



Joint appraisal report (JA) DRC 2018

Country	Democratic Republic of Congo
Full JA or Updated JA	Full Joint Appraisal
Date and location of Joint Appraisal meeting	26 to 28 November 2018, Beatrice Hotel in Kinshasa
Participants / affiliation ¹	National and provincial MoH executives, technical and financial partners, civil society, ministerial government departments (Ministry of Finance, Budget and Health) and various partners (WHO, UNICEF, BMGF, PATH, SANRU, Village Reach, Red Cross, MSF, USAID and Gavi).
Frequency of results report	Every quarter (every three months)
Fiscal period ²	1 January to 31 December 2018
Comprehensive Multi Year Plan (cMYP) duration	5 years (2015-2019)
Co-financing group	Initial self-financing

1. RENEWAL AND EXTENSION REQUESTS

Renewal requests were submitted on the country portal

Vaccine (NVS) renewal request) (by 15 May)	Yes
HSS Renewal Request	Yes
CCEOP renewal request	No

Observations on vaccine request

Population	104,234,103				
Birth cohort	4,169				
Vaccine	IPV	PCV13	Pentavalent	Yellow fever vaccine	
Population in the target age cohort	3,637,770	3,637,770	3,637,770	3,637,770	
Target population to be vaccinated (first dose)	3,637,770	3,637,770	3,637,770	3,637,770	
Target population to be vaccinated (last dose)	3,637,770	3,637,770	3,637,770	3,637,770	
Implied coverage rate	88.9%	89%	90.4%	89.2%	
Last available administrative coverage rate from 2017	88.9%	89%	90.4%	89.2%	
Last available WUENIC coverage rate from 2017	69%	79%	81%	76%	
Wastage rate	17%	7%	8%	18%	
Stock reported	1,088,712	2,810,223	2,840,119	1,058,613	
Buffer stock	626,800	890,500	1,858,200	680,500	

The Democratic Republic of Congo (DRC) is a sub-continent with a yearly demographic growth rate of 3% and an estimated 3,637,770 children requiring immunisation each year. Since the last census in the DRC dates to 1984, uncertainty about population numbers is a major challenge, in particular for estimating required doses of vaccines.

Health surveys were conducted and updated each year with the support of four civil society organizations

¹ If the list of participants is too long, it may be attached as an appendix.

²If the country reporting period deviates from the fiscal period, please provide a short explanation.

(CSOs)/SANRU and community coordination cells (CACs), of which 22,968/24,092 were operational, and community mobilisers (RECOs), 24,199 of whom were trained with HSS2 support from Gavi in the context of the dynamic community (or village) approach.

Quantification data were triangulated thanks to the CACs and RECOs trained in information technology during monthly monitoring sessions.

Indicative interest to introduce New Vaccines or request Health System Strengthening support from Gavi in the future³

Indicative interest to introduce new vaccines or request Health	Schedule	Expected application year	Expected introduction year
System Strengthening support	MCV2	2019	2020
from Gavi in the future	HSS3	2019	2020

2. RECENT CHANGES IN THE CONTEXT OF THE COUNTRY AND POTENTIAL RISKS FOR NEXT YEAR



The DRC is located in Central Africa, straddles the equator and has a surface area of **2,345,409 km²**. It shares **9,165 kilometres of border with nine neighbouring countries** and is bounded in the north by Central African Republic and South Sudan, on the west by Republic of Congo and the English enclave of Kabinda, on the east by Uganda, Burundi, Rwanda and Tanzania, and on the south by Zambia and Angola. Pursuant to the 2006 Constitution, the DRC comprises the city of Kinshasa and 25 provinces having legal personality pursuant to Article 3 of the Constitution of the 3rd Republic. The country has **96 cities, 145 territories, 471 sectors, 261 chiefdoms, 337 urban and rural towns and 5,397 groupings.**

Recent projections by the National Statistics Institute (INS) place the Congolese population in 2018 at **85,026,000**⁴ with a density of **36 people per km**². The population is concentrated on the plateaus, in the savannas and near rivers and lakes. With an estimated fertility rate of **6.6 children per woman (2014 EDS),** and

an annual population growth rate of **2.9% (2015 INS)**, the DRC constitutes a **major logistical challenge for fully immunising all 3.5 million children targeted by the EPI each year**. Several major changes to the national context should be highlighted in the present appraisal:

- 1. From the political point of view: The period covered by the appraisal was marked by political and institutional instability and insecurity, which do not support the provision of health services, including immunisation, in the areas most affected by violence. With presidential and legislative national and provincial elections as well as security challenges on the horizon, the Government is obliged to use all available means to respond to emergencies and other sovereign expenses, setting aside other sectors, thus the frequent difficulties in refining license fees with regards to co-financing.
- **2. From the economic point of view:** The stability of the current Government and current macroeconomic trends for improving and stabilising the exchange rate (US\$ 1 = 1,650 CFA francs in the DRC) have allowed the country to reimburse the US\$ 1.6 million in so-called "irregular" expenses in 2018 and enabled Gavi to make regular disbursements. They have also allowed the DRC to implement the 2018 Gavi budgeted yearly activity plan without impediment, funding by more than 60% the DRC EPI operational action plan. However, the country's GDP per capita is among the lowest in sub-Saharan Africa (US\$ 514 in 2014, US\$ 800 in 2015 and US\$ 499 in 2016) with a human development

³Providing this information does not constitute any obligation for either the country or Gavi, it merely serves for informational purposes.

⁴ INS, 2014 Annual Statistics Report

index ranking of 0.435/1 in 2015.

- 3. Sector governance and leadership: The consolidation of reforms at the national level (the installation of the Inspector General for Health) and at the intermediate level is continuing with the effective installation of provincial health inspectors with clear collaboration between structures at the national and intermediate levels and the 26 Provincial Health Departments (PHDs). The presence of GIZ fiduciary agents (FA) in the 14 PHDs considered to be at-risk financially (including 10 that are high priority in the context of Gavi support: Lower Uélé, Equateur, Lomami, Upper Lomami, Mongala, Tanganika, South Ubangi and Tshuapa) has substantially improved the level of understanding and application of the management procedures at the provincial level.
- 4. Public health: Efforts continued to keep the DRC free of circulating wild poliovirus, to increase immunisation coverage and improve data quality. These efforts are negated whenever there is a delay or halt in disbursements, such as during the period of 30 September to 25 October 2018, when a freeze was placed on Gavi funding due to the 2017 audit report not having been filed as of 30 June 2018, in accordance with the Partnership Framework Agreement signed between Gavi and the MoH. This situation caused an interruption of activities, resulting in targeted children in the provinces not being immunised. Throughout 2018, the DRC was faced with a resurgence of certain epidemics that did not support regular immunisation: (i) the Ebola virus disease (EVD) in the Equator region and in North Kivu and Ituri, (ii) the occurrence of 20 cases of cVDPV2 in 2018 in the provinces, including 2 in Tanganika, 2 in Upper Lomami, 4 in Upper Katanga, 1 in Ituri and 11 in Mongala, and (iiii) measles epidemics in 100 health zones (HZs) distributed throughout the 18 provinces of Maniema, South Kivu, Upper Katanga, Upper Lomami, Mongala, Tanganyika, Lualaba, Tshopo, Upper Uélé, North Kivu, Kasai Oriental, Sankuru, Tshuapa, Kinshasa, Ituri, Lomami, South Ubangi and Central Kongo). The country also faced a yellow fever epidemic in the provinces of Tshuapa (Yalifafu health district), Upper Uélé (Doruma health district) and Lower Uélé (Ango health district).

On 11 October 2018, the country officially launched implementation of the Emergency Plan to resume routine immunisation, known as the **Mashako Plan**, in nine provinces (Upper Katanga, Upper Lomami, Ituri, Kasaï, Kinshasa, Kwilu, Mongala, Tanganyika and Tshuapa) accounting for around half of all children in the country who have not been sufficiently immunised. This plan aims to increase immunisation coverage by 15 percentage points in 18 months through five activities: (i) ensuring the permanent availability of vaccines and supplies at the local level; (ii) increasing opportunities for immunisation of children; (iii) regular monitoring of the plan and adaptation of the approach to the results obtained; (iv) verification of activities in the health zones (HZs) and health districts; and (v) coordination of EPI actions with the provinces and other Ministry of Health (MoH) programmes.

In November 2018, the country proposed holding a pre-validation exercise for maternal and neonatal tetanus elimination with an elimination validation deadline of December 2019.

5. Security: Massive movements of the population in Kasai and Kwanto and internal refugees in Kivu, the Kasaïs and Tanganyika following insecurity and armed tribal and ethnic conflicts has had a major impact on the implementation of activities, resulting in a drop in immunisation coverage levels and a resurgence in these areas of the epidemics cited above.

In 2019, several potential major changes to the national context should be highlighted in the present appraisal. These relate to events that, if they occur, could have positive consequences for the sustainability of achievements and progress, or, conversely, negative outcomes that could adversely affect maintenance of current accomplishments:

1. Policy: Presidential and legislative elections were held on 30 December 2018, and the provisional results announced by the electoral commission resulted in the victory of the opposition candidate Félix Tshisekedi in the presidential election, while the legislative elections were carried by the parties supporting President Joseph Kabila. These results were contested by the opposition candidate Martin Fayulu as well as by the Bishops' Conference of the DRC. A ruling by the constitutional court on the appeal by Mr. Fayulu is expected on 18 January and the new president's inauguration is scheduled for 22 January. These elections should cause significant disruptions in the DRC's institutions, in particular the Presidency, Parliament, Government and Judiciary. These changes would reportedly dictate a new political and administrative order with consequences for the governance of the country in general and in particular, the health and

immunisation sector.

There is a risk that the announcement of the constitutional court's ruling may lead to violence and the development of insecurity zones that would make it impossible to carry out activities, but with the historically dynamic nature of the DRC, we will continue to organise immunisation sessions and campaigns while leveraging humanitarian technical and financial partners (TFPs) (DRC Red Cross, Doctors Without Borders, etc).

- 2. Economics: The economic environment is expected to see an improvement in resources (income) in 2019 due to a combination of a rise in raw material prices generated by the country and the international market, and the application of the new mining framework enacted during the year and the various structural measures (in particular the 28 measures that are intended to increase growth rates to double digits). In addition, if a positive outcome of the new political order prevails, the country will use its royalties for co-financing to prevent insufficient procurement of traditional vaccines that has caused vaccine stockouts. However, if there is a negative outcome, the current situation will become worse.
- 3. Governance and sector leadership: The consolidation of national reforms, the General Inspectorate of Health (IGS) and the provincial level will play a significant role in immunisation quality control and monitoring throughout the DRC. Support for the IGS is included in the budgets of future yellow fever and measles campaigns as well as in the Mashako Plan. Additionally, maintaining the presence of representatives of the GIZ fiduciary agency in the provinces and strengthening the management skills of financial experts from the MoH by GIZ and FMSC would contribute to minimising the financial risk of the Gavi programme supporting HSS and immunisation in the DRC, by encouraging performance-based management (PBM) and applying performance-based funding.
- 4. **Public health**: Efforts will continue in order to keep the DRC **free from circulation of wild poliovirus** and to halt the spread of poliovirus derived from vaccine strains, reduce the incidence of measles, increase immunisation coverage and improve data quality.
- 5. **On the security front**, efforts must be made to implement contingency plans with an immunisation plan for targeted children and pregnant women in HZs receiving internal refugees or those coming from bordering countries, and in the HZs experiencing insecurity.

The emergence of EVD in the third quarter of 2018 in North Kivu and the unstable security situation are factors that represent a risk to the implementation of immunisation activities. The current EVD epidemic in North Kivu is the largest epidemic recorded in the history of the DRC and one of the most complex ones to control, in particular given the high level of insecurity and the significant concentration of the population. Since the start of the epidemic, there have been 634 cumulative total cases, of which 586 have been confirmed and 48 were probable. In total, there were 386 deaths (338 confirmed and 48 probable) and 231 persons who recovered (situation as of 11 January 2019).

