



Cold Chain Optimisation Platform Application for September 2016 (only)

This application has been prepared for countries applying for the Gavi CCE optimisation platform ('the Platform') support in September 2016.

In filling this application form, countries are expected to consult the following documents and resources:


	Application Guidelines for countries wishing to request HSS support is available here: http://www.gavi.org/support/apply/
---	--

	Application Instructions for countries wishing to request CCE optimisation platform support is available here: www.gavi.org/support/apply
---	---

	Technology guide for equipment selection for counties wishing to request CCE optimisation platform support is available here: http://www.gavi.org/support/hss/cold-chain-equipment-optimisation-platform/
---	---

	Extensive technical resources relating to vaccine cold chain equipment management are available on TechNet-21: http://www.technet-21.org/en/resources/cold-chain-equipment-management
---	--

Additionally:

	This signals important information that is provided within this application form
---	--

1. APPLICANT INFORMATION

Country:	Niger			
Date:	08/09/2016			
Contact name	Directorate of Immunisations			
Email address	mairabi@yahoo.fr			
Phone number	(00227)96995878			
Total funding requested from CCE optimisation platform (US \$)	This should correspond exactly to the budget requested in the embedded template. US\$ 9,468,201			
Does your country have an approved Gavi HSS support on-going?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
	Indicate the anticipated final year of the HSS: 2017 However, Niger proposes to prepare a new HSS for 2018-2022 .			
Proposed CCE optimisation platform support start date:	Indicate the month and year of the planned start date of the support, based on the strategic deployment plan: June 2017			
Proposed CCE optimisation platform support end date:	Indicate the month and year of the planned end date of the support, based on the strategic deployment plan: December 2021			
3. Signatures Include signed (and official) CCE optimisation platform application endorsement by: <ul style="list-style-type: none"> a) Minister of Health and Minister of Finance (or delegated authorities) b) Members of the HSCC/ICC or equivalent committee and signed minutes of meetings where the application was endorsed In case of HSS and CCE optimisation platform requests, minutes must reflect that both were discussed and endorsed.	We the undersigned, affirm the objectives and activities of the Gavi CCE optimisation platform proposal are fully aligned with the national health strategic plan (or equivalent) and that the funds for implementing all activities, including domestic funds and any needed joint investment, will be included in the annual budget of the Ministry of Health: <table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> Minister of Public Health (or authorised representative) Name: Signature : Date: </td> <td style="width: 50%; vertical-align: top;"> Minister of Finance (or authorised representative) Name: Signature : Date: </td> </tr> </table>		Minister of Public Health (or authorised representative) Name: Signature : Date:	Minister of Finance (or authorised representative) Name: Signature : Date:
Minister of Public Health (or authorised representative) Name: Signature : Date:	Minister of Finance (or authorised representative) Name: Signature : Date:			

2. NATIONAL STRATEGIES AND PLANS RELEVANT TO SUPPLY CHAIN AND REQUESTED SUPPORT

How do the following national strategies, country plans and documents inform plans to strengthen the country's supply chain, and how do they inform the request for CCE optimisation platform support. These documents are mandatory, must be attached to your application, and they must be final and dated.

N°	Strategy / Plan / Document <i>*All documents are mandatory. Only complete applications will be assessed.</i>	Attached Yes/No	Final version (dated)	Duration	<u>Comments</u>
1	Signature sheet for the Minister of Health and Minister of Finance, or their delegates	Yes	October 2016		
2	Signature sheet for HSCC/ICC or equivalent committee endorsement and minutes of meetings	Yes	October 2016		
3	National Health Sector Development Plan	Yes	January 2016	2017 -2021	
4	cMYP	Yes	December 2015	2016 - 2020	
5	EVM Assessment	Yes	June 2014	2014 -2017	
6	EVM Improvement Plan	Yes	June 2016	2015 - 2017	
7	EVM Annual Workplan AND Progress Report on EVM Improvement Plan¹	Yes	October 2015 June 2016	AWP 2016	
8	- CCE TE Inventory Report² - Facilities Segmentation Plan	Yes	September 2016 September 2016		
9	Cold Chain Rehabilitation and Expansion Plan, AND Equipment Selection and Strategic Deployment Plan	Yes	December 2015 September 2016		
10	Maintenance Plan with financing	Yes	September 2016		
11	Proof of status for CCE tariff exemptions waiver	Yes	NA		Niger is committed to exempting all equipment in the cold chain equipment optimisation platform.
12	OTHER RELEVANT DOCUMENTS	Yes			

13. How do the above strategies, plans and documents inform the CCE optimisation platform support request ('initial support' and 'scale-up support')? Countries are encouraged to reference relevant sections of the above documents as much as possible.

The primary reference documents used to prepare Niger's CCEOP application are:

- National Health Policy (2016-2035);
- The validated Health Development Plan (HDP 2017-2021);

¹ The EVM IP and annual work plan progress report must have been updated within three (3) months of applying for Platform support.

² The CCE Inventory must have been updated within no more than one (1) year of applying for Platform support.

- EPI 2016-2020 Comprehensive Multi-Year Plan (cMYP);
- The 2014 EVM report;
- The EVM improvement plan 2015-2017;
- The 2014 CCE inventory report;
- The cold chain equipment inventory (updated 2016).

The work methodology consists of implementing a work group composed of managers from the DI, WHO, and UNICEF, and consultants from Gavi and JSI. The process was participatory, involving regional managers, specifically concerning inventory.

The process of preparing the platform consists of a documentary review to seek out updated information, and to implement the situation analyses. The HDP made it possible to make projections for new infrastructure and CCE needs, to implement the EPI's activities.

The cMYP and the EVM helped deepen the analysis of the EPI's logistics component, and helped to identify bottlenecks, as well as high-priority actions to implement.

The updated inventory helped to identify CCE gaps and break them down according to the urgency of the emergency enhanced phase [sic] (first two years) and the supplemental phase (last three years).

3. APPLICATION DETAILS



Please review Section 6 of the Platform Application Instructions for complete information on phased support and application requirements.

3.1 Application requirements overview

- Aligning with the Gavi HSS support, the CCE optimisation platform will provide phased support (for a maximum duration of 5 years) which includes: 'initial support' (Approximately years 1-2) to address country's most urgent CCE needs; and 'scale-up support' (Approximately years 3-5) to address additional CCE needs as part of transforming the supply chain to support sustainable achievements of coverage and equity targets.
- Countries must make a single application to the CCE optimisation platform, requesting support for both the 'initial' and 'enhanced' phases.
- Sufficient, well-functioning cold chain equipment is one fundamental prerequisite for an effective immunisation supply chain, complementing the other "fundamentals" comprised of: supply chain managers; data for management; optimised & efficient design of the distribution system; and a continuous improvement process over time. Support from the CCE optimisation platform should be demonstrated to complement investments from other sources in these fundamentals
- Countries should also demonstrate, in their application, how the Platform support will contribute to sustainable improvements in immunisation coverage and equity, consistent with country targets.

