



Brabant Midden-West-Noord

Regionale ambulancevoorziening (RAV)

RAV Brabant MWN navigation and information system (NIS)

June 2021

OMC Report Document



Brabant Midden-West-Noord

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Brabant Midden-West-Noord

List of Acronyms

AZN – Ambulancezorg Nederland (Ambulance care Netherlands)

GNSS - Global Navigation Satellite System

HAS - High Accuracy Service

IPR – Intellectual Property Rights

MDT - Mobile Data Terminal

MDM - Mobile Device Manager

NIS – Navigation and Information System

OMC – Open Market Consultation

PCP - Pre-Commercial Procurement

PIN – Prior Information Notice

POI – Point Of Interest

PPI - Public Procurement of Innovative Solutions

PRS – (Galileo) Public Regulated Service

SaaS - Software as a Service

SLA - Service Level Agreement

DAP - Daily Agreed Procedures

TED – Tenders Electronic Daily

TRL - Technology Readiness Level





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For any clarifications of the documents, please bear in mind that the original languages of this tender are English.

1. Introduction

The Open Market Consultation (OMC) for the Rav Brabant MWN Navigation and Information System (NIS) aimed to inform market operators regarding the upcoming procurement of **end-to-end solutions for the navigation systems of ambulances (and eventually other vehicles) which include security and privacy aspects.**

The OMC also aimed to understand the operators' capabilities to satisfy the procurers' needs and to obtain market parties' input on the viability of the procurement plans and conditions as described in the OMC document and annexes. This was also an opportunity for technology providers to provide their feedback on the subject-matter of a future procurement.

The timetable for the OMC was set as follows:

Date	Event
6/05/2022	Prior Information Notice (PIN) published on TED. Publication of OMC document (this document) and EU Survey
18/05/2022	Last day to register for the webinar (17:00 CEST) here https://forms.gle/yBJJk5ABdCThMQxg8
19/05/2022	Online webinar (10:30-12:00 CEST)
26/05/2022	Last day to complete the questionnaire at the following link: https://ec.europa.eu/eusurvey/runner/04f95912-2651-e89f-d36b-144ed00cd0fe
1/06/2022	Publication of market consultation report
1/06/2022	Closure of market consultation

The OMC started on the date of its publication in the EU's Official Journal (TED) on May the 6th, with closure on June the 1st, unless terminated earlier. The market consultation was organised in the form of a webinar and an online questionnaire. The webinar took place on May 19th.



Market parties were also requested to fill out the questionnaire available at <https://ec.europa.eu/eusurvey/runner/04f95912-2651-e89f-d36b-144ed00cd0fe>. The deadline to fill out the questionnaire was May the 26th, 2022. The responses to the questionnaire could not contain any confidential information. The intention of the questionnaire was to explore the market 'as-is', therefore there could not be no wrong or right answers. The answers provided will be used as input for the procurement strategy and conditions.

After processing the questions and responses of all suppliers, this OMC report document is a means to process and communicate the results. In this context, all information provided by operators is treated as commercially sensitive and therefore no supplier specific details are communicated. Only the general findings are summarised and shared in this report. This anonymised report (excluding the confidential information) will be published on June the 1st, 2022 via TenderNed and TED.

All communication (before, during and after the OMC) was carried out in English. However, for the subsequent procurement, the interface of a final solution should be made available in Dutch language. Participation in the OMC is not a condition for submitting a tender in the subsequent procurement. Also, the provided input in the OMC will not be used to evaluate future proposals.

By carrying out the market consultation, the procurers do not commit to subsequently deploying a procurement procedure. Moreover, in case this OMC will be followed by a procurement procedure, the public procurers reserve the right to change any elements that define the desired solution. No rights can be derived from any statements made by the procurers during the OMC.

The EU Survey questionnaire was explicitly qualified as an annex to the market consultation document and is not a standalone document, but is part of a set of documents. For the sake of readability, the choice has been made to have the questions asked in the Market Consultation documents within the framework of the EU Survey (<https://ec.europa.eu/eusurvey/runner/04f95912-2651-e89f-d36b-144ed00cd0fe>).

The summary of the feedback received to the questions of the abovementioned EU Survey questionnaire is presented in the following sections of this report.

