



## RFT Scoring Sheet

SF-CF-87

PRO/PMO

2.0

September-21

Grade of Compliance range from 0 to 15 with a step of 1 unit:

15 : Compliant with additional value, not initially included in the requirements  
10 : Fully compliant  
4 - 5 - 6: Partially compliant  
0 : Not compliant  
K : Disqualification



**RFT**  
**Technical Scoring Sheet 50%**

Reference Number	SF-CF-87
Owner	PRO/PMO
Revision Code	2.0
Implementation Date	September 21

Project Name: Sim cards ref# 0208-24

\* For points that are compliant or partially compliant, providing comment / elaboration and reference to a paragraph/section/sentence in a document in the designated column is required.  
\* These comments should include details and information on the degree to which the point is compliant or partially compliant.  
\* For points that are compliant with additional value, the bidder must provide details and information about the additional value and how it can help us improve our user experience/environment/system performance/TTM/ etc

Article	Requirements	Killer	M/O	Weight	Responsible Entity	Supplier 1 Final	Supplier 2 Final	Supplier 3 Final	Supplier 4 Final	Supplier 5 Final	Supplier 6 Final
1.1	<b>Presentation of Offers</b>										
1.1.1	* The bidder shall submit the following documentations joined to the RFP technical response (in Envelop 1)	NO	M	100	LOG						
1.1.2	1. 5 references	NO	M	100	LOG						
1.1.3	2. A minimum of 5 years' experience in the sim production. Bidder to provide related proof.	NO	M	100	LOG						
1.1.4	3. Sim cards sample	NO	M	100	LOG						
1.2	<b>Delivery Penalty</b>										
1.2.1	In case of delay of delivery due to Supplier, the Supplier shall be liable for a penalty of 1.5% per day of delay which shall not exceed 10% of the amount of the corresponding delayed order, except if the delay is due to Force Majeure where no penalty shall be due from the Supplier.	NO	M	100	LOG						
1.2.2	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: oA penalty of 5% from the total amount of the project cost will be applied for each feature/functionality or item. oNot delivered by the Bidder. This amount will be deducted from the final acceptance payment. o 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.	NO	M								
1.3	<b>Logistics Requirements</b>										
1.3.1	<b>General Notes</b>										
1.3.1.1	The Bidder shall send the form of the electrical profile	NO	M	100	LOG						
1.3.1.2	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	NO	M	100	LOG						
1.3.1.3	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	NO	M	100	LOG						
1.3.1.4	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 accomodation	NO	M	100	LOG						
1.3.1.5	In case of defective sim cards, the Bidder shall replace all defective items free of charge, within 10 working days after MIC1's claim	YES	M	100	LOG						
1.3.1.6	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	NO	M	100	LOG						
1.3.1.7	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	NO	M	100	LOG						
1.3.1.8	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	NO	M	100	LOG						
1.3.1.9	Bidder confirms that input and output files will be transmitted encrypted over SFTP	NO	M	100	LOG						
1.3.1.10	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: XXXK 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_KApli:XXX ***** ** Input variables ***** Var_in_list: IMSI: XXXXXXXXXXXXXXXX SER_NB:XXXXXXXXXXXXXXXXXXXX ***** output ***** Var_Out: IMSI/ICCID/PIN2/PUK1/PUK2/KI/Code_ADM/ ***** fin *****	YES	M	100	LOG						
1.3.1.11	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	NO	M	100	LOG						
1.3.1.12	Bidder to invite the operator for a site visit	NO	M	100	LOG						

Article	Requirements	Killer	M/O	Weight	Responsible Entity	Supplier 1 Final	Supplier 2 Final	Supplier 3 Final	Supplier 4 Final	Supplier 5 Final	Supplier 6 Final
1.3.1.13	International and local sim manufacturers should be in business for at least 10 years, to provide a list of references	NO	M	100	LOG						
1.3.1.14	Local agents should be in business for at least 3 years	NO	M	100	LOG						
1.3.1.15	Local agents should provide MIC1 from a unique manufacturer	NO	M	100	LOG						
1.3.1.16	Local Agents should at least have 2 operators as clients and should provide references	NO	M	100	LOG						
<b>HALF SIZED PLAIN SIM 3 in 1 Factor</b>											
1.3.1.17	Every Half Sized SIM card shall be a unique unit	YES	M	100	LOG						
1.3.1.18	Material should be PVC "high temperature"	NO	M	100	LOG						
1.3.1.19	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	NO	M	100	LOG						
1.3.1.20	Cards shall be first packaged in cardboard boxes and then in wooden boxes, which protect them against dust and humidity.	NO	M	100	LOG						
1.3.1.21	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	NO	M	80	LOG						
1.3.1.22	BAP Trial cards need to be produced by machine and not manually	NO	M	100	LOG						
1.3.1.23	Standard lead-time for delivery of Trial Cards upon successful completion of the Client requirements is 2 weeks	NO	M	100	LOG						
1.3.1.24	Bidder to provide the software needed for testing the Products	NO	M	100	LOG						
1.3.1.25	Testing cards, readers and software are free of charge	NO	M	80	LOG						
1.3.1.26	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	NO	M	100	LOG						
<b>HALF SIZED Prepaid SIM 3 in 1 Factor</b>											
1.3.1.27	Every SIM card shall be a unique unit	YES	M	100	LOG						
1.3.1.28	Material should be PVC "high temperature"	NO	M	100	LOG						
1.3.1.29	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	NO	M	100	LOG						
1.3.1.30	Cards shall be first packaged in cardboard boxes and then in wooden boxes, which protect them against dust and humidity.	NO	M	100	LOG						
1.3.1.31	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.	NO	M	100	LOG						
1.3.1.32	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	NO	M	100	LOG						
1.3.1.33	BAP Trial cards need to be produced by machine and not manually	NO	M	100	LOG						
1.3.1.34	Standard lead-time for delivery of Trial Cards upon successful completion of the Client requirements is 2 weeks	NO	M	100	LOG						
1.3.1.35	Bidder to provide the software needed for testing the Products	NO	M	100	LOG						
1.3.1.36	Testing cards, readers and software are free of charge	NO	M	100	LOG						
1.3.1.37	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 accomodation	NO	M	100	LOG						
1.3.1.38	Each half size dprepaid sim should carry a label BARCODE LABEL SIZE 40*14mm The bar code is the ICCID without its last digit.	NO	M	100	LOG						
1.3.1.39	Every delivery should include a file with all serial numbers referring to the dedicated boxes	NO	M	100	LOG						
1.3.1.40	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	NO	M	100	LOG						
<b>M2M Sim Cards - Iso Sized 3in1 Form Factor</b>											
1.3.1.41	Every iso Sized SIM card shall be a unique unit	YES	M	100	LOG						
1.3.1.42	Material should be PVC "high temperature"	NO	M	100	LOG						
1.3.1.43	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	NO	M	100	LOG						
1.3.1.44	Cards shall be first packaged in cardboard boxes and then in wooden boxes, which protect them against dust and humidity.	NO	M	100	LOG						
1.3.1.45	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	NO	M	100	LOG						
1.3.1.46	BAP Trial cards need to be produced by machine and not manually	NO	M	80	LOG						
1.3.1.47	Standard lead-time for delivery of Trial Cards upon successful completion of the Client requirements is 2 weeks	NO	M	100	LOG						
1.3.1.48	Bidder to provide the software needed for testing the Products	NO	M	100	LOG						
1.3.1.49	Testing cards, readers and software are free of charge	NO	M	100	LOG						
1.3.1.50	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	NO	M	100	LOG						
<b>1.4 Technology Requirements</b>											
<b>1.4.1 General requirements (Plain and Prepaid)</b>											
1.4.1.1	The bidder shall provide a low level description of the SIM products (Commercial and M2M) proposed including but not limited to:	YES	M								
1.4.1.2	Hardware specs	YES	M	100	Network Services						
1.4.1.3	SIM release	YES	M	100	Network Services						
1.4.1.4	Compliance to 3GPP standards	YES	M	100	Network Services						
1.4.1.5	Compliance to ETSI standards	YES	M	100	Network Services						
1.4.1.6	Compliance to Global Platform standards	YES	M	100	Network Services						
1.4.1.7	Supported authentication algorithms	YES	M	100	Network Services						
1.4.1.8	Available network access applications	YES	M	100	Network Services						
1.4.1.9	Operating characteristics	YES	M	100	Network Services						

