

Market consultation (Design,) construction and supply of full electric IJ ferries (80 serie)

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Colophon

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1 Notes for the reader

This is the market consultation document for the (design,) construction and supply of full electric IJ ferries (80 series).

This document contains the following sections:

Section 2: This section contains general information about GVB, this market consultation and the schedule.

Section 3: This section describes the administrative conditions applicable to this market consultation.

Section 4: This section contains the scope and topics of this market consultation.

Section 5: This section contains the market consultation questions.

Appendices:

- Appendix 1 Questionnaire
- Appendix 2 Roadmap

2 Introduction

GVB plans to launch a European tendering procedure for the (design,) construction and supply of full electrically powered IJ ferries (80 series) in the beginning of 2026.

In anticipation of this, GVB wishes to conduct a round of consultations with market parties. This document has been prepared to facilitate this.

2.1 Publication

This market consultation is published through TenderNed, the Dutch procurement platform and also automatically published on Tenders Electronic Daily (TED). All provisions set forth in this publication remain applicable and can be requested from <http://ted.europa.eu> and www.tenderned.nl.

If you wish to remain informed about further publications regarding this market consultation, such as any Summaries of Additional Information and Changes, then you must register on TenderNed and add this market consultation to 'my tenders'. As referenced in the manual for entrepreneurs on TenderNed.nl.

2.2 Definition of a market consultation

A market consultation is used to improve, assess and/or further detail the quality of the contract documents or program of requirements and the procurement process.

By using the knowledge and skills of parties, a public organization can assess a proposed project and the accompanying preconditions for accuracy, completeness and feasibility. This allows the feasibility of the project to be determined and the preconditions under which the project should be carried out to be established.

The market consultation is a separate process that is carried out prior to a formal tender process. The market consultation is not a call for participation and is not part of a pre-qualification procedure. The information from the market consultation can be used to create a quality-driven procurement process. By having a good procurement process the probability of a suitable offer for GVB is greater.

2.3 Client

The market consultation is executed by GVB Veren B.V.

GVB provides public transport by tram, buses, metro and ferries in Amsterdam and surrounding region. The company employs approx. 4.000 employees. GVB transports passengers with 56 bus lines (including 12 nightlines), 16 tram lines, 4 metro lines and 10 ferry lines.

On average GVB provides 740.000 passengers rides per day. Passengers want to arrive on time at their destination, be well-informed and feel safe while using public transport. The passengers are centralized in the core values of GVB. Daily GVB transports 76.800 passengers via ferry lines over the IJ river. On a yearly basis the ferries transport approx. 28 million passengers crossing the IJ river. In the upcoming years, GVB expects a significant increase in the number of passengers, driven by urban developments along the banks of the IJ river.

GVB operates 10 ferry services with 19 ships and 180 employees on behalf of concessionaire City of Amsterdam. This includes 7 ferry services across the IJ river and 3 ferry services on the North Sea Canal. The ferry services on the North Sea Canal are operated with the fleet of 5 newly built ships that have been put into service over the past 3 years. The new ships are electrically powered and are automatically charged during operation using integrated charging arms at the landing. Of the 14 ships on the IJ river, 7 have diesel-electric hybrid propulsion and 7 older ships have diesel propulsion.

In addition to the operation, the management and maintenance of the vessels and of the infrastructure such as the landings and port is also managed by GVB Veren. The in-house technical service performs 1st line maintenance in the form of diagnosis and direct fault repair.

For more information about GVB, visit the website www.gvb.nl and <https://over.gvb.nl/ov-in-amsterdam/voer-en-vaartuigen/veren-in-cijfers/>.

2.4 Aim of market consultation

Our aim in conducting this market consultation is to:

1. get interested parties involved at an early stage in the design of the above-mentioned tendering procedure and/or the agreement to be concluded;
2. to consult the market regarding the investigation of the possibilities to tender the (design,) construction and delivery of (initially) 3 full electric IJ ferries and 7 in option (80 series). GVB is still in consultation with the City of Amsterdam in this regard to expand the scope of the basic order;
3. In addition to answering the questions posed, stakeholders are also given the opportunity to submit suggestions and ideas.

