

Request for Tender

For

Servers EoL 2023

For

Mobile Interim Company 1 S.A.L

Reference Number: MIC1/RFT/CFO-PRO/0536-23

Beirut-Lebanon, November 2023

Table of Contents

Contents

Introduction: Company's Profile.....	3
Article 1: Object.....	3
Article 2: Scope.....	3
Article 3: General Terms	3
3.1. Participation in the RFT process	3
3.2. Joint Offer	4
3.3. Cost of Tender	4
3.4. Offer Ownership	4
3.5. Offer Errors	4
3.6. Miscellaneous	4
Article 4: Clarifications.....	5
4.1. General Terms	5
4.2. Q&As format	5
Article 5: Presentation of Offers.....	5
5.1. Envelop 1	6
5.2. Envelop 2.....	7
Article 6: Time limit for Presenting Offers	7
Article 7: Period of Validity of Offer.....	7
Article 8: Compliance Matrix.....	8
Article 9: Special terms	9
9.1. Terms of Payment.....	9
9.2. Commercial/Financial Conditions.....	9
9.3. End of Sales	10
9.4. Delivery Penalty / Liquidated Damages.....	10
9.5. Project Implementation	10
9.6. Miscellaneous	11
Article 10: Technical Specifications	11
Article 11: Information Security Specifications.....	18
Article 12: Health, Safety and Environmental Specifications.....	19
Article 13: Evaluation of Offers.....	20
Article 14: Entering into Contract.....	20
Article 15: Termination and Assignment.....	20
Article 16: Boycott of Israel Requirement	21
Article 17: Applicable Law and Dispute Resolution.....	21

Introduction: Company's Profile

MIC1, operating under the brand name Alfa Nowadays, Alfa caters for the mobile needs of more than 2M subscribers including businesses and offers a variety of services and products that fit all age groups and preferences. Alfa vision is to provide competitive telecommunications services, while maintaining the highest quality of service and upholding sustainable commitments.

Article 1: Object

Bidders as defined in article 2 hereunder are hereby invited to submit their offers (herein referred to as **"Tender"** or collectively as **"Tenders"**) for the supply of Blade Servers and related enclosures, to the Mobile Interim Company 1 S.A.L (herein referred to as **"MIC1"**) who is managing one of the two national GSM networks for the benefit of the Republic of Lebanon.

The services required by MIC1 from the Bidders under the RFT (as defined in article 2 hereunder) are mentioned in appendix 1.

This tender process is subject to the provisions of Public Procurement law (PPL) no. 244 dated 19th July 2021.

Article 2: Scope

This request for tender (herein referred to as **"RFT"**) is restricted to companies which are specialists in Infrastructures and related services (herein referred to as **"Bidders"** or **"Bidder"** for any one of them separately), have signed a non-disclosure agreement or a confidentiality agreement with MIC1 and have received an invitation letter from MIC1 to participate in the RFT.

Article 3: General Terms

3.1. Participation in the RFT process

Bidders shall participate in the RFT process at their own risk. Such participation does not give the Bidders any grounds whatsoever for any right for compensation from MIC1.

The Bidders expressly acknowledge that their participation in the RFT process will be deemed as an undertaking that: (i) they have the full capacity, right, power and authority and have taken all necessary actions to enter into the RFT process; and (ii) the performance of their obligations under the RFT and or any potential purchase order (hereinafter **"PO"**) / contract will not result in the breach of any terms or provisions of, or constitute a default under, any judgment, decree, or agreement or instrument to which they are a party or by which they are bound. Furthermore, the Bidders expressly acknowledge that their participation in the RFT process will be deemed as an undertaking that: (i) they are not and shall not be, directly or indirectly, associated with any person or entity involved in terrorism and / or money laundering; (ii) they shall not be engaged, directly or indirectly, in any illegal, corrupt, and / or fraudulent practices; (iii) they shall adhere to the highest ethical standards in the performance of their obligations under the RFT and / or any potential PO / contract, and (iv) they shall not be engaged, directly or indirectly, in activities involving child labor, trafficking in arms, sexual exploitation or discrimination.

Thus, Bidders will be solely liable for and will hold MIC1 harmless from any claim, damage, action of any nature by any third party, and any consequences thereof, relating to any such breach or default as mentioned hereabove.

3.2. Joint Offer

Two or more Bidders may form a consortium and submit a joint offer under the terms and conditions defined herein. The offer must be submitted under the name of one member of the consortium which shall be responsible for undertaking all negotiations and discussions with MIC1 and performing the services under the RFT.

3.3. Cost of Tender

Bidders shall bear any and all costs, expenses or investments in connection with the preparation and / or submission of their offer and / or any presentation and / or any other cost or expense incurred by the Bidders as a result of the RFT.

MIC1 shall not be, in any case, directly or indirectly, responsible, or liable for any cost, expense or investment associated with the preparation and / or submission of the offers and / or any presentation and / or any other cost or expense incurred by the Bidders as a result of the RFT.

3.4. Offer Ownership

Notwithstanding the ultimate outcome, all the offers submitted by the Bidders shall become the sole property of MIC1.

3.5. Offer Errors

Bidders are solely responsible for any error, misstatement or omission contained in their offer.

If any Bidder identifies an error, misstatement, or omission contained in its offer, it may at its own risk, effort and expense submit a replacement offer (herein referred to as **"Replacement Offer"**) provided that the Replacement offer fully complies with the RFT and is delivered within the Closing Date. Bidders will not be allowed to alter their Offer after the Closing Date.

However, if a Bidder identifies, after the Closing Date, a material error, misstatement or omission contained in its Offer, it must notify MIC1 in writing within 3 days as of the date of such identification.

In the event the Offer contains an error in cost, time or other calculations, quoted items shall prevail. In case of inconsistencies between various sections in the Offer, MIC1 retains the right to select the option which shall be applied and be valid for the Offer.

