**Comprehensive CCE Needs Document**

For CCEOP support **[Year(s)]**

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# Inventory report and facilities segmentation (max 6 pages)

## Inventory status report:

* *Briefly describe the inventory system currently in use, frequency of the inventory updates and completeness of the CCE inventory*
* *Using analysis from the WHO Inventory and Gap Analysis Tool, provide a description of all equipment in-country (up to service delivery points): basic equipment makes and models distribution, PQS status, storage types, power sources, age, locations, funding sources etc as in Table A in the annex which include:*
* *The age and functionality of CCE and reasons for non-functionalities*
* *The numbers, types, distribution, and functionalities of other devices such as temperature monitoring devices, voltage regulators, equipment spare parts etc.*
* *Warranty status of equipment (where applicable)*
* *Provide details (numbers, locations, makes and models, funding source, etc.) of equipment in the pipeline (tender made and/or uninstalled in-country) funded by Gavi and non-Gavi funding sources.*
* *Include a summary of the gaps in the most recent EVMA report and recommendations made that will be prioritized under this support vis a vis other complementary support.*

## Facilities segmentation:

* *Using analysis from the WHO Inventory and Gap Analysis Tool, provide basic facility information which includes:*
* *An overview of sites by facility type (e.g., national store, provincial store, district store, provincial hospital, referral hospital, health centre, health post) and services provided (e.g. indoor patient, operation theatre, labour room etc.) by type*
* *Other, if available: overview of sites by ownership (e.g., government, private, faith-based, military, other); cellular connectivity or WIFI / internet availability*
* *An overview of sites with full solarization*
* *Describe the sources of power to operate CCE:*
* *Grid electricity availability; hours per day, if available (e.g., >8 hours or <8hours, none), electricity source*
* *Gas availability, solar availability, and generator powered CCE.*
* *Describe the status of immunization service provision:*
* *Sites providing vaccine storage and immunisation services (e.g., only storage, immunisation services without on-site storage, storage and immunisation services, or no storage nor immunisation services)*
* *Immunization services provided by different sites (e.g., static, outreach, static and outreach, neither)*
* *Segmentation by intervention e.g. sites for replacement, expansion, extension or no intervention as per the WHO Inventory and Gap Analysis Tool*

# Cold Chain Rehabilitation and Expansion plan (max 8 pages)

## Cold chain coverage plan and capacity analysis assumptions:

* *Does the plan identify full CCE needs to be met irrespective of the funding sources?*
* *Summarize the assumptions driving the capacity gap analysis which include both current immunisation needs and expected growth of National Immunisation Programme over the next 5 years to achieve coverage and equity targets to reach zero dose and missed communities.*
* *Describe the data and methods (e.g. assumptions on vaccine presentations, supply intervals, buffer stock used to estimate needs, new vaccine introductions, buffer capacity of 25-30%[[1]](#footnote-1) etc) used to calculate the gap between future required capacity and current capacity for each level, facility, and location*
* *Describe the density of immunization services and the availability CCE (e.g. number of service points per population unit, service points with functional CCE) and the target of the cold chain rehabilitation and expansion plan. This may include extending immunization to more existing facilities and/or creating new facilities.*
* *Where CCE availability and functionality has been identified as a barrier to service provision, how will this proposal prioritize areas identified with low coverage and equity issues to increase cold chain availability and extend reach to zero dose/missed communities?*
* *What coverage and equity analysis (focusing on at least geographic and socio- economic inequities and gender barriers) has been conducted to inform prioritisation of CCEOP investments*
* *Summarize the removal and replacement criteria for CCE.*
* *Summarize the analysis of capacity gaps and surpluses by facility type and administrative area (e.g., district)*

## Supply chain system design:

* *Summarize the current supply chain design in operation in the country (by health delivery level or supply chain aspect e.g. vaccines, cold chain equipment, integration of storage; if implemented)*
* *Explain how the CCE rehabilitation and expansion plan complements or optimizes the current system to contribute to reaching zero dose and missed communities to achieve coverage and equity objectives in an efficient way and address the issues and recommendations outlined in the last EVM report, and/or coverage and equity analysis.*
* *Explain the system design alternatives that were considered (or will be considered (e.g., de-layering supply chain, improving transport efficiency, integrating storage of vaccines and PHC commodities, expanding outreach efforts), with reasons they were not adopted.*

