

Muntstroom PCP, Brussels Capital Region

Pre-Commercial Procurement (PCP) regarding
R&D of end-to-end solutions for monitoring
multi-faceted people flow

Market consultation document

(including annexes)

The Muntstroom PCP Group:

STIB-MIVB (lead procurer)

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With the support of:



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¹ www.eafip.eu

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Purpose of this document

The Muntstroom PCP is currently in phase 0. See Figure 1. It started with an extensive preparation by the public buyers. Subsequently two market consultations have been prepared:

- an Open Market Consultation (OMC) to provide the Muntstroom PCP Group with a comprehensive feedback from technology suppliers and
- an Open Client Dialogue (OCD) to provide the Muntstroom PCP Group with a comprehensive feedback from potential end-users.

This document describes the objectives and the rules applicable to these two market consultations.

Reading guidance

The public buyers understand that the Muntstroom project is complex in many ways. This Market consultation document has therefore been divided in six parts that can be read separately:

- Part 1. Introduction of the Muntstroom project
- Part 2. Desired solution and desired output
- Part 3. The Pre-Commercial Procurement (PCP) approach
- Part 4. The objectives and rules of the Open Market Consultation
- Part 5. The objectives and rules of the Open Client Dialogue
- Part 6. The follow up of the two market consultations

Relation between OMC and OCD

Please note: Although the rules and background information of both the OCD and OMC are similar, as they are conducted in the context of the Muntstroom PCP, the questions addressed and feedback required differ due to the nature of the participants, their particular interest and roles.

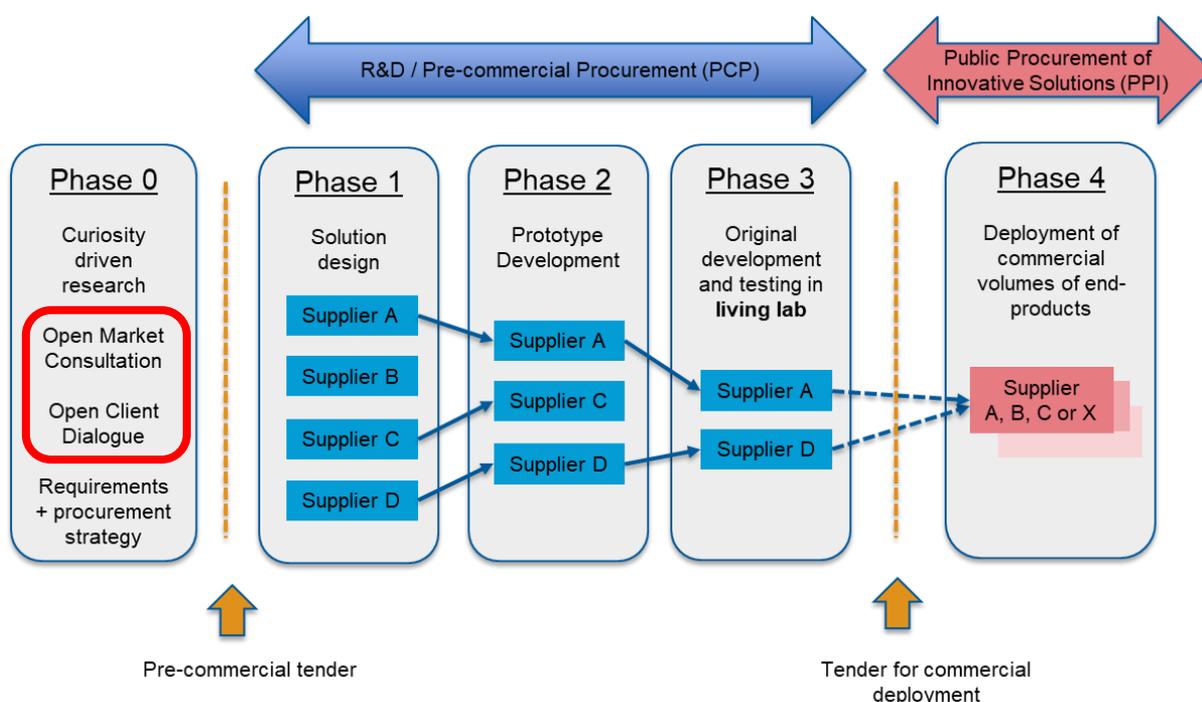


Figure 1: the different phases of Innovation procurement

Part 1. Introduction of the Muntstroom project

1 General introduction

The Muntstroom PCP is a pre-commercial procurement (PCP) that aims at developing and testing an integrated end-to-end solution for monitoring people flow. The project is a result of a project call by Innoviris² for Smart Mobility Living Labs in the Brussels-Capital Region (BCR).

The Muntstroom PCP group / public buyers

Four public partners submitted a joint proposal, being:

1. Public transport operator STIB-MIVB
2. Brussels Regional Informatics Centre CIRB-CIBG
3. Regional authority Brussels Mobility
4. Regional agency Parking Brussels

Assistance providers

The proposal was accepted by the Government of the Brussels-Capital Region in 2019. As a result, the project is partly funded and supported by Innoviris. The Muntstroom PCP has also been selected by the European Commission to receive support from the Eafip initiative³.

Consultancy

Via the assistance providers, the Muntstroom PCP Group is supported by two consultancy firms: Equator Law and Corvers Procurement Services b.v.

Outreach group

For the outreach of the Muntstroom project, the public buyers work together with 4 business support organisations: EASME, Agoria, BECI and hub.brussels. These parties will help with reaching out to Brussel's, Belgium's and Europe's most innovative companies. Additionally they will help identifying the matchmaking needs and subsequently provide the necessary matchmaking services.

Lead procurer

The joint PCP will be conducted by STIB-MIVB as lead procurer in representation of the Muntstroom PCP Group under Belgian law.

Budget

The foreseen budget for co-financing the R&D is maximum € 500.000.

NB. This budget does not include the possible future public procurement of the to be developed solutions (PPI), as a result of this PCP.

² The Brussels institute for encouraging scientific research and innovation

³ European Assistance for Innovation Procurement initiative

2 The people flow-challenge

2.1 Walking in Brussels

We walk a lot in Brussels, even more than in many similar European cities. Yet moving around on foot is seldom considered to be a pleasure and it sometimes seems like an obstacle course. The pedestrian mode has been for a long time largely neglected in the mobility policy.

However, since 2012 the position of the pedestrians has been reinstated with the Pedestrian Plan and the Accessibility Plan for the road and public space (PAVE) which outlined actions to make roads and public spaces in Brussels more accessible to pedestrians. (source: Good Move, 2017).

2.2 An automated people flow monitoring system

A next step for Brussels pedestrians is to understand how people are using the city in daily life. This is the key for creating effective, efficient places to live and work. Big Data solutions can help with this. The objective of this PCP is therefore to develop and test an automated people flow monitoring system for the counting, positioning & routing and managing of people flow.

During the development of the desired solution three guiding principles should be taken into account:

1. The sharing of data should create an added value for all users
2. The Muntstroom solution should “follow the river, but not the little droplets”.
3. The intelligence and innovation need to be, in particular, in the platform and not in the sensors.