3.6. Miscellaneous

MIC1 reserves the right to cancel, postpone or modify the RFT, including all its terms and conditions, at any time before the bid assignment, or to repeat the RFT, at its absolute discretion, under the provisions of Article 25 of the Public Procurement Law n0. 224 dated July 19th 2021, without incurring any liability towards the Bidders and/ or any third party. No offers will be opened after the bid cancellation decision. No responsibility or liability is or will be accepted by MIC1 in respect of any error or misstatement in or omission from the RFT and / or any response to request for Clarifications (as defined in article 4 hereunder) and / or any information or data provided by MIC1 in connection with the RFT.

All information regarding MIC1 included in the RFT and / or any response to request for Clarifications is intended to assist the Bidders in the preparation and submission of their Offer. This information is provided for information purposes only and is not exhaustive. No representation or undertaking is given as to accuracy, adequacy, or completeness of this information. MIC1 shall not be liable for any inaccuracy, oversight, or omission in or from any such material.

Bidders have the right to object as per article 103 of the PPL no.244/2021.

Article 4: Clarifications

4.1. General Terms

Clarifications needed by the Bidders to prepare the Offer (herein referred to as "Clarifications") should be consolidated and submitted to MIC1 in 1 set. Applications for Clarifications should be submitted within a maximum of 10 calendar days before the Closure Date of the RFT set by MIC1.

to:

technology.purchasing@alfamobile.com.lb

MIC1 answers will be submitted to all Bidders after 6 calendar days before the Closure Date of the RFT set by MIC1.

Bidders should not contact, directly or indirectly, MIC1 concerning the RFT process, starting from the Issue Date until the final selection. The only contact would be for clarification purposes and only by virtue of the mechanism described in this article.

4.2. Q&As format

The Clarifications submitted as per article 4.1 above should be in excel format filled as per below:

RFT Name REF# xxx- 1x (Q&As)		
AREA	Bidder Questions	ALFA- MIC1 Answers

Questions should be "serious and valid". This means that any inquiry should be in connection with the subject of this Tender and the response to which could be of impact on the offer to be offered by the Bidder. MIC1 upon its discretionary authority shall determine if the questions are serious and valid, and subsequently whether or not a response shall be given.

Failure to submit serious and valid Questions will be considered as an attempt to delay the tender process and MIC1 will have the right to ignore such Questions without any justification.

Article 5: Presentation of Offers

- The technical offer part (herein referred to as "**Technical Offer**") described hereafter should be enclosed in an envelope separated from the commercial/financial offer part (herein referred to as "**Commercial/Financial Offer**").
- All Offers shall be written in English language.
- The RFT has to be reviewed thoroughly by bidders. The selected bidder, and as a prerequisite for his award, will be requested to remit back the RFT document after being initialed on all its pages.
- A copy of "Alfa Security Terms & Conditions for Third Party" and "Supplier Compliance Form" are enclosed to this RFT for Bidders' review and reference.

However, it should be noted that the selected Bidder will be requested to sign these documents upon project award and prior to the PO / contract signature. These documents are an integral part of the issued PO / contract and their signature is mandatory to execute / implement any solution in MIC1 network.

- The Bidders shall submit a clear and complete list of references for similar implementations / projects in a relevant environment.
- **All Offers shall be in US Dollars**, shall include all taxes, duties and levies (excluding only Lebanese VAT), and shall be fixed, unconditional, unreserved and binding for the Period of Validity (as defined in article 7 hereunder). All Offers should cover the full range of services requested under the RFT.
- Each Bidder shall be solely responsible to pay and bear its own taxes and duties levied on it under any relevant jurisdiction or territory. For the sake of avoiding any doubts, Bidder shall be individually responsible to ascertain its tax liabilities under any subject territory and settle the same with its own resources without having any recourse whatsoever towards MIC1.
- Bidders should submit their Offer in a sealed envelope, with RFT Name and Reference clearly mentioned, which should contain two separate sealed envelopes, containing the below:

5.1. Envelop 1

Envelop 1 is labelled by the "RFT reference- Technical Offer & the Bidder 's name", and should include:

- A cover letter, in two copies, addressed to MIC1 showing the Bidder's interest in submitting the Offer to the RFT (where the name of project as mentioned in this RFT is explicitly mentioned) duly signed and stamped by the authorized representative and listing the documents enclosed whether in hard or soft copy. The cover letter should also mention the names of partners (if any) that are participating under the umbrella of the company in question.
- Thus, the technical submission should be limited to the cover letters (2 copies) and the sheet special terms (2 copies) within the attached document named "Compliance matrix- incase it is part of this RFT and shared by MIC1 in the invitation email".
- The complete version of the filled compliance matrix is not needed in hard copy, only on CD in both excel and PDF versions including bidder logo.
- The cover letter, however, should confirm that, in case selected, bidder commit to deliver according to the complete compliance matrix submitted as part of the technical response on the CD.
- No need to share a hard copy version of the executive summary or technical solution; it can be only part of the technical submission on CD.
- 3 labeled CDs with the complete Technical Offer to RFT, in WinWord, Compliance Matrix in MS Excel and in PDF format with company logo, unpriced BoM in MS Excel & supporting technical documentation in WinWord or PDF format.

N.B: No prices even Free of Charge (FoC) term shall be mentioned in the technical offer envelope whatsoever.

All submitted documents should be Signed and Stamped by bidder.

5.2. Envelop 2

Envelop 2 is labelled by the “RFT reference- Commercial Offer & the Bidder ‘s name”, and should include:

- 2 copies of the Commercial/Financial offer **summary** showing the **high-level** deliverables and their prices (**detailed pricing / BoQ should be included as soft copy on CD only**) duly signed by the authorized signatory and stamped –in Hardcopy. Thus, the commercial/financial submission should be limited to the summary sheet (2 copies) of the attached “financial sheet” in case it is part of this RFT and shared by MIC1 in the invitation email; all remaining sheets and detailed BoQ should be put on the CD.
- 2 labeled CDs with the complete price list in MS Excel Softcopy with formulas and equations clearly applied along with the filled commercial sheet - commercial.xlsx (in case embedded within this RFT).
- A Bid Bond amounting 3% of the total offer amount from the participating bidders’ bank to MIC1 is requested. This bid bond is ruled by article 34 of the Public Procurement Law dated July 19th, 2021 and is considered as a major condition for the compliance to this Tender document and selection criteria. The validity of the Bid Bond should be for 208 days as of offers submission date (shall exceed the Offer’s validity by 28 days as per article 4.2.17).

