

# REQUEST FOR PROPOSAL (RFP)

# DEVELOPMENT AND IMPLEMENTATION OF E-SERVICES AND BACK-END SYSTEM FOR MINISTRY OF LOCAL ADMINISTRATION

Ministry of Digital Economy And Entrepreneurship P.O.BOX 9903 AMMAN 11191 JORDAN

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#### **Section 1: INTRODUCTION**

# 1.1. RFP Purpose

The purpose of this Request for Proposal (RFP) is to elicit responses from a qualified local Information Technology bidders (either alone or having joint venture with local/international firms) in order to execute the development and implementation of e-Services and backend system for services within Ministry of Local Administration – hereafter referred to as the "Project".

The major project objectives from the Ministry of Local Administration perspective are in line with Jordan e-Government Program and its vision. Specifically, the project objective is to improve service to the public by:

- Reducing time to access and deliver the service.
- Provide Ministry of Local Administration Beneficiaries with new electronic channels to render the service.
- Meeting regulatory requirements.
- Streamlining Ministry of Local Administration operations to improve productivity and cost reduction.
- Improving Ministry of Local Administration decision-making capabilities.
- Enhancing collaboration with Ministry of Local Administration business partners and governmental entities, suppliers, citizens, service providers, etc.).
- Adapting and scaling Ministry of Local Administration business.

The goal of the project is to provide new offering channel for the selected services mentioned in section two through online and walk-in channels. The winning bidder is required to perform a detailed design and implementation for the selected e-services to be offered on-line and walk-in. The winning bidder is required to utilize Government Private Cloud Computing to host and implement the proposed solution taking in consideration that the required solution shall be developed using Mendix, which integrated with Government Cloud Collaboration Environment (RAD platform).

Services included within this RFP are emerged from the following set of Goals categorized as per groups of beneficiaries:

- For the government, the goal of e-Transformation of these services is to increase the
  efficiency associated with services, eliminate and cut-down lengthy and useless iterations,
  reduce correspondences and approvals, reduce time needed to fulfill the service,
  standardize and streamline procedures, improving the quality level associated with the
  services along with increasing the transparency and reporting by allowing direct sharing
  of information.
- 2. From user perspective, these services will provide a transitional move that will be tangibly recognized as a successful example of e-Government program by subscribers.

Ministry of Digital Economy and Entrepreneurship seeks a bidder capable of providing functional requirements and demonstrating clear and comprehensive implementation framework together with strong project management and leadership skills.

The winning bidder will be responsible for successful delivery of the project within specified timeframe and has to follow agreed tasks and achieve desired goals and objectives, so the project is managed efficiently and effectively. In addition, the bidder will be required to finance lump sum cost of the project according to Annex 5.7

Responses to this Request for Proposal (RFP) must conform to the procedures, format and content requirements outlined in this document. Deviation may be grounds for disqualification.

## 1.2. RFP Organization

This RFP provides the information to enable bidders to submit written proposals for the sought solution. The organization of the RFP is as follows:

#### Section 1: Introduction

This section outlines the RFP's purpose and its organization.

## Section 2: Project Definition and Overall Solution Description

This section provides general definition of the project scope and a high-level description of the solution to be implemented,

# Section 3: Scope of the Project

This section defines scope of work, proposal requirements and deliverables for the Project.

## Section 4: Administrative Procedures and Requirements

This section describes the administrative rules and procedures that guide the proposal and its processes.

#### Section 5: Annexes

This section includes all annexes to the RFP.

# Section 2: PROJECT DEFINITION AND OVERALL SOLUTION DESCRIPTION

## 2.1. Project Definition

Ministry of Local Administration is the governmental body charged to provide distinguished municipal services focusing on environmental, health, organizational, infrastructure and community development.

This sub-section provides general description of the Services.

## 2.1.1. Definition and description

Ministry of Local Administration is rendering a portfolio of services that are to be implemented in "e-mode" within the project described by this RFP. MoLA and its municipalities considered the main service provider for the e-Services mentioned below.

The scope of this RFP is to enable the e-transformation of the underneath services along with developing new back-end system within MoLA integrated with its municipalities.

The following list of services is currently provided in MoLA and its municipalities these services are to be implemented in both walk in, and e-mode within the scope of this project. Refer to annex (5.14) for list of MoLA and its municipalities and the nature of services each region deliver and refer to annex (5.2) for the To-Be procedure for the services in scope.

Table1: List of Services in Scope

Vocational License Services	خدمات رخص المهن	#
Vocational license renewal	تجديد رخصة مهن	1
Vocational license issuance	إصدار رخصة مهن جديدة	2
Vocational license cancellation	شطب / إلغاء رخصة مهن	3
Add/Change vocation	إضافة / تغيير مهنة	4
Vocational license partition	تجزئة رخصة مهن	5
Vocational license ownership transfer	نقل ملكية رخصة مهن	6
Vocational license location transfer	نقل موقع رخصة مهن	7
Construction license Services	خدمات رخص البناء	
Construction License Issuance	خدمة إصدار رخصة بناء	8
Occupancy permission renewal	خدمة تجديد إذن إشغال	9
Occupancy permit issuance	خدمة إصدار إذن إشغال	10
Advertising panel license Services	خدمات رخص الإعلانات	
Advertising panel license issuance	إصدار رخصة لوحة إعلانية	11

Advertising panel license issuance - Vehicles	خدمة إصدار رخصة لوحة إعلانية - مركبات	12
Advertising panel area adjustment	خدمة تعديل مساحة لوحة إعلانية	13
Construction and vocational Permits	خدمات تصاريح الأبنية والمهنية	
Contractors permit	خدمة تصاريح المقاولين	14
Sand blasting permit	خدمة تصريح قذف رملي	15
Digging permit	خدمة تصاريح الحفر	16
Demolition permit based on the owner's request	خدمة تصريح هدم بناء على رغبة المالك	17
Clean a site and transport mounds/waste permit	خدمة تصريح تنظيف موقع ونقل طمم	18
Street vendor permit	خدمة تصريح الباعة المتجولين	19
Marquee tents permit (public events, cultural and entertainment activities)	ري	20
Cattle sales permit	خدمة تصريح بيع الأضاحي	21
Financial clearances and other financial services	الخدمات المالية وبراءات الذمم	
Real estate financial clearance	إصدار براءة ذمة مالية على العقار	22
Insurance refund	طلب استرداد تأمينات	23
Financial clearance for tenants - Municipalities property	إصدار براءة ذمة مالية لمستأجري أملاك البلدية	24
Compensation request - Expropriations	طلب صرف تعويض عن الأراضي والمنشآت المستملكة	25
Expropriations appeals	طلب الاعتراض على الاستملاك	26
Appeal to the estimated value of a property	طلب الاعتراض على قيمة التخمين	27
Services for organizational changes, streets and sidewalks	الخدمات الخاصة بالتعديلات التنظيمية والشوارع والأرصفة	
Organizational changes	خدمة التعديلات التنظيمية	28
Excretion, consolidation and fragmentation	خدمة الإفراز والتوحيد والتجزئة	29
Buy a waste piece of land	خدمة شراء فضلة	30
Street straightness and sidewalk width	خدمة استقامة شارع وسعة رصيف	31
Land View Zooning Plan issuance	خدمة إصدار مخطط موقع تنظيمي	32
Sidewalk certificate issuance	خدمة طلب إصدار شهادة رصيف	33
Traffic violations removal	خدمة إزالة مظاهر إعاقة الحركة المرورية	34
Removal of constructed violations on private property	خدمة إز الة اعتداءات الأبنية على الأملاك الخاصة	35
Other services	خدمات أخرى	
Complaints, suggestions, requests for maintenance and general services	الشكاوى والمقترحات وطلبات الصيانة والخدمات العامة	36
Funeral services	تقديم خدمات دفن الموتى	37
Establishing and maintaining terminals, traffic intersections and pedestrian paths	خدمة إنشاء وصيانة الأطاريف والتقاطعات المرورية وممرات المشاة	38
Objection to an organizational chart listed for	طلب الاعتراض على مخطط تنظيمي معلن للاعتراض	39
Telecom towers licensing	ترخيص أبراج الاتصالات	40

Dog ownership license issuance	إصدار رخصة اقتناء كلب	41
Lease contract ratification	طلب تصديق عقد إيجار	42
Installment fees for buildings, verifications and professions	طلب تقسيط رسوم الأبنية والتحققات والمهن	43
Construction works services	طلبات الأعمال الإنشائية	44

## 2.1.2. Service Customers & Major Stakeholders

Services mentioned in the list above can be classified according to recipients as the following:

**Note:** The winning bidder should study and consider all possible cases regarding type of customers for each service during the requirement gathering phase.

- Vocational License Services: Vocational license services are requested by both Jordanians and non-Jordanians investors, citizen and associations, in order to start/proceed doing business.
- Construction license Services: These services are requested by both Jordanians and non-Jordanians investors and citizens
- Advertising panels license Services: These services are requested by both Jordanians and non-Jordanians investors and citizens.
- Construction and vocational Permits: These services are requested by both Jordanians and non-Jordanians investors and citizens.
- Financial clearances and other financial services: These services are requested by both Jordanians and non-Jordanians investors and citizens.
- Services for organizational changes, streets and sidewalks: Organization services are requested by both Jordanians and non-Jordanians and investors.
- Other services: These services are requested by both Jordanians and non-Jordanians investors and citizens.

#### 1. Internal stakeholders:

- 1. GFMIS: The system used to make accounting entries that are relevant to MoLA's work in details including (but not limited to) financials entries, budgeting, reporting.
- 2. Municipalities Electronic Finance System: The system used to collate Municipalities accounting entries and issue financial statements accordingly, in addition to expenses, invoices and funding.
- 3. GIS: Responsible of retrieving layers and location files.

The following table shows the sample of proposed integration details with internal stakeholders. The winning bidder should finalize all integration points in the requirements gathering phase and according to the approved solution architecture. It is the winning bidder responsibility to finalize

all integration points and if necessary, develop the required fields in order to support the services implementation.

الحقول المطلوبة	المعلومة المدخلة على النظام	المعلومات المطلوبة	الوثيقة الذي يتم الحصول على المعلومات منها بالوضع الحالي	#
نوع التصريح	الرقم التسلسلي/	معلومات	النصاريح	1
تاريخ الإصدار	المرجعي	التصريح	-	
تاريخ الانتهاء				
الغاية من التصريح				
DLS Key				
تنظيم القطعة				
اسم المصرح له				
نوع الرخصة	الرقم التسلسلي/	معلومات الرخصة	رخص المهن	2
تاريخ الإصدار	المرجعي			
تاريخ الانتهاء	_			
الغاية من الرخصة				
DLS Key				
تنظيم القطعة				
الرقم التعريفي للمرخص له				
اسم المرخص له				
DLS Key		معلومات المخطط	مخططات الموقع التنظيمية	3
صفة الاستعمال	الرقم التسلسلي/	التنظيمي	63	
صورة المخطط	المرجعي			
	Ų · ū			
DLS Key	الرقم التسلسلي/	معلومات إذن	إذن الإشغال	4
تاريخ الإصدار	المرجعي	الإشغال	, -,	
تاريخ الأنتهاء	"			
المخططات الهندسية				
طبيعة المخالفة	الرقم التسلسلي/	معلومات	المخالفات	5
تاريخ إصدار المخالفة	المرجعي	المخالفات		
اسم الشُخص المخالف				
الرقم التعريفي للشخص				
المخالف				
DLS Keyموقع المخالفة				
طبيعة المأجور	الرقم التسلسلي/	معلومات عقود	عقود الإيجار المصدقة من قبل البلدية	6
تاريخ العقد	المرجعي	الإيجار	,	
تاريخ الانتهاء	,	J 12,		
الغاية من الإيجار				
الرقم المرجعي المهن المتعلقة				
اسم المؤجر				
الرقم التعريفي للمؤجر				
اسم المستأجر				
الرقم التعريفي للمستأجر	•			
DLS Key	الرقم التسلسلي/	معلومات رخصة	رخص البناء	7
تاريخ الإصدار	المرجعي	البناء	. 5 5	_
تاريخ الانتهاء	ر بي	·		
تاريخ الاستحقاق	الرقم التسلسلي/	معلو مات	المستحقات المالية	8
نوع المستحقات	، عرب ، سيسي ، المرجعي	المستحقات المالية		
DLS Key	٠ . ي			
DEO NOy				

نوع الملك	الرقم التسلسلي/	معلومات عقارات	أملاك البلدية	9
-	الرقم التسلسير المرجعي	معلومات علقارات وأملاك البلدية	المرك البندية	9
DLS Key الحالة مأجور/ فارغ /مستملك	المرجعي	والمارك البلدية		
الحاله ماجور / فارع /مسلمات اسم المؤجر له (في حال كان				
اسم الموجر له (لاي خال خال العقار مؤجر)				
الرقم التعريفي للمؤجر له				
	/ 1 1 ::11 :: 11		قرارات الاستملاك الصادرة عن رئاسة	10
اسم المستملك المستملك منه	الرقم التسلسلي/ المرجعي	معلومات قرارات الاستملاك	فرارات الاستمالات الصندرة عن رئاسة الوزراء الخاصة باستملاكات البلدية	10
	المرجعي	الإستمارك	الورزاء الخاصة بالشمرخات البندية	
الغاية من الاستملاك				
تاريخ الاستملاك				
الشروط المتعلقة بالاستملاك				
DLS Key				
تاريخ القرار				
رقم القرار				
تاريخ الإعلان عن الاستملاك	/ 1 1 ::11 :: 11	1	The state of the s	44
الشركة المزودة للخدمة طبيعة الخدمة	الرقم التسلسلي/	معلومات الخدمات	الخدمات التي يتم تزويدها لأملاك البلدية	11
•••	المرجعي	الحدمات		
رقم العداد				
DLS Key	/ t t ati == ti	h \$21 m 1 1	2 4 5-871 11 671	40
تاريخ اكتمال تنفيذ الأعمال	الرقم التسلسلي/	معلومات الأعمال	الأعمال الإنشائية	12
الإنشائية	المرجعي	الإنشائية		
DLS Key				
نوع الأعمال الإنشائية	/ 1 1	n 1 1	e to fett	40
سبب دفع التأمينات من قبل	الرقم التسلسلي/	معلومات التأريب	التأمينات	13
متلقي الخدمة (إصدار تصريح	المرجعي	التأمينات		
أو غير ذلك)				
رقم التصريح أو الوثيقة ذات العلاقة				
مبلغ التأمينات الذي تم دفعه				
	الرقم التسلسلي/	معلومات المخطط	مخططات استقامة شارع	14
DLS Key صورة المخطط	الرقم التسلسير المرجعي	معلومات المحطط	محططات استعامه سارع	14
صورة المحطط	المرجعي			
DLS Key	الرقم التسلسلي/	معلومات	التعديلات التنظيمية	15
تاريخ التعديل التنظيمي	الرام التسسير المرجعي	معورهات التعديلات	المحيوت التصييب	13
الحالة التنظيمية السابقة للموقع	،ــر بــي	التنظيمية		
الحالة التنظيمية للموقع بعد				
التعديل				
الرقم المرجعي للرسوم في	الرقم التسلسلي/	معلومات الرسوم	الرسوم التي يتم تقسيطها	16
مرحم مصربعي عرسوم قاعدة بيانات الرسوم	برح ،—سير المرجعي	التي يتم تقسيطها	الرسوم التي يتم تستين	
و المستحقات	- رب ي	اسي يام سدياها		
تاريخ الموافقة النهائية على				
التقسيط				
المبلغ الكلي				
القسط الشهري				
القسط الأخير				

Services in scope are delivered by MOLA with close cooperation with the following government entities:

#### 2. External stakeholders:

# 1. Ministry of Social Development:

MoSD role in the Municipalities services delivery is mainly to provide the following:

- Sectorial approvals and licenses for issuing/renewal vocational licenses.
- Association Registration Certificate Information

#### 3. Media Commission:

MC role in Municipalities services delivery is mainly to provide the sectorial approvals and licenses for issuing/renewal vocational licenses.

## 4. Land transport Regulatory Commission:

LTRC role in Municipalities services delivery is mainly to provide the sectorial approvals for issuing/renewal vocational licenses.

# 5. Ministry of Water and Irrigation:

MoWI role in Municipalities services delivery is mainly to provide the sectorial approvals and licenses for issuing/renewal vocational licenses.

## 6. Ministry of Health:

MoH role in Municipalities services delivery is mainly to provide the sectorial approvals and licenses for issuing/renewal vocational licenses.

#### 7. Ministry of Tourism:

MoTA role in Municipalities services delivery is mainly to provide the sectorial approvals and licenses for issuing/renewal vocational licenses.

## 8. Ministry of Agriculture:

MoTA role in Municipalities services delivery is mainly to provide the sectorial approvals and licenses for issuing/renewal vocational licenses.

#### 9. Ministry of Interior / Governorate:

Mol role in Municipalities services delivery is mainly to provide the sectorial and securities approvals for issuing/renewal vocational licenses.

# 10. Ministry of Higher Education and Scientific Research:

MoHE role in Municipalities services delivery is mainly to provide the sectorial approvals for issuing/renewal vocational licenses.

#### 11. Ministry of Environment:

MoE role in Municipalities services delivery is mainly to provide the sectorial approvals for issuing/renewal vocational licenses.

#### 12. Energy and Minerals Regulatory Commission

The role in Municipalities services delivery is mainly to provide the sectorial approvals for issuing/renewal vocational licenses.

## 13. Telecommunications Regulatory Authority:

TCA role in Municipalities services delivery is mainly providing the sectorial approvals for issuing/renewal vocational licenses.

#### 14. Jordan Securities Commission

JSC role in Municipalities services delivery is mainly to provide the following:

- Sectorial approvals for issuing/renewal vocational licenses.
- Construction Drawings
- Design Office and Contractor Information

## 15. Jordan Engineers Association

JEA role in Municipalities services delivery is mainly to provide the following:

- Sectorial approvals for issuing/renewal vocational licenses.
- Construction Drawings
- Design Office and Contractor Information

#### 16. Jordanian Bar Association:

JBA role in Municipalities services delivery is mainly to provide the sectorial approvals for issuing/renewal vocational licenses.

# 17. Directorate of Special Education / Ministry of Education:

MoE role in Municipalities services delivery is mainly to provide the sectorial approvals for issuing/renewal vocational licenses.

## 18. Water Companies:

- Sectorial approvals for issuing/renewal vocational licenses.
- Water consumption fees information

#### 19. Water Authority of Jordan:

WAJ role in Municipalities services delivery is mainly to provide the sectorial approvals for issuing/renewal vocational licenses.

#### 20. Drivers and Vehicles License Department

DVLD role in Municipalities services delivery is to provide the vehicles license information.

## 21. Jordan Maritime Commission:

JMC role in Municipalities services delivery is mainly to provide the sectorial approvals for issuing/renewal vocational licenses.

#### 22. Jordan Food and Drug Administration:

JFDA role in Municipalities services delivery is mainly to provide the sectorial approvals for issuing/renewal vocational licenses.

#### 23. General Directorate of Civil Defense

GDCD role in Municipalities services delivery is mainly to provide the following:

- Needed approvals for issuing/renewal vocational licenses.
- Construction Drawings approval or amendments

#### 24. Jordan Olympic Committee:

JOC role in Municipalities services delivery is mainly to provide the sectorial approvals for issuing/renewal vocational licenses

#### 25. Central Bank:

CB role in Municipalities services delivery is mainly to provide the sectorial approvals for issuing/renewal vocational licenses

#### 26. Ministry of Labor:

MoL role in Municipalities services delivery is mainly to provide the sectorial approvals for issuing/renewal vocational licenses

# 27. Ministry of Culture:

MoC role in Municipalities services delivery is mainly to provide the sectorial approvals for issuing/renewal vocational licenses

#### 28. Jordan Press Association:

The role in Municipalities services delivery is mainly to provide the sectorial approvals for issuing/renewal vocational licenses

#### 29. Civil Aviation Regulatory Commission:

The role in Municipalities services delivery is mainly to provide the sectorial approvals for issuing/renewal vocational licenses

## 30. Directorate of Housing Establishment & Military Works:

The role in Municipalities services delivery is mainly to provide the necessary security approvals.

## 31. Ministry of Industry and Trade / Central Register:

MIT role in Municipalities services delivery is mainly to provide institution/company registration information.

#### 32. Companies Control Department:

CCD role in Municipalities services delivery is mainly to provide institution/company registration information.

#### 33. Jordan Chamber of Commerce:

The role in Municipalities services delivery is mainly providing the information of membership registration.

#### 34. Jordan Chamber of Industry

The role in Municipalities services delivery is mainly to provide the information of membership registration.

## 35. Ministry of Justice:

The role in Municipalities services delivery is mainly to provide authorization Document Information.

### 36. Traffic Department:

The role in Municipalities services delivery is mainly to provide the required approvals.

#### 37. Department of Antiquities

The role in Municipalities services delivery is mainly to provide the required approvals.

## 38. Department of Palestinian Affairs:

DoPA role in Municipalities services delivery is mainly to provide the necessary information related to Occupancy Permit.

#### 39. Supreme Judge Department

SJD role in Municipalities services delivery is mainly to provide necessary information related custody documents.

## 40. Public Security Directorate

PSD role in Municipalities services delivery is mainly to provide necessary approvals.

#### 41. Civil Status and Passport Department:

CSPD role in Municipalities services delivery is mainly to provide the civil record information for Jordanian citizen through the national number.

#### 42. Directorate of residence and borders

DoBR role in Municipalities services delivery is mainly to provide the information for non-Jordanian through the personal ID.

## 43. Electricity Power Companies:

Municipalities services delivery is mainly to provide the information of Electricity consumption.

#### 44. The Jordanian Post and other shipping company:

The winning bidder shall develop the solution to be able to integrate with shipping / delivery companies through web service.

#### 45. Prime Minister's Office

The role in Municipalities services delivery is mainly to provide announcement in the official newspaper.

# 46. Department of Land and Survey

DLS role in Municipalities services delivery is to provide the property location and information.



DEVELOPMENT AND IMPLEMENTATION OF E-SERVICES AND BACK-END SYSTEM FOR MINISTRY OF LOCAL ADMINISTRATION

The following table shows the proposed integration details with the key stakeholders. The winning bidder should evaluate, assess the proposed matrix and suggest any modification during the requirements gathering phase and according to the approved solution architecture and it's the bidder responsibility to develop all needed web services (provider and consumer).

Integration type has to be done by default through webservices (Provide \ Update \ Consume), unless there are limitations for specific stakeholders, the integration will be done as "user role". The bidder responsibility to re-evaluate this matrix and it will be approved by MoDEE and MoLA.

Any new integration point appeared during requirements gathering sessions for the stakeholders mentioned in matrix for any of the services under scope, will be considered as part of the scope of work.

Any sub process/sub service related to the e-services in scope and essential to complete end-to end services, will be winning bidder responsibility to build these process / subservice without any additional cost.

