Belastingdienst

Market Consultation

Workflow Engine for

High-Volume Automated Transaction Processing

Client: Tax and Customs Administration

Version	: 1.0
Reference	: IUC20-028
Date	: 14 September 2020

CONTENTS

Chapter 1. General

1.1. The Tax and Customs Administration

The Dutch Tax and Customs Administration forms part of the Ministry of Finance, which in turn forms part of the legal entity that is the State of the Netherlands. In addition to the Tax Administration, the organisation also includes Customs - charged with supervising the import, export, and transport of goods into, out of, and through the Netherlands - Benefits - charged with paying income-dependent benefits - and the Fiscal Intelligence and Investigation Service.

The most widely known task of the Administration is the levying and collection of taxes and premiums. The Dutch Tax and Customs Administration not only collects funds, but also pays them. It for instance is responsible for paying the income-dependent child, childcare, housing, and healthcare benefits.

Other important duties include:

- Investigating tax, economic, and financial fraud;
- Supervising the import, export, and transport of goods;
- Supervising compliance with tax legislation.

1.1.1. Dutch Tax and Customs Administration Procurement Centre (PC)

The Dutch Tax and Customs Administration PC forms part of the Dutch Tax and Customs Administration Facilities Services Shared Service Organisation and performs generic procurement services for the Central Government categories it is responsible for. In addition, it performs specific procurement services for the Dutch Tax and Customs Administration and the State Property Service Movable Goods. For more information on the organisation of the Tax and Customs Administration, please visit the following websites: www.belastingdienst.nl and www.rijksoverheid.nl/ministeries/fin. The Dutch Tax and Customs Administration PC will supervise this product market consultation.

1.2. Objective of the market consultation

The primary objective of the market consultation is to gain insight into the degree to which our demand for a workflow engine for high-volume automated transaction processing to be procured matches market supply. We are primarily interested in the functional and technical possibilities and impossibilities of the solutions available on the market, the scope of these solutions, the associated services that can be provided, licensing models, and prices.

So as to achieve the aforementioned objectives, we are looking for companies willing to contribute ideas without committing to anything, such to allow us to present the market with as solid a functional invitation for tenders as possible.

1.3. Preconditions of the market consultation

This market consultation expressly does not serve to arrive at a preselection of candidates in the context of any future acquisition. Nor will the parties involved in the market consultation be in any way excluded from participating in any acquisition procedure.

By participating in the market consultation, a market party will not come to have an advantageous or disadvantageous position in any future acquisition procedure.

Market consultation participants may derive no rights from their participation in the market consultation or from any information provided over the course of the market consultation. No market party claims concerning the use of information or confidentiality will be honoured.

The Dutch Tax and Customs Administration will, where necessary, use the information obtained during the market consultation to draw up a sound Descriptive Document for any acquisition procedure to follow. The Dutch Tax and Customs Administration reserves all rights in the context of determining the definitive acquisition procedure, if any, and the associated tender documents.

1.4. Reading guide

Chapter 2 describes the procedure the Dutch Tax and Customs Administration will use for this market consultation. Chapter 3 details the context, problem, current situation, desired situation, and background. Chapter 4 contains the questions.

Chapter 2. Market consultation procedure

2.1. General

Any interested entrepreneur can participate in this market consultation. The market consultation participants are requested to answer the questions provided in Chapter 4 and to submit an overview of their product/service.
Written responses may be submitted via e-mail to the contact person referred to in section 2.2, stating: "Market Consultation for High-Volume Automated Transaction Processing".
Please submit your contribution to this market consultation via TenderNed as soon as possible, but ultimately by the date referred to in section 2.4, by 13:00 hours.

2.2. Contact

The Dutch Tax and Customs Administration applies clear rules for this market consultation. For this reason, you should only communicate on this market consultation with the below contact persons, using the e-mail address stated in the below.

Contact person	
Name:	Yvo Bakker
Position:	IT Procurement Specialist
E-mail:	y.bakker@belastingdienst.nl with CC to cict.inkoop.aanbestedingen@belastingdienst.nl.

2.3. Market consultation document

Market parties can provide an answer to the questions posed in this market consultation using this document. The Dutch Tax and Customs Administration to this purpose has detailed its demand and explained the market consultation procedure in this document.

Should, in spite of the care with which the Dutch Tax and Customs Administration has prepared this document, anything be unclear or incomplete, or should it give rise to any questions, please inform the contact person (refer to subsection 2.2) before the deadline for posing questions (refer to subsection 2.4). All answers to questions will be published by way of a summary of additional information and changes.