Article	Requirements	Killer	M/O	Weight	Responsible Entity	Supplier 1 Final	Supplier 2 Final	Supplier 3 Final	Supplier 4 Final	Supplier 5 Final	Supplier 6 Final
1.4.1.10	ROM and RAM capacities	YES	M	100	Network Services						
1.4.1.11	Flash Write operations characteristics	YES	M	100	Network Services						
1.4.1.12	Free EEPROM memory size	YES	M	100	Network Services						
1.4.1.13	OTA channels support	YES	M	100	Network Services						
1.4.1.14	Supported form factors	YES	M	100	Network Services						
1.4.1.15	Any other specification not listed above	YES	M	100	Network Services						
1.4.1.16	The features offered shall have the <b>latest commercial release</b> 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.	YES	M	100	Network Services						
1.4.1.17	The bidder shall state the <b>release of the feature</b> (basic or optional) offered, and its compliance with the corresponding 3GPP specs. This is a killer point.	YES	M	100	Network Services						
1.4.1.18	The bidder shall state any <b>deviation</b> from the <b>3GPP</b> specs for each feature.	NO	M	100	Network Services						
1.4.1.19	The bidder shall state any <b>deviation</b> from the <b>ETSI</b> specs for each feature.	NO	M	100	Network Services						
1.4.1.20	The bidder shall be approved by the <b>GSMA association</b> and shall be <b>ISO 9000 certified</b>	YES	M	100	Network Services						
1.4.1.21	The bidder shall provide a compliance list and confirmation that the proposed SIM cards are tested and compatible with all <b>handsets</b> recognized by GSM association available in the Lebanese Market. The bidder has to bear all the responsibility.	YES	M	100	Network Services						
1.4.1.22	The proposed SIM cards shall be based on an <b>open Java platform</b> that is interoperable between suppliers and manageable over the air in a standardized way.	NO	M	100	Network Services						
1.4.1.23	The proposed SIM cards shall have based <b>dynamic application management</b> . This functionality provides ease of deployment of up-to-date services to the subscribers which are easily accessible via mobile phone	NO	M	100	Network Services						
<b>1.4.2 Training</b>											
1.4.2.1	The bidder shall describe the available <b>training courses, workshops</b> and other suitable <b>knowledge transfer</b> measures.	NO	M	100	Network Services						
1.4.2.2	The bidder shall provide <b>technical trainings</b> for MIC1's engineers.	YES	M	100	Network Services						
1.4.2.3	Training activities provided by the bidder shall be supported with: • Training <b>material</b> • Software (Card reader) <b>simulation</b>	NO	M	100	Network Services						
1.4.2.4	Training courses shall be delivered in <b>English language</b>	NO	M	100	Network Services						
1.4.2.5	Course documentation shall be distributed to all participants; <b>electronic format</b> for the course documentation is highly preferred by MIC1; <b>product manuals</b> for all products covered in the course are to be provided in electronic format.	NO	M	100	Network Services						
1.4.2.6	The bidder shall provide all needed equipment's and software's as <b>materials</b> to fulfill the training objectives.	NO	M	100	Network Services						
1.4.2.7	The bidder shall specify the <b>duration</b> and <b>location</b> of the training.	NO	M	100	Network Services						
1.4.2.8	If the training is abroad, the bidder shall cover all <b>travel expenses</b> within the provided quotation	NO	M	100	Network Services						
1.4.2.9	The bidder shall specify the <b>qualifications</b> of the trainers and their <b>certifications</b> .	NO	O	100	Network Services						
<b>1.4.3 Standards requirements</b>											
<b>1.4.3.1 3GPP requirements</b>											
1.4.3.1.1	The proposed SIM cards shall be compliant with the latest version of <b>"GSM 11.11: Specification of the Subscriber Identity Module - Mobile Equipment (SIM - ME) interface"</b>	NO	M	100	Network Services						
1.4.3.1.2	The proposed SIM cards shall be compliant with the latest version of <b>"GSM 03.48 release 99: Security mechanisms for SIM application toolkit; Stage 2"</b>	NO	M	100	Network Services						
1.4.3.1.3	The proposed SIM cards shall be compliant with the latest version of <b>"GSM 11.12: Specification of the 3 Volt Subscriber Identity Module - Mobile Equipment (SIM - ME) interface"</b>	NO	M	100	Network Services						
1.4.3.1.4	The proposed SIM cards shall be compliant with the latest version of <b>"GSM 11.18: Specification of the 1.8 Volt Subscriber Identity Module - Mobile Equipment (SIM - ME) interface"</b>	NO	M	100	Network Services						
1.4.3.1.5	The proposed SIM cards shall be compliant with the latest version of <b>"GSM 11.14: Specification of the SIM Application Toolkit (SAT) for the Subscriber Identity Module - Mobile Equipment (SIM-ME) interface"</b>	NO	M	100	Network Services						