#### Table1

#	Entity	Related Services	Integration Point (المعلومة المطلوبة (من الجهة الشريكة)	Input parameter (المعلومات المرسلة من وزارة الإدارة المحلية)	Integration Type	العمليات الفرعية ذات العلاقة
1.	Department of Lands and Survey	إصدار رخصة مهن، تجديد رخصة مهن، تجديد مهن ، نقل موقع رخصة مهن ، تقل موقع رخصة تجزئة رخصة مهن الغاء رخصة مهن، نقل ملكية رخصة مهن، نقل ملكية رخصة بناء، إصدار إنن أشغال، تجديد إنن أشغال، أصدار رخصة لوحة إعلانية، تعديل مساحة لوحة إعلانية، تعديل مساحة لوحة تصريح تنظيف موقع ونقل طمم، تصريح قذف رملي، تصريح هدم بناء على رغبة المالك، تصريح خيم	Site Map Information	Site Map Reference Number Ownership Document Reference Number	Provide/update/c onsume	Request Application

		المناسبات العامة والنشاطات الثقافية والترفيهية، تصريح بيع الأضاحي، اصدار براءة ذمة مالية على العقار، طلب صرف تعويض عن الاراضي والمنشآت المستملكة، طلب الاعتراض على قيمة التخمين، إزالة اعتداءات الأبنية على الأملاك الخاصة، التعديلات التنظيمية، استقامة شهادة رصيف، إصدار مخطط شهادة رصيف، إصدار والتوحيد موقع تنظيم، الإفراز والتوحيد والتجزئة، شراء فضلة، ترخيص على مخطط تنظيمي معلن الراج الاتصالات، طلب اعتراض على ملاعتراض، طلب تقسيط رسوم للاعتراض، طلب تقسيط رسوم الابنية والتحققات والمهن				
		إصدار رخصة بناء، إصدار إذن أشغال، تجديد إذن أشغال	Change Statement Information	Change Statemen Reference Number	Provide/update/c onsume	Request Application
		اصدار ابراج أبراج الاتصالات	DLS Key	GPS Location	Provide/update/c onsume	Service Application
		طلب صرف تعويض عن الاراضي والمنشأت المستملكة	Deduction Certificate Information	Deduction Certificate Reference Number	Provide/update/c onsume	Request Application
			Asset's estimated value	Asset Information	Provide/update/c onsume	Asset Value Estimation
2.	Ministry of Industry and Trade / Central Register	All Related Services	Ownership Document Information	Institution's National Number Commercial Name	Provide/update/c onsume	Request Application
3.	Companies Control Department	All Related Services	Institution's data	Institution's National Number	Provide/update/c onsume	Request Application

4.	Jordan Chamber of Commerce	إصدار رخصة مهن، تجديد رخصة مهن، نقل موقع رخصة مهن ، إضافة / تغيير مهنة ، تجزئة رخصة مهن، الغاء رخصة مهن، الغاء رخصة مهن، نقل ملكية رخصة مهن	Registration in Jordan Chamber of Commerce information	Reference Number of the registration document	Provide/update/c onsume	Request Application
5.	Jordan Chamber of Industry	إصدار رخصة مهن، تجديد رخصة مهن ، نقل موقع رخصة مهن ، إضافة / تغيير مهنة ، تجزئة رخصة مهن، الغاء رخصة مهن، الغاء رخصة مهن، نقل ملكية رخصة مهن	Registration in Jordan Chamber of Industry information	Reference Number of the registration document	Provide/update/c onsume	Request Application
6.	Ministry of Social Development	All Related Services	Association Registration Certificate Information	Association's National Number	Provide/update/c onsume	Request Application
7.	Department of Palestinian Affairs	تجديد إذن أشغال، الإفراز والتوحيد والتجزئة، طلب تصديق عقد ايجار	Occupancy Permit Information	Location Information	Provide/update/c onsume	Request Application
8.	Jordan Engineers Association	إصدار رخصة بناء تصاريح المقاولين، تصريح تنظيف موقع ونقل طمم، تصاريح الحفر، تصريح هدم بناء على رغية المالك، ،	Construction Drawings Design Office and Contractor Information	Construction Drawings Reference Number Design Office and Contractor ID Number	Provide/update/c onsume	Request Application
9.	Drivers and Vehicles License Department	إصدار رخصة إعلانية لمركبات، تصريح تنظيف موقع ونقل طمم، تصاريح الحفر	Vehicle's License Information Vehicle's Vocational License Information	Vehicle Number (Plate Number)	Provide/update/c onsume	Request Application
10.	Ministry of Justice	خدمات رخص المهن، إصدار رخصة بناء، إصدار إذن أشغال، تجديد إذن أشغال، إصدار رخصة إعلانية لمركبات، تصاريح	Authorization Document and Information	National Number/Personal Number	Provide/update/c onsume	Request Application

		المقاولين، تصريح تنظيف موقع ونقل طمم، تصاريح الحفر، تصريح الحفر، بناء على رغبة المالك، تصريح هدم المناسبات العامة والنشاطات الثقافية والترفيهية، تصريح بيع مالية على العقار، طلب صرف مالية على العقار، طلب صرف المستملكة، طلب الاعتراض على الأستملاك، طلب الاعتراض على قيمة التخمين، إزالة اعتداءات التعديلات التنظيمية، استقامة شارع وسعة رصيف، إصدار مخطط شهادة رصيف، إصدار مخطط موقع تنظيم، الإفراز والتوحيد والتجزئة، شراء فضلة، ترخيص والتجراض، طلب اعتراض على مخطط تنظيمي معلن الراج الاتصالات، طلب اعتراض على المنتراض، طلب تقسيط رسوم الابنية والتحققات والمهن،				
11.	Water Companies	اصدار براءة الذمة المالية لمستأجري املاك البلدية	Water consumption fees information	Subscription Number	Provide/update/c onsume	Request Application
12.	Electricity Power Companies	اصدار براءة الذمة المالية لمستأجري املاك البلدية	Electricity consumption fees information	Subscription Number	Provide/update/c onsume	Request Application
13.	Supreme Judge Department	طلب صرف تعويض عن الاراضي والمنشآت المستملكة، طلب الاعتراض على الاستملاك، طلب الاعتراض على قيمة التخمين	Custody documents information	Owner's National Number	Provide/update/c onsume	Request Application
14.	Prime Minister's Office	خدمة نقسيط رسوم الأبنية والتحققات والمهن	Regulations and announcements	None	Username	Request Application

			relevant to installment of fees and receivables			
15.	Telecommun ications Regulatory Commission	ترخيص أبراج الاتصالات	Telecommunica tion Tower License information	Telecommunication Tower License reference number	Provide/update/c onsume	Request Application
16.	Civil Status and Passport	All Related Services	Applicant's civilian data	National Number	Provide/update/c onsume	Request Application
17.	Department	تقديم خدمات دفن الموتى	Certificate of Death information	National Number or Certificate of Death reference Number	Provide/update/c onsume	Request Application
18.	Directorate of residence and borders	All Related Services	Applicant's personal data	Personal Number	Provide/update/c onsume	Request Application
19.	The Jordanian Group for Free Zones and Development Zones	All Related Services	Legal persons data	Institution's National Number	Provide/update/c onsume	Request Application
20.	Prime Minister's Office	التعديلات التنظيمية	Completion of announcement	Announcement Details	Provide/update/c onsume	Announcement and Collection of Objections
21.	Electricity Power Companies	إصدار رخصة لوحة إعلانية، تعديل مساحة لوحة إعلانية	None	Location Information and a notice of an advertisement which needs electrical services	Web Form	License Issuing
22.	PSD	خدمة إنشاء وصيانة الأطاريف والتقاطعات المرورية وممرات المشاة	Approval	Service Application	Web Form	Internal Approvals

• The integrations with the stockholders listed in below (responsible of issuing the sectorial approvals and licenses) should be offered as separately in the financial proposal.

Table 2

#	Entity	Related Services	Integration Point المعلومة المطلوبة من الجهة الشريكة	Input parameter	Integration Type	العمليات الفرعية ذات العلاقة
1.	Jordan Olympic Committee	إصدار رخصة مهن، نقل موقع رخصة مهن، إضافة تغيير مهنة، نقل ملكية	Sectorial Approval	Location Information, Vocation Information, and Applicant Data	Username (Web Form)	External Approvals
2.	General Directorate of Civil Defense	إصدار رخصة مهن، نقل موقع رخصة مهن، إضافة تغيير مهنة،	Sectorial Approval	Location Information, Vocation Information, and Applicant Data	Username (Web Form)	External Approvals
3.	General Directorate of Civil Defense	إصدار رخصة بناء	Construction Drawings approval or amendments	Construction Drawings	Username (Web Form)	External Approvals
4.	Jordan Food and Drug Administrat ion	إصدار رخصة مهن، نقل موقع رخصة مهن، إضافة تغيير مهنة، نقل ملكية	Sectorial Approval	Location Information, Vocation Information, and Applicant Data	Username (Web Form)	External Approvals
5.	Jordan Maritime Commissio n	إصدار رخصة مهن، نقل موقع رخصة مهن، إضافة تغيير مهنة، نقل ملكية	Sectorial Approval	Location Information, Vocation Information, and Applicant Data	Username (Web Form)	External Approvals
6.	Drivers and Vehicles License Departmen t	إصدار رخصة مهن، نقل موقع رخصة مهن، إضافة تغيير مهنة، نقل ملكية	Vehicle's License Information	Location Information, Vocation Information, Applicant Data, and Vehicle Data	Provide/update/c onsume	External Approvals

7.	Water Companies	إصدار رخصة مهن، نقل موقع رخصة مهن، إضافة تغيير مهنة، نقل ملكية	Sectorial Approval	Location Information, Vocation Information, and Applicant Data	Username (Web Form)	External Approvals
8.	Directorate of Special Education / Ministry of Education	نقل مديد إصدار رخصة مهن، نقل موقع رخصة مهن، إضافة تغيير مهنة، نقل ملكية	Sectorial Approval	Location Information, Vocation Information, and Applicant Data	Username (Web Form)	External Approvals
9.	Jordanian Bar Association	إصدار رخصة مهن، نقل موقع رخصة مهن، إضافة تغيير مهنة، نقل ملكية	Sectorial Approval	Location Information, Vocation Information, and Applicant Data	Username (Web Form)	External Approvals
10.	Jordan Engineers Association	إصدار رخصة مهن، نقل موقع رخصة مهن، إضافة تغيير مهنة، نقل ملكية	Sectorial Approval	Location Information, Vocation Information, and Applicant Data	Username (Web Form)	External Approvals
11.	Media Commissio n	إصدار رخصة مهن، نقل موقع رخصة مهن، إضافة تغيير مهنة، نقل ملكية	Sectorial Approval	Location Information, Vocation Information, and Applicant Data	Username (Web Form)	External Approvals
12.	Land transport Regulatory Commissio n	إصدار رخصة مهن، نقل موقع رخصة مهن، إضافة تغيير مهنة، نقل ملكية	Sectorial Approval	Location Information, Vocation Information, and Applicant Data	Username (Web Form)	External Approvals
13.	Energy and Minerals Regulatory Commissio n	إصدار رخصة مهن، نقل موقع رخصة مهن، إضافة تغيير مهنة، نقل ملكية	Sectorial Approval	Location Information, Vocation Information, and Applicant Data	Username (Web Form)	External Approvals
14.	Ministry of Environme nt	إصدار رخصة مهن، نقل موقع رخصة مهن، إضافة تغيير مهنة، نقل ملكية	Sectorial Approval	Location Information, Vocation Information, and Applicant Data	Username (Web Form)	External Approvals
15.	Ministry of Higher Education and Scientific Research	إصدار رخصة مهن، نقل موقع رخصة مهن، إضافة تغيير مهنة، نقل ملكية	Sectorial Approval	Location Information, Vocation Information, and Applicant Data	Username (Web Form)	External Approvals

16.	Ministry of Social Developme nt	إصدار رخصة مهن، نقل موقع رخصة مهن، إضافة تغيير مهنة، نقل ملكية	Sectorial Approval	Location Information, Vocation Information, and Applicant Data	Username (Web Form)	External Approvals
17.	Ministry of Interior / Governorat e	إصدار رخصة مهن، نقل موقع رخصة مهن، إضافة تغيير مهنة، نقل ملكية	Sectorial Approval	Location Information, Vocation Information, and Applicant Data	Username (Web Form)	External Approvals
18.	Ministry of Agriculture	إصدار رخصة مهن، نقل موقع رخصة مهن، إضافة تغيير مهنة، نقل ملكية	Sectorial Approval	Location Information, Vocation Information, and Applicant Data	Username (Web Form)	External Approvals
19.	Ministry of Tourism	إصدار رخصة مهن، نقل موقع رخصة مهن، إضافة تغيير مهنة، نقل ملكية	Sectorial Approval	Location Information, Vocation Information, and Applicant Data	Username (Web Form)	External Approvals
20.	Ministry of Health	إصدار رخصة مهن، نقل موقع رخصة مهن، إضافة تغيير مهنة، نقل ملكية	Sectorial Approval	Location Information, Vocation Information, and Applicant Data	Username (Web Form)	External Approvals
21.	Ministry of Labor	إصدار رخصة مهن، نقل موقع رخصة مهن، إضافة تغيير مهنة، نقل ملكية	Sectorial Approval	Location Information, Vocation Information, and Applicant Data	Username (Web Form)	External Approvals
22.	Ministry Of Culture	إصدار رخصة مهن، نقل موقع رخصة مهن، إضافة تغيير مهنة، نقل ملكية	Sectorial Approval	Location Information, Vocation Information, and Applicant Data	Username (Web Form)	External Approvals
23.	Jordan Press Association	إصدار رخصة مهن، نقل موقع رخصة مهن، إضافة تغيير مهنة، نقل ملكية	Sectorial Approval	Location Information, Vocation Information, and Applicant Data	Username (Web Form)	External Approvals
24.	Civil Aviation Regulatory Commissio n	إصدار رخصة مهن، نقل موقع رخصة مهن، إضافة تغيير مهنة، نقل ملكية	Sectorial Approval	Location Information, Vocation Information, and Applicant Data	Username (Web Form)	External Approvals
25.	Directorate of Housing Establishm ent &	إصدار رخصة مهن، نقل موقع رخصة مهن، إضافة تغيير مهنة، نقل ملكية	Security Approval	Location Information, Vocation Information, and Applicant Data	Username (Web Form)	External Approvals

	Military Works					
26.	Departmen t of Lands and Survey	إصدار رخصة مهن، نقل موقع رخصة مهن، إضافة تغيير مهنة، نقل ملكية	Security Approval	Location Information, Vocation Information, and Applicant Data	Username (Web Form)	External Approvals
27.	Departmen t of Antiquities	إصدار رخصة بناء	Construction approval	Location Information	Username (Web Form)	External Approvals
28.	Directorate of Housing Establishm ent & Military Works	إصدار رخصة بناء	Construction approval	Location Information	Username (Web Form)	External Approvals
29.	Traffic Departmen t (Across Jordan)	إصدار تصاريح المقاولين، إصدار تصاريح تنظيف موقع ونقل طمم، إصدار تصريح حفر، إصدار تصريح خيم المناسبات العامة والنشطات الثقافية والترفيهية	Approvals	Location Information, Authorization Purpose, and Applicant Information	Username (Web Form)	External Approvals
30.	Municipalit y Court	إز الة الاعتداءات على الأملاك الخاصة	Court's decision	Request Documents, Field Visit Results, and other notes	Web Form	Court Procedures
31.	Public Security Directorate	إزالة الاعتداءات على الأملاك الخاصة	Approval of participation on the suggested date or a suggestion of another date	Court's Decision and suggested date of noncomplying building removal	Username (Web Form)	Court Procedures

# 2.1.3. Legal Aspects of Delivering the Services in "e Mode"

Further to the Electronic Transactions Law (2015 لسنة 15 لسنة); bidders should consider and obey the following list of legal laws:

- قانون رخص المهن رقم 28 لسنة 1999 وتعديلاته
- قانون تنظيم المدن والقرى والأبنية رقم (79) لسنة 1966
- النظام (136) لسنة 2016 نظام الأبنية وتنظيم المدن والقرى
  - قانون البلديات رقم 41 لسنة 2015 وتعديلاته
- نظام ترخيص الإعلانات ضمن مناطق البلديات رقم 76 لسنة 2016
- نظام معدل لنظام ترخيص الإعلانات ضمن مناطق البلديات لسنة 2018
  - قانون ديوان المحاسبة الأردني
- نظام رقم 121 لسنة 2016 نظام مراقبة وتنظيم الباعة المتجولين والبسطات والمظلات والأكشاك ضمن حدود مناطق البلدية
  - نظام هدم الأبنية رقم2 لعام 1961
  - قانون البناء الوطني الأردني رقم 7 لسنة 1993 وتعديلاته
    - قانون معدل لقانون البناء الوطنى الأردنى لسنة 2018
      - قانون حماية البيئة 2018 وزارة البيئة
        - قانون الملكية العقارية لسنة 2019
  - نظام رقم (140) لسنة 2016 نظام بيع فضلات في المناطق البلدية
    - نظام الطرق والأرصفة ضمن مناطق البلديات لسنة 2016
- نظام رقم (138) لسنة 2016 نظام مراقبة الكلاب والتخلص من الضالة منها والوقاية من أخطارها وترخيصها ضمن حدود البلديات
  - تعليمات إيصال الخدمات لبث خدمة الاتصالات الخلوية لسنة 2010
    - قانون الاتصالات رقم 13 لسنة 1995
    - قانون تنظيم عقود إيجار العقار لسنة 1973

#### Notes:

- Services included in the project scope mentioned in section 2.1.1 are not directly
  affected by the Electronic Transaction Law in the sense that the Electronic
  Transactions Law does not specifically regulate them. However, the Electronic
  Transactions Law provides the general legal framework that recognizes the
  execution of transactions through electronic means and the provision of such
  services through electronic means.
- 2. MoDEE and other concerned parties are committed to facilitate the creation of legal environment which will support the e-enablement of the Service. 2.2. Overall Solution Description

In the following sub-section, a high-level e-Services solution is described.

## 2.2.1. Strategy of Provisioning e-Services

## 2.2.1.1. Access & Delivery Channels

The following access and delivery channels are to be considered for the e-Services;

- The Internet method for e-form (application) submission and payment.
- Office (Face-to-Face) method for requesting a service in the walk in mode, payment and document delivery if needed.
- SMS for customer notification
- e-Mail for customer notification
- Mobile application.
- E-Government Contact Center is expected to be responsible for processing general inquiries and providing access to basic information services via phone, IVR, e-mail.

#### 2.2.2. High Level Description of System Requirements for e-Services

Below is the proposed system requirements that must be provided by the winning bidder, noting that any additional system requirements needed for the proper functioning of the system should be provided by the winning bidder and its cost should be included in the fixed lump sum price submitted by the bidder.

System requirements	Description		
Registration	The winning bidder should use the Registration and Authentication Module available by the current IDM to guarantee that all services are available under SSO Integration.		
	The winning bidder is required to consider all types of users specified in the requirements gathering phase (stakeholders, region users, and MoLA and its municipalities users, others)		
Authentication	The winning bidder is obliged to describe, design in details and implement the system's user authentication mechanism with MoLA and its municipalities, along with information security measures in order to guarantee information confidentiality, integrity, availability and accountability (non-repudiation) to meet the security level sufficient to guarantee service delivery.		

Notification	The system will send notification(s) according to the progress of the requests, the supported notification delivery methods includes and not limited to:  1. E-Mail			
	2. SMS			
	3. e-Service user inbox			
	Any other channel that will improve e-service delivery			
Reporting and Dashboard	The system will provide defined reports to generate for all related departments that are going to interact with the system, example of a few reports and the system will log statistical information and generate analytical reports			
	The system shall include performance monitoring and reporting tools both dynamic (using analysis tools: visualizations, descriptive, analytical) and static to generate summary reports and statistics on transactions and system activities. The reporting system should allow for use of the different formats: MS-Excel, XML, PDF, JSON, and HTML. and provide live dashboard information on our specified business KPI.			
Inquiries Module	The system should have advance search and filtration option so it will facilitate retrieving the required data.			
System integration	The system should integrate with the following shared e-Government services:			
	1. The e-Government National Portal			
	The winning bidder should integrate e-Services with the e-Government portal taking into consideration to maintain the user experience and same look and feel of the national portal			
	2. e-Government Government Service bus (GSB):			
	The winning bidder shall integrate the MoLA e- Service with GSB through supporting web services and message communication using XML format and SOAP messaging protocol, and RESTFUL services through IBM API connect platform (Please refer to Annex (5.4) for integration guidelines and SDK). More details will be provided upon awarding to winning bidder.			
	Note: Integration with stakeholders has to be system to system integration by implementing web services through GSB platform. However, if there are limitations for GSB integration for specific Stakeholder(s), integration will be done as user role integration through screens to be accessed by stakeholder(s) or attaching specific files or documents to the application.			

#### 3. National e-Government Contact Center:

The winning bidder shall integrate the MOLA e-Service solution with the National Contact Center through the Government Service Bus (GSB). Accordingly, enabling the agents to access the entity's related applications for retrieving information, tracking the status of a service.

Please refer to Annex (5.5) for more information about the Contact Center requirements

# 4. Central Bank Payment Gateway eFAWATEERcom:

The Jordanian Central Bank payment gateway will be the facility by which applicants will be allowed to pay electronically.

Please refer to annex (5.4) for information about eFAWATEERcom Integration technical details.

## 5. National SMS Gateway:

SMS will be one of the notification channels that will facilitate interactions between MOLA and their applicants. (Ex: MOLA would use the SMS service to notify their applicants about the status of their transactions, the completion of their transactions, the location of delivery and so forth). The winning bidder should integrate the e-Service Solution with the e-Government SMS Gateway.

Please refer to annex (5.4) for information about the SMS Gateway Integration technical details.

## 6. Shipping and Delivery:

The system should integrate with a shipping service to provide a delivery option.

## 7. MOLA website:

The winning bidder should integrate e-Services with the MoLA website standards taking into consideration to maintain the user experience and same look and feel.

#### 8. e-Service Stakeholders:

The system should integrate with the stakeholders that involved in the MOLA selected services delivery. The communication and data exchange between those entities should be performed utilizing SGN

connectivity and GSB platform; stakeholders are mentioned in 2.1.2 above. 9. IDM Solution \ SSO The winning bidder should integrate the developed eservices with IDM /SSO (Please refer to SSO annex). The system should have the ability to create dynamic report Report Builder and save the result as template so it can be reused later. Main functionality that can be provided are: Dynamic column define (at runtime). **Create Group Report. Dynamic Layout.** Inherited report design. Sub Report. Calculation Variables. Exporting data to multiple format. Add Chart and Images. Connect to different Data Sources. Matrix Report. Form Report. Control access to reports using levels of access control for users and user groups (secured reports). Build charts and statistical reports to generate interactive reports. Save different versions of the same report to keep history of changes to go back to any version. System administration The system should contain administration module, to enable administrators to perform all day-to-day administrative tasks at data, automation engine, and application levels. The winning bidder should gather all MoLA solution related administration requirements during business requirements gathering and analysis phase System should allow admin to perform the following tasks but not limited as follow: Manage user profile. Manage Security Permissions. Manage lookups. **Business Process** This system should contain the following main modules: **Management System** 1. Business process automation engine: This engine should be capable to capture, model, implement and manage different business process activities through the use of graphical process designer. In order to achieve that, it should support the following: Integration with other systems (Enterprise application integration) and Business to business integration through the e-Government Government Service Bus, this means that the automation engine should be built and designed to support Service oriented architecture and XML messaging over SOAP protocol, or microservices architecture (MSA) using REST APIs or hybrid solution to integrate with the GSB. This is essential in order to transfer the application between the different department within the MoLA and across other external entities.

- Develop processes using Web Service Business Process Execution Language 2.0 standard (WS-BPEL) to support cross-platform execution of complete business processes
- Process designer: This shall allow analysts and process designers to model, design, build, and test business process flow through using any proper tool.
- Business rules engine: This should enable dynamic insertion of business rules to control the process flow according to defined business logic and decisions making (automated and manual). This should also support dynamic modification of these rules to comply with changing nature of business process and user needs after deployment of the system.
- Stepping engine: this module should control the flow of the business process and enable managing and defining the interaction points with the relevant entities according to business rules captured on Business rules engine.

#### **Performance**

The winning bidder shall propose the values of quality metrics below and they should adhere to industry best practices which are subject to approval, rejection or modification by MoDEE in cooperation with MoLA and the relevant entities

System reaction time: The time taken for logging into a system or getting connected to a network. [Up to 1 second intranet and up to 5 seconds internet)].

Throughput: The quantity of useful work made by the system per unit of time. [15 request/second (intranet and internet)].

Response time: The time the system takes to respond to specific query by the user. [Up to 1 second – intranet, up to 4 seconds – internet].

Workload: The capacity to handle the required volume of work in a given time frame. [1000 concurrent users].

	Capacity: The capability of the newer system to handle a number of simultaneous requests from the network for the application and the volume of data that it can handle from each of the users (Internal users through the LAN as well as external users through the internet/ dedicated WAN). In addition to the H/W capacity such as processing capability of all servers including DB, Apps. [CPU Utilization: 70%, Memory Utilization: 70%].  Utilization: The system minimum availability time vs. the	
	system down time [99.9].	
Monitoring	The system should include performance monitoring for all transactions.	
Role based security	The system should support role-based authentication, authorization and access control list. Role based security should be applied at all system functionalities.	
Information Security	Security of system and exchanged transaction information should be guaranteed at all system layers Based on ISO 27001, ISO 27002, WS-Security standards including infrastructure, application, web services and integration points, and access channels. This also includes using detective and preventive controls for all security threats and approval by MoDEE in cooperation with MoLA and related stakeholders.	
Supported web browser	In the cases where any parts of the user interface solution were developed web forms, those forms should support latest versions of the top 5 browsers. According to the W3C standards.	
Language	The system should be bilingual (Support Arabic and English)	
User interface and Help	The system provides a user friendly interface along with on- line help (in both languages) for user guidance while applying for different services transactions through messages of wizard.	
Audit, Logging and Data Versioning	System should Keep track of who login and in what time and what action he did. All these results should be store in separate database. The tracking system should help getting such information:  - Timestamp of creation/modification - User last changed and date last changed - Changed record and last operation (Create, Update, and Delete) Before and after value for each column that has changed Keep Track of what user retrieve or view (Select)	

Auditing and data versioning features should be configurable based on administrator selection to specify which system resources needs to audit and track changes.

# 2.2.3. Definition of Required IT Systems and Architecture

The following diagram illustrates high level architecture design of the proposed solution:

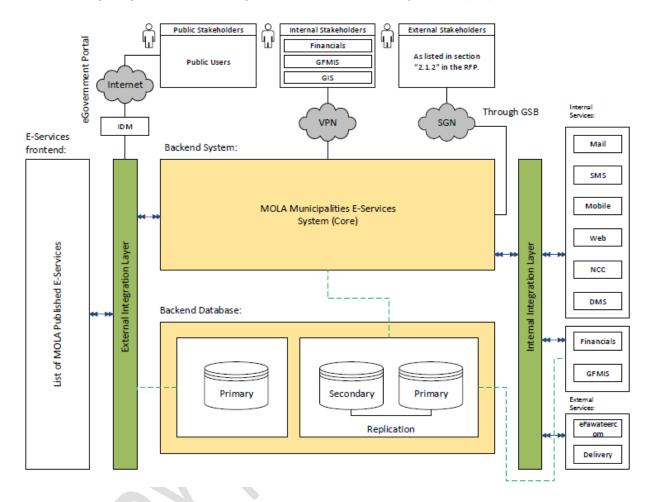


Figure 1: Proposed Solution Archeticture

The following table shows high level description of the system architecture and components.

System	Description	Remarks
Shared services		
EFAWATEERcom. (Jordan Central Bank Payment Gateway)	Facilitating electronic payments through various payment methods (Bank Transfer, Credit Card and Cash) and through different banks.	The developed solution shall integrate with the eFAWATEERcom. Refer to Annex (5.4) for the integration with the eFAWATEERcom. More details will be given to

## National Contact Center (NCC)

The contact center enables the customer service representative to perform general inquiries, track the status of the service

The developed solution shall integrate with the Contact Center. Refer to Annex (5.5).

## **SMS Gateway**

A shared service offered by the e-Government of Jordan that enables e-services to notify applicants over SMS and enable them to query about transaction status.

