



Invitation for Expression of Interest for the establishment of a Fintech Innovation Hub and Digital Lab (EOI) - Responses to Queries Received

	Queries Received	Response from the Bank
1	Are the EOI and subsequent RFP/Tender opened to international bidders (or restricted to Mauritian companies)?	The EOI is open to International applicants.
2	To participate to the EOI, are we required to pre-register as a vendor with the Bank? Or is this email sufficient to be considered as a participant to the EOI?	There is no requirement to pre-register as a vendor. Applicants for the EOI should submit the documents specified in the EOI document posted on the Bank's website.
3	Annexure A, section 2(ii): Will the Bank manage these programs and events by itself or through a 3rd party after the deployment of chosen infrastructure and the platform or Does the Bank expect the programs/events listed (a) to (g) to be facilitated and executed like an “innovation program service” by the bidder with capabilities of the chosen cloud infrastructure and platform?	The shared platform should support these services. The applicant should indicate how the platform can support these programs/events including their involvement in the process.
4	Do we need to include CVs in our expression of interest?	Yes, for key members of the project team.
5	Annexure A, section 1: Please specify hardware capacity sizing/specifications for below platform in the cloud environment: a. A shared platform b. A development platform including an Integrated Development Environment	For shared platform around 50 users. For development platform, 10 distinct users. It should also be possible to increase the number of users should the need arise at a later stage.
6	Annexure A, section 6(i): How many Virtual Machines (VMs) are required for Linux and Windows Machine? Should the Applicant include the license in the Hosting service, or will the Bank provide it?	A minimum of 10 VMs + additional packs of 5 VMS. The applicant should include relevant licenses.

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7	<p>Annexure A, section 6(ii): <i>Virtual Network</i> <i>a. Virtual Firewall</i> <i>b. Virtual Load Balancer</i> <i>c. IP addresses</i> <i>d. Virtual Web Application Firewall (WAF)</i></p> <p>What kind of network connectivity options, such as bandwidth and latency, are required?</p>	<p>For South Africa 40 -60ms latency and for Europe, 100 - 120 ms. Minimum Firewall throughput 1Gbps</p>
8	<p>Annexure A, section 6(iii): <i>Storage</i> <i>a. Storage options: block storage, object storage, etc.</i> <i>b. Disk encryption and security</i></p> <p>Please provide the total number of Storage (GB) required. Do you require high performance Disk?</p>	<p>Applicant to propose indicative storage requirements/options, disk encryption and security requirements based on responses number 5 and 6.</p>
9	<p>Annexure A, section 6(iv): Database License: MySQL and PostgreSQL are open-source databases and are free to use without any license requirements. MongoDB offers both a Community Edition and a commercial Enterprise Edition. Oracle and MS SQL are proprietary databases that require a license to use.</p> <p>- Please share how many Databases are required to install and configure. - Are Licenses to be provided included in the Hosting Service or will the Bank provide it? - Are there any other dependent software that need to be installed before or after the database installation? - Are there any configuration or customization requirements specific to the installation? - Who will be responsible for managing and maintaining the database after installation?</p>	<p>Applicant to propose indicative number of databases based on response number 5 and 6.</p> <p>Licences will have to be provided by the applicant.</p> <p>Applicant should take into consideration possibility of integration with other software.</p> <p>Applicant would be expected to provide continued support including management and maintenance of database and other core components after installation.</p>
10	<p>Annexure A, section 7: The service provider should be able to supply and install the core and support software required for the functioning of a fintech innovation hub and digital lab. a. What specific software is required to be installed? b. Do you require the Applicant to provide the Core Software and the implementation and support services?</p>	<p>The core components are the cloud infrastructure orchestration, the shared platform and the Integrated Development Environment. These should be supported for a minimum of 3 years full support + 2 years gradual transfer of support to the Bank. Training should be provided on all 3 core components.</p>