“RFT envelopes must be sealed with a large adhesive tape. Envelop must hold RFT Reference and title without mentioning the bidder’s name”.

N.B: Bidders must strictly comply with all the requirements above mentioned in this article 5. Any Bidder which fails to comply with any of the requirements listed in article 5 above will be immediately disqualified.

Article 6: Time limit for Presenting Offers

Every Bidder is bound to present its complete offer along with all the required and additional documents as mentioned in the RFT, to MIC1, at the latest **21** days from the date of its signature of the RFT (herein referred to as “**Closing Date**”) for the attention of:

Mobile Interim Company 1
Procurement Department
Attention: **Technology Purchasing**
Office: +961 3 391 000 - Fax: +961 3 391 620
Email: technology.purchasing@alfamobile.com.lb
Address:
Parallel Towers, **17th** floor, near Freeway Center, Dekwaneh, Beirut.
P.O.B: 55-534 Sin El Fil.

MIC1 may, at its own discretion, extend the Closing Date for the submission of Offers by notifying all Bidders thereof in writing.

Any Proposal received by MIC1 after the Closing Date will be automatically rejected.

Article 7: Period of Validity of Offer

The Offers submitted by the Bidders shall be commercially/financially and technically binding for the Bidders for a period of 6 months at least as of the Closing Date or any extension of the Closing Date decided by MIC1 (herein referred to as "**Period of Validity**").

Any Offer valid for a shorter period may be rejected by MIC1 at MIC1's sole discretion. The latter may solicit the Bidder's consent to an extension of the Period of Validity. The request and the response thereto shall be made in writing. Any Bidder granting its consent to such extension will not be entitled / permitted to modify its Offer.

No offer may be withdrawn before the expiration of the Period of Validity.

Article 8: Compliance Matrix

The following should be considered, while filling the compliance matrix (herein referred to as "**Compliance Matrix**"):

- Every Offer shall contain a clear reference to the supporting documentation within the Bidder's provided set of technical documentation. The reference must indicate explicitly the document title, page and section.
 - "Fully Compliant", when the Bidder fully complies with the requirements or fully agrees to the related statement, along with a clear explanation in both cases, in addition to the related reference to the supporting documentation when applicable.
 - "Partially Compliant", when the Bidder partially complies with the requirements or partially agrees to the related statement, along with a clear explanation in both cases for the compliance limits and / or agreement limitation, in addition to the related reference to the supporting documentation when applicable.
 - "Non Compliant", where the Bidder does not comply with the requirements or does not agree to the related statement, along with a clear explanation in both cases for the non-compliance / limitation, and with the related reference to the supporting documentation when applicable.
 - "Noted" when a statement is not a requirement but is only for information purposes. "Noted" will be accepted as meaning that the Bidder has read and understood the information. "Noted" is not accepted when a "Compliant" or "Non-Compliant" is the proper response.
- In cases of doubt, during the evaluation of the Offer by MIC1 as provided for in article 12 hereunder, any "Noted" statement shall be considered as "Compliant" for the purpose of such evaluation, and for PO / contract purposes as the Offer to the RFT will form an integral part of any potential PO / contract signed with the Bidder.
- The Compliance Matrix will be analyzed by MIC1 in detail and the compliance statements will be used within the RFT assessment model.
- In case the Offer states "Compliant" to a MIC1 requirement and the analysis of the solution shows that there is no full compliance, such statement will be assessed as "Non-Compliant" and an additional penalty will be applied.
- In case the Offer states "Compliant" to a MIC1 requirement while not specifying any reference, such statement will be assessed as "Non-Compliant" and an additional penalty will be applied.

- For any item that is not supported and / or for which no quote exists in the Commercial/Financial Offer, the price penalty is computed by taking the highest price amongst other Bidders.

If at any stage during the evaluation of the Compliance Matrix it becomes obvious to MIC1, that the solution offered by the Bidder substantially deviates from the requirements as defined in this RFT, such Offer will be disqualified at MIC's sole discretion with **immediate effect**.

Article 9: Special terms

9.1. Terms of Payment

The below describes the minimum payment requirements which are based on a careful analysis of the solution components and required deliverables. However, such minimum payment requirements are not in any way binding to MIC1 and modification of the same might be applied by MIC1 at its sole discretion after selection, on PO or contract level, in case the same is deemed necessary by MIC1.

Payment will be made in cash LBP at local market rate on payment date as per the below:

- 30% down payment on PO issuance
- 30% upon delivery
- 40% upon Final Acceptance certificate; 45 days from invoice receipt

9.2. Commercial/Financial Conditions

Bidders shall submit their best and final price. **No negotiations shall be made after offers submissions.**

- MIC1 reserves the right to negotiate with the selected Bidder all or part of the Offer as MIC1 deems convenient. In other words, MIC1 has the full flexibility to buy the full scope of the Offer or certain parts of it without any impact on unit rates and discount granted. It might also select different Bidders to supply different parts of the RFT's scope of work depending on its strategy and needs.
- A Bid Bond from the participating bidders' bank to MIC1 with a value of 3% of the total offer amount should be presented for participation within **envelop 2**. The validity of this LG should be for 208 days as of offers submission date; it will be returned to non-selected bidders. This LG will be returned to selected bidder after submission of the Performance Bond mentioned below.
The Bid Bond is ruled by the article 34 of Public Procurement Law 244 dated 19 July 2021.
- Another mandatory Performance bond from winning bidder' bank to MIC1 with a value of 6% of the total offer amount should be presented upon tender award only within 15 days from contract start date.
- The performance bond shall remain valid and effective from the date of issuance up to the contract expiry date.
- The Performance Bond is ruled as by the article 35 of Public Procurement Law 244 dated 19 July, 2021.