GVB hopes to achieve a tendering procedure and agreement that are as closely aligned with the market as possible.

2.5 Phasing

The market consultation is divided into 2 phases:

- A. A written response to the questions asked by GVB;
- B. GVB may invite parties to offer an opportunity for an oral explanation regarding the questions asked and related answers given. Any interviews will be conducted on an individual basis.

2.6 Conditions

GVB imposes the following conditions, which are automatically accepted by the interested party by their participation in this consultation:

- A. GVB will not reimburse any costs associated with this market consultation in any way whatsoever;
- B. GVB reserves the right not to follow up this market consultation;
- C. GVB reserves the right to choose a procurement strategy that is best suited to its needs depending on this consultation;
- D. GVB is free to use the information provided as it sees fit, but business information of the candidates will be treated as confidential.

2.7 Market consultation proces

The announcement of this market consultation “(Design,) construction and supply of fully electric IJ ferries (80 series)” with the associated documents has been published through TenderNed in accordance with the schedule from Section 2.8 and automatically also published on Tenders Electronic Daily (TED). All interested parties are thus given the opportunity to participate in this market consultation.

Then, until the time indicated in the schedule, there will be an opportunity for written questions to clarify the market consultation, from which a Memorandum of Information will be issued.

GVB will then be pleased to receive written responses to the questions submitted, which can be found in the “Questions for Market Consultation” section. The answers to the questions can be submitted until the moment indicated in the planning. Submission will take place via the messaging system in TenderNed.

In response to these written questions and/or comments, GVB may proceed to request further clarification (optional). This may take place by written questions or consist of further consultations, but GVB is not obliged to do so.

At the end of the market consultation, GVB will prepare an anonymized report outlining the main findings. The findings will be drawn from the answers to questions and from the consultations.

The anonymized report on the market consultation will also be published with the tendering procedure to be held for the “(Design,) construction and supply of full electric IJ ferries (80 series)”. This is how GVB ensures that all parties involved in this tendering procedure have the information relevant to this project.

2.8 Market consultation schedule

Below is the schedule for the market consultation procedure. GVB has placed an announcement for this market consultation on TenderNed. With this the market consultation has formally started.

GVB reserves the right to make changes to or deviate from the schedule; in such cases communication towards all interested parties will take place via TenderNed.

Phase	Milestone	Date
1	Publication of announcement	April 8, 2025
2	Submit questions to clarify market consultation document	April 10 – May 9, 2025
3	Draw up and send Memorandum of Information	May 12 – May 16, 2025
4	Submit answers market consultation question, ideas and comments	May 30, 2025
5	Consultation rounds (optional)	June 2 to June 13, 2025
6	Concluding consultations rounds	June
7	Concluding market consultation	June
8	Drafting, sending and publishing final report.	July

- 1) Phase 5 depends on the outcome or conclusion based on the answers to the questions posed.
- 2) Phases 6 through 8 depend on whether or not phase 5 continues.

3 Administrative conditions

3.1 Correspondence

Communication regarding this market consultation must at all times be made in writing via the messaging system in TenderNed.

From GVB, the following contact person has been appointed for this tender, Purchasing Department Nafie el Amrani, Senior Purchasing Officer.

3.2 Memorandum of Information

Any possible questions for clarifications of this document can be submitted until the deadline mentioned in the schedule. To submit your questions, please use the document in Appendix 1: "Questions Submission Form"

These questions and answers given by the parties will be anonymously processed in a Memorandum of Information format. GVB will publish the Memorandum of Information on TenderNed. This will be an integral part of the end report.