2.3 Expected novelties

As part of the PCP-phase 0, an Open Market Consultation is organised in order to get an overview of the (partial) solutions that already exists. For the moment, the Muntstroom PCP Group has identified the following novelties:

- The combination of outdoor and indoor monitoring of people flow (in one single integrated system);
- The modularity: the potential to progressively create a wider sensors network;
- Users that install Muntstroom-sensors should remain owners of their raw sensor data;
- Smart access to support different business models for different types of end-users (public /private, with(out) own sensors, ...);
- The combination of open source and proprietary technologies;
- The need for one end-to-end solution (sensor, data platform, analytics, smart access,..);
- A market driven People Flow-data standard.

2.4 Expected benefits

The information obtained from the people flow monitoring is extremely useful for both public organisations, private organisations and not-for-profit organisations. The data, which represents e.g. the volume of pedestrians or people in an area, can be used:

- to encourage the pedestrian mode:
 - to assess and address obstacles associated with walking
 - to assess and respond to current needs and future demands for pedestrian infrastructure
 - monitor and evaluate the impact of pedestrian infrastructure investments
- to improve combined mobility:
 - to monitor and evaluate the accessibility and compatibility with different mobility modes
 - to create a better overview of the total customer journey
 - to elaborate a piece of the Mobility as a Service (MaaS)-data-puzzle
- to monitor and evaluate the impact of events
- as input for emergency response planning
- to stimulate the (re)use of public data. For instance by students, start-ups and businesses that want to develop mobility apps, or for businesses to determine property values, security needs and staffing requirements.

Businesses can also use the people flow-data to attract potential customers. Or to better inform clients from outside (e.g. tourists) about how to best arrive at their destination by foot.

Last, but not least, because the users with sensors stay owner of the produced raw sensor-data, they decide themselves about what is done with it. This reduces the necessity to purchase data from, and become dependent on, third parties.

Part 2. Desired solution and desired output

3 Desired solution and output

To shape the pedestrian monitoring system, the general idea is to design and test a system that is designed to 1) capture, 2) communicate, 3) store, 4) process 5) analyse and 6) provide smart access to people flow data. These aspects are visualised in Figure 2 and Figure 3 and are further elaborated in Annex 1) Scope of the project.

Desired output

The expected output of the desired system consists of

- 1) Visualisations of the People Flow-data
- 2) People Flow-data sets (Open Data and on-demand data sets)
- 3) Support for routing.

This under the following conditions:

- a) Compliance with the sharing conditions of both public and private data sources
- b) The output responds to the use cases
- c) The system supports different business models
- d) End-to-end compliance with the regulation on Data Protection
- e) Different users can have different (levels of access to) information

Ad b) The uses cases are elaborated in chapter 4 Use cases and Annex 2) Use cases.

Ad c) In the PCP we want to test this technology. Elaborating the business models themselves is NOT part of the project. Nor is the producing and/or selling of sets of data.