Like most countries in the African sub-region, Niger created a comprehensive multi-year plan (cMYP) for 2016-2020. This plan's goal is to improve public health and allow for equitable access to immunisation services. Specifically, implementing the cMYP will help to reduce morbidity and mortality related to vaccine-preventable diseases in children 0-59 months old, and in women of childbearing age (15-49), through increases in the use of immunisation services by a larger number of people, the introduction of new vaccines and the integration of other health interventions with immunisation. By 2020, achieve and maintain a rate of immunisation coverage of at least 90% for all the antigens of the EPI on the national level and at least 80% in each district.

In Niger, the supply chain is structured in four separate levels:

- Central;
- Intermediate or Regional;
- Health district;
- Integrated Health Centre.

The last two levels form the operational, or peripheral level.

Despite the structure of the supply chain, the system has difficulties that limit programme performance, given that the country is in a phase of introducing new vaccines.

These difficulties are primarily related to storage capacity, providing new facilities with CCE, maintaining equipment and developing the staff's skills.

An analysis of ongoing accessibility and use indicators for services makes it possible to categorise the districts into four categories, which are:

-Category 1 districts: have good accessibility (Penta1 coverage rates $\geq 80\%$) and low dropout rates ($\leq 10\%$), which explain their good continuity of services.

-Category 2 districts: have good accessibility and high dropout rates (greater than 10%), and therefore a poor continuity of services.

-Category 3 districts: have poor accessibility (Penta1 $< 80\%$), but have dropout rates below 10%.

-Category 4 districts: poor accessibility and poor use of services, in other words a low Penta1 coverage rate (Penta1 $< 80\%$), combined with a high dropout rate, above 10%.

In 2015, 11 districts were in category 3 (Bilma, Agadez Commune, Arlit, Gaya, Konni, Bouza, Kollo, Téra, Tillabéri, Mirriah and Zinder Commune), and 9 districts were in category 4 (Tchiro, Diffa, Mainé Soroa, Maradi Commune, Tessaoua, Say, Niamey2, Niamey 3 and Niamey 5).

This classification shows that 20 of 44 health districts (45%) have poor accessibility. This observation is strengthened by the fact that more than half of Niger's population must travel more than five kilometres to access basic health services, and immunisation in particular.

In terms of immunisation equity, the results of the 2012 DHS-Niger show no gender gap (DTP3 males= 67.5%, females=68.6%), but on the contrary, the percentage of immunised children decreases as birth order increases, with 60% of first-born children immunised, but only 48% of children who are sixth-born or higher.

Notwithstanding that fact, there are still ongoing equity disparities between the districts, depending on whether they are in deserts, or difficult-to-access areas, or whether they have nomadic populations and/or are in insecure situations.

To meet these challenges and give all children a chance to be immunised against vaccine-preventable diseases, Niger is submitting this support proposal to Gavi. Funding for this vaccine CCEOP proposal will help reach the objectives in the cMYP, with immunisation coverage of $\geq 80\%$ for all health districts by antigen, and an estimated impact of ten thousand (10,000) lives saved per year in terms of vaccine-preventable diseases.

For the application, Niger updated its cold chain equipment inventory, which showed a storage capacity deficit, both at the district warehouse level and the service point level.

This deficit is caused by cold chain equipment (refrigerators and freezers) due to their advanced age, and repeated breakdowns. This applies to all regions, and specifically to Diffa, Agadez, Tahoua, Zinder, and Niamey.

These regions have the following characteristics:

- Diffa region: unsafe zone, nomads, difficult-to-access; all three (3) districts have deficits (Diffa, Mainé Soroa and N'guigmi) with a target of 35,998 children aged 0-11 months;
- Agadez region: desert zone, nomads, difficult-to-access (Arlit, Bilma et Tchirozérine) with a target of 28,628 children 0-11 months;
- Tahoua region: desert zone, difficult-to-access (Abalak, Tchinta), with a target of 210,647 children 0-11 months;
- Zinder region: nomadic zone, difficult-to-access (Gouré, Tanout), with a target of 214,585 children 0-11 months;
- Niamey region: very accessible zone (Niamey II, Niamey V), with a target of 59,581 children 0-11 months.

The five (5) regions total 549,439 target children, or nearly 54%.

Objectives:

Overall objective: Increase cold chain coverage and improve the quality of equipment in order to help reach the sustainable development goals.

Specific objectives:

- Cover gaps/deficits in storage capacity at the peripheral health facility level by 2018;
- Improve the quality of vaccine storage in order to better protect children;
- Increase immunisation coverage;
- Guarantee equitable access to immunisation for all targets;
- Acquire appropriate equipment for each health centre (segmentation plan);
- Renew old and outdated equipment, with reliable, approved equipment;
- Prepare a maintenance plan funded through the implement of the CCEOP;
- Strengthen cold chain stakeholders' technical skills;
- Acquire replacement parts and maintenance kits to work on cold chain equipment;
- Quantify the equipment according to the two phases (urgent phase, supplemental phase).

4. APPLICATION REQUEST

This section gives an overview of the types of information the IRC will anticipate from countries in their application for CCE optimisation platform support.

4.1. Situation analysis and requested support

This section must be filled with appropriate reference to the country documents listed in Section 2. Countries are required to provide a narrative in response to the following questions.