- The bidder is not allowed to introduce any new technical offer in the commercial envelop which will be considered a subject to disqualification.
- Fees submitted by bid winner will be announced on PPA website following tender award as per Public Procurement Law requirements.
- Any subcontracting scope by the bidder shall be clearly indicated in the offer. Bidders should not in any way subcontract more than 50% of the bid scope inline with Clause 30 of PPL.

9.3. End of Sales

End of sales date of proposed servers / appliances / systems shall be at least more than 10 months from the Closing Date. If by the time the PO is issued by MIC1 the proposed servers / appliances / systems have reached end of sales, then the Bidder shall offer the next generation equipment with equivalent or better specifications **at no extra cost for MIC1**

9.4. Delivery Penalty / Liquidated Damages

- In case of delay in the delivery, a penalty of 2% per day of delay shall be deducted from the total amount for a maximum of 20%
- The filled Compliance Matrix as well as the Offer and BoQ are an integral part of the PO to be issued by MIC1 following the selection of the Bidders. Bidders' abidance by and respect of their Offer, and more particularly on the delivery date mentioned therein, and based on which the PO is issued, is mandatory.

In case the above is not respected by the Bidder or in case the latter fails to deliver a feature, functionality or item for which he has already inserted "Compliant" in the Compliance Matrix and included in the Offer, then the following will be applied:

- A penalty of 5% from the total amount of the project cost will be applied for each feature/functionality or item.
- Not delivered by the Bidder. This amount will be deducted from the final acceptance payment.
- If the penalty value exceeds the amount remaining to be paid for the project, then MIC1 has the right to cancel the project with immediate effect and the Bidder will have to refund the total amount paid to the Bidder without the need for a prior notice or any judicial or extra-judicial proceedings.

If a feature, functionality or item, is marked as a Killer Point (as defined in article 11 below) and the Bidder fails to deliver it upon implementation, then MIC1 has the right to cancel the project with immediate effect and the Bidder will have to refund the total amount paid without the need for a prior notice or any judicial or extra-judicial proceedings.

9.5. Project Implementation

It is the Bidders' sole responsibility to make sure that the environment in which the equipment will be installed is ready and provides all prerequisites needed. If deemed necessary, the Bidders can perform a site survey to enable them to include all the needed equipment and accessories in the bill of materials (herein referred to as "**BoM**"). Additional cost or delay due to any missing equipment, accessories or software, customization, licenses, services and training needed for the proper operation of the ordered material, and which was not taken into account in the offered BoM will be solely borne by the selected Bidder.

9.6. Miscellaneous

- Bidder must explicitly mention, in the Offer and the BoQ, any prerequisite not stated within the RFT requirements and specifications and that might entail additional cost or impact while adding its respective price or the additional deliverables it needs (if not within Bidder's scope).
- Based on the provisions of the income tax law (Articles 41, 42 and 43), a 7.5% (on Opex) and 2.25% (on Capex) are to be deducted from the invoice for the Bidders that do not maintain a place of business or do not have a legal structure in Lebanon.
- All Bidders with local presence should have a corporate contract with MIC1 that covers 100% of their employees' business lines before entering into business relations with MIC1. If the selected Bidder does not fulfill this option at the time of project award, MIC1 corporate sales team will contact its representative for this purpose.
- The bidder to any tender launched by Alfa should declare any relative relations with any Alfa employee up to the 4th degree under Clause 30 of the PPL, for MIC1 to be able to assess the existing of any potential conflict of interests which may lead to deprive the bidder from participating to the tender under the risk of disqualification,
- The bidder will be automatically disqualified in two cases according to Clause 8 of PPL: in case of bribery or corrupted activity or conflict of interest.

Article 10: Technical Specifications

Bidder is requested to supply, implement, install, and configure all supplied Enclosures and blade servers and that according to the following specifications:

Blade Server Specs "Cluster1"

Blade Server Specs "Cluster1"	Technical specifications	6
Raid Controller	Raid controller with PCIe 5.0 support	1
Processor	2.0 GHz 24-core or above (Intel 4th generation processor or above)	2
Memory	64GB DDR5 4800MT/S memory DIMMs or equivalent	16
HDD	480GB NVMe Gen3 SSD or better	2
Network Card	25/50Gb Converged Network Adapter	1
Memory Protection	Advanced ECC with multi-bit error protection, Online spare and fast fault tolerance	
Storage expansion	Should have option to support minimum 24 nos. local HDD/SSD per blade server using storage expansion module in chassis	
Interfaces	Minimum of 3 number of x16 PCIe Gen5 slots 1* internal USB 3.0 port ,1* internal microSD slot and 1* external USB 3.0 port	
Blade Server Connectivity to SAN	Should be capable of supporting 32 Gbps Dual port Fiber Channel HBA internal to the Server Blade.	
GPU support	Server should support latest GPU for graphics intensive applications. Should be able to attach a graphics expansion module to accommodate two, four and 8 high end Graphics modules	