2. RAV Brabant Midden West Noord (MWN)

The ambulance service in the Netherlands is organised by region into Regional Ambulance Services (RAV). There are currently 25 RAV in the Netherlands. One of them is the RAV from Brabant Midden West Noord, located here:¹



¹ For more information see <https://www.ravbrabantmwn.nl/>

3. VZVZ Netherlands

The Association of Healthcare Providers for Healthcare Communication (VZVZ in Dutch) is an association of healthcare Dutch organisations and their patients. VZVZ fulfils three core functions. Firstly, VZVZ is a knowledge and expertise centre for interoperability. Secondly, VZVZ manages the development and implementation of agreements systems and generic facilities for its clients. Thirdly, VZVZ acts as coordinator of exchange networks.²



RAV Brabant MWN is cooperating with VZVZ to ensure that the deployed solution is compliant with VZVZ's high personal data and security standards related to the exchange of medical (personal) patient information.³

The exchange of medical data is surrounded by numerous technical and organizational measures and agreements in the Netherlands. These are laid down in the AORTA system of agreements. See Annex 6 for more information. AORTA describes all agreements and rules that apply to the infrastructure of the National Switch Point (Landelijk Schakelpunt-LSP in Dutch) and its use. The system of agreements is established thanks to intensive cooperation between all parties involved in the healthcare field and under the coordination of VZVZ. AORTA's documentation is public. AORTA is constantly under development and has well-documented version management.⁴

² For more information see <https://www.vzvez.nl/>

³ See *Richtlijn gegevensuitwisseling huisarts – huisartsenpost – ambulancedienst – afdeling spoedeisende hulp* for more information. Also available under: <https://www.nhg.org/themas/artikelen/richtlijn-gegevensuitwisseling-huisarts-ambulancedienst-afdeling-spoedeisende-hulp>. These Directive will be in force in mid-2023. See also ISO 27001 and NEN 7510.

⁴ See <https://www.aorta-lsp.nl/over-aorta-lsp> (in Dutch) for more information.



4. Introduction to RAV Brabant MWN current solution

There are currently 25 RAV's in the Netherlands. All the RAV's need to use a navigation system in their ambulances, in order to determine where the patient is, information about the patient and where - if needed - the nearest hospital is. The RAV from Brabant MWN has been using specific software, which – apart from being software only and not an end-to-end-solution - is currently slightly outdated.

These issues negatively impact the provision of quality care since arrival times are not as short as they should/could be. The GPS stops correctly working randomly, due to a map update or simply due to the fact that the software is outdated, incorrect roadblocks make it difficult reaching the destination and make the route longer than necessary and the system hangs and must be reset. These issues give the RAV Vehicle ICT and the RAV Fleet Management additional work, as they have to process reports from drivers, issues that may be caused by the drivers trying to solve problems by themselves, etc.

Moreover, multiple vendors are necessary to provide a fully working (software and hardware) solution, including updates and upgrades.

5. Objectives of RAV Brabant MWN

RAV Brabant MWN is looking for alternatives to solve the above mentioned issues and is looking for an end-to-end solution (including software and hardware), that is easy to replace in case of breakdown (less cables and apparatus), that has increased location precision, an immediate response time and less margin of error, as well as enables the sharing of information between the ambulance and the patient information to provide for a better health service.

Requirements:

- *2-way secure communication with the control room.*
 - *Daily update of maps.*
 - *Central availability of map.*
 - *Possible to use the solution in different devices (PC, tablets, smartphones).*
 - *Option to link with public services.*
 - *Access to real-time road closures information.*
 - *Trip registration link. I.e., access to the ambulances' BlackBox data.*
 - *Link with patient information systems.*
 - *Compatible with nationwide used LSIV-NG server API.*
-

All in all, RAV Brabant MWN wants an end-to-end solution that eliminates the issues derived from having multiple vendors and updates. RAV Brabant MWN wants a partner that delivers this end-to-end solution and is in charge of all the updates. The replacement of the hardware/solution can be easily done by RAV MWN personnel in case of problems.⁵ In case of issues, 24/7 support helpdesk is needed.

The solution should be future proof, which means that several functionalities will be mandatory for the initial solution, but additional functionalities to be developed/improved in the next years should be added on a later stage.

Additionally, the solution should be based on a map/application that already includes considerable amounts of geolocation information and Points Of Interest (POI), but should also allow RAV Brabant MWN to include new information and POI. Any and all rights related to these POI should remain vested in RAV Brabant MWN and as such, no rights are being granted to the map/application/supplier, except the right to use this new POI in the maps for the duration of the agreement with RAV Brabant MWN.