System should be ready through a specific web services for Citizen pull inquiries.

A Government Service Bus (GSB) is a pattern of middleware and software infrastructure that enables Service Oriented Architecture (SOA), and Microservices Architecture (MSA) through IBM API connect platform. By acting as middleware through which a set of reusable Government Services are made widely available. It unifies and connects services and applications within the government of Jordan and provides a framework within which the capabilities of business' applications are made available for reuse by other applications throughout the organization and beyond. It also provides a messaging framework through which government e-services exchange information.

Please refer to Annex (5.4) for SMS Integration requirement

The developed solution shall use the GSB. Refer to Annex (5.4).

## Government Service Bus (GSB)

IBM API Connect is an end-to-end solution that allows users to create, secure, manage, socialize, monetize and analyze APIs. It provides a powerful set of capabilities from turning backend RESTFUL or SOAP services into managed services. This is done by publishing APIs to API Gateways, while enforcing lifecycle and governance controls on those APIs. API Connect enables users to expose APIs, through a developer portal, targeting application developers both inside and outside their organization. Additionally, the solution's analytics tooling helps API providers and API consumers better understand the health and consumption of deployed APIs.

Note: Integration with stakeholders has to be done through GSB. However, if there are limitations for GSB integration for specific Stakeholder(s), integration will be done through screens to be accessed by stakeholder(s) or attaching specific files or documents to the application.

# Shipping (delivery channels)

شركات التوصيل للوثائق

The winning bidder shall develop the solution to be able to integrate with shipping / delivery companies through web service (Provide\Consume).

## Principal Service Provider (MOLA) applications

## e-Service Application (front end system)

The eService application (separate from backend) should provide the ability for public citizens Login to the system.

The eService application should handle multiple modules that will serve and help the applicant such as but not limited:

- Notification process
- Request Status Tracking
- Citizen Dashboard
- E-Services provided by MOLA

e-Service Core Back-end system The winning bidder must build this application including all the forms needed for MOLA services fulfilling all the requirements stated in annex 5.2 The solution shall be developed centrally at GPC serving all MOLA head quarter and municipalities distributed across Jordan.

The winning bidder is expected to build the application to host all the forms needed by MOLA services and process. In addition, the application should fulfill all the requirements stated in section 3, which should enable all MOLA regions to access the data stored at the centralized data base. The winning bidder solution should provide an enhanced efficient interface for all MOLA employees to access the central database and automation system.

The core system shall include all modules needed to fulfill the entire requirement for providing the services mentioned in the scope of work including and not limited to:

- Developing any needed mapping matrix between vocations and company objectives.
- Developing any internal processes needed for processing old data migrated from the old database.

The winning bidder should design, develop, deploy, and test the eservices application

The Core back-end application to be analyzed, designed, implemented and deployed by the winning bidder.

- Developing any needed processes for vocations classifications.
- Fees calculations
- Committee's module including committee formulation, field detection forms mapped to vocation type, reserving field detection dates.

## eService Integration

The eservice application shall connect to back end system via web service. (middle Integration layer)

The integration web service will receive the applicant service request and forward it to the MOLA Backend System.

The winning bidder should develop set of web services in order to integrate all the eservice operations to the backend system

# New MOLA back end Database

The New MOLA Database represents the repository to store all related information necessary to provide the target backend and front operations

All system configurations (like users profiles) should be migrated from the existing portal backend database to the new operational database based on the new database structure.

This database should be analyzed, designed, implemented, licensed and deployed by the winning bidder. Additionally, all required integration to the existing portal database should be described, analyzed, implemented and deployed by the winning bidder.

The winning bidder is requested to migrate all needed data from old database to new database

# New eservice Database (Front end )

The new Front end DB will store records for applicant requests, request status, applicant profile and all eservice application related information

The database should be analyzed, designed, implemented, licensed and deployed by the winning bidder

# Mobile Application

This Layer is Responsible for exposing all services so it can be deployed and used by the public citizen from mobile application channel using RAD platform.

The bidder is responsible to expose E-services all developed through APIs, the APIs can be used for different channels (i.e. Mobile Application, Chat bot...etc.)

Winning bidder is required to generate mobile application (IOS & Android) versions that will be ready to be uploaded under MoDEE\MoLA account on all stores; App Store, Google Play Store and Huawei AppGallery.

#### Section 3: SCOPE OF THE PROJECT

### Important notes:

- There are certain activities to be performed and deliverables to be provided by the winning bidder during execution of the project. More detailed information on each of them is given in the next paragraphs. The bidder shall provide such services, deliverables, in addition to support, maintenance and warranty, including any requirements or activities needed for the proper functioning of the system beside those outlined in the following listing and the cost of these requirements or activities should be included in the fixed lump sum price submitted by the bidder. Note that bidders should detail in their proposals all recommended mechanisms and methodologies through which its services and deliverables will be accomplished. All the final documentation deliverables of the project are required to be prepared in Arabic. Nevertheless, very technical documents such as DB design, architecture design, etc. can be accepted in English language.
- Final deliverables submitted by the winning bidder should be attached to an original official letter properly bounded, stamped and signed by the winning bidder as shall be defined and approved by MoDEE in cooperation with MoLA.
- The winning bidder should assure that the e-service architecture, design and implementation include the use of GSB in system integration and information exchange.
- The required solution shall be developed using Mendix, which integrated with Government Cloud Collaboration Environment (RAD platform). And deployed centrally at e-Government private Cloud GPC.
- Mendix licenses are within the winning bidder scope, and it's out of MODEE responsibility to provide all RAD licenses.
- The duration time for implementing this project is (240) calendar days in addition to the 36
  months maintenance and support time from the preliminary acceptance of the developed
  solution by MoDEE in cooperation with MoLA.
- The delivery of the e-services mentioned in 2.1.1 and related back-end system shall be delivered in phases approach as follows:

الخدمات	الحزمة الاولى
45 يوم تقويمي من امر المباشرة	مدة التنفيذ
طلب تصديق عقد ايجار (*)	1
طلب تقسيط رسوم الابنية والتحققات والمهن (*)	2
الشكاوى والمقترحات وطلبات الصيانة والخدمات العامة (*)	3
ترخيص أبراج الاتصالات (*)	4
طلبات الأعمال الإنشائية (*)	5

تقديم خدمات دفن الموتى (*)	6
إصدار رخصة اقتناء كلب (*)	7
الخدمات	الحزمة الثانية
45 يوم تقويمي ( 90 يوم من امر المباشرة)	مدة التنفيذ
خدمة تصاريح المقاولين	1
خدمة طلب اصدار شهادة رصيف	2
تصريح خيم المناسبات العامة والنشاطات الثقافية والترفيهية	3
خدمة إنشاء وصيانة الأطاريف والتقاطعات المرورية وممرات المشاة	4
خدمة تصريح بيع الأضاحي	5
خدمة إزالة مظاهر إعاقة الحركة المرورية	6
خدمة تصريح قذف رملي	7
خدمة استقامة شارع وسعة رصيف	8
خدمة تصاريح الحفر	9
خدمة تصريح تنظيف موقع ونقل طمم	10
الخدمات	الحزمة الثالثة
90 يوم تقويمي (بعد 180 يوم من امر المباشرة)	مدة التنفيذ
خدمة إصدار مخطط موقع تنظيمي	1
خدمة إصدار رخصة بناء	2
اصدار رخصة مهن جديدة	3
اصدار براءة ذمة مالية على العقار	4
تجدید رخصة مهن	5
خدمة إصدار إذن إشغال	6
شطب / إلغاء رخصة مهن	7

خدمة تجديد إذن إشغال	8
خدمة إصدار رخصة لوحة إعلانية – مركبات	9
إصدار رخصة لوحة إعلانية	10
طلب استرداد تامینات	11
خدمة تعديل مساحة لوحة إعلانية	12
تجزئة رخصة مهن	13
إضافة / تغيير مهنة	14
نقل ملكية رخصة مهن	15
خدمة تصريح الباعة المتجولين	16
طلب صرف تعويض عن الاراضي والمنشآت المستملكة	17
الخدمات	الحزمة الرابعة
60 يوم تقويمي (بعد 240 يوم من امر المباشرة)	مدة التنفيذ
60 يوم تقويمي (بعد 240 يوم من امر المباشرة) نقل موقع رخصة مهن	مدة التنفيذ 1
نقل موقع رخصة مهن	1
نقل موقع رخصة مهن خدمة التعديلات التنظيمية	2
نقل موقع رخصة مهن خدمة التعديلات التنظيمية طلب الاعتراض على مخطط تنظيمي معلن للاعتراض	1 2 3
نقل موقع رخصة مهن خدمة التعديلات التنظيمية طلب الاعتراض على مخطط تنظيمي معلن للاعتراض خدمة شراء فضلة	1 2 3 4
نقل موقع رخصة مهن خدمة التعديلات التنظيمية طلب الاعتراض على مخطط تنظيمي معلن للاعتراض خدمة شراء فضلة خدمة الإفراز والتوحيد والتجزئة	1 2 3 4 5
نقل موقع رخصة مهن خدمة التعديلات التنظيمية طلب الاعتراض على مخطط تنظيمي معلن للاعتراض خدمة شراء فضلة خدمة الإفراز والتوحيد والتجزئة خدمة تصريح هدم بناء على رغبة المالك	1 2 3 4 5 6
نقل موقع رخصة مهن خدمة التعديلات التنظيمية طلب الاعتراض على مخطط تنظيمي معلن للاعتراض خدمة شراء فضلة خدمة شراء فضلة خدمة الإفراز والتوحيد والتجزئة خدمة تصريح هدم بناء على رغبة المالك طلب الاعتراض على الاستملاك	1 2 3 4 5 6

### Note:

MoLA Solution mentioned below includes (e-services, backend system and integration layer and Mobile application IOS and Android).

### Note:

The support and maintenance shall begin after the preliminary acceptance of the whole project.

### Note:

In the above listed table, and for all services marked with (\*), it is the bidder responsibility to provide two options in the financial proposal, the first option should include all (44) services, and the second option should exclude the services marked with (\*). This should be reflected on the proposed implementation timeline and services implementation priorities.

## 3.1. Component 1 - e-Services System Delivery

## Winning bidder activities

In order to develop and launch these e-Services, the winning bidder is required to perform the activities mentioned below using Mendix, which integrated with Government Cloud Collaboration Environment (RAD platform), noting that any additional related activities needed for the proper functioning of the system should be provided by the winning bidder and its cost should be included in the fixed lump sum price submitted by the bidder:

## System Implementation

- Perform requirements gathering and analysis for services processes related to the delivery of the e-Services in new access and delivery channels keeping in mind Customer-centric approach and implementation of worldwide best practices
- Analyze and understand the existing systems and the system functional features for the integration/migration.
- Convert the To-Be documents for services into user stories and import it to the collaboration tools.
- Prepare detailed user stories that will be archived in the backlog.
- Structure and prioritize the business requirement.

- Get approvals from MoDEE in cooperation with MoLA on user stories backlog.
- Provide a detailed requirements specifications document for the new back end system and services showing Integration with both current internal systems and stakeholders.
- Conduct sprint review sessions with MoDEE and MoLA team.
- Provide a detailed functional design document together with detailed functional, non-functional and technical specifications of the proposed solution, use cases and use case diagrams considering the integration with all e-government shared services and the required access and delivery channels
- Do the Migration for all needed data from old database of the old systems in use and hardcopy documents to the new solution database.
- Data Conversion and Migration The winning bidder MUST provide services and tools to perform the following Data Conversion and Migration Services: Data conversion/migration is very closely associated with system implementation. The desired outcome for Data conversion/migration is the preservation of legacy data shall be made available in a common DBMS environment for analysis and interrogation by Business Intelligence tools. Due to the systems that the E service system will interact with different systems such as GFMIS, external stakeholders, and integrated system and others if needs be, data will be converted/migrated to the E-service system. Data will be required to be converted into an appropriate format that fits the destination database.
- Winning bidder should design, implement and supply a Document Management System (DMS), the DMS provides a set of technical standards and practices used to store and manage the flow and archiving of e-services electronic documents of all kinds, within MoLA and all its municipalities. It allows information retrieval and determines for how long documents should be saved and maintained. It determines to eliminate or purge those documents that no longer serve and ensure indefinite conservation of the most valuable documents in alignment with MoLA policies and requirements. A document management system normally includes storage, recovery, classification, security, custody, distribution, creation, authentication. It is important to highlight that the system will have a single document management system serving the communication between all the stakeholders which represented by MoLA and all its municipalities across Jordan.
- Design, develop, implement, deploy (install, test, launch) and rollout of the proposed solution through Mendix, which integrated with Government Cloud Collaboration Environment (RAD platform). This needs to be aligned with the e-Government Architecture Framework including the use of shared components and services that already developed on the RAD platform so the winning bidder can utilize their APIs or build new APIs if needed; like the SMS

- Gateway, Central Bank Payment Gateway eFAWATEERcom, e-Government Contact Center, Government Service Bus (GSB).
- Develop scanning functionality/feature on the walkin application developed on RAD platform to enable MoLA users to scan documents and upload it to the DMS and e-services systems.
- Build APIs to expose the services status to other MoLA supporting systems through GSB.
- Install, configure Mendix tools and deploy the services on the development/staging/production environment on the GPC.
- Develop on-line help for e-Services system.
- Integrate the developed (e-services/back end systems) with the egovernment shared services and relevant internal systems and stakeholders following the e-GAF standards and guidelines mentioned in annex (5.4)
- Develop and conduct the User Acceptance Test (UAT) in collaboration of MoDEE in cooperation with MoLA and Stakeholders' teams.

## Technical proposal requirements

The bidder is required to provide the following information in the technical proposal in relation to the e-Services System delivery:

### System Implementation

- Provide a high level design of the solution, describing system architecture, functions and interactions of all the components
- Describe logical n-tier architecture for the solution taking into consideration the fact that services delivery system and new back end system will be hosted on Government Private Cloud Computing, while current and shared services (like eGAF, Central Bank Payment Gateway eFAWATEERcom, portal, e-Government Contact Center, SMS Gateway) are hosted by e-Government Operations Center.
- Describe approach of launching and rolling out the solution.
- Provide a list of deliverables for the System Implementation.
- Describe bidder's qualifications in e-Business Applications Development

## Financial proposal requirements:

The bidder is required to provide the following information in the financial proposal in relation to the e-Services System Delivery:

### • System Implementation

- List all costs associated with system implementation and documentations.
- List of all costs associated with the Integrations points for stockholders mentioned in component 2.1.1 table 2.

### **Deliverables**

The winning bidder is required to provide the deliverables mentioned below, noting that any other related deliverables needed for the proper functioning of the system should be also provided by the winning bidder and its cost should be included in the fixed lump sum price submitted by the bidder:

## System Implementation

- Detailed requirements specifications document
- Sprint reviews feedback and sign off.
- Detailed functional, non-functional design, and technical specifications of the e-Services delivery system
- Implemented overall e-Services/back end systems delivery rolled out in MoLA head quarter and all its regions and municipalities including relevant interfaces, data migration, and web services necessary for integration with all related internal and external systems.
- On-line help for e-Services (in English and Arabic)
- Detailed integration document for integrations with internal systems and with systems existing in stakeholders involved in the process of rendering the e-Services.

### System Documentation

- System technical documentation (covering use cases and use case diagrams, detailed requirements, architecture, data model, algorithms, protocols, functionality of modules, quality-related documentation and artifacts, etc.)
- System manuals (covering software and hardware installation and configuration, maintenance, backup, recovery, optimization etc.)
- End-user manuals (including and not limited to FAQ, "How do I" questions; in English and Arabic).
- Detailed User Acceptance Test (UAT) Document and UAT test result report based on Winning Bidder execution of those tests.
- o Roll out plan

### 3.2. Component 2 - Required e-Service Infrastructure

## Winning bidder activities

The winning bidder is required to perform the activities mentioned below regarding the solution Infrastructure:

- 1. The bidder must provide the solution hosted on Government Private Cloud (GPC) and fully integrated with Windows Hyper-V and Nutanix AHV.
- 2. The bidder has two options regarding operating systems:
  - Option 1: Bidders can utilize Windows Server 2012 R2 and 2016, which are provided and licensed by GPC.
  - Option 2: In case the proposed solution requires any OS other than the OS mentioned in option 1, then it will be the winning bidder responsibility to provide, configure, and license the required OS.
- 3. The bidder has to utilize the Database as a Service (DBaaS) provided and licensed by GPC. Below list includes the bidder options for the DBaaS:
  - Option 1: The bidder can utilize MySQL 5.5.45 DBaaS on GPC.
  - Option 2: The bidder can utilize Microsoft SQL DBaaS on GPC. The available versions are 2012 SP2, 2014 SP2, 2016, 2019.
  - Option 3: The bidder can provide and use Oracle DBaaS on government oracle private cloud based on EXADATA. The available versions are 11g R2 and 12c.
- 4. The bidder must provide the required sizing (VM's specifications) for Infrastructure requirement on GPC.
- 5. The Bidder must describe the functionality for each VM or Database needed for the solution.
- 6. The Bidder must provide the logical Infrastructure architecture for the solution.

### Technical proposal requirements

The bidder is required to provide the following information in the technical proposal in relation to the required infrastructure:

- Proposed logical infrastructure architecture showing all needed components
- Proposed OS option that will fulfill project's needs and requirements
- Proposed database option that will fulfill project's needs and requirements
- Required sizing and VM's specifications
- VMs & DBs functionality needed for the solution

<u>Note:</u> If during implementation found that the infrastructure component described in the technical proposal submitted by the winning bidder does not fulfill the requirement of the scope of this project, then the winning bidder must provide all additional needed infrastructure components and the cost of all of these additional components will borne by the winning bidder

## Financial proposal requirements

The bidder is required to provide list of all costs associated with the required infrastructure of the System in the financial proposal.

### **Deliverables**

The winning bidder is required to provide the deliverables mentioned below:

- Comprehensive Logical Infrastructure Architecture
- Sizing & VMs Specification Document
- VMs & DBs Functionality
- Required Licenses (if required)

## 3.3. Component 3 - Information Security

### Winning bidder activities

The winning bidder is required to perform the activities mentioned below to ensure System security:

- Develop a detailed backup policy and related procedures encompassing handling the proposed solution and security controls. i.e. backup policy and procedures, auditing policy, etc., and in compliance with ISO 27001 standard. The policy and procedures should consider the operational environment of MoLA.
- Assess security risks implied in implementation of the proposed solution and in integration, if any, with legacy system. And recommend and include controls to mitigate them.
- Conduct risk assessment by identify security threats and risks to the developed system, and identify the controls applied by the developing bidder and the suggested controls.
- Appropriately assess, implement, test and deploy information security controls and measures to secure the System considering the following:
  - Controls to enforce separation of duties depending on Need-to-Know and Needto-Do.
  - Controls to ensure input validation, data processing and output integrity and confidentiality.

- Controls to ensure secure data at rest, in use and in transit, including encryption and hashing algorithms and encryption keys management.
- Controls to ensure secure messaging according to the WS-Security Standard.
- Controls to secure transactions and messaging among all stakeholders and solution components.
- Controls to ensure user privacy, including but not limited to, cookies management, users log file and behavior.
- Controls to ensure secure exception and error management that is both userfriendly and not revealing sensitive and structure data.
- Design and build secure connections and communication channels to ensure:
  - Secure connections between clients and the System.
  - Secure connections between the System and back-end systems (if any).
  - Communication channels should be secured as per WS-Security specifications.
  - Internet access should use encrypted communication channels.
- Provide and deploy security applications/solutions to secure the communication channel for front-end and back-end systems, including but not limited to:
- Design and build secure user identification and authentication approach.
- Ensure that Portlets are protected against web application threats, such as dangerous URL and attacks such as cross-site scripting, Session Hijacking. The solution should ensure that it is not vulnerable to common vulnerabilities and latest OWASP Top 10 vulnerabilities.
- Ensure that the final solution include comprehensive audit and log management and reporting tools for all transactions, especially security logs, based on need-to-know and need-to-do basis and having the following criteria:
  - Audit and logging, comply with ISO 27001 and contain but not limited to:
    - Input validation failures e.g. protocol violations, unacceptable encodings, invalid parameter names and values
    - Authentication successes and failures
    - Authorization (access control) failures
    - Session management failures e.g. cookie session identification value modification
    - Application errors and system events e.g. syntax and runtime errors, connectivity problems, performance issues, file system errors, file upload virus detection, configuration changes
    - Application and related systems start-ups and shut-downs, and logging initialization (starting, stopping or pausing)
    - Use of higher-risk functionality e.g. addition or deletion of users, changes to privileges, assigning users to tokens, adding or deleting tokens, use of systems administrative privileges, access by application administrators, all actions by users with administrative privileges, access to payment cardholder data, use of data encrypting keys, key changes, creation and deletion of system-level

objects, data import and export including screen-based reports, submission of user-generated content - especially file uploads

- Modifications to configuration
- Application code file and/or memory changes
- Audit record should contain the:
  - When: time of event, time of log,
  - Where: application/web service identifier, Window/form/page e.g. entry point URL and HTTP method for a web application, code location.
  - Who: source address and user ID.
  - What: type, severity and description of the event, object.
  - HTTP Status Code (web service only) the status code returned to the user (often 200 or 301)
  - Request HTTP headers or HTTP User Agent (web service only)
  - Log throttling should be used.
- Sensitive data is to be excluded from logs. See "National Security Policy(attached)
- Build security controls in the proposed service/application against Level 1 and Level 2 controls of OWASP Application Security Verification Standard V4.0 (2019)
- Verify the implementation of all the required OWASP ASVS controls.
- if mobile application is provided the winning bidder should Build security controls in the proposed Mobile application against Level 1 and Level 2 controls of OWASP Mobile Application Security Verification Standard V1.2 and Verify the implementation of the required OWASP MASVS controls.

**NOTE:** MoDEE reserves the right to perform their own vulnerability assessment and/or penetration test on the solution and provide the vulnerability reports to the winning bidder to apply appropriate recommendations to ensure system security. Another security test should be conducted to ensure recommendations are reflected

## Technical proposal requirements

The bidder is required to provide the following information in the technical proposal in relation to the Information Security:

- Risk Assessment plan or methodology.
- List of policies to be developed.
- Proposed security design of controls to be applied within the design in all layers: network security, host security, application security, data security, and access management, if any.
- Proposed approach(s) to ensure confidentiality, integrity, availability, authenticity, auditing, non-repudiation and accountability of data and services usage for the solution.
- Proposed approach(s) to ensure security for the following requirements:
  - Separation of duties depending on Need-to-Know and Need-to-Do.

- o Input validation, data processing and output integrity and confidentiality.
- Secure data at rest, in use and in transit, including encryption and hashing algorithms and encryption keys management.
- Secure messaging according to the WS-Security Standard.
- Secure transactions and messaging among all stakeholders and solution components.
- o Ensure secure identification, authentication and user profile management.
- Ensure user privacy, including but not limited to, cookies management, users log file and behavior.
- Ensure secure exception and error management that is both user-friendly and not revealing sensitive and structure data.
- Proposed design for secure connections between clients and the System.
- Proposed design for secure connections between the System and back-end systems.
- Proposed solution for encrypting internet communication channels.
- Proposed secure user identification and authentication approach.
- Proposed design to protect Portlets against web application threats. The solution should ensure that it is not vulnerable to OWASP Top 10 latest vulnerabilities. I.e. design to secure session management; security control such as session time out and secure channel and access to session store should be used.

## Financial proposal requirements

The bidder is required to provide list of all costs associated with the information security of the System in the financial proposal.

#### **Deliverables**

The winning bidder is required to provide the deliverables mentioned below:

- Detailed security policy and related procedures encompassing handling the proposed solution and security controls. i.e. backup policy and procedures, auditing policy, etc., Risk assessment and mitigation document.
- Security design of controls Appropriately implemented and tested information security controls and measures to secure the target solution Separation of duties depending on Need-to-Know and Need-to-Do.
- Input validation, data processing and output integrity and confidentiality.
- Secure data at rest, in use and in transit, including encryption and hashing algorithms and encryption keys management.
- Secure messaging according to the WS-Security Standard.
- Secure transactions and messaging among all stakeholders and solution components.
- Ensure secure identification, authentication and user profile management.