1.4.3.1.6	The proposed SIM cards shall be compliant with the latest version of <b>"TS 22.038: (U)SIM Application Toolkit (USAT): Service description; Stage 1"</b>	NO	M	100	Network Services						
1.4.3.1.7	The proposed SIM cards shall be compliant with the latest version of <b>"TS 22.048: Security mechanisms for the (U)SIM application toolkit; Stage 1"</b>	NO	M	100	Network Services						
1.4.3.1.8	The proposed SIM cards shall be compliant with the latest version of <b>"TS 23.003: Numbering, addressing and identification"</b>	NO	M	100	Network Services						
1.4.3.1.9	The proposed SIM cards shall be compliant with the latest version of <b>"TS 23.040: Technical realization of the Short Message Service (SMS)"</b>	NO	M	100	Network Services						
1.4.3.1.10	The proposed SIM cards shall be compliant with the latest version of <b>"TS 23.041: Technical realization of Cell Broadcast Service (CBS)"</b>	NO	M	100	Network Services						
1.4.3.1.11	The proposed SIM cards shall be compliant with the latest version of <b>"TS 23.048: Security mechanisms for the (U)SIM application toolkit; Stage 2"</b>	NO	M	100	Network Services						
1.4.3.1.12	The proposed SIM cards shall be compliant with the latest version of <b>"TS 21.111: USIM and IC card requirements"</b>	NO	M	100	Network Services						
1.4.3.1.13	The proposed SIM cards shall be compliant with the latest version of <b>"TS 31.048: Security mechanisms for the (U)SIM application toolkit; Test specification"</b>	NO	M	100	Network Services						
1.4.3.1.14	The proposed SIM cards shall be compliant with the latest version of <b>"TS 31.101: UICC-terminal interface; Physical and logical characteristics"</b>	NO	M	100	Network Services						
1.4.3.1.15	The proposed SIM cards shall be compliant with the latest version of <b>"TS 31.102: Characteristics of the Universal Subscriber Identity Module (USIM) application"</b>	NO	M	100	Network Services						
1.4.3.1.16	The proposed SIM cards shall be compliant with the latest version of <b>"TS 31.103: Characteristics of the IP Multimedia Services Identity Module (ISIM) application"</b>	NO	O	50	Network Services						
1.4.3.1.17	The proposed SIM cards shall be compliant with the latest version of <b>"TS 31.111: Universal Subscriber Identity Module (USIM) Application Toolkit (USAT)"</b>	NO	M	100	Network Services						
1.4.3.1.18	The proposed SIM cards shall be compliant with the latest version of <b>"TS 31.120: UICC-terminal interface; Physical, electrical and logical test specification"</b>	NO	M	100	Network Services						
1.4.3.1.19	The proposed SIM cards shall be compliant with the latest version of <b>"TS 31.122: Universal Subscriber Identity Module (USIM) conformance test specification"</b>	NO	M	100	Network Services						
1.4.3.1.20	The proposed SIM cards shall be compliant with the latest version of <b>"TS 31.115: Secured packet structure for (Universal) Subscriber Identity Module (U)SIM Toolkit applications"</b>	NO	M	100	Network Services						
1.4.3.1.21	The proposed SIM cards shall be compliant with the latest version of <b>"TS 31.116: Remote APDU Structure for (U)SIM Toolkit applications"</b>	NO	M	100	Network Services						
1.4.3.1.22	The proposed SIM cards shall be compliant with the latest version of <b>"TS 31.130: (U)SIM Application Programming Interface (API); (U)SIM API for Java™ Card"</b>	NO	M	100	Network Services						
1.4.3.1.23	The proposed SIM cards shall be compliant with the latest version of <b>"TS 31.133: IP Multimedia Services Identity Module (ISIM) Application Programming Interface (API); ISIM API for Java Card™"</b>	NO	O	50	Network Services						
1.4.3.1.24	The proposed SIM cards shall be compliant with the latest version of <b>"TS 31.213: Test specification for (U)SIM; Application Programming Interface (API) for Java Card™"</b>	NO	M	100	Network Services						
1.4.3.1.25	The proposed SIM cards shall be compliant with the latest version of <b>"TR 31.828: UICC access to IMS"</b>	NO	O	50	Network Services						
1.4.3.1.26	The proposed SIM cards shall be compliant with the latest version of <b>"TR 31.829: Conformance requirements for IP Multimedia Services Identity Module (ISIM) application test specification"</b>	NO	O	50	Network Services						
1.4.3.1.27	The proposed SIM cards shall be compliant with the latest version of <b>"TR 31.900: SIM/USIM internal and external interworking aspects"</b>	NO	M	100	Network Services						
1.4.3.1.28	The proposed SIM cards shall be compliant with the latest version of <b>"TR 31.919: 2G/3G Java Card™ Application Programming Interface (API) based applet interworking"</b>	NO	M	100	Network Services						
1.4.3.1.29	The proposed SIM cards shall be compliant with the latest version of <b>"TS 33.102: 3G security; Security architecture"</b>	NO	M	100	Network Services						
1.4.3.1.30	The proposed SIM cards shall be compliant with the latest version of <b>"TS 33.105: 3G Security; Cryptographic algorithm requirements"</b>	NO	M	100	Network Services						