4. PERFORMANCE OF GAVI SUPPORT

4.1 Vaccine support performance

Progress attained with regards to agreed targets were summarised in the context of Gavi performance on the portal that will be attached to this report to avoid making the text too complicated. The reporting year period was marked by responses to the cVDPV2 epidemic in several provinces of the country, in accordance with the following results:

Table 9: Administrative results of polio immunisation campaign in 2018

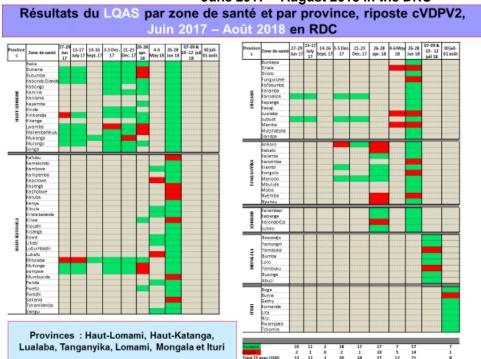
	Number	HZ	Туре	Expected		IM Results:		% rejected zones:		
Period	provinces	Covered	Vaccines	target	Immunised		% unimmunised children		after LQAS censuses	
Tenou				number	number	%	Households	% excl. households	HZs selected	% HZs rejected

26-28 April	4	34	VPOm2	1,598,925	1,518,155	94.90%	3.0%	5.0%	34	2640.0%
4-6 May	2	14	VPOm2	466,665	510,399	109.30%	6.0%	7.0%	12	41.6%
26-28 June	5	71	VPOm2	3,108,213	3,286,221	105.70%	4.0%	5.0%	71	15.4%
7-9 July &	4	13	VPOm2	448,842	435,384	97.50%	3.0%	4.0%	13	23.0%
30 July - 1 August	1	8	VPOm2	250,380	284,328	113.50%	1.9%	2.5%	8	12.5%
30 August – 1 Sept.	9	189	VPOm2	6,587,803	7,105,232	107.80%	3.2%	5.0%	157	37.5%
13-15 Sept.				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	7,839,789	119%	2.0%	3.0%	162	17.2%
27-29 Sept.	_				5,128,448	103.60%	2.0%	2.7%	91	16.4%
11-13 October	7 123	123 VPOm2	4,952,395	3,534,970**	71.30%	2.30%	2.80%	118	5%	

^{**} Partial data

Figure 7: LQAS results by health zone and by province, cVDPV2 response

June 2017 – August 2018 in the DRC



Since 2011, the DRC has experienced irregular measles epidemic flare-ups in all provinces, which is explained based on the context of each province's measles immunisation coverage. The largest epidemic was in 2011 with 134,041 cases and 1,652 deaths. Only 2,869 cases were investigated and 1,062 were IgM+. To address this situation, response campaigns in the HZs which had measles epidemics were conducted between 2011 and 2012.

However, an upward trend was seen in 2015 related to the cases recorded in Katanga province. These decreased in 2016 before rising towards the end of 2017. From the analysis of suspected measles cases (IDS database) by age group shown in Chart II, it can be seen that children under 5 years old are the most affected (73% of the national total). The percentage varies from 50% in Province Orientale to 76% in Katanga. The 27% of cases in children over 5 years old affected by the current measles epidemic shows an accumulation of a large susceptible population over the years.

Following the 2013 campaign, the number of measles cases reported by the routine surveillance system (aggregated) fell by over 50% from 89,108 in 2013 to 35,835 (see Table 2).

Table 10: Progression of suspected and confirmed measles cases – DRC, 2013 to 2018

Surveillance:	2013	2014	2015	2016	2017	2018*
Cases (aggregate)	87,366	33,711	50,889	22,162	45,165	31,901

Deaths	1,393	402	565	278	535	398
Mortality	1.6%	1.2%	1.1%	1.3%	1.2%	1.2%
Cases investigated	2,553	3,133	2,516	2,189	3,319	2,782
% aggregated cases which were investigated	2.9%	9.3%	4.9%	9.9%	7.4%	8.7%
IgM+ Measles cases	811	1,009	537	406	659	819
% Investigated cases which were IgM+ for measles	31.8%	32.2%	21.3%	18.6%	19.6%	29.4%
Number of health zones in epidemic	77	97	45	37	61	85

^{*}in force through 23 October 2018

Through December 2018, 100 HZs had confirmed measles epidemics (19.34% of the HZs) distributed in 18 out of 26 provinces. A total of 51,796 suspected cases were reported (Table 2) and 711 suspected measles deaths (1.4% mortality rate) were recorded in 2018. Some 3,172 (6.12%) cases were investigated. Of the cases investigated, 961 (30.3%) were IgM+ for measles. Thus the measles seropositivity rate in 2018 was even higher than that of the previous year, indicating that the number of susceptible people increased.

A general regression of the number of suspected measles cases is noted from 2013 to 2018 with a stable mortality. The percentage of cases investigated has improved since 2013, but there is room for further improvement. Between 2013 and 2018, the rate of seropositivity for measles went down for the first time but it has increased more recently.

Table 11: Surveillance quality indicators - DRC 2013-2018*

	2016	2017	2018*
Annualised rate of non-measles, febrile	1.85	2.4	2.3
rashes			
(goal: 2/100,000)			
HZs reporting at least one suspected case	60.9%	61%	60%
w/ sample			
(goal: 80%)			

^{*&#}x27; Through 23 October 2018

Comments: The measles surveillance quality indicators had a weaker performance because one of the indicators was never reached in 2016 to 2018 (year-to-date 4 September) at the national level and a large disparity is seen in the performance at the HZ and provincial levels.

Regarding rubella, a more than 50% reduction was observed vis-à-vis 2017 levels, similar to the level of 2016, because in 2017 the country reported 682 IgM positive rubella cases, of which 96.2% were children below 15 years of age, compared to 206 cases in 2016. These rubella cases were confirmed among the negative measles cases in provinces with a 16.5% proportion of IgM positive rubella and the norm of ≤10% was reached in 15 provinces. In 2018 (23 October), the country reported 231 confirmed IgM+ cases, of which 98% were in children below 15 years of age. The epidemiological surveillance system was also assessed during the 2018 external review, with the following primary conclusions:

Observations and evidence from the surveys specified as follows:

- 97% of health centres surveyed send AFP surveillance samples upon receipt or daily; 3% of centres do so weekly (including Upper Katanga, Equateur, Central Kongo and Tshopo health centres).
- Measles test samples were forwarded upon receipt or daily in 94% of the health centres surveyed; the same provinces that forward AFP samples weekly do likewise for measles test samples.
- The health centres surveyed conduct active surveillance on average three times per month for AFP, measles and/or NNT.
- 90% of health centres surveyed know that suspected cases of AFP must be notified immediately, and 84% know this for measles.
- 91% of the health centres surveyed reported zero cases.

- Community surveillance is not carried out systematically at the country level; fewer than 70% of health centres surveyed receive community surveillance data.

Strengths

- Most health workers involved in fighting vaccine-preventable diseases control the diseases targeted by the EPI and are familiar with actions to be taken in suspected cases.
- Active, passive and/or community surveillance is operational for diseases such as poliomyelitis, measles, NNT and yellow fever.
- Strengthening of community monitoring has benefited from the support of the Bill & Melinda Gates Foundation.
- There has been implementation of environmental monitoring, comprising sampling and regular testing of waste water in order to detect poliovirus, as a supplement to AFP surveillance.
- There is a network of consultants/STOP/FELTP and partners in the field that support vaccine-preventable disease surveillance activities.

Weaknesses

- Formal training in integrated disease monitoring and response is rare.
- The zero cases weekly notification report is not always sent.
- Active training activities are frequently interrupted due to the lack of supplies (eg fuel, transport resources, sheets).
- Only the executive teams from the HZs are authorised to take samples and research suspected cases.

The status of poliomyelitis in the DRC is still alarming. The country presents monitoring indicators. These should not conceal observed immunisation coverage coupled with poor data quality.

Adverse event following immunisation (AEFI) monitoring

Analysis of data collected in the field identified the following strengths and weaknesses:

Strengths

- The definition of AEFI cases is known at all levels: 118/134 at the health centre level: 38/38 at the HZ level and 13/13 at the outpost level.
- Definition of serious AEFI cases is known: 73/134 at the health centre level and 35/38 at the HZ level.
- Existence of an AEFI reporting protocol: 36/134 at the health centre level: 28/38 at the HZ level and 6/13 at the outpost level.
- Existence of an AEFI treatment protocol: 18/134 at the health centre level: 18/38 at the HZ level and 7/13 at the outpost level.
- Serious AEFI cases reported: 1/134 at the health centre level: 5/38 at the HZ level and 3/13 at the outpost level.
- Availability of reporting forms: 40/134 at the health centre level and 18/38 at the HZ level.
- AEFI trained personnel: 3/38 at the HZ level.
- Availability of training modules.
- EPI involvement in management at the national level.
- Cooperation between the EPI at the national level, partners and the CNPV to standardise their systems; schedule for harmonising these systems (end 2018).
- Research of serious AEFI cases reported at the national level within time.
- Existence of a vaccine pharmaco-surveillance plan with description of an AEFI notification circuit.

Weaknesses

- Variations in the existence of the AEFI treatment and notification protocol.
- Poor inventory of reporting sheets at HZs and health centres.
- Many outposts that have not been trained, while personnel at the outposts that have already been trained have undergone changes. Thus the need to conduct training again.
- Coexistence of two parallel systems.
- Non-systematic reporting of cases.
- Reporting of campaign-related cases is low in routine immunisation.
- Inability to attribute serious AEFI cases.

In conclusion, guidelines for the treatment and management of AEFIs exist at the national level, however practices are not systematic at the intermediate/peripheral levels. At the intermediate level, 9/44 outposts had training for BCZS teams; certain BCZS repeated the training in their HZs, although the exact number was not known. Considering the coexistence of two parallel AEFI management systems, as cited above, the national EPI prioritised the harmonisation of this system in 2018, however, it was not yet operational.

In 2019, the primary immunisation support activities by Gavi are:

- Rotavirus vaccine introduction in three blocks.
- Yellow fever preventive campaigns (block one, September 2019)
- The measles monitoring campaign in two blocks (block one in September 2019, including six provinces, will link the yellow fever vaccine and measles vaccine, and block 2 in November 2019).
- Effective implementation of the Mashako Plan and continuation of the outpost approach as well as the preparation of the 2019-2022 cMYP.

4.2 Performance of Gavi HSS support (if country is receiving Gavi HSS support)

Implementation of HSS2 activities started in 2015. Conducted with several stakeholders, such as UNICEF, WHO, UNOPS, CSOs/SANRU and MoH (DEP, EPI, DLM, FMSC and GIZ), HSS2 support enabled the results attained in 2016, 2017 and 2018 (from 1 January through 31 October 2018), reported in the context of performance on the Gavi portal. Strengthening of the health system via activities planned and conducted for six objectives show us that immunisation provision is not possible except in the health system with health coverage at a correct health facility, as follows: i) with an end-to-end supply chain providing vaccines and other supplies to the site, ii) respecting the cold chain, ii) leveraging all old and innovative strategies, iii) with competent personnel whose capacity has been strengthened, who are motivated and in a secure environment, and iv) with financial management respecting the procedures implemented by the country and the sponsors, including Gavi. Immunisation requires equipment, human resources and funding.

In addition to Gavi, there are other TFPs, such as the World Bank, with its health system development project in more than 150 HZs contributing extensively to the provision of immunisation services via its support to develop the HZs in the five pillars of the health system: human resources for health, health information, medication and other supplies, infrastructure and equipment, and governance. The same applies to funding support from the European Union, with its equipment project for the health system in the DRC, as well as the Bill & Melinda Gates Foundation with its projects focused on fighting disease (the lethal triad of malaria, tuberculosis and HIV/AIDS).

A major initiative within the context of Gavi HSS was the formulation of an ambitious plan to improve routine immunisation while combating identified bottlenecks and structural factors responsible for low immunisation rates observed by DRC surveys.

The emergency plan for relaunching systematic immunisation in the DRC, named the Mashako Plan in honour of the former Minister of Health and Professor Leonard Mashako Mamba, is intended to increase immunisation coverage during the next 18 months by 15 percentage points, ie 220,000 additional children who will receive life-saving vaccines. Following a participatory process that brought together all the partners around the MoH, the Mashako Plan was launched in October 2018 by the Minister of Health.

Despite some progress, the DRC has always reported one of the highest infant mortality rates in the world, and every year 1.8 million children do not have the complete series of vaccines. As a result, during the past several years, the country experienced major measles, poliomyelitis and yellow fever epidemics, all diseases that are vaccine-preventable.

The Mashako Plan will target nine at-risk provinces (Ituri, Kasaï, Upper Katanga, Mongala, Kwilu, Tanganyika, Kinshasa, Tshuapa and Upper Lomami). It will be organised around five key objectives for improving coverage:

- Immunisation services: to increase the number of immunisation sessions by 20%
- Vaccine availability: to reduce stockouts by 80% at local health centres.
- Monitoring and assessment: panel of key indicators of the plan updated monthly.
- Inspection and control: monthly inspection of immunisation activities in the HZs by inspectors.
- Coordination and funding: the operational steering committee of the plan to meet every week for the next 18 months.

In November and December 2018, Mashako Plan methodology dissemination workshops were held in all nine priority provinces in the presence of all the heads of Provincial Health Directorates and the Chief Zone Physicians of the provinces in question, a noteworthy performance with regards to the short term and in the context of the electoral campaign.

The priority activities of the Mashako Plan and the status of implementation of activities in late December 2018 that benefited from HSS funding support in that year are presented below.