- Ensure user privacy, including but not limited to, cookies management, users log file and behavior.
- Ensure secure exception and error management that is both user-friendly and not revealing sensitive and structure data.
- Appropriately designed and built secure connections between clients and the System.
- Appropriately designed and built secure connections between the System and back-end systems.
- Appropriately configured and secured user identification and registration.
- Security Test Results clarifying the elimination of the System from dangerous URL and attacks such as cross-site scripting, Session hijacking. And it is not vulnerable to latest OWASP Top 10 vulnerabilities.
- Audit and log management and reporting tools for all transactions, especially security logs based on need-to-know and need-to-do basis.
- Verification check list against all the applied controls of the required in OWASP Application Security Verification Standard V4.0 (2019) Level 1 and 2.
- Verification check list against all the applied controls of the required OWASP Mobile Application Security Verification Standard V1.2 (if the mobile application is provided)

# 3.4. Component 4 – Change Management, Knowledge Transfer, Training & Customer Journey/Experience

## Winning bidder activities

In order to provide Change Management, Knowledge Transfer, Training and customer journey the winning bidder is required to perform the activities mentioned below, noting that any other related Change Management, Knowledge, Transfer, and training needed for the proper qualification of stakeholders personnel should be provided by the winning bidder and its cost should be included in the fixed lump sum price submitted by the bidder:

- It is important to emphasize that the design of standard **customer Journey/experience** would be of great help to the MoDEE and MoLA, who may be in the process of developing new e-Government services to ensure consistency among e-Government services and provide a focus for customer experience, please refer to Annex (5.13) for more information about the customer journey/experience.
- The winning bidder is required to prepare, present and execute plan of knowledge transfer and training for identified stakeholders among different users' types. It should ensure that all types of users and administrators are prepared to operate e-Service and to take over future enhancements or support of the e-Service developed applications (especially in technical area), refer to Annex (5.5) for more information regarding the e-Government contact center support. Knowledge transfer should be arranged at various phases of the Project
- Taking into consideration the different training audience:
  - End user training, TOT (50)
  - End user training (200)
  - System Administrators (10)
  - Stakeholder training (50)
  - Basic Mendix development training (20)
  - Advanced Mendix development training (20)
  - PMI-ACP (Agile Certified Practitioner) (20)
  - Certification for Foundation Level Extension Agile Tester (9)
  - Certified Agile Software Test Professional Practitioner Level (CASTP-P)(9)
  - E-Government Contact Centre representatives (25)
  - MCSA: Windows Server 2016 (6)
  - CompTIA Cloud+ (6)
  - Project management professional (PMP) (8)
  - Certified ethical hacker (CEH) (6)
  - Cisco certified network associate (CCNA) (6)

- Cisco Certified Network Professional (6)
- IT Management Excellence (10)
- IS/ IT Governance (10)
- Provide training handout material, materials should include related links and videos.(soft and hard copies for all attendees)
- Training venue for training and awareness sessions and all needed PCs and equipment for training purposed will be the responsibility of the winning bidder.

<u>Note:</u> Train the Trainer approach will be applied for government employees that will have view or write access on the developed solution. Training shall be provided to MoLA personnel who will provide training and awareness sessions to all MoLA e-Services system users.

## Technical proposal requirements

The bidder is required to provide the following information in the technical proposal in relation to the Knowledge Transfer, and Training:

- Prepare and execute change management, knowledge transfer and awareness plan.
   Change management and awareness sessions should be conducted; in two levels; technical team and top management awareness
- Describe strategy and approach, including tools for change management, knowledge transfer and training
- Describe strategy suggested for Training plan, describing and listing the proposed training sessions, session duration, and number of attendees per session, (max no. of attendees per session is 20).
- Describe approach, including tools for internal awareness activities
- Provide a high level training schedule showing the training activities by phase.
- Provide a list of deliverables for the Change Management, Knowledge Transfer, and Training
- Describe bidder's qualifications in training including references and CV's of trainers.
- Describe bidder's qualification in change managements.
- State the Compliance to the customer Journey/experience requirements mentioned in Annex (5.13)

### Financial proposal requirements

The bidder is required to provide the following information in the financial proposal in relation to the Knowledge Transfer, and Training:

List all costs associated with Change Management and Customer Journey activities.

List all costs associated with training and Knowledge Transfer.

### **Deliverables**

The winning bidder is required to provide the deliverables mentioned below, and any other related deliverables needed for the proper Change Management, Knowledge Transfer, and training and its cost should be included in the fixed lump sum price submitted by the bidder:

- Awareness session plan.
- Change management, Knowledge transfer and training plan
- Awareness, Knowledge transfer, and training sessions schedule and curricula.
- Executed Knowledge Transfer awareness sessions and training sessions for all relevant e-Service stakeholders. (including Administrator training, Technical training, Stakeholders training, End-user training).
- Awareness, Knowledge transfer, training and sessions schedule and curricula.
- · Customer journey Compliance sheet.

## 3.5. Component 5 - Operations Support and Maintenance

## Winning Bidder Activities

In order to execute "Operations Management" component of this project, the winning bidder is required to perform the activities mentioned below <u>for 36 months after obtaining the preliminary acceptance</u>, noting that any additional related activities needed for the proper functioning of the system should be provided by the winning bidder and its cost should be included in the fixed lump sum price submitted by the winning bidder:

- Assign a contact person / account manager to be responsible during the support and maintenance period of this contract.
- Provide support and maintenance services on 24x7 basis for the implemented solution by a team which possesses the proper knowledge and proven experience of the proposed solution.
- Ensure the availability of educated resources to provide on-site support when needed
- Provide detailed implementation plan for any pre-planned maintenance operation that may affect MOLA services availability, functionality or stability, with necessity to provide rollback plan before commencing with maintenance operation
- Issue a service report after each and every site visit registering the reported incident, its
  root cause and the followed procedures for issue(s) successful resolution including the
  taken and/or suggested recommendations and measures that shall prevent such incidents
  / issues from reoccurring in the future.

- Renewal of the licenses for the software products other than RAD Licences (required for the covering and completion of the scope of work in this RFP) should be for duration of three years (36 months) starting from the date of preliminary acceptance.
- Comply with the service level requirements defined by MoLA and as shown in Annex (5.11) of this document.
- Assign a hot line number to be used for reporting incidents
- Use a ticketing system that records all reported incidents and that can be accessed by MoLA and generated various incident reports
- Applying the latest fixes, patches and required upgrades to the installed software during the support and maintenance period (if required) while ensuring system's integrity, reliability, conformity and normal operation for all system features including the content.

## Technical proposal requirements

The bidder is required to provide the following information in the technical proposal in relation to this component:

- Provide bidder's methodology of providing the support and maintenance services required in this RFP
- Demonstrate the technical capability for the team who will be in charge for maintaining and supporting the proposed solution, by providing the team qualifications and number of people who will be dedicated for supporting and maintaining the installed solution.
- Provide the appropriate escalation matrix and procedures (with contact details for concerned parties) that guarantees performing corrective measures in case needed and in actions within a guaranteed manner.

### Financial proposal requirements

The bidder is required to provide the following information in the financial proposal in relation to the "Operations Support and Maintenance" component:

List all costs associated with the Operations Support and Maintenance component

### <u>Deliverables</u>

- Service reports for all reported and resolved incidents signed by a representative from MOLA
- Proof of software subscription other than RAD Licenses for the period of 36 months (If required)
- List of all fix's, patch and upgrades implemented during the support and maintenance period

### 3.6. Component 6 – Project Management

## Winning bidder activities

The Ministry of Digital Economy and Entrepreneurship is following the PMI standards for managing projects and as per the PMI best practices.

In order to provide project management services, the winning bidder is required to perform the project management processes in addition to the activities mentioned below, noting that any other related activities and processes needed for the proper functioning of the project implementation should be provided by the winning bidder and its cost should be included in the fixed lump sum price submitted by the bidder:

- Appoint a designated Project Manager (full-time for the contract duration) to oversee the project execution together with project teams to execute all designated tasks and activities
- Develop a Project Management Plan, including project objectives and success criteria, deliverables, role/responsibilities, communication protocols, document control methodology, cost management, schedule management, quality management plan and any needed project plan.
- Develop and maintain the overall project schedule, and review and verify the integration of the project team's activities & deliverables
- Develop project implementation strategy based on the needs and priorities of the business owner that will ensure stakeholders buy-in and creates the needed impact at the different stages of the project
- Develop a project plan that will determine and ensure the attainment of all project objectives through the proper prioritization and dependency consideration of different project activities.
- Work with MODEE and MOLA and its stakeholders to come up with solid rational for phased approach of the project implementation plan
- Ensure close cooperation with MODEE and MOLA Project team as well as the service provider and dependencies representatives
- Schedule and conduct on-site weekly progress meetings involving the project team.
   Meeting Minutes will be recorded and distributed, including an outstanding action Item Log, detailing the status of key decisions, responsibility and required timing.
- Conduct periodic progress (steering committee) meetings with MODEE, MOLA and all stakeholders' representatives at least once a month. Provide and maintain a full and comprehensive plan that covers all project management knowledge areas (i.e., time, scope, quality, HR, communication, risk, etc.)
- Develop project organization structure to underline all possible resources needed from engaged parties including their roles and responsibilities as well as their involvement at different stages of the Project
- Establish and execute a process of Quality Assurance (planning, assurance and control) for all components included in the scope of work
- Establish and execute a process for reporting project progress including deadlines; delays, issues and critical paths to ensuring deliverables are met within resource constraints
- Establish and execute a process for project risks and issues management and mitigation

- Implement submission, key performance indicators and acceptance procedures for approving project deliverables
- Close the project and document lessons learnt.

**Note:** MODEE will be providing the winning bidder with a project management template that is mandatory to comply with.

### Technical proposal requirements

The bidder is required to provide the following information in the technical proposal in relation to the Project Management:

- The project's implementation methodology and approach. And the description of the different phases of the project
- Describe ideas how the overall project coordination should be tackled in order to assure proper time and effective use of resources and information
- Describe proposed implementation strategy that will ensure project success.
- Provide Project management organization structure describing roles and responsibilities
- Describe approach to Quality Assurance for all components of the scope and relevant qualifications in this field
- Describe approach for communication on the project
- Describe approach to report on project progress
- Describe approach to risks and issues management and mitigation
- Provide a list of deliverables for the Project Management.
- Describe methodology for the overall Project Management and bidder's professional qualifications (like PM certificates) in project management field

### Financial proposal requirements

The bidder is required to provide the following information in the financial proposal in relation to the Project Planning and Management:

List all costs associated with the Project Management.

## **Deliverables**

The winning bidder is required to provide the deliverables mentioned below, noting that any other related deliverables needed for the proper functioning of the project implementation should be provided by the winning bidder and its cost should be included in the fixed lump sum price submitted by the bidder:

- Project kick-off presentation (in English or Arabic)
- A project milestone schedule during the project preparation phase

- Project management documentation that will cover the different knowledge areas, listed below but not limited to:
  - Project Charter
  - Project management plan
  - Stakeholder management plan including project organization structure and roles and responsibilities
  - Communications management plan
  - Quality management plan (as Described in Quality Management Component)
  - Risk management plan
  - Issue management plan
  - Scheduled project status and progress reports, addressing Reasons behind any deviation from Project baseline plan.
  - Deliverables traceability matrix
- Issues and risk logs
- Action log
- Weekly and monthly status and progress reports
- Project closing presentation (in English or Arabic)
- Project conclusion document outlining work completed, lessons learned and recommendations for "next steps"

## 3.7. Component 7 - Quality Management

### Winning bidder activities

In order to provide Quality Management, the winning bidder is required to perform the activities mentioned below, noting that any additional related activities needed for the proper functioning of the system should be provided by the winning bidder and its cost should be included in the fixed lump sum price submitted by the bidder:

- Perform agile testing as it will be an integral part of the software development, where the
  whole development team will be conducting the testing on the developed features and
  functionalities and check behaviour of the outcomes according to the expectations and
  requirements of MoDEE and MOLA team:
  - Conduct sprint units testing for eservices and integrations points.
  - ii. Conduct sprint test.
- Assign a dedicated Quality team to ensure quality of project deliverables or software through the related set of (Verification and Validation) activities.
- Prepare a detailed Quality plan scope that should include all project phases, deliverables, and artefacts of any type relevant to the project nature like Portals, websites, e-Services software, documentation, etc.

- The winning bidder Quality team shall be responsible for performing all testing activities according to plans and procedures defined within the quality plan, and as per the requirements stipulated within this document.
- Provide all Quality deliverables which ensure that all related activities are done successfully. This includes but not limited to Test Plans, Test Case Scenarios including acceptance test scenarios, testing results/reports, Testing Summary report, Defect (Bug) report and other required/proposed artefacts.
- Ensure proper deployment from staging environment to the ultimate Production environment after getting the approval from MoDEE in cooperation with MOLA. These environments are to be prepared and set by the winning bidder on GPC.
- Perform all needed activities in the User Acceptance Testing that should be done in cooperation with MoDEE and MOLA, all bugs and defects should be solved in order to get the approval on e-Services launching before each phase.
- NOTE: MODEE reserves the right to perform their own functional and nonfunctional test including performance and customer journey test on the solution and provide the reports to the winning bidder to apply bug fixing and recommendations to ensure system functionalities this will be done in each phase. Another test should be conducted to ensure recommendations are reflected

## Technical proposal requirements

The bidder is required to provide the following information in the technical proposal in relation to the Quality Management and validation and demonstrate the approach and components through which the quality plan shall be implemented. The proposal should provide adequate explanation regarding the proposed Quality management plan, including but not limited to:

- Describe methodology for the overall Quality Management and bidder's professional qualifications (like Quality certificates/accreditation) in quality management.
- Assurance and Conformance of project deliverables and work products to established contractual agreements, processes, plans, policies, standards and procedures and e-Government requirements.
- Identify and describe the process for reviewing the test plans, test cases, and test results, identify the defect tracking processes, test environments, test roles and responsibilities, and test phase entrance/exit criteria.
- Identify and describe the process for determining whether deliverables are ready to deploy to the ultimate Production environment and production readiness criteria.
- Describe the project's quality practices, including but not limited to:
  - The set of reviews and checkpoints for the project, including entry and/or exit criteria; hold those reviews, and measure against entry/exit criteria.
  - o The standards and KPI's to be used to measure project deliverable quality.
  - The Quality metrics to be used to measure project deliverable quality.

- Identify and describe the testing tools should be used by the bidder to perform all required testing types to measure of project deliverables quality and final products.
- Provide a list of deliverables for the Quality Planning and Management, as mentioned in the deliverable section below, and as per the bidder proposed approach.

## Financial proposal requirements

The bidder is required to provide the following information in the financial proposal in relation to Quality Planning and Management in the financial proposal:

List all costs associated with Quality Planning and Management activities

## **Deliverables**

The winning bidder is required to provide the deliverables mentioned below, noting that any other related deliverables needed for the proper functioning of the system should be provided by the winning bidder and its cost should be included in the fixed lump sum price submitted by the bidder. Quality management documentation that will cover the different knowledge areas, including but not limited to:

- Quality Management plan (Quality and Test Plan documents)
- Quality Roles and responsibilities
- Test Case Scenarios documents
- Test Results document and quality reports
- User and System Acceptance Criteria documents
- Quality metrics and Key Performance Indicators document
- Performed UAT sessions and approved UAT report.

### Section 4: ADMINSTRATIVE PROCEDURES & REQUIREMENTS

### 4.1. Response Procedures

All inquiries with respect to this RFP are to be addressed to the MoDEE in writing **only** by e-mail with the subject "Development and Implementation Of E-Services and Back-End System for Ministry of Local Administration MOLA". Inquiries can only be addressed to [eGov\_tenders@modee.gov.jo] by [29/9/2020]. Responses will be sent in writing by e-mail no later than [4/10/2020]. Questions and answers will be shared with all Bidders' primary contacts.

## 4.2. Response Format

Bidders responding to this RFP should demonstrate up-to-date capabilities and similar experience in providing services using agile methodologies and strong experience in object-oriented programing concepts OOP (minimum 2 projects in the last 7 years).

### **Important Note:**

1) Bidders must detail the description about Scope, size and year for each project according to the below template

Project Name	
Start date	
End date	
Project size and	
number of	
services	
Project	
components	
Client contact	
number and	
email	

Bidders shall demonstrate the following specific capabilities:

- Experience in designing, developing and implementing electronic services using Agile methodologies.
- IT experience in software and other IT related areas specified in this RFP.
- Experience in Information Security
- General knowledge in Jordanian governmental laws and by-laws.
- Experience in project planning and management.
- Experience in providing post implementation support and maintenance
- Experience in quality assurance and quality control
- Experience in change management Practice.

<u>Note:</u> Where some skills are not available, the bidder should joint venture or sub-contract with a reputable <u>local/international firm</u> to cover for this specific skill, services or equipment provided that all partners to a joint venture will be jointly and severally responsible towards MODEE In case of subcontracting, the subcontractor has to be approved by MODEE and the contractor will be liable for all works performed by the sub-contractor.

Bidders' written response to the RFP must include:

### Part I: Technical Proposal

- A. Corporate capability statement: Corporate capability statement <u>must</u> include all the following:
  - Corporate technical capabilities and experience in implementing similar solutions together with detailed description and reference to each component underlined in Section 3: Scope of the project.
  - Detailed proposed Team Resumes (with names) (each resume will be subjected to the approval of MoDEE, in case of replacements the winning bidder has to abide by MoDEE requirements for replacements and approvals. In the implementation phase MoDEE reserves the right to request replacement of any resource that cannot fulfill the job)
  - Description and references to 2 similar projects performed in the last 7 years.
  - Reference to appropriate work samples
  - If a bidder is a joint venture, partners need to be specified with the rationale behind the partnership. Corporate capability statement should be provided for all partners
  - Current client list, highlighting potential conflict of interest
  - Submit work plan allocation resources with their percentage of involvement
  - Project Organizational Structure
- B. Technical proposal: The technical proposal should include the approach to achieving the scope of work defined in this RFP and delivering each of the major components as specified in the Deliverables section. In order for the evaluation

to progress quickly and effectively, bidders are requested to provide Part I of their proposal as per the format described in Annex 5.6.

## Part II: Financial Proposal

The financial proposal should include a cost summary and a detailed cost analysis section. The cost summary must provide a fixed lump sum price in Jordan Dinars for the overall scope of work and deliverables including all fees, taxes including sales tax. The supporting detailed cost analysis should provide a breakdown and details of the pricing should be provided. The day rates and expenses for any consultants should be included separately along with the time for which they will be required. The bidder will provide separately all professional fees and expenses (travel, project equipment, accommodation and subsistence, etc.) for the duration of the project. The pricing should show the proposed linkage between deliverables and payments. Financial proposal should include the Form of Bid (عرض المنافعة وقام عليه) and summary of remuneration (ملحق الاتعاقية وقام 2 و وقام 3 duly filled; signed and stamped by the bidder. The Financial proposal should be submitted in separation of the technical proposal. In order for the evaluation to progress quickly and effectively, bidders are requested to provide their proposal as per the format described in Annex 5.7.

على الفريق الثاني ان يشمل سعره الضريبة العامة على المبيعات بنسبة (16 %) الا اذا كانت الشركة خاضعة للضريبة العامة على العامة على المبيعات بنسبة (0)% (بموجب كتاب رسمى من هيئة الاستثمار يرفق مع العرض المالى) يتم عكس هذه النسبة على السعر المقدم من قبلها.

في حال عدم توضيح الضريبة العامة على المبيعات على السعر المقدم من قبل الشركة يعتبر سعر الشركة شامل للضريبة العامة على المبيعات بنسبة 16 %.

Part III: Bid Security

This part includes the original Bid Guarantee.

# 4.3. Response Submission

Bidders must submit proposals to this RFP to the MoDEE no later than 12:00 PM on [12/10/2020] (Jordan Local Time).

Ministry of Digital Economy and Entrepreneurship

Tender No: 14eGovt2020
Tendering Department

Ministry of Digital Economy and Entrepreneurship

8th circle

P.O. Box 9903

Amman 11191 Jordan

Tel: 00 962 6 5805642 Fax: 00 962 6 5861059

Proposals should be submitted as 3 separate parts each part in a separate well-sealed and wrapped envelope clearly marked, respectively, as follows:

- Part I "DEVELOPMENT AND IMPLEMENTATION OF E-SERVICES AND BACK-END SYSTEM FOR MINISTRY OF LOCAL ADMINISTRATION- Technical and Corporate Capabilities Proposal". This part (envelop) should contain 3 hard copies (1 original and 2 copy) and 1 softcopy (CD) [in Microsoft Office 2010 or Office 2010 compatible formats]. This part should not contain any reference to cost or price. Inclusion of any cost or price information in the technical proposal will result in the bidder's proposal being disqualified as irresponsive.
- Part II "DEVELOPMENT AND IMPLEMENTATION OF E-SERVICES AND BACK-END SYSTEM FOR MINISTRY OF LOCAL ADMINISTRATION Financial Proposal". This part (envelop) should contain 3 hard copies (1 original and 2 copy) and 1 softcopy (CD) [in Microsoft Office 2010 or Office 2010 compatible formats].
- Part III "DEVELOPMENT AND IMPLEMENTATION OF E-SERVICES AND BACK-END SYSTEM FOR MINISTRY OF LOCAL ADMINISTRATION Bid Bond" This part (envelope) should contain 1 hard copy. This part should not contain any reference to cost or price. Inclusion of any cost or price information in this section will result in the bidder's proposal being disqualified as irresponsive.

**Note:** Each CD should be enclosed in the relevant envelop. Late submissions will not be accepted nor considered and in case of discrepancy between the original hard copy and other hard copies and/or the soft copy of the proposal, the hard copy marked as original will prevail and will be considered the official copy. Proposals may be withdrawn or modified and resubmitted in writing any time before the submission date.

Regardless of method of delivery, the proposals must be received by the MoDEE no later than 12:00 PM on [12/10/2020] (Jordan Local Time). MoDEE will not be responsible for premature opening of proposals not clearly labeled.

#### 4.4. Response Evaluation

All responses to the RFP will be evaluated technically and financially and the winning proposal will be selected on the basis of "best value" in terms of technical superiority as well as cost effectiveness. Technical and financial proposals shall be reviewed by the Special Tendering Committee at the Ministry and evaluated in accordance with the following procedure:

The overall proposal will be evaluated according to the following criteria:

- 1. Overall Technical Proposal 70%
- 2. Overall Financial Proposal 30%
- 1. The overall bidders mark will be calculated as follows:

(30\* least value of financial proposals) / bidder financial proposal value + (%70\*bidder technical mark)

Technical proposal shall be first evaluated according to the following criteria:

- 2. References in similar projects (20.00%)(minimum 2 projects in the last 7 years).
- 3. Staff Qualifications and Experience (40.00%):

Minimum CVs required (minimum bachelor's degree for all CVs):

- Business analyst, minimum 5 years of relevant experience
   (2)
- 2. Enterprise Architect, minimum 5 years of relevant experience (1)
- 3. System analyst, minimum 5 years of relevant experience (3)
- 4. Developers (12) minimum 3 years of relevant experience:
  - 12 Mendix certified basic developer
  - 10 Mendix certified advanced developer
  - 2 Mendix certified expert developer
- 5. Infrastructure engineer, minimum 5 years of relevant experience (systems, network) (2)
- 6. Trainers (2) with minimum 5 years qualifications in change management, knowledge transfer and training
- 7. Information security specialist, minimum 5 years of relevant experience (1)
- 8. Project manager (PMP certified or equivalent), minimum 5 years of relevant experience (1)
- Quality engineer / specialist (2 seniors) with minimum 5 years of relevant experience and (3 testers) with minimum 2 years of relevant experience
- 4. Proposed Approach and Methodology in correspondence to the RFP requirements including to the following components (40%):
  - 1. E-Service System Delivery
  - 2. Required e-Service Infrastructure
  - 3. Information Security
  - 4. Change Management, Knowledge Transfer, Training and Customer Journey/Experience

- 5. Operation Support
- 6. Project Management
- 7. Quality Management

Only those bidders that qualify in the technical proposal will have their financial offers reviewed. The Financial proposal will be evaluated only for companies who qualify, based on a minimum acceptable score that will be defined by the special tenders committee. The financial offer of those who do not qualify will not be opened and will be returned. MoDEE reserves the right not to select any offer. MoDEE also assumes no responsibility for costs of bidders in preparing their submissions.

### 4.5. Financial Terms

Bidders should take into consideration the following general financial terms when preparing and submitting their proposals:

- 5. All prices should be quoted in Jordanian Dinars inclusive of all expenses, governmental fees and taxes, including sales tax
- 6. The type of contract will be a fixed lump sum price contract including costs of all software or/and hardware, licensees, documentation, maintenance, support, knowledge transfer, training, warranty, and professional fees, profits and over heads and all other expenses incurred
- 7. A clear breakdown (table format) of the price should be provided including price for consulting time, other expenses, etc.
- The bidder shall bear all costs associated with the preparation and submission of its proposal and MoDEE will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the proposal process.
- 9. The bidders shall furnish detailed information listing all commissions and gratuities, if any, paid or to be paid to agents relating to this proposal and to contract execution if the bidder is awarded the contract. The information to be provided shall list the name and address of any agents, the amount and currency paid and the purpose of the commission or gratuity.
- 10. The Bidder shall submit a (Tender Bond) proposal security on a form similar to the attached format in Jordanian Dinars for a flat sum of (20000J.D) twenty thousand Jordanian Dinars (in a separate sealed envelope. The bond will be in the form of bank guarantee from a reputable registered bank, located in Jordan, selected by the bidder. The bidder shall ensure that the (tender bond) proposal security shall remain valid for a period of 90 days after the bid closing date or 30 days beyond any extension subsequently requested by the tendering committee and agreed to by the bidder.
- 11. Any proposal not accompanied by an acceptable proposal security (tender bond) shall be rejected by the tendering committee as being non-responsive pursuant to RFP.

- 12. The proposal security of a joint venture can be in the name of all members participating in the joint venture submitting the proposal or in the name of one or more members in the joint venture.
- 13. The proposal security of the unsuccessful bidders will be returned not later than 30 days after the expiration of the proposal validity period.
- 14. The winning bidder is required to submit a performance bond of 10% of the total value of the contract within 14 days as of the date of award notification letter.
- 15. The proposal security of the winning bidder will be returned when the bidder has signed the contract and has furnished the required performance security.
- 16. The proposal security may, in the sole discretion of the tendering committee, be forfeited:
  - If the bidder withdraws its proposal during the period of proposal validity as set out in the RFP; or
  - In the case of winning bidder, if the bidder fails within the specified time limit to sign the contract; or sign the joint venture agreement in front of a notary public in Amman, Jordan; or furnish the required performance security as set out in the contract.
- 17. The winning bidder has to pay the fees of the RFP advertisement issued in the newspapers.
- 18. MoDEE is not bound to accept the lowest bid and will reserve the right to reject any bids without the obligation to give any explanation.
- 19. Bidders must take into consideration that payments will be as specified in the tender documents and will be distributed upon the winning submission and acceptance of the scope of work and of the deliverables and milestones of the scope of work defined for the project by the first party.
- 20. MoDEE takes no responsibility for the costs of preparing any bids and will not reimburse any Bidder for the cost of preparing its bid whether winning or otherwise.