The results of the market consultation may be included in tender documents and/or made public, albeit without them being traceable to market consultation participants. The Dutch Tax and Customs Administration may freely make use of the information provided. We request that you answer the questions in writing. The information provided by you will be treated confidentially. We might ask you to present your product during a meeting with representatives of the Tax and Customs Administration.

2.4. Market consultation schedule

Activity	Date
Publication of the market consultation on TenderNed	14 September 2020
Deadline for posing questions	21 September 2020, 13:00 hours
Publication of the summary of additional information and changes, if any	28 September 2020
Deadline for the submission of answers	12 October 2020, 13:00 hours
Optional: oral explanation and additional questions	TBD

2.5. Oral explanation and additional questions

The Dutch Tax and Customs Administration might invite market consultation participants to a meeting to provide a further explanation of their answers. The Dutch Tax and Customs Administration may, during such meeting, ask additional questions on the basis of the responses received.

2.6. Procedural requirements

You are expressly not asked to submit offers. We urgently request that you limit your response to answering the questions provided in Chapter 4.

Please provide a clear and succinct answer. Naturally, you are not required to provide answers and you are free to skip certain questions. We prefer receiving your market consultation contribution / answers to the questions in Word or Excel format. Additional and other documents may be provided as PDF files.

The market parties are requested to provide the following data of their contact persons in the letter accompanying their market consultation contributions:

Data	
Organisation	
Contact person	
Position	
Office address	
Telephone number	
E-mail address	

2.7. Preconditions for participation in this market consultation

By participating in this market consultation, you unconditionally agree to all conditions as provided in this market consultation document. The preconditions are exhaustively listed in the below:

- Participation in the market consultation is without obligation to both the market parties and the Tax and Customs Administration;
- This market consultation document is exclusively intended to be used for market consultation purposes;

- The market consultation does not form part of any future invitation to tender. Instead, it forms part of a consultation round;
- The market consultation participants may not charge any costs incurred in connection with submitting a response to the market consultation and with the work performed in this context on to the Tax and Customs Administration;
- This market consultation expressly does not serve to arrive at a preselection of market candidates in the context of any future invitation to tender. Market parties not participating in this market consultation are, thus, not excluded from any future procurement procedure. Nor will market parties participating in this market consultation in any way be excluded from, or take precedence in, any participation in a tendering or procurement procedure;
- The results of the market consultation may be included in tender documents (for example by processing the information obtained over the course of this market consultation in the Descriptive Document), albeit without them being traceable to market consultation participants. By participating in this market consultation, you agree therewith;
- The information to be provided in the context of the market consultation may deviate from the information to be provided in the tendering procedure;
- The input by the market consultation participants will be treated confidentially to the extent possible. Account will in this connection at any rate be taken of the justified interests of the market consultation participants and of the Tax and Customs Administration;
- The language of communication of this market consultation is Dutch, though product information may be provided in English;
- The Dutch Tax and Customs Administration is in no way bound to the results of the market consultation;
- Market consultation participants may derive no rights from their participation in the market consultation or from any information provided over the course of the market consultation;
- No conditions or claims (including conditions or claims related to intellectual property rights, such as copyright) by market consultation participants with respect to the use of the information provided to the Dutch Tax and Customs Administration in the context of this market consultation or to the confidentiality or secrecy of the information provided by the market party concerned will be accepted or honoured. However, the Dutch Tax and Customs Administration will, when providing, publishing, or processing information provided by participants during, or arising from, this market consultation, endeavour to prevent such information from being direct traceable to a specific market consultation participant.
- If any intellectual property rights (including copyright) held by a participant or a third party apply, the Dutch Tax and Customs Administration is indemnified by the market consultation participant concerned against any claims by this participant and/or third parties related to those intellectual property rights (including copyright).
- The Dutch Tax and Customs Administration expressly reserves the right: To alter the schedule of this market consultation, as provided in this document. In addition, to temporarily and/or permanently discontinue the market consultation.

Chapter 3. Description of the question

3.1. Context

The current BPM suite used by the Dutch Tax and Customs Administration is deployed in multiple ways, including as a workflow engine in high-volume processes that are usually dealt with without human intervention (STP). These processes are executed according to predetermined patterns.

The primary end user of the tooling is the Central Administrative Processes department, which manages these processes on the basis of the tooling.

While process control is often not separately considered in the context of supporting simple processes, it is prudent to separate process support from the presentation and logic layers for more complex processes. By doing so activities, (changes of) states become explicitly visible and adjustable thus enabling uniform processing of cases and monitoring and signalling across periods and processing times.

An additional advantage is that separating process control results in making the application components less dependent on (business) processes and, thus, more suitable for reuse.

For this specific use, we are looking for a replacement for our current BPM suite. The solution must be able to orchestrate high-volume processes on the basis of BPMN 2.0 and to provide sufficient support to developers and administrators.