Figure 8: 15 priority activities of the Mashako Plan

Subject areas	Increase in complete coverage by 15 percentage points between the 2020 survey and coverage measured by MICS
Coordination and funding	 Launch activities of the plan steering committee and subject-specific groups Organise operational provincial workshops to start up implementation Establish a performance contract for the Mashako Plan
Services	 Organise effective, basic microplanning based on satellite cartography Define the objectives of immunisation sessions by PHD and HZ Organise immunisation sessions at urban concentration points
Vaccine availability	 Establish an inventory monitoring system Adapt the outpost resupply process Implement the vaccine distribution approach to the last kilometre in a pilot province
Control	 Organise a validation workshop for norms, directives and inspection framework for immunisation activities Launch inspection activities among HZs Launch a pilot verification of immunisation activities by community
Monitoring and assessment	 Establish a control panel for monitoring the plan Conduct coverage surveys among the HZs Use applications to strengthen monitoring of immunisation activities

Figure 9: Implementation of the Mashako Plan related to the provision of services

- Preparation and validation of a simplified microplanning framework.
- Preparation of a tool with simplified planning guidelines for the number of immunisation sessions in the Health Area (HA) by HZ in function of the expected target population.
- Preparation of directives for reduction of missed opportunities for immunisation on any contact.

Table heading: Number of sessions held for each in relation to minimum number of sessions for an adequate service level (%, April 2018)

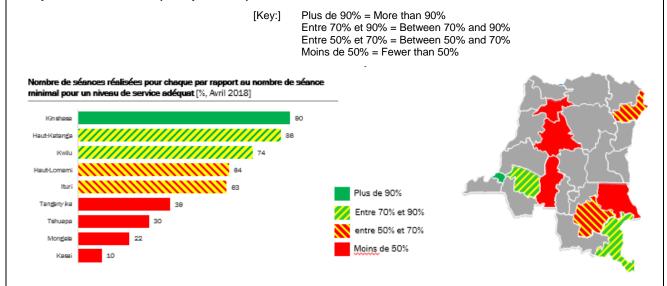
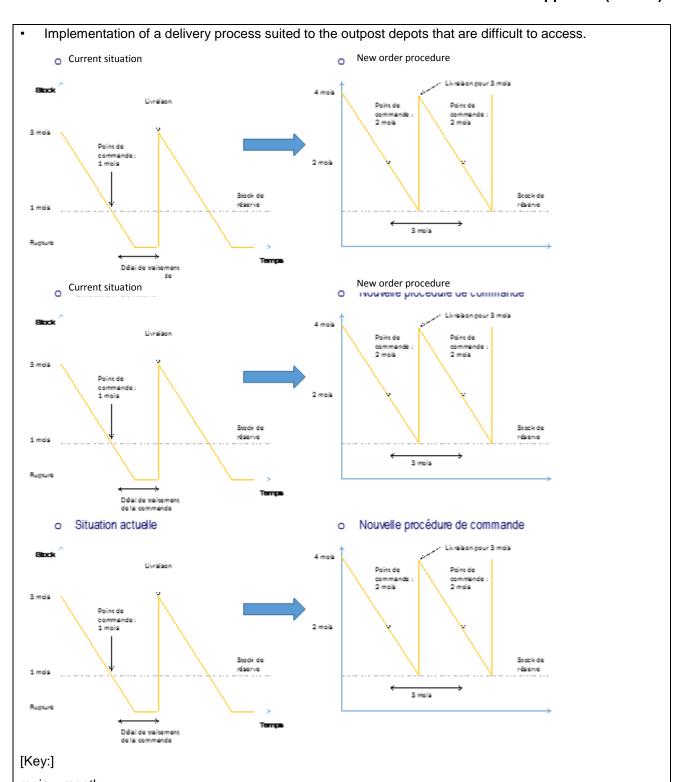


Figure 10: Implementation of the Mashako Plan related to the vaccine availability

- Preparation of a new outpost, health zone and health area delivery process allowing minimum stock levels to be respected and order points to be advanced.
- Development of a simplified vaccine order tool.



mois = month

livraison = delivery

Delai de = Order processing time

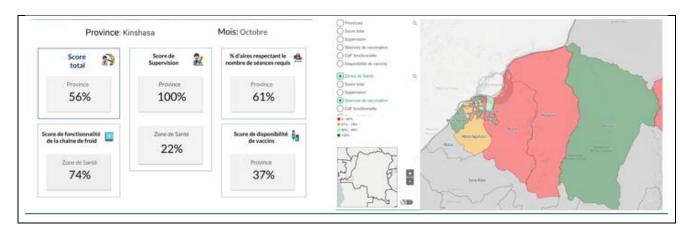
Stock de reserve = Reserve inventory

Temps = Time

Point de commande = Order point

Figure 11: Implementation of the Mashako Plan related to the monitoring and assessment of performance

- Development of a monitoring and assessment framework for the plan in order to assess the impact of activities carried out
- Development of an application to allow plan indicators to be followed at all levels in real time and distributions to supervisors in provinces and health zones
- Implementation of an online control panel allowing provincial performance to be displayed
- Development of simplified technical sheets for holding quality monitoring meetings



The following table provides a summary of the results achieved for each objective of the Gavi HSS grant.

Objective 1	
•	Strengthen the end-to-end supply chain from January 2015 to December 2019
	to ensure the availability of vaccines and other quality supplies through the last
proposals or PSR)	kilometre, ie the service end-points, the health centres.
Priority geographies/	miornene, ie nie service enu-points, nie neann cennes.
population groups or	Coverage and equity constraints by objective: deployment of the CD 2532
	equipment for HSS2, 1964 for CCEOP1 and 123 for CCEOP2 at the operational
	level will improve the availability of vaccines and reduce needs for transport and
addressed by the objective	human resources. The use of quality, solar powered refrigerators will reduce
Objective	operational costs and malfunctions. In relation to equity, there are 90/516 HZs
	with difficult geographical accessibility for which the supply of vaccines and other
	supplies pose a problem.
	Supplied pode a problem.
% of activities conducted	93% or 13/14 activities were carried out, and 1/14 processes are in course to be
	conducted.
Budget utilisation	Total budget (2015-2019): US\$ 66,708,043
_	Expenses (2015 to 31 October 2018): US\$ 56,230,112
	Performance rate: 84.3%
Major activities	o 1/3 ultra-modern storage warehouses for vaccines, medications and
implemented &	other dry EPI supplies and for other Directorates and MoH health
Review of implementation	programmes built and equipped with Gavi HSS2 funding. The Kinkole
progress	hub in Kinshasa that was completed and inaugurated on 10 October
including key successes &	2018 by the personal representative of the First Minister, the First Vice
outcomes / activities not	Minister of Transport of the DRC in the presence of the Assistant
implemented or delayed /	Executive Director of Gavi and other figures from the Government and
financial absorption	the TFPs. Of the construction work on the other two peripheral modern
	depots (Lubumbashi and Kisangani) and the expansion of the Kananga
	relay depot, as of the first quarter of 2018 only the expansion work on
	the Kananga depot was nearly completed.
	o 43/100 health centres were built and equipped in 2017, 58 had
	construction work in progress in 2018 and provisional acceptances were
	declared in late December 2018.
	14/14 trucks (7 refrigerated trucks and 7 standard trucks) have already
	arrived in the DRC and have been operational since they were officially
	delivered on 10 October 2018 during the inauguration of the Kinkole
	hub.
	Acceptance of Regional Distribution Centre (RDC) warehouses for dry
	supplies and health centres:
	- 10/10 RDCs with storage capacity of 1,800 m³ have been built and
	accepted. However, in 2017, the Matadi RDC suffered a fire of unknown
	origin after its acceptance. Upon completion of the Gavi and GF joint
	mission, additional resources were engaged to be mobilised for
	rehabilitation, work on which has not yet started. The Bill & Melinda
	Gates Foundation is late in providing its contribution.
	- 2,526 depots for dry supplies were built and accepted, except for the
	Bukavu depot, which has not been built, and funds were used to expand

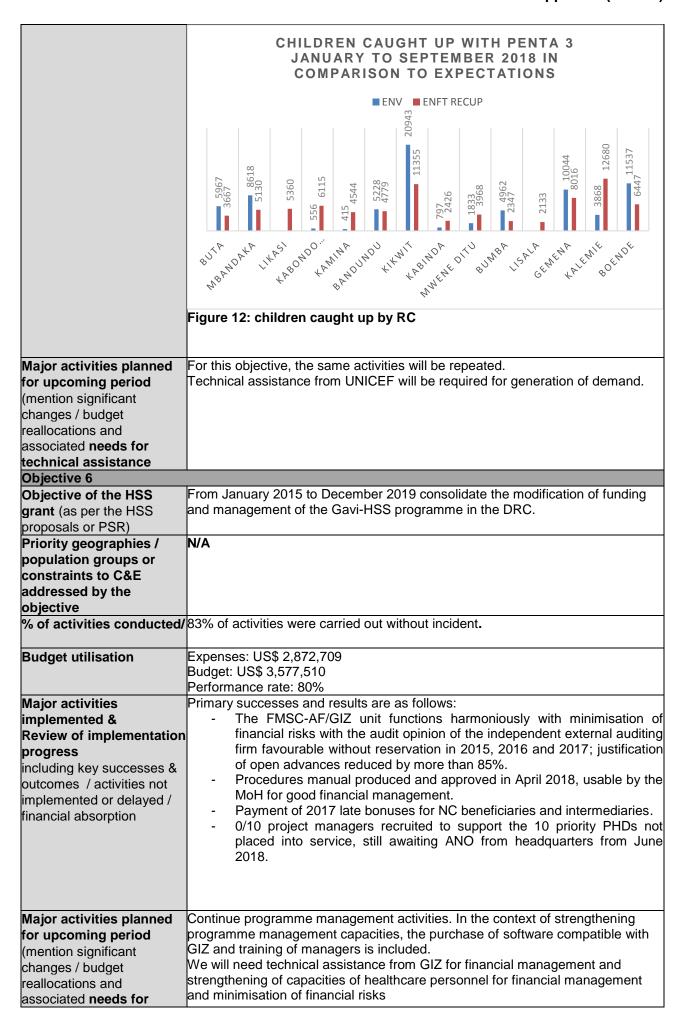
	the ARU depot. South Kivu province preferred to build an RDC at Bukavu in place of the depot with support from Swiss Cooperation. The project was completed and work could start in January 2019. - 21/23 cold rooms are currently solar powered; for the two others, work is progressing correctly and by February 2019, everything will be completed with regards to the forecasts for solar power for 23 cold rooms in environments that do not have electricity. Two vendors (Prodimpex and West Trading) were selected for this process. Prodimpex was not able to respect its schedule, which would explain this delay. - 35 engineers were selected and are waiting for training at INPP in order to implement the maintenance system for PHD equipment and hardware. The INPP contract negotiation process is complete and training will be conducted through the end of December 2018. - 12 managers were trained in Benin, including two in health logistics and 10 in vaccinology. This cohort joins those previously trained: 16 in vaccinology and 25 in health logistics, for a total of 27 supply chain agents and 26 in vaccinology. In 2018, although this training was still planned, the institute charged with this activity suspended its training until a new order was issued for activity assessment reasons. - It should be noted that a number of innovative steps were taken during the appraisal period in order to improve vaccine quality during storage and transportation. These include the mapping of the cold rooms in vaccine warehouses and a temperature study, installation of the remote temperature monitoring system with the option of sending alarms to managers, and publication at the national level of monthly reports of vaccine stock management analysis.
Major activities planned	1. Continue cold chain maintenance activities (more than 25 cold rooms plus
for upcoming period (mention significant	3,000 solar refrigerators, 132 solar freezers and 23 solar powered cold rooms). 2. Provide vaccine transport throughout the DRC.
	3. Continue construction of the Kisangani and Lubumbashi hubs as well as 35
	health centres.
	We will continue to require technical assistance for this objective from the WHO,
	UNICEF, Acasus and UNOPS.
Objective 2:	
	To improve the availability of quality health services in general and immunisation using the outpost approach in particular from January 2015 through December
grant (as per the HSS proposals or PSR)	using the outpost approach in particular from January 2015 through December 2019 in 144 HZs in order to attain all the targets for interventions provided to the
proposais of FOR)	healthcare facilities and as a result, to reduce the number of unimmunised
	children remaining, or even increased, in certain HZs.
Priority geographies/	The population of the 16 other provinces not included in this objective, ie, 61
population groups or	million residents during this period (from November 2017 through October
constraints to C&E	2018).
addressed by the objective	
% of activities conducted/	In 2018, eight major activities were planned and are under way.
Rudget utilisation	100% of the planned activities in 2017 and 2018. Expenses: US\$ 20,164,566
Budget utilisation	Expenses: US\$ 20,164,566 Budget: US\$ 22,571,229
2015 to 31 October 2018	Performance rate: 89%

⁵ Note: When specifying Technical Assistance (TA) needs, do not include elements of resource requirements. These will be discussed in the context of the Targeted Country Assistance (TCA) planning. The TCA planning will be informed by the needs indicated in the JA. TA needs should, however, describe – to the extent known to date – the type of TA required (staff, consultants, training, etc), the provider of TA (core/expanded partner) the quantity/duration required, modality (embedded, sub-national, coaching, etc), and any timeframes/deadlines. JA teams are reminded to both look back (TA which was not completed/successful in the past) and forward (planned vaccine introductions, campaigns, major upcoming HSS activities, etc.) when specifying TA priorities for the coming year. The TA menu of support is available as a reference guide.