The map/application shall be updated by the supplier in real time to reflect the changes in the routes.

⁵ As the updates of the system should be seamless, without the need of scheduling the updates (i.e., no end user participation and on a 24/7 basis, RAV Brabant MWN has reached the conclusion that a windows solution will not be able to comply with this requirements.



E.g., roadblocks, events, that may cause deviations in the route, etc.

The dispatch office (meldkamer) should send the basic medical information and the location of the patient via an HTTPS connection. The solution should be able to comply with this requirement from the beginning of the contract (Q4 2022/Q1 2023).

The foreseen new application should also relate to the exchange of medical (personal) patient information.⁶ The solution shall consider this aspect and be applicable by mid-2023. To achieve these goals, RAV Brabant MWN is working with VZVZ to ensure that the deployed solution is compliant with the high personal data and security standards. The objective of this cooperation is to ensure that the ambulances drivers, doctors and other relevant users can share and receive the patient's information in a safe way, on a need-to-know basis, but in a fast and efficient manner. I.e., the information that has to be shared to provide for a better health service has to be protected/encrypted because it is sensitive information. In fact, this is a very innovative element of this upcoming tender, since right now the information is located in silos, is difficult to access and not properly protected. RAV Brabant MWN would like an end-to-end solution that ensures security already at hardware level.

In order to ensure the compatibility with the high personal data and security standards of VZVZ, the procedure for authentication/authorization for both applications (navigation and submission of medical information) shall be the same and be based upon the new Zorg-ID (smart) infrastructure of VZVZ. As a result, both applications should have received the so-called XIS type qualification from VZVZ.

In principle, the ambulances of RAV Brabant MWN are mandated by law to arrive at destination in less than 15 or 30 minutes.⁷ Failure to achieve these objectives leads to liability and damages for RAV Brabant MWN. From a business perspective, the contractor shall be responsible for providing a solution that avoids these delays.

RAV Brabant MWN intends to deploy a working solution for the navigation and basic patient information by Q1 2023/Q4 2022. For this reason, the current TRL of the proposed solutions for the navigation and basic patient information should be 8 at least.

⁶ See *Richtlijn gegevensuitwisseling huisarts – huisartsenpost – ambulancedienst – afdeling spoedeisende hulp* for more information. Also available under: <https://www.nhg.org/themas/artikelen/richtlijn-gegevensuitwisseling-huisarts-ambulancedienst-afdeling-spoedeisende-hulp>. These Directive will be in force in mid-2023. See also ISO 27001 and NEN 7510.

⁷ See *Beleidsregel regionale ambulancevoorziening 2022 - BR/REG-22152a* for more information. Also available under: <https://wetten.overheid.nl/jci1.3:c:BWBR0046403&z=2022-03-09&g=2022-03-09>.

TECHNOLOGY READINESS LEVEL (TRL)

RESEARCH	9	ACTUAL SYSTEM PROVEN IN OPERATIONAL ENVIRONMENT
	8	SYSTEM COMPLETE AND QUALIFIED
	7	SYSTEM PROTOTYPE DEMONSTRATION IN OPERATIONAL ENVIRONMENT
DEVELOPMENT	6	TECHNOLOGY DEMONSTRATED IN RELEVANT ENVIRONMENT
	5	TECHNOLOGY VALIDATED IN RELEVANT ENVIRONMENT
	4	TECHNOLOGY VALIDATED IN LAB
DEPLOYMENT	3	EXPERIMENTAL PROOF OF CONCEPT
	2	TECHNOLOGY CONCEPT FORMULATED
	1	BASIC PRINCIPLES OBSERVED

