



**Terms of Reference** *(Annex A)*

**Request for Proposal**  
**for**  
**Call Accounting: Billing and Reporting**

**Division of Information Systems and  
Telecommunications (DIST)**  
Customer Support Service (CSS)

*Geneva, July 2019*

Date: July 2019  
Reference: RFP/2019/022

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## Table of Contents

<b>1</b>	<b>Introduction.....</b>	<b>4</b>
1.1	Who we are.....	4
1.2	Objectives .....	4
1.3	Overview.....	4
<b>2</b>	<b>RFP Administration .....</b>	<b>5</b>
2.1	Timeline .....	5
2.2	Term .....	5
2.3	RFP Response Structure.....	5
<b>3</b>	<b>Terms of Reference (ToR).....</b>	<b>6</b>
3.1	Introduction .....	6
3.2	Users and Call Statistics.....	7
3.3	Call Data Records (CDR) .....	8
3.3.1	CDRs to retain .....	8
3.3.2	CDR Capture .....	8
3.3.3	CDR Source.....	8
3.3.4	CDR Processing and Archiving .....	8
3.4	Staff and Workforce Affiliates Data .....	9
3.4.1	Directory Import .....	9
3.5	Destination Based Tariffs – Least Cost Routing (LCR) .....	9
3.6	Call Dial Procedures.....	9
3.6.1	Geneva .....	9
3.6.2	Field Offices.....	10
3.7	Call Accounting Reports .....	10
3.7.1	Routine Report Production .....	10
3.7.2	Ad Hoc Report Production.....	11
3.8	Monthly Billing Files and Format .....	11
3.8.1	Monthly Call Lists.....	11
3.8.2	Direct Salary Deduction Files .....	11
3.9	Operational Requirements.....	12
3.9.1	Availability.....	12
3.9.2	Customer Service .....	12
3.9.3	Response.....	12
3.9.4	Backup and Recovery .....	12
3.9.5	Key Performance Indicators (KPIs) .....	12
<b>4</b>	<b>Proposed Statement of Work (SoW).....</b>	<b>13</b>
4.1	Project Management .....	13
4.2	Implementation of the Call Accounting Service.....	13
4.3	Initial Testing and Quality Assurance of the Call Accounting Service.....	14
4.4	Post - Production Phase.....	14
<b>5</b>	<b>Content of the RFP Response .....</b>	<b>15</b>
5.1	Technical Response .....	15
5.1.1	Executive Summary.....	15
5.1.2	Company Profile .....	15
5.1.3	Administration .....	15
5.1.4	Technical Response .....	15
5.1.5	Support Plan .....	15
5.1.6	Implementation and Transition Plan .....	15
5.1.7	Miscellaneous .....	16
5.1.8	Solution Compliance.....	16
5.2	Financial Response .....	16
5.2.1	Currency of Offer and Contract .....	16
5.2.2	Pricing and Offer.....	16
5.2.3	Pricing Template and Offer .....	16
5.2.4	Taxes.....	17

<b>6</b>	<b>Contractual Requirements .....</b>	<b>18</b>
6.1	Contract Terms and Conditions.....	18
6.2	UNHCR Supplier Code of Conduct .....	18
6.3	UNHCR Vendor Registration Form .....	18
<b>7</b>	<b>Evaluation .....</b>	<b>19</b>
7.1	Technical Evaluation .....	19
7.2	Financial Evaluation .....	19
<b>8</b>	<b>Appendixes .....</b>	<b>20</b>

## 1 Introduction

### 1.1 Who we are

The Office of the United Nations High Commissioner for Refugees (UNHCR) was established by the United Nations General Assembly in 1950 to provide protection and assistance to refugees and Internally Displaced People (IDPs).

UNHCR is today one of the world's principal humanitarian agencies, its staff of more than 10,800 personnel helping more than 60 million people in more than 130 countries. Staff members work in a diversity of locations and conditions including 3 Headquarters (HQ), in Geneva, Budapest, and Copenhagen.

