

**UNICEF**

**TERMES OF REFERENCE for the recruitment of two Individual Consultants  
(International Consultant + National Consultant)**

<b>Title</b>	Evaluation of the Cold Chain in Sao Tome and Principe (STP)
<b>Purpose</b>	To inform the strengthening of the country's existing vaccination procurement and distribution mechanisms towards the attainment of Vaccination Independence
<b>Place</b>	Sao Tome
<b>Duration</b>	35 Days spread over a period of 3 months (September-November 2019)

**1. Evaluation Object.**

In Sao Tome and Principe (STP) the vaccination coverage rate is the highest in the Central African sub-region, according to WHO Inter-Country Team reports. That notwithstanding, vaccination coverage decreases with the number of doses. In 2018 only, the coverage of the pentavalent vaccine (DTP-Hib-HepB) decreased from 97% for the first dose to 95% for the third dose; likewise, the coverage of Measles/Rubella vaccine (MR) stood at 95% for the first dose but decreased to 74% for the second dose. Confronted with such challenges, the Sao Tome Government is stepping up its efforts to ensure higher vaccine coverage of all antigens and, as stated by the health authorities during the 9<sup>th</sup> edition of the African Vaccination Week (AVW) hosted in STP, it aims to attain universal health coverage, including reaching more than 99% of children not yet immunized or partially immunized. This is more relevant given that routine vaccination constitutes the basis of a strong and resilient health system.

In STP, immunization services are made possible as part of the Expanded Programme of Immunization (EPI). Available in 39 health facilities (posts and centers), EPI aims to ensure that vaccination coverage is not only ensured throughout the country but also made available to all population groups, regardless of sex, place of residence or family income. As part of EPI, routine vaccination is also offered along with a plethora of health interventions as a measure to strengthen the country's health sector.

The procurement and supply of vaccines is managed through UNICEF, based on a complete multi-year plan (cMYP). The vaccines are usually transported by airplane to STP, via Portugal. As there has never been a standardized mechanism to transport vaccines from the storage in the West or Central Africa Region, STP has developed its own procurement and supply system. Once arrived in country, vaccines are transported by land to the EPI cold chain central store and from there they get distributed to districts on a monthly basis. Once delivered at District level, vaccines are supplied to health units on a weekly basis.

Between September 2017 and April 2018 and thanks to GAVI Alliance funding, EPI allowed the installation of 39 new SDD refrigerators (7 TCW 2000 SDD and 32 TCW 42 SDD) in a variety of health units in different districts nationwide: 8 in District of Agua Grande, 6 in District of Me Zochi, 5 in Lobata, 3 in Lembá, 8 in Cantagalo, 3 in Caué and 6 in the Principe Region. Prior to the installation of the new equipment, the country's Cold Chain Park consisted of only 27 refrigerators RCW 42 EK and five VESTFROST, with a net storage capacity of 540 liters. Furthermore, waste disposal is ensured through a collection of used equipment in containers, burning and burial. GAVI and Global Funds are financing the installation of two incinerators, in Sao Tome and in Principe.

Two years into the implementation of the EPI program and in light of the country's higher vaccination coverage than in the rest of the region, UNICEF has commissioned this evaluation to assess the extent to which the

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existing cold chain may have contributed to higher immunization coverage. The timeliness of this evaluation is all the greater given that STP was recently selected to host the 9th edition of the African Vaccination Week.

## 2. Evaluation Purpose

This evaluation will have two purposes: **accountability** and **learning**.

This evaluation will provide both the donor (vertical accountability) and the expected beneficiaries (horizontal accountability) some solid evidence on the extent to which the Cold Chain put in place as part of the EPI attained its envisaged objectives. With respect to learning, this evaluation is expected not only to inform the Cold Chain implementation strategies in the years to come but it will also shed some light on some potential corrective actions that may want to be explored further in the future

More specifically, this evaluation is expected to generate recommendations that will help UNICEF Country Immunization/Health programme staff as well as other in-country partners (see table below) to adapt the implementation of cold chain mechanisms to the emerging and country-specific needs in this area.