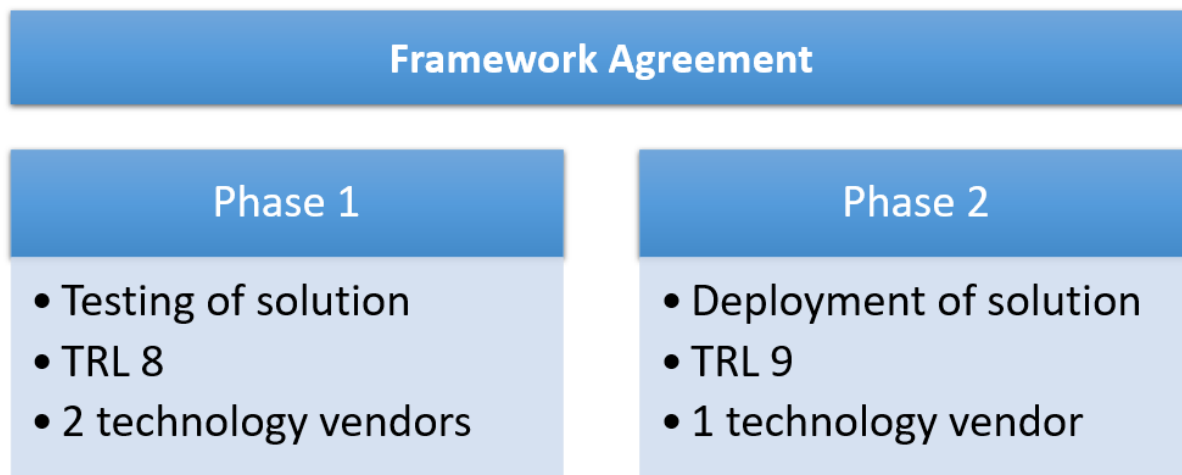
The compatibility with the high personal data and security standards of VZVZ should be ensured by mid-2023 by a XIS type qualification/approval of VZVZ. See Annex 6 for more information.

With this goal in mind, RAV Brabant MWN intends to launch an award procedure, at the end of which a Framework Agreement will be awarded to two successful technology vendors. This Framework Agreement will be composed of two different phases with respective Phase Contracts.

In the first Phase, the selected technology vendors will have to test their solution and demonstrate that works in a production environment (some ambulances). At the end of this first phase, the TRL of the solution will be 9. Only one technology vendor will be invited to sign a contract for Phase 2 and deploy the final solution, based on the outcome of the demonstration phase. I.e., the best solution – from a quality perspective - will be selected for the deployment phase. The price will be set from the beginning, already in the offer for phase 1.

The selected technology vendors will keep the IPR of the developed solution, but the data generated belongs to RAV Brabant MWN. The technology vendor must ensure that the data are protected and that RAV Brabant MWN has access to it. Once/If the contract terminates, the data will be returned to RAV Brabant MWN and the technology vendors will have to destroy and submit a self-declaration

indicating that the data has been properly eliminated. If needed a declaration of an EDP Auditor shall be submitted.



Based on the above information and with the goal to prepare an upcoming procurement procedure, RAV has prepared a set of questions for interested market parties.

6. Results of the EU Survey questionnaire

The following summary compiles the feedback received to the EU Survey questionnaire consisting of 18 questions in 5 different sections listed below. The results are presented in an anonymized manner as prescribed in the Market Consultation document.

QUESTIONS	
General requirements	
1.	After a prior market search, RAV Brabant MWN concluded that no solution is currently available on the market -TRL 9 – deploying a GNSS based navigation system and HTTPS communication, compliant with high personal data and security standards related to the exchange of medical (personal) patient as described in this OMC document. Is this conclusion correct? If you think there are already solutions that address all the demands from RAV Brabant MWN, please explain and provide with references.
2.	Is the time schedule realistic to have a working solution for the navigation and basic patient information deployed by Q4 2022? Do you foresee any constraints on realising this time schedule? Please describe.
3.	Is the time schedule realistic to have a working solution for the navigation and basic patient information deployed by Q1 2023? Do you foresee any constraints on realising this time schedule? Please describe.
4.	Is the time schedule realistic to ensure high personal data and security standards of VZVZ by mid-2023 by a <i>XIS type qualification/approval</i> of VZVZ? Do you foresee any constraints on realising this time schedule? Please describe.
5.	In order to ensure the compatibility with the high personal data and security standards of VZVZ, the procedure for authentication/authorization for both applications (navigation and submission of medical information) shall be the same and be based upon the aforementioned high personal data and security standards of VZVZ. Do you have constraints about this? Please describe.
6.	Are the use cases - listed in Annex 3 - complete or are there any relevant omissions from your perspective? If so, please indicate them.