### 4.6. Legal Terms

Bidders should take into consideration the following general legal terms when preparing and submitting their proposals:

0. If the Bidder decides to form a joint venture, each partner in the joint venture shall be a business organization duly organized, existing and registered and in good standing under the laws of its country of domicile. The Bidder must furnish evidence of its structure as a joint venture including, without limitation, information with respect to:

- the legal relationship among the joint venture members that shall include joint and several liability to execute the contract; and
- the role and responsibility of each joint venture member
- The Bidder must nominate a managing member (leader) for any joint venture which managing member will be authorized to act and receive instructions on behalf of all the joint venture members
- 2. All bidders should duly sign the joint venture agreement attached to this RFP under Annex 5.8 by authorized representatives of the joint venture partners without being certified by a notary public and to be enclosed in the technical proposal in addition to authorization for signature on behalf of each member. Only the winning bidder partners in a joint venture should duly sign the joint venture agreement attached to this RFP under Annex 5.8 by authorized signatories and this agreement is to be certified by a Notary Public in Jordan
- 21. The bidders shall not submit alternative proposal. Alternative proposals will be returned unopened or unread. If the bidder submits more than one proposal and it is not obvious, on the sealed envelope(s), which is the alternative proposal, in lieu of returning the alternative proposal, the entire submission will be returned to the bidder and the bidder will be disqualified.
- 22. The proposal shall be signed by the bidder or a person or persons duly authorized to bind the bidder to the contract. The latter authorization shall be indicated by duly legalized power of attorney. All of the pages of the proposal, except un-amended printed literature, shall be initialed by the person or persons signing the proposal.
- 23. Any interlineations, erasures or overwriting shall only be valid if they are initialed by the signatory (ies) to the proposal.
- 24. The bid shall contain an acknowledgement of receipt of all Addenda to the RFP, the numbers of which must be filled in on the Form of Bid attached to the Arabic Sample Agreement
- 25. MoDEE requires that all parties to the contracting process observe the highest standard of ethics during the procurement and execution process. The Special Tenders Committee will reject a proposal for award if it determines that the Bidder has engaged in corrupt or fraudulent practices in competing for the contract in question.

**Corrupt Practice** means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution>

**Fraudulent Practice** means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of MoDEE, and includes collusive practice among Bidders (prior to or after proposal submission) designed to establish proposal prices at artificial non-competitive levels and to deprive MOLA of the benefits of free and open competition.

- 26. No bidder shall contact MoDEE, its employees or the Special Tenders Committee or the technical committee members on any matter relating to its proposal to the time the contract is awarded. Any effort by a bidder to influence MoDEE, its employees, the Special Tenders Committee or the technical committee members in the tendering committee's proposal evaluation, proposal comparison, or contract award decision will result in rejection of the bidder's proposal and forfeiture of the proposal security
- 27. The remuneration of the Winning Bidder stated in the Decision of Award of the bid shall constitute the Winning Bidder sole remuneration in connection with this Project and/or the Services, and the Winning Bidder shall not accept for their own benefit any trade commission, discount, or similar payment in connection with activities pursuant to this Contract or to the Services or in the discharge of their obligations under the Contract, and the Winning Bidder shall use their best efforts to ensure that the Personnel, any Sub-contractors, and agents of either of them similarly shall not receive any such additional remuneration.
- 28. A business registration certificate should be provided with the proposal
- 29. If the bidder is a joint venture, then the partners need to be identified with the rationale behind the partnership. Corporate capability statement should also be provided for all partners.
- 30. The laws and regulations of The Hashemite Kingdom of Jordan shall apply to awarded contracts.
- 31. The Bidder accepts to comply with all provisions, whether explicitly stated in this RFP or otherwise, stipulated in the Procurement By-Law No28 of 2019 and its Instructions, and any other provisions stated in the Standard Contracting sample Arabic Contract Agreement annexed to this RFP including general and special conditions, issued pursuant to said Unified Procurement By-Law No28 of 2019 and its Instructions.
- 32. MoDEE takes no responsibility for the costs of preparing any bids and will not reimburse any bidder for the cost of preparing its bid whether winning or otherwise.
- 33. Bidders must review the Sample Arabic Contract Agreement provided with this RFP and that will be the Contract to be signed with the winning bidder. Provisions in this Sample Arabic Contract Agreement are not subject to any changes; except as may be amended by MOLA before tender submission; such amendments are to be issued as an addendum.
- 34. Proposals shall remain valid for period of (90) days from the closing date for the receipt of proposals as established by the Special Tenders Committee.

- 35. The Special Tenders Committee may solicit the bidders' consent to an extension of the proposal validity period. The request and responses thereto shall be made in writing or by fax. If a bidder agrees to prolong the period of validity, the proposal security shall also be suitably extended. A bidder may refuse the request without forfeiting its proposal security; however, in its discretion, the Special Tenders Committee may cease further review and consideration of such bidder's proposal. A bidder granting the request will not be required nor permitted to modify its proposal, except as provided in this RFP.
- 36. MoDEE reserves the right to accept, annul or cancel the bidding process and reject all proposals at any time without any liability to the bidders or any other party and/withdraw this tender without providing reasons for such action and with no legal or financial implications to MoDEE.
- 37. MoDEE reserves the right to disregard any bid which is not submitted in writing by the closing date of the tender. An electronic version of the technical proposal will only be accepted if a written version has also been submitted by the closing date.
- 38. MoDEE reserves the right to disregard any bid which does not contain the required number of proposal copies as specified in this RFP. In case of discrepancies between the original hardcopy, the other copies and/or the softcopy of the proposals, the original hardcopy will prevail and will be considered the official copy.
- 39. MOLA reserves the right to enforce penalties on the winning bidder in case of any delay in delivery defined in accordance with the terms set in the sample Arabic contract. The value of such penalties will be determined in the Sample Arabic contract for each day of unjustifiable delay.
- 40. Bidders may not object to the technical or financial evaluation criteria set forth for this tender.
- 41. The winning bidder will be expected to provide a single point of contact to which all issues can be escalated. MOLA will provide a similar point of contact.
- 42. MOLA is entitled to meet (in person or via telephone) each member of the consulting team prior to any work, taking place. Where project staff is not felt to be suitable, either before starting or during the execution of the contract, MOLA reserves the right to request an alternative staff at no extra cost to MOLA.
- 43. Each bidder will be responsible for providing his own equipment, office space, secretarial and other resources, insurance, medical provisions, visas and travel arrangements. MOLA will take no responsibility for any non-Government of Jordan resources either within Jordan or during travel to/from Jordan.

- 44. Any source code, licenses, documentation, hardware, and software procured or developed under 'Development and Implementation Of E-Services and Back-End System for Ministry of Local Administration MOLA' is the property of MOLA upon conclusion of 'The Project'. Written consent of MOLA must be obtained before sharing any part of this information as reference or otherwise.
- 45. Bidders are responsible for the accuracy of information submitted in their proposals. MoDEE reserves the right to request original copies of any documents submitted for review and authentication prior to awarding the tender.
- 46. The bidder may modify or withdraw its proposal after submission, provided that written notice of the modification or withdrawal is received by the tendering committee prior to the deadline prescribed for proposal submission. Withdrawal of a proposal after the deadline prescribed for proposal submission or during proposal validity as set in the tender documents will result in the bidder's forfeiture of all of its proposal security (bid bond).
- 47. A bidder wishing to withdraw its proposal shall notify the Special Tenders Committee in writing prior to the deadline prescribed for proposal submission. A withdrawal notice may also send by fax, but it must be followed by a signed confirmation copy, postmarked no later than the deadline for submission of proposals.
- 48. The notice of withdrawal shall be addressed to the Special Tenders Committee at the address in RFP and bear the contract name "DEVELOPMENT AND IMPLEMENTATION OF E-SERVICES AND BAKEND SYSTEM FOR MINISTRY OF LOCAL AMINISTRY OF LOCAL ADMINISTRATIONDMINISTRATION MOLA" and the words "Withdrawal Notice".
- 49. Proposal withdrawal notices received after the proposal submission deadline will be ignored, and the submitted proposal will be deemed to be a validly submitted proposal.
- 50. No proposal may be withdrawn in the interval between the proposal submission deadline and the expiration of the proposal validity period. Withdrawal of a proposal during this interval may result in forfeiture of the bidder's proposal security.
- 51. The Bidder accepts to comply with all provisions, that are explicitly stated in this RFP and any other provisions stated in the Standard Sample Arabic Contract Agreement attached hereto and Tendering Instruction and attached hereto.

- 52. The winning bidder shall perform the Services and carry out their obligations with all due diligence, efficiency, and economy, in accordance with the highest generally accepted professional techniques and practices, and shall observe sound management practices, and employ appropriate advanced technology and safe methods. The Winning Bidder shall always act, in respect of any matter relating to this Contract or to the Services, as faithful advisers to MOLA, and shall at all times support and safeguard MOLA's legitimate interests in any dealings with Sub-contractors or third parties.
- 53. If there is any inconsistency between the provisions set forth in the Sample Arabic Contract Agreement attached hereto or this RFP and the proposal of Bidder; the Sample Arabic Contract Agreement and /or the RFP shall prevail
- 54. MOLA reserves the right to furnish all materials presented by the winning bidder at any stage of the project, such as reports, analyses or any other materials, in whole or part, to any person. This shall include publishing such materials in the press, for the purposes of informing, promotion, advertisement and/or influencing any third party. MOLA shall have a perpetual, irrevocable, non-transferable, paid-up right and license to use and copy such materials mentioned above and prepare derivative works based on them.
- 55. Bidders (whether in joint venture or alone) are not allowed to submit more than one proposal for this RFP. If a partner in a joint venture participate in more than one proposal; such proposals shall not be considered and will be rejected for being none-responsive to this RFP.
- 56. Amendments or reservations on any of the Tender Documents: Bidders are not allowed to amend or make any reservations on any of the Tender Documents or the Arabic Sample contract agreement attached hereto. In case any bidder does not abide by this statement, his proposal will be rejected for being none-responsive to this RFP. If during the implementation of this project; it is found that the winning bidder has included in his proposal any amendments, reservations on any of the tender documents or the Contract; then such amendments or reservations shall not be considered and the items in the tender documents and the Contact shall prevail and shall be executed without additional cost to MOLA and the winning bidder shall not be entitled to claim for any additional expenses or take any other legal procedures.
- 57. Nothing contained herein shall be construed as establishing a relation of principal and agent as between MOLA and the Winning Bidder. The Winning Bidder has complete charge of Personnel and Sub-contractors, if any, performing the Services and shall be fully responsible for the Services performed by them or on their behalf hereunder.
- 58. The Winning Bidder, their Sub-contractors, and the Personnel of either of them shall not, either during the term or after the expiration of the Contract, disclose any proprietary or confidential information relating to the Project, the Services, the Contract, or MOLA's business or operations without the

prior written consent of MOLA. The Winning Bidder shall sign a Non-Disclosure Agreement with MOLA as per the standard form adopted by MOLA. A confidentiality undertaking is included in annex 5.8.

#### 59. Sample Arabic Contract Agreement Approval:

Bidders must review the Sample Arabic Contract Agreement version provided with the RFP, which shall be binding and shall be signed with winning bidder.

Bidders must fill out, stamp and duly sign the Form of Bid (نموذج عرض المناقصة)

attached to the Arabic Sample Agreement under (2) ملحق رقم and enclose it in their financial proposals.

Bidders must fill out the summary payment schedule form sub annex 3 (الملحق) (3 which is part of the Arabic Sample Contract version provided with the RFP, sign and stamp it, and enclose it with the Financial Proposal.

<u>Bidders must also fill out and duly sign the Financial Proposal Response</u>
Formats under Annex 5.7 of this RFP and enclose it in the financial proposals.

<u>Proposals that do not include these signed forms are subject to rejection as being nonresponsive.</u>

#### PROHIBITION OF CONFLICTING ACTIVITIES

Neither the Winning Bidder nor their Sub-contractors nor their personnel shall engage, either directly or indirectly, in any of the following activities:

- During the term of the Contract, any business or professional activities in Jordan or abroad which would conflict with the activities assigned to them under this bid; or
- After the termination of this Project, such other activities as may be specified in the Contract.

# • INTELLECTUAL PROPERTY RIGHTS PROVISIONS

- Intellectual Property for the purpose of this provision shall mean all copyright and neighboring rights, all rights in relation to inventions (including patent rights), plant varieties, registered and unregistered trademarks (including service marks), registered designs, Confidential Information (including trade secrets and know how) and circuit layouts, and all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields.
- Contract Material for the purpose of this provision shall mean all material (includes documents, equipment, software, goods, information and data stored by any means):

- a) Brought into existence for the purpose of performing the Services;
- b) incorporated in, supplied or required to be supplied along with the Material referred to in paragraph (a); or
- c) Copied or derived from Material referred to in paragraphs (a) or (b);
- Intellectual Property in all Contract Material vests or will vest in MOLA. This shall not affect the ownership of Intellectual Property in any material owned by the Winning Bidder, or a Sub-contractor, existing at the effective date of the Contract. However, the Winning Bidder grants to MOLA, or shall procure from a Sub-contractor, on behalf of MOLA, a permanent, irrevocable, royalty-free, worldwide, non-exclusive license (including a right of sub-license) to use, reproduce, adapt and exploit such material as specified in the Contract and all relevant documents.
- If requested by MOLA to do so, the Winning Bidder shall bring into existence, sign, execute or otherwise deal with any document that may be necessary or desirable to give effect to these provisions.
- The Winning Bidder shall at all times indemnify and hold harmless MOLA, its officers, employees and agents from and against any loss (including legal costs and expenses on a solicitor/own client basis) or liability incurred from any claim, suit, demand, action or proceeding by any person in respect of any infringement of Intellectual Property by the Winning Bidder, its officers, employees, agents or Sub-contractors in connection with the performance of the Services or the use by MOLA of the Contract Material. This indemnity shall survive the expiration or termination of the Contract.
- The Winning Bidder not to benefit from commissions discounts, etc. The remuneration of the Winning Bidder stated in the Decision of Award of the bid shall constitute the Winning Bidder sole remuneration in connection with this Project and/or the Services, and the Winning Bidder shall not accept for their own benefit any trade commission, discount, or similar payment in connection with activities pursuant to this Contract or to the Services or in the discharge of their obligations under the Contract, and the Winning Bidder shall use their best efforts to ensure that the Personnel, any Subcontractors, and agents of either of them similarly shall not receive any such additional remuneration.

# • THIRD PARTY INDEMNITY

Unless specified to the contrary in the Contract, the Winning Bidder will indemnify MOLA, including its officers, employees and agents against a loss or liability that has been reasonably incurred by MOLA as the result of a claim made by a third party:

 Where that loss or liability was caused or contributed to by an unlawful, negligent or willfully wrong act or omission by the Winning Bidder, its Personnel, or sub-contractors; or  Where and to the extent that loss or liability relates to personal injury, death or property damage.

#### LIABILITY

- The liability of either party for breach of the Contract or for any other statutory cause of action arising out of the operation of the Contract will be determined under the relevant law in Hashemite Kingdom of Jordan as at present in force. This liability will survive the termination or expiry of the Contract. Winning bidder's total liability relating to contract shall in no event exceed the fees Winning bidder receives hereunder, such limitation shall not apply in the following cases (in addition to the case of willful breach of the contract):
  - gross negligence or willful misconduct on the part of the Consultants or on the part of any person or firm acting on behalf of the Consultants in carrying out the Services.
  - an indemnity in respect of third-party claims for damage to third parties caused by the Consultants or any person or firm acting on behalf of the Consultants in carrying out the Services,
  - infringement of Intellectual Property Rights

#### 4.7. Conflict of Interest

- 60. The Winning bidder warrants that to the best of its knowledge after making diligent inquiry, at the date of signing the Contract no conflict of interest exists or is likely to arise in the performance of its obligations under the Contract by itself or by its employees and that based upon reasonable inquiry it has no reason to believe that any sub-contractor has such a conflict.
- 61. If during the course of the Contract a conflict or risk of conflict of interest arises, the Winning bidder undertakes to notify in writing MOLA immediately that conflict or risk of conflict becomes known.
- 62. The Winning bidder shall not, and shall use their best endeavors to ensure that any employee, agent or sub-contractor shall not, during the course of the Contract, engage in any activity or obtain any interest likely to conflict with, or restrict the fair and independent performance of obligations under the Contract and shall immediately disclose to MOLA such activity or interest.
- 63. If the Winning bidder fails to notify MOLA or is unable or unwilling to resolve or deal with the conflict as required, MOLA may terminate this Contract in accordance with the provisions of termination set forth in the Contract.

#### 4.8. Secrecy & Security

The Winning bidder shall comply and shall ensure that any sub-contractor complies, so far as compliance is required, with the secrecy and security requirements of MOLA, or notified by MOLA to the Winning bidder from time to time.

# 4.9. Document Property

All plans, drawings, specifications, designs, reports, and other documents and software submitted by the Winning bidder in accordance with the Contract shall become and remain the property of MOLA, and the Winning bidder shall, not later than upon termination or expiration of the Contract, deliver all such documents and software to MOLA, together with a detailed inventory thereof. Restrictions about the future use of these documents, if any, shall be specified in the Special Conditions of the Contract.

#### 4.10. Removal and/or Replacement of Personnel

- 64. Except as MOLA may otherwise agree, no changes shall be made in the key Personnel. If, for any reason beyond the reasonable control of the Winning bidder, it becomes necessary to replace any of the key Personnel, the Winning bidder shall provide as a replacement a person of equivalent or better qualifications and upon MOLA approval.
- 65. If MOLA finds that any of the Personnel have (i) committed serious misconduct or have been charged with having committed a criminal action, or (ii) have reasonable cause to be dissatisfied with the performance of any of the Personnel, then the Winning bidder shall, at MOLA's written request specifying the grounds thereof, provide as a replacement a person with qualifications and experience acceptable to MOLA.

# 4.11. Other Project-Related Terms

MOLA reserves the right to conduct a technical audit on the project either by MOLA resources or by third party.

# **Section 5: ANNEXES**

# 5.1. List of Acronyms

TERM	DESCRIPTION
ADC	Access and Delivery Channel
BPR	Business Process Re-engineering
CC	Contact Center
CCD	Company Control Department
CMS	Content Management System
CSPD	Civil Status and Passport Department
DLS	Department of Lands and Survey
DoBR	Department of Borders and Residency
eGAF	e-Government Architecture Framework
MOLA	Ministry of Local Administration
GID	General Intelligence Department
GoJ	Government of Jordan
G2B	Government to Business
G2C	Government to Citizens
G2G	Government to Government
IT	Information Technology
KPI	Key Performance Indicator
NFAS	Nationality and Foreigner Affair System
MoA	Ministry of Agriculture
MoF	Ministry of Finance
MoDEE	Ministry of Digital Economy And Entrepreneurship
МоН	Ministry of Health
Mol	Ministry of Interior
MoIT	Ministry of Industry and Trade
MoL	Ministry of Labor
MoMA	Ministry of Municipal Affairs
MoJ	Ministry of Justice
OP	Occupancy Permit
PM(O)	Program Management (Office)

PSD	Public Security Directorate
RFP	Request For Proposal
SENS	Secure Enterprise Nervous System
SGN	Secure Government Network
SMS	Short Message Service
SOA	Service Oriented Architecture
SSC	Social Security cooperation

# 5.2. To-be procedures and Processes workflow < Attached>

# 5.3. Government Private Cloud (GPC)

#### Introduction

The Ministry of Digital Economy and Entrepreneurship (MoDEE) operates the Private Cloud at the National Information Technology Center (NITC) and it is a part of the Secure Government Network (SGN) which provides it with more secure and reliable environment to run and operates on.

Cloud computing is a general term for the delivery of hosted services over the network, enable the data center to evolve from a fixed environment, where applications run on dedicated servers, toward an environment that is dynamic and automated as shown in figure 1.

The government of Jordan decided to build consolidated data center that is powered by cloud computing Technology and is linked to over 100 government entities via a Secure Government Network.

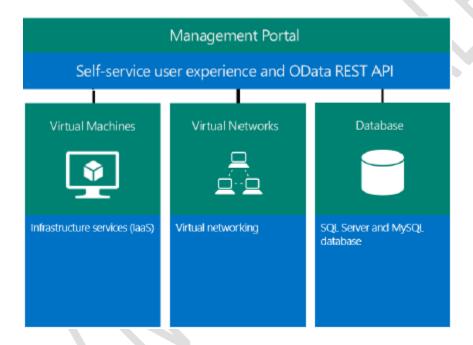
#### **Benefits**

Cloud computing boasts several benefits for government entities:

- 1. Build Virtualized data center within one hour. This will eliminate the procurement process to build Data center
- 2. Can scale up as computing needs. This eliminates the need for massive investments in local infrastructure and not use
- 3. Less of a requirement for capital expenditure, and operation cost
- 4. Speed-up the e-government implementation, because it will provide the infrastructure needed to develop e-services.

The GPC serve all SGN entities with the following services:

- 1- Ready services with covered licenses:
  - Virtual Machines as a Service:
    - Windows Server 2012 R2
    - Windows Server 2008 R2
  - Databases as a Service:
    - SQL Server 2012
    - SQL Server 2014
    - MySQL 5.1
  - Virtual Network as a Service



**Figure 2: Government Private Cloud Computing** 

The Private Cloud stack is based on Microsoft Windows Azure Pack (WAP), including the following technologies:

- Windows Server 2012 R2 Hyper-V
- Hyper-V inbox Network Virtualization Gateway
- System Center 2012 R2 Virtual Machine Manager
- System Center 2012 R2 Operations Manager
- System Center 2012 R2 Orchestrator
- System Center 2012 R2 Data Protection Manager
- Windows Azure Pack with resource providers for Virtual Machines, Databases, Virtual Networks

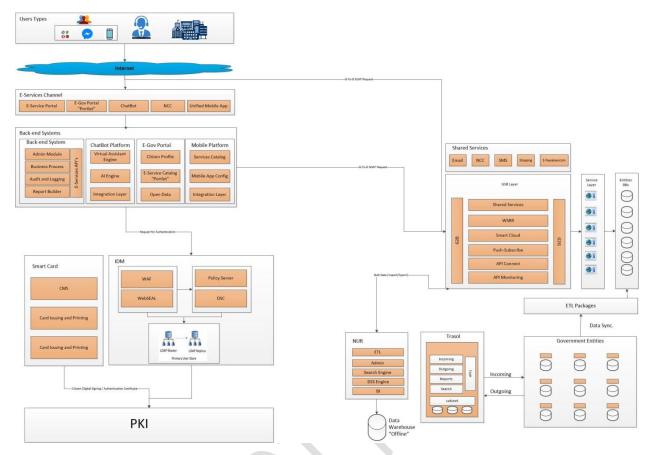
These technologies in alignment with the virtualization layer (Hyper-V), provides the following functionalities on the Private Cloud:

- Manage the cloud's compute, network, and storage resources (Virtual Machine Manager) by allowing datacenter administrators to define the shared pooled resources and configuring their re-usable artifacts (such as VM templates, VM networks, IP pools, etc...).
- ➤ End-to-end monitoring the cloud's resources (Operations Manager) for health and performance information. Performance Resource and Optimization (PRO) ties specific SCOM alerts to remediation actions in VMM.
- Backup and Restore resources on the cloud (Data Protection Manager).
- ➤ Offer Self-Service access for internal tenants to consume the cloud's services by subscribing to plans (Windows Azure Pack and Orchestrator)
- Allow authentication of the Self-Service Portal by user accounts residing in the existing AD DS domain.

# 5.4. E-Government Implementation Framework

# **Implementation Framework**

This section provides a definition of a general framework for e-government infrastructure components that is based on the concept of the e-Government Architecture Framework (eGAF) and Service Oriented Architecture (SOA) as well as two other major initiatives – e-Government Portal and Secure Government Network – that are major supporting infrastructure components for e-Services. In addition to other important initiatives like the e-Government Contact Center, National Payment gateway (EFawateerCom), Government Service Bus (GSB), and National E-gov Portal.



e-Government Architecture

As the facilitator of the implementation and delivery of governmental e-Services, the e-Government Program has been working diligently to define its target e-Government federated enterprise architecture, which is meant to enable seamless integration and secure interoperability of services between distributed entities cohesively and cost effectively using SOA. The responsibility of the implementation and delivery of government e-Services lies upon the government and its various entities:

The e-Government Program plays the role of the "e-Services enabler" by providing the components that constitute the Central e-Government Service Delivery Platform;

The other governmental entities (mainly ministries) play the role of the "e-Services providers" by composing and operating their e-Services, having the choice to either outsource these services, or operate them in-house.

The following diagram presents a high-level view of the various e-Government stakeholders, and depicts the federated, customer-centric nature of the e-Government architecture1:

<sup>&</sup>lt;sup>1</sup> The diagram is meant to present a high-level view of the e-Government from a business perspective; hence many businesses and technical details do not appear for the sake of the overall understanding.

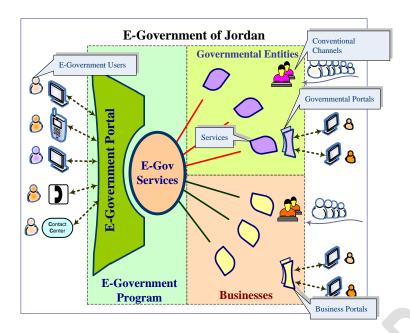


Figure 5.4.1: e-Government of Jordan High-level View

The e-Government portal of Jordan is customer-centric, i.e. all e-Services are centered on customers' needs. Currently, the e-Government Web Portal, which constitutes the central web informational portal of the e-Government, co-exists with a number of other governmental portals. Ultimately, the e-government's portal will turn into a multi-channel, one-stop-shop for all government e-Services and will support various access and delivery channels (e.g. Web, SMS, Kiosks, etc.).

