REQUEST FOR INFORMATION
Border Queuing System (BQS) for Moldova

Amendment II
Issue Date: March 11, 2019

The purposes of this amendment is to issue the corresponding revised RFP. This amendment consists of one modification

Extension of the RFI Deadline to Sunday, March 31, 2019 at 5:00 PM (U.S. EST Time)

REQUEST FOR INFORMATION (RFI) – Amendment II

Date of Issue: January 18, 2019
Closing Date: March 31, 2019
Closing Time: 17:00 EST US time
Submission Email: moldovaprocurement@nathaninc.com

Subject: Border Queuing System (BQS) for Moldova

To all Interested Respondents/Parties:
Nathan Associates Inc. ("Nathan") is issuing this Request for Information (RFI) to solicit input from Interested Parties to provide comments, opinions, and recommendations in approaches to implement activities that support a Border Queuing System (BQS) for Moldova. The BQS will manage and control the movement of trucks and other commercial vehicles through the land borders of Moldova.

This RFI is solely issued to solicit comments on the anticipated activity and for information and planning purposes. It is neither a Request for Applications (RFA) nor a Request for Proposals (RFP), and is not to be construed as a commitment by Nathan to issue an RFP in the future. This RFI does not commit Nathan to contract for any supply or service whatsoever. This RFI is being used to gauge interest and capabilities of potential bidders, and may be used to develop a shortlist for a potential RFP, if an RFP is issued. Interested parties are advised that Nathan will not pay for any costs incurred in response to this RFI; all costs associated with responding to this RFI will be solely at the interested party's expense.

Not responding to this RFI does not preclude participation in any future RFP, if issued in the future

Submission Instructions:
Interested parties are strongly encouraged to submit a written response to this RFI, including comments on the draft SOW, recommended approaches, possible financing mechanisms, and responses to questions detailed in this document. Responses to the RFI should also include indicative timelines to develop and pilot the BQS, and an estimated budget range to develop the system and pilot it at one border. All submissions must be via email, and should be in the following format:

Email Subject Line: Nathan BQS RFI - Organization Name
File Attachment: Nathan BQS RFI - Organization Name

All responses to this RFI must be emailed to moldovaprocurement@nathaninc.com. They will be confidential and not made available to the public. Submissions will receive an electronic confirmation acknowledging receipt. Phone calls or hard copy delivery of information will not be accepted. Submitted documents and correspondence must be in the English language and in Microsoft Word or PDF format. Please limit responses to no more than 30 pages, not including brochures and illustrations, by no later than the date and time listed above.

Interested parties may submit questions to Nathan via email, phone or in person, but official responses must be submitted via email as per the submission instructions above. Nathan will only provide responses to questions submitted to this RFI at our discretion, and no proposals or resumes will be accepted or considered. Interested Parties are permitted to engage and meet with Nathan after the launch of the RFI

for clarification purposes and resulting non-proprietary information relevant to any subsequent procurement may be published as part of that procurement.

Please note that responses to this notice are not offers and cannot be accepted by Nathan to form a legally binding contract.

REQUIRED SERVICES[1]

DESCRIPTION/PERFORMANCE BASED WORK STATEMENT

1.0 Activity Title

The activity title is a Request for Information for a Border Queuing System (BQS) for Moldova.

2.0 Overview

The USAID-funded Moldova Structural Reform (MSR) Program is a four-year project that aims to improve the business and trade enabling environment in Moldova by helping Government of Moldova (GOM) institutions and private sector accelerate the implementation of trade liberalization mechanisms, adopt structural and business enabling reforms, and improve strategic communications between private and public actors. Program activities focus on reinforcing the capacity of Moldovan institutions and the private sector to consolidate earlier gains made in the trade and business-enabling environment.

MSR is working with the Moldovan Customs Service (MCS) to reduce delays and increase reliability of processing and queue times at Moldova's external borders. MSR and MCS are considering engaging a private sector partner to develop and operate a BQS. The BQS would initially be piloted on the Moldovan side of one border control point (BCP), with the intention of potentially expanding the system to other BCPs if the system proves impactful.

3.0 Background

From November 2017 through July 2018, the USAID MSR Program conducted Moldova's first comprehensive Trade Corridor Assessment (TCA). A major finding of the TCA was that delays at Moldova's border crossing points (BCP) negatively affect transport corridor performance, transport times, trucking costs, and ultimately trade flows. The largest issue in terms of time to trade across many routes is related to BCP queues.