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	<p>c. Who will be responsible for maintaining and updating the software over time?</p> <p>d. Are there any training or support requirements related to the software installation?</p>	
11	<p>Annexure A, section 8: <i>The various activities cited above are illustrative and are not an exhaustive list. All activities need to be performed and delivered within the given timelines without compromising the quality standards.</i></p> <p>a. What are the specific timelines for the project or activity?</p> <p>b. Are there any milestones or deadlines that need to be met along the way?</p> <p>c. What are the quality standards that need to be adhered to?</p> <p>d. How will quality be measured and evaluated throughout the project?</p> <p>e. Are there any specific tools or resources that will be provided to help ensure timely and high-quality delivery?</p> <p>f. What happens if the timelines cannot be met without compromising quality? Are there any contingency plans in place?</p>	<p>a and b: The project should be completed within 3 months.</p> <p>c and d: For IDE and API, secure development lifecycles should be used. The Cloud infrastructure should be compliant with Mauritian Data Protection Act (DPA) 2017 or to data protection laws which are equivalent to the Mauritian data protection laws.</p> <p>e and f: Applicants should indicate the manner in which they are planning to monitor the implementation of the project.</p>
12	<p>Annexure A, section 2: Could you please provide additional details of the expectations for the “shared platform”? Does a managed service provider need to develop the shared platform, or the Bank has a portal that needs to be hosted on the cloud?</p>	<p>The applicant will have to provide a shared platform which includes a portal and meets the requirements specified in Annexure A.</p>
13	<p>We assume that the Bank will provide all the required software licenses for the DB, Portal, app server, APM etc. Please confirm.</p>	<p>The applicant will have to provide all relevant licenses.</p>
14	<p>Annexure A, section 7: Please provide a list of core and support software requested in the EOI.</p>	<p>Refer to response number 10.</p>
15	<p>Could you please share the evaluation methodology of the EOI?</p>	<p>This cannot be disclosed.</p>
16	<p>Annexure C: Details of similar projects executed Could you please elaborate on what you mean by similar projects? Is it in providing the Cloud infra, managing it, or operating it?</p>	<p>This refers to projects similar to the scope of work and includes all related aspects of the project, namely implementation of the infrastructure as well as managing and operating it.</p>

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17	Are there any GDPR, PII data or geographical constraints of providing cloud infrastructure like the location of DC/DR?	DC/DR or hosting services should be on territories which are compliant to the Mauritian DPA 2017 or to data protection laws which are equivalent to the Mauritian data protection laws.
18	As we will have only 12 days to turn around the EOI upon receiving the responses, we would appreciate getting the answers sooner or extending the deadline for the EOI response. Please advise.	The timelines specified in the EOI will have to be adhered to.
19	Which cloud is the infra currently hosted on? (AWS/Azure/GCP)	Refer to section 3 of the EOI. The purpose of this EOI is to build such an infrastructure.
20	What is the application architecture? (Monolithic/Microservice/Serverless)	Applicant to propose.
21	Are there any services running on-premises?	Yes. These systems/applications will have to be integrated through APIs
22	Does the applications use Databases within the cloud?	Applicant to propose.
23	Are the applications hosted within a Kubernetes cluster?	Applicant to propose.
24	Has there been an infrastructure audit? Or a security config review?	Refer to section 3 of the EOI. The purpose of this EOI is to build the infrastructure.
25	Is there an IaC for the infrastructure? If yes, what's the IaC language (Terraform/CloudFormation/ARM/Crossplane/Bicep)	Refer to section 3 of the EOI. The purpose of this EOI is to build the infrastructure.
26	How many environments are present currently?	Refer to section 3 of the EOI. The purpose of this EOI is to build the infrastructure.
27	Does application deployments use CI/CD pipelines?	Refer to section 3 of the EOI. The purpose of this EOI is to build the infrastructure.
28	Does the proposed Cloud Infrastructure have to reside in Mauritius? If so where?	No
29	Is the proposed solution in scope for regulatory compliance (such as PCI DSS, FSC, DPA, SOX, etc.)?	Yes, as applicable.
30	Does the proposed Cloud Infrastructure need to be single tenant solution?	No
31	Can the proposed Cloud Infrastructure be hosted by a hyperscaler: <ul style="list-style-type: none"> ▪ AWS Mumbai (40-50 milliseconds latency) ▪ GCP Mumbai (40-50 milliseconds latency) ▪ Azure South India (40-50 milliseconds latency) 	Applicant to propose.