## CCE Rehabilitation, Expansion and Extension plan:

* *Provide a summary of the number of sites to be equipped and units to be purchased for expansion, replacement and/or extension from the operational deployment plan as per the table below:*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ***Replacement*** | | | | ***Expansion*** | | ***Extension*** | |
| *Existing sites with (non)functional and/or obsolete* ***non-PQS equipment*** *to be replaced with platform-eligible ILR, SDD or long-term passive devices (including equipping sites with a larger equipment)* | | *Existing sites with (non)functional and/or obsolete* ***PQS equipment*** *to be replaced with platform-eligible ILR, SDD or long-term passive devices (including equipping sites with a larger equipment)* | | *Equipping existing sites with ADDITIONAL pieces of equipment for new vaccine introduction and/or to serve an increasing population* | | *Equipping previously unequipped sites (providing immunisation services or not, including existing sites without active devices) and add new service sites to reach zero-dose populations and missed communities* | |
| *No of Equipment* | *No of sites* | *No of Equipment* | *No of sites* | *No of Equipment* | *No of sites* | *No of Equipment* | *No of sites* |
|  |  |  |  |  |  |  |  |
| ***Total*** | ***Total*** | ***Total*** | ***Total*** | ***Total*** | ***Total*** | ***Total*** | ***Total*** |

* *Describe the multi-year CCE plan for filling gaps, including a unit forecast for 5 years, consistent with latest strategy of plan e.g NIS or an equivalent.*
* *Provide the total CCE multi-year needs for immunization including the proportion that to be met by the available funding (Gavi, Donor, Government) and unfunded CCE needs.*

## Budget and funding sources:

* *Using the CCEOP budget template, provide the budget required to address all equipment needs (ILRs, SDDs and accessories e.g TMDs and data subscriptions for RTMDs, spare parts, voltage regulators) including costs for purchase, shipping, transport, installation, UNICEF procurement fees (8% or 8.5%), buffer (6%) and maintenance.*
* *Articulate the proportion of the budget required that will be met by Gavi, other donors vis a vis the funding gap.*
* *Provide the source of country joint investment expected from either the country budget, bilateral donors or Gavi HSS (for fragile and conflict countries only) and progress made on securing the funding (e.g., secured and budgeted, approved but pending disbursement, requested and under evaluation, preparing request, etc.).*

# Equipment Selection (max 3 pages)

## Lessons learnt from CCEOP 1:

* *Provide lessons learnt from previous equipment selection, procurement, and installation in-country including challenges and how they were mitigated.*

## Justification for CCE selection:

* *Provide a justification of CCE types, makes and models of 3 preferences of equipment selected for procurement including TCO, CCE performance data for deployed equipment or health facility solar electrification where applicable. Please note that while this may not be reflected in the budget template, the country may benefit from volume-based pricing discounts and it may be advisable to procure more of the same equipment model rather than small quantities (e.g., <50 units) of multiple equipment models.*

## Implementation of the RTMD policy:

* *Summarize support requested on Remote Temperature Monitoring Devices (RTMDs) (integrated or bundled standalone devices) in new CCE procured for upper levels of the system (national, regional, district) and in 25-30% of new CCE procured for the Health Facility level.*
* *Describe the approach to be used by the country to strengthen use of data for decision making e.g. maintenance and how the approach aligns with the broader digitalization strategy.*
* *Where applicable, summarize support requested for renewal of RTMD data subscriptions for new and existing CCE at any level of the cold chain system.*