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1.4.3.1.31	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"	NO	M	100	Network Services						
1.4.3.1.32	The proposed SIM cards shall be compliant with the latest version of "TS 33.203: 3G security; Access security for IP-based services"	NO	M	100	Network Services						
1.4.3.1.33	The proposed SIM cards shall be compliant with the latest version of "TS 33.220: Generic Authentication Architecture (GAA); Generic Bootstrapping Architecture (GBA)"	NO	O	50	Network Services						
1.4.3.1.34	The proposed SIM cards shall be compliant with the latest version of "TS 33.401: 3GPP System Architecture Evolution (SAE); Security architecture"	NO	M	100	Network Services						
1.4.3.1.35	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"	NO	O	50	Network Services						
1.4.3.1.36	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"	NO	M	100	Network Services						
1.4.3.1.37	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"	NO	M	100	Network Services						
1.4.3.1.38	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"	NO	M	100	Network Services						
1.4.3.1.39	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"	NO	M	100	Network Services						
1.4.3.1.40	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"	NO	O	50	Network Services						
1.4.3.1.41	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"	NO	O	50	Network Services						
1.4.3.1.42	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"	NO	O	50	Network Services						
1.4.3.1.43	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"	NO	M	100	Network Services						
1.4.3.1.44	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"	NO	O	50	Network Services						
1.4.3.1.45	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"	NO	O	50	Network Services						
1.4.3.1.46	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"	NO	O	50	Network Services						
1.4.3.1.47	The proposed SIM cards shall be compliant with the latest version of "TS 42.017: Subscriber Identity Module (SIM); Functional characteristics"	NO	M	100	Network Services						
1.4.3.1.48	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"	NO	M	100	Network Services						
1.4.3.1.49	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"	NO	M	100	Network Services						
1.4.3.1.50	The proposed SIM cards shall be compliant with the latest version of "TS 43.048: Security Mechanisms for SIM Toolkit Application; Stage 2"	NO	M	100	Network Services						
1.4.3.1.51	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"	NO	M	100	Network Services						
1.4.3.1.52	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"	NO	M	100	Network Services						
1.4.3.1.53	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"	NO	M	100	Network Services						
1.4.3.1.54	The proposed SIM cards shall be compliant with the latest version of "TS 51.017: Subscriber Identity Module (SIM) test specification"	NO	M	100	Network Services						
1.4.3.1.55	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"	NO	M	100	Network Services						
1.4.3.2	<b>ETSI requirements</b>										
1.4.3.2.1	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"	NO	M	100	Network Services						
1.4.3.2.2	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"	NO	M	100	Network Services						
1.4.3.2.3	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"	NO	M	100	Network Services						
1.4.3.2.4	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;	NO	M	100	Network Services						
1.4.3.2.5	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"	NO	M	100	Network Services						
1.4.3.2.6	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"	NO	M	100	Network Services						
1.4.3.2.7	The proposed SIM cards shall be compliant with the latest release of "ETSI TS 102 223: Smart Cards; Card Application Toolkit (CAT) "	NO	M	100	Network Services						
1.4.3.2.8	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"	NO	M	100	Network Services						
1.4.3.2.9	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"	NO	M	100	Network Services						
1.4.3.2.10	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"	NO	M	100	Network Services						
1.4.3.2.11	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"	NO	O	50	Network Services						
1.4.3.2.12	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"	NO	M	100	Network Services						
1.4.3.2.13	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™"	NO	M	100	Network Services						
1.4.3.2.14	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 Card™ Part 1: Tests Environment and Annexes"	NO	M	100	Network Services						
1.4.3.2.15	The proposed SIM cards shall be compliant with the latest release of "ETSI TS 102 412: Smart Cards; Smart Card Platform Requirements Stage 1"	NO	M	100	Network Services						
1.4.3.3	<b>Global Platform requirements</b>										
1.4.3.3.1	The bidder shall specify the version of the Global Platform Card Specification to which the proposed SIM cards are compliant	NO	M	100	Network Services						
1.4.3.3.2	The proposed SIM cards shall be at least compliant with "Global Platform Card Specification Version 2.1.1"	NO	M	100	Network Services						