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	If so do you have a preferred cloud provider?	
32	Who will own the Cloud Infrastructure: ▪ Bank of Mauritius? ▪ The Supplier?	The supplier.
33	What is the estimated Compute & Storage requirements of the cloud infrastructure?	Refer to responses number 5 & 6.
34	What is the estimated Database requirements of the cloud infrastructure?	Refer to responses number 5 & 6.
35	What is the estimated number of users that will consume services from this platform?	Refer to responses number 5 & 6.
36	Is the user traffic anticipated to mainly from Mauritius? What is the % split of user traffic? ▪ Mauritius? ▪ North America? ▪ Europe? ▪ Asia PAC? ▪ Middle East & Africa? ▪ Rest of the world?	Data on the split of user traffic is not available at this stage.
37	Who will be responsible for the development platforms software development & support including: ▪ Participant Registration? ▪ Conferences, Summits & workshops? ▪ Competitions & Challenges?	The applicant.
38	Annexure A, section 5: Who will be responsible for the Integrated Development Environment's (IDE)? ▪ API development & support ▪ Integration with systems hosted by the Bank ▪ Core banking & non-banking financial system with test data ▪ Development of solutions domains such as core banking, payments, lending and risk management	The applicant.
39	How many Applications will make up the IDE environment?	Approximately 5
40	Do you have your own software development team? Will they be contracted separately?	The applicant to provide software development capabilities.
41	Annexure A, section 1: What are the anticipated Project timelines for: ▪ The Shared platform? ▪ The Integrated Development Environment?	As highlighted in response number 11, both the shared platform and the IDE should be implemented in parallel within 3 months.

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42	Will the vendor be required to provide support to all Cloud Infrastructure components?	Yes. Please refer to response number 10.
43	Will the vendor be required to provide support to all IDE Software development to support user functionality: <ul style="list-style-type: none"> ▪ Participant Registration ▪ Conferences, Summits & workshops ▪ Competitions & Challenges 	Yes
44	Will the vendor provide training sessions from onsite or can this be outside of Mauritius?	Training should be in a hybrid mode.
45	Will the vendor be required to setup an Innovation Hub for FinTechs?	No
46	What are the estimated Disaster recovery mechanism, does "Bank of Mauritius" define RPO / RTO for DR along with SLAs? DR mechanism -Cold -Warm -Hot	RPO-4 Hours; RTO-12 Hours; DR-warm site.
47	Does "Bank of Mauritius" solution be extended across other regions? If yes, who are your clients, Geography, Nationality, Other segmentations, this is to understand data sovereignty and other regulatory requirements.	Details are not available at this stage.
48	Objective of this is to modernize existing solution or to build a new green field implementation for this initiative?	The objective is to build a new green field implementation.
49	Individual Timelines defined to deliver Design, Build, Operate and Transfer: -What are the timelines for Minimum Viable product? -What is the timeline to launch the product in Market? -Is product launch planned with complete integrations or with Minimum viable product model?	Refer to responses number 10 & 11.
50	Does the Bank have a preferred cloud provider?	No
51	Does the Bank have a preferred hosting jurisdiction?	Refer to response number 17.
52	Does the Bank have an international regulator interoperability requirement?	To be determined on a case to case basis.
53	Does the Bank have an expected number of users?	Refer to responses number 5 & 6.
54	Is it anticipated the Fintech Innovation Hub and Digital Lab would need to support physical devices?	No

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55	Does the Bank currently know who would operate the platform day-to-day, and are consulting services required to operate platform?	The project will follow the design, build, operate and transfer model.
56	Can a Private Limited Company from India bid this tender?	Refer to response number 1.
57	If an Indian company not eligible to bid then can a Mauritian company bid along with an Indian entity?	Refer to response number 1.
58	Are there any requirement to submit financials of the company? If Yes, then for how many years we need to provide it.	Not required at this stage
59	Is there any benchmark/minimum requirement of the financial to qualify for bidding this tender?	Not required at this stage
60	What are the criteria of Human Resource required as per bid doc? Does it require CV Submission?	Refer to response number 4.
61	Annexure A, Section 1: a. Does the shared platform need to be available in High Availability or Disaster Recovery Mode? b. Does the shared platform need to support the Bank as a master tenant and have multiple sub tenants? c. Does the shared platform need to use Dedicated backend Hardware Infrastructure, or the backend hardware can be shared across other tenants? d. Can the shared platform and the Development platform co-exist on the same backend hardware infrastructure?	a. Disaster Recovery mode. b. Applicant to propose tenancy model. c and d. Applicant to assess the risk and to come up with the most appropriate setup.
62	Annexure A, Section 2: a. Does the cloud service provider need to provide managed services in terms of the operation of the applications Reference in A(2)(i) and A(2)(ii)? b. Does the cloud service provider need to provide managed services in terms of deploying the applications Reference in A(2)(i) and A(2)(ii)?	Yes
63	Annexure A, Section 3: a. Does the cloud service provider need to provide managed services in terms of deploying the infra on the cloud Reference in A(3)	Yes

