



**Gemeente
Amsterdam**

Automated Waste Collection Systemen (AWCS) Amsterdam

Market consultation III

1 Market consultation OAT

This document provides brief notes to the market consultation for the tendering of the 'Automated Waste Collection Systemen (AWCS)' (hereinafter OAT) and the questionnaire for this market consultation. Based on this questionnaire, the Municipality of Amsterdam offers you an opportunity to submit comments in preparing for a tendering procedure. All information in this document is indicative, and need not necessarily appear in the tender, in this form. A market consultation is not part of the tendering procedure. No rights may be derived from the content of this document and the accompanying appendices.

To ensure that market parties are informed as fully as possible about the proposed scope of the assignment and the underlying principles, a number of appendices have been included with this document, that contain further information. This document regularly refers to these appendices. The following appendices are an integral part of this market consultation document:

- Appendix 1 Overview of demarcation
- Appendix 2 Implementation planning timetable
- Appendix 3 Principle drawing bridge crossing
- Appendix 4 Principle design terminal location
- Appendix 5 Principle design for the built-in section of the first building
- Appendix 6 Legislation and standards
- Appendix 7 Location principles
- Appendix 8 Soundings

2 Project description

2.1 Introduction

With its Waste Implementation Plan, the municipality adopted the rules that should contribute to a waste separation percentage of 65% by 2020. To achieve this target, the municipality aims to combine separation at source and post-separation. Separation at source will be achieved by organising a good level of service for recyclable materials (making it easy for residents to hand in these materials). Post-separation will take the form of a post-separation installation at AEB Amsterdam. As well as increasing the separation percentage, the municipality has also identified a clear focus on keeping the city clean and whole, over the coming years. Another important theme will be traffic safety.

In developing the Sluisbuurt district, this Waste Implementation Plan must be taken into account. The Sluisbuurt district is a new district to be developed on the western section of Zeeburgereiland. In a relatively limited space, 5,500 homes and 100,000 m² of facilities are planned. The district will consist of 11 clusters which in turn break down into various building blocks and plots. The municipality plans to develop the district in nine phases (each lasting approx. 18 months).



High ambitions have been identified for the Sluisbuurt district with regard to spatial quality and waste collection. As a result of there being mainly high-rise buildings, the area will generate relatively more waste per hectare than the existing parts of the city. As a consequence, if a traditional collection system were selected, waste collection would have a clear effect on public space, both in terms of quantity since relatively more m² will have to be reserved for waste containers and in quality because of the greater risk of negative effects such as littering and fly tipping.

The intensive building plans in the Sluisbuurt district impose additional pressures on public space. On the one hand because more people live in the area and on the other because with high-rise buildings, private outdoor space is smaller. Public space in the Sluisbuurt district will serve as the 'living room' for the residents, while at the same time, that same public space will be used for bicycle and car parking, and for visitors from outside the Sluisbuurt district. These characteristics and objectives mean that a different approach to waste collection will be introduced, in the Sluisbuurt district.

An Automated Waste Collection Systemen (OAT) will have positive social effects on use of space, quality of outdoor space and reduced burdens in the form of emissions, odour nuisance, noise and risks to safety. Realisation of the OAT will be issued under tender.

With this mind, the Municipality of Amsterdam has prepared a number of operating principles it wishes to discuss with the market.

Objectives

A highly urbanised environment, high-rise building and high population densities call for a different approach to waste collection. The maximum amount of the already limited public space must be available for movement and residence/occupation. The Sluisbuurt district offers an opportunity to optimally satisfy the objectives for the separation of waste. The aim of the client with the OAT is to achieve the following project objectives:

1. Sustainability:

- raising the waste separation percentage from 27% in 2014 to 65% in 2020, thereby enabling the recycling of more waste and the reuse of organic waste. This also means that if the OAT does break down, measures will have to be taken to guarantee separate waste collection.
- Amsterdam wishes to see the lowest possible energy consumption by the OAT. If possible, it is the aim to achieve an energy-neutral OAT, whereby the required energy is fully generated locally.