3.3 Consultation rounds

The consultation rounds will take place digitally via MS teams. You are requested to indicate in good time via the messaging system in TenderNed whether and with whom you will be present during the consultation rounds.

3.4 Equal information

All parties involved in the future tendering procedure will have access to the same information. The final report will be published on TenderNed in due course along with the tender documents.

3.5 Language

The languages to be used in this market consultation is English.

3.6 Rights

No rights can be derived from the information provided in the context of this market consultation. All oral and written communications should be viewed as general opportunities for the procurement process and GVB's approach.

3.7 Confidentiality

You must keep confidential the information provided by GVB in the context of this market consultation. The obligation of confidentiality also applies to your employees and the third parties you engage. GVB will of course also treat the information obtained confidentially.

3.8 Provided data

As indicated, GVB may start using the information obtained from this market consultation to market the tender for '(Design,) construction and supply of electric IJ ferries (80 series)'. Therefore, all responses submitted by market parties to in the context of this market consultation become or are the property of GVB. GVB may therefore freely use this information. GVB would greatly appreciate it if all questions were provided with answers.

The status of the information is indicative.

3.9 Reporting irregularities

If a participating market party believes that information and/or a provision in this market consultation document and/or other documents is inaccurate, unlawful or otherwise irregular, the participating market party must, within fifteen days of receipt of the relevant market consultation document, notify GVB in writing of that suspected inaccuracy, unlawfulness or irregularity.

If a participating market party fails to notify GVB in good time and in the specified manner, that market party thereby forfeits any right against GVB in relation to the suspected inaccuracy, unlawfulness or irregularity.

3.10 Priority of documents

In case of conflict between the invitation for market consultation and this market consultation document, this market consultation document shall prevail.

4 Topics market consultation

City of Amsterdam (as grantor of the concession) and GVB Veren B.V. (as executor of the concession) have the ambition, as part of making the ferry services in and around Amsterdam more sustainable, to switch to fully electric ferries by 2030.

GVB Veren plans to tender three to ten full electric ferries in early 2026. The fleet capacity on the IJ river in Amsterdam needs to be expanded given the projected passenger growth. Last year the IJ ferries carried more than 28 million passengers on seven different ferry connections. A substantial increase compared to 24 million passengers in 2023.

Top requirements in capacity expansion see:

- Achieving sufficient fleet capacity to meet the projected passenger growth across the IJ river for 2030-2050;
- Full electric and emission-free shipping;
- Realizing a reliable timetable through mitigating measures for possible power outages during operation.

In addition to this tender, the existing ferries will also be converted from diesel (50 series) and hybrid (60 series) propulsion to fully electric. The anticipated conversion is not part of this tender. The conversion will make it possible to eventually operate all ferry services on the IJ completely electrically.

This project contributes to the strategic objectives of the City of Amsterdam and GVB because:

- Effective procurement of good quality vessels contributes to the reliability of Amsterdam's ferry services;
- By standardizing the vessels, purchasing them on a larger scale and for a longer period of time, we contribute to more efficient operations;
- By electrifying the ferry service we contribute to making GVB and Amsterdam more sustainable.

Appendix 2 includes a roadmap of the electrification of the vessels.

4.1 Current situation

In order to cope with the anticipated passenger growth, the start of new ferry services and the electrification of the ferries, a number of additional vessels must be put into service. These vessels will contribute to the efficiency and sustainability policy goals of GVB and the City of Amsterdam.

An electric ferry runs on electric motors that receive their power solely from batteries present in the vessel. The batteries are charged by charging infrastructure placed on the shore side.

The European tender to be carried out from the beginning of 2026 is intended to market the (engineering and) construction and delivery of this new series of ferries (80 series). The tender concerns design, construction and supply of initially 3 vessels. Also included are options for the construction and supply of 7 more vessels, which can be called for to accommodate future passenger growth and facilitate new ferry services. GVB is still in discussions with the City of Amsterdam to expand the scope of the basic order, as it is preferred to be able to build the ferries in series as much as possible in order to make optimal use of economies of scale.