Industry Standard Compliance	Advanced Encryption Standard (AES)	
	TPM 2.0 Support	
	Triple Data Encryption Standard (3DES)	
	SNMP v3	
	SSL 2.0	
	DMTF Systems Management	
	Architecture for Server Hardware Command Line Protocol (SMASH CLP)	
	PCIe 3.0 Compliant	
	UEFI (Unified Extensible Firmware Interface Forum)	
	Redfish API	
	Energy Star Compliant	
System Security	Power-on Administrator's Keyboard password (QuickLock)	password password
	Remote management On System Management Chipset with SSL encryption, Secure Shell version 2, Advanced Encryption Standard (AES) and Triple Data Encryption Standard (3DES) on browser	
	CLP and XML scripting interface, AES and RC4 encryption of video External USB port enable/disable Network server mode Serial interface control TPM (Trusted Platform Module) 1.2 or 2.0 option	
	Advanced Encryption Standard (AES) Intel® Advanced Encryption Standard-New Instructions (AES-NI)	
OS Support	Microsoft Windows Server Latest version "2022	
	Red Hat Enterprise Linux (RHEL)	
	SUSE Linux Enterprise Server (SLES)	
	Vmware ESXi latest versions including and not limited to 7.0, 7.5, 8.0a, etc	
Secure encryption	System should support Encryption of the data (Data at rest) on both the internal storage and cache module of the array controllers using encryption keys. Should support local key management for single server and remote key management for central management for enterprise-wide data encryption deployment.	
Firmware security	1. For firmware security, system should support remote management chip creating a fingerprint in the silicon, preventing servers from booting up unless the firmware matches the fingerprint. This feature should be immutable	
	2. Should maintain repository for firmware and drivers recipes to aid rollback or patching of compromised firmware. Should also store Factory Recovery recipe preloaded to rollback to factory tested secured firmware	
	3. Server Configuration Lock - Protecting Systems in Transit and when Deployed in remote Locations	
	4. One-Button Secure Erase - Making server retirement and redeployment simpler.	
	5. Security Dashboard for Server to detect possible security vulnerabilities.	

Blade Server Specs "Cluster2 & Cluster3"

Blade Server Specs and "Cluster2 Cluster3"	Technical specifications	4
Raid Controller	Raid controller with PCIe 5.0 support	1
Processor	2.0 GHz 24-core or above (Intel 4th generation processor or above)	2
Memory	32GB DDR5 4800MT/S memory DIMMs or equivalent	4
HDD	480GB NVMe Gen3 SSD	2
Network Card	25/50Gb Converged Network Adapter	1
Memory Protection	Advanced ECC with multi-bit error protection, Online spare and fast fault tolerance	
Storage expansion	Should have option to support minimum 24 nos. local HDD/SSD per blade server using storage expansion module in chassis	
Interfaces	Minimum of 3 number of x16 PCIe Gen5 slots 1* internal USB 3.0 port , 1* internal microSD slot and 1* external USB 3.0 port	
Blade Server Connectivity to SAN	Should be capable of supporting 32 Gbps Dual port Fiber Channel HBA internal to the Server Blade.	
GPU support	Server should support latest GPU for graphics intensive applications. Should be able to attach a graphics expansion module to accommodate two, four and 8 high end Graphics modules	
Industry Standard Compliance	Advanced Encryption Standard (AES)	
	TPM 2.0 Support	
	Triple Data Encryption Standard (3DES)	
	SNMP v3	
	SSL 2.0	
	DMTF Systems Management	
	Architecture for Server Hardware Command Line Protocol (SMASH CLP)	
	PCIe 3.0 Compliant	
	UEFI (Unified Extensible Firmware Interface Forum)	
	Redfish API	
	Energy Star Compliant	
System Security	Power-on Administrator's password Keyboard password (QuickLock)	password password
	Remote management On System Management Chipset with SSL encryption, Secure Shell version 2, Advanced Encryption Standard (AES) and Triple Data Encryption Standard (3DES) on browser	
	CLP and XML scripting interface, AES and RC4 encryption of video External USB port enable/disable Network server mode Serial interface control TPM (Trusted Platform Module) 1.2 or 2.0 option	
	Advanced Encryption Standard (AES) Intel® Advanced Encryption Standard-New Instructions (AES-NI)	
OS Support	Microsoft Windows Server Latest version "2022"	
	Red Hat Enterprise Linux (RHEL)	
	SUSE Linux Enterprise Server (SLES)	

	Vmware ESXi latest versions including and not limited to 7.0, 7.5, 8.0a, etc	
Secure encryption	System should support Encryption of the data (Data at rest) on both the internal storage and cache module of the array controllers using encryption keys. Should support local key management for single server and remote key management for central management for enterprise-wide data encryption deployment.	
Firmware security	1. For firmware security, system should support remote management chip creating a fingerprint in the silicon, preventing servers from booting up unless the firmware matches the fingerprint. This feature should be immutable	
	2. Should maintain repository for firmware and drivers recipes to aid rollback or patching of compromised firmware. Should also store Factory Recovery recipe preloaded to rollback to factory tested secured firmware	
	3. Server Configuration Lock - Protecting Systems in Transit and when Deployed in remote Locations	
	4. One-Button Secure Erase - Making server retirement and redeployment simpler.	
	5. Security Dashboard for Server to detect possible security vulnerabilities.	

Blade Server Specs "Cluster4"

Blade Server Specs "Cluster4"	Technical specifications	3
Raid Controller	Raid controller with PCIe 5.0 support	1
Processor	2.0 GHz 24-core or above (Intel 4th generation processor or above)	2
Memory	32GB DDR5 4800MT/S memory DIMMs or equivalent	1 2
HDD	480GB NVMe Gen3 SSD	2
Network Card	25/50Gb Converged Network Adapter	1
Memory Protection	Advanced ECC with multi-bit error protection, Online spare and fast fault tolerance	
Storage expansion	Should have option to support minimum 24 nos. local HDD/SSD per blade server using storage expansion module in chassis	
Interfaces	Minimum of 3 number of x16 PCIe Gen5 slots 1* internal USB 3.0 port ,1* internal microSD slot and 1* external USB 3.0 port	
Blade Server Connectivity to SAN	Should be capable of supporting 32 Gbps Dual port Fiber Channel HBA internal to the Server Blade.	
GPU support	Server should support latest GPU for graphics intensive applications. Should be able to attach a graphics expansion module to accommodate two, four and 8 high end Graphics modules	
Industry Standard Compliance	Advanced Encryption Standard (AES)	
	TPM 2.0 Support	
	Triple Data Encryption Standard (3DES)	
	SNMP v3	
	SSL 2.0	
	DMTF Systems Management	
	Architecture for Server Hardware Command Line Protocol (SMASH CLP)	
	PCIe 3.0 Compliant	
	UEFI (Unified Extensible Firmware Interface Forum)	
	Redfish API	
	Energy Star Compliant	