- **Service provision:** The Client wants the residents and users of the OAT to be satisfied with the functioning of the OAT. This satisfaction can be influenced by the Contractor by ensuring that waste can be delivered via the OAT at any time, but also by ensuring the provision of timely and complete information about the construction and maintenance of the OAT.
- **Robust and reliable system:** A robust and reliable OAT so that satisfaction among residents and users is increased; maintenance costs on the OAT are reduced; nuisance for the environment is restricted. One specific element within this project objective is preventing fouling around the OAT, both on the collection side (in the buildings) and at the terminal.
- **Public space:** In the Sluisbuurt district, public space is limited. In allocating functions within this limited public space, priority will be given to the residence function and movement by bicycle or on foot. To make this structure possible in the public space, it is desirable that there be no obstacles for the collection of waste.
- **Successful qualitative and technical integration of the OAT in the surrounding environment:** For Amsterdam, successful qualitative and technical integration of the OAT in the surrounding environment is crucial. The minimum requirements appear in the zoning plan (Sluisbuurt and Baaibuurt districts). However, in the further elaboration of the design, it is vital that as many decisions as possible are taken that make a demonstrable contribution to the objectives of the zoning plan.
- **Flexibility:** a solution that is flexible, extendable, futureproof and transferrable, so that effective and efficient use is ensured, at acceptable social costs.
- **Timely realisation:** The OAT will be installed in phases. These phases are linked to the development of the Sluisbuurt district itself. The development of the Sluisbuurt is not set in stone and may change during the term of the agreement. It is essential for the Client that the OAT keeps pace with the rate of development of buildings in the Sluisbuurt district, and that for each new development, the OAT is ready before any building is handed over. It is essential that the building developments be followed, in order to ensure that residents are always able to submit their waste via the OAT.
- An **efficient organisation** to keep waste charges and costs for the residents of Amsterdam as low as possible, and to ensure that the constant need for investments is met.

2.2 The Assignment

The Municipality of Amsterdam plans to organise a tendering procedure whereby one contractor will be responsible, on the basis of a DBMO contract for the design (D), build (B), maintain (M) and operate (O) of the OAT, for a maximum period of 50 years. Broadly speaking, (not an exhaustive list), the OAT consists of the following elements:

- 1. Main pipeline: Pipeline linking the collection pipes to the OAT Terminal
- 2. Collection pipe: Pipe that links the connection pipes to the main pipeline and/or to which connection pipes and other collection pipes are connected
- 3. Connection pipe: Pipeline located outside the plot which connects the collection point and/or pipes within the plot boundaries (site pipeline) to the collection pipeline
- 4. Activation of the connection in the building to the main pipeline network
- 5. Terminal for waste collection
- 6. Shut-off valve (to shut off a building from the OAT system) and
- 7. Measurement and control installation in the buildings (electrical engineering and pneumatic engineering component of the system in the buildings)

- In addition, market parties are required to submit an offer for the design, building, management, maintenance and operation of the built-in facilities (in buildings) that form part of an OAT system (with separated collection of four waste flows: 1. residual waste, 2. organic, 3. paper and cardboard, 4. plastic, metal waste, cardboard drink packaging).

Subsequent transport from the terminal to AEB (or another processor) is not part of the tender. Post-transport will be organised by or on behalf of the Directie Afval & Grondstoffen.

Appendix 1 'Overview of demarcation' provides an overview of the demarcation as proposed by Amsterdam, and further clarified below.