4.2 Scope description

The scope of this contract involves the (design,) construction and delivery of three to ten fully electric IJ ferries (80 series). GVB intends to ask the contractor to make the design for a full electric vessel, construct and deliver it (possibly in a collaborative construction team). The consideration as to whether or not to request this design component depends on the knowledge and expertise in the market and explicitly forms part of this market consultation (see the questionnaire in Chapter 5).

Currently, management and maintenance are not part of the scope to be tendered. This consideration is also part of this market consultation and is addressed in the questionnaire in Chapter 5.

The time frame requested by GVB from the shipbuilder to be contracted is now as follows:

- ± Q1 2026 start tender
- ± Q4 2026 contract award
- ± Q1 - Q2 2027 (further development) design
- ± Q2 2027 - Q2 2029 construction phase first ship
- ± Q2 - Q3 2029, start test and commissioning of first vessel
- ± Q3 2029, delivery of first vessel

- ± Q4 2027 - Q4 2029 construction phase second ship (6 months after previous ship)
- ± Q2 2028 - Q2 2023 construction phase third ship
- ± Q1 2030 - delivery of second vessel
- ± Q3 2030 - delivery of third vessel

Thereafter start construction and delivery of options to be called

4.3 Charging infrastructure

GVB aims to assign a single party as the system integrator responsible for charging infrastructure. This party is intended to be responsible for charging stations and connectors based on performance requirements and ensure system integration. The foreseen scope consists of the following components:

1. Charging stations and charging interface:
 - a. System components
 - b. Installation of components and connections.
 - c. Construction work (the housing/enclosure).
2. Connection of charging stations to Liander electricity grid
 - a. Permits
 - b. Physical (cables and infrastructure).

3. Physical infrastructure
 - a. Cables and infrastructure
 - b. Charging connectors
 - c. Integration of charging stations with connectors (cables and infrastructure)
 - d. Adjustment to landing areas if necessary
4. System Integration
 - a. Coordination with shipyard for 80 series
 - b. Coordination with Liander for grid connection
 - c. Coordination with other permitting authorities
 - d. Full system testing
 - e. Delivery and acceptance process

Procurement is expected to run in parallel. The precise demarcation between system integrator and shipyard has not yet been determined. For GVB, it is essential that all components function seamlessly, and it is therefore interesting to know your preferences in this.

5 Market consultation questions

The request is to answer the questions below. These address several issues. First, GVB would like to receive information about your company and the market. In addition, GVB would like to receive answers to the specific questions we have asked. Finally, you will be given the opportunity to provide any comments and/or suggestions.

It is not mandatory to answer all questions, but full responses are greatly appreciated. Complete answers will, in our opinion, help GVB to formulate a proper contract and specifications and/or program of requirements for a possible tender. We hereby emphasize once again that the answers to the questions below will not be used for supplier selection. The purpose of the structured questionnaire is to select comparable answers from different suppliers. We encourage you to comment on the questions and suggest alternative ones where you think necessary.

Theme	Question
Electric propulsion and innovation <i>In this theme, we explore the implications of a fully electric design. We want to understand shipyards' perspectives, learn about relevant reference projects, and see how past experience can contribute to a more efficient design phase. Additionally, we examine shipyards' experience with electric vessels, the challenges they foresee, and innovative solutions in electric propulsion and energy management.</i>	1. Does your shipyard have experience building full electric passenger ferries or ships? If yes, can you name some reference projects?
	Answer:
	2. Which challenges do you foresee in realizing a fully electric ferry without a (backup) diesel engine and which optimizations or measures can be recommended to ensure reliability?
	Answer:
	3. Which innovations do you see in electric propulsion and energy management that may be relevant to this project?
	Answer:
Design and Construction Engineering <i>We aim to gain insight into how shipyards view the division of roles between GVB and the shipyard in designing and engineering ferries. Additionally, we explore the preferences and necessary support</i>	4. What do you see as the biggest technical and operational risks in the realization of these electric vessels? How can these be mitigated?
	Answer:
	5. Does your shipyard have experience designing full electric ferries or ships for passenger transport? If yes, can you name some reference projects?
	Answer:
	6. What is your view on designing and building a fully electric IJ ferry? Should these two parts of the process be integrated in one contract, or not?
	Answer:

<i>during the design and construction process.</i>	7. What would your preference be? Do you prefer to build a fully electric vessel based on a final design prepared by a specialized design agency commissioned by GVB Veren, or do you prefer to keep the design part in-house?
	Answer:
	8. If GVB commissioned the design through a specialized nautical agency, how do you view the division of design responsibilities? Would you be willing to take over this design responsibility, and if so, what would be required? Consider, among other things, time reservation for verification of requirements.
	Answer:
	9. Under which conditions would you as a shipyard want to take responsibility for drawing up the design based on a functional Program of Requirements (PoR)? Which risks do you foresee and how can they be mitigated by GVB?
	Answer:
	10. What do you need from GVB to be able to perform construction engineering optimally?
	Answer:
	11. How much time would you need to verify and optimize the design if the design is provided by GVB?
	Answer:
	12. Would you be interested in a tender in which you are asked to draft a preliminary design and offer a suitable price for the preliminary design?
	Answer:
	13. If we asked you to draft a preliminary design as part of the tender process, how much time would you need to create a design based on a functional Program of Requirements from GVB?
	Answer:
	14. If you were asked to draft the design for a fully electric IJ ferry as part of the contract, would you do it in-house or hire a third party?
	Answer:
	15. How can GVB make optimal use of the shipyards' expertise during the design process?
	Answer:

Collaboration during the design process <i>GVB is open to various forms of collaboration during the design process. We are exploring how shipyards prefer to structure this collaboration and which collaboration models (such as design-build agreements) may be the most effective. Additionally, we aim to gain insight into the level of flexibility and involvement that shipyards expect and require to achieve a successful design.</i>	16. Do you have experience with construction team agreements? What do you see as the advantages and risks of this approach? <i>Explanation: by construction team agreement we mean a collaboration model in which GVB and consortive work intensively together on a design plan during the design phase.</i>
	Answer:
Tender and contracting <i>This theme focuses on the contractual and procurement aspects within the shipbuilding sector, with specific attention to responsibilities, risk allocation, and project feasibility. It explores how design choices, timelines, contract forms, and financial aspects can be fairly and effectively aligned between GVB and the contractor(s).</i>	17. What makes a project interesting to you in terms of collaboration in the designing and engineering proces?
	Answer:
	18. What should be the minimum lead time between the award and the start of the construction phase to ensure a realistic and feasible process? Can you eleborate on your answer?
	Answer:
	19. We are currently exploring differences in contract templates, including NewBuildcon. Does your shipyard have experience using standard contract templates, such as NewBuildcon, in the shipbuilding sector? Which contract standards do you apply, what is your preference, and what are the considerations behind this choice? Under which conditions could GVB apply a standard GVB contract template?
	Answer:
	20. How do you see a fair distribution of risks in a contract, specifically regarding the payment schedule? What do you consider a fair payment schedule that balances the risks for both parties?
	Answer:
	21. How do you see a fair distribution of risks in a contract, specifically regarding bank guarantees? How can bank guarantees be used to secure risks without imposing an undue burden on one of the parties?
	Answer:
	22. How do you see a fair distribution of risks in a contract, specifically regarding inflation? How should the contractual