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1.4.3.3.3	The proposed SIM cards shall be compliant with the latest version of "Card Remote Application Management over HTTP Card Specification Amendment B"	NO	O	50	Network Services						
1.4.3.3.4	The proposed SIM cards shall be compliant with the latest version of "Card Technology Secure Channel Protocol '03' Card Specification – Amendment D"	NO	O	50	Network Services						
1.4.3.3.5	The proposed SIM cards shall be compliant with the latest version of "Card Secure Channel Protocol '11' Card Specification – Amendment F"	NO	O	50	Network Services						
1.4.3.3.6	The proposed SIM cards shall be compliant with "Global Platform Card Specification Version 2.3.1"	NO	O	50	Network Services						
1.4.3.3.7	The proposed SIM cards shall be compliant with the latest version of "Card Confidential Card Content Management Card Specification - Amendment A"	NO	O	50	Network Services						
1.4.3.3.8	The proposed SIM cards shall be compliant with the latest version of "Card Technology Contactless Services Card Specification - Amendment C"	NO	O	50	Network Services						
1.4.3.3.9	The proposed SIM cards shall be compliant with the latest version of "Card Technology Opacity Secure Channel Card Specification – Amendment G"	NO	O	50	Network Services						
1.4.3.4	<b>Java Card requirements</b>										
1.4.3.4.1	The proposed SIM cards shall be compliant with the latest version of Java Card API specification	NO	M	100	Network Services						
1.4.3.4.2	The proposed SIM cards shall be compliant with the latest version of Java Card Runtime Environment Specification	NO	M	100	Network Services						
1.4.3.4.3	The proposed SIM cards shall be compliant with the latest version of Java Card Virtual Machine Architecture Specification	NO	M	100	Network Services						
1.4.4	<b>Network authentication requirements</b>										
1.4.4.1	The proposed SIM cards shall support the following algorithms for the encryption of Ki:	NO	M		Network Services						
1.4.4.2	DES	NO	M	100	Network Services						
1.4.4.3	3DES	NO	M	100	Network Services						
1.4.4.4	AES	NO	M	100	Network Services						
1.4.4.5	The proposed SIM cards shall support the SAGES MILENAGE standard function set	NO	M	100	Network Services						
1.4.4.6	The proposed SIM cards shall support the Comp 128 1,2,3 algorithms	NO	M	80	Network Services						
1.4.4.7	The proposed SIM cards shall support the TUAK algorithm	NO	O	50	Network Services						
1.4.4.8	The proposed SIM cards shall support switch mechanism from Milenage to TUAK	NO	O	50	Network Services						
1.4.5	<b>OTA requirements</b>										
1.4.5.1	The proposed SIM cards shall support OTA over SMS channel	YES	M	100	Network Services						
1.4.5.2	The proposed SIM cards shall support OTA over CAT-TP channel	NO	O	50	Network Services						
1.4.5.3	The proposed SIM cards shall support OTA over HTTP channel	NO	O	50	Network Services						
1.4.5.4	The proposed SIM cards shall support OTA over HTTPs channel	NO	O	50	Network Services						
1.4.5.5	The proposed SIM cards shall support OTA pull mode	NO	O	50	Network Services						
1.4.5.6	The proposed SIM cards shall support OTA Steering of Roaming	NO	O	50	Network Services						
1.4.5.7	The proposed SIM cards shall support OTA RFM	YES	M	100	Network Services						
1.4.5.8	The proposed SIM cards shall support OTA RAM	YES	M	100	Network Services						
1.4.6	<b>Electrical profile requirements</b>										
1.4.5.1	The electrical profile of the USIM cards shall be as per the attached current profile:	YES	M	100	Network Services						
1.4.5.2	The bidder shall provide a document describing the electrical profile of the proposed commercial SIM cards	NO	M	100	Network Services						
1.4.5.3	The bidder shall provide a document describing the electrical profile of the proposed M2M SIM cards	NO	M	100	Network Services						
1.4.5.4	The bidder shall take into consideration that the user must be able to store/update up to 400 contacts on the SIM card	YES	M	100	Network Services						
1.4.5.5	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	NO	M	80	Network Services						
1.4.7	<b>Applets requirements</b>										
1.4.7.1	Info on demand applet and its menu shall be downloaded Over-The-Air	NO	M	100	Network Services						
1.4.7.2	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. ...)	NO	O	50	Network Services						
1.4.7.3	A QoE monitoring applet shall be pre-loaded on the proposed SIM cards	NO	O	50	Network Services						
1.4.7.4	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.	NO	M	100	Network Services						
1.4.8	<b>Free EEPROM requirements</b>										
1.4.8.1	The bidder shall specify the free EEPROM size of the proposed SIM cards	YES	M	100	Network Services						
1.4.8.2	The minimum free EEPROM size shall be 64K	YES	M	100	Network Services						
1.4.8.3	The bidder shall provide different quotations for a free memory size of:	NO	M		Network Services						
1.4.8.4	128K	NO	M	100	Network Services						
1.4.8.5	256K	NO	M	80	Network Services						
1.4.8.6	512K	NO	M	80	Network Services						
1.4.9	<b>Roadmap</b>										
1.4.9.1	The bidder shall present the evolution roadmap of the proposed solution.	NO	M	100	Network Services						
1.4.9.2	The bidder shall provide information on the position of the proposed M2M and commercial SIM cards within the standards landscape.	NO	M	100	Network Services						
1.4.9.3	The bidder shall provide for the proposed M2M SIM cards a roadmap for at least the next three years	NO	M	100	Network Services						
1.4.9.4	The bidder shall provide for the proposed commercial SIM cards a roadmap for at least the next three years	NO	M	100	Network Services						
1.4.9.5	The bidder shall state the planned compliance with all upcoming 3GPP specification releases for the next 5 years	NO	M	100	Network Services						
1.4.9.6	The bidder shall state the planned compliance with all upcoming ETSI specification releases for the next 5 years	NO	M	100	Network Services						
1.4.9.7	The bidder shall state the planned compliance with all upcoming GlobalPlatform specification releases for the next 5 years	NO	M	100	Network Services						
1.4.9.8	The bidder shall commit to upgrade OS/HW/SW version of the proposed SIM cards once released with no extra charges	NO	M	100	Network Services						
1.4.9.9	The bidder shall inform MIC1 whenever a new OS/HW/SW version/release of the proposed SIM cards is available for mass production	NO	M	100	Network Services						
1.4.9.10	The bidder shall inform MIC1 whenever a new SIM product is released	NO	M	100	Network Services						
1.4.10	<b>A4 and OTA transport keys requirements</b>										
1.4.10.1	Following transport key algorithms shall be available:	YES	M	100	Network Services						
1.4.10.2	DES in CBC mode	YES	M	100	Network Services						
1.4.10.3	DES in ECB mode	YES	M	100	Network Services						
1.4.10.4	3DES in CBC mode	YES	M	100	Network Services						
1.4.10.5	3DES in ECB mode	YES	M	100	Network Services						
1.4.10.6	AES	YES	M	100	Network Services						
1.4.10.7	Transport keys shall be stored in HSM on bidder's side	YES	M	100	Network Services						
1.4.10.8	No one shall have access to the transport keys on bidder's side	YES	M	100	Network Services						
1.4.10.9	The bidder shall provide a secure tool to define any new transport key	YES	M	100	Network Services						
1.4.10.10	The bidder shall describe the transport key exchange process	YES	M	100	Network Services						
1.4.10.11	The bidder shall make sure that the transport keys exchange is done without compromising them to any single person from MIC1 and bidder side	YES	M	100	Network Services						