Further information on UNHCR, its mandate and operations can be found on its official website, <http://www.unhcr.org>

### 1.2 Objectives

UNHCR is soliciting the market to identify and acquire a hosted or cloud-based call accounting solution to replace its present on-premise solution. The objective is to receive competing proposals, evaluate solutions for best technical and financial value, and contract for the solution.

### 1.3 Overview

The UNHCR call accounting system will be implemented in UNHCR Geneva headquarters and provides reporting and billing capacity for staff and affiliate workforce based in Geneva, for both fixed (desktop) and mobile devices, as per below table.

Additional call accounting is provided for users in UNHCR field offices calling over the UNHCR Global WAN (VSAT, ISP) through the Swiss PSTN (off-net calls). The call accounting platform will cover fixed and mobile traffic as per the following matrix:

	Call accounting Fixed	Call accounting Mobile
<b>Geneva</b>	Yes	Yes
<b>Field Offices Global WAN</b>	Yes	No

In accordance with the DIST strategy, UNHCR has decided to launch an RFP for subsequent award of a service contract to provide managed call accounting services to replace its existing internally managed system. The Terms of Reference (ToR) and requirements for the solution are detailed in the sections below.

## 2 RFP Administration

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### 2.1 *Timeline*

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Following completion of the RFP, a contract award is expected in calendar Q4 2019. The call accounting platform is expected to be fully operational in January 2020.

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### 2.2 *Term*

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The resulting contract will cover one-time costs (OTC) and monthly recurring charges (MRC), as well as service and maintenance for an initial period of three (3) years, renewable subsequently a maximum of two additional one-year periods (i.e., 3+1+1) subject to satisfactory performance as per UNHCR service procurement criteria.

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### 2.3 *RFP Response Structure*

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RFP responders are requested to follow the response content structure described in section 5 of this TOR.

### 3 Terms of Reference (ToR)

#### 3.1 Introduction

This section provides a high level description of the terms of reference which are fully detailed in the subsequent sections.

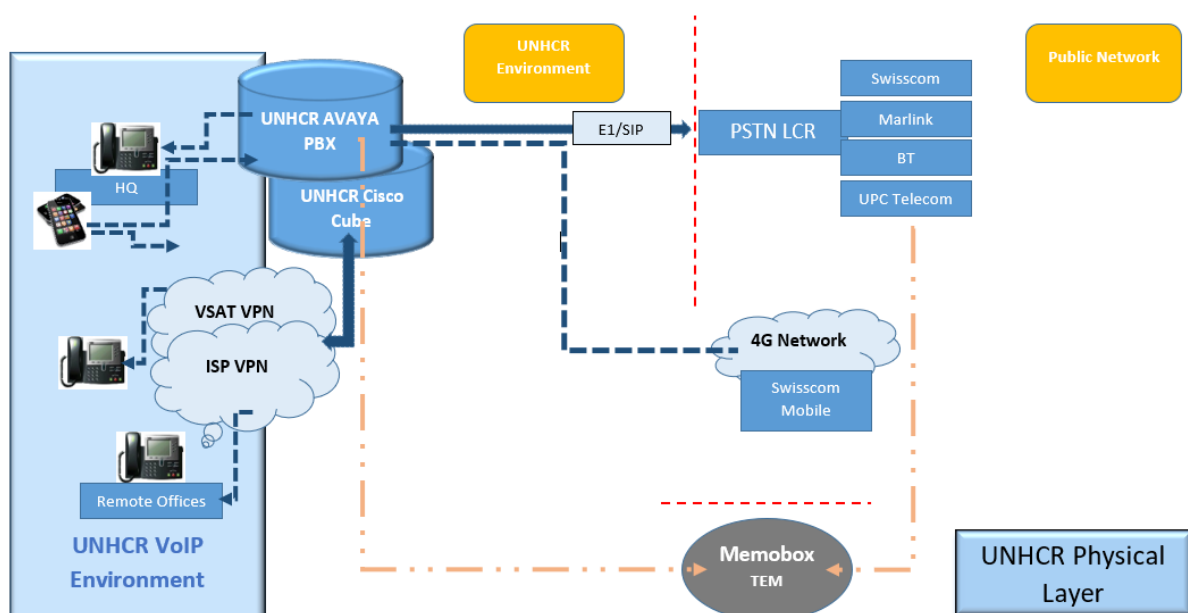
UNHCR requires that all its Call Accounting services are provided as a fully managed service by an external partner. The call accounting infrastructure is expected to be hosted by the service provider (not on UNHCR premises). The Call Accounting platform shall be compatible with the current UNHCR Least Cost Routing (LCR) platform (fixnet calls) as well as with the Swisscom Mobile Natel Go platform (mobile calls).

