Annex 1
RFQ Ref # 0469-24 #: SIM CARDS

Article 1: Scope

Suppliers to quote for the supply of SIM Cards as per below quantities:

- 130,000 Prepaid Sim
- 30,000 Plain Sim

Article 2: Technical Specifications

Logistics Requirements (10.1)
Technology & Marketing Requirements (10.2)
Branding Requirements (10.3)
Boycott of Israel Requirement (10.4)

Logistics Requirements

10.1.1	The Bidder shall send the form of the electrical profile
10.1.2	The Bidder shall deliver the test cards to the Client within a maximum period of one (1) week starting from the date of receiving the electrical profile
10.1.3	The Supplier shall deliver the e-proof of the SIM card and its corresponding packs to the Client within a maximum period of one (1) week starting from the date of receiving the artwork CD or files transmission
10.1.4	Bidder shall provide training for 4 people on Java card, General overview on OTA, Value added services on Products, Test equipment, SIM CARDS personalization and Java Tools for free excluding tickets and accommodation
10.1.5	In case of defective sim cards, the Bidder shall replace all defective items free of charge, within 10 working days after MIC1's claim
10.1.6	The Supplier warrants that the Products' software, which means any and all program or software (including firmware) embedded in the Products, are for the period of twelve (12) months from the date of delivery of the Products, compliant to the relevant agreed written specifications
10.1.7	Before delivery of the Products, the Bidder shall take all necessary precautions beforehand to protect Products and keep them undamaged. The Bidder shall be liable for any damage whatsoever caused. The risk of loss, damage or destruction of the Products shall then pass to MIC1 as soon as the Cards are delivered
10.1.8	Bidder confirms that he is certificated by SAS, EAL4+ and EMV co, and his production physical and IT network environment are compliant with the corresponding SAS requirements and other security rules and policies. Production site is complying with the highest security standards and are audited every year by regulatory bodies from governmental and telecom activity sectors
10.1.9	Bidder confirms that input and output files will be transmitted encrypted over SFTP

10.1.10	Bidder should follow alfa's Input file format/template to generate the relevant Output and OTA files: ********* Header Description ** file : FMLXXXXX.INP********* Customer: XXX Quantity: X Type: PLUG-IN Profile: XX.0 Card memory: XXK Card phase: 2+ Card voltage: 3V ADN1: 250 ADN2: 150 SMS memory: 40SMS Pin 1: Graph_ref:X.0 * Batch: XXXXX Transport_key:XXX Transport_KAppli:XXX ********** Input variables ********** Var_in_list: IMSI: XXXXXXXXXXXXXX SER_NB:XXXXXXXXXXXXXXXXXX ********** output ********** Var_Out: IMSI/ICCID/PIN2/PUK1/PUK2/KI/Code_ADM/ ********** fin **********
10.1.11	Bidder shall take out and maintain with a reputable insurance company, an insurance policy, relating to: liability insurance covering the bidder personnel and to cover damage or destruction during transportation
10.1.12	Bidder to invite the operator for a site visit
10	**HALF SIZED PLAIN SIM 3 in 1 Factor**
10.1.13	Every Half-Sized SIM card shall be a unique unit
10.1.14	Material should be PVC “high temperature”
10.1.15	Laser printing of 4 lines of data 1- PIN1 Back side: 4 digits Format: XXXX 2- PUK1 Back side: 8 digits Format: XXXX XXXX 3- Code Bar of the ICCID (code 128) 12 digit 4- ICCID on the Chip
10.1.16	Cards shall be first packaged in cardboard boxes and then in wooden boxes, which protect them against dust and humidity.
10.1.17	Boxes in the package shall contain 500 Products inserted serially. Outer box contains 2500 cards (5 packages). The outer box label shall specify the first serial and the last serial of the cards placed in the four boxes
10.1.18	BAP Trial cards need to be produced by machine and not manually
10.1.19	Standard lead-time for delivery of Trial Cards upon successful completion of the Client requirements is 2 weeks
10.1.20	Bidder to provide the software needed for testing the Products
10.1.21	Testing cards, readers and software are free of charge
10.1.22	The final delivery (to Beirut International Airport) for Plain half sized 3 in 1 usim card shall be done by the Supplier within a maximum period of three (3) weeks after written acceptance of the signed PO sent by fax or email and the related input files
10	**HALF SIZED Prepaid SIM 3 in 1 Factor**
10.1.23	Every SIM card shall be a unique unit
10.1.24	Material should be PVC “high temperature”
10.1.25	Laser printing of 4 lines of data 1- PIN1 Back side: 4 digits Format: XXXX 2- PUK1 Back side: 8 digits Format: XXXX XXXX 3- Code Bar of the ICCID (code 128) 12 digit 4- ICCID on the Chip
10.1.26	Cards shall be first packaged in cardboard boxes and then in wooden boxes, which protect them against dust and humidity.
10.1.27	Each prepaid sim is bundled in a transparent nylon bag 60mm x 70mm . Every 25 prepaid sim will compose a chain without any indications about the MSISDN.