7.	Are the requirements and the specifications - listed in Annex 4 - complete or are there any relevant omissions from your perspective? If so, please indicate them.
8.	Have you noticed conflicts between the annexes (in particular between annex 3 and 4)? If so, please indicate them.
Procurement Approach	
9.	Do you agree with the procurement approach above described: two-phased project including testing and deployment based upon a framework agreement and two phase contracts? Please explain.
Technical requirements	
10.	The solution must continue to be in line with developments around national geolocation standards. RAV Brabant MWN has identified the Traffic Square, GEO4OOV, IMROI and Melvin. Are these standards relevant for the scope of the solution to be provided? Can you indicate additional (relevant) national, European and international geolocation standards?
Commercial requirements (for the testing phase)	
11.	RAV Brabant MWN wants to pay a fix amount for the testing phase – two ambulances for a maximum period of three months - with a maximum of 5,000 € (excl. VAT) in total. Is this fix amount feasible? Please explain.
Commercial requirements (for the deployment phase)	
12.	RAV Brabant MWN wants to pay a fix amount for the deployment phase per month and per ambulance. Is this approach feasible? Please explain.
13.	RAV Brabant MWN is willing to pay a maximum uplift of 4% for repair and maintenance during the deployment phase. Is this % feasible? Please explain.

14.	RAV Brabant MWN is expecting the contractor to bear his own cost for any higher %. Is this risk acceptable? Please explain.
15.	RAV Brabant MWN expects a volume discount based on: • 50 to 75 ambulances • 76 to 100 ambulances • 101- to 125 ambulances Is this volume scheme feasible? Please explain.
16.	RAV Brabant MWN expects an additional launching customer discount on the volumes reached. What is a feasible discount % and what kind of activities do you expect from RAV Brabant MWN in return? Please explain.
17.	Are you willing to provide an additional discount if RAV Brabant MWN allows you to use POI after termination of the framework agreement? What would you consider as a reasonable discount? Please explain.
18.	Do you have any additional remarks, suggestion and/or recommendations? Please describe.

6.1. General requirements

1. After a prior market search, RAV Brabant MWN concluded that no solution is currently available on the market -TRL 9 – deploying a GNSS based navigation system and HTTPS communication, compliant with high personal data and security standards related to the exchange of medical (personal) patient as described in this OMC document. Is this conclusion correct? If you think there are already solutions that address all the demands from RAV Brabant MWN, please explain and provide with references.

It has been understood by one of the respondents that the application(s) should be web-based, but that is not the case, since the navigation should also work properly offline.

Market parties indicate that they are manufacturing market ready and future proof location based systems with state of the art GNSS receivers, including communication and security standards (robust 2 way communication and accuracy location), which can be implemented by application providers. These systems are available as automotive certified embedded system or alternatively, in a tablet, and

can have a remote platform in order to monitor performance, asset and release / installation management as well as MDM.

The existing solutions can monitor vehicle information (Digital/CAN), optical/sound signals (OGS) and provide vehicle/location information via a secure and documented API connection. This data is property of client and can be used to improve the system, as well as the activity of other linked organisations to facilitate traffic management, fleet / asset management, gate-entry and user control, accident analysis and incident resolution times, and service KPI's.

Market parties indicate shortcomings on dynamic stock inventory as well as management of vehicle equipment like EAD, powercontrol, audio, integration of PRS location service, etc.

2. Is the time schedule realistic to have a working solution for the navigation and basic patient information deployed by Q4 2022? Do you foresee any constraints on realising this time schedule? Please describe.

In general the feasibility of the timeline will depend on how strict the requirements are.

It was suggested to prioritise which elements of the solution should be easily replaced. E.g., a rear view camera is not easy to be replaced.

Additionally, the PRS requirement is not available yet, which may complicate achieving the deadlines for Q4 2022. PRS could be an addition to the existing platforms.

3. Is the time schedule realistic to have a working solution for the navigation and basic patient information deployed by Q1 2023? Do you foresee any constraints on realising this time schedule? Please describe.

As mentioned in the previous question, the feasibility of the timeline will depend on how strict the requirements are.

Moreover, it was highlighted that if a complete solution is required before mid-2023, the “starting” solution should indeed be at TRL8, since developing new solutions will take longer than the foreseen deadlines. A modular solution would enable to integrate new innovations on a later stage.

4. Is the time schedule realistic to ensure high personal data and security standards of VZVZ by mid-2023 by a XIS type qualification/approval of VZVZ? Do you foresee any constraints on realising this time schedule? Please describe.

The market gave a positive answer to the envisaged schedule. It was suggested to prioritise the



functionalities most important for RAV Brabant MWN, and to leave room for innovation.