Section	Required information
<p>Situation analysis of country's supply chain and CCE (number, distribution, functionalities etc.)</p>	<p>➤ How is the country's immunisation supply chain administered?</p> <p>In Niger, vaccines and supplies are procured under the terms of the protocol agreement signed by Niger and UNICEF. Annual needs are communicated at the end of the third quarter of each year, using the Forecast tool. Vaccines and supplies are received and stored at the central level, pursuant to the procurement plan included in Forecast.</p> <p>A quarterly distribution plan allows the central level to ensure that regional warehouses are resupplied. In turn the districts resupply the regional warehouses on a monthly basis, and stock their departmental warehouses. The supply chain extends to the IHCs, which resupply themselves from the district warehouses, which store vaccines in refrigerators for immunisations, and to supply their associated health huts that have qualified staff and cold chain equipment.</p> <p>The purchase of vaccines and injection supplies is done through a budget line item created by the State in conjunction with the implementation of the Vaccine Independence Initiative in Africa policy which provides for an order and two deliveries annually. This procurement system functions satisfactorily.</p> <p>The country benefits from Gavi support to procure new vaccines:</p> <ul style="list-style-type: none"> • 2014: PCV-13 pneumococcus vaccine, rotavirus diarrhoea vaccine and the human papillomavirus vaccine which is in the demonstration phase in 3 districts; • 2015: inactivated injectable polio. <p>The country continues to benefit from UNICEF support for the purchase and procurement of polio, tetanus and measles vaccines used during supplemental immunisation activities.</p> <p>➤ What weaknesses have been identified in the country's supply chain?</p> <ul style="list-style-type: none"> - Delays in disbursing central government funds to purchase vaccines. - On average, to cover one region's needs, a volume of 14.70m³ is required, while the shipment vehicles' capacity is only 11.25m³, or 3/4 of transportation needs. This has led the central level to make multiple trips to resupply the regions with vaccines. - Three refrigerated vehicles are available; they are between 5 and 15 years old and only one is in working order; - At each resupply interval, the operational refrigerated vehicle undergoes corrective maintenance; - Only 45% (468 of 925) of IHCs have at least 100 litres of net storage capacity for vaccines; - And the lack of sufficient transportation methods prevents a formal distribution system for vaccines and supplies from being established between the regions and the districts, then from the districts to the IHCs. <p>These weaknesses show a lack of capacity, both in terms of distribution/transportation and storage.</p> <p>➤ Through what interventions are these weaknesses currently being addressed?</p> <ul style="list-style-type: none"> - Intensive, high-level advocacy through memos addressed to the Prime Minister and the Minister of Finance, to accelerate the disbursement of vaccine purchase funds, along with a mechanism to track this closely. - Raising Niger's ceiling in the context of the vaccine independence initiative, which will make it possible to secure availability of vaccines. - Many trips are required to resupply the regions, which increases their cost. - In order to remedy this problem, the central level uses refrigerated trucks from the regions and the National Office of Pharmaceutical and Chemical Products (ONPPC), which results in delays in resupplying, and an increase in the cost of fuel and driver pay. - In terms of motorbikes purchased with HSS funding, 275 motorbikes have been

distributed to the IHCs, to cover the need of 433 [motorbikes] expressed by the regions during the 2016 mid-year review.

- In 2016, an order for 216 refrigerators, 181 RCW25 ice packs, 280 RCW12 ice packs, and 467 Blow King vaccine carriers was placed using HSS funding.
- Concerning distribution of vaccines at the operational level (regions to the districts, and districts to the IHCs), the regions and districts were requested to include this activity in their AWP; but only two regions out of eight received funding.

➤ Describe challenges that are hindering the implementation of these interventions.

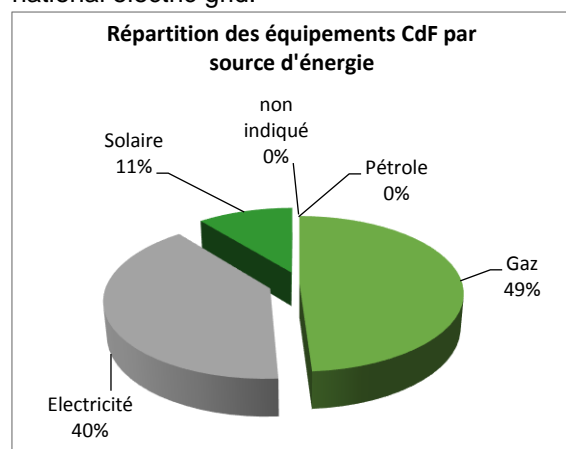
- The fact that the interministerial technical committee responsible for tracking vaccine and supply funding is not operational;
- Despite the political commitment that the highest-level authorities constantly reiterate, delays in disbursing funds persist, for funding for vaccine purchases and procurement;
- Allocation of central government resources does not always cover all of the expressed needs for vaccine procurement and distribution.

➤ Describe lessons learnt from recent supply chain related support that inform the current request for CCE optimisation platform support.

- Construction of a modern warehouse with eight cold rooms including one negative cold room has improved central-level storage capacity.
- Purchasing and installing Beyond Wireless log tags in the central warehouse has allowed continuous recording and monitoring of temperatures.
- Training of the central level team in the use of temperature monitoring tools (log tags) does make it possible to map each cold room and configure it according to storage standards, which are +2 to +8°C.
- Purchasing and installing two (2) mixed cold rooms (25 m3 positive and 15 m3 [sic]) in the Zinder and Niamey regions has made it possible to cover increase [sic] storage needs in positive cold rooms;
- Purchasing and installing 1,595 second-generation fridge tags at the central, intermediate, and peripheral levels has made it possible to begin and improve regular temperature monitoring of the cold chain.

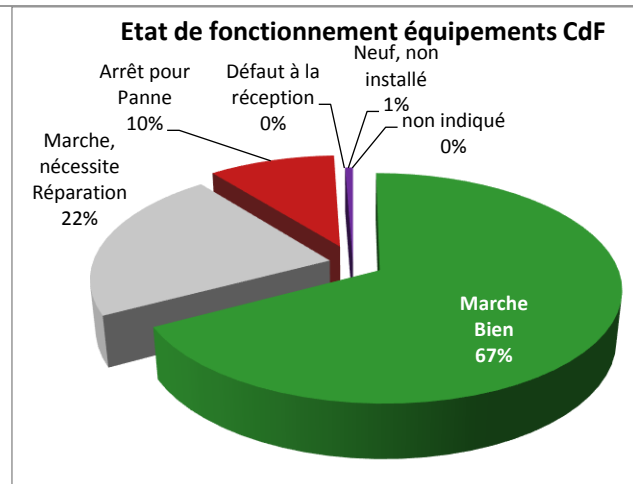
➤ What percentage of facilities have reliable access to grid electricity for up to or more than 8 hours per day?

This figure shows that 40% of cold chain equipment has a reliable connection to the national electric grid.



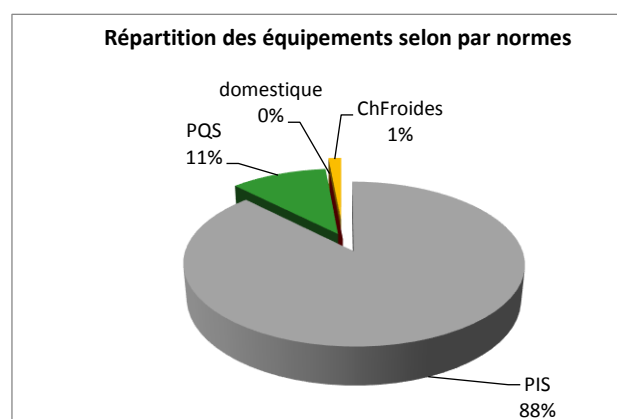
➤ Please indicate the quantity and percentage of current cold chain equipment that:

- a) Is in working order: 1,091 (67%) is in good working order;



b) Complies with the PQS (performance, quality, security);

In total 178 pieces of equipment comply with the PQS (11%), and 1,419 with the PIS (former name for PQS) (88%);



c) Does not comply with the PQS: 0%

d) Obsolete: 48.57% of the equipment is obsolete (SIBIR, RCW 42, RCW 50, EG).