# Deviation plan (max 3 pages)

## Overview of the operational deployment plan:

* *Demonstrate how country will support manufacturers/representatives or third party (in charge of service bundle) with access to information and relevant documents (e.g. tax exemption) needed for port clearance, in-country distribution and installation*
* *Summarize the approach used to conduct the health facility readiness assessment that has informed the ODP i.e. remote assessments, site visits etc.*
* *Has the country included back up sites to be equipped in the ODP where the country is anticipated to generate savings to procure additional CCE through reprogramming of remaining balances?*

## Deviation management:

* *Describe CCEOP 1 experiences in deploying CCE including deviations seen.*
* *Summarize the scope and number of deviations seen, the reasons for the deviations and most common risks and mitigation plans implemented.*
* *How have these experiences shaped the current support requested?*
* *Summarize the deviation plan, i.e., the plan in case the health facilities specified in the deployment plan are found to be unprepared at the time of delivery of CCE.*

# Maintenance plan (max 4 pages)

## Maintenance strategy and structure:

* *Does the country have a CCE maintenance plan reflected in cMYP, NIS or equivalent?*
* *Is the CCE maintenance plan informed by the CCE inventory?*
* *How is EPI cold chain maintenance organized at different levels of the system for corrective and preventative maintenance? Indicate whether country has explored or plans to explore different models for organizing maintenance e.g. outsourcing.*
* *Summarize the number of human and material resources available to support maintenance activities.*
* *Explain the data systems in place for CCE performance management and how the country plans to strengthen data use to support decision making.*
* *How are maintenance activities currently financed?*

## Preventative maintenance:

* *How is the country planning to strengthen preventative maintenance provided by users of CCE?*
* *How is temperature monitoring data and inventory data used to inform preventative maintenance?*

## Corrective maintenance:

* *How is the country ensuring sufficient availability and access to spare parts, transport, and qualified technicians for corrective maintenance for CCE?*
* *How is the country managing CCE warranties and which systems have been established to manage warranty requests?*
* *Provide details on the utilisation of CCE warranties (vis-à-vis facility level knowledge of warranty scope and contact details of service provider), for previously deployed equipment under CCEOP, and quality of services provided by the vendor (response time, turnaround time and CCE uptime).*

## Maintenance budget:

* *Provide the budget required to maintain CCE procured by the country including sources of funds.*
* *Is the country prioritizing capacity building for maintenance and use of temperature monitoring devices (e.g. 30DTRs, RTMDs, Varo app) under this support?*
* *How does the country plan to finance maintenance activities and strengthening CCE equipment performance monitoring?*

# CCE decommissioning plan (max 4 pages)

## Overview of the country’s CCE decommissioning policy:

* *Does the country have a CCE decommissioning policy?*
* *Summarize the current approach to decommissioning of CCE in an environmentally friendly/sustainable manner, including ability to harvest and recycle spare parts, roles and responsibilities and funding sources.*

## CCEOP decommissioning plan:

* *Describe the status (e.g. completed, ongoing, planned) on decommissioning of obsolete CCE as defined in this indicator: Percentage of total out of service CCEs decommissioned as per national guidelines*
* *Indicate the quantity, type, capacity, and model of equipment decommissioned (or planned for decommissioning) including the rationale, timelines and methods for decommissioning.*
* *Explain of how CCE decommissioning has been or will be funded.*

# Performance framework (max 3 pages)

## Key performance indicators:

* *Using Annex B attached below, provide targets that will be used monitor performance on the grant.*
* *How does the country track CCE indicators?*