Call accounting services are currently provided in-house. Additional call reporting is provided for off-net calls originating from UNHCR Field Offices over the UNHCR WAN (VSAT and ISP) terminating on the PSTN. There are approximately 200 UNHCR locations connected through the WAN with about 2500 staff regularly using the facility.

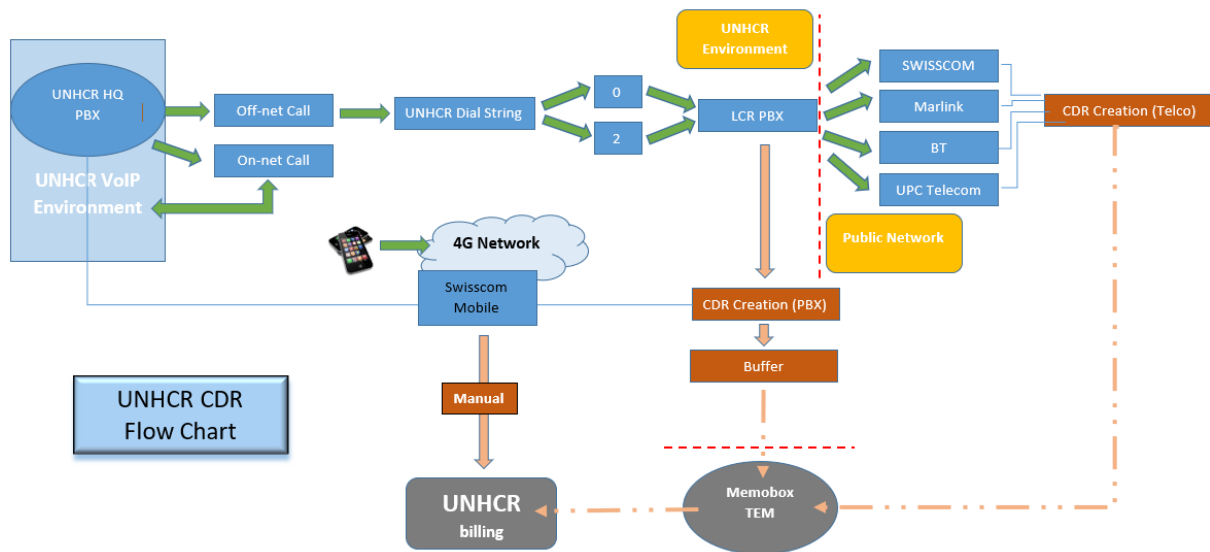
UNHCR uses a six (6) digit authentication code (PIN) for all users and all off-net calls terminating over the PSTN. HQ and field (Global One) users have the possibility to differentiate private calls and professional calls via a one (1) digit pre-selection code (2 and 0) respectively. Charges for private calls are identified and deducted from staff monthly salaries automatically.

The HQ Geneva offices are connected as in the diagram below. Connectivity may change over time and UNHCR expects the solution to adapt to such changes.