➤ **What percent of the birth cohort is served by effectively functioning, PQS-approved CCE currently?**

In total, 24.80% of births, or 251,311 children receive services based on CCE that is in working order and listed on the PQS. In addition, 75.20% of births, or 762,040 children, receive service based on CCE that is working order and listed on the PIS.

➤ **What are the bottlenecks that CCE can address in the current supply chain set-up (for example, capacity and technology constraints)?**

The bottlenecks that the supply chain is confronted with in general are:

- Strengthening of storage capacity;
- Absorption refrigerators are gradually being replaced with solar-powered refrigerators;
- Renewing cold chain equipment and expanding the supply chain (to new facilities);
- Frequent gas stock-outs at supply points;
- Low financial capacity in some Integrated Health Centres, to resupply gas;
- Outdated cold chain equipment;
- Difficult to access some zones, especially in winter.

Thus, with the implementation of the optimisation platform, all of these bottlenecks will be resolved, while contributing to programme performance.

In essence, it should be noted that with the increased number of targets and the introduction

of new vaccines, new needs will become apparent in terms of required storage capacity. In addition, more than 71% of refrigerators are absorption and require replacement in order to comply with new technology policies and to remedy the inherent cost of purchasing gas.

➤ Describe any other supply chain challenges that CCE optimisation platform support will assist in mitigating?

- Equipment maintenance plan;
- Renewal and expansion plan;
- Strengthening workers' skills.

Despite the existence of qualified staff to provide maintenance, some replacement parts are unavailable on the local market. This makes it impossible to ensure that equipment is maintained appropriately. In essence, when a new technology is adopted, some equipment will need to be replaced, and staff skills will need to increase.

➤ What are the overall CCE needs?

Name	Model	Quantity/no
Refrigerators	VLS 400 A	249
	GRV 100 DC (solar)	392
	GRV 50 DC (solar)	917
Freezers	MF 314	195
Electric voltage regulator		445
Fridge – Tag 2		1753

➤ Which of the CCE needs identified in the situation analysis are urgent, and why, and therefore should be addressed in the urgent enhanced [sic] phase? (eg type of equipment, model, capacity, number etc.)?

Type of equipment	Model	Capacity	Number	Comments
Refrigerator	VLS 400 A	145 L	127	To replace 46 broken-down refrigerators (districts) and 81 [sic] to equip 27 new districts, or 3 per district.
Refrigerator	GVR 100 DC	99 L	155 (IHC)	Create 80 type II IHCs, and 73 [sic] to replace broken down refrigerators, and 2 to equip 2 new IHCs.
Refrigerator	GVR 50 DC	47 L	337	Change 120 health huts into type 1 IHCs, 197 [sic] to replace broken down refrigerators and 20 IHCs that do not have CCE
Freezer	MF 314	253.6 L	102	44 to replace broken down equipment, 54 to equip the 27 new districts, and 4 to equip 2 health districts that do not have freezers.
Voltage regulator	Unit	NA	229	To equip the existing

Country's urgent and scale-up CCE needs
(number, distribution, functionalities etc.)
1 page

for refrigerator/freezer				refrigerators/freezers in locations with electricity.
Temperature device	Fridge – Tag 2	NA	721	To equip some existing refrigerators that do not yet have continuous temperature monitoring equipment.

These needs result from the updated inventory, and take into account the creation of new facilities (27 districts and 200 IHCs) during the platform's urgent phase.

➤ *What percent of the birth cohort will be served by effectively functioning CCE when the Platform equipment is deployed?*

According to inventory data, 75% of the birth cohort will receive platform equipment.

➤ *Explain how these urgent needs relate to the current bottlenecks (as outlined in the preceding section)?*

The expressed needs take into account depreciated and obsolete equipment that needs to be replaced, and equipping new facilities (new districts and health centres).

In addition, to implement the platform, expansion plans, maintenance plans, and staff capacity-building plans at all levels have been prepared.

15. How will the requested Platform support concretely contribute to addressing identified geographic and socio-economic inequities and gender barriers to sustainable improvements in coverage and equity of immunisation? Examples may include (not exhaustive):

- *Geographically remote districts or those with low coverage*

Currently, the country has 44 health districts, of which 13 are difficult-to-access: N'guigmi ; Mainé Soroa, Gouré, Tanout, Dakoro, Mayahi, Tchintabaraden, Abalak, Arlit, Bilma, Tchirozérine, Ouallam and Filingué. Arlit, Bilma, Mainé Soroa, N'guigmi, Gaya, Maradi commune, Tchintabaraden, Magaria, Niamey II and Niamey V. In addition, 10 districts have Penta3 coverage below 80%: Arlit, Bilma, Mainé Soroa, N'guigmi, Gaya, Maradi commune, Tchintabaraden, Magaria, Niamey II and Niamey V.

- *Poorer communities (e.g. in the poorest 10 % of the population)*

The immunisation coverage rate also varies along with the wealth level of the child's household, rising from 35% in the poorest-quintile households to 67% in the wealthiest quintile. (DHS-MICS IV) 2012, Niger

- *Communities where gender barriers are significant and/or where low levels of female education is common (as this is often associated with lower coverage)*

Furthermore, variations according to the mother's education level are very significant, with the proportion of children completely immunised varying: 50% when the mother has no education, 59 % when she has a primary-school education, 73% when she has a secondary-school education or higher.

Analysis of immunisation coverage in children 12-23 months, using several of the mother's and child's socio-demographic characteristics shows that there is not disparity according to the child's gender, but the percentage of immunised children decreases as birth order increases, with 60% of first-born children immunised, but only 48% for sixth-born or later-born children. (DHS-MICS IV) 2012, Niger

There are significant disparities depending on the residential area and region. In essence, in urban areas, 69% of children are completely protected against the EPI's target illnesses; this is only 49% in rural areas. In the regions, we see that in Diffa and Zinder, the percentage of fully-immunised children is lower (41% and 42%, respectively) and in Niamey