System Security	Power-on Administrator's Keyboard password (QuickLock) password password	
	Remote management On System Management Chipset with SSL encryption, Secure Shell version 2, Advanced Encryption Standard (AES) and Triple Data Encryption Standard (3DES) on browser	
	CLP and XML scripting interface, AES and RC4 encryption of video External USB port enable/disable Network server mode Serial interface control TPM (Trusted Platform Module) 1.2 or 2.0 option	
	Advanced Encryption Standard (AES) Intel® Advanced Encryption Standard-New Instructions (AES-NI)	
OS Support	Microsoft Windows Server Latest version "2022	
	Red Hat Enterprise Linux (RHEL)	
	SUSE Linux Enterprise Server (SLES)	
	Vmware ESXi latest versions including and not limited to 7.0, 7.5, 8.0a, etc	
Secure encryption	System should support Encryption of the data (Data at rest) on both the internal storage and cache module of the array controllers using encryption keys. Should support local key management for single server and remote key management for central management for enterprise-wide data encryption deployment.	
Firmware security	1. For firmware security, system should support remote management chip creating a fingerprint in the silicon, preventing servers from booting up unless the firmware matches the fingerprint. This feature should be immutable	
	2. Should maintain repository for firmware and drivers recipes to aid rollback or patching of compromised firmware. Should also store Factory Recovery recipe preloaded to rollback to factory tested secured firmware	
	3. Server Configuration Lock - Protecting Systems in Transit and when Deployed in remote Locations	
	4. One-Button Secure Erase - Making server retirement and redeployment simpler.	
	5. Security Dashboard for Server to detect possible security vulnerabilities.	

Blade Enclosure chassis

Blade chassis	Enclosure	Technical specifications	
		The 13 blade servers will be split among two datacenters as follows : 2 in parallel towers and 11 in Pine	
		The needed number of enclosures should be provided in such a way to have spare slots in each to accommodate at least 4 half height future expansions	
Footprint		Bidder should specify the dimensions of each the enclosure (U)	
Scalability		Bidder shall provide the max number of blades the enclosure can host	
power consumption		Max Power consumption per enclosure shall specified	
Heat dissipation		Heat dissipation to be specified	
		10GBase-T SFP+ Transceiver per enclosure	4
		100GbE/4x25GbE/4x32GbFC QSFP28 Transceiver per enclosure	6
		QSFP28 to SFP28 Adapter per enclosure	4
		10Gb SFP+ SR Transceiver per enclosure	2

	Dual power supply per enclosure	
FC connectivity	32Gb Fibre Channel support per enclosure	2
	Proposed solution should support provisioning virtual, physical and container infrastructure from pools of compute, storage and networking resources	
	Solution should have single console provisioning for compute, storage and server side network configuration with choice of direct attach storage (DAS), iSCSI and FC SAN should be available	
	Solution should support software defined templates to quickly make changes to the infrastructure. Template should include server BIOS, firmware, boot order, RAID, storage configs and network config of the infrastructure required for workload	
	Solution should support scripting to reassign compute resources to different workloads to effectively utilize the infrastructure (re provision compute resources from one workload to another)	
	Bidder to specify the number of available interconnect bays to configure redundancy	
	Redundant Interconnect modules shall be integrated within the chassis such that uplinks from the chassis can be directly connected to core LAN/SAN switches	
	The Chassis direct-connect midplane should deliver a min of 16 Tb/s of bandwidth	
	Should support technology built-in to every chassis for Auto-Discovery of resources	
	Chassis should include a display port and USB port to connect Laptop/Monitor locally	
	Should support housing of FCoE, Ethernet, FC and SAS interconnect fabrics offering redundancy as a feature. Also should support network switch/module with 25/50Gb downlinks and 100G uplink to DC switch	
	Interconnect should support 50Gbps downlinks to the Blades in redundancy supporting carving of each port into at least four ports.	
	Should support at least six QSFP28 for external uplink to choose Ethernet and FC uplinks as needed	
	Should support aggregation of multiple enclosures to consolidate data center network connections, reduce hardware and to scale network bandwidth across multiple enclosures. At least 60/36 servers should be supported per aggregation. Layer 2 network traffic should be switched within enclosure aggregation (without using top of the rack switch)	
	Should support Multi-module link aggregation (MLAG) for resiliency against interconnect failure	
	The enclosure should support network switches with at least 6* 100Gb QSP+ uplink ports , up-linkable to the data center switch.	
	The enclosure should support Fiber Channel SAN switches with at least 8* 16Gb FC uplinks and also at least 16Gb downlinks to all server bays. Switch should support trunking to external SAN switches at 128Gb/s per trunk	
	Each blade enclosure should have a cooling subsystem consisting of redundant hot pluggable fans or blowers enabled with technologies for improved power consumption and acoustics	
	Should support redundant physical appliances to stream the Image with OS & application. Appliances should be configured with failover and high-availability	
	Should support provisioning of boot/run storage volumes and deploying OS along with application	
	Should support personalizing OS per deployment plan.	
	Should support stateless operation with IP addresses assigned to bootable images	
	Should provide tools for personalization and customization of images	
	Should support generating iSCSI target for the boot/run volume	
	Should support integration with popular virtualization offerings VMware vCenter and Microsoft system center	

	Should support integration with open source automation and DevOps tools such as Chef, Docker etc.	
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Implementation / Installation