Major activities implemented & Review of implementation	The activities scheduled as part of the branch approach helped clear bottlenecks in various components of the Reach Every Target strategy and improve immunisation coverage results in the PHDs:			
progress including key successes & outcomes / activities not implemented or delayed / financial absorption	 The 10 targeted PHDs (Lower Uélé, Equateur, Upper Lomami, Lomami, Mongala, South Ubangi, Tanganika, Kwilu, Upper Katanga and Tshuapa) are funded on a quarterly basis and are implementing the outpost approach. The total amount anticipated for 2018 is US\$ 6.7 million; 70%, (US\$ 4.6 million), has already been disbursed and the number of children immunised at the PHDs underwent a net increase. The population census was conducted in the 516 HZs as scheduled. This count was conducted using the village approach, with full participation by community mobilisers on a voluntary basis. It served to identify unimmunised children and those lost-to-follow-up in each village. Microplanning was organised in 8,830 health areas and 516 HZs, for a 100% execution in 2017. Monitoring for action activities (MAA) and stronger links with the community were organised in the HZs in synergy with CSOs, ie 85% in 2017 and 94 in 2018 (first six months). However, it is important to note that monitoring for implementation of this activity by polyvalent provincial trainers and HZ management teams is still poor. 1/1 EVM 2018 last March, with WHO support. Implementation of the immunisation strategy via missed immunisation opportunities through JSI in the city-province of Kinshasa. 			
Major activities planned for upcoming period (mention significant changes / budget reallocations and associated needs for technical assistance	1. Implement the activities of the Mashako Plan in the nine PHDs, six of which use the outpost approach (Upper Katanga, Upper Lomami, Kwilu, Mongala, Tanganika and Tshuapa) and three others without the outpost approach (Ituri, Kasai and Kinshasa) 2. Continue the implementation of the outpost approach in 10 PHDs. 3. Support the preparation of Operational Action Plans in 233 HZs, 144 of which use the outpost approach and 89 of the other three PHDs which use the nonoutpost approach Mashako Plan. There were budget reallocations for the Mashako Plan, UNOPS (health centre construction), procurement for the Fully Immunised Child service via the PBF cell of the World Bank, RDC Bukavu to supplement Swiss Cooperation support. We will continue to require technical assistance for this objective from WHO,			
Objective 3:	UNICEF, Acasus and JSI.			
Objective of the HSS grant (as per the HSS proposals or PSR)	From January 2015 through to December 2019 improve the availability and the quality of data to reduce existing discrepancies between administrative data and those from surveys to fewer than 5% and make health, logistics, programmatic and financial information available for better management of the health system.			
Priority geographies / population groups or constraints to C&E addressed by the objective % of activities conducted/	N/A 40% (12/30) of scheduled activities during the period were conducted			
Budget utilisation 2015 to 31 October 2018	Expenses: US\$ 4,427,718 Budget: US\$ 12,089,449 Performance rate: 37% Reallocation of US\$ 1,581,487 for implementation of the Mashako Plan			
Major activities implemented & Review of implementation progress including key successes & outcomes / activities not implemented or delayed / financial absorption	Primary successes and results: 1/1 2018-2020 strategic plan regarding data quality prepared in late December 2017, mobilisation of resources and implementation of the plan as per the schedule tentatively proposed in 2018. Routine activities (DQS, data quality audit and review in HZs) organised in 26 PHDs. The small-scale household coverage and satisfaction surveys conducted alongside the reviews via ESP/Kin will be coordinated through late December 2018. Computerisation of the processing, analysis and transmission of health			

for upcoming period (mention significant changes / budget	data: immunisation data were sent via DHIS2 software. For programme, budget, financial and logistics information, the EPI still uses the SMT and DVD-MT software while waiting for the completion of the additiona EPI modules on DHIS2 and implementation of software for remotely viewing real-time vaccine stocks at all levels by late 2019 with support from the TFPs (PATH, WHO and UNICEF). Organisation of the connectivity assessment of VSATs via PATH to redefine options to be taken with the contribution of all to improve the system of providing internet to all in order to digitise the health information system, and starting with health, to send health information in real time for relevant decision-making for universal quality healthcare and immunisation coverage. In 2019, the 26 major activities related to this objective will be conducted again. However, there will be a partial reallocation of funds for implementation of the Mashako Plan. We will need technical assistance from WHO, UNICEF, PATH, ACASUS and	
associated needs for	University of OLSO/HISP for DHIS2	
technical assistance		
Objective 4		
Objective of the HSS grant (as per the HSS proposals or PSR)	Strengthening of institutional capacities at all levels from January 2015 through the end of December 2019, including the coordination, monitoring and evaluation mechanism. N/A	
addressed by the		
objective		
% of activities conducted/	92% (32/35) of activities conducted at a different performance level	
	Expenses: US\$ 5,136,014 Budget: US\$ 19,580,007 Performance rate: 26%	
Major activities implemented & Review of implementation progress including key successes & outcomes / activities not implemented or delayed / financial absorption	 The primary successes and results of this objective are as follows: The process of preparing the 2018 Operational Action Plans in the PHDs and at the national level has not been supported following freezing of funds in 2017 but they will be in fourth quarter 2018. Support was given to the M&E process through the annual sector review held in 2016 and 2017 from 17-19 July 2018 and the priority semi-annual reviews organised in 10 PHDs. Support was also given to the organisation of the NSC-HS General Assembly held from 20-21 July in 2016 and 2017 and from 30 October 1 November in 2018. The production of score cards, research on the health system and sectoral macroeconomic studies, (however) given the multiple stresses related to epidemics and other urgent matters, the DEP/MoH experts were not organised. 1/1 mid-point HSS2 appraisal in progress via the selected French TeAM firm since early October 2018. 1/1 implementation of the NITAG committee, its operation continues and the first results are expected: opinion regarding rotavirus introduction and cervical cancer vaccine. Monitoring and assessment missions in the 10 PHDs each quarter by experts from the EPI, DEP, DLM, FMSC, Secretariat General and General Inspectorate for Health. Performance bonus payment to beneficiaries at the national level and intermediate levels in 10 PHD offices only in 2017, not in 2016 and in 2018, the HZs were not yet rewarded. 	
Major activities planned for upcoming period	The 35 routine activities will be conducted again.Pay the overdue bonus amounts to beneficiaries.	

(mention significant changes / budget	- Reallocate a portion of funds for the implementation of the Mashako Plan.				
reallocations and	For this objective, we will not need technical assistance				
associated needs for	Tot tille objective, we will not need to innear addictance				
technical assistance					
Objective 5					
Objective of the HSS	From January 2015 through December 2019 strengthen demand for				
grant (as per the HSS		ough reinvigoration	n of community	participation en	tities in the
proposals or PSR)	village dynamic The population of the 16 other provinces not included in this objective, ie, 61				
Priority geographies /					
population groups or	million residents (2018).	during this period ((Irom November	r 2017 through	October
constraints to C&E	2016).				
addressed by the objective					
% of activities conducted/	100% of activities	s were conducted			
70 Of activities contaacted/	10070 of dollvilles	were correduced			
Budget utilisation	Expenses: US\$ 1				
2015 to 31 October 2018	Budget: US\$ 20,				
	Performance rate				
Major activities		343,067 children			
implemented & Review of implementation		found by commun	,	,	,
-	and 60,660 for Y		Penias, 55,67	9 101 PCV 13, 3	01,702 101 1010,
			and Septe	ember 2018,	a total of
outcomes / activities not	· · · · · · · · · · · · · · · · · · ·	71,340 (82%) hom			
implemented or delayed /		dren, of which			
financial absorption		regnant women w			
		ECOs only corres			
	Kabondo Dianda, Kabinda, Mwene ditu, Lisala, Gemena, Buta et Kalemie). The				
	data collection tool (DVD-MT) made available nationally to the seven outposts				
	does not include the women recovery indicator.				
		1,134/1,200 mont			
		20,083/22,145 m			
		mber 2018, 1,242 9/25,434 (94%), m			
	Table 12: Impact of the effective involvement and ownership of community actors for 2016-2018				
	- 2	24,092 CACs insta	lled and 24,199	RECOs trained	t l
	 10,619,135 VAD performed and 78,967 children recovered 				
	(Penta3)			
	Year	No. of VAD	No. of children	No. of children	Immunication
	leai	INO. OF VAD	immunised for		coverage %
			DPT-Hep3	recovered	coverage 70
	2016	4,206,173		23,399	5
	2017	15,556,111	692,940	104,618	9
	2018	10,619,135	708,755	78,967	9
	(Jan.				
	Sept.)			abaum in 41 -	figure lealars
	ustribution of c	hildren caught u	p by outpost is	snown in the	rigure below.



technical assistance

The overall results of the project assessed by the TeAM firm in third quarter 2018 are presented below:

Overall, despite the issues and difficulties encountered by the project (such as the delay in implementation related to the freeze in funding; slowness in transferring funds to the operational levels; poorly suited procedures for availability; procedures for justification of unappropriated expenses, poor level of bonuses for CACs/CODESA), the activities were conducted when the funds were made available by participants from operational levels (HZs – CACs/CODESA).

Although it is difficult at this stage to perceive the effects on **the immunisation coverage dynamic** as specified in the chain of results (intermediate vaccine coverage results with the following levels: DPT-HepB-Hib 3 > 90%; MV1 > 85%; fully immunised children > 75%; dropout rate for DTP-HepB-Hib1/ DPT-HepB-Hib3 < 10%; DPT3 in the poorest quintile is reduced by 10 percentage points against coverage in the richest quintile; all the **144 HZs supported have DPT3 immunisation coverage of at least 80%),** the majority of the objectives were attained with a few exceptions. As was stated above, the activities related to buildings, cold chain and equipment (such as solar conversion of cold rooms) experienced implementation difficulties.

In relation to the **strengthening of the routine/outpost approach**, the complementarity and coordination of partners offering public health services was not carried out at the operational level; Operational Action Plans for HZs are integrated at the PHD level, with HSS2 support from Gavi. As a result, it was difficult to access information regarding the strategic procurement of services. Lastly, when the funds were transferred to them, the approach was fully implemented in each zone in all the HZs visited and supported by HSS2 support from Gavi. The various components of REZ were implemented in the HZs when the funds were available via the promotion of community dynamics, strengthening of CACs/CODESA capacities (eg communication) and various kinds of motivation, and the number of unimmunised children caught up by RECOs increased. However, problems remain with reaching certain communities living in geographically hard-to-access health areas. Community mobilisers have continually noted the urgency of travel resources (motorbikes or bicycles) to travel to these.

With regards to data quality, although not mentioned in this mid-point appraisal, there are significant issues in this domain. Even if the counting was carried out in most of the HZs visited (invalid number at the central level), the failure to cover target populations is a current issue.

In terms of the efficiency of the various procedures to support the outpost approach, we were not able to assess the differential between the HZs supported by Gavi, those supported by UNICEF and those without additional resources. Comparative analysis of immunisation coverage of the 43 HZs selected for this midpoint assessment and the other HZs did not reveal significant differences. Overall EPI indicator values do not show apparent changes since 2015, even with data quality subject to caution; nevertheless, starting from the same basis, changes would be perceptible if there were any. Similarly, the review of national averages also show identical values.

However, without the intention of calling into question the effectiveness of the Gavi-HSS2 support in the field, a more in-depth assessment with systematic comparison of several data sources would be useful to confirm current trends. The use of data from the 2018 Multiple Indicator Cluster Survey (MICS) 4 would also be useful for issuing judgements on values regarding results prepared by the HZs supported by Gavi-HSS2. Based on this aspect, the analysis of immunisation activities for each of the antigens during 2016-2018 in the 144 prioritised HZs and the eight HZs visited, show an inconsistency in the evolution of immunisation coverage numbers, with stability in certain HZs and perhaps a trend towards improvement in other HZs.

Related to the demand generation aspect/CSOs/SANRU:

In total, 17,464/17,555 CACs were established (a rate of 99.5%) in all of the 112 HZs in 2016. In 2017, of the 14 EPI outposts of the 10 PHDs supported by HSS2-Gavi, 22,019 of the 22,494 CACs installed (98%) were operational. Based on the unanimous opinion of all participants at operational levels, and in particular community-based and CSOs, thanks to the promotion of the community dynamic, several community-based initiatives were carried out in 2017 and 2018. In addition to their participation in the preparation, implementation and assessment of communication plans and strengthening their capacities (knowledge, attitudes and practices or KAP) for approaches to stimulate demand for immunisation services, community mobilisers were particularly involved in catching up unimmunised children.

Home visits enabled children and pregnant women to be caught up, well beyond the respective target numbers (15,556,111/114,032,720 visits carried out with the recovery of 633,670/187,052 children and 103,472/211,787 pregnant women). Operational level participants (PHDs – HZs) visited confirmed without reservations the **beneficial impacts of Gavi-HSS2 funding support on the demand for health and immunisation services** despite the modest level of the bonuses received (**US\$ 7/CAC**, knowing that the number of RECOs varies from 10 to 30 on average depending on the size of the community). Thanks to a "token" system that allows a certain accountability of RECO vis-à-vis the parent and also the Registered Nurse, these structures have had an uncontested role in catching up unimmunised children and pregnant women.