Expected immunisation coverage, equity and sustainability results

Provide 2 pages

	<p>and Agadez, it is highest (73% and 66%, respectively).</p> <p><i>16. What analyses have been done³, or what plans are underway, to optimise the supply chain's distribution system⁴, in order to improve the supply chain's effectiveness and to contribute to the coverage and equity goals?</i></p> <ul style="list-style-type: none"> • The Effective Vaccine Management Report (EVM), the 2014 updated inventory report, the 2016-2020 cMYP, the 2015 EPI review and the 2017-2021 HDP; • The EVM improvement plan and the maintenance plan; <p><i>17. How have these system design considerations impacted the choice of CCE to be supported by the Platform?</i></p> <ul style="list-style-type: none"> • These documents have identified dysfunctions in the programme, evaluated needs and proposed improvement solutions for the supply chain. • platform optimisation <p><i>18. Concretely, how will Platform support help improve the sustainability of the supply chain system?</i></p> <ul style="list-style-type: none"> • through the acquisition of cold chain equipment that is energy-efficient and easier to maintain; • through installation being performed by manufacturer/supplier technicians, and routine training of users in how to operate the new equipment; • through building the capacities of maintenance technicians and cold chain managers;
<p>Maintenance plan (and its source of funding) and equipment disposal</p> <p>2 <u>Pages</u></p>	<p><i>19. How will the country ensure that aspects of maintaining the cold chain are addressed (e.g. preventive and corrective maintenance, monitoring functionality, technicians, financing for maintenance, etc.)?</i></p> <p><i>a. What is the frequency of preventative and corrective maintenance that the country commits to (supported by partners)?</i></p> <p>Preventive maintenance will be performed at the end of each month, with well-defined tasks that are identified in advance; it will be performed based on the manufacturer's instructions. This task falls to the cold chain managers and the multi-purpose maintenance workers. Curative maintenance will be done on a case by case basis following a request; corrective maintenance will be done quarterly, after the equipment is counted. Building maintenance technicians' capacities at all levels, training them, and purchasing new equipment.</p> <p><i>b. What technical support is anticipated for maintenance?</i></p> <p>Building the cold chain managers' and maintenance technicians' capacities and training them to install and use the new equipment;</p> <ul style="list-style-type: none"> - Creating a logistics information management system; - Supporting this system with rapid intervention teams; - Support from an international expert in cold chain equipment maintenance; - Providing the maintenance services with tools and replacement parts; <p><i>20. How will the country monitor the completion of preventive and corrective maintenance?</i></p> <ul style="list-style-type: none"> - Design and make available a history sheet for each piece of equipment; - Ensure periodic supervision at all levels; - Include equipment maintenance on the agenda for periodic meetings of EPI focal

³ These plans can vary from desk reviews to complex modelling of the country's supply chain system and distribution that identify ways to increase supply chain efficiencies, to deliver potent vaccines.

⁴ NOTE: Activities to optimise the design of supply chain distribution systems are NOT funded by Platform-support.

	<p>points.</p> <p><i>a. Which source(s) of funding will be used for maintenance?</i> Funding for equipment maintenance will be included in the annual action plans, from HSS funding.</p> <p><i>b. To what extent are they guaranteed?</i> Inclusion in the validated AWP constitutes a funding guarantee. Maintenance will be included in the new HSS covering 2018-2022.</p> <p><i>21. How will the country dispose of obsolete and irreparable equipment replaced by CCE optimisation platform equipment?</i> The country will recycle and/or destroy obsolete or unrepairable equipment, pursuant to national and supranational legislative and regulatory texts in effect, under the direction of the committees already in place, while protecting the environment.</p>
<p>Other implementation details</p> <p><u>1 page</u></p>	<p><i>22. How will the country facilitate the manufacturer's or representative's role in equipment purchase, distribution and installation?</i> Equipment specifications, timely transfers of cash for expenses, entry authorisations, exemptions from customs fees, and support from in-country technicians: Equipment will be purchased through UNICEF Equipment cost estimates will include transportation and installation costs The EPI technical and maintenance team will contribute its experience and knowledge of the area, to plan, distribute, and install the equipment.</p> <p><i>23. What is the source of the joint investment? Is the country's joint investment secured?</i> The joint investment (20%) is guaranteed by reallocating HSS2 funds for the first year (2017) and HSS3 funds for the other four years (2018-2022).</p> <p><i>24. Has the country secured import tariff exemptions for CCE? If yes, attach proof.</i> The cold chain equipment that will be purchased through the platform will be exempt from customs tariffs, as is the case for purchases of vaccines and consumables, in the context of Gavi co-financing. In essence, the law on finance includes provisions for pharmaceutical products, vaccines, and biomedical equipment that must be exempted. The country commits to take all necessary provisions to obtain exemptions from customs tariffs at the opportune moment.</p>

4.2 Initial support phase

This initial support is designed to address urgent CCE needs through years 1 and 2.

Provide maximum three pages, comprising:

- **2 to 4 prioritised URGENT CCE needs** as identified in the 'CCE rehabilitation and expansion plan, equipment selection and strategic deployment plan requirements' (see Annex 3 of the Application Instructions),
- **Description** of planned or ongoing activities related to other supply chain "fundamentals."

4.2.1 Prioritised urgent CCE needs

<p>i</p>	<p>Budgets not inclusive of operational cost (Operational costs to be financed by Ministry of Health or other partners)</p>
<p>Prioritised (URGENT) CCE need 1: (Required information)</p>	<p>To implement the first two (2) years, or the urgent phase, the country identified two (2) priorities in order to improve the supply chain system. They are:</p> <ul style="list-style-type: none"> • Replace non-working refrigerators and freezers;

	<ul style="list-style-type: none"> • Provide equipment to newly-created facilities (27 districts and 100 IHCs) and facilities that have no CCE (2 districts and 22 IHCs) <p>1. The need: Replace non-working refrigerators and freezers;</p> <p>The highest priority is to replace all non-working refrigerators and freezers at the district and IHC level.</p> <p>The inventory shows that 46 VLS 400 A refrigerators and 44 MF314 freezers must be purchased for the districts, and 73 GVR 100 DC refrigerators and 197 GVR 50 DC freezers must be purchased for the IHCs.</p> <p>These have been selected because of the required storage capacity needs, as a prelude to phased introduction of new antigens. All electrical equipment will be equipped with a voltage regulator. Each refrigerator will be equipped with a Fridge Tag 2.</p> <p><i>Please include: Type of activity (e.g. replace obsolete CCE, extend CCE to unequipped facilities, etc.); specific CCE site (facility); type of equipment required; quantity of equipment items.</i></p> <p>2. Explanation</p> <ul style="list-style-type: none"> • Without a functional cold chain, the districts cannot store vaccines, which causes the supply chain to break down. • The IHCs that do not have a cold chain cannot offer immunisation services. This unfortunately reduces immunisation coverage, and contributes to increased morbidity due to vaccine-preventable diseases. <p><i>Please include: Reasons for urgent need (e.g. low CCE and/or immunisation (Penta3) coverage area, gender barriers, mobile population, etc.); current CCE and immunisation (Penta3) coverage in the population area.</i></p> <p>3. Expected outcome</p> <p>With these new acquisitions:</p> <ul style="list-style-type: none"> - 100% of non-working equipment will be replaced; - The supply chain will be re-established; - Immunisation coverage and equity will improve; - Morbidity and mortality caused by vaccine-preventable diseases will be reduced; <p><i>Please include: Anticipated increase in CCE and immunisation coverage (Penta3); anticipated progress against identified inequity (describe, in alignment with country Performance framework).</i></p>
<p>Total CCE Budget:</p>	<p><i>'Total budget' includes Gavi and country joint investment share: US\$</i> 1,837,305</p>
<p><i>Prioritised (URGENT) CCE need 2:</i></p>	<p>3. The need: Provide equipment to newly-created facilities (27 districts and 200 IHCs) and facilities that have no CCE (2 districts and 22 IHCs)</p> <p>The second priority is to provide the 27 new districts and 200 IHCs with cold chain equipment.</p> <p>Each district will receive 3 VLS 400 A refrigerators (81 in total) and 2 MF 314 freezers (54 in total).</p> <p>The 80 new type II IHCs will each receive a GRV 100 DC refrigerator, and the 120 new type I IHCs will each receive a GRV 50 DC solar refrigerator.</p> <p>The two districts without freezers will each receive two MF 314 freezers.</p> <p>Of the 22 IHCs, 2 will each receive a GRV 100 DC solar refrigerator, and</p>