Successful bidder will be responsible for supply, installation, configuration , customization and fine tuning the proposed system according to MIC1 (Alfa) requirements
The bidder shall provide professional Services to configure the new clusters and Hypervisors and to migrate existing VMs
Installation shall be performed by certified engineers experienced teams and under the vendor's supervision- CV of installation team shall be shared
Partnership level: The Bidder should provide documents proving the partnership level that the bidder has with the equipment vendor. The bidder must be certified to sell, implement, and support the proposed systems
Reference List: the Bidder shall provide a reference list for similar installations that have been performed by his team the past 5 years and are still being supported by the bidder-
Contractor shall provide and install during the 3 or 5 years of Warranty/support period all firmware and OS versions and updates and upgrades which occur as a result of continuous improvement or enhancements
Bidder to specify the proactive services that will be provided as part of the device acquisition/support during the warranty/support period. (number of site visit per year, Patch, firmware upgrades, Training credits, health check, etc ..)
Additional cost or delay due to any missing equipment, compatibility issues, accessories or SW needed for the proper operation of the ordered material and which was not taken into account in the offered BOM will be born by the bidder. A penalty of 2% per week on the total value of the PO will be applied on the contractor due to delays induced due to an incomplete BOM.
It is the bidder's responsibility to make sure that the environment in which the equipments will be installed is equipped with all the pre-requisites HW and SW. Should the bidder require to perform a site survey to enable him include all the needed equipment and accessories in the bill of material, please send an email to technology.purchasing@alfamobile.com.lb
Bidder shall provide detailed SOW for installation
The Solution should be able to integrate with the existing monitoring system i.e.: Instantaneous notification of failures (i.e. SNMP trap) to enable IT support staff to ensure maximum system availability
The Bidder shall detail the technical and physical requirements of each of the proposed equipments, device nodes, racks and provide a detailed calculation of power consumption, power supply and weight/heat distribution.
Bidder shall include in his offer the necessary transfer of knowledge sessions to enable the IT engineers perform the needed support, operation and maintenance of the platform.

Warranty and Support

Bidder shall offer two warranty and support options : option 1- 3 years manufacturer warranty with proof including parts and labour- warranty shall start from the date of final acceptance issued by MIC1 option 2 - 5 years manufacturer warranty with proof including parts and labour- warranty shall start from the date of final acceptance issued by MIC1
System support shall be provided on 24/7 basis, with 2 hours response time after problem notification .
Any failure, defect or problem in the Solution provided for MIC1 (Alfa) is considered as critical and supplier shall remedy to that failure in terms of labor & parts and restore the service within 4 to 6 hours of placing the service call. Each time the resolution is not implemented within 4 to 6 hours the bidder will be subject to a penalty of 2% from total amount of the project.
Bidder shall retrieve from alfa premises the defected equipment/parts/items and shall replace it with identical or better one within 4 hours. A penalty of 2% of the cost of the impacted equipment will be applied everytime the supplier fails to comply with this SLA. (working hours is from 8am to 3 pm during week days)

Bidder should confirm that he has in his local stock all the needed spare parts for the systems covered under warranty. Bidder shall ensure in its local stock the needed quantities of each part to comply with the replacement SLA
Bidder should submit the Support pricing rule as function of out of warranty Network Element's (Out of Warranty means that has passed more than 3 and 5 years from the final acceptance certificate issuance date)
Bidder should share with alfa IT team the procedure to follow and the support point of contact name and details to open tickets with his support team
Bidder shall provide the end of support and end of life dates of the proposed systems-
End of sales date of proposed systems shall be at least more than 5 years from the date of RFP submission. If by the time the PO is issued by MIC1 the proposed systems have reached end of sales, then the bidder shall offer the next generation equipment with equivalent or better specifications at no extra cost.
The Bidder must provide commitment for escalation for any incident during installation or warranty period as specified below to the support center of the vendor

General Requirements

Bidder should specify the delivery time line of the proposed equipment.
Additional cost or delay due to any missing equipment, accessories, or software needed for the proper operation of the proposed material and which was not taken into account in the offered BOM will be borne by the Bidder
In case of delay in delivery a penalty of 2% per day of delay shall be deducted from total amount of the PO for a maximum of 20%
In Case the bidder/supplier fails to deliver a feature , functionality or item that he had mentioned as compliant and included in the RFP response, then the following will be applied: • A penalty of 5% from the total amount of the project cost will be applied for each feature/functionality or item not delivered by the supplier. This amount will be deducted from the final acceptance payment. • If the penalty value exceeds the amount remaining to be paid for the project, then MIC1 has the right to cancel the project and the supplier will have to refund the total amount paid to the supplier without the need of any legal recourse . • If a feature , functionality or item is marked as killer and supplier/bidder fails to deliver it upon implementation then MIC1 have the right to cancel the project and the supplier will have to refund the total amount paid without the need of any legal recourse.
previous experience with proposed brand (robustness, frequent incidents, performance, Quality, availability of spares in local market,...
previous experience with bidder (support and after sales services delivered , accuracy of eqt delivered as per order, speed of response to alfa requests , seriousness and professionalism in the proposals expertise of his team, respects deadlines
Bidder shall have an authorized service center in Lebanon for aftersales support - service center should have been established and operational in Lebanon at least 7 years from the present RFP date- the address of the service center location should be provided
Bidder shall share the CVs of technical support team
Equipment offered shall be fully built and assembled at the manufacturing plant of the proposed brand - manufacturer proof letter to be submitted - equipment assembled in Lebanon are not accepted
Bidder shall provide proof by submitting a letter from the proposed equipment manufacturer that he is authorized to sell and provide after sales support for the proposed equipment
30% down payment on PO issuance 30% upon delivery 40% upon Final Acceptance certificate; 45 days from invoice receipt

Article 11: Information Security Specifications

- The Bidder shall commit to refrain from offering any product / equipment which can cause security threat or information leakage that jeopardizes MIC1 network security. (K)