	approach to inflation look to ensure that the risks of price increases are fairly distributed between the client and the contractor?
	Answer:
	23. What is important to you regarding a fair distribution of risks in a contract, what aspects of the contract do you focus in regarding risk management?
	Answer:
	24. Does your shipyard have experience with performance contracts? If so, what factors contribute to a successful contract, and what risks do you foresee?
Planning, Costs, Maintenance, and Contract Forms <i>This section explores shipyards' perspectives on integrating design, construction, and maintenance within a single contract format, such as Design-Build-Maintain or performance-based contracts. It also examines preferences and experiences with maintenance services, including the availability of in-house facilities or collaborations with third parties. Additionally, market developments, cost efficiency, and price indications are assessed, along with the feasibility of the schedule proposed by GVB.</i>	Answer:
	25. Can you indicate if the schedule included by GVB is realistic? If not, please specify and provide a schedule that is realistic for you?
	Answer:
	26. Does your shipyard have experience combining design, construction, and maintenance in one contract? What contract forms (e.g., Design-Build-Maintain, performance contracts) do you have experience with, and what advantages or challenges do you foresee in this?
	Answer:
	27. Where would your shipyard carry out potential maintenance (in case requested by GVB)? Do you have your own facilities, or would you collaborate with external parties?
	Answer:
	28. Can you indicate your preference with regards to providing maintenance services?
	Answer:
	29. Can you also indicate your recent experience (<5 years) in delivering 'availability' based on a performance contract / SLA? If yes what structure could you offer to manage this delivery?
	Answer:
	30. What market developments (e.g., availability of batteries, regulations, labor market) could impact the schedule and costs of this project?

	Answer:
	31. How can the design and construction costs be managed as efficiently as possible?
	Answer:
	32. Could you provide an indicated price for constructing, delivering, testing and commissioning an 80 series ferry?
	Answer:
	33. What do you consider to be the largest cost items in the construction of a fully electric ferry?
Cost and Efficiency <i>This theme focuses on managing costs and maximizing efficiency within the design and construction process of vessels, particularly fully electric ferries. It explores how cost control can be combined with high quality, sustainability, and identifies the factors that have the greatest impact on the total cost of a project.</i>	34. What cost-saving opportunities do you foresee without compromising the quality and sustainability of the design?
	Answer:
	35. What is your opinion on working with external technical advisors or a second opinion on the design?
	Answer:
	36. What do you consider to be the success factors for smooth cooperation between GVB and the shipyard?
	Answer:
Collaboration and Knowledge Sharing <i>This theme focuses on promoting effective collaboration between GVB, other parties including the system integrator and supplier charging infrastructure and the shipyards, with an emphasis on sharing knowledge and expertise. It explores how GVB can make optimal use of the experience and technical insights of shipyards, and all other parties included to identifies the factors that contribute to successful collaboration, such as transparency, communication, and involving external advisors.</i>	37. In the event of being awarded the contract, are you willing to enter into a coordination or collaboration agreement with other parties working on the same project on behalf of GVB (system integrator and supplier charging infrastructure)? If so, under what conditions (e.g., form of the agreement, division of responsibilities, cost distribution) would you be willing to enter into such an agreement? Could you explain which factors influence your willingness to collaborate? And in your view, what scope demarcation would be suitable?
	Answer:
	38. Do you have any other suggestions and/or ideas regarding this market consultation and the scope of the planned tender?
	Answer:

Timetable/ schedule <i>A well-structured schedule is essential for the successful execution of a maritime project like building three ferries. It ensures that the required resources, capacity, and timelines are realistic and achievable within the shipyard's capabilities. By identifying potential challenges early, risks can be minimized, and project efficiency can be improved.</i>	39. Is the scope of the project for 3 ferries potentially interesting to participate in for your shipyard?
	Answer:
	40. Considering our schedule would you have the resources and time to execute the tender/project? If our schedule is unrealistic or unable to execute due to other factors, can you specify which problems you foresee?
	Answer:

Appendix 1 Standard form submission questions

Any questions and/or comments should be submitted via the TenderNed messaging system using the separate Excel document/ format.

Appendix 2 Roadmap ferry electrification

Separate document