Targets we wish to achieve with the solution:

- Increasing (runtime) insight into the (business) processes and, thus, into the possibility of, eg:
    - Identifying bottlenecks and options for effective intervention, so as to have the processes thereafter run without further human intervention
    - Further optimising the processes, so as to increase user satisfaction, shorten processing times, reduce costs, etc.
- Being able to integrate with, isolate, and scale workloads using cloud concepts, such as containerisation.

Realising higher throughput for some processes is essential to the business. The other Business targets apply to all BPM programmes.

So the solution primarily has to contribute to:

- Easily adjustable business processes.
- Short transaction processing times.
- Producing insight into process execution in order to optimise business processes..
- Support of administrators in a multi-tenant situation for many Dutch Tax and Customs Administration primary business processes.

3.2. Problem

The Dutch Tax and Customs Administration uses an IBM product as a workflow engine for the execution of high-volume business processes. The supplier has indicated to stop supplying this product in due time. The

Dutch Tax and Customs Administration is looking for a replacement for this product. In addition, we would like to know if more suitable solutions are available on the market.

3.3. Current situation

This need is currently met using the BPM-Advanced product, supplied by IBM.

3.4. Desired situation

- A solution with a suitable functional and non-functional profile.
- A supplier:
  - Able to provide effective support when using the solution
  - That has an explicit vision on the future development of the solution and has an associated maintenance and release policy in place.

3.5. Background information

IBM BPM-Advanced will in due course be removed from the market.
This is a consequence of the Java version the product is built on no longer being supported.

Chapter 4. The market consultation questions

The Dutch Tax and Customs Administration is looking for a solution by which the desired situation described in Chapter 3 can be realised. Starting point for this market consultation is to make optimum use of the expertise available within the market. Upon assessing the answers, the following must have become clear:

- Insight into the way market parties generally resolve the questions listed in 4.1;
- Which procurement strategy is suitable;
- How to delineate the scope of any future tendering procedure;
- Which implementation strategy is suitable;
- Which cost structures and licensing models are possible.

4.1. Questions relating to the desired solution

Please provide us with a description of the solution you offer, detailing the various functional, non-functional, and technical elements.

Please answer the below questions while doing so:

1. To what extent does your solution support BPMN 2.0 and which graphical support do you provide in this context?
2. In which ways does your solution support state persistency and how can this be adjusted (e.g. points in the flow where the state is made persistent)?
3. How many transactions per second can your solution guarantee? Could you also indicate the circumstances and provide your definition of a transaction?
4. In which ways does your solution support the construction of composite services and microservices?
5. In which ways does your solution support monitoring / logging?
6. How does your solution support the required administrator processes? What are the options for third party products to connect to these administrator processes?
7. How does your solution integrate with other products deployed for human workflow processing?
8. Which integration options does your solution support (e.g. protocols like rest, soap, etc.)?
9. Does your solution have an API?
   If so, please detail the functional possibilities of the API of your product.
   If so, please indicate the technology (e.g. Java, REST) used to realise this API.
   If so, which options does this provide (how rich are the APIs)?
10. How does your solution support automated testing (e.g. daily regression tests)?
11. Please indicate the deployment models your solution supports (e.g. as “embedded process engine”, etc.).
12. Please describe the ideal development infrastructure for building an application using your solution, including the CI/CD, developer type, required education, and learning curve.
13. Please describe the authentication and authorisation mechanism for your solution.
    Please explicitly detail the granularity of the authorisation model in your solution.
14. How has data storage been implemented in your solution?
    How have administration and housekeeping for this purpose been set up and which DBMSs are supported?
15. Does your solution support import and export options? If so, please indicate which.

16. Which environments can your solution be hosted in?
17. Please describe the lifecycle management (roadmap) of your solution and the associated APIs for the next two years, including backwards compatibility support for interfaces and process models.
18. Please indicate which Escrow arrangements you provide with respect to your solution.

4.2. Questions relating to the procurement strategy

19. Which methods for acquiring (sub-)solutions would you recommend the Dutch Tax and Customs Administration to use?
20. Which cost structures are possible? Include the solution, licences, maintenance, implementation/migration, consultancy, training courses, et cetera in your answer;
21. The Dutch Tax and Customs Administration wishes to enter into a long-term contract. What is your view on entering long-term contracts? Which contract term options could you provide?
22. Do you have any references? If so, which? Would it be possible to contact these references?

4.3. Questions relating to the implementation

23. How do you usually implement the solution?
24. To what extent are you able to / do you wish to bear responsibility for the implementation of the solution?

4.4. Supplier input

25. What additional information do you wish to provide the Dutch Tax and Customs Administration with respect to aspects not covered by the previous questions?