

# **Request for Proposal (RFP): Implementation of Robotic Process Automation (RPA) with Artificial Intelligence (AI) for Jordan Customs Department**

**1. Executive Summary:** The Jordan Customs Department is launching a strategic initiative to implement a comprehensive Robotic Process Automation (RPA) system enhanced with Artificial Intelligence (AI) and Generative AI capabilities. This project is part of the department's broader digital transformation agenda aimed at improving operational efficiency, automating manual workflows, enhancing service delivery, and supporting data-driven decision-making. Vendors are invited to propose scalable, intelligent automation solutions that incorporate advanced orchestration, AI-driven automation management, and autonomous execution capabilities. The proposed solution must ensure secure, adaptive, and sustainable process automation aligned with the department's long-term strategic digital objectives.

## **2. Project Overview:**

**The RPA implementation project will involve:**

- Identification and analysis of at least five (5) business processes suitable for automation. Vendors should propose high-impact processes within customs operations (e.g., customs declaration processing, risk assessment support, refund/duty drawback processes, trade statistics reporting, bond management, or correspondence handling) and define criteria for "suitability" (e.g., high volume, repetitive, rule-based, low exception rate, potential for human error reduction).
- Development and deployment of RPA bots enhanced with Artificial Intelligence (AI) and Generative AI capabilities. For Generative AI, vendors must propose specific use cases (e.g., automated document generation, intelligent search/information retrieval, or internal support chatbots for policy queries) and detail how data privacy, security, and governance will be handled, especially for sensitive customs data.
- Seamless integration with existing systems, including Asycuda, Tarasul, and the Public Service System.
- Deployment of a centralized platform to manage and coordinate automation workflows, including digital workers, AI-powered functionalities, and human-in-the-loop processes, enabling real-time collaboration and operational efficiency.

**3. Scope of Services:** The vendor will be responsible for:

**3.1 Assessment and Gap Analysis:** Identify automation opportunities and calculate ROI for each process.

- 3.2 Solution Design:** Develop detailed RPA design models, TO-BE processes, and AI enhancement strategies.
- 3.3 Bot Development:** Design and deploy intelligent bots powered by AI capabilities that can handle complex and unstructured processes. These should include features such as machine learning, natural language processing, adaptive decision-making, and intelligent data extraction for end-to-end automation.
- 3.4 Reports and Dashboards: Operational Intelligence:** Deliver real-time dashboards and reporting tools that provide comprehensive visibility into the performance of automation workflows, including bot activity, human-in-the-loop engagement, and insights for continuous improvement and optimization.
- 3.5 Process Optimization:** Recommend reengineering initiatives using AI insights.
- 3.6 Training and Support: Provide full training sessions for end-users and admins with post-implementation support. Vendors must provide a detailed tiered support structure with clear Service Level Agreements (SLAs). A comprehensive knowledge transfer plan to the Jordan Customs internal IT team, including detailed documentation, code walkthroughs, and hands-on sessions, is mandatory.**
- 3.7 Workflow Coordination:** Design and implement end-to-end automation workflows that integrate rule-based bots, AI-powered components, and human-in-the-loop interactions through a unified framework. The solution should ensure seamless coordination, scalability, and adaptability across diverse automation scenarios without reliance on any specific technology vendor.

#### **4. Technical Requirements:**

- Compatibility with standard virtual desktop and remote access environments, ensuring seamless operation across diverse infrastructure setups.
- Ability to integrate with a wide range of custom applications and programming environments, ensuring flexibility and compatibility.
- Support for modern API standards, enabling seamless integration with existing and future systems.
- Batch API request handling for large automation tasks.
- Read/write capabilities from/to network drives and FTP/SFTP servers.
- Security standards including OAuth, API keys, JWT authentication. It must comply with Jordanian data protection laws and relevant international standards (e.g., ISO 27001). Vendors must outline their approach to security testing. The solution must ensure granular access control based on



the principle of least privilege, full audit trails, and encrypted data processing where necessary.