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64	<p>Annexure A, Section 6:</p> <p>a. Can the Bank share a list of Linux and Windows distributions which should be made available on the cloud platform? Reference in A(6)(i)</p> <p>b. With reference to Oracle Database and Microsoft SQL Database, will those licenses be provided by the cloud service provider or the Bank. Reference in A(6)(iv)</p> <p>c. With reference to Oracle Database, what type of licenses will be used Hard Partitioning or Soft Partitioning. Reference in A(6)(iv)</p> <p>d. With reference to Containerisation, will the cloud service provider need to provide Containerisation as a service or the Bank will deploy its own Containerisation solution over virtual machines? Reference in A(6)(v)</p>	Refer to response number 9.
65	<p>General Notes</p> <p>a. Will the Tenants applications be accessible over VPN Tunnels (IPSEC) or Private Network (MPLS) or Public (Internet) or Hybrid (All scenarios)</p> <p>b. Will the Bank commit to a fixed resource pool in terms of CPU, Memory and Storage or the resource pool will be dynamic.</p> <p>c. What is the starter resource pool required and if the resource pool is required in multiple regions.</p> <p>d. The Bank to share a high-level estimates and topology of the overall resources required.</p> <p>e. The Bank to provide more information about Billing and Administration? Is the Bank referring to the overall infrastructure billing?</p>	<p>a. Applications will be accessible through internet.</p> <p>For questions 'b' to 'e', please refer to responses number 5, 6 and 79.</p>
66	We would request for a meeting/explanation session to have more info regarding the requirements of the project. Please advise whether we should disclose the names of any Third Party with whom we will partner to provide the solution in the EOI response.	<p>No meetings or explanation sessions are scheduled at this stage.</p> <p>The third party should be disclosed in line with section 8 of the EOI.</p>
67	Would the Bank have any preference in terms of the investment model i.e., Capex, Opex, Licensing or Revenue Share?	Opex
68	What would the Bank's roles be towards this project i.e., Supervisory; Enabling; Mentoring; or Controlling?	It may include any of the examples mentioned depending on the different projects.
69	Is there an existing Sandbox? If yes, can you please provide more details?	No

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70	What would be the estimated timeframe to roll-out this project?	3 months. Refer to response number 11
71	Will the Bank provide hardware and software licenses?	Applicant to provide.
72	Will the Bank provide access to existing APIs/Web-Services?	Yes
73	If yes, how far are the API or integrations available within the sector?	This will be disclosed at a later stage
74	We have the tools and learning platforms to assist early stage fintech innovators to go from idea to prototype, is that a part of this initiative?	Yes
75	Is there an intention to equip and coach start-ups with the skills of starting up & scaling and would the Bank support an education and collaboration hosting platform?	Refer to section 2 of Annexure A of the EOI.
76	Is there a need to create an on-line design sprint space to allow innovators to move from idea to prototype and get coaching an input from the broader eco-system?	Yes
77	How does the Bank foresee finding and identifying innovators to bring into the platform - is it to also attract early-stage innovations or is it aimed at innovators who already have traction and product market fit?	It is aimed for both the early-stage innovations and at innovators who already have traction and product market fit.
78	Is there an intention to help the programme participants go through the stages of start-up and help them develop their businesses or is it just to provide a technical platform?	The intention is to provide a technical platform and some guidance.
79	Is there an annual support budget over time or just a once-off build and hand-over investment?	It is expected that there would be a one off minimum set up cost and on-going support/pay as you go model.
80	Could you please confirm whether it is permissible for three companies to form a joint venture and apply for this EOI?	Yes, refer to section 8 of the EOI.

Bank of Mauritius
28 April 2023