	<p>20 others will receive GRV 50 DC solar refrigerators. All electrical equipment will be equipped with a voltage regulator. Each refrigerator will be equipped with a Fridge Tag 2.</p> <p>Rationale:</p> <ul style="list-style-type: none"> - The new facilities must be provided with qualified staff and adequate CCE - Targets must be closer to the immunisation service points - Immunisation coverage and equity must be strengthened <p>Expected outcome</p> <p>With these new acquisitions:</p> <ul style="list-style-type: none"> - Health coverage and cold chain coverage will increase beyond current limits - 100% of new districts and IHCs will be equipped and operational - Immunisation coverage and equity will improve; - Morbidity and mortality caused by vaccine-preventable diseases will be reduced; <p><i>(See guidance as per prioritised need 1, above)</i></p>
Total CCE Budget:	US\$ 1,699,848
<i>Prioritised (URGENT) CCE need 3:</i>	The need; Justification; Expected outcome <i>(See guidance as per prioritised need 1, above)</i>
Total CCE Budget:	<i>\$()</i>
<i>Prioritised (URGENT) CCE need 4:</i>	The need; Justification; Expected outcome <i>(See guidance as per prioritised need 1, above)</i>
Total CCE Budget:	<i>\$()</i>
Grand Total CCE Budget: "initial support" (years 1 and 2)	US\$ 3,729,107 The cost of replacement parts is US\$ 191,954, included in the total.

4.2.2 Ongoing or planned activities around other supply chain fundamentals in the initial support

In this section, linkages must be drawn between requested CCE Optimisation Platform support, on-going Gavi investments (especially through the Health Systems Strengthening support) and other partner supply chain support.

phase

Describe planned or ongoing activities related to other supply chain "fundamentals" (see section 3 of the Application Instructions) during the initial support phase, including their sources of funding. *Responses to this section should be linked to the EVM Improvement Plan.*

Supply chain managers

Provide description of all planned or ongoing activities related to improving the availability and performance of supply chain managers, their sources of funding, and partner support.

CURRENT ACTIONS	Funding Sources	Comments
-----------------	-----------------	----------

Train 19 drivers and 17 handlers involved in vaccine transportation on how to respond in case of central-level and regional emergencies.	JSI	Three of six drivers at the central level have been trained.
Train 40 workers from the regional and district levels in knowledge and use of vaccine and cold chain management and monitoring tools (DVD/MT, SMT, Fridge Tag 2, etc.).	JSI	8 regional immunisation coordinators and 44 district immunisation coordinators have already been trained. However, 3 new regional immunisation coordinators and 37 district immunisation coordinators still need to be trained.
Four times per year, supervise those involved at the DRSP, health district and IHC levels.	UNICEF:	Supervisions from the central level to the operational level are irregular.
Planned actions		
Once per year, supervise the central level workers on the EPI management principles.	Gavi-HSS UNICEF:	International technical assistance twice per year
Train 19 drivers and 17 handlers involved in vaccine transportation on how to respond in case of emergencies.	WHO UNICEF JSI	3 drivers from the central level and 16 from the regional level (2 per region), 16 handlers, 2 per region and 1 from the central level.
Ensure monitoring after training for the trained workers.	UNICEF:	60 workers (80 regional immunisation coordinators and 62 district immunisation coordinators)
Do regular supportive supervision in order to correct the deficiencies that have been noted.	UNICEF:	On average, four supervision visits to the operational level.
Train 8 regional managers and 45 district immunisation supervisors in knowledge and use of vaccine and cold chain management and monitoring tools (DVD/MT, SMT, Fridge Tag 2, etc.). Train EPI workers: 8 at the regional level and 44 at the district level, in knowledge and use of vaccine and cold chain management and monitoring tools (DVD/MT, SMT, Fridge Tag 2, etc.).	Gavi-HSS	8 regional immunisation coordinators and 45 district immunisation coordinators
Conduct supportive supervision focused on vaccine and supply management	Gavi-HSS	Conduct supervision missions focused on vaccine management Four per year for the central level Four for [sic] for the regional level Six for the district level
Train 16 regional managers and 90 departmental managers in vaccination modules (practical training) Train 104 health workers in	Gavi-HSS UNICEF:	The regional immunisation coordinators, departmental immunisation coordinators and their replacements, district immunisation coordinators

vaccination modules (practical training)							
Data for supply chain management							
<i>Provide description of all planned or ongoing activities related to data for management, their sources of funding, and partner support. In particular, please provide information explaining how improvements to the functionality of logistics management systems will improve the visibility of up-to-date and accurate vaccine stock records at each level of the vaccine supply chain.</i>							
Actions are ongoing concerning supply chain data management	Funding Sources	Updated and correct information concerning the vaccine stock at each level of the vaccine supply chain			Comments		
		Central	Regional	District	Central	regional level	District
Conduct a systematic temperature audit study in all cold rooms	UNICEF/PATH						
		Provide the mapping of the eight cold rooms	APR	APR	Provide support for technical assistance with mapping the eight cold rooms at the regional level	10 cold rooms are planned	APR
Purchase Multilog-type continuous temperature loggers for the 16 cold rooms	HSS	Allow reliable temperature monitoring of cold rooms	Allow reliable temperature monitoring of cold rooms	Not applicable	Four cold rooms at the central level	12 cold rooms at the regional level	Not applicable
Each month, analyse the stock management reports generated by the SMT		Ensure better monitoring of vaccine stock management	Ensure monitoring of vaccine stocks	Ensure monitoring of vaccine stocks	Analyse the reports generated by the SMT each quarter	Analyse the reports generated by the SMT each month	Analyse the reports generated by the SMT each month
Analyse stock management (individual stock cards and logs)		Harmonise the SMT data and the data from the manual stock management tools	Harmonise the SMT data and the data from the manual stock management tools	Harmonise the SMT data and the data from the manual stock management tools	Regularly update the various manual tools	Regularly update the various manual tools	Regularly update the various manual tools
					Archive the manual management tools	Archive the manual management tools	Archive the manual management tools

Optimised, efficient design of distribution system

Provide description of all planned or ongoing activities related to distribution system design optimisation, their sources of funding, and partner support.