**Annex A: CCE inventory tool parameters**

|  |  |
| --- | --- |
| **Basic equipment (and location) information** | * The inventory should include all cold chain equipment in health system used for immunization and be recently updated (i.e. within the last 12 months)4 * Date that overall inventory was last updated * Facility name (facility ID / code); if available, * System location information (e.g., level in health system including region, province, zone, and district) * Availability of cellular network connectivity * *Manufacturer and model* * *Storage type (cold room / freezer room / refrigerator / freezer / combination)* * *Refrigerator / freezer type (e.g., compression electric, compression solar, absorption)* * *Net vaccine volume (or internal storage dimensions if model ID unavailable)* * Power sources used to power equipment (directly or indirectly3) * CCE in the system across all funding sources (e.g. Gavi, Government, Donor or unknown) * Equipment model ID and serial number; if available |
| **Functionality and performance information** | * Year of first installation (or best estimate) * Working status (functioning, awaiting repair, unserviceable, not yet installed) * Reason for non-functionality (spare parts unavailable, finance for repair unavailable, lack of electricity or fuel, equipment is surplus, lack of trained maintenance staff, other) |
| **Supporting equipment information** | * Other, if available: Type of temperature monitoring device, if any (e.g., built-in, 30 Day Temperature Recorders (DTRs), Remote Temperature Monitoring devices (RTMDs) including access to dashboard, dial thermometer, electronic monitoring system (EMS); Presence of voltage regulator for each piece of electric-powered equipment. |

**Annex B: Indicator monitoring and requirements**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ***USE THE TABLE BELOW TO COMPLETE MANDATORY INDICATORS (please note that indicators should be cumulative, where appropriate)*** | | | | | | | |
| ***Indicator***  *(Provide name of the mandatory indicator as shown above)* | ***Definition***  *(Provide definition if not already specified)* | ***Data Source***  *(identify data source)* | ***Reporting frequency***  *(annual, semi-annual, quarterly etc.)* | ***Baseline (Year)***  *(Provide numerator and denominator for calculating percentage)* | ***Target Year 1***  *(Provide numerator and denominator for calculating percentage)* | ***Target Year 2***  *(Provide numerator and denominator for calculating percentage)* | ***Target Year 3 (If applicable)***  *(Provide numerator and denominator for calculating percentage)* |
| *1.* ***CCE Replacement/rehabilitation in existing equipped sites*** | *Percentage of existing sites with (non)functional and/or obsolete non-PQS and PQS equipment to be replaced with platform-eligible ILR, SDD or long-term passive devices (including equipping sites with a larger equipment)* |  |  | *Numerator =*  *Denominator=*  *Percentage=* | *Numerator =*  *Denominator=*  *Percentage=* | *Numerator =*  *Denominator=*  *Percentage=* | *Numerator =*  *Denominator=*  *Percentage=* |
| *2.* ***CCE expansion in existing equipped sites:*** | *Percentage of existing sites being equipped with ADDITIONAL pieces of equipment for new vaccine introduction and/or to serve an increasing population;* |  |  | *Numerator =*  *Denominator=*  *Percentage=* | *Numerator =*  *Denominator=*  *Percentage=* | *Numerator =*  *Denominator=*  *Percentage=* | *Numerator =*  *Denominator=*  *Percentage=* |
| ***3. CCE extension in unequipped existing and/or new sites:*** | *Percentage of previously unequipped sites (providing immunisation services or not, including existing sites without active devices) and new service sites being equipped with Platform eligible equipment to reach zero-dose populations and missed communities.* |  |  | *Numerator =*  *Denominator=*  *Percentage=* | *Numerator =*  *Denominator=*  *Percentage=* | *Numerator =*  *Denominator=*  *Percentage=* | *Numerator =*  *Denominator=*  *Percentage=* |
| *4.* ***CCE functionality*** | *Percentage of functional PQS equipment at all levels in a country[[2]](#footnote-2)* |  |  |  |  |  |  |

1. Based on the WHO-UNICEF joint statement; Temperature-sensitive health products in the Expanded Programme on Immunization cold chain which can be accessed here: <https://www.who.int/publications/i/item/WHO-2019-nCov-Immunization-Cold_Chain-2020.1> [↑](#footnote-ref-1)
2. ***Indicator definition:*** *Percentage of functional PQS equipment at all levels in a country = (# functional PQS CCE devices) / (total # of CCE devices designated for use). CCE devices considered for this indicator include all refrigerators, fixed passive storage devices, walk-in cold rooms and freezers designated for string vaccines. Both the numerator and denominator should be collected from the same geographical area / period in time and should not include decommissioned equipment. Functionality of CCE is broadly defined to mean that the device is operable at a particular point in time for storing vaccine.* [↑](#footnote-ref-2)