In relation to integrated formative supervisions, several public health domains have benefited from funding support. Based on the opinion of all participants, Gavi-HSS2 generated positive results in other sectors such as the promotion of essential family practices like breastfeeding, water, sanitation and hygiene, reporting births to the civil Government, reproductive health, HIV/AIDS prevention, integrated management of child illness, use of insecticide-treated mosquito nets, epidemiological surveillance, etc. At this stage, we recommend refocusing the Gavi HSS3 project on immunisation activities and priorities. In order to do this, greater involvement of the EPI management is needed to establish an equitable balance between activities directly related to immunisation on the one hand, and on the other, those that frame or accompany immunisation, prioritising "structural" interventions that leverage the improvement of the healthcare system (eg with a view towards harmonisation, strengthening of ties, procedures, tools, procedures for DV-DMT integration and SIGL in the DHIS2). Furthermore, ongoing and more regular communication with the Gavi Secretariat is indispensable at the time of request preparation and during project performance.

4.3 Performance of Gavi CCEOP support (if country is receiving Gavi CCEOP support)

- The country submitted two CCEOP proposals that are being implemented and that to date, have allowed the country to add 2,087 solar refrigerators for CCEOP1 to its cold chain. In 2019, 1,303 refrigerators will be added under CCEOP2 for facilities that provide immunisation in the 26 provinces. This will allow cold chain coverage, which was 36% before HSS2, to increase significantly to 51.7%. It has risen to more than 74% in HAs implementing CCEOP1, facilities for which were 99% completed as of 22 October 2018. Furthermore, the country received technical assistance from JSI in the context of preparations for introduction of the rotavirus vaccine into the routine schedule. Analysis of the storage capacity of the central offices was conducted and it showed that there are nearly 100 HZ central offices that have insufficient storage capacity for the rotavirus introduction. CCEOP2 will fufil the needs of nearly 50 central offices.
- The Effective Vaccine Management (EVM) improvement plan provides for an increase of cold chain capacity at health facilities, as well as improvements in both transportation and human resources. The number of healthcare structures with a refrigerator meeting EPI standards (solar refrigerators without batteries) is sharply increasing. Via HSS2 in 2016, the country had installed 2,522 solar refrigerators without batteries, 132 freezers and 57 temperature monitoring systems in the 45 cold rooms of the 26 PHDs.
- Implementation of the CCEOP project allowed the country to install 2,087 solar refrigerators in the
 context of CCEOP1 in 2018 while 1,303 solar refrigerators will be installed through CCEOP2 in
 immunisation facilities in the 26 provinces. This has enabled cold chain equipment coverage to
 increase from 30% to 51.7% with the implementation of Gavi/HSS2, and it is set to rise further to 74%
 after installation of CCEOP1 in the HAs.

Strengthening of the cold chain Evolution of cold chain coverage in the DRC

Cold chain coverage in 2015: Cold Chain coverage in 2016: Cold chain coverage in 2018: Before Gavi-HSS2 With Gavi-HSS2 With CCEOP1
Average: 30% Average: 51.7% Average: 74%

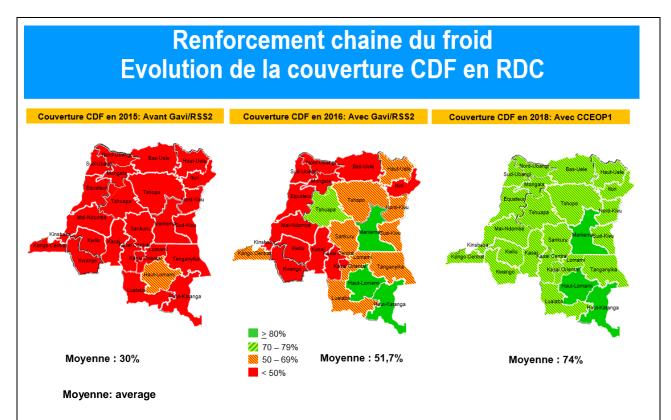


Figure 2: Strengthening of the cold chain from 2015 to 2018

- During implementation of the quality response to the cVDPV epidemic in the DRC, 46 solar refrigerators acquired with government funding via the project to strengthen health structures (PESS) were installed in the central offices and the HAs affected.
- The country received technical assistance from JSI for preparations for the introduction of the rotavirus vaccine. Analysis of storage capacities of the central offices was carried out and it showed that nearly 100 central offices have insufficient storage capacity with regards to introduction of the new vaccine into the country's immunisation calendar. CCEOP2 will fulfil needs for the nearly 50 remaining central offices.

4.4. Financial management performance

- Financial management of Gavi-HSS2 grants is carried out according to a joint management mechanism put into place by the Government and Gavi pursuant to the Partnership Framework Agreement signed in October 2014. This mechanism involves a government entity (MoH), and the Financial Support and Management Cell jointly manages the funds with a Fiduciary Agent (GIZ recruited by the donor). The MoH remains responsible for all fund management, while FA GIZ acts as the a priori controller for all administrative and financial procedures before authorising any payment. Further, the FA works with the MoH to keep its accounting compatible with international norms and standards. Because this mechanism works seamlessly with the FA GIZ, the financial management indicators for the Gavi grants have improved, with a significant reduction in open advances (2015 to 2018) of more than 80%. However the audit of grants carried out late for 2017 as well as the delay in intermediate financial reporting are concerns. The overall and detailed financial performance is shown below:
- Absorption of funds: From 2015 through 31 October 2018, performance values in the implementation of programmatic activities as described in section 4.2 clearly improved, save for the freeze in Gavi funding from the MoH in 2017 and 2018 due, respectively, to non-reimbursement of "irregular" expenses and the failure to submit the audit reports by 30 June 2018 as agreed upon. In fact, there were several cash management issues with liquidity, which slowed or even stopped the implementation of most activities.
- The absorption rates for 2015 funds as of 30 November 2018 of the various MoH/DEP/DLM/PEV/DPS/ZS stakeholder grants as validated by the last audit for fiscal year 2017, are below (Table 13).

Table 13: Absorption of aggregated funds (MoH + partners combined)

Stakeholders	Estimate	Disbursed
UNICEF	49,200,540	46,673,849
UNOPS	14,071,229	13,333,061
WHO	4,428,475	4,124,713
CSO/Sanru	20,507,258	14,216,522
МоН	46,633,650	26,753,432
GIZ	10,150,000	10,150,000
	144,991,152	115,251,577

Table 14: Absorption of 2015 funds as of 30 November 2018 by MoH (in US\$)

Gavi HSS2/MoH	2015	2016	2017	as of 30 November 2018	Cumulative
Amt. budgeted or					
approved per year in					
US\$ by Gavi	0	23,274,047	20,396,344	19,458,809	63,129,200
Amount spent US\$	0	6,551,587	7,982,525	12,219,319.25	26,753,432
Execution rate	0	28%	39%	62.8%	42.3%
Balance	0	16,722,460	12,413,819	7,239,489.72	36,375,768

Comments: In 2015, the MoH portion had not received Gavi funds until 30 December 2015, thus the HSS2 project was not implemented in 2015, but we still had HSS1 funds as of 31 March 2016. HSS2/MoH did not start until April 2016.

In 2017, based on the irregular expenses of US\$ 1.6 million declared for the Gavi department audit (combined 2012-2015 fiscal year audit), there was a freeze of Gavi funding during the entire first six months of 2017, which was lifted when the Government started to make reimbursements. However, in 2018, there was a second funding freeze at the end of Q2 and the start of Q3, following the delay in submitting the 2017 fiscal year audit report for HSS2. The freeze was lifted on 25 October 2018. All these bottlenecks caused the absorption rate to decrease each budget year. Following this, there was a series of reallocations of the budget lines that were insufficiently used for other needs, such as filling the construction gap for the Kinkole hub in Kinshasa, procurement of health centre and hub equipment, vaccine transport, performance procurement of a fully immunised child via the World Bank PBF cell, health centre construction by UNOPS, etc, all with the approval of the Gavi Secretariat. Thus the balance stated is not accurate.

- A very important result achieved in 2018 was the full repayment by the DRC of the non-eligible expenses identified by Gavi following submission of the May 2017 audit report. Thus, US\$ 1.6 million (100%) of the "irregular" expenses discovered in the 2012-2015 Gavi department audit were fully reimbursed in May 2018 by the Government upon completion of the new plan and configured in eight monthly instalment payments, which allowed conditional partial disbursements respecting the milestones of the plan negotiated by Gavi and the Government.
- The rate of absorption of funds from 2015 to 31 October 2018 from various stakeholders such as UNICEF, WHO, UNOPS, CSO/Sanru are shown in Table 15 below.

Table 15: Rate of absorption of 2015 funds from TFPs as of 31 October 2018 (in US\$)

Table 13. Nate of absorption of 2013 funds from 11 Fs as of 31 October 2010 (iii O3\$)					
Description	UNICEF	WHO	UNOPS	CSO/Sanru	
Disbursement					
received	49,200,540	4,428,475	14,071,229	15,742,141	
Funds spent	46,673,849	4,124,713	13,333,061	14,216,522	
Disbursement					
rate	95%	91%	94.75%	90%	

Commitments	N/A	N/A	N/A	N/A
Cash balance	2,526,691	303,762	738,168	1,525,618

Comment: based on these figures, and contrary to the case with the MoH, it was noted that all the implementation TFPs have performance levels beyond 90%, particularly considering that the funds were not frozen and their implementation started in July 2015.

- Conformity with financial reports and audit-related requirements: Since the FMSC reform and the entry of the FA GIZ into operation in 2015, all financial reports now follow the template proposed by Gavi. The 2015, 2016 and 2017 external audits had a positive opinion and no reservations for the HSS1 and HSS2 grants. External audits of grants are conducted in compliance with industry standards. The audit firm is selected internationally with donor approval. The auditors assigned to this work have access to all programme and financial information and perform their work without undue influence.
- Primary issues arising from the audits, starting with the audit conducted by Gavi in 2015, including the in-depth review of 2013, 2014 and the first six-months of 2015 expenses, revealed several irregular, ineligible and insufficiently supported expenses, in addition to the repayment of the exchange loss of US\$ 766,099 related to the transfer from BIAC to FBN on the GVT account for Gavi DRC programmes agreed upon to be paid in November 2017. All these expenses assessed at US\$ 2,433,002 were repaid by the Government except for the US\$ 766,099 that will be repaid by the end of November 2018.
- Another issue raised by the 2017 external audits is the fact of using a single account for all Gavi subsidies in the DRC. However, this situation will be corrected for 2018 because sub-accounts were opened.
- Significant progress was recorded regarding the audits related to advances made from 2015 to date
 that were not supported, updated as of 31 October to total US\$ 650,000, thanks to the involvement of
 all the stakeholders (Minister's office, general inspectorate, General Secretariat, FMSC, GIZ, PHI and
 PHD, because we had more than US\$ 3.5 million in open advances).
- The weaknesses of the internal audit mechanisms were at the root of these problems. Strengthening the internal audit with the FMSC reform (presence of the internal audit and scheduling) and the entry of the FA GIZ, which ensures the advance audit of all expenses, have reduced all these risks. The consolidation of the accomplishments from this mechanism and strengthening the capacities of FMSC constitute a challenge to be addressed given the prospective departure of FA GIZ in December 2019. The internal audit reports and the implementation of the recommendations from 2017 have substantially increased the proper administrative and financial management of the FMSC.
- Liquidity issues: the limitation of cash flow by Gavi and the failure to make the six-month disbursements recorded in 2017 and 2018 posed many liquidity problems in the context of ineligible expenses awaiting reimbursement.

Furthermore, the current update to the procedures manual and the responsibility of FMSC for accounting are two elements that acknowledge proper health grant management in spite of the delays recorded in the compilation of financial information in Tompro by GIZ for fiscal years 2015, 2016 and 2017. The audits of CSOs for the 2015, 2016 and 2017 financial years did not mention any reservations.

4.5 Transition planning (if applicable, eg country is in accelerated transition phase)

0

4.6. Technical assistance

In 2016, 2017 and 2018, the DRC enjoyed technical assistance in the implementation of grant management, in particular with WHO, UNICEF, CSO/SANRU, GIZ, PATH, UNOPS, Acasus and JSI.