Continuous improvement process

Provide description of all planned or ongoing activities related to continuous improvement processes, their sources of funding, and partner support.

4.3 Reviewing implementation of initial support activities

Support for approximately years 3 onwards will be contingent on reporting and performance of activities implemented during the initial support phase.

4.4 Enhanced support phase

This second phase of Gavi CCE optimisation platform support will be provided for approximately year 3 onwards.

Provide maximum 3 pages, comprising:

- **2 to 4 prioritised ADDITIONAL CCE needs** as identified in the ‘CCE rehabilitation and expansion plan, equipment selection and strategic deployment plan requirements’ (see Annex 3 of the Application Instructions),
- Description of planned activities related to other supply chain “fundamentals”.

4.4.1 Prioritised ADDITIONAL CCE needs



Budgets not inclusive of operational cost

(Operational costs to be financed by Ministry of Health or other partners)

*Prioritised (ADDITIONAL)
CCE need 1:
(Required information)*

Priorities in the second phase of the platform are to provide the new IHCs with equipment, replace and strengthen old and obsolete CCE in the districts and IHCs.

1. 1. The need: Provide new facilities (300 IHCs) with equipment

The first priority in the supplemental phase is to provide the 300 new IHCs with cold chain equipment.

The 120 new type II IHCs will each receive a GRV 100 DC refrigerator, and the 180 new type I IHCs will each receive a GRV 50 DC solar refrigerator.

Each refrigerator will be equipped with a Fridge Tag 2.

Please include: Type of activity (e.g. replace obsolete CCE, extend CCE to unequipped facilities, etc.); specific CCE site (facility); type of equipment required; quantity of equipment items.

2. Rationale:

- The new facilities will expand vaccination services, in more locations
- Immunisation coverage and equity must be strengthened

Please include: Reasons for additional CCE need (e.g. low CCE and/or immunisation (Penta3) coverage area, gender barriers, mobile population, etc.); current CCE and immunisation (Penta3) coverage in the population area.

	<p>3. Expected outcome</p> <p>With these new acquisitions:</p> <ul style="list-style-type: none"> - 100% of new IHCs will have equipment; - Immunisation coverage and equity will improve; - Morbidity and mortality caused by vaccine-preventable diseases will be reduced; <p><i>Please include: Anticipated increase in CCE and immunisation coverage (Penta3); anticipated progress against identified inequity (describe, in alignment with country Performance framework).</i></p>
Total CCE Budget⁵:	'Total budget' includes Gavi and country joint investment share: US\$ 1,857,000
<i>Prioritised (ADDITIONAL) CCE need 2:</i>	<p>The need: Replace outdated refrigerators and freezers; The updated physical equipment inventory identified: 32 outdated refrigerators and 48 outdated freezers in the districts, as well as 517 refrigerators that are more than 10 years old, in the IHCs. At the district level, the VLS 400 A refrigerators and the MF 314 freezers will replace the outdated equipment. At the IHC level, according to the inventory data, the 400 GVR 50 DC and 117 GVR 100 DC. All electrical equipment will be equipped with a voltage regulator. Each refrigerator will be equipped with a Fridge Tag 2.</p> <p>Rationale: Replacing this equipment will make it possible to ensure continuity of immunisation services, help increase immunisation coverage and avoid maintenance-related expenses.</p> <p>Expected outcome</p> <ul style="list-style-type: none"> - 100% of outdated equipment will be replaced; - 80% of districts and IHCs will receive WHO-prequalified equipment <p><i>(See guidance as per prioritised need 1, above)</i></p>
Total CCE Budget:	US\$ 3,263,413
<i>Prioritised (ADDITIONAL) CCE need 3:</i>	<p>The need: Strengthen existing districts by providing refrigerators and freezers. The third and final priority for the supplemental phase is to strengthen the 45 districts, as a prelude for introducing new vaccines, by providing VLS 400 A refrigerators and MF 314 freezers. Each district will receive two refrigerators and a freezer. All electrical equipment will be equipped with a voltage regulator. Each refrigerator will be equipped with a Fridge Tag 2.</p> <p>Rationale: This strengthening will increase the districts' storage capacities as a prelude for introducing new vaccines.</p> <p>Expected outcome</p> <p>The 45 districts' capacities are increased</p> <p><i>(See guidance as per prioritised need 1, above)</i></p>

⁵ Budget not inclusive of operational cost to be financed by Ministry of Health and other partners

Total CCE Budget:	US\$ 330,750
<i>Prioritised (ADDITIONAL) CCE need 4:</i>	<i>The need; Justification; Expected outcome (See guidance as per prioritised need 1, above)</i>
Total CCE Budget:	<i>\$(XX)</i>
Grand Total CCE Budget: "enhanced support" (years 3, 4 and 5)	US\$ 5,739,094 The cost of replacement parts is US\$ 287,931, included in the total.

Summary budget for the optimisation platform

YEAR	Total amount	Government co-funding (20% HSS)	Gavi (80%)
2017	1,872 185	374,437	1,497,748
2018	1,856,922	371,384	1,485 538
2019	1,920 274	384,055	1,536 219
2020	1,909 410	381,882	1,527 528
2021	1,909 410	381,882	1,527,528
Total in USD	9,468 201	1,893,640	7,574 561

The total budget for the application, for the 5 years of the platform, is US\$ 9,468,201, of which US\$ 1,893,640 (20%) will be financed from RSS funds, and US\$ 7,574,561 (80%) by Gavi.

4.4.2 Activities planned around other supply chain fundamentals during the enhanced support phase

In this section, linkages must be drawn between requested CCE Optimisation Platform support, on-going Gavi investments (especially through the Health Systems Strengthening support) and other partner supply chain support.

Describe planned activities related to other supply chain “fundamentals” (see section 3 of the Application Instructions) during the enhanced support phase, including their sources of funding. Responses to this section should be linked to the EVM Improvement Plan.

The EVM improvement plan, like the updated inventory, showed weaknesses in the supply chain in terms of capacity, storage conditions, and distribution conditions for vaccines and supplies, and in terms of building the capacities of staff involved in programme management and temperature monitoring.

Supply chain managers

Provide description of all planned activities related to improving the availability and performance of supply chain managers, their sources of funding, and partner support.

