do plan to store annotated file and process the feedback with original sources ?                                                                                                                                                                                                                                                                                                                                                                                                                        | Annotation and red lining should be executed based on visuals. However, not everyone that views (uses viewer) are allowed to do annotation and red lining. It depends on the choice for application for the collaboration platform, we don't know yet. |
| 159 | 13 | Appendix 4-12                                  | How do you plan to manage concurrent usage licenses?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Depending on the license model (see model for answers).                                                                                                                                                                                                |
| 160 | 13 | Appendix 4-12                                  | Do you plan to have rules based validation of concurrent activities?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Not decided yet. Data validation is relevant for us. How validation will be applied to concurrent activities is not decided yet,                                                                                                                       |
| 161 | 6  | 2.4                                            | How to plan to deal with change management process? How does the current "AS-IS" change management process look like?                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Depends on the level.                                                                                                                                                                                                                                  |
| 162 |    |                                                | Which support languages do you intend to have?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | English and Dutch                                                                                                                                                                                                                                      |
| 163 | 6  | 2.4                                            | Does Gasunie follow any part nomenclature standards or guidelines? How does Gasunie plan to resolve identification of existing assets within different systems in future?                                                                                                                                                                                                                                                                                                                                                                                                   | Regarding names, Gasunie developed an own nomenclature for assets.                                                                                                                                                                                     |
| 164 | 7  | 2.5                                            | Can you share key business processes that collaboration platform should support? Can you share descriptions of "AS-IS" business processes mapping it to existing system? How does the configuration activities differ between "AS-IS Design", "AS-IS built and "AS-IS maintained" activities?                                                                                                                                                                                                                                                                               | See section 2.4 in the market consultation.                                                                                                                                                                                                            |
| 165 | 7  | 2.5                                            | How are standard assets such as "valves" managed in multiple plants? Do each valve in 2 different plants have same part identification numbers or separate one? How do you plan to deal with standard configuration items/ components ?                                                                                                                                                                                                                                                                                                                                     | We distinguish between article and equipment, where article is the physical object and equipment is the unique instance of that. So we can derive to which standard item/component a specific instance belongs.                                        |
| 166 | 7  | 2.5                                            | How to deal with change management process? How is it managed presently?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | It truly depends on the level of change management: the change that initiated a project, a change within a project or a change in the operate and maintain phase. Which level of change management are you referring to?                               |
| 167 | 7  | 2.5                                            | Does Gasunie have set priorities for the further digitalization (structured data) of assets? Will priority be given to the digital registration process for new assets (greenfield) or the consolidation of existing assets in the new collaboration platform? Or maybe both in parallel?                                                                                                                                                                                                                                                                                   | Greenfield first.                                                                                                                                                                                                                                      |
| 168 | 5  | 2.4                                            | Does Gasunie use specific tooling to support the initial ideation phase in the Asset Lifecycle where one specifies the requirements for new assets?                                                                                                                                                                                                                                                                                                                                                                                                                         | Yes, e.g. portfolio management and Risk Based Asset Management (RBAM) should lead to project initiation.                                                                                                                                               |
| 169 | 5  | Section 2.4 (Current Situation and Background) | On page 5, in the section discussing the current situation, it is mentioned that Gasunie uses multiple applications for asset data management with limited interlinking, leading to inefficiencies in data exchange. How critical is it for Gasunie to integrate these systems into a single platform that ensures seamless data flow? Would a solution like XXXXXXXX, which offers robust integration capabilities (as detailed in Appendix 4, Function 17: Integration), be beneficial in creating a unified data management environment, particularly for OT operations? | Integrating asset data is important for Gasunie. We don't know the application you mention and therefore cannot answer your question with regard to this.                                                                                              |
| 170 | 4  | Section 2.3 (Vision on Managing Asset Data)    | On page 4, the document outlines the vision for the Managing Assets Digitally (MAD) program, which emphasizes the importance of collaboration and data-driven asset lifecycle management. How important is it for Gasunie to select a scalable and flexible platform that can start with OT and expand to IT as needed? Would XXXXXXXX, known for its scalability and broad functionality, align with Gasunie's long-term vision, as described in Appendix 5 (Norms and Standards)?                                                                                         | A scalable and flexible platform is a plus. But we don't know the application you mention and therefore cannot answer your question with regard to this.                                                                                               |
| 171 | 6  | Section 2.4 (Current Situation and Background) | In the description of the current situation on page 6, the challenge of managing decentralized data with no single source of truth is highlighted. How valuable would it be for Gasunie to implement a platform like XXXXXXXXS that can centralize data management and ensure consistency across all asset lifecycle phases, as described in Appendix 4, Function 1: Data Management? Could this improve efficiency in OT operations and provide a foundation for future IT integration?                                                                                    | This could be valuable for Gasunie. It could improve efficiency but this has to be determined in a later stage.                                                                                                                                        |

|            |   |                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                         |
|------------|---|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>172</b> | 7 | Section 2.5<br>(Collaboration<br>Platform for ALM) | The need for cross-functional collaboration is discussed on page 7. How do you see a platform like XXXXXXXXS, which offers advanced workflow automation and real-time collaboration tools, enhancing operational efficiency across different departments, particularly within OT? Would these capabilities align with the Workflow and Review & Markup functionalities described in Appendix 4, Functions 15 and 16?                                                                                                                                                                                                                                                                                                                                                | We don't know the application you mention and therefore cannot answer your question with regard to this.                                                                                |
| <b>173</b> | 7 | Section 2.5<br>(Collaboration<br>Platform for ALM) | On page 7, the document mentions the importance of hardware flexibility and independence in the chosen platform. How essential is it for Gasunie to adopt a future-proof solution like XXXXXXXXS, which not only addresses current OT needs but also provides a pathway for IT integration while ensuring alignment with the principles of hardware flexibility and engineering tool independence as outlined in Appendix 5 (Norms and Standards)?                                                                                                                                                                                                                                                                                                                  | It is important for Gasunie that the solution is flexible and futureproof. But we don't know the application you mention and therefore cannot answer your question with regard to this. |
| <b>174</b> | 8 | Section 3.2.4<br>(Demonstrations)                  | On page 8, under the section regarding demonstrations, it is mentioned that Gasunie is open to live demos of proposed solutions to better understand their capabilities. Given the complexity of managing both IT and OT environments, how beneficial would it be to arrange a workshop or a dedicated meeting where we can showcase how a platform like XXXXXXXXS could seamlessly integrate and enhance your existing asset management processes? This could provide an opportunity to explore how XXXXXXXXS's features align with the specific needs outlined in this document and further discuss tailored solutions for Gasunie. this could help you with picking the benefits of multiple tools so that you can add them as a requirement in your next phase. | We will adhere to the proces for possible demonstrations as described in the document, chapter 3.2.4.                                                                                   |
| <b>175</b> | 4 | Section 2.2 Main<br>Questions                      | On page 4, where the document outlines the primary objectives of identifying applications capable of fulfilling the collaboration platforms requirements, it's worth noting that several leading energy companies (also in the netherlands) are already leveraging the XXXXXXXXS platform to manage similar complexities in their operations. How valuable would it be for Gasunie to explore a proven solution like XXXXXXXXS, which has demonstrated success in meeting the stringent demands of the energy sector? Could this provide added confidence in its ability to handle Gasunie's specific requiremnts for both OT and IT?                                                                                                                               | Please see question 11 regarding references in the Model for submitting answers and availability.                                                                                       |