5. In order to ensure the compatibility with the high personal data and security standards of VZVZ, the procedure for authentication/authorization for both applications (navigation and submission of medical information) shall be the same and be based upon the aforementioned high personal data and security standards of VZVZ. Do you have constraints about this? Please describe.

No constraints and/or limitations have been indicated.

6. Are the use cases - listed in Annex 3 - complete or are there any relevant omissions from your perspective? If so, please indicate them.

The use cases listed in Annex 3 are considered in general complete. Moreover, some market parties indicate that all mentioned requirements are already part of their existing solutions.

The only mentioned omission is that the main user of navigation will be the driver. It is recommended by one of the respondents that the system should be integrated in the vehicle and 'RDW' approved.

7. Are the requirements and the specifications - listed in Annex 4 - complete or are there any relevant omissions from your perspective? If so, please indicate them.

According to some market parties, there are conflicts between requirements. See answer to question 2.

Additionally, Google street view, is a tool to visualize the location, but not a map layer. It has been pointed out that the navigation system should be "platform independent". I.e., it should run on window, ios, android, etc. so that in the future it is possible to select the best hardware without any consequences for the software.

One of the respondents indicated that hardware should carry R10 / E-Mark approvals needed to obtain an RDW vehicle approval and to guarantee the safety of the crew. Additionally, compliancy with guidelines such as FCS1362 - for integration of equipment – would be recommendable.

8. Have you noticed conflicts between the annexes (in particular between annex 3 and 4)? If so, please indicate them.

One of the respondents suggested that the tokens should be based on open standards, so that readers can communicate with hardware via interfaces like USB.

6.2. Procurement Approach

9. Do you agree with the procurement approach above described: two-phased project including testing and deployment based upon a framework agreement and two phase contracts? Please explain.

The approach is deemed feasible by the market parties. Only question was about limiting Phase 1 – testing of the solution to 2 parties, as there could be more with suitable solutions.

One of the respondents suggested to have a project deployment contract with a testing phase and a chained parallel contract.

6.3. Technical requirements

10. The solution must continue to be in line with developments around national geolocation standards. RAV Brabant MWN has identified the Traffic Square, GEO4OOV, IMROI and Melvin. Are these standards relevant for the scope of the solution to be provided? Can you indicate additional (relevant) national, European and international geolocation standards?

One of the respondents made several remarks regarding some of the mentioned geolocation standards:

- Traffic Square is currently demanded by the security regions, however, NIPV indicates that it does not yet know whether they will make it accessible to commercial parties, meaning that there is an external dependency to use this standard.
- IMROI is a model for the fire service by the fire service: it is about object information. It may be a too demanding requirement and might not be necessary for the ambulance service.
- Melvin's quality level differs greatly per municipality, so manual control is still necessary.

An additional geolocation standard was mentioned: Talking Traffic coming in LISV Next Gen.

6.4. Commercial requirements (for the testing phase)

11. RAV Brabant MWN wants to pay a fix amount for the testing phase – two ambulances for a maximum period of three months - with a maximum of 5,000 € (excl. VAT) in total. Is this fix amount feasible? Please explain.

No issues have been pointed out. The market agrees with this proposal, however, it was mentioned by one parties that this would only cover hardware, not integration, services and application software.

6.5. Commercial requirements (for the deployment phase)

12. RAV Brabant MWN wants to pay a fix amount for the deployment phase per month and per ambulance. Is this approach feasible? Please explain.

No issues have been pointed out.

13. RAV Brabant MWN is willing to pay a maximum uplift of 4% for repair and maintenance during the deployment phase. Is this % feasible? Please explain.

No issues have been pointed out, except that one of the respondents indicated that molestations should be excluded from this percentage.

14. RAV Brabant MWN is expecting the contractor to bear his own cost for any higher %. Is this risk acceptable? Please explain.

In general, the answer is yes, but one of the respondent suggested to use a maximum amount, instead of a percentage.

15. RAV Brabant MWN expects a volume discount based on:

- 50 to 75 ambulances
- 76 to 100 ambulances
- 101 to 125 ambulances

Is this volume scheme feasible? Please explain.

No issues have been pointed out.

16. RAV Brabant MWN expects an additional launching customer discount on the volumes reached. What is a feasible discount % and what kind of activities do you expect from RAV Brabant MWN in return? Please explain.

One of the respondents indicated that a launching customership discount should be translated into a win-win agreement between supplier and procurer.



Another party indicated that there are no volume discounts, but that for lower numbers than 50, then the prices will increase.