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1.4.10.12	The bidder shall abide with MIC1 following <b>process</b> for the definition of a new transport key: Any new 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	YES	M	100	Network Services						
<b>1.4.11 OTA XML files requirements</b>											
1.4.11.1	The bidder shall provide <b>OTA content</b> and <b>security XML files</b> as per the attached format along with .OUT file	YES	M	100	Network Services						
1.4.11.2	XML files shall be transferred to MIC1 servers through a secure protocol <b>sFTP</b>	YES	M	100	Network Services						
1.4.11.3	The bidder shall provide an XML for the <b>card profile</b> to be loaded on MIC1 OTA platform as per the attached format	YES	M	100	Network Services						
<b>1.4.12 Third party applets</b>											
1.4.12.1	The bidder shall anytime provide <b>support</b> to MIC1 for loading a third party applets via OTA with no extra charges assuming that no licensing, testing, qualification & integration fees are imposed by the third party supplier	NO	O	80	Network Services						
1.4.12.2	The bidder shall allow to <b>pre-load</b> any third party applet on new batches of SIM cards with no extra charges assuming that no licensing, testing, qualification & integration fees are imposed by the third party supplier (BAP process to precede production phase)	NO	O	80	Network Services						
1.4.12.3	The bidder shall confirm that <b>warranty</b> on <b>hardware</b> and <b>software</b> 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	NO	M	100	Network Services						
<b>1.4.13 Features &amp; technology support</b>											
1.4.13.1	The bidder shall list all <b>features</b> supported by the proposed commercial and M2M SIM cards	NO	M	100	Network Services						
1.4.13.2	The proposed SIM cards shall support <b>proactive commands</b>	YES	M	100	Network Services						
1.4.13.3	The proposed SIM cards shall support <b>2G</b> technology	YES	M	100	Network Services						
1.4.13.4	The proposed SIM cards shall support <b>3G</b> technology	YES	M	100	Network Services						
1.4.13.5	The proposed SIM cards shall support <b>LTE</b> technology	YES	M	100	Network Services						
1.4.13.6	The proposed SIM cards shall support <b>5G</b> technology	NO	M	100	Network Services						
1.4.13.7	The proposed SIM cards shall be <b>phase 2+</b> , STK/DSTK capable	YES	M	100	Network Services						
1.4.13.8	The proposed SIM cards shall include all <b>roaming files</b> (such as but not limited to PLMNsel, OPLMNwact, etc.)	YES	M	100	Network Services						
1.4.13.9	The proposed SIM cards shall support <b>CSD</b>	NO	M	100	Network Services						
1.4.13.10	The proposed SIM cards shall support <b>HSCSD</b>	NO	O	50	Network Services						
1.4.13.11	The proposed SIM cards shall include the latest available version of the <b>WIB browser</b> (WIB 1.3)	NO	M	100	Network Services						
1.4.13.12	WIB shall be implemented in <b>ROM</b> and shall be in " <b>sleeping mode</b> "	NO	M	100	Network Services						
1.4.13.13	The proposed SIM cards shall support <b>S@T</b>	NO	O	50	Network Services						
1.4.13.14	The proposed SIM cards shall support <b>STK menu</b>	NO	M	100	Network Services						
1.4.13.15	The proposed SIM cards shall support <b>LTE broadcasting</b> (GBA eMBMS)	NO	O	50	Network Services						
1.4.13.16	The proposed SIM cards shall support <b>NFC</b>	NO	O	50	Network Services						
<b>1.4.14 Optional 5G features</b>											
1.4.14.1	The proposed SIM cards shall include all <b>5G specific EFs</b> under DF5GS	NO	O	50	Network Services						
1.4.14.2	The proposed SIM cards shall include all <b>5G services</b>	NO	O	50	Network Services						
1.4.14.3	The bidder shall list the <b>5G services</b> supported by the proposed SIM cards	NO	O	50	Network Services						
1.4.14.4	The proposed SIM cards shall support <b>SUCI calculation by ME</b>	NO	O	50	Network Services						
1.4.14.5	The proposed SIM cards shall support <b>SUCI calculation by SIM</b>	NO	O	50	Network Services						
1.4.14.6	The proposed SIM cards shall support <b>dynamic behavior switch</b> between SUCI calculation in SIM or in phone	NO	O	50	Network Services						
1.4.14.7	The proposed SIM cards shall be operable in a <b>NSA 5G</b> deployment	NO	O	50	Network Services						
1.4.14.8	The proposed SIM cards shall be operable in a <b>SA 5G</b> deployment	NO	O	50	Network Services						
1.4.14.9	The proposed SIM cards shall support SUCI calculation in SIM HW <b>on fly</b> and <b>in background</b>	NO	O	50	Network Services						
1.4.14.10	The proposed SIM cards shall be compliant with <b>3GPP Release 15</b>	NO	O	50	Network Services						
1.4.14.11	The proposed SIM cards shall be compliant with <b>3GPP Release 16</b>	NO	O	50	Network Services						
1.4.14.12	The bidder shall specify the <b>3GPP releases supported</b> by the proposed SIM cards (release 15, Release 16, Release 17, etc.)	NO	O	50	Network Services						
1.4.14.13	The proposed SIM cards shall support following asymmetric crypto schemes:	NO	O	50	Network Services						
1.4.14.14	<b>Null Scheme</b>	NO	O	50	Network Services						
1.4.14.15	<b>Scheme A</b>	NO	O	50	Network Services						
1.4.14.16	<b>Scheme B</b>	NO	O	50	Network Services						
1.4.14.17	The proposed SIM cards shall support <b>Over-The-Air</b> 5G Service activation, 5G files configuration updates and SUCI Algorithm selection	NO	O	50	Network Services						
<b>1.4.15 M2M SIM cards additional requirements</b>											
1.4.15.1	The bidder shall provide a <b>description</b> of all available M2M products	NO	M	100	Network Services						
1.4.15.2	The bidder shall provide different <b>quotation</b> for each M2M product	NO	M	100	Network Services						
1.4.15.3	The bidder shall provide a full <b>description / specs</b> of the proposed M2M SIM cards	NO	M	100	Network Services						
1.4.15.4	The bidder shall specify the <b>form factor</b> of the proposed M2M SIM cards	NO	M	100	Network Services						
1.4.15.5	The bidder shall specify the <b>quality</b> of the proposed M2M SIM cards	NO	M	100	Network Services						
1.4.15.6	The bidder shall specify the <b>free EEPROM size</b> of the proposed M2M SIM cards	NO	M	100	Network Services						
1.4.15.7	The bidder shall specify the <b>temperature range</b> of the proposed M2M SIM cards	NO	M	100	Network Services						
1.4.15.8	The bidder shall specify the <b>data retention specs</b> of the proposed M2M SIM cards	NO	M	100	Network Services						
1.4.15.9	The bidder shall specify the <b>memory endurance</b> of the proposed M2M SIM cards	NO	M	100	Network Services						
1.4.15.10	The proposed SIM cards shall be compliant with the latest version of <b>"TS 102 671: Smart Cards; Machine to Machine UICC; Physical and logical characteristics"</b>	NO	M	100	Network Services						
1.4.15.11	The bidder shall list the <b>JEDEC standards</b> to which the proposed M2M SIM cards are compliant	NO	M	100	Network Services						