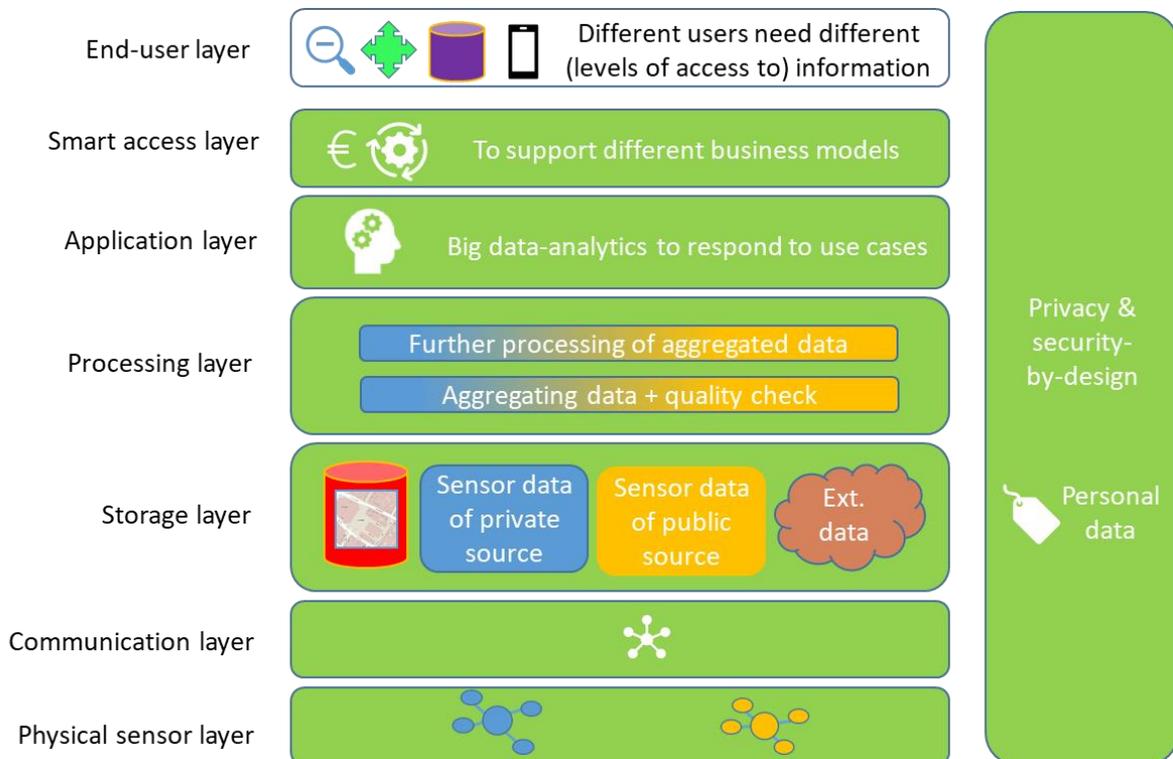


Figure 2: Data architecture of the desired solution

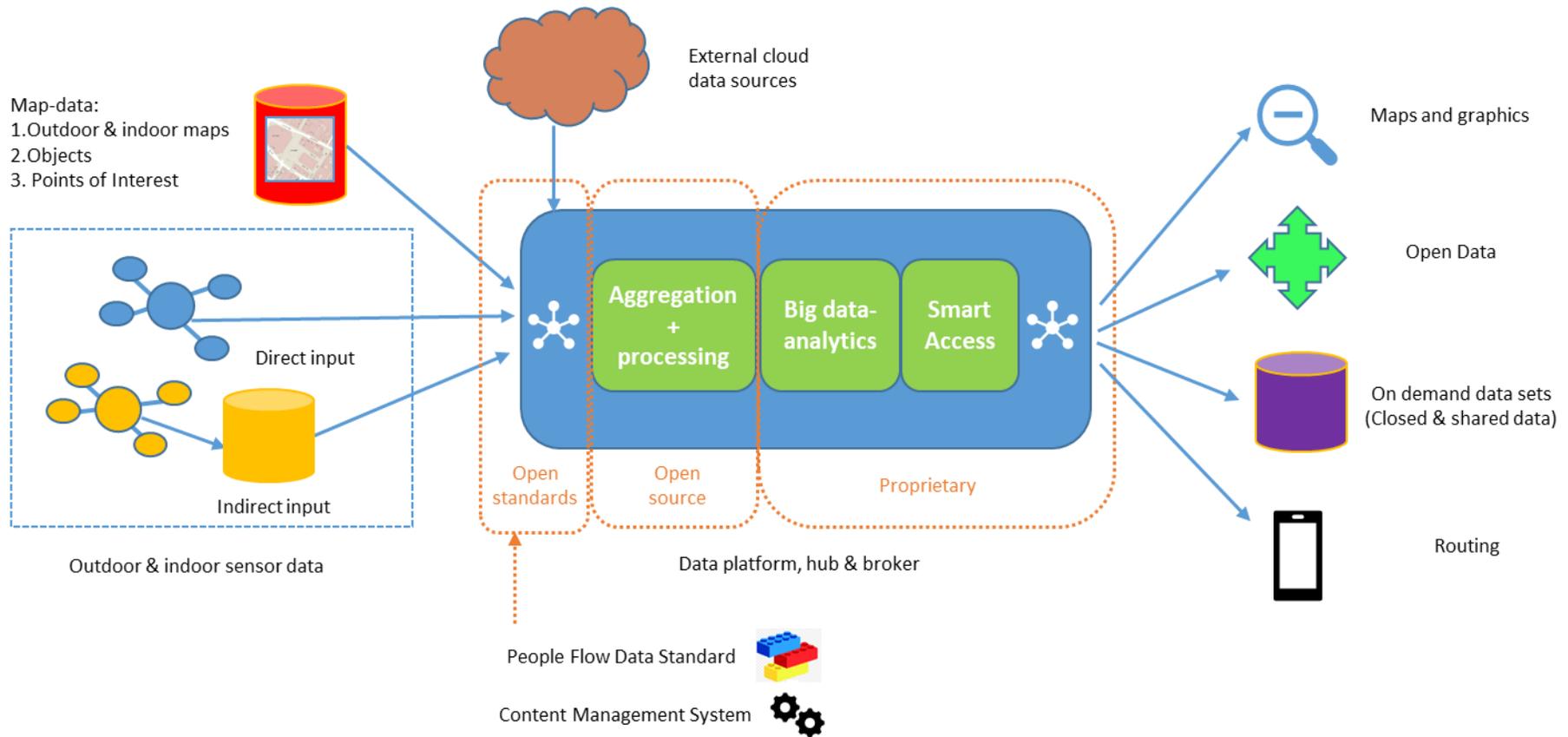
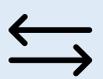


Figure 3: Visualisation of the desired solution

4 Use cases

To keep the end in mind: the output of the desired system should respond to the following use cases. This will be tested during the Living Lab-phase (PCP-phase). More information in Annex 2) Use cases.

		Use case	Subject
Analytics		1. Pedestrians analytics	Understanding “the” pedestrian.
		2. Analysis on reasons of movements	Understand why pedestrians move around.
		3. Event analytics	Understanding the behaviour of pedestrians that visit events (specific zones and specific time horizon).
		4. Crowd analytics: security	Understand and react to security issues.
		5. Crowd analytics: COVID	Understand and react to social distancing issues.
		6. Mobility hub analytics: usage of specific public transport lines	Quantify the alighting, onboardings, people onboard and interchanges.
		7. Mobility hub analytics: transfers	Understand how travellers transfer between public transport lines.
		8. Asset management	Understand how pedestrians / travellers make use of assets.
		9. Commercial analytics: Shopping policy and research	Understand the vitality of a street, its commercial attractiveness and the commercial potential of a specific location.
		10. Commercial analytics: Individual shop	Understand the relation between the people flow and individual marketing strategies.
		11. Traffic light analytics	Understand the impact of traffic lights on people flow and indicators e.g. safety.
Routing		12. PMR routing: Wheelchair	Defining and testing step-free routes.
		13. PMR routing: Partially sighted person	Defining and testing the routing of a partially sighted person.
		14. Indoor routing: Subsurface	Defining and testing routing within underground corridors.
		15. Indoor routing: Building	Defining and testing routing within a building.
Access		16. Smart access	Testing the technologies to support different business models.

Part 3. Pre-Commercial Procurement

5 The theory

5.1 Why

Innovation procurement happens when public procurers procure the development (PCP) or deployment (PPI) of pioneering innovative solutions to address specific mid-to-long term public sector needs. This approach has different advantages, for both public, private parties and for the intended users. It helps:

1. to encourage and focus innovation by the private sector.
2. to support breakthrough innovation, in collaboration with the end users.
3. to facilitate the smoother adoption of innovations, notably in a highly regulated sector such as transport.
4. to speed up the creation of customer benefits from innovation.
5. to share risk-benefit under market conditions between public buyers and private parties
6. use public expenditure more effectively

5.2 How to procure innovation

Pre-Commercial Procurement (PCP)⁴ is the procurement of R&D of pioneering innovative solutions, before they are commercially available. See the relation with the TRL-levels in Figure 4.

Competitive development in phases

Pre-Commercial Procurement (PCP) is a specific approach to procure R&D services that involves competitive development in phases, risk-benefit sharing under market conditions, and where there is a clear separation between the PCP and the deployment of commercial volumes of end-products (potential follow-up PPI).

Evaluation per phase

A PCP consists of 3 competitive phases of solution design, prototype and piloting. See Figure 5. To deliver the R&D services, suppliers/technology vendors are awarded a public framework agreement and phase contracts. Only those suppliers/technology vendors evaluated as successful after each phase will be requested a proposal for the next phase. Those suppliers/technology vendors who are evaluated as satisfactory or lower will not pass to the next PCP phase, thus their framework agreement will be terminated.

Each PCP phase has a maximum budget allocated and payments are made based upon the results of an evaluation after each phase, by an evaluation committee. In the last phase, ideally a minimum of two solutions will be tested and demonstrated in an operational environment.

Follow-up of a PCP

When a PCP is completed successfully, the developed solution can be procured during phase 4. This is a separate step that requires a new tender which is open again for all technology vendors.

⁴ For more information please consult the eafip toolkit and www.eafip.eu.