For **UNICEF**, this involved technical assistance for strengthening the vaccine and other healthcare products supply chain (logistics, cold chain and development of an integrated logistics systems); in the context of coverage and equity with technical support at the national level and at the provincial level; as

well as in communication for development (C4D). This enabled a contribution to the primary achievements specified below:

- Construction of the Kinshasa hub and acquisition of trucks and a pickup.
- Installation of 2,532 solar refrigerators for Gavi HSS2.
- Submission of and approval for CCEOP1 and 2, with CCEOP1 scheduled to begin with the first refrigerators for arrival and installation before the end of May 2018 for the rotavirus vaccine introduction.
- Temperature mapping in cold rooms.
- Installation and monitoring of the functionality of remote temperature monitoring system for cold rooms.
- 42% execution of the EVM improvement plan.
- Updating of the microplanning on the basis of 2016 as per the analysis of equity at all levels (HAs
 with the community, consolidated at the HZs and branches) in the PHDs supported for routine
 immunisation strengthening.
- Availability of a list of process indicators for implementation of the branch approach (proportion of
 outreach, mobile and fixed strategies executed over those planned, number of monthly monitoring
 meetings executed, number of women and children recovered) by level (HA, HZ and branch/PHD)
 completed monthly and shared with the national level.
- Preparation of a guide and support for microplanning of Integrated Targeted Advanced Strategies (SACI) in the 11 HZs that are a priority for tetanus; this allowed identification of poorly covered locations in the HZ health areas and planning of catch-up activities for children aged up to 23 months and women of childbearing age.
- Coordination and monitoring of measles and polio supplementary immunisation activity preparations and implementation of the branch approach at both the central and intermediate levels.
- Strengthening of the community dynamic in 13 PHDs: supply for the establishment of 9,827 community coordination cells, 2,665 of which have a community action plan.
- Technical support and M&E for CSOs for implementation of the community dynamic in 10 PHDs that routinely allowed for the adjustment of field activities, in particular building the skills of community actors and reporting. Detailed report available.
- Three Gavi-funded studies analysing the tax base, mobilisation of additional domestic financial resources, and the flow of funds from the central level to the districts via the World Bank.

WHO technical assistance supported the following areas:

- Coordination of national activities and regular monitoring activity implementation.
- Preparation of operational plans and new vaccine introduction plans, including rotavirus.
- Monitoring of operational activities by the 11 national consultants in support of the 11 WHO suboffices throughout the country;
- Surveillance of vaccine preventable diseases, including measles, AFP, yellow fever and tetanus.
- Weekly analysis of AFP, measles, yellow fever and tetanus data.
- Publication of weekly bulletins concerning polio and measles.
- Support for the preparation and publication of the quarterly information bulletin and EPI feedback
- Quarterly risk analyses for polio
- Process for establishing independent technical committees for the strategic level, including NITAG.
- Implementation of the process for solar energy conversion of 23 EPI branches.
- Coordination of mass immunisation activities, including against measles and polio at the national and provincial levels.
- External and independent evaluations like the post-measles campaign evaluation, independent monitoring and post-polio campaign LQAS.
- Organisation of two formative reviews in the EPI outposts of Mwene Ditu, Kabinda, etc. This
 enabled updating and raising the level of knowledge of EPI managers at the provincial level
- Implementation of the innovative strategy for reducing missed immunisation opportunities
- Improvement of data quality and use of quality data: decentralisation of databases in six provinces and training of personnel for quality monitoring and analysis; Central Kasaï, Tshopo and Upper Katanga, Kwango, Central Kongo and Eastern Kasaï.
- Training of MoH workers in 25 HZs in South Kivu on immunisation coverage improvement strategies with implementation of the REZ approach.

For PATH, technical assistance specified advocacy in support of immunisation, targeting political-

administrative authorities as well as the health survey with satellite cartography with population estimates.

For **Acasus**, technical assistance covers the management of vaccines and supplies as well as management processes to improve immunisation coverage in the DRC with **innovative strategies**. Support from Acasus was particularly important to identify bottlenecks and to formulate the Mashako Plan.

For **JSI**, technical assistance is through support for development of a poor, urban immunisation strategy in the two pilot HZs of the city of Kinshasa (Limete and Kimbanseke) with specific high-impact activities for increasing immunisation coverage: integration of immunisation into private/faith-based healthcare facilities that constitute more than 90% of health facilities in Kinshasa; also, the organisation of immunisation sessions in concentrated urban activity areas is considered in the Mashako Plan budget.

5. UPDATE OF FINDINGS FROM PREVIOUS JOINT APPRAISAL

Provide the status of hierarchical strategic actions identified in the prior joint appraisal,⁶ and any other significant recommendation by the independent review committee or the high-level audit review panel (as applicable).

⁶Refer to the section "Prioritisation of Country Requirements" in last year's Joint Appraisal report



		Current status as of 31 October 2018
Key finding 1	Fewer than 15% of HZs in each of the 26 provinces have Penta3 immunisation coverage below 80%.	Result not attained. Immunisation coverage in all antigens decreased to 41% as of 31 August 2018, compared to 45.6% for the same period of 2017.
Agreed country actions	 Strengthening mechanisms for technical monitoring and support in all PHDs using branch approaches (supervision of the PHDs by the national EPI, monitoring of Operational Action Plan implementation by the DSP, regularly holding quarterly reviews with support from the DSP and EPI, performance monitoring in the scorecard platform) and reconfiguration and incorporation of the optimisation of the logistics system in the supply chain in the provinces 	Action 60% complete
	hubs and the Kananga transit warehouse.	Kinkole hub inaugurated on 10 October 2017, and other construction was suspended by the MoH to identify supplemental work and changes to be made to the site.
	 Regularly disburse funds intended for the implementation of activities in all HSS2-targeted PHDs. 	Action 100% complete
	 Continued implementation of the outpost approach or strengthen the routine EPI or ACZ RED approach in the 144 HZs and extension to the other HZs not yet supported outside of RPR support via UNICEF. 	Action 100% complete
	Immunisation of all target children at each contact (hospital, school and churches) in urban environments.	Action completed in the three HZs of Kinshasa with JSI support

	 Implement the strategy for reducing missed opportunities for immunisation. 	Action completed in the three HZs of Kinshasa with JSI support
Key finding 2	Discrepancies between the administrative data reported by health facilities and the data from WHO-UNICEF estimates and small-scale provincial surveys are reduced to below 5% for all antigens.	
Agreed country actions	 Improve participants' technical skills in the recording, compilation, quality assurance, analysis and use of data for decision-making at all levels: 	Not completed
	 Decentralise the databases, organise staff training in the field for recording, compilation, analysis, transmission and use of data. Organise training of previously untrained field actors in DQS including the importance of the exercise. Organise training of EPI branch managers in data management. Organise training in the use of DVD-MT targeting the 144 priority HZs, 13 outposts and 10 PHDs; train participants at the national level, PHD, outpost, HZ, in the EPI module of DHIS2 including specific additional applications (dashboard, data quality review, data transfer). 	but may be through 31 December 2018.
	Conduct supportive supervision visits targeting field actors on data management during immunisation sessions in the priority HZs (Identification of priority HZs for data quality, assurance of financing, capacity of HZ management teams and implementation and tracking of corrective actions)	
	 Strengthening capacity of human resources and financial, material structures that are adequate and data management tools to ensure effective data management for the EPI. 	

	Equip 144 HZs, 13 outposts and 10 PHDs with computer equipment and cover the corresponding maintenance; Equip health facilities with sufficient quantities of management tools; conduct advocacy for posting of data managers at the outpost level; advocate for security and on-time disbursement of the funding necessary for PAQD implementation; advocate for making the request processing process more flexible; conduct an analysis of the minimum staff required for SSP, including balancing between the current staff and standards; and implement the mechanism for incentivising personnel at various levels.
•	Improve control of the target population necessary for Action not completed quality planning and monitoring to reach out to children traditionally missed by immunisation services in collaboration with the INS, with the use of new technology
	Conduct a high-quality population count in all HAs with trained Not completed and sufficiently supervised teams and use the results for planning and monitoring. This will be done with the support of INS experts, including the use of new technology.
	Organise a workshop on the incorporation of vaccine In process to be completed management data and other required data in the DHIS2 tool, making immunisation data collection and entry tools uniform
	Incorporate the data missing from the EPI into the DHIS2 and the NHIS data collection template and remove the unnecessary aggregation level in the routine management system for the immunisation programme in order to lighten the workload in accordance with international guidelines. Case of counting an immunised child by gender
	Improve governance in data management and establish In process to be completed accountability mechanisms for the actors
fo	rganise a workshop to prepare directives, norms and standards In process to be completed r data management (recording, compilation, analysis, ansmission and use) and disseminate them; define the roles and

Key finding 4	 Organisation of the population count in each HA once every two years according to the community dynamic approach in combination with satellite mapping with support and expertise from PATH, ULCA and ESP. Effective vaccine management is assured throughout the country in order to stop stockouts and reduce the 	The result of auto-EVM shows a
	 Study of the population structure based on data from the count (pregnant women and live birth target, surviving newborn target, etc). 	
Agreed country actions	 Organisation of the quality and comprehensive healthcare count of the population with support from demographic experts in all the country's HAs. 	
Key finding 3	The denominator for the immunisation targets is known throughout the country, in order to have a target that reflects reality and can be used in programme planning and performance monitoring.	
	 Organise a workshop to review the information system and data quality and develop the 2018-2020 strategic plan and the 2018 annual data quality improvement plan. lead the desk review of the 2018 data and prepare the 2019 annual data quality improvement plan. 	
	responsibilities of participants in data management, implement accountability mechanisms for field participants at various levels. • Strengthen the data quality review and strategic planning to ensure the identification of bottlenecks and appropriate corrective measures.	In process to be completed

	_			
Agreed country actions	•	Computerise vaccine stock management using web software (in SMT format), including functionality for impending stockout alerts and automatic online orders between different levels.	-	Action in progress
		Conduct the 2018 EVM (evaluations and improvement plan development).	-	Action carried out in March 2018
	•	Institute an instantaneous temperature reporting system for vaccine warehouses (central, coordinating office, branch warehouses), daily for the HZs and weekly for the health centres.	-	Action introduced and in progress at outposts and the relay depot
	•	Train personnel from the health centres and HAs in immunisation logistics once every two years.	-	Action not completed
	•	Train workers involved in EPI management in 12 PHDs supported by Gavi and UNICEF in STEP training.		Action not completed
	•	Optimise the supply chain in two HZs (one in each of the zones covered by UNICEF and Gavi).	-	Action not completed
	•	Extend the Village Reach project to another HZ in the Equateur province with an emphasis on the use of drones.	-	In progress for 2019 Operational Kinshasa hub
	•	Bring the various hubs into operation starting with the one in Kinshasa.	-	Action carried out urgently in the HZs, 2,087
	•	Equip all health facilities with an SSD solar refrigerator as part of the CCEOP.		refrigerators were installed through CCEOP1
	•	Finalise the solar conversion of 23 cold rooms operating with	-	Not completed
		fossil fuels.	-	Action ongoing in the HZs
•	•	Conduct several studies on wastage rates and evaluate the impact of real-time remote temperature monitoring.	_	Incomplete activity
•		Secure HSS2 funds for transporting vaccines from the PHDs (EPI branches) to all 516 HZs.		opioto dotivity
	•	Use barcodes in vaccine management.	-	Kinshasa in progress
	•	Operational start-up of hubs starting with the one in Kinshasa.		
Key finding 5	Eff	fective and efficient management and coordination is ovided throughout the entire health system in order to	Result	70% attained

	harmonise and supplement interventions.	
Agreed country actions	 Support making the PSCs operational in all provinces, encourage other partners to fund some activities not cover by HSS2. Share the means of transport used by the various stakeholders at the provincial level when supplying the H with vaccines and other supplies. Organise quarterly quality reviews on a regular basis in the PHDs with Gavi support. Continue training by GIZ and FMSC of PHD management teams in financial procedures and awarding procurement contracts in order to consolidate compliance with Ginancial management requirements. Implement plan for improving FA GIZ skills to benefit FMS managers involved in the funds disbursement chain. Place 10 project managers and 10 TAs in priority province one manager at the national level, one national coordinator monitoring and coach newly recruited managers assisted one or two national consultants with a six-month servicentract, renewable if necessary. Disburse funds for activities and pay personnel bonuses various levels on a regular basis. Support operation of the NITAG. 	eed experts - Action completed bus lZs - Action completed in 10 Gavi priority PHDs - Not completed ent ent ent avi - Not completed SC - Action carried out and bonus paid to CN and PHDs for FY 2017 by ice - NITAG established and could be operational by late
Organise to impact of the coverage in the	the VSAT functionality and propose alternative solutions completeness and promptness of health data, including	for Completed
	ngulation of data in CSO presentations (immunisation covera	geCompleted

processes versus results) for better evaluating the impact of their interventions	
4. Develop and implement a plan for strengthening skills of peripheral-level personnel in public financial management.	Not completed
5. Extend the GIZ structures in the PHDs not covered.	Incomplete
Incorporate the evaluation indicator from the PSC-HS functionality, including the ICC as a working group in the PHD performance framework.	Completed
7. Improve advocacy for accelerating processing of requests in order to make HSS2 implementation easier.	Completed
8. Optimise the supply chain for vaccines and other consumables (redefinition of distribution circuits for vaccines, direct distribution to the health centres, use of drones, integration with other health products) and logistics performance monitoring.	·
 9. Consider reallocating a portion of the HSS2 unexecuted credits to help strengthen/implement PBF (performance-based funding) in two provinces as a pilot (Kwilu and Kinshasa). 10. Improve the accuracy of the target population necessary for quality planning and monitoring for reaching children normally missed by immunisation services in 	Not completed
collaboration with the INS, including use of new technology. 11. Strengthen the review of data quality and strategic planning to ensure bottlenecks are identified and appropriate corrective measures are taken.	Partially complete, a data quality strategic plan in place and some activities conducted for the plan (31%)
 12. Improve actors' technical skills in registration, compilation, quality insurance, analysis and use of data for decision-making at all levels. 13. Strengthen the capacities of the structures in appropriate human, financial and material resources and data management tools to guarantee effective 	Not completed
management of EPI data. 14. Improve data analysis and quality assurance in order to have effective monitoring of immunisation programme performance.	Not completed
15. In the context of a significant amount of unjustified open advances for 2015 and 2016 (US\$ 3.5 million at the end of October 2017) it is recommended for funding from Gavi and other partners that:	· ·

No disbursement be made to these institutions or people.	
The MoH must require affected structures and people to send supporting documents by 20 February 2018 at the latest by official communication.	
 Mobilise existing structures including IGS at the national level and IPS at the provincial level 	
 Produce a quarterly progress report on the implementation of Gavi grant management requirements. 	Completed
17. Prepare the various budgets with particular attention to unit costs in collaboration with the EPI, FMSC and fiduciary agent GIZ teams.	·
18. Evaluate the workload of the FMSC accounting/budget control team (in light of the financial volumes) and consider increasing the team based on observations and recommendations from the GIZ.7777	
19. Secure HSS2 funds for transporting vaccines from the NC to the PHD (EPI branches) to all 516 HZs.	Completed
improve health system results	Practically complete, HZ teams not yet paid because they were not assessed by the PHDs
21. Renew the Gavi country-tailored approach for the DRC, which ends 31 December 2017, for another three years from 2018 to 2020.	Completed
22. Improve governance in data management and establish accountability mechanisms for the actors	Incomplete
23. Re-evaluate 2017 and 2018 traditional vaccine needs considering the status of vaccine stocks and deliveries.	·
costs up to the voted credits	Partially completed, monitoring is performed, however the Government only released 60% of the anticipated amount.