10.1.28	Every 100-sim cards shall be in one box, each 25 having a separator. Outer box contains 2500 cards (5 packages). The outer box label shall specify the first serial and the last serial of the cards placed in the four boxes
10.1.29	BAP Trial cards need to be produced by machine and not manually
10.1.30	Standard lead-time for delivery of Trial Cards upon successful completion of the Client requirements is 2 weeks
10.1.31	Bidder to provide the software needed for testing the Products
10.1.32	Testing cards, readers and software are free of charge
10.1.33	Bidder shall provide training for 4 people on Java card, General overview on OTA, Value added services on Products, Test equipment, SIM CARDS personalization and Java Tools for free excluding tickets and accommodation
10.1.34	Each half sized prepaid sim should carry a label BARCODE LABEL SIZE 40*14mm The bar code is the ICCID without its last digit.
10.1.35	Every delivery should include a file with all serial numbers referring to the dedicated boxes
10.1.36	The final delivery (to Beirut International Airport) for Plain half sized 3 in 1 usim card shall be done by the Supplier within a maximum period of three (4) weeks after written acceptance of the signed PO sent by fax or email and the related input files
10	**M2M Sim Cards - Iso Sized 1 Form Factor**
10.1.37	Every iso Sized SIM card shall be a unique unit
10.1.38	Material should be PVC “high temperature”
10.1.39	Laser printing of 4 lines of data 1- PIN1 Back side: 4 digits Format: XXXX 2- PUK1 Back side: 8 digits Format: XXXX XXXX 3- Code Bar of the ICCID (code 128) 12 digit 4- ICCID on the Chip
10.1.40	Cards shall be first packaged in cardboard boxes and then in wooden boxes, which protect them against dust and humidity.
10.1.41	Boxes in the package shall contain 500 Products inserted serially. Outer box contains 2500 cards (5 packages). The outer box label shall specify the first serial and the last serial of the cards placed in the four boxes
10.1.42	BAP Trial cards need to be produced by machine and not manually
10.1.43	Standard lead-time for delivery of Trial Cards upon successful completion of the Client requirements is 2 weeks
10.1.44	Bidder to provide the software needed for testing the Products
10.1.45	Testing cards, readers and software are free of charge
10.1.46	The final delivery (to Beirut International Airport) for Plain half sized 3 in 1 usim card shall be done by the Supplier within a maximum period of three (3) weeks after written acceptance of the signed PO sent by fax or email and the related input files
10	**M2M Sim Cards - Half Sized 3in1 Form Factor**
10.1.47	Every iso Sized SIM card shall be a unique unit
10.1.48	Material should be PVC “high temperature”
10.1.49	Laser printing of 4 lines of data 1- PIN1 Back side: 4 digits Format: XXXX 2- PUK1 Back side: 8 digits Format: XXXX XXXX 3- Code Bar of the ICCID (code 128) 12 digit 4- ICCID on the Chip
10.1.50	Cards shall be first packaged in cardboard boxes and then in wooden boxes, which protect them against dust and humidity.
10.1.51	Boxes in the package shall contain 500 Products inserted serially. Outer box contains 2500 cards (5 packages). The outer box label shall specify the first serial and the last serial of the cards placed in the four boxes
10.1.52	BAP Trial cards need to be produced by machine and not manually
10.1.53	Standard lead-time for delivery of Trial Cards upon successful completion of the Client requirements is 2 weeks
10.1.54	Bidder to provide the software needed for testing the Products
10.1.55	Testing cards, readers and software are free of charge
10.1.56	The final delivery (to Beirut International Airport) for Plain half sized 3 in 1 usim card shall be done by the Supplier within a maximum period of three (3) weeks after written acceptance of the signed PO sent by fax or email and the related input files

Technology & Marketing Requirements

Article	10.2 Technology & Marketing Requirements
10.2.1	**General requirements**
10.2.1.1	The bidder shall provide a **low-level description** of the SIM products (**Commercial and M2M)** proposed including but not limited to:
10.2.1.1.1	Hardware specs
10.2.1.1.2	SIM release
10.2.1.1.3	Compliance to 3GPP standards
10.2.1.1.4	Compliance to ETSI standards
10.2.1.1.5	Compliance to Global Platform standards
10.2.1.1.6	Supported authentication algorithms
10.2.1.1.7	Available network access applications
10.2.1.1.8	Operating characteristics
10.2.1.1.9	ROM and RAM capacities
10.2.1.1.10	Flash Write operations characteristics
10.2.1.1.11	Free EEPROM memory size
10.2.1.1.12	OTA channels support
10.2.1.1.13	Supported form factors
10.2.1.1.14	Any other specification not listed above
10.2.1.2	The features offered shall have the **latest commercial release** deployed by the supplier. In the negative case (not possible to offer the latest release), an explanation should be offered. This is a killer point.
10.2.1.3	The bidder shall state the **release of the feature** (basic or optional) offered, and its compliance with the corresponding 3GPP specs. This is a killer point.
10.2.1.4	The bidder shall state any **deviation** from the **3GPP** specs for each feature.
10.2.1.5	The bidder shall state any **deviation** from the **ETSI** specs for each feature.
10.2.1.6	The bidder shall be approved by the **GSMA association** and shall be **ISO 9000 certified**
10.2.1.7	The bidder shall provide a compliance list and confirmation that the proposed SIM cards are tested and compatible with all **handsets** recognized by GSM association available in the Lebanese Market. The bidder has to bear all the responsibility.
10.2.1.8	The proposed SIM cards shall be based on an **open Java platform** that is interoperable between suppliers and manageable over the air in a standardized way.
10.2.1.9	The proposed SIM cards shall have based **dynamic application management**. This functionality provides ease of deployment of up-to-date services to the subscribers which are easily accessible via mobile phone
10.2.2	**Training**
10.2.2.1	The bidder shall describe the available **training courses**, **workshops** and other suitable **knowledge transfer** measures.
10.2.2.2	The bidder shall provide **technical trainings** for MIC1's engineers.
10.2.2.3	Training activities provided by the bidder shall be supported with: • Training **material** • Software (Card reader) **simulation**
10.2.2.4	Training courses shall be delivered in **English** language
10.2.2.5	Course documentation shall be distributed to all participants; **electronic format** for the course documentation is highly preferred by MIC1; **product manuals** for all products covered in the course are to be provided in electronic format.
10.2.2.6	The bidder shall provide all needed equipment's and software's as **materials** to fulfill the training objectives.
10.2.2.7	The bidder shall specify the **duration** and **location** of the training.
10.2.2.8	If the training is abroad, the bidder shall cover all **travel expenses** within the provided quotation
10.2.2.9	The bidder shall specify the **qualifications** of the trainers and their **certifications.**
10.2.3	**Standards requirements**
10.2.3.1	**3GPP requirements**
10.2.3.1.1	The proposed SIM cards shall be compliant with the latest version of "**GSM 11.11: Specification of the Subscriber Identity Module - Mobile Equipment (SIM - ME) interface**"