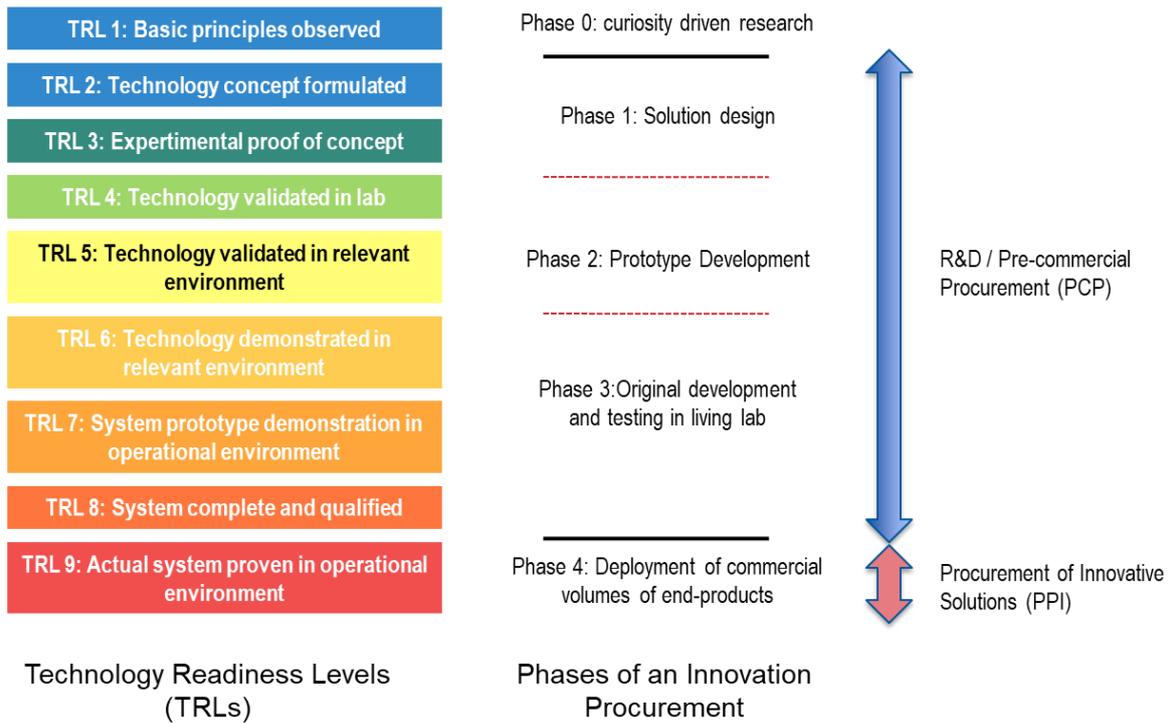


Figure 4: The relation between TRL levels and the phases of an Innovation Procurement

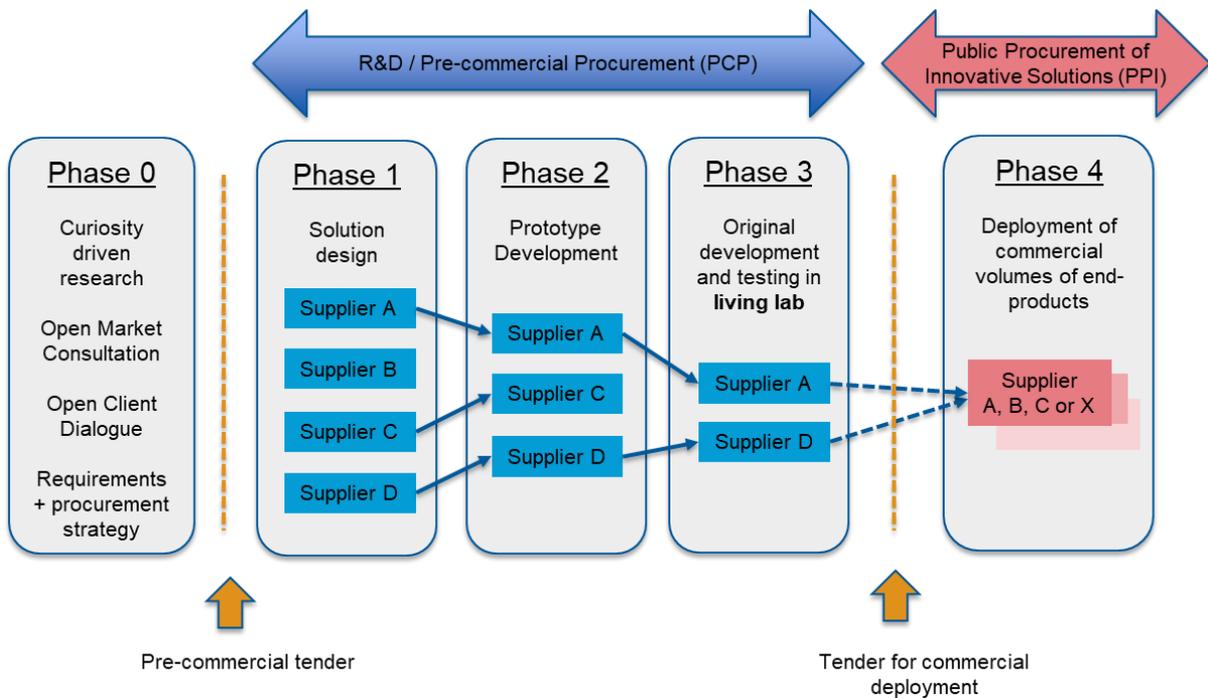


Figure 5: the different phases of an Innovation procurement (PCP+PPI)

6 Muntstroom PCP in practice

When you combine the content of chapters 3, 4 and 5 a preliminary description of the foreseen PCP-process can be made.

6.1 Why

Through applying the PCP procedure, aimed to the provision of R&D services, the Muntstroom PCP group aims to:

1. pull a radical breakthrough from the market to identify innovative Big data technologies for the monitoring of multi-faceted people flow.
2. allow the sharing of risks and benefits between the public buyers and market parties

6.2 End results

At the end of the Muntstroom PCP, the Brussels Capital Region should have:

1. Specifications of technology platform
 - a. Specifications of the technology (interfaces, security, privacy, data quality, ..)
 - b. Output and functional requirements (i.a. about open and shared Data)
 - c. Final test scripts
2. 2 working solutions (Technology Readiness Level =8)
3. Agreement upon a people flow data standard
4. Elaborated and adapted use cases

6.3 Budget for co-financing

The Public Buyers are committed to co-finance the R&D to a maximum of € 500k (in total, for all suppliers and all 3 PCP-phases).

In the Open Market Consultation questionnaire⁵ questions are included for the Muntstroom PCP group to understand e.g. how this budget could be split over the PCP-phases and which part of the total R&D-costs market parties would be willing to finance themselves.

6.4 PCP-phases

The Muntstroom PCP will be divided in three competitive phases:

PCP-phase 1: Solution Design

Phase 1 covers the design of solutions for data collection, combination, sharing, analysis and access system, including its specifications to set up the Living Lab.

The functional specifications should explain how to collect data, enrich data, store data on premise or in the cloud, analyse data and convert the data into information with a set of standard tools to optimise people flow management.

⁵ See Annex 3) EUSurvey questionnaire - Open Market Consultation.

The design should be useable to integrate (privacy and security by design) solutions for different end-users during the Living Lab-phase (PCP-Phase 3)

PCP-phase 2: Prototype Development and Training

Phase 2 covers the development of a machine learning model using collected and processed data.

PCP-phase 3: Living Lab

The best prototypes of phase 2 will be tested in a relevant area of the Brussels Capital Region.

Phase 3 covers demonstrating the system in the operational environment and testing the developed models on streaming data. The testing will be done in accordance with the use cases described in chapter 4 and Annex 2) Use cases.

6.5 Evaluation

After each competitive phase an evaluation takes place to assess the performance of each supplier. The end of phase reports issued by an evaluation committee will conclude which suppliers will be requested bids for the next PCP-phase.

During PCP-phases 2 and 3 the competing suppliers/technology vendors are required to collaborate with the different end-users. This interaction is also relevant to the evaluation process.

6.6 Proposed PCP timeline

It is envisaged that the Muntstroom PCP will start Q1 2021, and it is currently anticipated that the completion of the PCP process will take place in Q4 2022, whereby two competing technology vendors will have working prototypes in the Living Lab environment.