The following diagram depicts the main building blocks for the e-Government target architecture:

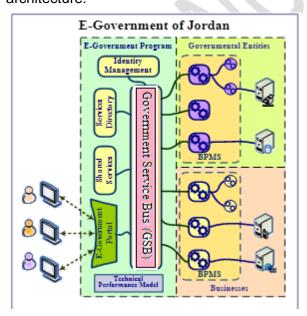


Figure 5.4.2: e-Government Architecture High-level View

As shown in the above diagram, the e-Government Program will provide a central Government Service Bus (GSB) that will serve as a unique point of traffic. It will take care of routing service invocations towards service providers and of returning responses back to the service clients (which could be the portal or some other service as in the case of cross-organizational e-Services). The e-Government Program will also provide a set of shared services (for instance National Payment Gateway, EFawateerCom, notification gateway, etc.) that can be invoked from within the context of any e-Service, promoting reuse of components across the government and thus reducing the costs by eliminating the needs for dedicated implementations of components that perform the same functionalities offered by any of the central shared functionalities at the entities side. The services directory will maintain an active list of all available services as well as their interface specifications. A central identity management solution will be used to federate identities, provide (when applicable) single-sign-on, facilitate propagation of user identities and attributes across the e-Government trust domain, and enable account provisioning. Finally, a central technical performance model will be put in place to enable concerned technical stakeholder at the e-Government Program to monitor the health and performance of the overall e-Government and identify issues and bottlenecks as well as potential areas for improvement. In order to prevent vendor lock-in, all of the above components will be built solely upon open standards, such as Web Services, SOAP. Where necessary, all service providers shall conform to the above standards in order to interoperate with other components within the e-Government framework.

The e-Government of Jordan Program will also provide Government Entities with an Enterprise Architecture Framework and methodology to help them in building their Enterprise Architecture in respect of the above principles. The e-Government Program will also provide help and support on how to apply this framework to aid the entities during the course of the framework implementation.

The e-Government Program will provide all necessary documentation and support in order to enable project implementers to produce deliverables that are in line with the e-Government architecture vision in the form of a Reference Model Winning PSPs shall have to access the necessary documentation.

# E-GAF & SOA

The primary delivery models for e-government are:

- Government-to-Citizen (G2C)
- Government-to-Business (G2B)
- Government-to-Government (G2G)

Jordan e-government program is capitalizing over the G2G, G2B, and G2C service models in order to provide information integration between the different government entities to improve government processes efficiency, easy end user's accessibility, increase transparency and reduce total cost of ownership.

The following figure depicts the different parties involved in the integration.

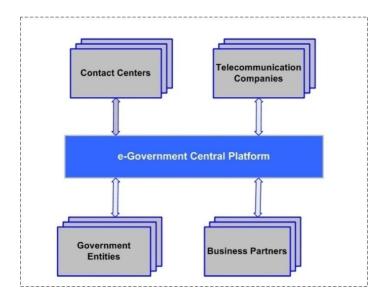


Figure 5.4.3: Government of Jordan Integrating Participating Parties

As seen in the figure above the following parties are involved in integration:

- Government entities: Government entities form the major customer and beneficiary for the business integration service provided by the e-government central platform. G2G integration model shall introduce efficient mechanism for integrating the government entities in order to deliver G2C, G2E and G2B services.
- Telecommunication companies: Telecommunication companies are considered business partners. The program will be responsible for providing the G2B integration services between those companies and the government entities. One example of such services can be the SMS notification.
- Business partners: The program will be responsible for providing the G2B integration service between business partners and government entities. Example for such business partners: payment service providers (PSP) and private banks.
- Contact center: Contact center's business is to serve the government entities
  end users. The program will be responsible for providing the G2B integration
  services between those contact centers and the government entities.

The IT infrastructure in the government entities and other business partners in Jordan is heterogeneous across operating systems, applications and software packages. Existing applications are used to run current business processes; so, starting from scratch to build new infrastructure is a very expensive and non-practical option. Hence; government entities should quickly respond to business changes with agility; leverage existing investments in applications and application

Infrastructure in order to address newer business requirements; support new channels of interactions with clients and partners (other government entities); and feature an architecture that supports business-oriented model.

SOA is efficient for large and distributed systems where other types of integration are more complex and costly.

# **Jordan e-Government Business Integration Patterns**

The business integration patterns that will be enabled by the central platform infrastructure are:

- Vertical e-Services integration pattern defines the pattern in which services are
  provided end-to-end by one government entity. It's true that such services are
  provided by one government entity, but their integration pattern may use some of
  the e-government central platform shared services such as authentication, online
  payment, notification, contact center ... etc.
- Cross organizational e-Services integration pattern defines the pattern in which a government service requires the involvement of several government entities in order to be delivered.
- Composite e-Services integration pattern defines the pattern in which a service flows across multiple government entities and contribute to e-Government overall objectives (e.g. GRP).
- Shared e-Services integration pattern: shared services are defined as the "enablers", providing technology-based functionality that are central to the provision of vertical and cross-organizational services. Their ultimate ownership belongs to the e-government central platform as part of the federated architecture framework.

# Jordan Information Interoperability Framework (IIF)

The Jordan e-government program has initiated an information interoperability framework that will manage and standardize the exchange of common and shared information between the different parties involved in the e-government of Jordan such as the government entities, central platform and business partners.

The IIF mandates that all the parties should speak the same language, and this includes:

Protocol: SOAP/HTTP(s)

Content type: XML

Standards: Jordan e-government standards

Format: IIF format

Note: For any new service that will be integrate with GSP it's recommended to be implemented using the WCF standard.

# E-GAF and Business Process Management (BPM)

The government entities in Jordan will provide cross organizational services whose logic is distributed across other government entities and business partners including the central platform. The main provider of a service [Principle Service Provider] will host the workflow of the Cross Organizational Service. Hence, the national GSB of Jordan will not host the workflow of any Government Entity Service, nevertheless, it should enable integration between different entities' services to constitute a Cross Organizational Service.

A government entity will utilize the central platform integration services published web services, and other government entities published e-Services to compose the business processes for

their cross organizational e-service. The following figure depicts the relation between the integration infrastructure provided by the e-government central platform and the BPM components at the government entities premises.

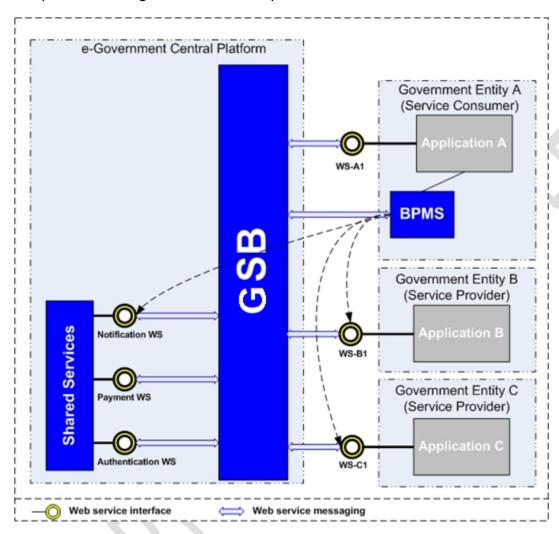
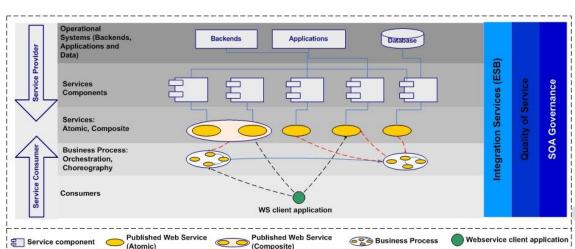


Figure 5.4.4: E-GAF and BPM

As depicted in the figure above, the application in government entity "A" starts a business process that includes executing tasks at government entity "B", "C" in addition to the notification services provided by the e-government central platform. The application at "A" will communicate with the Business Process Management System (BPMS) component2 at its premises to execute the complete process. The BPMS component invokes the entity "B" Web service (WS-B1), entity "C" Web service (WB-C1) and the Notification WS web services according to the rules that had been set earlier in its rule engine.

#### **E-GAF Integration Reference Model**

<sup>&</sup>lt;sup>2</sup> WFMS: A software application that stores process definitions and runs jobs based on those process definitions via its workflow engine component. The workflow engine is the runtime execution module.



(Composite)

The following figure depicts the E-GAF integration reference mode.

Figure 5.4.5: E-GAF Integration Reference Model

As depicted in the figure above; the reference model crosses the different parties involved in the SOA architecture: service consumer; integration services (GSB), and the service provider.

The consumer will implement the Web service client application that contains either direct calls to published Web services or calls to the orchestrated or choreographed or business processes.

The provider publishes his services (atomic and composite) through the GSB. The services are enabled by a set of components (JavaBean, EJB, COM, DCOM, PLSQL ... etc.). Such components form the bridge between the backend applications, business applications and databases on one side and the web services on the other side.

The integration services at the central platform represented by the GSB form the mediator between the service consumer and service provider. The GSB provides several services and functionalities such as integration hub, services registry, security, intelligent routing ...etc.

Security, audit, high availability, manageability is quality of service attributes for the integration model.

# **Secure Government Network**

The Secure Government Network (SGN) is a large initiative linking all government entities to a secure Government Network as a part of a recently developed Connectivity Strategy. The main role of the SGN is to provide connectivity to government entities. Currently, the following services are provided through the SGN:

- File sharing/exchange between government's entities connected through the SGN.
- E-mail services (electronic services that include email messaging solution, calendar, personal communications tools, etc.).
- Inter-application communication

Upon request, MoDEE will provide the winning bidder with related document(s) describing in detail Connectivity Strategy and detailed requirements related to SGN.

# Government Service Bus (GSB)

**GSB** Integration Requirements

The Government Service Bus (GSB) is the central enabling set of components of the e-Government infrastructure that is based on Service Oriented Architecture (SOA). The GSB provides an infrastructure that removes any direct connection between service consumers and providers. Consumers connect to the bus and not the provider that actually implements the service. This provides location independence to all services.

The GSB also implements further value add Infrastructure or "Fabric" services. For example, security, transaction, scalability, directory, registry and delivery assurance are implemented centrally within the bus instead of having these buried within the applications or at the government agency back-ends.

The GSB architecture enables governmental entities to connect and use ready-made components of the e-Government. The diagram below shows the conceptual architecture of the GSB.

IBM WebSphere Data Power SOA Appliances are purpose-built, easy-to-deploy network devices that simplify, secure, and accelerate your XML and Web services deployments while extending your SOA infrastructure. Data Power provides configuration-based approach to meet MODEE's edge ESB requirements. The DataPower Appliance provides many core functions to applications, such as service-level management, routing, data and policy transformations, policy enforcement, access control, and hardened security—all in a single "drop-in" device.

For MODEE, Data Power provides the following key benefits.

- Platform for Vertical e-Services integration: Web services from different government entities (service providers) can be securely exposed using Data Power.
- Cross Organizational e-Services Platform: Data Power provides role-based access control to ensure the right level of secure access for cross-organizational e-Services.
- Composite e-Services integration platform: Data Power is the service composition layer that exposes composite services to service consumers.
- Shared e-Services integration platform: Data Power supports modular service integration architecture.

When deploying this IBM appliance in your network, you secure your enterprise at the Application Layer vs. at the Network Layer. DataPower is a next-generation appliance that operates on MESSAGES instead of PACKETS. This enables offloading security checks and structural checks from the service providers, there by simplifying integration while minimizing performance degradation.

#### **Solution Benefits**

Using IBM Data Power as the ESB appliance, this provides the following benefits:

- Ease of implementing security and web services in a purpose-built appliance resulting in reduced Development Lifecycle and implementation costs.
- Configuration, rather than coding: This approach offers faster time to market compared to traditional coding approaches for service integration.
- Offloading tedious security tasks from Sevice Providers (Government entities), preventing potential performance degradation
- Appliance approach provides greater security compared to software based solutions (removes periodic operating system patches, OS vulnerabilities, virtualization layer vulnerabilities, regular software patches, etc.)
- Purpose built firmware, offering wire-speed processing.
- Prepare your environment for the future: DataPower is ready for mobile and web 2.0
- Extensible architecture: add-on modules can be turned on as required.
- Highly fault tolerant device (multiple power supplies, multiple network ports) with in-built load balancing & clustering options.

The Data Power Appliance is purpose-built, easy to consume and easy to use. Data Power delivers security, common message transformation, integration, and routing functions in a network device. IBM approach helps you to leverage and scale your existing infrastructure investments.

Solution components and features

The below sections lists the used components and the utilized features within the Data Power appliance during the implementation of the Edge ESG to help meet MoDEE requirements:

#### Logging

IBM Data Power appliance offers a bunch of different options when it comes to logging. MODEE's main concerns when it came to logging were:

The ability to troubleshoot a problem when one arises: As for this point in the solution IBM Data Power offers a feature called 'debug probe', this feature can be enabled to log the messages temporarily and then view them at each stage within the policy execution, this also offers information like the requested and source URL/IP which should be sufficient when a problem arises at the message level.

- Being able to view and track events as they occur (mostly errors): As for this DataPower's out of the box logging behavior should suffice, it offers the ability to filter the logs based on the component from which they originated and the ability to increase and decrease the level of logging details based on the current need.
- <u>DataPower auditing</u>: Out of the box, DataPower offers the ability to log any administrational actions, by which user where they performed and when (this also included some lower level relevant action logging).

# Security using SSL certificates

When it comes to SSL, the solution includes two different implementations:

- Standard SSL over HTTP (for G2G services)

In this scenario DataPower is issued a certificate which the service consumers should trust and accordingly be able to authenticate DataPower boxes and perform transport layer encryption. As for between DataPower and the service providers, DataPower should receive a copy of the public certificate of the entities it will connect to in order to trust them.

- SSL with mutual authentication (for G2B services)

As for this scenario the communication with the backend services is still done in the same manner but the communication with the consumers is done differently. In this case the first part still stands true where DataPower is still issued a certificate which the service consumers should trust but the difference is that the service consumers themselves should also be issued certificates which the DataPower should receive (public certificates) in order to perform a mutually authenticated connection.

**Mutual authentication** or **two-way authentication** (sometimes written as 2WAY authentication) refers to two parties authenticating each other at the same time. In technology terms, it refers to a client or user authenticating themselves to a server and that server authenticating itself to the user in such a way that both parties are assured of the others' identity. As for the certificates issuing three different options were discussed:

- Purchasing internationally trusted certificates
- Using the new Jordan PKI to issue new certificates (in the future)
- Using self-signed certificates (this option will not be used)

DataPower supports four different formats when it comes to certificates and key:

- DER
- PEM

- PKCS #8
- PKCS #12

Note: DataPower offers notifications for the box administrators/developers when an SSL certificate is going to expire within a month to insure minimized service downtime and a minimal impact of this event.

### Web services proxy

A 'Web Service Proxy' provides security and abstraction for remote web services. It is the object where most of the implementation will be performed and where the majority of the other features are contained. A Web Service Proxy makes it easier to implement certain features for web services based on a WSDL file.

The first step of implementing a web service in DataPower is always obtaining the WSDL (by uploading to the device or fetching from WSRR), after doing so the Web Service Proxy starts offering options starting with specifying the end point to be exposed and the protocol to be used. After that one can start applying the required policy. In the current scenario we have two policies to be applied per service the first (client to server) at the service level and another policy to apply on the way back but on a lower level and that is the operation level.

On the client to server policy:

- Within the AAA action the service credentials will be extracted from the message (Password-carrying UsernameToken element from WS-Security header), this identity will be validated against LDAP to decide whether the consumer is eligible to consume the service based on whether the identity is a member of the service group or not.
- At this stage the SLA is enforced.
- An attribute containing the identity's access level to the services is queried and stored in context variables.
- The identity within the message is replaced with another identity which is meant to authenticate DataPower boxes at the service provider's side.
- The destination URL is replaced with the actual service provider's URL instead the one that came with the message here.

On the way back (server to client) each response to a consumer is filtered based on the consumer's access level to a service using a transformation action (an XSLT style sheet) and finally the response is returned to the consumer here. Guidelines for web service integration

#### **Government to Government - SGN**

The below is a list containing all the guidelines for a service provider willing to expose a service or a service consumer willing to integrate with the GSB:

- 1- Messages should comply with the **XML** + **SOAP** standards.
- 2- All the currently implemented services follow the SOAP standard version 1.1.
- 3- The SOAP header must contain a **Password-carrying Username Token** element from WS-Security header.
- 4- The currently followed approach mandates that the **Username Token should not be signed.**
- 5- The SOAP message should not be encrypted nor signed.
- 6- The current followed approach mandates **not using Timestamp** token so that consumers with a different time or time zone settings could consume the service.
- 7- Both the service provider and consumer must implement and use transport layer security
  - a. SSL version 2 should not be used
  - b. SSL version 3 should not be used
  - c. Weak ciphers and hashes should not be used
  - d. The usage of strong ciphers only is strongly recommended
  - e. It is mandatory to use TLS v1.0, v1.1 or v1.2
  - f. The usage of message compression is not recommended
  - g. The usage of insecure legacy SSL should not be permitted
- 8- The recommended certificate format to be used is **DER encoded binary X.509 certificates** (.cer)
- 9- The recommended **RSA key length** for the issued and used certificates and keys is **2048**.
- 10- Services that can provide large chunks of data at once (ex. Search based services) are recommended to **use** some sort of **pagination** and not to return all the data at once if the result is considered large enough.
- 11- All the **data fields within the message body** should be marked as **optional** from the provider's side and the service consumer should be able to handle any missing or empty fields appropriately (regardless of data type).
- 12- The message providers are free to build the message body structure as they see fit to the service requirements as long as they comply with the relevant points mentioned above.
- 13- **Using any additional feature** from WS-Security or WS-Standards in general is **not recommended** unless verified and approved to be supported by the GSB.

#### **Government to Business - Edge**

In addition to all the above mentioned guidelines in the G2G section above, any entity outside the government (outside the SGN network) who would like to integrate with the GSB must comply with the below:

1- The entity must comply with the **mutual authentication** or **two-way authentication** (sometimes referred to as 2WAY authentication) specifications.

Establishing the encrypted channel using certificate-based mutual authentication involves:

- A client requests access to a protected resource.
- The server presents its certificate to the client.
- The client verifies the server's certificate.
- If successful, the client sends its certificate to the server.
- The server verifies the client's credentials.
- If successful, the server grants access to the protected resource requested by the client.

Note: To establish this approach the entity should provide its public certificate to the GSB team (regardless of being a service provider or a service consumer) to ensure its trust as well as to receive the public certificate from GSB and insure that it is trusted from the entity's side as well.

# Sample request message

```
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:u="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-
1.0.xsd">
<s:Header>
   <ActivityId CorrelationId="bcf08350-0ad0-4e6a-b596-9994e137b45c"</pre>
   xmlns="http://schemas.microsoft.com/2004/09/ServiceModel/Diagnostics">9dc40624-
   0ae7-4984-8806-4e251982b213</ActivityId>
   <o:Security s:mustUnderstand="1"</pre>
   xmlns:o="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
   secext-1.0.xsd" >
       <o:UsernameToken u:Id="uuid-1349a92e-13f7-41d1-bdde-0021a9c1d276-79">
              <o:Username>UserName</o:Username>
              <o:Password>******</o:Password>
       </o:UsernameToken>
   </o:Security>
</s:Header>
<s:Body>
   <operation xmlns="http://tempuri.org/" >
       <NationalNo>123456789</FirmNationalNo>
   </operation>
</s:Body>
</s:Envelope>
```

#### **API Connect**

#### IBM API Connect

"IBM API Connect is an end-to-end solution that allows users to create, secure, manage, socialize, monetize and analyze APIs. It provides a powerful set of capabilities from turning backend RESTFUL or SOAP services into managed services. This is done by publishing APIs to API Gateways, while enforcing lifecycle and governance controls on those APIs. API Connect enables users to expose APIs, through a developer portal, targeting application developers both inside and outside their organization. Additionally, the solution's analytics tooling helps API providers and API consumers better understand the health and consumption of deployed APIs."

The following table explains the key steps of the API lifecycle in more detail.

Table 1. Key phases of the API lifecycle		
Lifecycle Phase	Description	
Create	Develop and write API definitions from an API development environment, eventually bundling these APIs into consumable products, and deploying them to production environments	
Secure	Leverage the best-in-class API Gateway, gateway policies, and more, to manage access to your APIs and back-end systems.	
Manage	Governance structures are built into the entire API lifecycle, from managing the view/edit permissions of APIs and Products being deployed, to managing what application developers can view and subscribe to when APIs are deployed.	
Socialize	API Connect comes with an advanced Developer Portal that streamlines the onboarding process of application developers and can be completely customized to an organization's marketing standards.	

Table 1. Key phases of the API lifecycle		
Lifecycle Phase	Description	
Analyze	Developers and Product Managers alike are given the tooling in API Connect to understand their API traffic patterns, latency, consumption, and more to make data driven insights into their API initiatives.	

#### **IBM MQFT**

IBM MQ Files Transfer solution is based on MQFT agents, which plays the role of either sender or receiver in case of sending files or receiving files. The same agent can be acting as both sender and receiver at the same time.

Files will be transferred across the centralized MQ infrastructure hosted in the NITC data center.

File transfers will be triggered using the following methods:

- Scheduled file transfers
- Manual file transfers
- Automatic file transfers based on monitoring a system directory

A governmental entity will be able to either send or receive files when they have the MQFT agent installed and connected from their side to the centralized MQFT environment in the NITC data center.

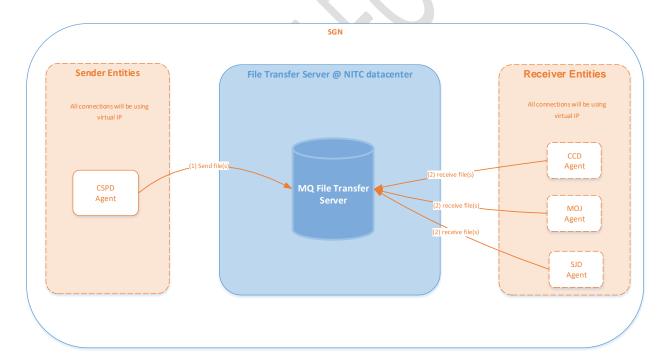
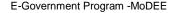


Figure (File Transfer)

#### IBM Publish - Subscribe

IBM MQ Publish - Subscribe solution will provide the following functionalities:

- The solution will provide one topic for each publisher
- The solution will provide a web service facility to be used for the publications
- The publisher will either use MQ APIs or the available wen service to connect to the MQ server and send publication messages. We recommend that each publisher should use MQ APIs to connect to MQ server and send the publication messages
- Publication message structure and format is considered to be the responsibility of the publisher
- It is recommended to limit the size of the publication message by using paging techniques or by sending the needed information only without extra data
- The solution will enable the system administrator to control manual subscriptions
- The administrator will create a subscription for each subscriber per topic of interest
- The solution will provide a dedicated queue for each subscriber per topic subscription
- The subscriber is responsible to connect to the MQ server hosted in the NITC using MQ
   APIs, and retrieve the publication messages from own queue
- Each subscriber will have access to own queue(s) only



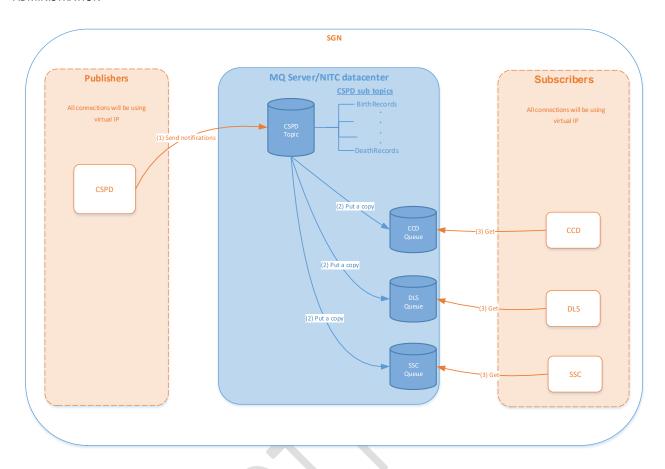


Figure (publish-subscribe Business Case)

#### eFawateerCom:

eFawateerCom solution has the ability to connect different banks and PSPs with different billers and/or financial houses or services providers, and at the same time, the solution integrates with the RTGS and the ACH for settlement.

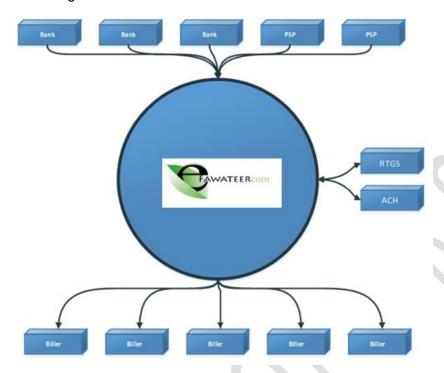


Figure 5.4.6 eFAWATEERcom Switch

# Business Process Operations (BPOs) of eFawateerCom

The following workflow shows the main stages that eFawateerCom consists of:

- Bill Upload
- Bill Presentment
- Bill Payment
- Settlement and Reconciliation

#### Note:

The solution is capable of supporting different types of payments (periodic, one-off, non-existing bill, non-banked customer payments) in addition to handling all payment status cycle (New, Updated, Sent, Completed).