The border crossing delays are not only problematic because of the actual time it typically takes to cross the border, but also due to the uncertainty and lack of reliability caused by the delays. Trucking companies have to plan excess time into their trip plans, which impacts the number of trips they can take in a month, regardless of whether the potential border delay actually persists. Traders have to make these same judgements in planning shipments, holding extra inventories in storage and building extra buffers into their delivery times.

[1] The Required Services set forth below are subject to change.

The TCA highlighted one potential solution: a truck appointment system that would enable vehicle owners to obtain an appointment for a time slot in advance of their trips to join a queue at the border, creating a virtual queue rather than a physical one.

Such a solution is well established in busy seaports handling foreign trade, with vessel window systems granting time slots ("windows") at the berth and truck appointment systems granting time slots at the port gates. In both cases, ports have improved berth and gate utilization efficiency while mitigating congestion. Additionally, in ports vessel operators can submit pre-arrival notices to enable enforcement authorities to conduct preliminary document inspection, a functionality that can be replicated at land border crossings.

Recent experience has seen an adaptation of the port appointment system to land border crossings. Such systems have been successfully implemented on some European Union (EU)/Non-EU borders such as the Estonia/Russia, Estonia/Belarus, Finland/Russia, and Lithuania/Russia borders, demonstrating that under certain conditions queue management systems have been an effective strategy to shorten truck queues and waiting time at the borders.

Such a system is most effective when enforcement agencies at both sides of the border collaborate on the use of the system, suggesting cross border agreements are a complementary prerequisite for optimizing border queue management. However, experience also shows that queue management systems can also be effective for reducing truck queues and waiting time if employed only on one side of the border.

4.0 Scope

We are seeking from interested parties comments on the functional, economic and financial requirements for a successful BQS pilot project. It is envisioned that the initial pilot site will occur at one BCP on the Moldovan side of the border, focusing on export cargo by commercial vehicles. However, interested parties are encouraged to present suggestions for how import cargo and non-freight related cross border transits could be integrated into a potential solution. Interested Parties are also requested to set forth the:

1. functionalities they envision for such a BQS,
2. operational structure,
3. IT system and integration requirements,
4. physical infrastructure needs
5. preferred funding models,
6. regulatory and policy requirements,
7. selection of pilot site,
8. estimated budget range for assignment, and
9. implementation schedule and pilot duration.

The latter includes estimates of the minimum time requirements for the successful party to set up the infrastructure and software for the BQS (lead time between contract signing and pilot launch), as well as the amount of time required to "prove the concept" and to test the economic viability of the business

configuration. The period should also allow enough data to be generated to enable measuring progress on a set of indicators established as a base line at the onset of the project. Another factor here is seasonality, and it will be important to capture the peak transport demand season in the pilot period to see how the system works at maximum capacity.

4.1 BQS Functionalities

At this stage, MSR envisions the following functionalities for the BQS:

- Granting appointment slots for commercial vehicles in advance of arriving at the border; and
- Allowing trucks to join a live queue.

It is possible the BQS can perform other functions like pre-clearance that would be complementary to expedited border processing for both imports and exports as well as non-freight related cross-border transits. The MSR welcomes interested parties to provide comments on these and other functionalities that have efficiency effects at BCPs.

4.1 Systems Requirements

The core of the system is envisioned to be a web-based truck appointment and queuing system, which allows for transporters to either 1) make advance reservations via the web, or 2) join a live queue via a kiosk at the border or waiting area.

Queue information is displayed at the border, on the website and can also be distributed by SMS. At the border, license plate readers or other IT solutions such as RFID facilitate managing the queues, and vehicles are called via electronic boards.

One system functionality option is a linkage with the Customs Service's IT system (in the case of Moldova, ASYCUDA) to allow for pre-arrival notification, document submission, customs' processing and even customs' clearance. Possible integrations with customs' IT systems should also be considered.

4.2 Operational Structure

The operational structure refers to the how the BQS would be managed and operated. Various options can be considered, such as the following but not limited to:

- A management contract issued by MCS to the BQS operator where the operator is paid a fee for each vehicle processed through the system;
- An operating agreement where the BQS operator is contracted to provide the service and charge a fee for such directly to the vehicle owner;
- An MCS-operator joint venture company charged with the responsibility for installing, managing, operating, maintaining, and upgrading the system.

Note there are two separate components for the BQS, including the IT-associated systems required for operating the system and a physical infrastructure component that consists of buffer area for staging vehicles (see Infrastructure Requirements section below). MSR is interested in receiving the views of interested parties on whether the components should be combined as a single BQS system, and hence having an operational structure consisting of a single operator, or if the two components should be separated and transacted separately (e.g. a separate operator for the IT system and other operators for the buffer or vehicle staging areas).