The Muntstroom PCP group proposes the following duration of the 3 PCP-phases:

- PCP-phase 1: 3 months
- PCP-phase 2: 7 months
- PCP-phase 3: 6 months

If this planning is reasonable / feasible, is one of the questions of the Open Market Consultation questionnaire. See Annex 3) EUSurvey questionnaire - Open Market Consultation.

6.7 PCP related Intellectual Property Rights

The Muntstroom PCP Group foresees to receive from the PCP suppliers a royalty free non-exclusive license to use the developed technology for indefinite time. FRAND agreements will be concluded between two or three technology vendors (PCP-phase 3) and the public buyers. FRAND licensing aims to compensate the innovative companies through patent royalties so they can re-invest in next generation technologies, while allowing fair access to their technologies based on trust. The FRAND requirement facilitates wide use of standard essential patents (SEPs).

Part 4. Open Market Consultation

7 Objectives and rules

This chapter describes the objectives and the rules applicable to the Open Market Consultation (OMC).

7.1 Objectives

The OMC has two objectives:

1. to inform market parties regarding the upcoming Pre-Commercial Procurement (PCP)
2. to obtain market parties' input on the viability of the possible future envisaged procurement plans and conditions as described in this document and annexes, with the purpose to understand the market parties' capabilities to satisfy the needs of the Muntstroom PCP Group.

About objective 1: The content of the upcoming PCP is explained in Parts 1, 2 and 3 of this Market consultation document

About objective 2: The process of getting feedback from market parties is explained in this chapter.

7.2 Target group

The Open Market Consultation is widely targeting companies that could provide (elements of) the desired end-to-end solution. This regardless of the sector that companies are working in (ICT, software, hardware, analytics, security, ...) and regardless how companies would like to be engaged in the PCP-tender procedure (consortium, sole contractor, ...).

7.3 Activities

The Open Market Consultation is organised in the form of different activities:

OMC questionnaire

Interested market parties are requested to fill out the EUSurvey questionnaire via the link in Annex 3) EUSurvey questionnaire - Open Market Consultation.

The foreseen start and end of the OMC questionnaire are shown in the timetable in § 7.4. Although the questionnaire can be terminated earlier.

As the Muntstroom PCP group wants to develop and test an integrated end-to-end solution, it has quite some questions. As most companies probably only deliver parts of the solution, it is possible to leave questions blank. Respondent can also download a PDF version of the questionnaire or save a draft. Respondents will then receive a link per email and can continue with the questionnaire when they want.

Sending additional information

Any market party who desires to supply additional information may upload such information via the EUSurvey questionnaire. See the last question (last remarks).

OMC webinar

On the date and time shown in the timetable in § 7.4, the Muntstroom PCP Group will organize a digital information meeting about the project. The meeting will be held via Microsoft Teams.

If you want to be present you are requested to register no later than the date indicated in the timetable. You can register by sending an email to muntstroom@stib-mivb.brussels.

NB. No party is be obliged to attend the OMC webinar, nor does participation have influence on any decision in the further PCP process. See also § 7.8.

OMC-report

After processing the questions and responses of all interested private parties, the general results and findings will be summarised and communicated widely.

7.4 Timetable

The timetable for the Open Market Consultation is as follows:

Year	Date	Activity
2020	4 November	Publication of: <ol style="list-style-type: none"> 1. this Market consultation document 2. the questionnaire on EUSurvey
	13 November	Deadline registering for the OMC-webinar
	19 November	OMC-webinar (from 13h-14:30 CET via MS Teams)
	20 November	Deadline for possible questions by email from interested parties
	27 November	Final publication Q&A by Muntstroom PCP Group on project website and/or EUSurvey portal.
	4 December	17h CET. Deadline for answering the EUSurvey questionnaire
	18 December	Publication of OMC report.
	28 December	Formal closure of the Open Market Consultation
2021	Q 1	Start matchmaking activities via private sector intermediates
		Webinars on the theory of a Pre-Commercial Procurement
		Foreseen start of the PCP via a pre-commercial tender
2022	Q 3-4	Preliminary start of the PPI (phase 4) via a tender for commercial deployment

Note 1: After having received their answers via the questionnaire, the Muntstroom PCP Group may decide to plan bilateral meetings with certain respondents.

Note 2. If needed, the Muntstroom PCP Group may organise additional webinars. This will be communicated via the project website⁶ and/or EUSurvey portal.

Please note that the Muntstroom PCP Group is entitled to adjust the timetable at all time. Furthermore, Muntstroom PCP Group is and remains entitled to unilaterally terminate the OMC for its own reasons at any time. In such a case, Muntstroom PCP Group will make the termination known the project website and/or EUSurvey portal.

⁶ www.stib-mivb.be/muntstroom

7.5 Questions

In case the information provided in this document and annexes needs further clarification, market parties may ask questions via muntstroom@stib-mivb.brussels.

The Muntstroom PCP group will anonymise, compile and summarize the questions and answers in a Q&A-document. This document will be published and updated -if needed- via the project website⁷ and/or EUSurvey portal.

7.6 Communication via business support organisations

For the outreach of the Muntstroom project, the Muntstroom PCP group works together with an **Outreach-group** consisting of: hub.brussels, BECI, Agoria and EASME. These parties will help with reaching out to Brussel's, Belgium's and Europe's most innovative companies. Additionally they will help identifying the matchmaking needs of the companies - if any - and subsequently provide these.

Please note: Any updates on the project information will be available on the project website and/or the EUSurvey portal.

7.7 Invitation to market parties

All interested parties are invited to take part in this OMC, regardless of their geographical location, size or governance structure.

Participation in the OMC is voluntary and non-binding and, moreover, is done by all participants on their own account and risk.

A market party cannot charge any costs to the Muntstroom PCP Group for participation in the OMC or for (re)-use of its information that is provided during the OMC in the context of a possible future procurement procedure.

In case the information provided in this document and annexes needs further clarification, market parties may ask questions via muntstroom@stib-mivb.brussels.

EUSurvey questionnaire

Market parties are requested to fill out the EUSurvey questionnaire via the link in Annex 3) EUSurvey questionnaire - Open Market Consultation.

The questionnaire should be submitted automatically through EUSurvey by the deadline indicated in the timetable above. After having received their answers to the EUSurvey questionnaire, the Muntstroom PCP Group may plan bilateral meetings with one or more respondents.

The responses to the questionnaire should not contain any confidential information, however, all information will be treated as sensitive. As the questionnaire is intended to explore the market 'as-is', there can be no right or wrong answers.

⁷ www.stib-mivb.be/muntstroom

The answers provided during the OMC will be used by the Muntstroom PCP Group as input for a procurement strategy and accompanying conditions in case the Muntstroom PCP Group decides to procure the solutions in the future. Furthermore, please note that in the context of institutional cooperation and the assessment of common challenges, the Muntstroom PCP Group may decide to share the information collected as a result of this Open Market Consultation with other public or private end-users. Likewise, for cooperation purposes, the information may be shared with the members of the outreach-group.