**Table 1. Evaluation Users and Uses**

Evaluation Users	Evaluation Uses
UNICEF Health/Immunization Section Staff	By better understanding the contributions of the Cold Chain to the Country's health system, UNICEF will amend the activities that it funds in this area.
Other UNICEF Sections Staff	Define a better coordination strategy with the Health/Immunisation team and identify concrete modalities of strategic collaboration towards the attainment of KRC1
UN and other development partners	The UNICEF Health/Immunization Section, in collaboration with other UN partners, namely WHO and UNFPA, will introduce strategic/implementation changes to their health strategies. The renewal of the Cold Chain as one of the recommendations of the Effective Management of Vaccines must reflect the securing vaccine supply costs and ensure a robust and strengthen the control the quality of vaccines. Secure the sustainability of funding for vaccines and immunization activities. Other development partners can take this opportunity to strengthen their collaboration with the Ministry of Health as well as their involvement in the immunisation issues.
Government (Health and other line ministries)	Will better define the terms of collaboration with UNICEF with respect to the attainment of the relevant goals set in the National Development Plan (add hyperlink)
NGOs/CBOs	Mainstream (into their day-to-day practices) the good practices identified during the evaluation and address the weaknesses emerged during the analysis

## 3. Evaluation objectives

The Objectives of the Evaluation are to:

- Measure the effects of the national cold chain operating system on the country's immunization coverage,
- Identify the "vaccine chain"<sup>1</sup> shortcomings, constraints and challenges which are holding back the current progress of the Vaccination Programme towards universal coverage;

<sup>1</sup> The "vaccine chain" would include, inter alia: Purchasing services / Choice of equipment / External transport mechanism / Features of delivery services / Impact of the installation of a new CEC on the delivery of immunization services

- Establish recommendations for immediate, medium and long-term actions to achieve universal coverage and health systems strengthening (HSS) based on the final conclusions and drawing on the experiences of other countries in the sub-region.

## 4. Evaluation Scope

### 4.1. Thematic Scope

The evaluation will focus on:

- Measuring the effectiveness of the vaccine procurement services (made available through UNICEF support) as well as the CEE equipment selection process;
- Gauging the efficiency of the current transport system and exploring the feasibility of the set-up of a possible storage mechanism in the Africa sub-region;
- Determining the total costs of the supply chain (including the costs of immunizing a child);
- Measuring the frequency of vaccination services;
- Estimating the degree of availability and conservation of vaccines;
- Measuring the equity in the distribution of vaccines to target groups;
- Determining the improvement of immunization coverage, the vaccination coverage and its relationship with HSS
- Estimating the immunization service system, including vaccine procurement, transportation, storage and distribution mechanisms.

### 4.2. Geographical Scope

The desk review to be conducted as part of this evaluation is expected to cover all the activities implemented as part of the supply chain nationwide. However, the data collection will concentrate on a smaller sample of intervention sites to be defined by the consultancy, as it is related to the technical-methodological approach of the Evaluation. The Geographical location of the health units with SDD refrigerators in Annex I.

### 4.3. Chronological Scope

The evaluation will make sure to capture the essence of the activities implemented between September 2017 and April 2018.

## 5. Evaluation Context

## 6. Evaluation Criteria

This evaluation will be guided by 5 evaluation criteria: 4 OECD/DAC criteria<sup>2</sup> (Relevance, Effectiveness, Efficiency and Sustainability) and an additional one on Gender, Equity and Human Rights.

## 7. Evaluation Questions

<sup>2</sup> [OECD DAC Evaluation Criteria.pdf](#)

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The Evaluation will seek to answer the following questions (the evaluation consultant may suggest some different ones in his/her technical proposal; questions will be finalized with the UNICEF Country Office staff upon signature of the contract).

### 7.1. Relevance

- To what extent have the vaccine Procurement Services rendered by UNICEF (the only operator in this area nationwide), met the country's needs, especially during the transition period towards Vaccine Independence Initiative (VII), defined by UNICEF Supply Division jointly with GAVI Alliance<sup>3</sup>.

### 7.2. Effectiveness

- How did the national authorities participate in the selection of SDD equipment? Did the type and level of participation modality correspond to the Government's expectations?
  - What is the level of functionalities of delivery services CCE across all levels of healthcare delivery?
  - To what extent have CCE investments contributed to improving immunization service delivery? (e.g. changes in frequency of immunization sessions, changes in frequency of vaccine collection/distribution, Averted missed opportunities due to a better vaccine availability)?
  - To what extent have CCE investments catalysed innovations in other supply chain fundamentals e.g. continuous improvement, leadership, data systems and system design?
  - What are the factors (e.g. equipment type and/or model, health care workers conducting preventive maintenance tasks, installation method(s), verification systems, service delivery models etc.) that have facilitated the level of functionalities observed across all levels of healthcare delivery?
  - What are the factors that have hindered the level of functionalities observed across all levels of healthcare delivery?
  - What are the unexpected outcomes (positive and negative) produced with the scope of the procurement and distribution of vaccines?