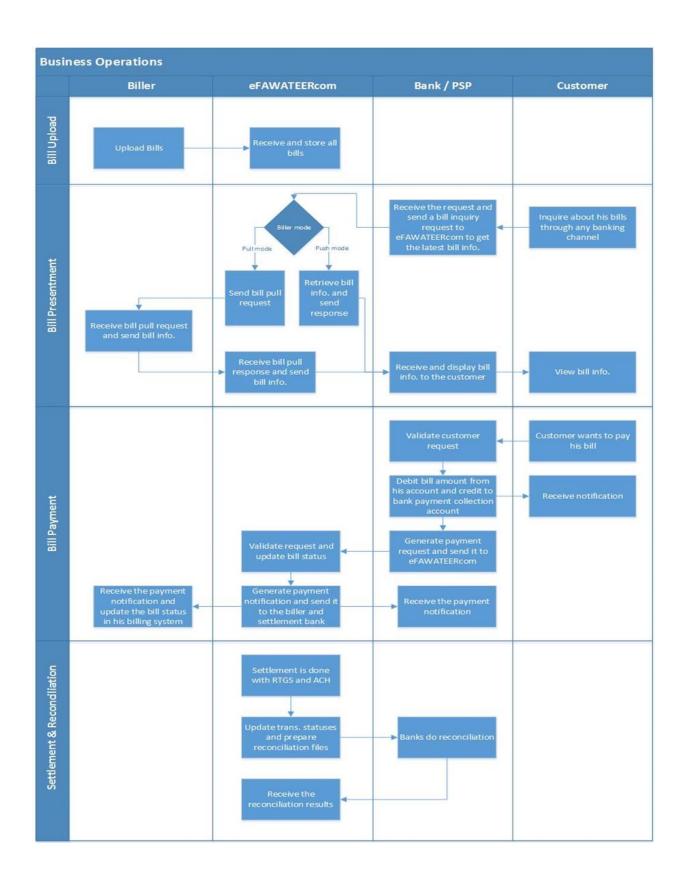
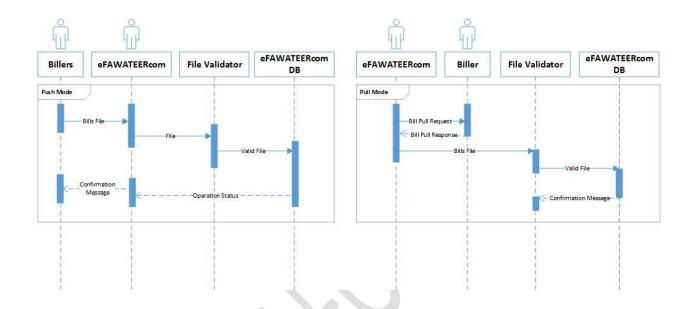


Figure 5.4.7 Business Process Operation

#### Bill Upload



# Figure 5.4.8 Bill Upload Process

The previous workflow describes in general the bill upload process:

- Billers are required to upload bill summary data to eFawateerCom on a regular basis using the Bill Upload Process; this process can be:
- Biller initiated (Push) via web service using XML file structure or file transfer using different formats such as XML, CSV, or any other flat file structure that can be defined as part of the gap analysis.
- eFawateerCom initiated (Pull) via web service using XML file structure and can be performed through eFawateerCom.
  - On receiving the uploaded bills, eFawateerCom performs certain validations on the bills to maintain bills data accuracy. These are:
- Data Validations.
- Business Validations.
  - If the file/batch has errors/inconsistencies, the systems reject the entire file/batch of records and return it to the biller for reprocessing, and it will mention the rejection reason.
  - Each bill on eFawateerCom database carries a code that shows the status of the bill such as BillNew, BillUpdated, or BillExpired.
  - The solution will response to billers after a successful bill upload operation is performed successfully.

# Bill Presentment (Bill Inquiry)

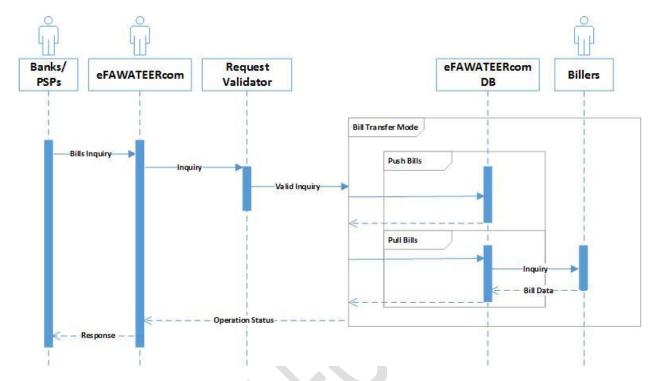


Figure 5.4.9 Bill Presentment

The previous workflow describes in general the bill presentment process:

- Bank applications may query eFawateerCom for bill and associated payment data using a bill inquiry message. The query can take the form of a Bill-Specific (single) Query in which the Bank wishes to view bill data for a specific account or bill number. Conversely, a Customer Profile query permits the Bank to query on any Customer associated bills (multiple) within the eFawateerCom system using a variety of parameters.
- The bill inquiry request contains a set of information that entered by the customer such as 'Bill No.' plus a set of information that are provided from the bank application such as [Biller Code, Billing No.].
- eFawateerCom verifies all the business rules (active, inactive, etc....)
   to be validated for each request, and based on the verification result,
   it either accepts or rejects the request.
- The response of bill inquiry may contain one or more records based on the criteria used in the guery and might return zero results as well.
- All transactions occur across a wide range of channels such as Bank ATM, Internet Banking, Bank Teller, Call Center and Point of Sale.

#### Bill Payment

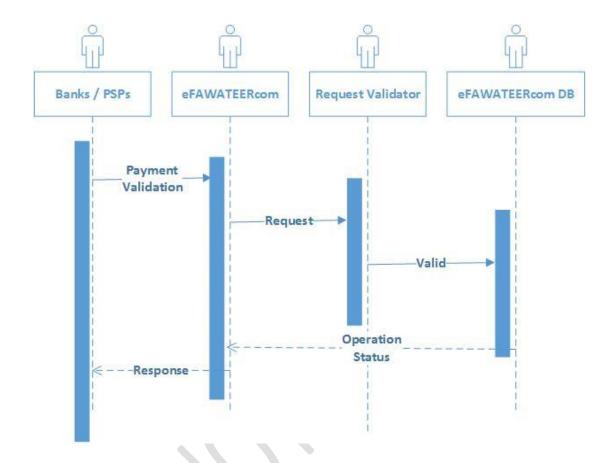


Figure 5.4.10 Bill Payment Sequence

The previous workflow describes in general the bill payment process:

- The Payment process permits Banks to create new payment records in eFawateerCom. The process is intended to ensure the customer pays according to Biller intent, and it involves a validation of Biller's payment rules.
- If the funds are not sufficient, the bank shouldn't send a bill payment request for eFawateerCom.
- A payment collection account will be set-up in each Settlement Bank.
- Banks must record data about all payments in storage termed as eFawateerCom Payment Log.
- All transactions occur across a wide range of channels such as Bank ATM, Internet Banking, Bank Teller, Call Center, and Point of Sale.

#### Settlement & Reconciliation

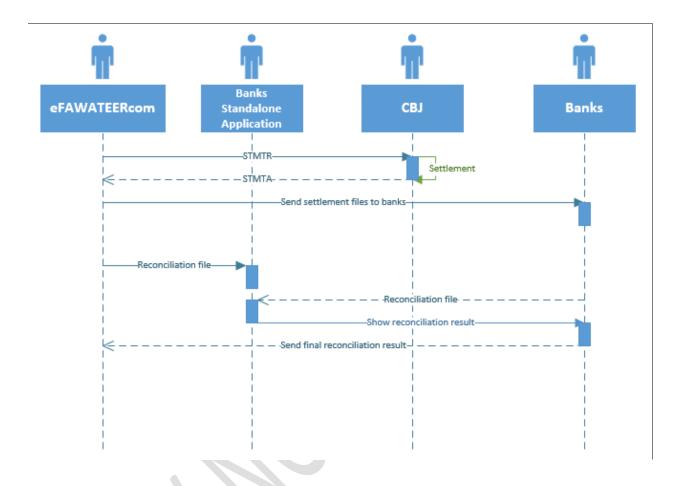


Figure 5.4.11 Settlement & Reconciliation Process

The previous workflow describes in general the settlement and reconciliation process:

- eFawateerCom sends a settlement file to RTGS (STMTR) that includes all payments details in totals.
- CBJ "RTGS" will process the STMTR file and sends the response (STMTA) to eFawateerCom system.
- Same operation is repeated for the purpose of the fees totals, meaning that settlement with RTGS will happen for the payments and the fees separately.
- eFawateerCom sends two settlement files to the Banks/PSPs including the net total payments and total fees in CSV format, where each file will contain one row for the total payments and in the other file one row for the total fees.

- eFawateerCom will allow paying banks to reconcile their payment transactions using the standalone application (Which is a website that is used for reconciliation purposes) where each bank is supposed to upload its data and match with eFawateerCom data.
- As for settlement banks, and for any unmatched payment transaction (After receiving settlement payment and fees notifications from RTGS end of that particular day), they can use the standalone application for investigating their transactions statuses.
- Paying banks can send their reconciliation results to eFawateerCom, where the result file will be placed automatically on the bank inward FTP directory where eFawateerCom support team will investigate unmatched payments.

More details will be given upon award.

# **E-Government PUSH SMS API Connectivity**

#### 1. Send SMS API:

http://bulksms.arabiacell.net/vas/http/send\_sms\_http?login\_name=login&login\_pass word=password&msg=messageText&mobile\_number=9627XXXXXXXXX&from=senderl D&tag=X&delivery\_date=XXXX-XX-

XXXX:XX&charset=XXXXXXX&unicode=X&dlr=X&dlr-url= http://xyz.com/get\_status.php?msg\_id=XXXXXX&status=%d

# - Parameters:

Parameter Name	Description
mobile_number	Mobile number of the user. Mobile number should be in the
(Mandatory)	international format, example 962790000000
msg (Mandatory)	SMS text.
delivery_date (Optional)	Message sending date, the date should be with format (yyyy-mm-dd hh:mm).
login_name	Login name used to access your account over the SMS PUSH
(Mandatory)	Interface.
login_password	Password used to access your account over the SMS PUSH
(Mandatory)	Interface.
from (Mandatory)	Sender ID or name already reserved and defined over the SMS PUSH Interface.
tag (optional)	Message Type :
	معاملة حالة عن اعلام . 1
	وارشادية توعوية .2
	ترويجية .3
	داخلي اتصال .4

Charset (Optional)	Message characters-set, (windows-1256 or UTF-8).
Unicode (Optional)	1 for Arabic Message. 0 for English Message.
	Request delivery report on the sent messages,
dlr (Optional)	1. Delivered messages.
dii (Optional)	2. Undelivered messages.
	3. All messages delivery statuses (Delivered and Undelivered).
	URL to be fetched if the dlr parameter is present. eGov PUSH
dlr-url (Optional)	SMS Sender will replace parameter '%d' in the provided URL with
dir-dir (Optional)	1 for delivery success or 2 for delivery failure, URL must be
	encoded, and length should not exceed 100 chars.

#### - API Responses:

In case of success message submitting to the eGov PUSH SMS Sender, the below are the possible return messages:

- I01-Job (Job ID) queued for processing. (For messages with message date equal to the current date and time)
- I02-Job (Job ID) has been scheduled. (For messages with message date greater than the current date and time)

And below are listing of possible errors could be returned by the system.

#### - Errors:

- E01-Invalid USERNAME or PASSWORD.
- E02-Account Expired.
- E03-Account Inactive.
- E04-Empty SMS message.
- E05-Invalid mobile number.
- E06-SMS balance already expired.
- E07-SMS balance already consumed.
- E08-Database error.
- E09-One of the following parameters missing, USERNAME, PASSWORD, MESSAGE TEXT OR MOBILE NUMBER.
- E010-Invalid delivery date.
- E011-Date and time for scheduled messages should be greater than the current date and time.
- E012-You cannot schedule SMS job(s) after SMS expiry date.
- E013-You cannot schedule SMS job(s) after account expiry date
- E014-Not allowed to send SMS through HTTP interface.
- E015-SMS message exceeded the max size for the selected language.
- E016-Invalid sender ID, sender ID must be in English chars and less than or equal 11 in length, space and special characters not allowed.
- E-022- dlr values should be 1, 2 or 3 only.
- E-021- dlr-url length exceeded 100 chars.

#### 2. View Account details and Scheduled Messages API:

http://bulksms.arabiacell.net/vas/http/sch\_tasks\_http?login\_name=login&login\_pass word=password&action=n

#### - Parameters:

Parameter Name	Description
login_name (Mandatory)	login name used to access your account over the SMS PUSH Interface.
login_password (Mandatory)	Password used to access your account over the SMS PUSH Interface.
Action (Mandatory)	0 : to list all the scheduled messages. 1 : return user credit details (SMS balance), SMS expiry date, Sub-account expiry date and allowed Sender IDs (Comma separated)

## - API Responses:

In case of success request, the returned values will be one of the responses mentioned in the description column for parameter (Action). And below are listing of possible errors could be returned by the system.

#### - Errors:

- E01-One of the following parameters missing, USERNAME, PASSWORD or ACTION.
- E02-Invalid USERNAME or PASSWORD.
- E03-no schedule tasks.
- E04-Sorry, Account Inactive.
- E05-Sorry, Account Expired.
- E06-Error, Invalid action number.

#### 5.5. National e-Government Contact Centre Required Information

The offered e-service solution should provide contact center agents users with enough privileges and access to Information for them to perform their required role.

In addition to the above the winning bidder is required to deliver the following for contact center use:

#### Documentation and training on the following:

- Objectives and benefits of the E-Service (before /after description)
- o Benefits of the E-Service
- Target population
- o Provide support for the E-Service application How to use it
- Provide information about the status When will the end user see the result
- o Provide technical support in case of problems
- Or execute the whole transaction on behalf of the customer?

#### E-Service frequently asked questions

- Technical
- Business (informational)

Furthermore, a number of categories of queries / contact reasons and contact drivers are anticipated:

- Difference between e-Service and physical, traditional service
- How to use
- Payment
- Fulfillment (the paperwork)
- Status information
- Technical support
- Complaints

The winning bidder is required to review the above contact reasons and add to them if necessary. In addition to contact reasons types definition, the winning bidder to provide all related information to the anticipated questions. (Answer to the questions illustrated in the matrix below)

#### Question & Answer Matrix - Illustrative

Moment:	Pre-use	During use	Post use
Category:			

Difference between E- Service and traditional service How to use	"What are the benefits, compared to going to the relevant government entities?"  "How long will it take to complete the process? I use dial-up	"I have completed this process now, should I not go somewhere to pick up the paperwork?"  "I have filled in this information on that screen, what do I do	"I used to receive notification via letter, is the e-mail I just received replacing the letter?"
	Internet access and do not want to spend a fortune of phone costs" "What kind of information do I need to have in order to complete the process?"	next?"	
Status information		"I have completed the E- Service process, when will I receive confirmation that it went OK?"	"I received confirmation last week that the process was completed. Can you see where my request is?"
Payment	"I do not trust your online payment; can I make the payment separately?"		"Can you please confirm that you received my payment?"
Fulfillment	"If I submit the request tomorrow, when will I receive the output?"		"It has been 2 weeks since I was supposed to receive my paperwork. Why haven't I received it already?"
Technical support	"What are the minimum systems requirements?" "I cannot access the application, is the website down?"	"I think my browser's pop-up blocker is interfering with the application, is that correct?" "The application crashed while I was entering my information, is everything lost?"	
Complaints	"I do not have Internet access and cannot use the E-Service, this is discrimination"	"I am having problems completing the transaction and the person trying to help me was very rude"	"I have completed the transaction but did not receive the paperwork and was charged for it, this is scandalous"

The winning bidder should make the following information ready to the contact center team to learn about:

- The Service
- The issues related to the current processes
- The changes and improvements made with the E-Service
- The processes surrounding the E-Service
- o The remaining issues that people have to deal with around the E-Service
- o The impact on the Civil Servants population
- o identify the as-is situation in the relevant government entities, as well as the expected changes due to the introduction of E-Service
- Activities that the contact center could / need to "piggyback" in order to complete the whole process.

#### 5.6. Technical Proposal Response Format

#### Introduction

#### **Executive Summary**

This includes the bidder's understanding of the terms of reference, scope of work and necessary skills, and company profile. This involves including an overview of the main points contained in the proposal with references to sections where more detailed discussion of each point can be found (maximum 4 pages).

## Approach

A detailed description of how the bidder will undertake each major area in the SCOPE OF THE PROJECT and DELIVERABLES section, required resources (bidder, ministry and third party) and any special skills required, the deliverables (format and structure), use of any methodology and how it will cover the scope, use of any standard tools, and duration of any work streams.

#### [Activity 1]

#### Implementation Approach

Actions	Approach
Provides a listing of the actions needed for the Activity	Describes the bidder's approach for implementing the action; including  Process (i.e. steps) Standard methodologies adopted Scope of involvement for each stakeholders

### **Deliverables**

Deliverables	Format and Structure
Provides a listing of the deliverables of the Activity	Describes the format (e.g. MS Word document) and Structure (e.g. Outline, indicating the scope and content) of each deliverable.

## [Activity 2]

## Implementation Approach

Actions	Approach
Provides a listing of the actions needed for the Activity	Describes the bidder's approach for implementing the action; including  Process (i.e. steps)  Standard methodologies adopted  Scope of involvement for each stakeholders

## Deliverables

Deliverables	Format and Structure
Provides a listing of the deliverables of the Activity	Describes the format (e.g. MS Word document) and Structure (e.g. Outline, indicating the scope and content) of each deliverable.

## [Activity...]

## Implementation Approach

Actions	Approach
Provides a listing of the actions needed for the Activity	Describes the bidder's approach for implementing the action; including  Process (i.e. steps)  Standard methodologies adopted  Scope of involvement for each stakeholders

## Deliverables

Deliverables	Format and Structure
Provides a listing of the deliverables of the Activity	Describes the format (e.g. MS Word document) and Structure (e.g. Outline, indicating the scope and content) of each deliverable.

#### Work Plan and Duration

The work plan and duration for the overall consulting work, including any dependencies between the separate items in the scope. The bidder should provide milestones for each deliverable. The work plan should break down the phases and tasks within each phase and indicate which resources will be working on these tasks

#### Track Record

The bidder's track record on projects similar in both size and nature undertaken in the last five years, and references of suitable client references with contact details

## CVs of Project Staff

A summary of proposed team and a description of each project staff role and their relevant experience. Brief resumes of the team who will work on the project (all detailed resumes should be included in an Appendix). The bidder should also indicate the availability of the proposed staff and indicate which phases of the project each team member is participating in, what role they will be playing, and what their utilization rate will be (percentage of their time), below is the required template to be filled for each team member

<u>Curriculu</u>	ım Vitae	
Proposed Position on the Project:		
Name of Firm:		
Name of Personnel:		
Profession/Position:		
Date of Birth		
Years with the Company:	Nationality:	
Proposed Duration on Site:		
Key Qualifications and Relevant Experience		

<del></del>
Expected Role in MOLA Project
Expected Role III MOLA Floject
Education
Employment Record:

(a)	Employment Record	From date — present
	Employer	
	Position held	
(b)	Employment record	
	Employer	
	Position held	
(c)	Employment	
	record	
	Employer	
	Position held	
Langi	uages:	
		Reading Speaking Writing
		Neading Speaking Writing
Langu	iage 1	
Langu	uage n	
Sigi	nature	Date
Langu Langu	uages: uage 1	Reading Speaking Writing  Date

## Other Information

# **Appendices**



#### 5.7. Financial Proposal Response Format

Please indicate the overall estimated cost of your proposed solution.

Cost should be broken down as per the schedules below as well as the detailed scope of work presented in section 3 of this document.

The price quotation should be all-inclusive fixed lump sum price and provided in Jordanian Dinars (JD). All prices are inclusive of all fees, finance rate and taxes. All prices are for site delivery.

Project Total Cost (Lump Sum Contract Amount) for the total compensation for the whole WORK contemplated under this proposal: [ JD]

The bidder is required to finance lump sum cost of the project according to Annex 5.7

Services	Amount
e-Services System Delivery	
Integration points with stakeholders mentioned in section 2.1.2 table 2	
Required e-Services Licensees (if any)	
Information Security	
Change Management, Knowledge Transfer, Training and Customer Journey/Experience	
Operations Support, Maintenance and Warranty (36 months)	
Project Management	
Quality Management	
Total	
Total Amount in Words, (Only	

## Project Detailed Cost:

## 1. e-Service System Delivery:

E-Services System Delivery	Resource	Unit cost (man day cost)	Number of Units (man days)	Total Cost	Comments
[ List all activities associated with system implementation ]	Skill 1			C	
	Skill 2			7/	
	Skill N				
[ List all costs associated with System Performance ]	Skill 1				
	Skill 2				
	Skill N				

[ List all costs associated with System Documentation ]	Skill 1			
	Skill 2			
	Skill N		C	
TOTAL	,	,	P	

Total Amount in Words: (Only -------Jordanian Dinars)

## 2. Integration points with stakeholders mentioned in section 2.1.2 table 2

Integration points with stakeholders	Resource	Unit cost (man day cost)	Number of Units (man days)	Total Cost	Comments
[ List all activities associated with Integration points with stakeholders ]	Skill 1				
	Skill 2				
	Skill N				
TOTAL					

Total Amount in Words: (Only -------Jordanian Dinars)

## 3. Software Licenses (if any)

Software Supplier	Name of Software	License Metrics (i.e. by number of clients, processor power or other	No Licenses	Unit price	Total	One year maintenance (24/7) and upgrade	Total (Including maintenance)
			TOTAL				

(i) Use several lines in the table if	the license complexi	ty warrant	s	

Total Amount in Words: (Only	
Jordanian Dinars)	

# 4. Information Security:

Information Security	Resource	Unit cost (man day cost)	Number of Units (man days)	Total Cost	Comments
[List all activities associated with Information Security]	Skill 1				
	Skill 2				
	Skill 3				
	Skill N				
TOTAL					

Total Amount in Words: (Only -------Jordanian Dinars)

## 5. Knowledge Transfer Training and Customer Journey/Experience

Knowledge Transfer, and Training	Resource	Number of Units (man days)	Total Cost	Comments
[ List all activities associated with Knowledge Transfer, Training and Customer Journey/Experience]	Skill 1			
	Skill 2			
	Skill 3			
	Skill N			
TOTAL				

Total Amount in Words: (Only -------Jordanian Dinars)

# 6. Operation Support, Maintenance and Warranty:

Operations Support	Resource	Number of Units (man days)	Total Cost	Comments
[ List all activities associated with On- site Operation Support]	Skill 1			
	Skill 2			
	Skill n			
[ List all activities associated with Off-site Operation Support]	Skill 1			

	Skill 2		
	Skill n		
TOTAL			

### 7. <u>Project Management:</u>

Project Management	Resource	Number of Units (man days)	Total Cost	Comments
[ List all activities associated with Project Management]	Skill 1	5		
	Skill 2			
	Skill n			
TOTAL				

#### 8. Other Costs (if any)

Note (1): The Itemized Financial Proposal will be examined prior Contract Award in order to ascertain that the items are correctly calculated. The itemized prices are for reference only and the lump sum price shall constitute all costs ...etc. incurred by the bidder for the execution of the project. Should any arithmetical error be found, it will be corrected and the Proposal Value will be amended accordingly. MODEE encourages all bidders to study carefully their prices and to submit their final and lowest prices.

Note (2): The bidder shall also take into account that all the rates quoted in his Price Proposal shall be <u>fixed throughout the Contract</u> duration and that no adjustment to such rates shall be accepted by MODEE, except when otherwise provided for in the Contract.

## 5.8. Joint Venture Agreement Template

## **Standard Form of Joint-venture Agreement**

#### **JOINT-VENTURE AGREEMENT**

اتفاقية ائتلاف

It is agreed on this dayof	م الاتفاق في هذا اليوم الموافق / /
Represented by Mr.	
	ويمثلها السيد
Represented by Mr.	
Represented by wir.	ويمثلها السيد
5	ويمثلها السيد
Represented by Mr.	
	- على تشكيل ائتلاف فيما بينهم لتنفيذ أشغال عقد العطاء رقم ( )
1- To form a Joint Venture to execute the works specified in the Contract of the Central	/ ) المتعلق بـ
Tender No. ( / )which	
was signed or to be signed with the Employer.	2- يلتزم جميع أطراف الانتلاف بإنجاز جميع الاشغال المتفق عليها مع صاحب العمل والمنصوص عليها في عقد العطاء ويكونون متضامنين ومتكافلين في مسئولياتهم نحو صاحب العمل فيما يخص كافة الأشغال المتعلقة بالعطاء رقم ( / ) والعقد الخاص به.
2- All parties of the Joint Venture shall be obliged to perform all works agreed upon with the employer which are specified in the	وفي حالة تخلف أو تأخر أحد أطراف الائتلاف عن إنجاز المسئوليات المناط به تنفيذها جزئياً أو كلياً يلتزم بقية الأطراف مجتمعين و / أو منفردين دون تحفظ بإنجاز جميع الالتزامات المحددة بالعقد الموقع مع صاحب العمل بالشكل المتفق عليه في العقد.
tender contract, and they are jointly and severally responsible for all works related to tender no. ( / ) and the contract pertaining thereto. Should one party fails or	
delays to perform its obligations either partially or totally, it shall be the	3- يعين أطراف الانتلاف رئيساً
responsibility of all other parties jointly and	للائتلاف،
severally without reservation to execute all obligations set under the contract with the	) ، واي مراسيرت لنم بين صلحب العمل والانتراث التجمع الو المشاركة توجه إليه
Employer to the same standards specified by the contract .	4- يسمي أطراف الانتلاف السيد
3- The parties to the Joint Venture nominate as leader of the	الخاصة بالعطاء رقم ( / ) وبتمثيل الائتلاف أمام المحاكم المختصة والدوائر الرسمية وغير الرسمية في كافة الأمور العقدية
as leauel 01 the	

Joint Venture. Any correspondence between the Employer and the parties to the Joint Venture shall be addressed to such leader.