7.8 The procedure

Open Market Consultation report will be anonymised

After processing the questions and responses of all market operators, the Muntstroom PCP Group will communicate the results widely. In this context, the Muntstroom PCP Group will treat all information provided by the market operators as commercially sensitive. Therefore, in the course of this communication of the OMC results no operator specific details will be communicated. Only general findings and results will be summarised and communicated via a so-called Open Market Consultation report. This anonymised report is foreseen to be published via the project website⁸ and/or EUSurvey portal on the date indicated in the timetable.

Languages

The announcements of the Open Market Consultation will be published in French, Dutch and English. The supporting information will be available in English and upon request in French and/or Dutch.

Link with PCP-procedure

Participation in this OMC is not a pre-condition for eventually submitting a tender in a possible future subsequent procurement procedure. Also, please note that the provided input in this OMC will not be used by the Muntstroom PCP Group to evaluate future proposals received during a possible future subsequent procurement procedure.

By carrying out this Open Market Consultation, Muntstroom PCP Group does not commit to subsequently initiate a public procurement procedure. Moreover, in case this OMC will be followed by a procurement procedure, the Muntstroom PCP Group reserves the right to change any element that defines the desired solution as elaborated in this Market consultation document. No rights can be derived from any statements made by Muntstroom PCP Group during the OMC.

Link with matchmaking events prior to the PCP-procedure

Participation in this OMC is not a pre-condition for possible matchmaking events initiated by the business support organizations. However, the Muntstroom PCP Group strongly encourages collaborations between start up's, SME's and/or big companies to participate in the PCP as a consortium. Underlying rationale is that a successful participation as a consortium in the PCP decreases the risk of a "valley of death" situation for the collaborating technology vendors in the PCP and increases the change for a winning bid in the foreseen follow-up PPI.

The Muntstroom PCP Group does not commit to subsequently initiate a matchmaking event. However, a matchmaking event initiated by one or more of the business support organizations as a follow-up of

⁸ www.stib-mivb.be/muntstroom

the OMC and in preparation of the PCP, will be applauded by the Muntstroom PCP Group. Such a matchmaking event shall be conducted under the sole responsibility of the respective business support organizations.

Annexes are an integral part of this document

The following annexes are attached to this document:

- Annex 1: Scope of the project
- Annex 2: Use Cases
- Annex 3: EUSurvey questionnaire for the Open Market Consultation
- Annex 4: EUSurvey questionnaire for the Open Client Dialogue

The annexes form an integral and inseparable part of this Market consultation document. In the event of any conflict between the provisions of this document and the provisions in the annexes, the provisions in this document prevail.

Please note that also the EU survey questionnaire is explicitly qualified as an annex to this Market consultation document and is not a standalone document, but is part of a set of documents. The EUSurvey questionnaire needs to be filled out via the link in Annex 3) EUSurvey questionnaire - Open Market Consultation.

7.9 Information to be supplied by market parties

No sensitive information

As the Muntstroom PCP Group wishes to analyse information from the market parties and, where possible (partially) (re) use it in the context of a future procurement procedure, it is crucial that the Muntstroom PCP Group may assume that it can use the information it has received, for example via the answers to the questionnaire formulated in the EUSurvey. Each market party/technology vendor/supplier therefore warrants and guarantees that in the context of the Open Market Consultation, it will not provide information that is subject to any trade secret rights or protected intellectual property rights.

Sharing of the received information

Information received may be shared with Muntstroom PCP Group's employees, its external of counsels and consultants, the Eafip initiative, Innoviris, and their respective employees and external of counsels and consultants, for the purpose of analysing the Open Market Consultation and for the preparation of a possible subsequent singular and/or joint innovation procurement project as a follow-up of the Open Market Consultation.

In order to avoid any misunderstanding, the Muntstroom PCP Group is not entitled to treat any information as “sensitive” if that information:

- a. was already in possession of the Muntstroom PCP Group before receipt from the market party
- b. is or becomes a matter of public knowledge through no fault of the Muntstroom PCP Group
- c. is rightfully received by the Muntstroom PCP Group from a third party without a duty of confidentiality
- d. is disclosed by the market party to a third party without a duty of confidentiality on the third party
- e. is independently developed by the Muntstroom PCP Group; or
- f. is disclosed by the Muntstroom PCP Group with the market party’s prior written approval.

Part 5. Open Client Dialogue

8 Objectives and rules

This chapter describes the objectives and rules applicable to the Open Client Dialogue (OCD).

8.1 Objectives

The Open Client Dialogue seeks more insight in the market demand of the People Flow data to be produced and analysed by the desired Muntstroom solution/platform. This as input for the PCP requirements such as for example the format choice of the data or a possible API.

The OCD has three objectives:

1. to inform market parties regarding the upcoming Pre-Commercial Procurement (PCP) of research and development (R&D) services related to technologies for measuring multi-faceted people flow.
2. to obtain feedback from private parties interested in these multi-faceted people flow measuring technologies and particularly in the use and re-use of open and shared data. This to understand the needs, potential services, insights and requirements on collecting, sharing and re-using open and shared data.
3. to obtain an overview of parties who would be interested in testing open and shared data during the Living Lab phase (PCP-phase 3) and/or who would like to participate in discussions on People Flow related events during the PCP-process.

Ad 1: The upcoming PCP is explained in Parts 1, 2 and 3 of this Market consultation document.

Ad 2: The process of getting feedback from market parties is explained in Part 5 of this Market consultation document.

8.2 Target group

The Open Client Dialogue is widely targeting companies that would like to use the People Flow-data to develop new apps/services for commercial purposes. This regardless of the sector that they are working in: mobility, asset management, security, location / commercial attractiveness, tourism, etc.

For more information about the possible usage of people flow data, see § 2.4.

8.3 Activities

The Open Client Dialogue is organized in the form of different activities:

OCD questionnaire

Interested parties are requested to fill out the EUSurvey questionnaire available via the link in Annex 4) EUSurvey questionnaire - Open Client Dialogue

The foreseen start and end of the OCD questionnaire are shown in the timetable in § 8.4. Although it can be terminated earlier.

As the Muntstroom PCP group wants to develop and test an integrated end-to-end solution, it has quite some questions, in a wide area. If respondents want, they can focus on the questions of their interest and leave other questions blank. Respondent can also download a PDF version of the questionnaire or save a draft. They will then receive a link per email and can continue with the questionnaire when you want.

Sending additional information

Any market party who desires to supply additional information may upload such information via the EUSurvey questionnaire. See the last question (last remarks).

OCD webinar

On the date and time shown in the timetable in § 8.4, the Muntstroom PCP Group will organise a digital information meeting. The meeting will be held via Microsoft Teams.

If you want to be present you are requested to register for this meeting no later than the date mentioned in the timetable. You can register by sending an email to muntstroom@stib-mivb.brussels.

NB. No party is be obliged to attend the OMC webinar, nor does participation have influence on any decision in the further PCP process. See also § 8.8.

OCD-Report

After processing the questions and responses of all interested parties, the general results and findings will be summarised and communicated widely.