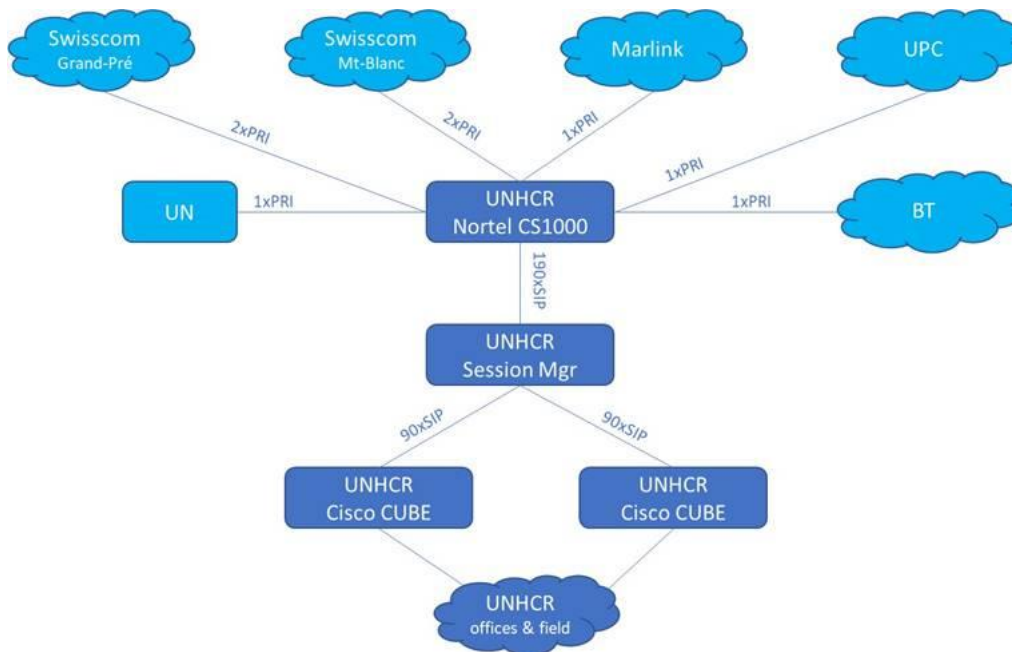
#### UNHCR Physical Layer



#### UNHCR Logical Flow



### UNHCR Trunking



### 3.2 Users and Call Statistics

The following table provides statistics for outbound calls (calls generating call data records, CDRs) for Geneva and Field Locations users. The number of staff in the directory is fairly constant in view of staff arrivals and departures. While the below figures will serve adequately for the purpose of this RFP, they will be updated at a later stage and prior to the execution of the billing contract.

Location	Staff in Directory	Active Staff	Outbound Calls /month
Geneva	1000	800	24000
Field Locations	2000	600	18000

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### 3.3 Call Data Records (CDR)

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This section details the PBX generated CDR to retain, their capture, interpretation/archiving. CDR will reflect traffic made on the PSTN and Mobile networks.

#### 3.3.1 CDRs to retain

CDRs for inbound, outbound, and transit calls should be retained for reporting. Internal extension-to-extension calls, for all locations, will not be retained for reporting or analysis. All retained CDRs should be made available, on request, for a period of five years, starting the first day of the contract. Beyond the five years period, CDRs deletion should be automatic, on a first-in-first-out basis. Repository for retained CDRs should be redundant.

#### 3.3.2 CDR Capture

The CDRs are to be collected on daily basis. The suggested call accounting service will include the provision of intermediate data buffers for CDR storage in the event of loss of connectivity to the PBX platform.

#### 3.3.3 CDR Source

The Call Data Records source shall be:

- The UNHCR PBX for all CDRs stated under section 3.3.1 above
- Swisscom for CDRs related to GSM (mobile) traffic
- Alternatively, the Least Cost Routing (LCR) Service Providers
- Any source of CDRs using industry standards

The CDR source and format may change over time and UNHCR expects the solution to adapt to such changes.

#### 3.3.4 CDR Processing and Archiving

The raw CDR shall be collated on monthly basis, at the end of each calendar month. They will be archived by the service provider at its facility and made available to UNHCR, upon request e.g. for legal proceedings needs. Similarly, the processed CDR shall be made available to UNHCR, upon request. The format of the processed CDR should be compatible with MS Excel (Office 365) 2013, 2016 or later versions.