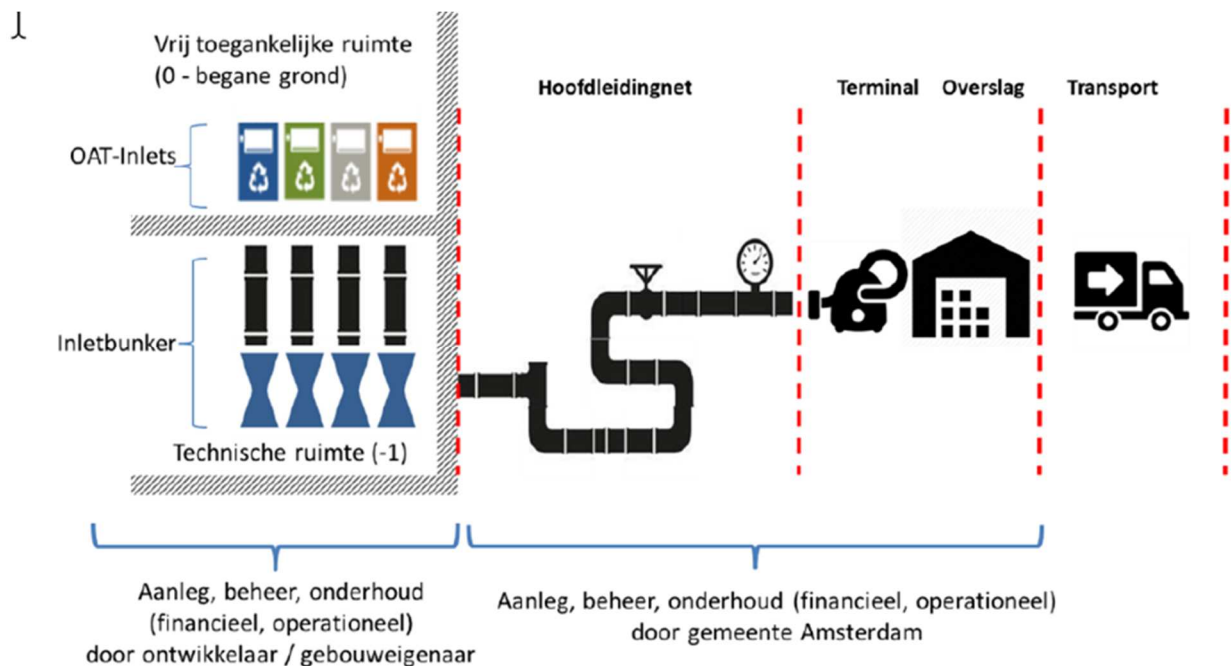


Figure 1: diagrammatic representation of OAT Sluisbuurt district Amsterdam.

The system consists of collection points with multiple inlets, transport pipelines and a receiver terminal (21*28 metres), see appendix 4 Principle design Terminal location.

The inlet points to the system are located on the ground floor in the building. The system itself is in a lower floor below ground level, because the collection points must have sufficient buffer capacity for the connection to the system (at least 0.25 m³ (= 250 litres)).

In principle, collection points will not be installed on higher floors. In the terminal, the waste is compressed in containers (compacted in the same way as domestic waste is compacted in waste collection vehicles), before being transported to the waste processing installation. The transport of waste containers to the waste processing company is beyond the scope of the assignment and is the responsibility of the Municipality of Amsterdam.

The design, building and maintenance of the collection points including the area in which they are installed will be the responsibility of the building developer, and the owners' association (VVE) that will be established at a later date. The completion of a functional connection between a collection

point and the pipeline in the public space of the OAT is also the responsibility of the OAT contractor. See also appendix 1.

The OAT contractor is expected to deliver a fully operational waste transport system (including terminal, the main pipeline system, including the necessary measurement and control systems at the collection points, but excluding the collection points). See also appendix 1.

2.3 Operating principles OAT

This must be an open OAT system which means that the building owner/owners' association is responsible for the construction and management of the OAT facilities inside the building. The interface for the built-in OAT facilities is within the scope of this Assignment. This interface will have to be generic allowing different built-in OAT facilities (systems) to be connected.

Before the contractor is contracted, in connection with the opening up of the Sluisbuurt district, it is possible that a small section of the route (at a number of bridge crossings) will be built by a third party. The reason for this is that the construction of the route at these bridge crossings will not be possible at a later date (see Appendix 3 'Principle drawing bridge crossings'). In addition, the Client wants to be able to manage the risks relating to the already installed anchors for the Piet Hein tunnel. This may require the Client to install pile foundations. In that framework, the Client will therefore be taking over a small section of the route (at a number of bridge crossings), and the pile foundations for the terminals, whereby the contractor will acquire full responsibility for these components, during the operation phase.

The development of the Sluisbuurt district will as already stated take place in phases. It must therefore be possible to roll out the OAT in phases, whereby the system must already be operational following completion of the first phase.

Part of the assignment is the management and maintenance (maintain) and operation (operate). The tendering service plans to sign a contract for these services for a period of 25 years (following handover and initial commissioning), after which time this period may be unilaterally extended by the Client by five years, on five occasions.