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1.4.15.12	The minimum <b>free EEPROM size of M2M SIM cards</b> shall be <b>64K</b>	YES	M	100	Network Services						
1.4.15.13	The bidder shall provide different quotations for a <b>free memory size</b> of:	NO	M	100	Network Services						
1.4.15.14	128K	NO	M	100	Network Services						
1.4.15.15	256K	NO	M	80	Network Services						
1.4.15.16	512K	NO	M	80	Network Services						
<b>1.4.16 Testing &amp; Validation</b>											
1.4.16.1	The bidder shall commit to send <b>test cards</b> configured with the defined profiles to MIC1 for testing and validation with no extra charges	YES	M	100	Network Services						
1.4.16.2	The bidder shall commit to provide <b>card readers</b> with corresponding latest version of the <b>SW tool</b> 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	YES	M	100	Network Services						
1.4.16.3	The bidder shall be ready to <b>participate in testing</b> when requested.	YES	M	100	Network Services						
1.4.16.4	The bidder shall have reactive <b>technical support</b> to support the operator in finding adapted solutions.	YES	M	100	Network Services						
1.4.16.5	The bidder shall <b>describe</b> the way its technical support team is organized.	NO	M	100	Network Services						
1.4.16.6	The bidder shall commit to provide support in modifying the electrical profile if required (i.e. file content such as SPN, FPLMN, etc.) and testing the changes through BAP process	YES	M	100	Network Services						
<b>1.4.17 Network Architecture requirements</b>											
1.4.17.1	The bidder shall provide a detailed explanation of the <b>eUICC authentication</b>	YES	M	100	Network Architecture						
1.4.17.2	The bidder shall provide a detailed explanation of the <b>ISIM authentication</b>	NO	O	50	Network Architecture						
1.4.17.3	The bidder shall provide a detailed description of the <b>A4 algorithm</b> used for the encryption of the Subscriber Authentication Key (Ki)	YES	M	100	Network Architecture						
1.4.17.4	<b>Ki</b> in the <b>output file</b> shall be encrypted with the <b>transport key</b>	YES	M	100	Network Architecture						
1.4.17.5	<b>Opc</b> shall be computed off the USIM. <b>OP</b> it self should not be stored on the USIM	YES	M	100	Network Architecture						
1.4.17.6	<b>ri</b> and <b>ci</b> should be according to the 3GPP standards 35.206	YES	M	100	Network Architecture						
1.4.17.7	The bidder shall confirm that all algorithms are available: <b>DES, 3DES and AES.</b>	YES	M	100	Network Architecture						
1.4.17.8	The bidder shall provide <b>USIM memory architecture specification</b>	YES	M	100	Network Architecture						
1.4.17.9	The bidder shall provide <b>ISIM memory architecture specification</b>	NO	O	50	Network Architecture						
1.4.17.10	The bidder shall provide <b>USIM feature specification document</b>	YES	M	100	Network Architecture						
1.4.17.11	The bidder shall provide <b>ISIM feature specification document</b>	NO	O	50	Network Architecture						
1.4.17.12	The bidder shall provide the <b>Chipsets vendors</b> and <b>specification</b> to be used	YES	M	80	Network Architecture						
1.4.17.13	The bidder shall provide the <b>expected Memory usage</b> and the <b>remaining free space</b> ( EEPROM, RAM) for USIM and ISIM	YES	M	100	Network Architecture						
1.4.17.14	The bidder shall specify the <b>Voltage Range, endurance, and Data retention time</b> for USIM	YES	M	100	Network Architecture						
1.4.17.15	The bidder shall specify the <b>Voltage Range, endurance, and Data retention time</b> for ISIM	NO	O	50	Network Architecture						
1.4.17.16	The bidder shall confirm the <b>possibility to include the STK menu</b> ( 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	YES	M	100	Network Architecture						
1.4.17.17	The bidder shall provide the <b>function set</b> used when generating quintets for a subscriber. Is it the SAGEs MILENAGE standard function set	YES	M	100	Network Architecture						
1.4.17.18	The bidder shall advise on the <b>length of the A4 Key</b> . Length of AES A4 key can be 16, 24 or 32 bytes (128, 192 & 256 bits)	YES	M	80	Network Architecture						
1.4.17.19	The bidder shall provide detailed <b>ISIM authentication call flows.</b>	NO	O	50	Network Architecture						
1.4.17.20	The bidder shall provide detailed <b>USIM authentication call flows.</b>	YES	M	100	Network Architecture						
1.4.17.21	The bidder shall provide references for USIM implementation in <b>Ericsson core network</b> (2G/3G/4G) and <b>IMS network</b>	YES	M	100	Network Architecture						
1.4.17.22	The bidder shall provide references for ISIM implementation in <b>Ericsson IMS core network</b> . Specify the SW release version	NO	O	50	Network Architecture						
1.4.17.23	The bidder shall provide <b>references</b> for USIM Provisioning and authentication for Apple device, using Ericsson Platform.	YES	M	100	Network Architecture						
1.4.17.24	The bidder shall confirm that the <b>EAP-AKA network authentication</b> procedure will be used for 3G Radius authentication	YES	M	100	Network Architecture						
1.4.17.25	The bidder shall provide details regarding the <b>IMS-AKA authentication</b> used by ISIM	NO	O	50	Network Architecture						
1.4.17.26	The proposed solution shall be compliant with <b>ETSI</b> (2.17, 2.19, 2.48, 3.20, 11.11, 11.12, 11.14, 11.17)	YES	M	100	Network Architecture						
1.4.17.27	The proposed solution shall be compliant with <b>3GPP</b> ( 22.048, 42.017, 42.019, 43.019, 43.020, 51.011, 51.014)	YES	M	100	Network Architecture						
1.4.17.28	The proposed solution shall be compliant with the <b>latest release of the GSMA specifications</b> for the remote provisioning of embedded SIM cards for M2M (SGP.01 M2M Architecture v3.2, SGP.02 M2M TS v3.2, etc.)	NO	O	50	Network Architecture						
1.4.17.29	The bidder shall provide a technical description of all the <b>interfaces</b> used in the proposed USIM/ISIM solution	YES	M	100	Network Architecture						
1.4.17.30	The bidder shall advise on the <b>Connectivity parameters</b> (for example SMSC address) required by the eUICC to open a communication channel (for example SMS, HTTPs) on a dedicated network.	YES	M	100	Network Architecture						
1.4.17.31	The bidder shall confirm the <b>WIB smartTrust</b> are provided	YES	M	100	Network Architecture						
<b>1.5 Marketing Requirements</b>											
<b>1.5.1 Plain, Prepaid, M2M Muti Sim Cards</b>											
1.5.1.1	The bidder shall provide a list of applets that can be provided as free of charge while precising their size	NO	M	80	MKT						
<b>1.6 Branding Requirements</b>											
<b>1.6.1 Plain</b>											
1.6.1.1	Supplier to repeat the work (free of charge) for any reported complaint related to a bad quality of service (wrong specs, wrong color etc...)	YES	M	100	CC						
1.6.1.2	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	YES	M	100	CC						
1.6.1.3	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	YES	M	100	CC						
<b>Prepaid</b>											
1.6.1.4	Supplier to repeat the work (free of charge) for any reported complaint related to a bad quality of service (wrong specs, wrong color etc...)	YES	M	100	CC						
1.6.1.5	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	YES	M	100	CC						
1.6.1.6	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	YES	M	100	CC						
<b>M2M Muti Sim Cards</b>											
1.6.1.7	Supplier to repeat the work (free of charge) for any reported complaint related to a bad quality of service (wrong specs, wrong color etc...)	YES	M	100	CC						
1.6.1.8	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	YES	M	100	CC						
1.6.1.9	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	YES	M	100	CC						
<b>1.7 Security Requirements</b>											
1.7.1	Supplier shall provide a low level description of the SIM cards security	YES	M	100	SOC						
1.7.2	Supplier declares that he is certificated by GSM SAS UP and provide a copy of the certificate and its scope	YES	M	100	SOC						
1.7.3	Supplier declares that he is certificated by PCI CP and provide a copy of the certificate and its scope	YES	M	100	SOC						
1.7.4	Supplier declares that he is certificated by ISO/27 and provide a copy of the certificate and its scope	YES	M	100	SOC						