If findings have not been addressed and/or related actions have not taken place, provide a brief explanation and clarify whether this is being priorities in the new action plan (section 6 below).

Two results (1 & 5) out of five planned for 2018 were 70% completed, the other results (2, 3 and 4) were either not completed, or actions were 50% or not performed at all. Several factors accounted for the failure to complete these actions to achieve the respective results, including: Absence of available funds and experts to conduct the activities; emergencies in countries (priorities going to actions to fight epidemics and cVDP, measles and EVD, not to mention the freeze in funding in late second guarter of 2018.

We believe that all the actions must be repeated and others added, as applicable.

With regards to recommendations, 54% of recommendations (13/24) were implemented in full, a further 3% were partially implemented and 33% (8/24) were not implemented for various reasons, including those specified above.

6. ACTION PLANS: SUMMARY OF FINDINGS, ACTIONS AND RESOURCES/SUPPORT NEEDS IDENTIFIED AND AGREED DURING THE JOINT APPRAISAL

In the DRC, 2019 will be a high-stakes year with the probable arrival of a new political leadership, and the MoH launch of innovative strategies to attain all the targets in the context of the recast National Health Development Plan (NHDP) just adopted.

The 2019-2022 NHDP is focused on two relevant domains: **Provision of a priority care package and** strengthening of pillars of the public health system, with the objective of increasing coverage and the population using quality healthcare services with equity and financial protection. This NHDP is focused on three axes:

- 1. Provision of a SRMNEA package of care + 3 major endemic diseases (HIV, TB, Malaria) + non-communicable diseases
- 2. Strengthening the five pillars of the public health system:
 - Human resources
 - · Medication, vaccines and supplies
 - Infrastructure and equipment
 - Health information
 - Funding
- 3. Governance

All actions as of 2019 must be prioritised in function of these three NHDP axes. It is based on this plan that we agreed to focus our actions in 2019 on the primary outcomes specified below, and to further increase coverage and use of healthcare services in general and immunisation in particular with equity and financial protection throughout 2019.

The priority recommendations are, in particular, structured around the primary axes of the Mashako Plan. The objective of this emergency plan is to achieve an increase in routine immunisation coverage of 15 percentage points in 18 months.

Key finding/action 1	Implementation of targeted actions in conjunction with the provision of routine immunisation services, in particular to increase the frequency of immunisation sessions		
Current response	 The proportion of HZs with immunisation coverage >80% for all antigens is 41% per 2018 EPI administrative data. The preliminary results of the MICS 4 survey for 2018 showed a reduction in vaccine coverage throughout the country in relation to results of the 2013/2014 DHS EPI performance in 2018 showed a large number of children who were not immunised. A total of 56% of the population of priority provinces from the Mashako Plan have low availability of immunisation services (HZs with fewer than 80% of the required immunisation sessions) 		

	- Lack of coordination of activities reported by the HSS2 mid-point assessment.
	Cover implementation of the Mashako Plan in 2019 along the axis of provision of services (immunisation sessions).
	Determine the objectives of immunisation sessions by PHD, HZ and HA (Development of a simple tool allowing an estimate of the immunisation sessions necessary per health zone to be determined).
	Organise immunisation sessions at urban concentration areas.
	Strengthen implementation of the five components of the REZ approach in 13 PHDs, strengthening routine immunisation.
Agreed country actions	 Make available the microplans validated for each of the health areas. Organise effective basic microplans based on satellite cartography. Organise immunisation sessions based on the categorisation of HZs and HAs as well as the number of children to immunise and those with whom contact was lost.
	3. Implement CACs in all HZs throughout the provinces.
	 Disseminate the standards, norms and directives document for the EPI, taking into consideration any innovations and updates, and put them into effect.
	5. Leverage supplementary immunisation activities to conduct wide-ranging social surveys at least every two years in order to survey the state of knowledge, attitudes and behaviours of the population towards systematic immunisation in order to adjust approaches
	 Establish a long-term partnership with the mass information media, in particular the print media, radio and television, without forgetting other traditional media such as town criers.
	Increase by 20% the immunisation sessions held
Expected	- 80% of HZs attained immunisation coverage of more than 80% for Penta3 - 60% of ECV in 13 PHDs/outpost approach and three PHDs/PM) - Wastage rate < 10%
output/results	 Zero stockouts in all antigens. The proportion of HZs with immunisation coverage greater than 80% for all antigens increased by 15% in each of the 26 provinces of the DRC
Associated timeline	Q1, Q2, Q3 and Q4 2019
A3300iated tilllelille	- RHS available and secured HSS2 funds.
	- TA to provide services for implementation of the Mashako Plan: decentralised with a coordination of TA at the central level (WHO, UNICEF, Acasus and JSI).
Required resources/support	- A technical assistant for coverage activities and equity (WHO/Immunisation on any contact, urban and other zones, etc) by intervention province (14).
	- TA introducing new vaccines (rotavirus, RR) - TA GTCV operation, two TA for generation of demand
	- TA decentralised C4D for each of the 14 provinces with a coordination of TA at the central level; TA for provision of immunisation services and generation of demand.
Key finding/action 2	2.a. Discrepancies between the administrative data reported by health facilities and the data from WHO-UNICEF estimates and small-scale provincial surveys are reduced to below 10% for all antigens 2.b. The denominator for the immunisation targets is known throughout the country, in order to have a target that reflects reality

	Discrepancies between administrative data and WHO & UNICEF estimates and surveys >10%	
Current response		
	Current vaccine targets that are used are not reliable.	
Agreed country actions	 Organise a workshop for updating directives, norms and standards regarding data management (recording, compilation, analysis, transmission and use), define rules/measures for accountability of field personnel and sanctions an updating and validation of EPI standards and norms. Make management tools available in facilities. Reproduce and make a sufficient quantity of immunisation cards available to all healthcare facilities that provide immunisations in the DRC. Facilitate data validation meetings immediately from the site after an immunisation session and monthly at all levels (health centre, BCZS, PHD and EPI). Strengthen the capacities of providers for analysis and use of data. Cover the quality assessment of data (DQS, RDQA, LQAS, etc) at all levels. Cover the transition from DVD-MT to DHIS2. Coordinate the organisational audit of the EPI health information system Geolocation of healthcare facilities and estimates of target populations via satellite cartography (GRID) including the following activities: population density map, map of healthcare facility locations and limits of healthcare areas for Mashako priority provinces, map of human settlements for priority provinces, estimate of seasonal changes of DRC population density, identification of zones with a high proportion of arriving migrants focused on urban zones and identification of zones welcoming new refugee populations. Organisation of the population count in each HA according to the community dynamic approach in combination with satellite mapping, with support and expertise from PATH, ULCA and ESP. Update demographic data based on new counts, in particular in HZs that experienced major population movements. Involve demographic specialists in performing counts in order to benefit from 	
	the best approach. - Discrepancies between administrative data and WHO and UNICEF estimates and	
Expected output/results	- Discrepancies between administrative data and WHO and UNICEF estimates an data on surveys reduced by <10% - DHIS2 with supplemental EPI module installed and continually used Denominator/vaccine target covered.	
Associated timeline	Q1, Q2, Q3 and Q4 2019	
Required support/resources	RHS available and HSS2 secured funds TA from WHO, UNICEF, PATH, University of Oslo/HISP	
Key finding/action 3	a) Programme management is strengthened through a specific focus on the regularity and quality of supervisions at the operational level (dedicated application), verification and systematic follow-up of priority actions through the end of 2019. b) At least 80% execution of the 2019 budget, disbursed in a synchronise direct and transparent manner.	
Current response	1. Programme managementa) 34/516 (6.5%) microplanning activities not carried out in the 34 HZs with a	

cVDPV2 epidemic

- b) 1/3 of formative supervisions carried out at all levels
- c) Poor motivation of personnel
- d) Poor follow-up on recommendations from prior reviews

2. Financial management

- e) Non-synchronised disbursement in the implementation of the REZ approach, affecting the attainment of objectives.
- f) Non-coordinated activities implemented: for example: sustained monitoring at the Health Area level without links to REZ supervision (monitoring a posteriori); generation of demand and organisation of advanced strategies are not implemented at the same time.
- g) Financial information not systematically shared on time.
- h) Late validation of MoH and CSO budgeted yearly activity plan.
- i) Low disbursement rate of funds from certain results.
- i) Delay in disbursement of funds.
- k) Late return of supporting documents.
- Lack of fluidity in the transfer of funds from the PHD to BCZ and from BCZ to the HAs.
- h) EPI Outpost Head not involved in monitoring the implementation of financial activities by the HSS in certain PHDs.

1. Programme management

- Development of an application to supervise health centres by the HZ team and monthly monitoring via Dashboard (Mashako Plan).
- Thorough review of the performance framework and the performance bonus system linked to effective performance.
- Independent verification (General Inspectorate of Health) of the performance of immunisation and supervision activities in HZs and HAs (Mashako Plan)
- Make a single model microplanning framework, to be prepared in relation to its context for implementation activities, available to implementation structures.

2. Financial management.

Agreed country actions

- 1. Implement a system to directly transfer funds (mobile banking) to the BCZS, Health Areas, OAS, with a feasibility study in one province.
- Ensure the application of the Secretary General's instruction on the involvement of EPI experts in monitoring specific activities.
- Strengthen collaboration for the preparation of requests between FMSC, GIZ and the EPI (weekly meeting).
- Define a single disbursement for signature of requests by the authorities (Secretary General, Minister).
- Hold monthly meetings to oversee performance of the budgeted yearly activity plan and establish the schedule for preparation and validation of requests; EPI and the manager to report to ICC meetings and TCA meetings.
- Ensure online sharing of financial information on Gavi disbursement at various levels (restricted access).

7. Hold the CD and CDPS responsible for monitoring key activities.
8. Adjust rules to provide documentation of funds at the operational level.
 Programme management is strengthened at the planning, monitoring and assessment level
 Dashboard of indicators published monthly at the level of each HZ and provinces (Mashako Plan)
3. HZs inspected monthly
4. At least 80% budget compliance on each budget line item
Q1, Q2, Q3 and Q4 2019
RHS available and HSS2 secured funds.
Technical assistance from GIZ is provided.
Effective vaccine management is ensured throughout the country in order to reduce stockouts (objective is to reduce by 80% stockouts of vaccines and supplies and to reduce vaccine wastage rates at the various levels of the health system).
 Poor availability of vaccines and frequent vaccine stockouts (eight instances of inventory stockouts on average, affecting 90% of HZs).
- Frequent stockouts of more than 10 days for more than three antigens
 Computerise vaccine stock management using web software (in SMT format), including functionality for impending stockout alerts and automatic online orders between different levels.
 Conduct the 2019 EVM (evaluation and improvement plan development).
 Institute an instantaneous temperature reporting system for vaccine warehouses (central, coordinating office, branch warehouses), daily for the HZs and weekly for the health centres.
 Train personnel from the health centres and health areas on immunisation logistics once every two years.
 Train workers involved in EPI management in 13 PHDs supported by Gavi and UNICEF in STEP training.
 Optimise the supply chain in two HZs (one in each of the zones covered by UNICEF and Gavi.
For poor availability of vaccines at all levels:
 Systematic monitoring and reporting of inventory levels at outposts.
 Adapt delivery terms and frequencies (Mashako Plan) (for months at the outpost level and two months at the HZ level, considering specific terms for accessibility).
Submit CMRs and supporting documents for funds on time and correctly.
Lobby for disbursement of government funds on time/REPACAV
Equip and make the Kinkole hub operational.
Accelerate the process of building hubs at Kisangani and Lubumbashi
Transfer certain cold rooms from the national level to the provinces (eg Kabinda)
 Strengthen advocacy for provincial government compliance via REPACAV for supplying vaccines and maintenance.