### 7.3. Efficiency

- With respect to the transport mechanisms put in place, were there other alternative strategies that could have been put in place to achieve the same level of results but at a lesser cost, especially in light of the country's current transition towards Vaccine Independence?
- To what extent were financial resources, human resources and supplies:
  - sufficient (quantity)?
  - adequate (quality)?
  - distributed/deployed in a timely manner?
- To what extent could an existing central warehouse at the regional level (WCAR) produce transportation benefits for the whole country?

### 7.4. Sustainability

- How did UNICEF incorporate measures for the activities funded by the UNICEF to be continued without UNICEF support in the future?

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<sup>3</sup> UNICEF's Vaccine Independence Initiative (VII) is a key element in UNICEF's supply financing portfolio. It provides technical support to governments and short-term bridge financing to help countries procure vaccines and other immunization-related supplies.

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### 7.5. Gender, Equity and Human Rights

- To what extent were Gender, Human rights and Equity principles duly integrated in the design and delivery of the Cold Chain interventions?
- To what extent did the EPI program tackle the barriers that prevent girls' and women's access to the services that it made available in the targeted communities?

### 8. Evaluation methodology

The evaluation will be based on a participatory methodology using quantitative and qualitative data collection methods (mixed methods) on a multivariate analysis.

Based on the review of the existing program documentation, the evaluation consultant would identify information needs and gaps in appraisal data. In doing so, the evaluation consultant would also analyse all the variables for which monitoring, and evaluation indicators have been collected at the district and national levels, including, equity, gender and immunization coverage. In doing so, the evaluation consultant would also conduct semi-structured interviews with the staff working for the Health Reproductive Programme/Expanded Programme of Immunization at Central level, as well as with the immunization team at the District level, the HSS coordination team and the representatives of a variety of other stakeholders (UNICEF CO, WHO). Present the design of the study including evaluation method, tools of data collection, analysis and reporting. Tools to share the generated evidence and their wide use for planning and decision-making. Direct observations at health sites and focus groups discussion could also be used to collect and triangulate data.

The consultants are strongly encouraged to propose the use of innovative methodologies in their technical proposal.

The data collection and analysis as well as the different deliverables produced as part of this consultancy assignment, will draft report and final report will be consistent with the international evaluation quality standards namely: the UNEG Checklist on Quality Evaluation Reports<sup>4</sup>, the GEROS Quality Assessment Criteria<sup>5</sup>, and the UNEG Guide on the Integration of Gender Equality and Human Rights in Evaluation<sup>6</sup>.

### 9. Schedule of Tasks, Deliverables, Duty-Station & Timeline

The consultancy will be three months in duration in August-October and will consist of three main phases:

	ACTIVITIES	Number of Days of Work	
		International Team Leader	Consultant 1
<b>Phase I</b>	Development of inception report (this will include the development of the evaluation design and the data collection tools) + Inception Meetings	8	5
<b>Phase II</b>	Data collection and Field work + Debriefing on preliminary findings	12	12
<b>Phase III</b>	Data analysis, report writing (draft and final), validation and dissemination	15	8
	<b>Total</b>	<b>35</b>	<b>25</b>

<sup>4</sup> <http://www.unevaluation.org/document/detail/607>

<sup>5</sup> [https://www.unicef.org/evaluation/files/GEROS\\_Methodology\\_v7.pdf](https://www.unicef.org/evaluation/files/GEROS_Methodology_v7.pdf)