10.2.3.1.2	The proposed SIM cards shall be compliant with the latest version of "**GSM 03.48 release 99: Security mechanisms for SIM application toolkit; Stage** 2"
10.2.3.1.3	The proposed SIM cards shall be compliant with the latest version of "**GSM 11.12: Specification of the 3 Volt Subscriber Identity Module - Mobile Equipment (SIM - ME) interface**"
10.2.3.1.4	The proposed SIM cards shall be compliant with the latest version of "**GSM 11.18: Specification of the 1.8 Volt Subscriber Identity Module - Mobile Equipment (SIM - ME) interface**"
10.2.3.1.5	The proposed SIM cards shall be compliant with the latest version of "**GSM 11.14: Specification of the SIM Application Toolkit (SAT) for the Subscriber Identity Module - Mobile Equipment (SIM-ME) interface**"
10.2.3.1.6	The proposed SIM cards shall be compliant with the latest version of "**TS 22.038: (U)SIM Application Toolkit (USAT); Service description; Stage 1"**
10.2.3.1.7	The proposed SIM cards shall be compliant with the latest version of "**TS 22.048: Security mechanisms for the (U)SIM application toolkit; Stage 1**"
10.2.3.1.8	The proposed SIM cards shall be compliant with the latest version of "**TS 23.003: Numbering, addressing and identification"**
10.2.3.1.9	The proposed SIM cards shall be compliant with the latest version of "**TS 23.040: Technical realization of the Short Message Service (SMS)"**
10.2.3.1.10	The proposed SIM cards shall be compliant with the latest version of "**TS 23.041: Technical realization of Cell Broadcast Service (CBS)"**
10.2.3.1.11	The proposed SIM cards shall be compliant with the latest version of "**TS 23.048: Security mechanisms for the (U)SIM application toolkit; Stage 2"**
10.2.3.1.12	The proposed SIM cards shall be compliant with the latest version of "**TS 21.111: USIM and IC card requirements"**
10.2.3.1.13	The proposed SIM cards shall be compliant with the latest version of "**TS 31.048: Security mechanisms for the (U)SIM application toolkit; Test specification"**
10.2.3.1.14	The proposed SIM cards shall be compliant with the latest version of "**TS 31.101: UICC-terminal interface; Physical and logical characteristics"**
10.2.3.1.15	The proposed SIM cards shall be compliant with the latest version of "**TS 31.102: Characteristics of the Universal Subscriber Identity Module (USIM) application"**
10.2.3.1.16	The proposed SIM cards shall be compliant with the latest version of "**TS 31.103: Characteristics of the IP Multimedia Services Identity Module (ISIM) application"**
10.2.3.1.17	The proposed SIM cards shall be compliant with the latest version of "**TS 31.111: Universal Subscriber Identity Module (USIM) Application Toolkit (USAT)"**
10.2.3.1.18	The proposed SIM cards shall be compliant with the latest version of "**TS 31.120: UICC-terminal interface; Physical, electrical and logical test specification"**
10.2.3.1.19	The proposed SIM cards shall be compliant with the latest version of "**TS 31.122: Universal Subscriber Identity Module (USIM) conformance test specification"**
10.2.3.1.20	The proposed SIM cards shall be compliant with the latest version of "**TS 31.115: Secured packet structure for (Universal) Subscriber Identity Module (U)SIM Toolkit applications"**
10.2.3.1.21	The proposed SIM cards shall be compliant with the latest version of "**TS 31.116: Remote APDU Structure for (U)SIM Toolkit applications"**
10.2.3.1.22	The proposed SIM cards shall be compliant with the latest version of "**TS 31.130: (U)SIM Application Programming Interface (API); (U)SIM API for Java™ Card"**
10.2.3.1.23	The proposed SIM cards shall be compliant with the latest version of "**TS 31.133: IP Multimedia Services Identity Module (ISIM) Application Programming Interface (API); ISIM API for Java Card™"**
10.2.3.1.24	The proposed SIM cards shall be compliant with the latest version of "**TS 31.213: Test specification for (U)SIM; Application Programming Interface (API) for Java Card™"**
10.2.3.1.25	The proposed SIM cards shall be compliant with the latest version of **"TR 31.828: UICC access to IMS"**
10.2.3.1.26	The proposed SIM cards shall be compliant with the latest version of "**TR 31.829: Conformance requirements for IP Multimedia Services Identity Module (ISIM) application test specification"**
10.2.3.1.27	The proposed SIM cards shall be compliant with the latest version of "**TR 31.900: SIM/USIM internal and external interworking aspects**
10.2.3.1.28	The proposed SIM cards shall be compliant with the latest version of " **TR 31.919: 2G/3G Java Card™ Application Programming Interface (API) based applet interworking**
10.2.3.1.29	The proposed SIM cards shall be compliant with the latest version of "**TS 33.102: 3G security; Security architecture"**
10.2.3.1.30	The proposed SIM cards shall be compliant with the latest version of "**TS 33.105: 3G Security; Cryptographic algorithm requirements"**
10.2.3.1.31	The proposed SIM cards shall be compliant with the latest version of "**TS 33.110: Key establishment between a Universal Integrated Circuit Card (UICC) and a terminal"**