- The Bidder shall accept that MIC1 runs a vulnerability scan on the proposed solution prior to issuing the acceptance and in case any vulnerability is found, the Bidder undertakes to take the necessary actions to remedy such vulnerability within 15 days from its notification. (K)
- The Bidder shall mention the security standards adopted/followed in designing the proposed solution.
- The Bidder should specify if it has acquired the ISO27001 certification or any other equivalent security certification and submit with the Offer a copy of such certificate.
- The Bidder shall not hard code passwords in the proposed solution. (K)
- The provided application should run without the need of root (unix) and / or admin (win) privileges.
- Source code of proposed application should be owned by MIC1.
- System shall allow generation of user, operator as well as alarms logs. (K)
- Solution and storage shall be sized to host history logs for at least 1 year back.
- The Bidder should submit a data flow diagram and schema of the solution architecture.
- In case of online payment, the Bidder shall use encryption. (K)
- The Bidder shall harden systems servers / storage before being published online, and describe hardening aspects applied on each type.
- The Bidder shall describe security checking and audits performed on the designed solution prior to putting it on the market.
- The Bidder shall change default errors / messages and configuration.
- Application should support role-based access, specific privileges per user (i.e specific access to application modules and reports)
- Database should support restricted access per user or groups to data (i.e access per field or per table, ...)
- Encryption shall be used in all communications / interactions between systems, especially if the communication is through web access. Web based access shall always be used through HTTP+SSL. (K)
- Each user shall have only one account / profile to access data.
- Least-privileges should always be specified on nodes / applications.
- Pseudocode flow chart shall be provided by the Bidders.
- The Bidder should commit to improve solution / systems information security weaknesses whenever needed or highlighted by MIC1 information security team. (K)

Article 12: Health, Safety and Environmental Specifications

To ensure that the proposed products and services bidders are compliant with HSE culture, bidders should state basic HSE specifications and compliance information:

- Bidder shall provide the product's specifications that have an environmental impact (power consumption, gas emissions, etc...)
- Bidder shall provide the product specifications that contribute into preserving the environment (made of recycled material, ozone friendly, low volatile organic compounds, etc...)
- Bidder shall provide the product's specifications that contribute towards the health and safety of the users (ergonomic design, safety features, etc)
- Bidder shall state the safety measures being followed by personnel performing the work on Alfa's sites (ISO45001 certification, specific best practices, etc...)

Article 13: Evaluation of Offers

MIC1 reserves the right to accept or reject any or all Offers at its absolute discretion and without thereby incurring any liability to the affected Bidder / Bidders and / or any third party, or any obligation to inform the affected Bidder / Bidders of the grounds for MIC1's action.

The RFT does not bind in any way MIC1 which reserves the right to study the Offers, and to conclude PO/contract negotiations in relation to the RFT, in its totality or parts thereof, with any or several Bidders, as it sees fit and at its sole discretion. MIC1 also retains the right to enter into a contract or to issue PO only for parts of the offered solution.

Further to what is mentioned above, no Bidder may file any claim whatsoever against MIC1 or may claim any compensation from the latter based on the rejection of its Offer or on any ground whatsoever in relation to the RFT.

The Technical and Commercial/Financial Offers are opened sequentially, so that the evaluation of the Technical Offer will precede the evaluation of the Commercial/Financial one. Bidder selection is based on the combined results of the technical and commercial evaluations.

Although due consideration will be given to MIC1's general principles and criteria, including economy and efficiency, MIC1 does not bind itself in any way to select the Bidder offering the lowest price.

Article 14: Entering into Contract

MIC1 shall enter into a contract with the selected Bidder for the services requested under the RFT and shall issue a PO to the selected Bidder in this regard, as the case may be.

At all times, the terms and conditions of said contract/PO shall be defined in accordance the RFT.

MIC1 is operating the Mobile Network for the benefit of the Republic of Lebanon and therefore, in case MIC1 enters into any contract with or issues a PO to the Bidder, this will be for the benefit of the Republic of Lebanon.

Article 15: Termination and Assignment

At any time, MIC1 shall have the right at its sole discretion to cancel the RFT process or terminate the PO/contract with the selected Bidder, with immediate effect, without the need for any judicial or extra-judicial proceedings and such termination shall not entitle the Bidder to any compensation or indemnity whatsoever.

It is to be highlighted that any PO/contract is de facto terminated if the Republic of Lebanon / Ministry of Telecommunications requests its termination. Such termination shall have an immediate effect, and shall be effective without the need for any judicial or extra-judicial proceedings and such termination shall not entitle the Bidder to any compensation or indemnity whatsoever.

MIC1 shall have the sole discretionary right to assign at any time and with immediate effect the PO/contract to the Republic of Lebanon or any designee assigned by the Republic of Lebanon to manage the first mobile network in Lebanon.

Article 16: Boycott of Israel Requirement

Bidder is informed of, and undertakes to abide by, the legal requirements of the Republic of Lebanon concerning the Boycott of Israel in accordance with the law dated June 23rd, 1955.

Therefore, Bidder shall not hold Israeli nationality, or be domiciled in or resident of Israel, or work for it, directly or indirectly, or represent or act for, in any way, directly or indirectly, the interests of Israel or an Israeli entity. Bidder shall not have any main or branch factories or assembly plants or offices in Israel and shall not participate in any Israeli business. Bidder shall not license its name, trademarks, manufacturing or technological patents to any Israeli individual or entity and shall not provide any technological assistance to any Israeli business.

In addition, no person holding Israeli nationality or domiciled in or resident of Israel or working for it directly or indirectly or representing or acting for, in any way, directly or indirectly, the interests of Israel or an Israeli entity may be employed or used, in any way, directly or indirectly, by the Bidder in the project subject to the RFT. Bidder is explicitly obliged to take into consideration this requirement in the allocation and management of its personnel resources, employees, contractors and subcontractors for any activity or solution or mean whatsoever linked to Israel and contributing to the project subject of the RFT.

Any time the Bidder violates such requirements and / or any direct or indirect relation between the Bidder and Israel is brought to MIC1's knowledge, MIC1 shall immediately exclude the Bidder from the RFT process or terminate the PO/contract without the need for any judicial or extra-judicial proceedings and without incurring any liability whatsoever to the affected Bidder / Bidders and / or any third party.

Article 17: Applicable Law and Dispute Resolution

All disputes, which might arise from the validity, interpretation, implementation or termination of the RFT, shall be exclusively settled by the competent Courts of Beirut in Lebanon.

The RFT shall be governed by and construed in accordance with the applicable Lebanese laws.