There are likely other operational structure options that can be considered; interested parties are requested to comment on the ones addressed here and suggest other operational structures.

4.3 IT System and Integration Requirements

MSR anticipates the core of the BQS will be a web-based truck appointment and queuing system, which allows for transporters to either 1) make advance reservations via the web accessed online by computer or a smart phone app, or 2) join a live queue via a kiosk at the border or waiting area. Queue information can be displayed at the border and on the website and can also be distributed by SMS. At the border, OCR license plate readers, RFID, or other IT solutions can be applied to facilitate managing the queues, and vehicles can be called via electronic boards located at staging areas outside the border area. Additionally, vehicles can be tracked and traced while on their transits to the border to allow the BQS operator to adjust border appointment times as needed.

One system functionality option is a linkage with the Customs Service's IT system (in the case of Moldova, ASYCUDA) to allow for pre-arrival notification, document submission, customs' processing and even customs' pre-clearance. Possible integrations with customs IT systems should also be considered. Additionally, it is envisioned that truck staging areas near to and distant from the border may be established to allow better control of hinterland-border truck and passenger vehicle flows, suggesting integration with these staging areas.

Interested parties are requested to provide comments on these system and integration requirements and suggestions for other system and integration requirements that contribute to BQS efficiency.

4.4 Physical Infrastructure Requirements

MCS envisions implementing a system where cargo could be cleared at a buffer zone several kilometers from the actual BCP or even in hinterland points where substantial inbound or outbound freight are generated. The buffer zone might include a waiting area for trucks and other vehicles with kiosks for joining the live queue as well as a customs bonded area for conducting customs' clearance. It is understood that infrastructure may need to accommodate the placement of license plate readers and electronic signs to call or notify vehicles at both the buffer zone and BCP, a kiosk for truckers to apply for

a spot in the live queue, as well as any back-end server, hardware and software requirements. Interested parties should comment or detail any other envisioned infrastructure requirements, such as access ramps and gates, as well as minimum requirements for the waiting area.

4.5 Preferred Funding Models

In view of the operational structures interested parties may envision and the associated IT and physical infrastructure costs, we request interested parties to identify funding options they envision for developing, managing, operating, and upgrading the BQS in Moldova such that the BQS is financially sustainable.

Interested parties are also requested to provide order of magnitude cost estimates for each of the two components of the system based on their views of the functionalities and services offered. For the IT component, interested parties are requested to consider the upfront software development, waiting/parking areas, ongoing maintenance and operational costs, and to specify and estimate other costs not identified here.

4.6 Regulatory and Policy Requirements

Interested parties are requested to identify any specific regulatory and policy requirements for ensuring successful implementation of the BQS. Attention should be given to broader border management issues, additional border staffing needs, common risk mitigation approaches, traffic management, etc. and other issues interested parties may identify to ensure effective BQS implementation.

This RFI also seeks views on the merits and regulatory feasibility for mandatory use of the BQS system and voluntary use of the BQS system.

4.7 Selection of a Pilot Site

It is envisioned that the queuing system will first be piloted at one BCP before being rolled-out to several or all of Moldova's main BCPs. Selecting the pilot location will be important as it will demonstrate the efficacy and impact of the concept. In this regard, there are two opposing requirements that must be balanced: the border having enough traffic and current delays to demonstrate meaningful impact and the situation being conducive to the pilot being successful. Interested parties are encouraged to provide recommendations for other considerations in selecting a pilot site, and can propose a pilot site.

4.8 Implementation Schedule

This RFI is also seeking views from interested parties on the implementation schedule for the pilot project and, if a decision is made to proceed with BQS implementation at all or most of Moldova's borders, for full implementation. The implementation schedule should reflect time for development, installation, testing, training, go-live, and post go-live training and other actions interested parties identify to be important for effective implementation.

4.9 Transfer of Ownership

The MCS has expressed interest in the possibility of eventually assuming the responsibility of managing and operating the Border Queuing System. Interested parties are requested to comment on the feasibility and outline any assumptions or considerations for this proposed ownership transfer.

5.0 Expected Outputs

The MCS, USAID, and Nathan Associates Inc. are deeply appreciative of comments, views, and opinions provided by interested parties regarding the questions and proposed functionalities detailed in Section 4. Such insight will contribute to the project's ultimate success should a determination be made to proceed with a tender process.

6.0 Environmental Compliance

Interested parties need to consider the impact of proposed solutions on the environment and ensure compliance to relevant regulations.

[END]