10.2.3.1.32	The proposed SIM cards shall be compliant with the latest version of "**TS 33.203: 3G security; Access security for IP-based services"**
10.2.3.1.33	The proposed SIM cards shall be compliant with the latest version of "**TS 33.220: Generic Authentication Architecture (GAA); Generic Bootstrapping Architecture (GBA)"**
10.2.3.1.34	The proposed SIM cards shall be compliant with the latest version of "**TS 33.401: 3GPP System Architecture Evolution (SAE); Security architecture"**
10.2.3.1.35	The proposed SIM cards shall be compliant with the latest version of "**TS 33.402: 3GPP System Architecture Evolution (SAE); Security aspects of non-3GPP accesses**
10.2.3.1.36	The proposed SIM cards shall be compliant with the latest version of "**TS 35.205: 3G Security; Specification of the MILENAGE algorithm set: An example algorithm set for the 3GPP authentication and key generation functions f1, f1*, f2, f3, f4, f5 and f5*; Document 1: General"**
10.2.3.1.37	The proposed SIM cards shall be compliant with the latest version of "**TS 35.206: 3G Security; Specification of the MILENAGE algorithm set: An example algorithm set for the 3GPP authentication and key generation functions f1, f1*, f2, f3, f4, f5 and f5*; Document 2: Algorithm specification"**
10.2.3.1.38	The proposed SIM cards shall be compliant with the latest version of "**TS 35.207: 3G Security; Specification of the MILENAGE algorithm set: An example algorithm set for the 3GPP authentication and key generation functions f1, f1*, f2, f3, f4, f5 and f5*; Document 3: Implementors' test data"**
10.2.3.1.39	The proposed SIM cards shall be compliant with the latest version of "**TS 35.208: 3G Security; Specification of the MILENAGE algorithm set: An example algorithm set for the 3GPP authentication and key generation functions f1, f1*, f2, f3, f4, f5 and f5*; Document 4: Design conformance test data"**
10.2.3.1.40	The proposed SIM cards shall be compliant with the latest version of "**TS 35.231: Specification of the TUAK algorithm set: A second example algorithm set for the 3GPP authentication and key generation functions f1, f1*, f2, f3, f4, f5 and f5*; Document 1: Algorithm specification"**
10.2.3.1.41	The proposed SIM cards shall be compliant with the latest version of "**TS 35.232: Specification of the TUAK algorithm set: A second example algorithm set for the 3GPP authentication and key generation functions f1, f1*, f2, f3, f4, f5 and f5*; Document 2: Implementers' test data"**
10.2.3.1.42	The proposed SIM cards shall be compliant with the latest version of "**TS 35.233: Specification of the TUAK algorithm set: A second example algorithm set for the 3GPP authentication and key generation functions f1, f1*, f2, f3, f4, f5 and f5*; Document 3: Design conformance test data**
10.2.3.1.43	The proposed SIM cards shall be compliant with the latest version of "**TR 35.909: 3G Security; Specification of the MILENAGE algorithm set: an example algorithm set for the 3GPP authentication and key generation functions f1, f1*, f2, f3, f4, f5 and f5*; Document 5: Summary and results of design and evaluation"**
10.2.3.1.44	The proposed SIM cards shall be compliant with the latest version of "**TR 35.934: Specification of the TUAK algorithm set: A second example algorithm set for the 3GPP authentication and key generation functions f1, f1*, f2, f3, f4, f5 and f5*; Document 4: Report on the design and evaluation**"
10.2.3.1.45	The proposed SIM cards shall be compliant with the latest version of "**TR 35.935: Specification of the TUAK algorithm set: A second example algorithm set for the 3GPP authentication and key generation functions f1, f1*, f2, f3, f4, f5 and f5*; Document 5: Performance evaluation**"
10.2.3.1.46	The proposed SIM cards shall be compliant with the latest version of "**TR 35.936: Specification of the TUAK algorithm set: A second example algorithm set for the 3GPP authentication and key generation functions f1, f1*, f2 ,f3, f4, f5 and f5*; Document 6: Security assessment**"
10.2.3.1.47	The proposed SIM cards shall be compliant with the latest version of "**TS 42.017: Subscriber Identity Module (SIM); Functional characteristics**"
10.2.3.1.48	The proposed SIM cards shall be compliant with the latest version of "**TS 42.019: Subscriber Identity Module Application Programming Interface (SIM API); Stage 1**"
10.2.3.1.49	The proposed SIM cards shall be compliant with the latest version of "**TS 43.019: Subscriber Identity Module Application Programming Interface (SIM API) for Java Card; Stage 2**"
10.2.3.1.50	The proposed SIM cards shall be compliant with the latest version of "**TS 43.048: Security Mechanisms for SIM Toolkit Application; Stage 2**"
10.2.3.1.51	The proposed SIM cards shall be compliant with the latest version of "**TS 51.011: Specification of the Subscriber Identity Module - Mobile Equipment (SIM-ME) interface**"