17. Are you willing to provide an additional discount if RAV Brabant MWN allows you to use POI after termination of the framework agreement? What would you consider as a reasonable discount? Please explain.

The respondents were not aware of this possibility, since the ownership of the data always remains vested with the customer.

18. Do you have any additional remarks, suggestion and/or recommendations? Please describe.

A recommendation was to allow participants in the OMC to have an opportunity to discuss and exchange ideas with RAV Brabant NIS.

In relation to Annex 5 - Background information relating to GNSS, one of the respondents made several remarks:

1. PRS we are now at a TRL6, but demonstrators prove that it is more of a TRL4, meaning that it is difficult to embed the PRS in a vehicle and it would be expensive due to the small economic scale. I.e., PRS can be used to validate a location for the command / control centre, but is not available for local use in the vehicle.
2. Certain GNSS equipment is already capable of receiving the Galileo open signals and of embracing open standards.
3. Depending on antenna and type of GNSS used, a normal GNSS lowerband system can achieve an accuracy of about 3mtr. The usage of lower bands or PRS can improve this.
4. Use of GNSS is now at TRL8-9 and implemented in certain – existing - hardware solutions.
5. HAS still is at TRL6-7. No planning known.
6. It would be recommendable to use a location communication system with external antennas not via a tablet. If available, an antenna with PRS E6 band could be a criterion.



7. Conclusion

Due to the limited number of respondents, we can conclude that there is room for RAV Brabant MWN to act as a launching customer. Nevertheless, RAV Brabant MWN concluded that there is also a risk for the procurement procedure, due to a possible limited number of tenderers. There are indications that the market is in a pioneering phase, as well as of a lack of European competition in this specific sector. This could have the effect and/or the characteristics of an oligopolist market.

The answers from the market lead to conclude that the implementation of the XIS type qualification/approval of VZVZ both for the navigation system – per Q1 2023 - and for the medical applications – per mid 2023 – is feasible. I.e., the timing is realistic. However, there is always a risk that technology vendors are not capable of delivering on time. This risk cannot be born by RAV Brabant MWN, but should be born by the market parties.

The procurement strategy of a Framework Agreement to be awarded to two successful technology vendors and composed of two different phases with respective Phase Contracts is also deemed feasible by the market.

This approach implies that in the first Phase, the selected technology vendors will have to test their solution and demonstrate that works in a production environment (some ambulances). At the end of this first phase, the TRL of the solution will be 9. Only one technology vendor will be invited to sign a contract for Phase 2 and deploy the final solution, based on the outcome of the demonstration phase. I.e., the best solution – from a quality perspective - will be selected for the deployment phase. The price will be set from the beginning, already in the offer for phase 1.

The suggested pricing schemes and discount schemes - both for the testing phase and for the deployment phase - are deemed feasible and realistic by the market.

Where no tenders or no suitable tenders or no requests to participate or no suitable requests to participate have been submitted in response to an open procedure or a restricted procedure, provided that the initial conditions of the contract are not substantially altered, RAV Brabant MWN will start a negotiated procedure without prior publication.

A tender shall be considered not to be suitable where it is irrelevant to the contract, being manifestly incapable, without substantial changes, of meeting RAV Brabant MWN's needs and requirements as specified in the procurement documents. A request for participation shall be considered not to be suitable where the economic operator concerned is to be or may be excluded pursuant to Directive 2014/24/EU and the Dutch national transposition thereof.

From the feedback of the market, RAV Brabant MWN has identified an integration risk between the different aspects/components/functionalities of the solutions. This risk cannot be born by RAV Brabant MWN, but should be born by the market parties. However, RAV Brabant MWN has provided with several possibilities in terms of timelines to ensure that interested market parties have time to develop an integrated solution that is future proof for the coming years, that is why RAV Brabant MWN intends to award the framework agreement and related phase contracts in Q1 2023 and not in Q4



2022.

Finally and based on the outcomes of the OMC replies, RAV Brabant MWN will finetune and – where deemed needed - modify the technical specifications of the envisaged solution.

These are RAV Brabant MWN's conclusions to the OMC replies.