The coordination obligation lies with the Contractor in respect of the connections between the buildings and the route, and in respect of the terminal and the route for the crossing of the Piet Hein Tunnel by the pipeline.

3 Procedure and planning

3.1 Market consultation

You are requested to respond to this market consultation at the latest by **Monday 6 August 2018**. You can submit your written response via the message module of TenderNed.

The municipality reserves the right to add to existing questions, to withdraw questions or to add new questions, during the course of this market consultation. Any such alterations will be announced via the message module of TenderNed.

To ensure the efficient processing of the responses, we would ask you to use the space behind each of the questions for your response. You can also indicate in this space whether your

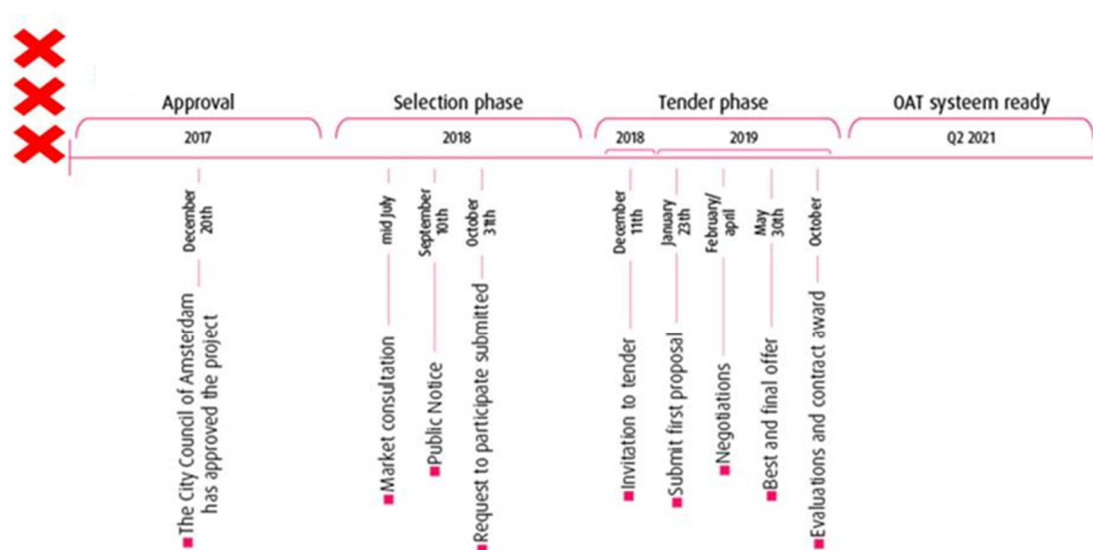
response/reply includes confidential information (competition-sensitive information). Please keep your response/replies as brief and concise but also as complete as possible.

In response to your written replies, the Municipality of Amsterdam may wish to hold a personal interview with one or more market parties who have responded, to receive further explanations/information about the answers given. You will be duly informed by the municipality.

This market consultation will take place both in English and Dutch. The working language for the proposed tender and the accompanying tendering procedure is Dutch.

3.2 Indicative planning

For the time being, Amsterdam assumes the following planning timetable.



4 Collected information

Of all the information collected, the Municipality of Amsterdam will prepare a report which will be published (possibly as part of the tendering documents). The Municipality of Amsterdam is entitled to use the information provided for the preparation of the tendering documents. The Municipality of Amsterdam will refrain from using any specific references to participants or commercially sensitive information in the tendering documents.

5 Market consultation questionnaire for 'OAT Sluisbuurt district Amsterdam'

Basic details	
Company name	
Address, Postcode and place	
Contact person	
Telephone & e-mail contact person	

- If a reply must be treated confidentially, please mark this fact explicitly and specifically with the answer in question.
- You can opt to only answer those questions which relate to your area of expertise.