10.2.3.1.52	The proposed SIM cards shall be compliant with the latest version of "**TS 51.013: Test specification for Subscriber Identity Module (SIM) Application Programming Interface (API) for Java Card**"
10.2.3.1.53	The proposed SIM cards shall be compliant with the latest version of "**TS 51.014: Specification of the SIM Application Toolkit for the Subscriber Identity Module - Mobile Equipment (SIM - ME) interface**"
10.2.3.1.54	The proposed SIM cards shall be compliant with the latest version of "**TS 51.017: Subscriber Identity Module (SIM) test specification**"
10.2.3.1.55	The proposed SIM cards shall be compliant with the latest version of "**TS 55.205: Specification of the GSM-MILENAGE algorithms: An example algorithm set for the GSM Authentication and Key Generation Functions A3 and A8**"
10.2.3.2	**ETSI requirements**
10.2.3.2.1	The proposed SIM cards shall be compliant with the latest release of "**ETSI TS 101 220: Smart Cards; ETSI numbering system for telecommunication application providers"**
10.2.3.2.2	The proposed SIM cards shall be compliant with the latest release of "**ETSI TS 102 124: Smart Cards; Transport Protocol for UICC based Applications; Stage 1"**
10.2.3.2.3	The proposed SIM cards shall be compliant with the latest release of "**ETSI TS 102 127: Smart Cards; Transport protocol for CAT applications; Stage 2"**
10.2.3.2.4	The proposed SIM cards shall be compliant with the latest release of "**ETSI TS 102 151: Smart Cards; Measurement of Electromagnetic Emission of SIM Cards;**
10.2.3.2.5	The proposed SIM cards shall be compliant with the latest release of "**ETSI TS 102 221: Smart Cards; UICC-Terminal interface; Physical and logical characteristics"**
10.2.3.2.6	The proposed SIM cards shall be compliant with the latest release of "**ETSI TS 102 222: Integrated Circuit Cards (ICC); Administrative commands for telecommunications applications"**
10.2.3.2.7	The proposed SIM cards shall be compliant with the latest release of **"ETSI TS 102 223: Smart Cards; Card Application Toolkit (CAT) "**
10.2.3.2.8	The proposed SIM cards shall be compliant with the latest release of "**ETSI TS 102 224: Smart Cards; Security mechanisms for UICC based Applications - Functional requirements"**
10.2.3.2.9	The proposed SIM cards shall be compliant with the latest release of "**ETSI TS 102 225: Smart Cards; Secured packet structure for UICC based applications"**
10.2.3.2.10	The proposed SIM cards shall be compliant with the latest release of "**ETSI TS 102 226: Smart Cards; Remote APDU structure for UICC based applications"**
10.2.3.2.11	The proposed SIM cards shall be compliant with the latest release of **"ETSI TS 102 310: Smart Cards; Extensible Authentication Protocol support in the UICC"**
10.2.3.2.12	The proposed SIM cards shall be compliant with the latest release of **"ETSI TS 102 240: Smart Cards; UICC Application Programming Interface and Loader Requirements; Service description"**
10.2.3.2.13	The proposed SIM cards shall be compliant with the latest release of **"ETSI TS 102 241: Smart Cards; UICC Application Programming Interface (UICC API) for Java Card™"**
10.2.3.2.14	The proposed SIM cards shall be compliant with the latest release of **"ETSI TS 102 268: Smart Cards; Test specification for UICC Application Programming Interface (API) for Java CardTM Part 1: Tests Environment and Annexes"**
10.2.3.2.15	The proposed SIM cards shall be compliant with the latest release of **"ETSI TS 102 412: Smart Cards; Smart Card Platform Requirements Stage 1"**
10.2.3.3	**Global Platform requirements**
10.2.3.3.1	The bidder shall specify the **version** of the **Global Platform Card Specification** to which the proposed SIM cards are compliant
10.2.3.3.2	The proposed SIM cards shall be at least compliant with **"Global Platform Card Specification Version 2.1.1"**
10.2.3.3.3	The proposed SIM cards shall be compliant with the latest version of **"Card Remote Application Management over HTTP Card Specification Amendment B"**
10.2.3.3.4	The proposed SIM cards shall be compliant with the latest version of **"Card Technology Secure Channel Protocol '03' Card Specification – Amendment D"**
10.2.3.3.5	The proposed SIM cards shall be compliant with the latest version of **"Card Secure Channel Protocol '11' Card Specification – Amendment F"**
10.2.3.3.6	The proposed SIM cards shall be compliant with **"Global Platform Card Specification Version 2.3.1"**
10.2.3.3.7	The proposed SIM cards shall be compliant with the latest version of **"Card Confidential Card Content Management Card Specification - Amendment A"**
10.2.3.3.8	The proposed SIM cards shall be compliant with the latest version of **"Card Technology Contactless Services Card Specification - Amendment C"**

10.2.3.3.9	The proposed SIM cards shall be compliant with the latest version of **"Card Technology Opacity Secure Channel Card Specification – Amendment G"**
10.2.3.4	**Java Card requirements**
10.2.3.4.1	The proposed SIM cards shall be compliant with the latest **version** of **Java Card API specification**
10.2.3.4.2	The proposed SIM cards shall be compliant with the latest **version** of **Java Card Runtime Environment Specification**
10.2.3.4.3	The proposed SIM cards shall be compliant with the latest **version** of **Java Card Virtual Machine Architecture Specification**
10.2.4	**Network authentication requirements**
10.2.4.1	The proposed SIM cards shall support the following **algorithms** for the encryption of Ki:
10.2.4.1.1	DES
10.2.4.1.2	3DES
10.2.4.1.3	AES
10.2.4.2	The proposed SIM cards shall support the **SAGEs MILENAGE** standard function set
10.2.4.3	The proposed SIM cards shall support the **Comp 128 1,2,3** algortihms
10.2.4.4	The proposed SIM cards shall support the **TUAK** algortihm
10.2.4.5	The proposed SIM cards shall support switch mechanism from Milenage to TUAK
10.2.5	**OTA requirements**
10.2.5.1	The proposed SIM cards shall support OTA over **SMS** channel
10.2.5.2	The proposed SIM cards shall support OTA over **CAT-TP** channel
10.2.5.3	The proposed SIM cards shall support OTA over **HTTP** channel
10.2.5.4	The proposed SIM cards shall support OTA over **HTTPs** channel
10.2.5.5	The proposed SIM cards shall support OTA **pull mode**
10.2.5.6	The proposed SIM cards shall support OTA **Steering of Roaming**
10.2.5.7	The proposed SIM cards shall support OTA **RFM**
10.2.5.8	The proposed SIM cards shall support OTA **RAM**
10.2.6	**Electrical profile requirements**
10.2.6.1	The **electrical profile** of the USIM cards shall be as per the attached current profile: ALFA - USIM Profile - Nov 2019.pdf
10.2.6.2	The bidder shall provide a document describing the **electrical profile** of the proposed **commercial** SIM cards
10.2.6.3	The bidder shall provide a document describing the **electrical profile** of the **proposed** M2M SIM cards
10.2.6.4	**For each optional feature**, the bidder shall provide a description of the electrical profile highlighting the additional needed files and mentioning the impact on the software release if feature is needed
10.2.7	**Applets requirements**
10.2.7.1	The **Extended Phonebook** applet shall be pre-loaded on the proposed commercial SIM cards with no extra charges. By Extended Phonebook applet we mean an applet that allows the user to store /view/update up to 400 contacts. Worksheet in SIM RFP 2018 -Complian Attached you may find its flowchart
10.2.7.2	**Info on demand** applet and its menu shall be downloaded Over-The-Air
10.2.7.3	A **refresh** applet shall be pre-loaded on the proposed SIM cards, The bidder shall provide a full description for the refresh applet and actions to be performed on the SIM card (Refresh all files, refresh specific file, reset, initialization, etc. ...)
10.2.7.4	A **QoE monitoring** applet shall be pre-loaded on the proposed SIM cards.
10.2.7.5	The bidder shall advise if any **proprietary applet** will be pre-loaded on the SIM cards. If yes, the bidder is asked to provide details about the applet and the reason for it.
10.2.8	**Free EEPROM requirements**
10.2.8.1	The bidder shall specify the **free EEPROM size** of the proposed SIM cards
10.2.8.2	The minimum **FREE EEPROM size** shall be **64K, means the supplier shall quote for at least 128K size**
10.2.8.3	The bidder shall provide different quotations for a **memory size** of:

10.2.8.3.1	**128K**
10.2.8.3.2	256K
10.2.8.3.3	512K
10.2.9	**Roadmap**
10.2.9.1	The bidder shall present the **evolution roadmap** of the proposed solution.
10.2.9.2	The bidder shall provide information on the position of the proposed M2M and commercial SIM cards within the **standards** landscape.
10.2.9.3	The bidder shall provide for the proposed M2M SIM cards a roadmap for at **least** the next **three years**
10.2.9.4	The bidder shall provide for the proposed commercial SIM cards a roadmap for at **least** the next **three years**
10.2.9.5	The bidder shall state the planned compliance with all upcoming **3GPP specification releases** for the next **5 years**
10.2.9.6	The bidder shall state the planned compliance with all upcoming **ETSI specification releases** for the next **5 years**
10.2.9.7	The bidder shall state the planned compliance with all upcoming **GlobalPlatform specification releases** for the next **5 years**
10.2.9.8	The bidder shall commit to **upgrade OS/HW/SW version** of the proposed SIM cards **once released** with **no extra charges**
10.2.9.9	The bidder shall inform MIC1 whenever a **new OS/HW/SW version/release** of the proposed SIM cards is **available** for mass production
10.2.9.10	The bidder shall inform MIC1 whenver a **new SIM product** is released
10.2.10	**A4 and OTA transport keys requirements**
10.2.10.1	Following transport key **algorithms** shall be available:
10.2.10.1.1	DES in CBC mode
10.2.10.1.2	DES in ECB mode
10.2.10.1.3	3DES in CBC mode
10.2.10.1.4	3DES in ECB mode
10.2.10.1.5	AES
10.2.10.2	Transport keys shall be stored in **HSM** on bidder's side
10.2.10.3	**No one** shall have **access** to the transport keys on bidder's side
10.2.10.4	The bidder shall provide a **secure tool** to define any new transport key
10.2.10.5	The bidder shall describe the transport key **exchange process**
10.2.10.6	The bidder shall make sure that the transport keys exchange is done **without compromising** them to any single person from MIC1 and bidder side
10.2.10.7	The bidder shall abide with MIC1 following **process** for the definition of a new transport key: Any new key key should be divided into three parts. Key parts will be defined by 3 different custodians from MIC1 side Key parts should be loaded in the secure tool provided by the bidder (key parts should be hidden once entered) The tool shall generate a file including the keys The file should be pgp encrypted then sent to the bidder to load it from his side on HSM
10.2.11	**OTA XML files requirements**
10.2.11.1	The bidder shall provide **OTA content** and **security XML files** as per the attached format along with  FEA616F5.XML  D49699CB.xml .OUT file
10.2.11.2	XML files shall be transfered to MIC1 servers through a secure protocol **sFTP**
10.2.11.3	The bidder shall provide an XML for the **card profile** to be loaded on MIC1 OTA platform as per the  CardProfile_Sample.txt attached format
10.2.12	**Third party applets**