In order to ensure effective and efficient management of the supply chain, we plan a series of trainings for managers, focusing on stock management, immunisation practices, and use of temperature monitoring tools. In addition, a training for supply drivers on temperature monitoring and a training for handlers on handling techniques and storage standards is planned.

Supportive supervisions are planned, to build capacity and correct any insufficiencies.

In essence, all of these activities can potentially be funded by UNICEF and WHO.

Data for supply chain management

Provide description of all planned activities related to data for management, their sources of funding, and partner support. In particular, please provide information explaining how improvements to the functionality of logistics management systems will improve the visibility of up-to-date and accurate vaccine stock records at each level of the vaccine supply chain.

For data reliability and quality, many tools have been designed to manage stocks, monitor temperature, and maintain equipment. These have been implemented at all levels of the system. These tools are either manual and/or computerised, depending on the level. In order to do this, periodic supervisions are completed.

Optimised, efficient design of distribution system

Provide description of all planned activities related to distribution system design optimisation, their sources of funding, and partner support.

The distribution system's effectiveness and performance; the central level prepared a distribution plan, and plans to purchase a large-capacity refrigerated truck (40 m³) to reduce the cost of transportation to the regions, and plans to purchase two new cold rooms to strengthen the warehouse, in order to avoid the frequent stock-outs at the regional warehouses.

Purchase two (2) refrigerated trucks for the Diffa and Tillabery regions, to ensure that vaccines are distributed to the districts.

Purchase supervision vehicles, ice packs and vaccine carriers to facilitate distribution of vaccines from the districts to the IHCs.

These will be purchased from Gavi/HSS funding for the new programming 2018-2022.

Continuous improvement process

Provide description of all planned activities related to continuous improvement processes, their sources of funding, and partner support.

To ensure continuous improvement, the country will continue to conduct evaluations on Effective Vaccine Management, and on implementation of the renewal, maintenance, continuous temperature monitoring and temperature mapping for all cold rooms.



5. BUDGET TEMPLATES

This section details the number of requested equipment items and equivalent budget. The IRC will estimate a maximum expenditure amount (and the baseline equipment) corresponding to the support request, for its approval and a future decision by Gavi.

However, in consultation with the Secretariat and national partners, the number of pieces of equipment may be changed when a detailed operational plan is prepared, after the platform proposal is made, and support may vary within the limits of the maximum amount granted.

Budgets must be made using the integrated budgeting template: please refer to the *Application instructions, Gavi's technical guide for the CCE optimisation platform, planned CCE prices, and the TCO analysis tool*.

Note: The country has chosen the second budget template

CCE optimisation platform budget template 01 (highly recommended)	
<p>i Important information: selection of budget template</p> <ul style="list-style-type: none"> ➤ Countries can fill one of two CCE optimisation platform Budget Templates: <ul style="list-style-type: none"> ○ <i>Either budget template number 01; or</i> ○ <i>budget template number 02</i> 	
<p>To be filled by countries that have selected generic equipment categories that best suit their CCE needs (e.g. 'ILR 90L' i.e. Not specific model or make).</p> <p><i>Planning price ranges are provided in this template.</i></p>	 Modèle de bugétisation 01.xlsx
CCE optimisation platform -Budget Template 02	
<p><i>To be filled by countries that have selected specific equipment that best suit their CCE needs (e.g. specific model and make).</i></p> <p><i>Countries will plan with indicative PQS prices and corresponding service bundle estimates (depending on equipment being on/off-grid and estimated costs of service bundle).</i></p> <p><i>Planning price ranges are provided in this template.</i></p>	 Modèle de bugétisation 02.xlsx

6. PERFORMANCE FRAMEWORK

Countries must include CCE Optimisation Platform indicators into the Performance Framework for the current and/or proposed Gavi HSS support, after Platform proposal approval.

According to their specific context, countries are required to consider the most appropriate data sources to report on programme implementation and progress against the targets set. This should be discussed with partners (which may provide technical assistance) and the Gavi Secretariat.

Programmatic reporting updates, as well as targets and indicator updates, will be made as part of the Gavi performance framework and annual Joint Appraisal process. Countries are expected to consider relevant smart indicators to be monitored and reported against, in terms of intermediate results or outcomes/impact.

Data sources

The following data sources are examples that countries may want to choose from when establishing performance framework indicators and targets:

- DHIS2
- DVD-MT
- HMIS
- WHO/UNICEF joint reporting form (JRF)
- Health facility assessments that include cold chain
- Vaccine stock ledgers
- Wastage reporting tools
- Cold chain equipment inventories
- On-site assessments of equipment functioning
- Routine monitoring with continuous temperature monitoring devices

Indicator monitoring and reporting requirements

As a minimum, countries need to monitor and report on:

- 3 MANDATORY intermediate results indicators; and
- 1 to 3 ADDITIONAL intermediate results indicator(s)

MANDATORY intermediate results indicators (must include baseline, data source, targets and frequency of reporting):

1. Number of equipped facilities (IHCs) replacing CCE with (any) platform-eligible ILR, SDD or long-term passive devices, and irrespective of their funding source;
 - Baseline value 801 (801 out of 946 IHCs)
 - Source of data Cold chain equipment inventories
 - Objectives: 100%
 - Reporting frequency: monthly
2. Number of facilities (IHCs) previously without equipment, newly equipped with platform-eligible equipment (i.e. ILRs, SDDs or long-term passive devices); and
 - Baseline value 0 (0 out of 522 IHCs)
 - Source of data Cold chain equipment inventories
 - Objectives: 100%
 - Reporting frequency: monthly
3. Percentage of departmental (district) warehouses equipped with a working cold chain
 - Baseline value 63% (45 out of 71 districts)
 - Source of data Cold chain equipment inventories
 - Objectives: 100%
 - Reporting frequency: monthly

Note: these estimates include projections made for the five years of the platform

ADDITIONAL intermediate results indicator(s): Countries are required to suggest 1 to 3 intermediate results indicators to track performance of rehabilitation, expansion, maintenance and/or other supply chain fundamentals (include baseline, data source, targets and frequency of reporting):

1. Proportion of districts that have at least 90% of equipment in working order:
 - Baseline value 27%
 - Source of data Cold chain equipment inventory and evaluations of health facilities that have a cold chain
 - Objectives: 90%
 - Reporting frequency: yearly
2. Proportion of districts with no stock-outs
 - Baseline value 100%
 - Source of data Vaccine stock ledgers
 - Objectives: 100%
 - Reporting frequency: monthly
3. Number of IHCs that have a continuous monitoring device in their CCE
 - Baseline value 760
 - Source of data Routine monitoring with continuous temperature monitoring devices
 - Objectives: 100%

Reporting frequency: monthly