Scope and the project	
The scope of the assignment for the OAT in the future Sluisbuurt district consists of the design, building (during the phased development of the Sluisbuurt district, approx. 11 years) and management and maintenance (maintain) and operation (operate) of the OAT (for a maximum of 50 years), which shall be taken to include: 1. The main pipeline network 2. The connection from the building to the main pipeline network 3. The waste collection terminal 4. The shut-off valve (to shut off an entire building from the OAT) 5. The measurement and control installation in the buildings (electrical engineering component of the system in the buildings) 6. The market party will also be required to submit an offer for the design and implementation of the built-in facilities (in buildings) (with separated collection of four waste flows: 1. residual waste, 2. organic, 3. paper and cardboard, 4. plastic, metal, cardboard drink packaging) and to submit an offer for the management, maintenance and operation of these in-built facilities. There is still a possibility that the built-in facilities (in the buildings) will not be supplied by you as the Tendering party, but that the building owner/developer will purchase the built-in facilities from another party. The OAT (terminal, route and measurement and control systems in the buildings) are the responsibility of the contractor. The built-in facilities are the responsibility of the building developers.	
1.	The Client wants an OAT with a technical service life of at least 50 years, in accordance with the standard use appropriate for the specified number of homes. Are you in a position to submit an offer for the design and building of an OAT with a technical service life of at least 50 years?

2.	An indicative implementation planning timetable appears in appendix 2 'Implementation planning timetable'. a) In your view, is this planning timetable realistic in the framework of the implementation of the work? b) If not, what suggestions can you make to make this planning timetable realistic/viable.	
3.	The OAT will be tendered as a single, integrated system whereby the built-in facilities at the collection points must be offered, as an option, so that building owners/developers are in a position to take up this offer from the contractor. The building owners may also purchase these systems from a third party. For the management of the OAT installation at the collection point, facilities will have to be fitted at the collection point, to which the built-in system can be coupled, to ensure functioning of the OAT system. a) On the basis of your system responsibility, how do you view this solution (e.g. in terms of risks)? Both if you supply the built-in OAT facilities and if they are purchased from a third party. b) In your opinion are there other options? If so, which? c) See appendix 1: demarcation. Can you supply the through feed through the facade and, given the settlement problems in Amsterdam, take responsibility for this passage?	
4.	In the requested solution and demarcation as outlined in appendix 1 ('Overview of demarcation') it has been assumed that as contractor, with the measurement and control systems you are required to install in the buildings, you will be able to guarantee correct functioning of the OAT and can accept responsibility for the systems you have supplied. a) Can you confirm this? b) If you are unable to confirm this, what are the conditions according to which you would be able to guarantee the correct	

	functioning of the OAT, and accept responsibility for the systems you supply?	
5.	a) Are the measurement and control systems you supply universally suitable for operating inlets from other suppliers? b) If your answer is negative, what do you need to be able to control the built-in OAT facilities from (a) third party(ies) using your measurement and control systems?	
6.	The Client wishes as far as possible to guarantee the integrated nature of the OAT, and to place system responsibility with the contractor. In the implementation stage, communication and cooperation will be necessary with building owners/developers, for example for checking the built-in facilities that form part of the OAT system (and the accompanying space), the connection of built-in facilities to the pipeline route, the calibration of the measurement and control systems, etc. The Client plans to place the coordination/management task with the contractor. The operating principle is that the building owner applies for a connection, after which the remaining process is coordinated by the contractor. The operating principle here is that a time frame of 26 weeks must be maintained between the application for connection and definitive completion (commissioning) of the connection. a) Are you able to carry out these coordination tasks? b) What do you need to make this possible? (for example: information about the built-in facilities, planning timetable)	
7.	Before a contractor is contracted, in the framework of ensuring transport access to the Sluisbuurt district, it is possible that a small section of the route (at a number of bridge crossings) will be installed by a third party. The reason for this is that the construction of the route at these bridge crossing will no longer be possible at a later date. The crossings will take the form of a submerged construction beneath the bridge and the waterway, including an approx. 100-mm HDPE for the through feed of the cables and air pipe, which will subsequently no longer be accessible. The definitive specifications for the construction of this section of the route will be notified to you, in	