RAV Brabant MWN expressly offers the opportunity to interested market parties to object to the decisions and the conclusions (hereinafter: the decision of RAV Brabant MWN) by instituting summary proceedings before the competent court in Breda (Rechtbank Zeeland-West-Brabant), The Netherlands, within 20 calendar days of the date of publication of this report. This means that the summons must be served to RAV Brabant MWN within the aforementioned period of 20 calendar days. This period of 20 calendar days is an expiry period. This means that if a market party has not brought summary proceedings before the court in the competent court within the expiry period, that decision is final; he has then processed his rights to challenge that decision. RAV Brabant MWN is then free to (further) follow up on its decisions. Any requests for (further) motivation of the decisions shall not suspend this objection period.

The expiry period also precludes a market party that has not itself instituted summary proceedings within this period from intervening in summary proceedings brought by another market party on the side of that other market party.

RAV Brabant MWN shall never be obliged to actually start the intended tender procedure(s).

If summary proceedings are instituted, RAV Brabant MWN shall await the outcome of the disputed part before proceeding with the execution of that disputed part of the decision. For the rest, RAV Brabant MWN remains entitled (but not obliged) to implement the undisputed part of the decision.

After the outcome in summary proceedings, RAV Brabant MWN will consider how to deal with the outcome.

After expiry of the objection period (expiry period) of 20 calendar days, market parties can no longer affect the decision of RAV Brabant MWN. Any claims for compensation (by market parties that may or may not have commenced preliminary relief proceedings) must be brought in substantive proceedings no later than 60 calendar days after the publication of this final report. Letting this period expire unused is interpreted as waiving the right to claim damages and will (therefore) result in the processing of the right to institute another action for damages.

Since RAV Brabant MWN is of the opinion that it is the interest of technology vendors to understand the consequences of their decision and to avoid any misunderstanding, the following is applicable and explicitly stated in Dutch:

RAV Brabant MWN biedt nadrukkelijk de mogelijkheid aan marktpartijen om tegen de besluiten en de onderbouwingen daarvan (hierna: de beslissing van RAV Brabant MWN) bezwaar te maken door een kort geding procedure aanhangig te maken in Breda (Rechtbank Zeeland-West-Brabant), binnen een



termijn van 20 kalenderdagen na het moment van publicatie van dit verslag. Dat betekent dat de dagvaarding binnen voornoemde termijn van 20 kalenderdagen moet zijn betekend aan het adres van RAV Brabant MWN. Deze termijn van 20 kalenderdagen is een vervalt termijn. Dat wil zeggen dat indien een marktpartij niet binnen deze vervalt termijn een kortgedingprocedure aanhangig heeft gemaakt bij de rechtbank in Breda (Rechtbank Zeeland-West-Brabant) die beslissing onherroepelijk is; hij heeft dan zijn rechten verwerkt om nog tegen die beslissing op te komen. RAV Brabant MWN is dan vrij om (verder) gevolg te geven aan zijn beslissing.

Eventuele verzoeken om (nadere) motivering van de beslissing schorten deze bezwaartermijn niet op.

Deze vervalt termijn staat er bovendien in de weg dat een marktpartij die binnen deze termijn niet zelf een kort geding aanhangig heeft gemaakt, zich in een door een andere marktpartij aanhangig gemaakt kort geding voegt aan de zijde van die andere marktpartij.

RAV Brabant MWN is nimmer verplicht om de voorgenomen aanbestedingsprocedure(s) daadwerkelijk te starten.

Indien er een kortgedingprocedure aanhangig wordt gemaakt, zal RAV Brabant MWN de uitkomst van het betwiste onderdeel afwachten, alvorens tot uitvoering van dat betwiste onderdeel van de beslissing over te gaan. Voor het overige, blijft RAV Brabant MWN zonder meer gerechtigd (maar niet verplicht) tot uitvoering van het niet betwiste deel van de beslissing over te gaan.

Na de uitkomst in kort geding zal RAV Brabant MWN zich beraden hoe met de uitkomst om te gaan.

Na het verstrijken van de bezwaartermijn (vervalt termijn) van 20 kalenderdagen kunnen marktpartijen de beslissing van RAV Brabant MWN niet meer aantasten. Eventuele vorderingen tot schadevergoeding (door marktpartijen die al dan niet een kortgedingprocedure zijn gestart) dienen uiterlijk binnen 60 kalenderdagen na publicatie van dit eindverslag in een bodemprocedure te worden ingesteld. Het ongebruikt laten verstrijken van deze termijn wordt uitgelegd als het afzien van het recht om schadevergoeding te vorderen en zal (dus) leiden tot het verwerken van het recht om nog een schadevergoedingsactie in te kunnen stellen.