For poor Implementation of the maintenance plan Implement the strategic maintenance plan and system **Update PONs** Disseminate PONs at all levels Acquire RTMDs - Train agents in the use and analysis of RTMD data finance data transmission Obtain access codes for users at the HZ level from the vendor to monitor functionality of cold chain equipment For poor logistics management information system (LMIS) and inventory control system: Equip HAs with management tools while insuring timely printing and dissemination. Ensure the training and supervision of agents responsible for logistics management at the level of outposts and HZs. Implement an SIGL (interoperable with DIHS2) related to the inventory control system. Identify and acquire software. Conduct a pilot project in Kinshasa and Equateur. Train participants in the use of the SIGL as well as the inventory control system and data interpretation. Acquire information and communications materials for the provincial depots. 2019 EVM attained. - EPI personnel at all levels trained. An instantaneous daily temperature reporting system for vaccine depots (central depots, coordination offices, outposts) for the HZs and weekly reporting for health centres, installed and operational. Kinkole hub made operational with the management committee and agents assigned to Q1 2019. Construction of the Lubumbashi and Kisangani hubs accelerated and work completed in Q2 2019. Expanded Kananga depot starts operations as of Q2 2019. Expected Frequency and delivery of vaccines in accordance with the Mashako Plan. output/results EPI supply chain agent trained for depots. Implementation of maintenance plan. PONs updated. > PONs disseminated in all provinces and at all levels. > RTMD available in the country, agents trained in use and conveyance of financial data. Access code for ECF monitoring available to the country at all levels. Quality management tool available. Associated timeline Q1, Q2, Q3 and Q4 2019 Resources/support RHS available and HSS2 secured funds necessary Technical assistance from UNICEF, Acasus and WHO provided.

Key finding/action 5	Good governance and coordination is provided throughout the health system in order to harmonise and supplement interventions			
	At the provincial level:			
	Poor functionality and poor ICC quality			
	Poor use of technical immunisation knowledge available in the provinces			
	Turnover of key personnel involved in immunisation (MCA, MCZ, etc)			
	Delay in disbursement of funds at the provincial and operational level			
Current response	Operational level:			
	- Instability of managers from the operational level trained in EPI management			
	- Absence of formal training plans for healthcare personnel			
	- Insufficient number of qualified human resources at the operational level			
	National level:			
	 Organise technical monitoring meetings bringing together the EPI, FMSC and the manager of programmes with the obligation to report to the weekly coordination meetings and the ICC meetings. 			
	(Frequency: Weekly)			
	 Ensure weekly reporting on the implementation of the Mashako Plan during coordination meetings. 			
	Provincial level:			
Agreed country actions	 Update reference terms and conditions/standard talking points at ICC meetings and monitor the various points of action. 			
	 Request correspondence from the SG related to the roles and responsibilities of immunisation technicians in the provinces. 			
	 Advocacy targeting governors, presidents of provincial assemblies, provincial ministers for stabilisation of healthcare personnel involved in immunisation. 			
	Support the roles of inspectors at the provincial level.			
	 Provide training for participants from the provincial and operational level regarding financial management procedures (justification of funds) 			
Expected output/results	 Good governance provided at all levels of the healthcare system 10 functional Programme Steering Committees Review of sector conducted in 2019 2019 CNP Assembly held RA EPI and 2019 EC held 			
Associated timeline	Q1, Q2, Q3 and Q4 2019			
- RHS available and HSS2 secured funds -Technical assistance requirements for monitoring provinces du implementation of the emergency plan for routine strengthening (Mashako) with sharing of responsibility by partners at the level of provinces targeted Mashako Plan and other approaches (REZ, missed opportunities for immunication, etc).				

7. JOINT APPRAISAL PROCESS, ENDORSEMENT BY THE NATIONAL COORDINATION FORUM (ICC, HSCC OR EQUIVALENT) AND ADDITIONAL COMMENTS

The 2018 Joint Appraisal process was launched late in comparison with 2017 given the emergencies at the MoH and the unavailability of experts in charge other than the Project Manager, who, despite his other duties, dealt with the task appropriately in conformity with the instructions and directives sent by Gavi that are on the country portal.

The activities started in September 2018 with dissemination of the instructions to all stakeholders by the Project Manager (MoH structures: DEP, EPI, DLM, FMSC, SG and Minister's Office) and the TFPs, including members of the alliance (WHO and UNICEF), USAID, DFID, EU, World Bank, PATH and others. This communication suggested that a preparatory team be created for this appraisal, coordinated by the Project Manager and made up of experts from the DSP, EPI and TFPs, notably WHO, UNICEF and CSOs.

The preparatory team was immediately able to gather data from various routine information sources (eg NHIS, annual and bi-annual activity reports from the TFPs in charge of the UNOPS programme, FDSS, UNICEF, WHO, CSOs); from the DEP, EPI, DLM, FMSC and FA/GIZ meeting minutes and reports (ICC technical and administrative, Gavi ad hoc commission, NSC, CCT-SS); and data from surveys and studies (2013-2014 DHS, MICS 1, 2, 3 and 4, SARA, UNICEF-WHO joint report). Data were also collected from the Gavi-HSS2 in order to produce a first draft, which the Project Manager consolidated and shared with everyone for input before uploading it to the Gavi portal on 3 November 2018. This draft was enhanced by all parties, leading to an updated draft.

A validation workshop then took place in Kinshasa at the Beatrice Hotel from 26-28 November 2018 with sponsorship from Public Health SEM, Dr. Oly Ilunga Kalenga.

Five working groups were established to analyse, amend and improve the corresponding information from the report, after a summary presentation of the report by the Project Manager and the TFPs in a full workshop session.

The amended reports from each group were consolidated by the Project Manager and shared with all the stakeholders for rereading (Draft 2). The amendments and additional inputs will be integrated in order to produce the final Joint Appraisal report after validation to the ad hoc commission and/or the CCIAT.

The editorial team is thus made up of EPI, DEP and TFP experts under the coordination of the Gavi-HSS/DRC Project Manager, under the supervision of the DEP and EPI directors.

Composition of the editorial team:

From DEP: Dr Alain Iyeti and Dr Nestor Mukinay.

From EPI: Dr Guillaume Ngoie M, Dr Elisabeth Mukamba, Dr Bertin Lora, Dr Luhata Lungayo Christophe, Dr Augustin Milabio, Dr Charles Katu, Dr Crispin Kazadi, Mr Pascal Mikenyi, Mr Jean Paul Makala, Mr Joël Mulubi, Mr Didier Mahunde, Dr Michel Nyembue, Mr Justin Konso.

From the FMSC: Dr Didier Gasigwa and Mr Emeyr Mahenga.

From UNICEF: Dr Daniel, Dr Sylvie Luketa, Dr Djariatou Sow Sall, Mrs Adele Mudipanu, Mr Idrissa Yalcouye.

From WHO: Dr Cheikh Dah, Dr Yapi Moise, Dr Léon Kinuani, Dr John Otomba, Dr Béatrice Mukaji.

From CSOs: Dr Benoit M, Dr Assy Lala and Bienfait Kisimba.

Prepared in Kinshasa, 13 January 2019

For Technical Coordination of the EC 2018

Dr MUKINAY DIZAL Nestor

GP/Gavi-HSS2/DRC

8. ANNEX 1: Compliance with Gavi reporting requirements

	Yes	No	Not applicable
Grant Performance Framework (GPF) Reporting against all due indicators	Yes		
Financial Reports*			
Periodic financial reports	Yes		
Annual financial statement	Yes		
Annual financial audit report	Yes		
End of year stock level report (which is normally provided by May 15 as part of the vaccine renewal request) *	Yes		
Campaign reports*			
Supplemental immunisation activity technical report			N/A
Campaign coverage survey report			N/A
Immunisation financing and expenditure information	Yes		
Data quality and survey reporting		N/A	
Annual data quality desk review.		N/A	
Data improvement plan (DIP)		N/A	
Progress report on data improvement plan implementation		N/A	
In-depth data assessment (conducted in the last five years)		N/A	
Nationally representative coverage survey (conducted in the last five years)		N/A	
Annual progress update on the Effective Vaccine Management (EVM) improvement plan	Yes		
(CCEOP): Updated CCE inventory			N/A
Post-Introduction Evaluation (PIE)			N/A
Measles and rubella situation analysis and 5-year plan		N/A	
Operational plan for the immunisation programme	Yes		
HSS1 end of grant evaluation report	Yes		
HPV-specific reports			N/A
Reporting by partners on TCA and PEF functions	Yes		

In case any of the required reporting documents is not available at the time of the Joint Appraisal, provide information when the missing document/information will be provided.

Nothing to note at this time.		

ANNEX 2: Technical Assistance Requirements and TCA Plan for 2019

Technical Assistance Domains identified		Partners
Data quality	TA for counting based on satellite cartography	Unicef CSO/SANRU; GRID
Data quality	TA in the organisation of the EPI Information System Audit	Unicef CSO/Sanru
Data quality	TA for transition from DVD-MT to DHIS2	Unicef CSO/Sanru
Data quality	TA to generate demand: - Decentralised TA C4D for each of the 13 provinces with a coordination TA at the central level	Unicef CSO/Sanru
Leadership, management and coordination	TA for operation of EPI coordination entities (ICC, Mashako Plan, NITAG, the AEFI Committee and the ICCs in the provinces)	WHO & UNICEF
Services/VC/equity	TA for implementation of the Mashako Plan	WHO, UNICEF, Acasus, PATH, Village Reach and JSI
Services/VC/equity	TA for review of the cMYP and writing of HSS3	WHO, UNICEF and TeAM
Services/VC/equity	TA for validation of MNT elimination and implementation of SACI in the at-risk HZs	WHO and UNICEF
Services/VC/equity	TA in 11 WHO sub-offices for supporting the planning, implementation and tracking of systematic immunisation, surveillance and immunisation campaigns (including routine EPI strengthening during campaigns)	WHO and UNICEF
Supply Chain	Support logistics management and cold chair of the EPI at the central level and outposts	WHO, UNICEF and Acasus
Supply Chain	Train agents charged with logistics at the PHD level and outposts in EPI logistics management with specific emphasis on inventory management	UNICEF, WHO and Acasus
Supply Chain	Implement the SIGL project	Village Reach
Supply Chain	Technical support and training of agents to ensure optimal management of the Kinkole hub	ARC
Supply chain	Conduct EVM in April 2019	WHO and UNICEF
Supply chain	Assessment of Logistics HR (UNICEF and Village Reach) → Funding available	Village Reach
Supply chain	Studies regarding losses and economic impact of RTMD on the logistics system → funds available	UNICEF
Supply chain	Support ongoing vaccine supply by the national level to the Health Areas in provinces for the Mashako Plan	Village Reach
Surveillance	TA for developing and implementing the surveillance strengthening plan and the extension of sentinel sites	WHO
Vaccine support	TA for rotavirus vaccine introduction in three blocks	WHO
Vaccine support	TA for implementing the yellow fever preventive campaign	wнo

TA for implementing the measles control strategic plan	WHO

ANNEX 3: Recommendations of the 2018 Joint Appraisal

No.	Recommendations	Owner	Timeline
1	Strengthen management of reform implementation to ensure implementation of effective reform of priority actions linked to immunisation and the effective use of resources dedicated to immunisation	SG/MoH	Q1 2019
2	Link performance of technical assistants to immunisation performance manager indicators	SG/MoH	Q1 2019
3	Implement CACs in the 80 HZs of the Mashako Plan	EPI/TFPs	Q1 2019
4	Implement a synchronous method for all REZ components in the 516 HZs of the 26 provinces	EPI/TFPs	Ongoing
5	Produce immunisation cards in duplicate to facilitate filing and monitoring of vaccines	EPI/TFPs	Q1 2019
6	Expand analysis of performance levels to correct inconsistencies between the availability of supplies and performance levels on vaccine coverage for various antigens	EPI/TFPs	Q1 2019
7	Cover the management and regular oversight of providers by the various levels in the context of improving immunisation data quality	EPI/TFPs	Q1 2019
8	Integrate private health facilities with the profile in the immunisation service offer	MCZS/CD	Ongoing
9	Increase the number of immunisation sessions using all strategies to attain targets	MCZS/CD	Ongoing
10	Integrate equity as elements of monthly analysis during monitoring meetings while taking into consideration the socio-economic level determining factors, mother's education and place of residence		Ongoing
11	Involve the Provincial Health Inspectorate in the data quality audit	MCZS/CD	Ongoing
12	Involve EPI experts (MCP, MCA and supply chain agent) in the management of funds allocated to provincial immunisation activities	CDPS	Ongoing
13	Report activities conducted and their contribution to improving immunisation performance	Partners/EPI/MoH:	Ongoing
14	Agefin/GZ should continue to strengthen capacities of MoH staff for financial management via a consulting firm in the field of resource management	FMSC/GIZ	Q1 and Q2 2019