	the agreement. For the time being, the external diameter of this pipeline is set at 406,4 mm. Enclosed is the principle design drawing, see Appendix 3 'Principle drawing bridge crossings' a) Are you willing to take over responsibility for this section of the route, such that it becomes an integral part of your system? b) If not, what would you need to be prepared to accept responsibility? c) Can you make a connection to a pipeline of this diameter?	
8.	Before the contractor is contracted, the terminal pile foundations will be installed by a third party. This will help manage the risk relating to the already installed anchors for the Piet Hein tunnel, in such a way that these anchors will no longer influence the planning timetable for the OAT. The specifications for the installation of the pile foundations will be notified to you in the agreement. Enclosed is the principle design for the terminal location, see appendix 4 ('Principle design terminal location'). a) Are you willing to take over responsibility for the pile foundation in such a way that it becomes an integral part of your system for the maintain and operate phase? b) If not, what would you need to be willing to accept this responsibility?	
9.	What do you see as the most important opportunities and hindrances (threats) to the completion of the OAT?	
10.	a) Do you currently recognise specific risks given the scope/nature of this project? Please list your top 5 risks. b) What risk management measures do you propose? c) Who is best able to manage these risks?	
11.	Based on the proposed demarcation, in addition to the design and build elements, are you also able to manage, maintain and operate the OAT?	
12.	One of the design principles for the OAT is that the management, maintenance and operation can at any time be taken over by a third party. In building the technical systems (including the software), it is possible that a vendor lock-in will be created, or built in by the contractor	

	To what extent and how will you prevent such a vendor lock-in, such that the management, maintenance and operation can at any time be transferred to a third party?	
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Tendering and contract		
13.	We plan to request reference projects for the following core competences: 1. the implementation and handover on time (including any extensions granted) in an expert and regular manner of at least one implementation design for an underground waste transport system; 2. the completion and handover on time (including any extensions granted) in an expert and regular manner of at least one underground waste transport system. 3. the implementation in an expert and regular manner of at least one assignment, which includes the management and maintenance of an underground waste transport system for a contract period of at least two years. 4. The implementation and timely handover (including any extensions granted) in an expert and regular manner of at least one underground pipe system in an area subject to ground subsidence with a total length of at least 100 metres (total length of the pipe system). In respect of the first three core competences, the project must involve an underground waste transport system whereby (separated) waste is/was compacted and collected at a terminal (central location). All these competences must have been implemented or have been in implementation during the past <u>five years</u> prior to the final date for registration. a) Are you able to satisfy these competences? b) If not, why not?	
14.	Can you provide a (reference) description of the materials and dimensions for the OAT project already completed by you?	

15.	For the OAT, the Client plans to enter into a long-term agreement. The Client wishes to match the term of the agreement to the intended useful life of the OAT. To guarantee the functioning of the OAT, management, maintenance and operation will also be entrusted to the contractor. The Tendering service plans to entrust the management, maintenance and operation to the contractor for 25 years (see also question 18). These 25 years will consist of between 11 and 15 years implementation work during the area development of the Sluisbuurt district, and approx. 10 years management and maintenance. In addition, if the Client wishes to make use of its unilateral extension options (see also question 19), the contractor will be required to accept responsibility for maintaining the OAT (in a condition still to be defined) for a maximum period of 50 years. Is this an acceptable and manageable timeframe for you? If not, please explain why this timeframe is unacceptable and/or unmanageable, for you.	
16.	For the period after the first 25 years, the Tendering service will take up extension options for five periods of five years (see also question 19). These extension options can be taken up unilaterally by the client. Is this acceptable and workable for you? If not, please explain why not	

Price		
17.	To ensure the manageability of the development risks for market parties, the Client intends to pay the price for the terminal and routes as follows: (i) Contract fee design and building of terminal, payable following handover (fixed); (ii) Contract fee design and building of route, payable following handover (fixed prices for the components will be settled on the basis of the actual purchase) Can you make a suitable offer on this basis?	