Each processed CDR entry should contain the following information:

- The call date & time
- The originating extension
- The call destination number
- The call destination country name (in English)
- The call duration in seconds
- The call cost in Swiss Francs
- The call purpose (official or private)
- The authentication/PIN code used to initiate the call
- The last name of the person associated with the PIN code
- The first name of the person associated with the PIN code
- The email address of the person associated with the PIN code



Supplier should provide documentation for the processed call records including the record fields such as field name, a brief description of what the field data represents, the data type and any constraints on the field values (e.g. if a field value should be in a specific range).

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### 3.4 Staff and Workforce Affiliates Data

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#### 3.4.1 Directory Import

Active Directory (AD) records of UNHCR Staff and Affiliate Workforce with fixed (desk phone) as well as mobile devices will be made available once for initial load and then subsequently for every update made in the directory.

It is expected that the AD content will change frequently on basis of new arrivals, departures, and assignment change within or across the locations concerned by the Call Accounting platform. The arrival of a new person will be signified by the addition of an entry in AD; a departure will be signified by the removal of an entry. Assignment change, with user remaining under the billing scope, e.g. changing departments in HQ, will be reflected by entry removal followed by entry creation with the new account details. The constant identifier of a person is the PIN code for fixed calls and the mobile number for mobile calls. It is envisaged to merge the fixed and mobile identifications in AD. In that respect the proposed platform will need to be readily compatible with such evolution.

The deletion of an AD entry for reasons mentioned above shall not result in the deletion of the related CDR history. It will be retained for a period of 5 years from the deletion event.

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### 3.5 Destination Based Tariffs – Least Cost Routing (LCR)

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The Geneva PBX is interconnected to the Swiss PSTN through Swisscom and three other service providers, Marlink, BT, and UPC, under the Least Cost Routing scheme, routing off-net calls through the most cost-effective carrier.

As such a table of LCR countries, the related rates in CHF and the corresponding service providers are maintained in Geneva and applied to all PSTN and mobile destinations, when a differentiated rate is applicable. The LCR table is reviewed periodically and updates will be provided accordingly.

It is expected that the current billing processes will evolve to align with best practices. The suggested platform shall be compatible with such evolution.

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### 3.6 Call Dial Procedures

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#### 3.6.1 Geneva

Internal calls do not require a PIN code. Calls to external destinations use the sequence:

- 173 [PIN] [Purpose] [Destination Number]
- Alternatively, the dial sequence can be \*73 [PIN] [Purpose] [Destination Number]

*Purpose = Personal (2) or official (0)*

The current Authentication Code (PIN code) access system is under review and may be cancelled or replaced by an alternative control mechanism.

### 3.6.2 Field Offices

For Field offices dialling through the global WAN, only the CDRs for outbound off-net calls terminating on the Swiss PSTN network are recorded. The current off-net call routing is based on DISA access provided by the Geneva Avaya CS1000. In that respect, the same dial string used in Geneva is applied to field users. As advised earlier, the authentication code approach may be abandoned or modified.

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## 3.7 Call Accounting Reports

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UNHCR expects the following report format:

### 3.7.1 Routine Report Production

- *Daily data integrity checks:*
  - i. Irregular use / abuse
  - ii. Calls to unrecognized destinations
  - iii. Calls with unknown tariffs
  - iv. Calls made using unrecognized PIN codes
  - v. Calls made using deactivated PIN codes
  - vi. Calls with extreme costs and/or duration
- *Monthly Reports:*
  - i. Summary statistics (call count, duration, cost, purpose, grouped by location)
  - ii. Official & Private Call statistics, total and per department (Division, Bureau etc.) or any other pre-defined entity that will be communicated to the service provider
  - iii. Itemised call lists for staff with official call charges exceeding 50 CHF
  - iv. Official call costs grouped by department (Division, Bureau etc.) or any other pre-defined entity that will be communicated to the service provider.
  - v. Creation and distribution of UNHCR global WAN call list files
- *Monthly Billing:*
  - i. Monthly private call charges (GVA & Field Locations) created & distributed to staff and UNHCR's payroll unit before the 7<sup>th</sup> day of each month.
  - ii. Summary Reports
- *Annual Reports:*
  - i. An annual report containing call summary statistics grouped by destination.
- *Other Custom Reports:*
  - i. UNHCR may require other relevant types of reports, to be determined in due course.