8.4 Timetable

The timetable for this Open Client Dialogue is as follows:

Year	Date	Activity
2020	4 November	Publication of: 1. this Market consultation document 2. the EUSurvey questionnaire
	13 November	Deadline registering for the OCD-webinar
	19 November	OCD-webinar (from 15h-16:30 CET, via MS Teams)
	20 November	Deadline for possible questions by email from interested parties
	27 November	Final publication Q&A by Muntstroom PCP Group on project website and/or EUSurvey portal.
	4 December	17h CET. Deadline for answering the EUSurvey questionnaire
	18 December	Publication of OCD-report.
	28 December	Formal closure of the Open Client Dialogue
2021	Q1 2021	Foreseen start of the PCP via a pre-commercial tender
2022	Q1 2022	Preliminary start Living Lab-phase (PCP-phase 3)

Note 1. After having received their answers via the questionnaire, the Muntstroom PCP Group may decide to plan bilateral meetings with certain respondents.

Note 2. If needed, the Muntstroom PCP Group may organise additional webinars. This will be communicated via the project website⁹ and/or EUSurvey portal.

⁹ www.stib-mivb.be/muntstroom

Please note that the Muntstroom PCP Group is entitled to adjust the time table at all times. Furthermore, Muntstroom PCP Group is and remains entitled to unilaterally terminate the OCD for its own reasons at any time. In such a case, Muntstroom PCP Group will make the termination known via the project website¹⁰ and/or EUSurvey portal.

8.5 Questions

In case the information provided in this document and annexes needs further clarification, interested parties may ask questions via muntstroom@stib-mivb.brussels.

The Muntstroom PCP group will anonymise, compile and summarize the questions and answers in a Q&A-document. This document will be published and updated -if needed- via the project website and/or EUSurvey portal.

8.6 Communication via business support organisations

For the outreach of the Muntstroom project, the Muntstroom PCP group works together with an Outreach-group consisting of: hub.brussels, BECI, Agoria and EASME. These parties will help with reaching out to Brussel's, Belgium's and Europe's most innovative companies.

Please note: Any updates on the project information will be available on the project website and/or the EUSurvey portal.

8.7 Invitation to potential clients

All parties who are potentially interested users of open and shared data and data technologies are invited to take part in this OCD, regardless of their geographical location, size or governance structure.

Participation in the OCD is voluntary and non-binding and, moreover, is done by all participants on their own account and risk.

No party can charge any costs to the Muntstroom PCP Group for participation in the OCD or for (re)-use of its information that is provided during the OCD in the context of a possible future procurement procedure.

In case the information provided in this document and annexes needs further clarification, interested parties may ask questions via muntstroom@stib-mivb.brussels.

EUSurvey questionnaire

Interested parties are requested to fill out the EUSurvey questionnaire available via the link in Annex 4) EUSurvey questionnaire - Open Client Dialogue.

The questionnaire should be submitted automatically through EUSurvey by the deadline indicated in the timetable above. After having received their answers to the EUSurvey questionnaire, the Muntstroom PCP Group may plan bilateral meetings with one of more respondents.

The responses to the questionnaire should not contain any confidential information, however, all information will be treated as sensitive. As the questionnaire is intended to explore potential client needs 'as-is', there can be no right or wrong answers.

¹⁰ www.stib-mivb.be/muntstroom

The answers provided during the OCD will be used by the Muntstroom PCP Group as input for a procurement strategy and accompanying conditions in case the Muntstroom PCP Group decides to procure the solution in the future. Furthermore, please note that in the context of institutional cooperation and the assessment of common challenges, the Muntstroom PCP Group may decide to share the information collected as a result of this Open Client Dialogue with other relevant buyers. Likewise, for cooperation purposes, the information may be shared with the members of the outreach-group.

8.8 Procedure

Open Client Dialogue report will be anonymised

After processing the questions and responses of all interested parties, Muntstroom PCP Group will communicate the results widely. In this context Muntstroom PCP Group will treat all information provided by the interested parties as commercially sensitive. Therefore, in the course of this communication of the OCD results no party's specific details will be communicated. Only general findings and results will be summarised and communicated in a so-called Open Client Dialogue report. This anonymised report is foreseen to be published via the project website¹¹ and/or EUSurvey portal on the date indicated in the timetable.

Languages

The announcements of the Open Client Dialogue will be published in French, Dutch and English. The supporting information will be available in English and upon request in French and/or Dutch.

Link with PCP-procedure

Participation in this OCD is not a pre-condition for eventually submitting a tender in a possible future subsequent procurement procedure. Also, please note that the provided input in this OCD will not be used by the Muntstroom PCP Group to evaluate future proposals received during a possible future subsequent procurement procedure.

By carrying out this Open Client Dialogue, the Muntstroom PCP Group does not commit to subsequently initiate a public procurement procedure. Moreover, in case this OCD will be followed by a procurement procedure, the Muntstroom PCP Group reserves the right to change any element that defines the desired solution as elaborated in this Market consultation document. No rights can be derived from any statements made by Muntstroom PCP Group during the OCD.

Link with matchmaking events prior to the PCP-procedure

Participation in this OCD is not a pre-condition for possible matchmaking events initiated by the business support organizations. However, the Muntstroom PCP Group strongly encourages collaborations between start up's, SME's and/or big companies to participate in the PCP as a consortium. Underlying rationale is that a successful participation as a consortium in the PCP decreases the risk of a "valley of death" situation for the collaborating technology vendors in the PCP and increases the change for a winning bid in the foreseen follow-up PPI.

The Muntstroom PCP Group does not commit to subsequently initiate a matchmaking event. However, a matchmaking event initiated by one or more of the business support organizations as a follow-up of

¹¹ www.stib-mivb.be/muntstroom

the OCD and in preparation of the PCP, will be applauded by the Muntstroom PCP Group. Such a matchmaking event shall be conducted under the sole responsibility of the respective business support organizations.

Annexes are an integral part of this document

The following annexes are attached to this document:

- Annex 1: Scope of the project
- Annex 2: Use Cases
- Annex 3: EUSurvey questionnaire for the Open Market Consultation
- Annex 4: EUSurvey questionnaire for the Open Client Dialogue

The annexes form an integral and inseparable part of this Market consultation document. In the event of any conflict between the provisions of this document and the provisions in the annexes, the provisions in this document prevail.

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8.9 Information to be supplied by interested parties

No sensitive information

As the Muntstroom PCP Group wishes to analyse information from the interested parties and, where possible (partially) (re) use it in the context of a future procurement procedure, it is crucial that Muntstroom PCP Group may assume that it can use the information it has received, for example via the answers to the questionnaire formulated in the EUSurvey. Each party therefore warrants and guarantees that in the context of the Open Client Dialogue, it will not provide information that is subject to any trade secret rights or protected intellectual property rights.

Sharing of the received information

Information received may be shared with the Muntstroom PCP Group's employees, its external of counsels and consultants, the Eafip initiative, Innoviris, and their respective employees and external of counsels and consultants, for the purpose of analysing the Open Client Dialogue and for the preparation of a possible subsequent singular and/or joint innovation procurement project as a follow-up of the Open Client Dialogue.

In order to avoid any misunderstanding, the Muntstroom PCP Group is not entitled to treat any information as “sensitive” if that information:

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- c. is rightfully received by the Muntstroom PCP Group from a third party without a duty of confidentiality;
- d. is disclosed by the market party to a third party without a duty of confidentiality on the third party;
- e. is independently developed by the Muntstroom PCP Group; or
- f. is disclosed by the Muntstroom PCP Group with the market party’s prior written approval.