18.	The Client intends to tender a fixed price for the management, maintenance and a fixed price for operation for a period of not more than 25 years, that will be annually indexed. The start date is planned after the first connection(s) has/have been commissioned. The planned end date will be fixed for the entire area, so that the first connections will have been under your management for longer than the connections that for example are only completed in year 10. <table><tr><td></td><td colspan="10">Termijn in jaren</td></tr><tr><td></td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10 etc.</td></tr><tr><td>Face 1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>Face 2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>Face 3</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>Face 4</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>Face 5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>etc.</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> is looptijd beheer en onderhoud Is it possible for you to make a specified offer on this basis?		Termijn in jaren											1	2	3	4	5	6	7	8	9	10 etc.	Face 1											Face 2											Face 3											Face 4											Face 5											etc.																						
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19.	For the second 25 years, the Client plans to call in an independent cost expert every five years, to assess the price for the management, maintenance and operation, in order to arrive at healthy price development. This may result in an (upward or downward) adjustment to the prices. a) Do you consider this system workable? b) If not, in your opinion what would be a workable system for developing the management, maintenance and operation price?																																																																																																				
20.	Together with the tender for the OAT, the tender will also take place for the completion of the first building. By way of option, the contractor will be asked to submit a price for a construction of the built-in facilities, such that the building developer can decide on that basis whether or not to purchase the built-in facilities from the contractor. The contractor will also be asked to submit a price (as an option) for the management and maintenance of the built-in facilities, such that the building developer can decide on that basis whether or not to purchase the built-in facilities from the contractor. Do you consider this acceptable?																																																																																																				
21.	This price information will be too late for the first building. Appendix 5 Principle design for the built-in section of the first building shows the scope of built-in facilities and the number of metres of pipeline required. For the management/control of these built-in facilities.																																																																																																				

	the requirements as listed in question 31 in respect of access to the system will apply. a) Can you provide a cost indication for the construction of the built-in section of the OAT for the first building? b) Can you provide a cost indication for the annual management and maintenance costs for the built-in section of the OAT for the first building? If your answer to the above questions is affirmative, please provide your cost indication together with your reply document.	
22.	Requirements will be imposed on contractors in the implementation of the assignment (maintain and operate phase of the agreement). Appendix 6 Legislation and standards lists a number of standards with which the contractor must comply during implementation (being certified) or with which the OAT must comply (legislation and standards). The NEN-ISO 55001:2014 certificate is only required at the moment that phase one of implementation is completed. a) Are you conversant with the legislation and standards appearing in appendix 6 ? b) Are you capable of achieving these certifications? For each standard/certification, please indicate what is achievable for you or if applicable, which standard/certificate you already comply with. c) Are you able to build the OAT in accordance with the legislation and regulations and standards?	

Technical and/or functional requirements		
23.	Do you have any suggestions for the schedule of requirements still to be drawn up, to ensure that both parties can complete the project as successfully as possible?	
24.	During the operation phase (in other words also during the phased implementation), the Client is aiming for an OAT that offers maximum availability to ensure correct waste collection.	

	In that connection, the Client plans to include an availability requirement of 99% (calculated over a year) for the OAT system as a whole and even higher availability requirements on certain elements. a) Do you consider availability of 99% (on a yearly basis) achievable? b) For certain elements of the OAT system (pipeline, systems at OAT terminal), a maximum limit of 4 hours will apply. Is this technically/organisationally achievable?	
25.	Appendix 7 lists location principles. a) Do you consider these principles logical? b) Do you see opportunities for further optimisation? If so, what opportunities do you see? c) Do you have any suggestions for these principles?	
26.	In the Sluisbuurt and Baaibuurt districts, there are specific soil conditions (by way of indication: 10 to 25 metres of clay/peat). These soil conditions lead to risks of settlement (in accordance with the previous market consultation: approx. 200 to 300 mm) in the public area in relation to the constructions (terminal, Piet Hein tunnel, bridges, buildings) which have been/will be built on foundations. This brings with it the possibility that the OAT will subside with the settlements in public areas, while the constructions will not subside. See appendix 8 Soundings a) Are you able to manage this risk? b) How do you plan to manage this risk?	
27.	At present, the Client has identified several options for the collection of cardboard. The Client wishes to have cardboard collected via the OAT, by installing a shredder. a) Are you able to offer this option? b) Are there possible alternatives for collecting cardboard (larger than A4) via the OAT?	
28.	The OAT will have to be connected to the buildings via a through passage in the outside wall. The specifications with which the through feed (pipe) in the wall must comply will be	