### 3.7.2 Ad Hoc Report Production

On the departure of a staff member, her/his outstanding private call charges accrued beyond the previous month and/or last reimbursement (i.e. since the last billing process) will be required on short notice. The number of requests for such ad-hoc report per month is not expected to exceed 20. UNHCR will designate at its discretion super-user access, through the portal or as recipient of these reports.

The following reports may be requested up to twice per month:

- Call lists originating from a particular mobile number
- Call lists assigned to a particular PIN
- Calls terminating on a particular destination, domestic or international

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## 3.8 Monthly Billing Files and Format

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### 3.8.1 Monthly Call Lists

Each month subscribers/users receive an itemised list of calls instigated by their PIN. Simultaneously, the itemized list will be available at the portal level, through individual access. Examples of these call lists can be found as follows.

- Appendix 1 Monthly Call List Example – Geneva (Fixed)
- Appendix 2 Monthly Call List Example – Geneva (Mobile)
- Appendix 3 Monthly Call List Example – Global WAN (Fixed and VSAT)

Charges in the call lists are presented in Swiss Francs (CHF) for Geneva but will include an exchange rate for United States Dollars for eligible users calling through the global WAN.

The exchange rates shall be the official United Nations rates and will be provided each month.

### 3.8.2 Direct Salary Deduction Files

Charges for private calls are deducted monthly from salaries, for staff in Geneva.

The private call charges for staff in Geneva are combined into one file, <UNOG.PRI>.

Calls identified as private/official must be automatically tagged as such, calls not identified, for any reason, should be tagged as “private” by default, this applies to calls made over the PSTN and the mobile network.

In the event that a person incorrectly identifies an official call as private (or vice versa) there will be a requirement to modify the billing statement. The same applies in the event of disputed calls (staff claiming they did not make one or more calls). Corrections will be handled by the service provider upon claims from UNHCR staff member after certification by a UNHCR designated signing authority.

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### 3.9 Operational Requirements

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UNHCR intends to evaluate standard service levels provided by bidders. Base operational requirements include:

#### 3.9.1 Availability

- System availability during UNHCR HQ business hours of 07:00 to 19:00 CET/CEST.
- 99% minimum up-time service level
- Defined maintenance periods
- Notifications for periods of planned and unplanned non-availability

#### 3.9.2 Customer Service

- Telephone support
- Email and/or Web portal support

#### 3.9.3 Response

- Standard, severity-based service level response times
- Accommodation for major and minor incidents
- Defined escalation procedure

#### 3.9.4 Backup and Recovery

- Standard, scheduled backups
- Defined data retention period
- Defined Recovery Time Objective (RTO)
- Defined Recovery Point Objective (RPO)

#### 3.9.5 Key Performance Indicators (KPIs)

- Basic operational reporting
- Measurement of customer service metrics
- Measurement of system availability metrics

## 4 Proposed Statement of Work (SoW)

### 4.1 Project Management

Upon completion of contracting, DIST will appoint a Project Manager. She/he will lead the implementation of the new Call Accounting platform. The PM will ensure overall operational coordination, from project initiation to closure, including the transition from the present platform, following DIST Project Management guidelines.

### 4.2 Implementation of the Call Accounting Service

The following action items are proposed to be performed by the service provider in view of the implementation of the Call Accounting Service:

- Detailed analysis and assessment of UNHCR's telephony infrastructure and configuration relevant to the call accounting requirements.
- Rationalisation and streamlining the transfer of the raw CDR to a single location hosted by the service provider.
- Implementation of data transfer from UNHCR PBX platform to the service provider location as follows:

Data	Transfer Frequency
PBX raw CDR	Twice a day
AD records of Staff and Devices	Once upon creation of database then upon every update
UN Exchange Rates (USD to CHF)	Monthly (occasionally 2 per month)
Call Destination Tariffs (LCR)	Once upon creation of database, then annually

The transfer process should include provisions (alerts) for failure, e.g. in the event that anticipated data files are missing, to allow for corrective measures.