- 5- The parties to the Joint Venture have no right to terminate this agreement or substitute the leader's representative until the works awarded to them by the contract to this tender are completed and shall remain responsible before the employer until the works are finally taken over as per the conditions of taking over specified in the Tender / Contract documents.
- 6- This agreement is written in both Languages Arabic and English should any discrepancy in interpretation arise the Arabic text shall be considered the authentic.

والإدارية والمالية والقضائية المتعلقة بالعطاء رقم ( / ) والعقد الخاص به .

5- لا يحق لأطراف الانتلاف أو أي طرف فيه فسخ الائتلاف فيما بينهم أو تبديل ممثل رئيس الائتلاف إلا بعد انتهاء الأشغال المحالة عليهم بموجب العقد الخاص بهذا العطاء وتكون مسئولياتهم تجاه صاحب العمل قائمه إلى حين تسليم الأشغال استلاماً نهائيا حسب شروط الاستلام المحددة في وثائق العقد / العطاء

6- حررت هذه الاتفاقية باللغتين العربية والإنجليزية في حالة نشوء أي اختلاف في تفسير أي من بنودها تعتبر لغة العقد المعتمدة هي اللغة العربية وملزمة للطرفين

الطرف الثالث	الطرف الثاني	المطرف الأول	
Third Party	Second Party	First Party	
			توقيع الشخص المخول بالتوقيع قاله ندًا

		Signature of the Authorized Personnel
		الخاتم المعتمد
	 	Seal
Notary Public Certification		تصديق كاتب العدل

## 5.9. Confidentiality Undertaken

#### **Confidentiality Undertaking**

This Undertaking is made on [DATE] by [NAME] "[Consultant]" to the benefit of MOLA, "[Principal]" [Entity Address].

**WHEREAS**, MOLA possesses certain financial, technical, administrative and other valuable Information (referred to hereinafter as Confidential Information)

**WHEREAS**, [Consultant], while performing certain tasks required by the Principal in connection with the .................... (The Project), did access such Confidential Information,

**WHEREAS**, the Principal considers the Confidential Information to be confidential and proprietary.

#### **Confidential Information:**

As used in this Agreement, the term "Confidential Information" means all information, transmitted by Principal or any of its subsidiaries, affiliates, agents, representatives, offices and their respective personnel, consultants and winning bidders, that is disclosed to the Winning bidder or coming to his knowledge in the course of evaluating and/or implementing the Project and shall include all information in any form whether oral, electronic, written, type written or printed form. Confidential Information shall mean information not generally known outside the Principal, it does not include information that is now in or hereafter enters the public domain without a breach of this Agreement or information or information known to Winning bidder by Third Party who did not acquire this information from Principal".

The Consultant hereby acknowledges and agrees that;

(1) The Confidential Information will be retained in the Principal's premises and will not be moved without the express written consent of the Principal. All Confidential Information shall be and remain the property of the Principal, and such Confidential Information and any copies thereof, as well as any summaries thereof, shall be promptly returned to the Principal upon written request and/or destroyed at the Principal's option without retaining any copies. The Winning bidder shall not use the Confidential Information for any purpose after the Project.

- (2) It will use all reasonable means and effort, not less than that used to protect its own proprietary information, to safeguard the Confidential Information.
- (3) the Winning bidder shall protect Confidential Information from unauthorized use, publication or disclosure.
- (4) It will not, directly or indirectly, show or otherwise disclose, publish, communicate, discuss, announce, make available the contents of the Confidential Information or any part thereof to any other person or entity except as authorized in writing by the Principal.
- (5) It will make no copies or reproduce the Confidential Information, except after the Principal's written consent.

#### Remedy and damages:

The Winning bidder acknowledges that monetary damages for unauthorized disclosure may not be less than 20% of the Project and that Principal shall be entitled, in addition to monetary damages and without waiving any other rights or remedies, to such injunctive or equitable relief as may be deemed proper by a court of competent jurisdiction.

### **Employee Access and Control of Information**

It is understood that the Winning bidder might need from time to time to discuss the details of confidential Information with other individuals employed within its own or associated companies in order to support, evaluate, and/or advance the interests of the subject business transaction. Any such discussion will be kept to a minimum, and the details disclosed only on a need to know basis. Prior to any such discussion, the Winning bidder shall inform each such individual of the proprietary and confidential nature of the Confidential Information and of the Winning bidder's obligations under this Agreement. Each such individual shall also be informed that by accepting such access, he thereby agrees to be bound by the provisions of this Agreement. Furthermore, by allowing any such access, the Winning bidder agrees to be and remain jointly and severally liable for any disclosure by any such individual that is not in accordance with this Agreement.

#### Miscellaneous

The obligations and rights of the Parties shall be binding on and inure to the benefit of their respective heirs, successors, assigns, and affiliates. This Agreement may be amended or modified only by a subsequent agreement in writing signed by both parties. Winning bidder may not transfer or assign the Agreement or part thereof. No provision of this Agreement shall be deemed to have been waived by any act or acquiescence on the part of the Principal, its agents or employees, nor shall any waiver of any provision of this Agreement constitute a waiver of any other provision(s) or of the same provision on another occasion. This Agreement shall be construed and enforced according to Jordanian Law. The Winning bidder hereby agrees to the jurisdiction of the Courts of Amman, Jordan and to the jurisdiction of any courts where the Principal deems it appropriate or necessary to enforce its rights under this Agreement.

## **Term of Agreement**

The obligations of the parties under this Agreement shall continue and survive the completion of the Project and shall remain binding even if any or all of the parties abandon their efforts to undertake or continue the Project.

IN WITNESS WHEREOF, the Winning bidder hereto has executed this Agreement on the date first written above.

Consultant:	
Ву:	
Authorized Officer	

## 5.10. Key RFPs Dates & Deadlines

ITEM	DATE (DD/MM/YY)
Date of RFP distribution	20-27/10/2020
Deadline for submission of bidders' questions to RFP	29/10/2020
Expected date for answers to bidders' questions	4/10/2020
Proposal deadline	12/10/2020

### 5.11. Support Procedures & Policies

#### **Severity Levels:**

## Severity One (Urgent)

A severity one (1) issue is a catastrophic production problem which may severely impact the Required Service\Solution Availability, In such case, part or all Required Service\Solution production components are down or not functioning; loss of production data and no procedural work around exists.

Examples of Severity one cases: DB becoming corrupted or inaccessible.

#### Severity Two (High)

A severity two (2) issue is a problem where the Required Service\Solution is functioning but in a severely reduced capacity. The situation is causing significant impact to portions of business operations and productivity of Required Service\Solution. The system is exposed to potential loss or interruption of service.

Example of Severity two cases: one node of cluster becomes down or unavailable, inability to update DB by entities representatives or solution administrators, or inability to synchronize data between DB nodes.

#### Severity Three (Medium)

A severity three (3) issue is a medium-to-low impact problem which involves partial non-critical functionality loss one which impairs some operations but allows the Required Service\Solution users/administrators to continue to function. This may be a minor issue with limited loss or no loss of functionality or impact to the client's operation and issues in which there is an easy circumvention or avoidance by the end user.

#### Severity Four (Low)

Important problem but it can wait no loss of functionality or impact to the client's operation and issues in which there is an easy circumvention or avoidance by the end user.

Table 1: Response, Resolution, times for different severity levels

Severity	Response Time	Resolution Time
1	1 hour	4 hours.
2	3 hours	24 hours
3	4 hours	72 hours
4	8 hours	One Week

<sup>\*</sup> Support is required to be 24x7 basis.

#### Where:

**Response Time**: Time taken to acknowledge receiving of reported incident calculated from the time sending an email explaining the incident, opening a ticket on bidder ticketing system, or conducting a phone call with the assigned support engineer by the bidder or bidder's first line of support.

**Resolution Time**: Time taken to solve the reported incident completely. Resolution Time is calculated from the end of the defined response time for each severity level as shown in the above table.

#### **Escalation Procedures & Penalties**

For incidents classified as Severity Level 1, 2, 3 & 4, if bidder:

- Passed the Response Time: first level of escalation will be applied by notifying bidder's Technical Support Manager or the assigned contact person.
- 2. Passed the Resolution Time: MoLA is entitled to fix the problem and to apply penalty on the winning bidder in accordance with the following criteria in the below table and all costs incurred by MoLA for fixing will be charged to the winning bidder.

**Table 2: Penalties** 

Severity	Definition	Penalty
1	Must be done, essential to	A penalty of 15 J.D. shall be
	business survival. Business can't	applied for each hour pass the
	continue	resolution time. This penalty shall
		continue for the first 24 hours
		(15x24). If delay continues, then
		the penalty of 360 J.D. per day
		shall be applied and for the

		maximum duration of 3 days; after that, 3 <sup>rd</sup> party will be called to fix the problem.
2	Should be done, near essential to business survival.	A penalty of 360 J.D. shall be applied for each day pass the resolution time. This penalty will be applied for the maximum duration of 4 days; after that, 3 <sup>rd</sup> party will be called to fix the problem.
3	Could be done, high benefit to business if time and resources are available.	A penalty of 240 J.D. shall be applied for each day pass the resolution time. This penalty will be applied for the maximum duration of 5 days; after that, 3 <sup>rd</sup> party will be called to fix the problem.
4	Important problem but can wait	A penalty of 120 J.D. shall be applied for each day pass the resolution time. This penalty will be applied for the maximum duration of 10 days; after that, 3 <sup>rd</sup> party will be called to fix the problem.

# 5.12. Sample Arabic Contract Agreement (Attached)

<Sample contract in Arabic attached>

## 5.13. Customer Journey/Experience

It is envisaged that the design of standard **customer experience** '**component**' would be of great help to the MoDEE and MOLA, who may be in the process of developing new e-Government services to ensure **consistency** among e-Government services and provide a focus for **customer experience**.

## 1- المتطلبات الفنية (Technical Requirements):

الرقم	المعيار
1.1 شمولية	رامج تصفح الانترنت ( Browser Compatibility )
1.1.1	الخدمة الإلكترونية تعمل بكفاءة على برنامج تصفح الانترنت المدعوم "Google Chrome"
1.1.2	الخدمة الإلكترونية تعمل بكفاءة على برنامج تصفح الانترنت المدعوم "Mozilla Firefox"
1.1.3	الخدمة الإلكترونية تعمل بكفاءة على برنامج تصفح الانترنت المدعوم "Microsoft Edge"
	لإستجابة و الاستخدامات المتعددة ( Responsiveness and Capability Cross-Platform ) المواستعدامات الإلكترونية عن طريق كافة الوسائط الالكترونية
1.2.1	الإستجابة على الكمبيوتر/اللابتوب: • توافق وظهور الأقسام و الحقول و الأزرار بشكل كامل و مرتب واستخدامها بسهولة، للإتجاهين العمودي و الأفقي. ظهورها على جميع أنواع و أحجام الأجهزة المدعومة.
1.2.2	الإستجابة على الأجهزة اللوحية  • توافق وظهور الأقسام و الحقول و الأزرار بشكل كامل و مرتب واستخدامها بسهولة، للإتجاهين العمودي و الأفقي.  • ظهورها على أنواع و أحجام الأجهزة المدعومة المختلفة.
1.2.3	الإستجابة على أجهزة الموبايل      توافق وظهور الأقسام و الحقول و الأزرار بشكل كامل و مرتب واستخدامها بسهولة، للإتجاهين العمودي و الأفقي.      ظهور ها على أنواع و أحجام الأجهزة المدعومة المختلفة.
1.3 ربط و تك	امل الأنظمة ( System Integration )
1.3.1	الخدمة الإلكترونية مربوطة مع جميع الانظمة ذات العلاقة الضرورية لعمل الخدمة أو لتسهيل استخدام الخدمة مثل ( CRM, Billing, ) الخدمة الإحتفاظ بسجل حول كافة الإجراءات التي تتم عبر هذه الأنظمة (payments Gateway, CSPD) ويتعين على مزود الخدمة الاحتفاظ بسجل حول كافة الإجراءات التي تتم عبر هذه الأنظمة (يتم تحديد بند خاص لكل تكامل مع جهة معينة حسب نطاق عمل كل خدمة مثال البنود أدناه):
1.3.1.1	التكامل مع الأحوال المدنية (CSPD)

التكامل مع بوابة الدفع الالكتروني اي فواتيركم (payments Gateway)	1.3.1.2
التكامل مع (CRM)	1.3.1.3
الهاتف النقال ( Mobile App ) في حال توفر تطبيق للهاتف	1.4 تطبيقات
قابلية الإستخدام بسهولة ووضوح على نظام التشغيل: Android	1.4.1
قابلية الإستخدام بسهولة ووضوح على نظام التشغيل : IOS	1.4.2
زم للتحميل ( Load Time )	1.5 الوقت الملا
وقت التحميل الخاص بالصفحات ووقت التنقل بين الصفحة الرئيسية مع الصفحات المرتبطة بها يجب ان يكون خلال 4 ثواني كحد أقصى، مع التأكد من استخدام تطبيقات وبرامج متخصصة باختبار سرعة التحميل.	1.5.1

# 2- االخصائص و المميزات (Features):

المعيار	الرقم
( Bi-Lingual )	2.1 متعددة
الخدمة الإلكترونية متوفرة باللغة العربية بشكل صحيح من حيث الصياغة و الوظائف وضمان توحيد نوع الخط.	2.1.1
الحدمة الإلكترونية متوفرة باللغة الإنجليزية بشكل صحيح من حيث الصياغة و الوظائف وضمان توحيد نوع الخط ( اذا لم يكن خيار اللغة الانجليزية موجوداً بنطاق عمل المشروع، يجب أن لا يكون الخيار متوفراً على أي من الشاشات الخاصة بالخدمة).	2.1.2
محرك البحث (Search Engine) الخدمات الالكترونية تحتوي على محرك بحث يمكنه البحث والتحقق من الكلمات الرئيسية و الخيارات المتعددة عند الحاجة إلى ذلك	2.2
ررصد آراء المستخدمين (Rating and feedback forms)	2.3 التقييم
الخدمة الالكترونية توفر خيار التقييم للمستخدم لقياس مدى رضى مستخدم الخدمة <b>(رضاك يهمنا)</b> حتى يتمكن مستخدم الخدمة من إضافة ملاحظات و أسئلة.	2.3.1
وضع رقم مركز الاتصال الوطني في حال ورود أي استفسارات أو شكاوي 06-5008080 بالربط مع هذه الوظيفة على موقع الحكومة الإلكترونية.	2.3.2
ا <b>لربط مع حسابات مواقع التواصل الاجتماعي</b> يتم تزويد روابط فعالة لكافة قنوات التواصل الاجتماعي لل (المؤسسة الحكومية أوالحكومة الالكترونية) بالربط مع هذه الوظيفة على موقع الحكومة الإلكترونية	2.4
رسالة التاكيد اللحظي على الشاشة (On-Screen Message Confirmation) يتم عرض رسالة توضح إما إتمام العملية أو عدمه على الشاشة لكل إجراء يقوم به مستخدم الخدمة لتبليغ المستخدم نتيجة الإجراء الذي قام به و الخطوات القادمة المطلوبة من المستخدم	2.5

الصفحة الرئيسية (Home Page) سهولة التنقل بين الصفحات من خلال زر "رجوع" و زر "التالي" وتوفر أيقونة الصفحة الرئيسية على كافة الصفحات حتى تساعد مستخدم الخدمة على التنقل بسهولة

2.6

# 3- المصادقة و التحقق ( Validation, Verification ):

المعيار	
فحص الوظائف (Functionalities) كافة وظائف الخدمة تم فحصها بشكل كامل وتعمل بنجاح (بناء على نتائج فحص الجودة).	3.1
فحص الروابط (URLs -Links) كافة الروابط تعمل و يتم تحميلها بنجاح.	3.2
مجموعة تجربة المستخدم: (من ضمن مدخلات وزارة الريادة والاقتصاد الرقمي للتأكد من صحته وإرسال دليل) تم عقد جلسة لتجربة المستخدم (5-10 شخص من مختلف الفئات) لتقييم تقبل مستخدم الخدمة للخدمة.	3.3

# 4- دليل المستخدم ( User Manual ):

المعيار	الرقم
دليل المستخدم (User Manual)	
<ul> <li>توفير دليل مستخدم واضح وبدون اخطاء املائية يتضمن خطوات استخدام الخدمة، و يجب أن يتضمن الدليل الكتابي على صور عملية تشرح كيفية استخدام الخدمة الإلكترونية لمساعدة المستخدم أثناء استخدامه للخدمة</li> <li>توفير فيديو تعليمي يوضح خطوات الاستخدام</li> </ul>	4.1

# 5- معلومات مستخدم الخدمة (Information Customer):

المعيار	الرقم
فحص امكانية الدخول إسم المستخدم/ كلمة المرور الخدمة الإلكترونية تطبق الدخول الموحد من بوابة الحكومة الالكترونية باستخدام الرقم الوطني/ كلمة المرور (IDM sign in)	5.1

# 6- هندسة/ هيكلة المعلومات (Architecture Information):

المعيار	الرقم
الخطو الالوان (Fonts & color Schemes) محتوى الخدمة الإلكترونية موحد من ناحية الخط (النوع) والألوان مع محتوى الموقع الالكتروني للمؤسسة او موقع بوابة الحكومة الالكترونية ضمن معايير المواقع الالكترونية للمؤسسات الحكومية للتمكن من اعطاء تناسق الشكل و المظهر لكافة خدمات الالكترونية.	6.1
الملكية (Ownership) الملكية المؤسسة الخاصة بها ، و أنها جزء من خدمات الحكومة الإلكترونية من خلال إضافة الشعارات المشتركة و ذلك على مستوى كافة الخدمات.	6.2
هيكلة الصفحات (Information Structure) ترتيب المعلومات (روابط، القوائم المنسدلة، القوائم) بطريقة تمكن مستخدم الخدمة الوصول للمعلومات المطلوبة من خلال 5 نقرات كحد أقصى.	6.3
التلميحات و رسائل الخطأ (Tooltips and Error messages) ظهور التلميحات و رسائل الخطأ بالوقت الصحيح و بصيغة تمكن مستخدم الخدمة من معرفة ما هو مطلوب فوراً.	6.4
الصور و الباترز (Images and Banners) استخدام صور وشعارات وبانرز ذات درجة وضوح عالية في أي خدمة إلكترونية.	6.5

# 7- سهولة الإستخدام (Usability-UX/UI):

المعيار	المرقم
كفاءة الاستخدام: سهولة استخدام الخدمة بدون وجود معيقات لإتمام الخدمة.	7.1
التصميم العام للخدمة واضح و مفهوم للمستخدم و يسهّل تعلم استخدامها و التجول فيها و مناسب للمستخدم المستهدف.	7.2
تواجد الوظائف الأساسية في أماكن متوقعة و سهل الوصول إليها، مع توضيحات كافية بخصوص الخدمة أو الوظيفة.	7.3
وضوح تسمية المصطلحات المستخدمة في الخدمة بما يتناسب مع وظائفها.	7.4

# 8- التواصل مع متلقي الخدمة (Emails & SMS):

المعيار	الرقم
الرسائل النصية (SMS)    صياغة النص صحيحة لغوية باللغة المناسبة و معبرة و احترافية.   مرسل الرسالة تبعيته واضحة للجهة الرسمية الحكومية المعنية   النص يحتوي على المعلومات الهامة لمتابعة الطلب ( مثلاً رقم الطلب، او حالته، او روابط محددة للدخول لهاالخ حسب طبيعة الخدمة).   في حال كانت تحتوي على رمز تفعيل يجب توضيح مدة صلاحيته والاحتفاظ بها حسب الحاجة	8.1
البريد الإلكتروني (Emails)      صياغة النص صحيحة لغوية باللغة المناسبة و معبرة و احترافية.     مرسل الرسالة تبعيته واضحة للجهة الرسمية الحكومية المعنية     النص يحتوي على المعلومات الهامة لمتابعة الطلب ( مثلاً رقم الطلب، او حالته، او روابط محددة للدخول لهاالخ حسب طبيعة الخدمة).     في حال كانت تحتوي على رمز نفعيل يجب توضيح مدة صلاحيته و الاحتفاظ بها حسب الحاجة وجود شعار الجهة الرسمية الحكومية و ان الإيميل تابع للخدمات الإلكترونية.     حملة ترحيبية بمتلقي الخدمة، مع مراعاة جنسه (مثلاً: السيد/ة).     إتجاه النص سليم وفقا للغة المناسبة.     عدم استخدام ألوان تحذيرية كالأحمر     عدم استخدام أنواع خطوط غير متداولة أو غير واضحة،     عدم استخدام التاثيرات إلا عند الحاجة فقط (مثلاً الخط Bold).     وجود معلومات التواصل ليستخدمها متلقي الخدمة في في حال كان لديه استفسار او واجه مشكلة.	8.2

		Full Compliance	Partial Compliance	Non-Compliant	Comments
Technical Requirements	Cross-Platform Capability	X			
	Mobile App	X			
	Browser Compatibility	X	80%		
	Systems Integration				
	Alerts	X			
	Content Management System	X			
	Load Time			X	can't gurantee
Features	Bi-Lingual Bi-Lingual	x			
	Search Engine	X			
	Live Chat	X			
	Feedback Form	X			
	Links to e-Government Social Media Accounts	X			
	Frequently Asked Questions	X			
	Rating Section	X			
	Site Map	X			
	On-Screen Message Confirmation		50%		
	Panels		20%		Maximum of 3 new panels
Logs/Reports	No. of users/hits	X			·
•	Transaction Logs			X	
	Incidents Report		70%		Only critical incidents
	SLAs		30%		24 hour response for all incidents
Validation, Verification and Testing	Test Plan	X			·
	Functional Tests	X			
	Integration Tests	X			
	Links Tests	X			
	Focus Group			Х	Never done that before
Training	Training Manaual	X			
	Client Training		40%		Will train up to 4 people
Customer Infromation	Userid/password complexity tests	X			
	Forgotten Userid/password	x			
	Re-activation of userid/password	x			
	Confidentiality/Security			Х	
Infromation Architecture	Fonts & color schemes	X			
	Ownership	x			
	Information Structure			Х	
	1	1			

# 5.14. MOLA Regions and Municipalities

اسم البلدية	المحافظة	الرقم
اربد الكبرى		1
الرمثا الجديدة		2
السرو		3
الشعلة		4
الطيبة الجديدة	إربد	5
الكفار ات		6
المزار الجديدة		7
الوسطية		8
اليرموك الجديدة		9

برقش		10
خالد بن الوليد		11
دير أبي سعيد الجديدة		12
رابية الكورة		13
سهل حوران		14
شرحبیل بن حسنة		15
طبقة فحل		16
غرب اربد		17
معاذ بن جبل		18
الأمير الحسين بن عبد الله		19
الباسلية		20
الخالدية		21
الرويشد الجديدة		22
الصفاوي		23
السرحان		24
الصالحية ونايفة		25
الزعتري والمنشية		26
المفرق الكبرى	المفرق	27
أم الجمال الجديدة	المحدري	28
أم القطين والمكيفته		29
بلعما الجديدة		30
بني هاشم		31
حوشا الجديدة		32
دير الكهف الجديدة		33

رحاب الجديدة		34
صبحا والدفيانة		35
منشية بني حسن		36
الجنيد		37
الشفا	عجلون	38
العيون		39
عجلون الكبرى		40
كفرنجة الجديدة	]	41
المعراض		42
النسيم	<del>ج</del> ـرش	43
باب عمان		44
برما		45
جرش الكبرى		46
الجيزة		47
العامرية		48
أم البساتين	العاصمة	49
أم الرصاص الجديدة	العاصمه	50
حسبان		51
سحاب		52
الموقر		53
ناعور		54

الأزرق		55
الحلابات		56
الرصيفة	-	57
الزرقاء	-	58
الظليل	الزرقاء	59
الهاشمية الجديدة		60
بيرين الجديدة	-	61
السلط الكبرى		62
الشونة الوسطى	-	63
العارضة الجديدة	1 · t ti	64
الفحيص	البلقاء	65
دير علا الجديدة		66
سويمة		67
عين الباشا	]	68
ماحص		69
معدي الجديدة		70
جبل بني حميدة		71
ذيبان الجديدة	مادبا	72
لب ومليح		73

مادبا الكبرى		74
الأغوار الجنوبية	الـكـرك	75
الحزمان (عي)		76
السلطاني		77
القطرانة		78
الكرك الكبرى		79
شیحان		80
طلال الجديدة		81
عبد الله بن رواحة		82
مؤاب الجديدة		83
مؤتة والمزار		84
الحارث بن عمير (بصيرا)	الطفيلة	85
الحسا		86
الطفيلة الكبرى		87
القادسية		88
الأشعري	معان	89
الجفر		90
الحسينية الجديدة		91
الشراه		92
الشوبك الجديدة		93
ايل الجديدة		94
معان		95
القويرة الجديدة	العقبة	96
حوض الديسة		97
قريقرة وفينان		98
وادي عربة		99
قطر ورحمة		100