	provided to the building developer and the building developer will be responsible for the through feed. Appendix 5 also contains the principles applicable for this through feed. The risk of leaks at this through feed during use is an important point for attention. The access to this part of the OAT is another important point for attention. Although these aspects are the responsibility of the building developer, please indicate which measures you are able to take to make a positive contribution to these issues. See appendix 1 – Overview demarcation	
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Technical developments and Innovation		
29.	To what extent can the solution you propose keep up with continued technological innovations? Please submit additional explanation to the Client.	
30.	How can market parties be challenged to implement and guarantee innovations and technological developments throughout the contract period?	
31.	Amsterdam is considering the way in which access to the building (inlets area) and the inlets themselves can be controlled. Amsterdam has identified three possible variants: Variant 1; OAT inlet tag readers for both residents and companies connected directly to the OAT system. Variant 2; OAT inlet tag readers for both residents and companies connected to the building access control system. Variant 3; OAT inlet tag readers for residents connected to the building access control system, OAT inlet tag readers for companies and a separate OAT tag reader connected directly to the OAT. In that respect, Municipality of Amsterdam has the following questions: (i) Are you able, from your OAT (measurement & control systems) management software to release the inlet doors (which are locked in the standard situation) using RFID technology?	

	(ii) Are you at all times able to comply with the hardware and software requirements for the entire in-built purchased set (from inlets to facade) if provided by (any) other OAT supplier? In this situation, assume that you supply just one measurement & control system cabinet in the building, that is capable of managing this entire purchase set from your section of the OAT. (iii) If yes, what aspects need to be taken into account (risks, requirements, protocols, etc.) (iv) If no, how do you plan to manage this situation? (v) If the inlet doors are connected to the building access control system, via measurement and control systems, are you able to keep the inlet doors locked, with your management software, at the moment that the buffer is being emptied? (vi) Using your OAT (measurement & control system) management software, are you able to release the inlet doors (locked in the standard situation) using RFID technology, with a tag reader exclusively for commercial parties, which operates alongside a tag reader exclusively for residents? The tag reader for residents is (possibly) itself connected to the building access control system. In all these cases, question 5 should also be taken into account. (vii) Are you able to register and authorise passes based on RFID technology in simple manner from your OAT (measurement & control systems) on a large scale (around 20.000 passes)? (viii) Are you able, using your OAT (measurement & control systems) management software to authorise and register RFID passes (also for the OAT inlet release) that are already registered and authorised on other software (than your own)? If not, why not? (ix) If so, do you already manage OATs in which this system is operational? (x) Are you able to structure and manage the data generated by RFID technology (registration, authorisation and user data) in accordance with privacy legislation?	
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	(xi) Are you willing and able to do this on the basis of the requirements/wishes of the Municipality of Amsterdam and if required, to release this? (xii) Are you willing and able to alter/adjust the data release on the basis of future changes in waste management? (xiii) How complex is this? Please provide a detailed explanation. (xiv) Are you able to automate any necessary data release/transfer? Possibilities include the monthly statement for the disposal of commercial waste per hospitality business spread over multiple residual waste inlets, even possibly spread over multiple inlets in different buildings. (xv) Do you have other ideas or methods for dealing with these inlet release and data registration issues? If yes, please provide a detailed explanation.	
32.	The Tendering service plans to deploy a number of OAT inlet locations for both private and commercial use. Private use will be charged via the waste disposal charge (fixed amount) payable by the user. Commercial use will have to be based on actual consumption. a) What is your opinion of combined use (private and commercial)? b) Can you issue invoices on behalf of the municipality? c) How will costs be charged to commercial users? Or is this a task for the municipality? d) Do you have solutions for optimum service provision to both parties, taking account of the different settlement methods for the costs by users?	
33.	For managing the operating system, the Client uses a red and green light, to indicate whether the system can be used. a) Please describe the various possibilities for managing the built-in facilities from the control room. b) What possibilities are there for shutting off the system for a single building or a section (with several buildings) in the event of problems? c) How is it possible to determine numbers of reports (per group or per user)?	

34.	Is there any demand for the possibility of stacking containers at the terminal? What added value would this generate for the operational reliability of the OAT?	
35.	The option is being considered of planting a row of trees over the OAT network, following completion of the OAT network. Connections to buildings will have to be built between 2 trees, together with the maintenance access points. This will make it impossible to reach the pipes by open excavation, in the event of breakdown/maintenance. Are you still able to manage/maintain the system in this situation?	

Your recommendations/comments. What would you like to let us know?	

Finally		
	If invited by the Municipality of Amsterdam, are you willing to further explain your answers to the questionnaire in a face to face meeting?	

Thank you for taking the time to participate in this market consultation.