- Implementation of data transfer for the service outputs (reports, billing files etc.) from the service provider to UNHCR, by email and through a dedicated portal service as discussed below. Similar to the transfer of input data, the transfer of output data should include processes to handle transfer failure.
- Validation of the process to import the input data (CDRs, directory, exchange rates and tariffs) into the call accounting system.
- Based on samples of CDR generated by UNHCR's PBX, the implementation and configuration of the adequate accounting system to correctly interpret UNHCR CDR.
- Designing and implementation of the call accounting reports described above.
- Designing and implementation of a dedicated portal for billing and reporting. Access to the portal shall be individual (for staff members to check their monthly bills) and administrative (for administrators and super users to access planned reports and/or file query for ad-hoc reports).

- Design of state-of-the-art automation for direct reporting (section 3.7.1) as well as reporting through the portal, e.g. previous pre-selections for personal and/or official calls will be automatically carried over / forward over subsequent billing periods, etc.
- Implementation of a Customer Service platform, through the portal, by e-mail, telephone and chat operational during CET business hours. The expected service level resolution shall be next business day (NBD).
- Training sessions for users on the portal and use of the customer service platform.

The Call Accounting Service is expected to be fully operational on the 1 January 2020. The implementation phase shall include the Testing and Quality Assurance phase described in section 4.3 below.

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#### **4.3 Initial Testing and Quality Assurance of the Call Accounting Service**

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The proposed call accounting service should be run in parallel with the existing call accounting system for a period of 6 weeks. A comparison of the call records should then be made by the service provider to identify discrepancies between the two sets of call data. The aim of this exercise is to ensure that the CDRs are correctly interpreted and the correct call tariffs are applied.

Having established that the call accounting matches or improves the existing system, a trial run of the reporting and billing should be performed to validate the call association of PINs, extensions and mobile numbers to their respective holders and the billing/reporting processes described above.

The quality assurance phase should take no more than 2 weeks to complete.

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#### **4.4 Post - Production Phase**

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Following the point of cut-over from the existing system to the new Call Accounting managed service, a period of 3 months is required to identify and resolve issues that were not previously found in the implementation and test/quality assurance phases. At the end of this period, the agreed service levels will start. This phase is estimated to start in early January 2020 and complete at the end of March.

## 5 Content of the RFP Response

All RFP responders are required to structure their offers as per the following layout. The information requested below constitutes a minimum all responders should provide. Potential offerors could however provide additional information around the suggested structure and layout.

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### 5.1 Technical Response

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To enable an optimal comparability, all responders shall structure their response in accordance with UNHCR specifications. The narrative part shall follow the chapters and the chapters' titles below.

**IMPORTANT: The technical response must not contain any pricing information. Including pricing with the technical response may be grounds for disqualifying your submission.**

#### 5.1.1 Executive Summary

- Executive summary, contract management concept and general introduction.

#### 5.1.2 Company Profile

- Company Profile

#### 5.1.3 Administration

- Sample Contract
- General Terms and Conditions (GTC)
- Guarantees
- License Metrics
- Standard Service Levels and Service Level Options

#### 5.1.4 Technical Response

- Solution Description
- Functional Specifications
- Non-Functional Specifications
- Response to Section 3 Terms of Reference
- Response to Section 4 Statement of Work

#### 5.1.5 Support Plan

- Service and Maintenance Procedures
- Call Reporting, Support and Delivery
- Preventive and Corrective Maintenance
- Incident Response
- Service Requests

#### 5.1.6 Implementation and Transition Plan

- Description of approach to Testing, Service Assurance and Pre-Production
- Description of approach to transition of services from the current platform
- Description of approach Project Management, full cycle through delivery

### 5.1.7 Miscellaneous

- RFP responders may add in this section all additional relevant information that they deem necessary in order to provide turnkey Call Accounting services.