- Full audit trails and encrypted data processing.
- **Vendors must guarantee 24/7 bot uptime with minimal downtime through robust Disaster Recovery (DR) and Business Continuity Planning (BCP) capabilities. Proposals must clearly detail strategies for maintaining service availability, including redundancy, data backup, and specified Recovery Time Objectives (RTO) and Recovery Point Objectives (RPO).**
- **Support for hybrid task coordination involving software bots, AI-powered components, and human-in-the-loop interactions.**
- Support for developing and managing AI-enabled automation components using flexible, user-friendly tools suitable for technical and non-technical users.
- AI Autonomy and Governance: Vendors must provide a detailed framework for managing AI autonomy, ensuring alignment with operational needs. This framework should include mechanisms for transparency and accountability in AI decision-making processes, such as clear documentation of decision logic or explainability features where applicable, and a strategy for continuous learning and adaptation. Vendors should also outline protocols for human oversight or intervention, if required, to ensure compliance with the department's governance and operational requirements.
- **Integration support for workflow execution platforms capable of modeling and running structured and dynamic business process flows, including BPMN-compliant or equivalent representations.**

#### **5. Project Timeline:**

- Each service phase — including assessment, design, development, and deployment — should be completed within 2 to 3 weeks per targeted process, with post-go-live support included.
- Each service phase — including assessment, design, development, and deployment — should be completed within 2 to 3 weeks per targeted process, with post-go-live support included. Vendors must provide a detailed project timeline that includes a realistic and clearly justified timeframe for each phase, along with clear, outcome-based milestones. The timeline should also explicitly outline Jordan Customs' expected contributions and dependencies.

#### **6. Vendor Qualifications:**



- Proven experience in RPA and AI solution delivery.
- Experience with customs, logistics, or public sector automation preferred.
- Offices must be located in Jordan. A dedicated local support team with specific RPA and AI expertise, accessible during Jordan Customs' working hours, is required.
- No subcontracting allowed.
- Certified RPA and AI professionals on staff.
- **Demonstrated capability in delivering intelligent automation solutions that support contextual decision-making within automated workflows using AI-driven logic.**
- **Proven experience delivering automation solutions that combine human-in-the-loop processes with AI-powered capabilities supporting learning and adaptation.**
- **Proven ability to design and deploy automation frameworks capable of integrating and coordinating various automation tools and technologies, regardless of platform or vendor.**

#### **7. Project Deliverables:**

- ROI and gap analysis report.
- Detailed solution design (AS-IS and TO-BE).
- Deployed RPA bots with AI enhancements.
- Dashboards and performance reports.
- Training materials and sessions.
- UAT results and user feedback documentation.
- Post-go-live support plan. This must include a clear strategy for continuous process optimization and bot improvement post-go-live.
- Architecture and configuration for intelligent workflow execution and coordination across automated and human-assisted processes.
- Real-time dashboards with metrics for agent performance, human interaction, and process intelligence.
- Documentation of agent training, adaptation cycles, and governance protocols.

#### **8. Proposal Submission Requirements:**

- Company profile.
- Project plan and timeline.

- Team composition and CVs.
- Detailed financial proposal. This should include a clear breakdown of the licensing model and how it scales with increased usage.
- References from similar projects.

#### 9. Assumptions and Conditions:

- Primary points of contact will be assigned.
- Weekly status meetings are mandatory.
- Vendor access to stakeholders must be ensured.
- Feedback/approvals expected within 72 hours.
- Additional out-of-scope work requires prior written approval.

#### 10. Evaluation Criteria:

##### - التقييم الفني:

يجب على كل مناقص أن يحقق درجة تساوي أو تزيد عن 60 من أصل 80 علامة مخصصة للتقييم الفني ليعتبر مؤهلاً. وسيتم استبعاد المناقصين الذين يحصلون على درجة أقل من هذا الحد من العطاء. من بين المتأهلين فنياً وحسب التقييم التالي:

##### - Technical evaluation (80 marks):

- **Proof of Concept (POC) for process automation with ROI estimate (20 mark):** During the tender evaluation, each bidder must deliver a professional Proof of Concept (POC) within a maximum period of two (2) weeks. The POC must demonstrate a quantifiable Return on Investment (ROI) and clearly detail Jordan Customs' data contributions, along with specific and measurable success metrics for evaluation.
- **Alignment with objectives and scope (20 mark):** Proposals must demonstrate clear alignment with the project's strategic objectives and defined scope, addressing the department's long-term digital transformation goals defined in points (1-9) above.
- **RPA/AI implementation experience and innovation (20 mark):** Bidder must provide evidence of successful RPA and AI implementations, highlighting both proven experience and innovative approaches to automation challenges in the last 3 years.
- **Implementation timeline & methodology (20 mark):** Bidder must provide a realistic, well-structured timeline and methodology for project execution, ensuring efficient and high-quality delivery.

- التقييم المالي:

- الأقل سعر سيحصل على 20 علامة.
- السعر الثاني سيحصل على 15 علامة.
- السعر الثالث سيحصل على 10 علامات.
- باقي الأسعار ستحصل على 5 علامات.

التقييم النهائي:

سيتم جمع علامة التقييم الفني و علامة التقييم المالي و المناقص صاحب أعلى علامة سيتم إحالة العطاء عليه.