10.2.12.1	The bidder shall anytime provide **support** to MIC1 for loading a third party applets via OTA with no extra charges assuming that no licensing, testing, qualification & integration fees are emposed by the third party supplier
10.2.12.2	The bidder shall allow to **pre-load** any third party applet on new batches of SIM cards with no extra charges assuming that no licensing, testing, qualification & integration fees are emposed by the third party supplier (BAP process to precede production phase)
10.2.12.3	The bidder shall confirm that **warranty** on **hardware** and **software** shall not be affected even when a third party applet is installed on the proposed SIM cards as long as no issue related and/or caused by third party applet is encountered
10.2.13	**Features & technology support**
10.2.13.1	The bidder shall list all **features** supported by the proposed commercial and M2M SIM cards
10.2.13.2	The proposed SIM cards shall support **proactive commands**
10.2.13.3	The proposed SIM cards shall support **2G** technology
10.2.13.4	The proposed SIM cards shall support **3G** technology
10.2.13.5	The proposed SIM cards shall support **LTE** technology
10.2.13.6	The proposed SIM cards shall support **5G** technology
10.2.13.7	The proposed SIM cards shall be **phase 2+**, STK/DSTK capable
10.2.13.8	The proposed SIM cards shall include all **roaming files** (such as but not limited to PLMNsel, OPLMNwact, etc.)
10.2.13.9	The proposed SIM cards shall support **CSD**
10.2.13.10	The proposed SIM cards shall support **HSCSD**
10.2.13.11	The proposed SIM cards shall include the latest available version of the **WIB browser** (WIB 1.3)
10.2.13.12	WIB shall be implemented in **ROM** and shall be in **"sleeping** mode"
10.2.13.13	The proposed SIM cards shall support **S@T**
10.2.13.14	The proposed SIM cards shall support **STK menu**
10.2.13.15	The proposed SIM cards shall support **LTE broadcasting** (GBA eMBMS)
10.2.13.16	The proposed SIM cards shall support **NFC**
10.2.14	**M2M SIM cards additional requirements**
10.2.14.1	The bidder shall provide a **decription** of all available M2M products
10.2.14.2	The bidder shall provide different **quotation** for each M2M product
10.2.14.3	The bidder shall provide a full **description** / **specs** of the proposed M2M SIM cards
10.2.14.3.1	The bidder shall specify the **form factor** of the proposed M2M SIM cards
10.2.14.3.2	The bidder shall specify the **quality** of the proposed M2M SIM cards
10.2.14.3.3	The bidder shall specify the **free EEPROM size** of the proposed M2M SIM cards
10.2.14.3.4	The bidder shall specify the **temperature range** of the proposed M2M SIM cards
10.2.14.3.5	The bidder shall specify the **data retention specs** of the proposed M2M SIM cards
10.2.14.3.6	The bidder shall specify the **memory endurance** of the proposed M2M SIM cards
10.2.14.4	The proposed SIM cards shall be compliant with the latest version of **"TS 102 671: Smart Cards; Machine to Machine UICC; Physical and logical characteristics"**
10.2.14.5	The bidder shall list the **JEDEC standards** to which the proposed M2M SIM cards are compliant
10.2.14.6	The minimum **free EEPROM size of M2M SIM cards** shall be **64K**
10.2.15	**Testing & Validation**
10.2.15.1	The bidder shall commit to send **test cards** configured with the defined profiles to MIC1 for testing and validation with no extra charges
10.2.15.2	The bidder shall commit to provide **card readers** with corresponding latest version of the **SW tool** that enables MIC1 testers to read write and save all types of files on the card shall be sent with the test cards with no extra charges.
10.2.15.3	The bidder shall be ready to **participate** in **testing** when requested.
10.2.15.4	The bidder shall have reactive **technical support** to support the operator in finding adapted solutions.
10.2.15.5	The bidder shall **describe** the way its technical support team is organized.
10.2.16	**Network Archictecture requirements**
10.2.16.1	The bidder shall provide a detailed explanation of the **eUICC authentication**
10.2.16.2	The bidder shall provide a detailed explanation of the **ISIM authentication**
10.2.16.3	The bidder shall provide a detailed description of the **A4 algorithm** used for the encryption of the Subscriber Authentication Key (Ki)
10.2.16.4	**Ki** in the **output file** shall be encrypted with the **transport key**
10.2.16.5	**Opc** shall be computed off the USIM. OP it self should not be stored on the USIM
10.2.16.6	**ri** and **ci** should be according to the 3GPP standards 35.206
10.2.16.7	The bidder shall confirm that all algorithms are available: **DES, 3DES** and **AES.**
10.2.16.8	The bidder shall provide **USIM memory architecture specification**
10.2.16.9	The bidder shall provide **ISIM memory architecture specification**

10.2.16.10	The bidder shall provide **USIM feature specification document**
10.2.16.11	The bidder shall provide **ISIM feature specification document**
10.2.16.12	The bidder shall provide the **Chipsets vendors** and **specification** to be used
10.2.16.13	The bidder shall provide the **expected Memory usage** and the **remaining free space** (EEPROM, RAM) for USIM and ISIM
10.2.16.14	The bidder shall specify the **Voltage Range**, **endurance,** and **Data retention time** for USIM
10.2.16.15	The bidder shall specify the **Voltage Range**, **endurance,** and **Data retention time** for ISIM
10.2.16.16	The bidder shall confirm the **possibility to include the STK menu** (Extended Phone Book, EPB "Alfa+") which enables to increase the phone book from 250 (as main) to an additional 150 (within EPB) to reach a total of 400 phone contacts
10.2.16.17	The bidder shall provide the **function set** used when generating quintets for a subscriber. Is it the SAGEs MILENAGE standard function set
10.2.16.18	The bidder shall advise on the **length of the A4 Key**, Length of AES A4 key can be 16, 24 or 32 bytes (128, 192 & 256 bits)
10.2.16.19	The bidder shall provide detailed **ISIM authentication call flows.**
10.2.16.20	The bidder shall provide detailed **USIM authentication call flows.**
10.2.16.21	The bidder shall provide references for USIM implementation in **Ericsson core network.**(2G/3G/4G) and **IMS network**
10.2.16.22	The bidder shall provide references for ISIM implementation in **Ericsson IMS core network**. Specify the SW release version
10.2.16.23	The bidder shall provide **references** for USIM Provisioning and authentication for Apple device, using Ericsson Platform.
10.2.16.24	The bidder shall confirm that the **EAP-AKA network authentication** procedure will be used for 3G Radius authentication
10.2.16.25	The bidder shall provide details regarding the **IMS-AKA authentication** used by ISIM
10.2.16.26	The proposed solution shall be compliant with **ETSI** (2.17, 2.19, 2.48, 3.20, 11.11, 11.12, 11.14, 11.17)
10.2.16.27	The proposed solution shall be compliant with **3GPP** (22.048, 42.017, 42.019, 43.019, 43.020, 51.011, 51.014)
10.2.16.28	The proposed solution shall be compliant with the **latest release of the GSMA specifications** for the remote provisioning of embedded SIM cards for M2M (SGP.01 M2M Architecture v3.2, SGP.02 M2M TS v3.2, etc.)
10.2.16.29	The bidder shall provide a technical description of all the **interfaces** used in the proposed USIM/ISIM solution
10.2.16.30	The bidder shall advise on the **Connectivity parameters** (for example SMSC address) required by the eUICC to open a communication channel (for example SMS, HTTPs) on a dedicated network.
10.2.16.31	The bidder shall confirm the **WIB smartTrust** are provided
10.2.17	PLAIN SIM
10.2.17.1	The bidder shall provide a list of applets that can be provided as free of charge while precising their size
	Prepaid Sim
10.2.17.2	The bidder shall provide a list of applets that can be provided as free of charge while precising their size
	M2M Sim Cards - Iso Sized 1 Form Factor
10.2.17.3	The bidder shall provide a list of applets that can be provided as free of charge while precising their size
	M2M Sim Cards - Half Sized 3in1 Form Factor
10.2.17.4	The bidder shall provide a list of applets that can be provided as free of charge while precising their size
10.2.18	**Security Requirements**
10.2.18.1	The bidder shall provide a low level description of the SIM cards security
10.2.18.2	Supplier declares that he is certificated by GSM SAS UP and provide a copy of the certificate and its scope
10.2.18.3	Supplier declares that he is certificated by PCI CP and provide a copy of the certificate and its scope
10.2.18.4	Supplier declares that he is certificated by ISO/27 and provide a copy of the certificate and its scope
10.2.18.5	Supplier declares that he is certificated by EAL4+ and provide a copy of the certificate and its scope
10.2.18.6	Supplier declares that he is certificated by EMV co and provide a copy of the certificate and its scope
10.2.18.7	Supplier should declare that his Production site is complying with the highest security standards and are audited every year by regulatory bodies from governmental and telecom activity sectors.
10.2.18.8	The Supplier shall make available audit trails for each event related to card printing and packaging, and any information on events concerning card rejects and bad production
10.2.18.9	The Supplier shall provide a high degree of flexibility in the structuring of the administrative secret codes
10.2.18.10	the Supplier shall offer standard levels of security during personalization
10.2.18.11	The Supplier shall commit that Customer data must always be stored encrypted and transferred encrypted