### 5.1.8 Solution Compliance

- RFP responders are required to fill in the Technical Response Matrix as per Appendix 4 of this TOR.

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## 5.2 Financial Response

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This section outlines how bidders are expected to structure the commercial response to this RFP.

As explained in the covering letter for this RFP, it is essential that your commercial response be provided in a correspondence separate from the technical response.

### 5.2.1 Currency of Offer and Contract

UNHCR intends to award a multi-year Services contract resulting from this RFP. To allow for direct comparison of all submissions, your commercial offer must be provided in USD (United States Dollars) based on the prevailing United Nations rate of exchange at the time of the evaluation.

As UNHCR is planning to engage the Service Provider in an extended contract, UNHCR is particularly interested in proposals from the bidders to limit the mutual exposure to exchange rate fluctuations against the US Dollar over the duration of the contract.

### 5.2.2 Pricing and Offer

UNHCR intends to contract for commercial arrangements that result in an understandable and predictable cost to the organization. Core principles for pricing are as follows:

- Priced to the scope and service level requirements
- Simple to explain;
- Designed to be sensitive to both UNHCR and the Services Provider;
- Ensure long-term value for money.

### 5.2.3 Pricing Template and Offer

UNHCR has provided a pricing template in the form of Appendix 5 Financial Response Template. A Bidders Instructions worksheet has been included in the file. Participants must fully-populate and return the worksheets in Appendix 5 Financial Response Template. **Submissions are to include both Excel and PDF versions of the Appendix 5 Financial Response Template.**

- Bidder Notes
- Implementation and Transition Fees
- Monthly Recurring Fees



- Termination Fees

#### 5.2.4 Taxes

UNHCR is exempt from all direct taxes and customs duties. Therefore, all fees and rates must be quoted without VAT.

## 6 Contractual Requirements

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### 6.1 *Contract Terms and Conditions*

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Any contract awarded pursuant to this RFP will incorporate the terms and conditions of the UNHCR General Conditions of Contract for the Provision of Goods and Services, a copy of which is attached as Annex D UNHCR General Terms and Conditions to this RFP. The Bidder must indicate its acceptance of these General Conditions as the basis of the contract by initialling each page and returning it as part of its Technical Response.

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### 6.2 *UNHCR Supplier Code of Conduct*

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The contract will also incorporate the terms and conditions of the UN Supplier Code of Conduct, a copy of which is attached as Annex B UN Supplier Code of Conduct to this RFP. The Bidder must indicate its acceptance of the Supplier Code of Conduct by initialling each page and returning it as part of its Technical Response.

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### 6.3 *UNHCR Vendor Registration Form*

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If your company is not already registered with UNHCR, please complete, sign, and submit the Vendor Registration Form in Annex C with your Technical Offer.

## 7 Evaluation

### 7.1 Technical Evaluation

UNHCR/DIST will form an evaluation committee which will examine all offers received in good order and prior to the closing deadline for submissions.

The Technical offer will be evaluated using the following criteria and percentage distribution: **70% from the total score:**

Company Qualifications	10%
Requirements Match	15%
Call Reporting, Support and Delivery	30%
Implementation and Transition	15%
Total Technical	70%

### 7.2 Financial Evaluation

UNHCR Procurement Services will complete the evaluation of the price proposals and consolidate all results.

In general, UNHCR will select the offer that represents the “best value” to the organization and not necessarily the lowest price offer.

The Financial offer will use the following percentage distribution: **30% from the total score.**

## 8 Appendixes

Appendix 1 Monthly Call List Example – Geneva (Fixed)

Appendix 2 Monthly Call List Example – Geneva (Mobile)

Appendix 3 Monthly Call List Example – Global WAN (Fixed and VSAT)

Appendix 4 Technical Response Matrix

Appendix 5 Financial Response Template