Article	Requirements	Killer	M/O	Weight	Responsible Entity	Supplier 1 Final	Supplier 2 Final	Supplier 3 Final	Supplier 4 Final	Supplier 5 Final	Supplier 6 Final
1.7.5	Supplier declares that he is certificated by EAL4+ and provide a copy of the certificate and its scope	YES	M	100	SOC						
1.7.6	Supplier declares that he is certificated by EMV co and provide a copy of the certificate and its scope	YES	M	100	SOC						
1.7.7	Supplier shall commit to refrain from offering any product / equipment which can cause security threat or information leakage that jeopardizes MIC1 network security	YES	M	100	SOC						
1.7.8	Supplier shall mention the security standards adopted/ followed in designing/securing the proposed solution.	YES	M	100	SOC						
1.7.9	Supplier shall commit to improve information security weaknesses whenever needed or highlighted by MIC1 information security team	YES	M	100	SOC						
1.7.10	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 5 days from its notification.	YES	M	100	SOC						
1.7.11	Documentation regarding details of how sensitive data is protected when transmitted	YES	M	100	SOC						
1.7.12	For hashing: - Generally use SHA-2 algorithms (SHA-256 recommended) - Use SHA-1 only for SHA-2 incompatible clients (some web browsers) - Disable all other hashing algorithms (e.g. MD5) In case of partial compliance, state the non-compliant point(s) from the above.	NO	M	100	SOC						
1.7.13	Cipher suites: - Only cipher suites with SHA256 (or above) message authentication algorithms must be used - NULL encryption must not be permitted, and implementations must not negotiate with cipher suites with NULL encryption. - RC4 encryption must not be used. - CBC must not be used. Where this is not possible, CBC must be placed below GCM cipher suites, and a risk raised against the platform. - EXPORT ciphersuites must not be implemented or enabled. - Symmetrical cipher suites must be at least 128-bits in length – any symmetrical ciphersuites with at least 256-bits in length must be preferred over 128-bit symmetrical cipher suites.	NO	M	100	SOC						
1.7.14	Exchange Protocols: ECDHE/DHE must be prioritised over RSA and ECDHE must be prioritised over DHE. - Key exchange protocols based on ECDHE protocols must not support keys that are less than 256-bits in length - Key exchange protocols based on DHE or RSA protocols must not support keys that are less than 2048-bits in length. - PSK, DSA, ECDH, and ECDSA implementations must not support the following keys lengths: PSK not less than 128-bits in length DSA not less than 2048-bits in length Elliptic Curve not less than 256 bits in length If implemented, these key exchange protocols must be prioritized lower than ECDHE, DHE and RSA	NO	M	100	SOC						
1.7.15	Supplier to provide regular updates and patches for any discovered vulnerabilities or weaknesses in the SIM Toolkit	YES	M	100	SOC						
1.7.16	SIM cards provided should include a number of features to protect against cloning and other attacks including STK exploitation, Data Extraction...	YES	M	100	SOC						
1.7.17	Supplier shall employ FIPS-validated cryptography (3DES can be used only for AES incompatible clients)	NO	M	100	SOC						
1.7.18	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.	YES	M	100	SOC						
1.7.19	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	YES	M	100	SOC						
1.7.20	The Supplier shall provide a high degree of flexibility in the structuring of the administrative secret codes	YES	M	100	SOC						
1.7.21	The Supplier shall offer standard levels of security during personalisation	YES	M	100	SOC						
1.7.22	The Supplier shall commit that Customer data must always be stored encrypted and transferred encrypted	YES	M	100	SOC						
1.7.23	The supplier shall accept that Alfa perform security Audits at the Supplier' premises	YES	M	100	SOC						
1.7.24	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	YES	M	100	SOC						
1.8	<b>Health, Safety and environmental Specifications</b>										
1.8.1	Bidder shall state the safety measures being followed by personnel performing the work on Alfa's sites (ISO45001 certification, specific best practices, etc...)										
1.9	<b>Boycott of Israel Requirement</b>										
1.9.1	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 23 <sup>rd</sup> , 1955.	YES	M	100							
1.9.2	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.	YES	M	100							
1.9.3	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.	YES	M	100							
1.9.4	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	YES	M	100							
Total Technical Score				31720	Max Score	SUPPLIER 1 SCORE	SUPPLIER 2 SCORE	SUPPLIER 3 SCORE	SUPPLIER 4 SCORE	SUPPLIER 5 SCORE	SUPPLIER 6 SCORE
				Total Technical Score	31720	0	0	0	0	0	0
				Total ( 50% from the total grade)	50%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

\* The supplier should have at least 40% over 50% taking into consideration that he shouldn't have a Killer point.

\* Evaluation of Proposals will be based on 50% weight for the technical part, and 50% weight for the commercial part.

**Scoring Sheet - Commercial Scoring " 50% "**

Project Name: Sim Cards RFP Ref#0208-24

[illegible]