<sup>6</sup> <http://www.uneval.org/document/detail/980>

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**Deliverables:**

- 1) **Inception Report**, including a detailed description of the methodology, data collection tools, and suggested work plan;
- 2) **Power Point summarizing key preliminary findings and conclusions** (to be held before the international consultant leaves the country);
- 3) **First Draft of the evaluation report in English.**
- 4) **Recommendation validation workshop** (to be facilitated remotely or by national consultant, as agreed with UNICEF);
- 5) **Final Evaluation report in both English and Portuguese** (max 40 pages with the rest to be placed in annexes) incorporating the comments made by UNICEF staff and the Reference Group members;
- 6) **Power Point Presentation** which summarizes the Evaluation Report with slide(s) of Key findings and recommendations;
- 7) **Raw data** in electronic medium, data collection instruments in electronic medium, transcripts in electronic medium, completed data sets, etc.
- 8) **An Infographic summarizing the key findings and conclusions**

The contractor will need to make sure that the draft report and final report will be consistent with the international evaluation quality standards namely: the UNEG Checklist on Quality Evaluation Reports, the GÉROS Quality Assessment Criteria, and the UNEG Guide on the Integration of Gender Equality and Human Rights in Evaluation.

**Duty-Station**

The Consultant will be based in STP during the primary data collection phase and will work remotely (in his/her home country) during the rest of the assignment when physical presence in the country is not required. This will be proposed by the Consultant in the bid document and discussed and agreed between the UNICEF and the Consultant.

**10. Governance of the evaluation**

The contractor will be supervised by and report to the UNICEF STP Country Office M&E Specialist. A steering committee composed of Health Reproductive Programme/EPI, UNICEF and WHO will be set up to validate the evaluation protocol, provide oversight to the Evaluation and provide comments to the different deliverables (inception, draft and final report). The Regional Evaluation Adviser based at the UNICEF Regional Office for West and Central Africa (WCARO) will also provide technical oversight over the entire evaluation process, including on the different evaluation products (inception report, draft and evaluation

**11. Estimated duration of contract; Remuneration; Other Terms and Conditions**

The contractor will be engaged under short-term individual contract on a full-time basis, immediately after the completion of the contracting procedure, for an estimated period of 30 days spread over a period of 12 weeks. The exact number of days to be proposed by the contractor and discussed with and confirmed, including the specific deadlines, by UNICEF when signing the contract. The Terms of Reference is an integral part of the individual contract signed with the contractor.

A national consultant will be hired to support the international consultant during the data collection and the scheduling of interviews with various health units and communities as well as to contribute to the work of data collection and analysis.

UNICEF reserves the right to withhold all or a portion of payment if performance is unsatisfactory, if work/outputs:

- is incomplete,
- does not meet the quality standards of both UNICEF and the Government of XXX,
- is not delivered or has failed to meet deadlines

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- (fees reduced due to late submission: 5 days – 10%, 15 days – 20%; 1 month – 50%; more than 1 month – payment withheld).

Other terms:

- UNICEF CO will assist the consultant in contacting with local health authorities.
- UNICEF CO will provide an office for consultant installation and work during their stay in Sao Tome
- The consultant is committed to having his own computer and phone.
- A national consultant will be hired by UNICEF CO to support on the displacement to the Health Units with new Cold Chain equipment, the contacts with the health authorities, including the Districts, on the interviews and contribute to the work of data collection and analysis.

**12. Qualifications and specialization/experience required**

An International individual consultant to lead the evaluation with the following profile:

- Advanced degree in Public Health, Immunization or another related field
- At least 5 years' experience in developing impact studies and/or evaluations (a copy of an evaluation report, which the applicant has been a primary author of, will need to be submitted a part of the application);
- Experience working in a multisectoral environment
- Speak and write fluently the English language; fluency in Portuguese will be an advantage
- Good IT Skills including a good knowledge of MS Word, Power Point and Excel;

**13. Technical and Financial Proposal**

UNICEF accepts applications from individual contractors.

All applications should contain the following documents:

i. Technical Project Proposal (max 2 pages), which would include at least the following (applicants are strongly encouraged not to repeat the text from Terms of Reference but rather to demonstrate a critical understanding of it):

- Understanding of the evaluation purpose
- An adequate conceptual framework and evaluation methodology
- Consultant's profile/portfolio
- Proposed timeframes (hour/days)
- Names and contact details of reference persons
- List of past evaluation reports (if applicable)
- Any other additional information to support the application (optional).

ii. Financial Proposal:

The financial proposal should be a standalone document (using excel), which should include full details of financial offer: daily fees and the components of financial offer. Applicants are strongly encouraged to email their technical and financial evaluation offers (proposals should be submitted separately, to the following email address [www.unicef.org/about/employ](http://www.unicef.org/about/employ)).