Part 6. Follow up market consultations

9 PCP and PPI

Intention to launch a PCP and PPI

After the two market consultations have taken place, it is the Muntstroom PCP Group's strong intention to define and set up a Pre-Commercial Procurement of R&D services. The PCP shall be based upon the analysis of the feedback of the market parties.

It is also intended that after successful completion of the Muntstroom PCP, a follow-up Public Procurement of Innovative Solutions (so-called PPI) will be initiated, based upon the lessons learned from the Muntstroom PCP.

Year	Date	Activity
2021	Q1	Start matchmaking activities via private sector intermediates
		Webinars on the theory of a Pre-Commercial Procurement
		Foreseen start of the PCP via a pre-commercial tender
2022	Q 1	Preliminary start of the Living Lab-phase (PCP-phase 3)
	Q 3-4	Preliminary start of the PPI (phase 4) via a tender for commercial deployment

Table 1: Preliminary timetable of the intended PCP

Notwithstanding the foregoing intentions of the Muntstroom PCP Group to launch such a future PCP and PPI, the Muntstroom PCP Group is in no way committed to start the PCP and PPI and market operators cannot derive any related rights to that effect under the Open Market Consultation and/or Open Client Dialogue.

The scope of the PCP will be broader

If the decision is made to start a future subsequent procurement procedure, the Muntstroom PCP Group already wants to inform the market parties that it is the intention to broaden the scope of the end-users of the innovative solution resulting from the PCP. Apart from the group of end users employed by the Muntstroom PCP Group, the group of end-users may be broadened by users employed by "local partners" and "other organisations within the Brussels Capital Region' public sector.

List of Acronyms

Abbreviation	Word
BCR	Brussels Capital Region
CIRB – CIBG	The Brussels Regional Informatics Centre
CMS	Content Management System
Eafip initiative	European Assistance for Innovation Procurement initiative
EU	European Union
FAIR	FAIR-principles: Findable, Accessible, Interoperable, Re-usable ¹²
FRAND	Fair, Reasonable and Non-Discriminatory
IPR	Intellectual Property Rights
MaaS	Mobility as a Service
OECD	The Organisation for Economic Co-operation and Development
OCD	Open Client Dialogue
OMC	Open Market Consultation
OSS	Open Source Software
PA	Process Automation
PCP	Pre-Commercial Procurement
PETs	Privacy Enhancing Technologies
PPI	Public Procurement of Innovative solutions
PRM	Persons with reduced mobility
R&D	Research and Development
SEP	Standard Essential Patents
SOTA	State of the Art Analysis
STIB-MIVB	Brussels Intercommunal Transport Company
TCO	Total Cost of Ownership
TED	Tenders Electronic Daily
TRL	Technology Readiness Levels

¹² [Directive \(Eu\) 2019/1024 of the European Parliament and of the Council of 20 June 2019 on open data and the re-use of public sector information. Official Journal of the European Union L 172/56, 26.6.2019. Recital 27. Article 10. Research data.](#) *“1.Member States shall support the availability of research data by adopting national policies and relevant actions aiming at making publicly funded research data openly available (‘open access policies’), following the principle of ‘open by default’ and compatible with the FAIR principles. In that context, concerns relating to intellectual property rights, personal data protection and confidentiality, security and legitimate commercial interests, shall be taken into account in accordance with the principle of ‘as open as possible, as closed as necessary’. Those open access policies shall be addressed to research performing organisations and research funding organisations.”*

List of Definitions

Definition	Explication
Belgian Public Tender Bulletin	Bulletin des Adjudications/ Bulletin der aanbestedingen Website: https://enot.publicprocurement.be/enot-war/
Big data	Extremely large data sets that may be analyzed computationally to reveal patterns, trends, and associations.
Client	A person who receives services. Potential public and private parties who may use and re-use people flow related open and shared data in the Brussels Capital Region.
Data-driven insights	Insights generated by drawing conclusions from processed, analyzed data.
Internet of Things	Internet of Things (IoT) is a network of Internet connected objects/devices able to collect and exchange data.
Muntstroom PCP Group	The joint public buyers behind this PCP, being public transport operator STIB-MIVB, Brussels Regional Informatics Centre CIRB-CIBG, the regional authority Brussels Mobility and regional agency Parking Brussels.
Open data¹³	Open data are digital data that have the technical and legal characteristics required to make them freely available for use, re-use and republish at anytime and anywhere, without restrictions from copyright, patents or other mechanisms of control. Data quality is one of the factors that affect the successful use of open data.
Open data licenses	Standard licenses that are available online, which allow data and content to be freely accessed, used, modified and shared by anyone for any purpose, and which rely on open data formats. The re-use of documents should not be subject to conditions. However, in some cases justified by a public interest objective, a license may be issued imposing conditions on the re-use by the licensee dealing with issues such as liability, the protection of personal data, the proper use of documents, guaranteeing non-alteration and the acknowledgement of source. If public sector bodies license documents for re-use, the license conditions should be objective, proportionate and non-discriminatory. ¹⁴

¹³ [Directive \(Eu\) 2019/1024 of the European Parliament and of the Council of 20 June 2019 on open data and the re-use of public sector information. Official Journal of the European Union L 172/56, 26.6.2019. Recital 16\)](#)

¹⁴ [Directive \(Eu\) 2019/1024 of the European Parliament and of the Council of 20 June 2019 on open data and the re-use of public sector information. Official Journal of the European Union L 172/56, 26.6.2019. Recital 44.](#) (...) Member States should encourage the use of open licences that should eventually become common practice across the Union. Without prejudice to liability requirements laid down in Union or national law where a public sector body or a public undertaking makes documents available for re-use without any other conditions or restrictions, that public sector body or public

PCP	Pre-Commercial Procurement (PCP) is a specific approach to procure R&D services that involves competitive development in phases, risk-benefit sharing under market conditions, and where there is a clear separation between the PCP and the deployment of commercial volumes of end-products (potential follow-up PPI). ¹⁵
Privacy Enhancing Technologies	Technologies like anonymisation and encryption techniques, protocols for anonymous communications, at-tribute based credentials and private search of databases.
Pre-processed data	Pre-processing includes, for example, cleaning, instance selection, re-sampling, normalisation, transformation, feature extraction and selection.
Shared data	Data that is shared with a certain group of users that have specific access rights for particular purposes

undertaking may be allowed to waive all liability with regards to the documents made available for re-use.”

¹⁵ See eafip Toolkit, at www.eafip.eu

Annexes

Annex 1) Scope of the project

Annex 2) Use cases

Annex 3) EUSurvey questionnaire - Open Market Consultation

Market parties are requested to fill out the EUSurvey questionnaire available at:

<https://ec.europa.eu/eusurvey/runner/Muntstroom-OMC-2020>

Annex 4) EUSurvey questionnaire - Open Client Dialogue

Interested parties are requested to fill out the EUSurvey questionnaire available at:

<https://ec.europa.eu/eusurvey/runner/MuntstroomPCP-ClientDialogue2020>