10.2.18.12	The supplier shall accept that Alfa perform security Audits at the Supplier' premises
10.2.18.13	The supplier shall provide a description on how outfiles are handled and encrypted, and how the encryption keys including transport key are protected inside his premise and when communicated to Alfa

Branding Requirements

10	**PLAIN SIM**
10.3.1	Supplier to repeat the work (free of charge) for any reported complaint related to a bad quality of service (wrong specs, wrong color etc…)
10.3.2	Supplier should provide an e-proof / color proof of every item he is willing to print for Alfa's approval prior kicking off the production. If the colors / info are wrong, supplier needs to provide us with a new e-proof
10.3.3	Supplier should provide a High-res sample after e-proof approval for Alfa's approval prior kicking off the production If the colors / info are wrong, supplier needs to provide us with a new sample
10	**Prepaid Sim**
10.3.4	Supplier to repeat the work (free of charge) for any reported complaint related to a bad quality of service (wrong specs, wrong color etc…)
10.3.5	Supplier should provide an e-proof / color proof of every item he is willing to print for Alfa's approval prior kicking off the production. If the colors / info are wrong, supplier needs to provide us with a new e-proof
10.3.6	Supplier should provide a High-res sample after e-proof approval for Alfa's approval prior kicking off the production If the colors / info are wrong, supplier needs to provide us with a new sample
10	**M2M Sim Cards - Iso Sized 1 Form Factor**
10.3.7	Supplier to repeat the work (free of charge) for any reported complaint related to a bad quality of service (wrong specs, wrong color etc…)
10.3.8	Supplier should provide an e-proof / color proof of every item he is willing to print for Alfa's approval prior kicking off the production. If the colors / info are wrong, supplier needs to provide us with a new e-proof
10.3.9	Supplier should provide a High-res sample after e-proof approval for Alfa's approval prior kicking off the production If the colors / info are wrong, supplier needs to provide us with a new sample
10	**M2M Sim Cards - Half Sized 3in1 Form Factor**
10.3.10	Supplier to repeat the work (free of charge) for any reported complaint related to a bad quality of service (wrong specs, wrong color etc…)
10.3.11	Supplier should provide an e-proof / color proof of every item he is willing to print for Alfa's approval prior kicking off the production If the colors / info are wrong, supplier needs to provide us with a new e-proof
10.3.12	Supplier should provide a High-res sample after e-proof approval for Alfa's approval prior kicking off the production If the colors / info are wrong, supplier needs to provide us with a new sample

10.4	***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, ithe 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 RFP. 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 RFP. 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 RFP 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 3: Special terms

3.1 Terms of Payment

Payments shall be made through bank transfer as follows:

- 60% down payment upon Purchase order receipt
- 40% 1 month after cards and invoices reception and successful testing

3.2 Commercial/Financial Conditions

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

- All prices quoted and all cards shall be delivered CIP accordance with INCOTERMS to Beirut International Airport for International suppliers and to MIC1 warehouses for the local ones. When prices are fixed on CIP basis, the cost of the upgrade from CIP to DDP shall be determined by the Bidders in their Proposal, at their own responsibility. The ratio shall be fixed in accordance with the applicable laws and regulations. The Bidders shall be held liable for any inaccurate or incorrect statement from their side in this regard.

- 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.

- **Selected Supplier(s) shall be requested to provide the Customs' declaration of Export with the merchandise of every order issued.**

- Fees submitted by bid winner will be announced on PPA website following tender award as per Public Procurement Law requirements.

- A Bid Bond from the participating bidders' bank to MIC1 with a value of Fresh 1,100$ should be presented for participation within envelop 1. The validity of this Bid Bond should be for 148 days as of offers submission date; it will be returned to non-selected bidders.

  This Bid Bond 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 19th July 2021.

- Another mandatory Performance bond from winning bidder' bank to MIC1 with a value of 5% of the quoted items 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 policies 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 or new policies terms and conditions 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.

Article 4: Offer Validity

Submitted offers should be valid for 4 months.

Article 6: Submission

Offers must be **submitted in sealed envelope on Friday May 24th, 2024 at 12 pm**

Sealed Envelope should hold the Bidder name as well as RFQ Title : SIM RFQ REF# 0469-24 and should contain:

1- First Envelope including technical specifications of quoted cards
2- Second Envelope including Price List and delivery date for each type of cards

Envelopes received after set date and time will be considered disqualified and returned to suppliers.

No prices should be submitted by email.