- Air ticket to and from home base using the most direct and economical routes
- UNICEF does not provide or arrange health insurance coverage for the consultant.
- DSA will be paid as per the International Civil Service Commission

**Deadline for applications: August 10, 2019.**

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*Rosalia Zup*

## Annex 1

## Geographic location of health units with refrigerators to SDD

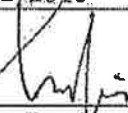
Districts	Health Units	Date of installation	Equipment type	Net Stocking Capacity	OBS:
gua Grande	CNSR	1/9/2018	TCW 2000 SDD	99lt	
	PS Agua Arroz	1/10/2018	TCW 42 SDD	32lt	
	PS Sao Marçal	1/11/2018	TCW 42 SDD	32lt	
	PS Pantufo	1/11/2018	TCW 42 SDD	32lt	
	PS Vila Fernanda	1/12/2018	TCW 42 SDD	32lt	
	PS Madre Deus	1/12/2018	TCW 42 SDD	32lt	
	PS Praia Gamboa	1/12/2018	TCW 42 SDD	32lt	
Mé-Zóchi	PS Bombom	1/15/2018	TCW 42 SDD	32lt	
	PS C. Grande	1/18/2018	TCW 42 SDD	32lt	
	PS Madalena	1/22/2018	TCW 42 SDD	32lt	
	CS Trindade	9/2/2018	TCW 42 SDD	32lt	
	PS Monte Café	9/2/2018	TCW 42 SDD	32lt	
	PS Milagrosa	9/2/2018	TCW 42 SDD	32lt	
	PS Almas				To be installed: the construction works of the health unit are in progress
Lobata	PS Desejada	1/22/2018	TCW 42 SDD	32lt	
	PS S. Amaro	1/22/2018	TCW 42 SDD	32lt	
	PS Gondé	1/24/2018	TCW 42 SDD	32lt	
	PS Micoló	1/24/2018	TCW 42 SDD	32lt	
	CS Guadalupe	1/25/2018	TCW 2000 SDD	99lt	
Lembá	CS Neves	1/26/2018	TCW 2000 SDD	99lt	
	PS Diogo Vaz				To be installed: waiting for a decision of the Ministry of Health
	PS Santa Catarina	1/28/2018	TCW 42 SDD	32lt	
Cauê	CS Angolares	1/16/2018	TCW 2000 SDD	99 Lt	
	PS R. Peixe	1/16/2018	TCW 42 SDD	32lt	
	PS Porto Alegre	1/19/2018	TCW 42 SDD	32lt	

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Cantagalo	PS Voz d'America	1/29/2018	TCW 42 SDD	32lt	
	PS Santana	1/4/2018	TCW 42 SDD	32lt	
	PS Pinheira Roça	2/5/2018	TCW 42 SDD	32lt	
	PS R. Afonso I e II	2/6/2018	TCW 42 SDD	32lt	
	PS Santa Cecilia	7/2/2018	TCW 42 SDD	32lt	
	CS Água Izé	7/2/2018	TCW 2000 SDD	99 Lt	
	PS Uba Budo				To be installed: waiting for a decision of the Ministry of Health

R. A. Príncipe	S.S.R	20/4/2018	TCW 2000 SDD	99 Lt	
	PS Picão	20/4/2018	TCW 42 SDD	32lt	
	PS Nova Estrela	20/4/2018	TCW 42 SDD	32lt	
	PS Aeroporto	20/4/2018	TCW 42 SDD	32lt	
	PS Sundry				To be installed: waiting for a decision of the Ministry of Health
	Porto Real	7/2/2018	TCW 42 SDD	32lt	

Signature du spécialiste :

  
Luis Bonfim, Health Specialist

19/07/2019

Date

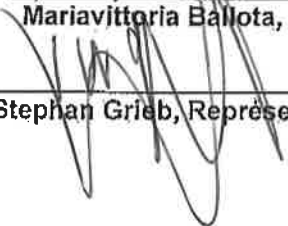
Signature du superviseur :

  
Mariavittoria Ballota, Deputy Representative

29-7-19

Date

Approuvé par Signature :

  
Stephan Grieb, Représentant de Zone de l'UNICEF

24-7-19  
Date