Joint Appraisal report 2018

Country	Sierra Leone
Full Joint Appraisal or Joint Appraisal update	JA update
Date and location of Joint Appraisal meeting	July 2017 – November 2018
Participants / affiliation[1]	GAVI, WHO, UNICEF, CHAI,
Reporting period	2017-2018
Fiscal period[2]	July 1 – June 30
Comprehensive Multi Year Plan (cMYP) duration	2017 - 2021

SUMMARY OF RENEWAL AND EXTENSION REQUESTS

1.1. New and Underused Vaccines Support (NVS) renewal request(s)

Type of support (routine or campaign)	Vaccine	End year of support	Year of requested support	Target (population to be vaccinated)	Indicative amount to be paid by country	Indicative amount to be paid by GAVI
Routine	Inactivated Polio Vaccine	2019	2019	268,452	US$ 0	US$ 948,500
Routine	Rotavirus	2018	2021	268,452	US$ 85,500	US$ 902,500
Routine	PCV	2018	2021	268,452	US$ 102,000	$1,617,500
Routine	Pentavalent	2018	2021	268,452	US$ 151,500	US$ 420,500
Routine	Yellow Fever	2018	2021	248,246	US$ 75,000	US$ 397,000

1.2 New and Underused Vaccines Support (NVS) extension request(s)

Type of Support	Vaccine	Starting year	Ending year
Routine	Yellow Fever	2018	2021
Routine	Rotavirus	2018	2021
Routine	Pneumococcal	2018	2021
Routine	Pentavalent	2018	2021
Routine	Inactivated Polio Vaccine	2018	2021

1.3 Health System Strengthening (HSS) renewal request

Total amount of HSS grant	US$ 12,880,000 (excluding 20% CCEOP joint investment)
Duration of HSS grant (from…to…)	2017 – 2021
Year / period for which the HSS renewal (next tranche) is requested	2019
Amount of HSS renewal request (next tranche)	TBD*

***this is subject to ongoing discussions regarding fund flow.**

[1] If taking too much space, the list of participants may also be provided as an annex.
[2] If the country reporting period deviates from the fiscal period, please provide a short explanation.

1.4 Cold Chain Equipment Optimisation Platform (CCEOP) renewal request

Similar to the GAVI HSS support, the Cold Chain Equipment Optimisation Platform provides phased support for a maximum duration of five years, which is subject to an annual renewal decision.
Below table summarises key information concerning the amount requested for the next year.

Total amount of CCEOP grant	$1,301,914 (2018)* $ 325,653 joint investment from HSS grant	
Duration of CCEOP grant (from…to…)	2017/2018	
Year / period for which the CCEOP renewal (next tranche) is requested	N/A	
Amount of GAVI CCEOP renewal request	N/A	
Country joint investment	**Country resources**	
	Partner resources	
	GAVI HSS resources[3]	$1,628,264

*Source Gavi country Hub

1.5 Indicative interest to introduce new vaccines or request Health System Strengthening support from GAVI in the future[4]

	Programme	**Expected application year**	**Expected introduction year**
Indicative interest to introduce new vaccines or request HSS support from GAVI	Hep-B birth dose*	2019	2021

***** Country was informed that there is no Gavi window for this vaccine

[3] This amount must be included either in an earlier HSS approval or else in the current HSS renewal request in section 1.4 above.
[4] Providing this information does not constitute any obligation for either the country or GAVI, it merely serves for information purposes.

LIST OF ACRONYMS

AEFI	Adverse Events Following Immunization
AFP	Acute Flaccid Paralysis
AVADAR	Auto-Visual AFP Detection and Reporting
CEA	Coverage and Equity Assessment
CHAI	Clinton Health Access Initiative
CHWs	Community Health Workers
CMO	Chief Medical officer
CRS	Catholic Relief Service
DCMO	Deputy Chief Medical Officer
DDMS	Directorate of Drugs and Medical Supplies
DHIS2	District Health Information System 2
DHS	Demographic Health Survey
DOO	Districts Operations Officers
DQIP	Data Quality Improvement Plan
DVDMT	District Vaccine Data Management Tool
FT2	Fridge Tag-2
GoSL	Government of Sierra Leone
GPF	Grant Performance Framework
GVAP	Global Vaccine Action Plan
HED	Health Education Department
HSCC	Health Sector Coordinating Committee
HSSG	Health Sector Steering Group
ICAP	International Center for AIDS Care and Treatment Programs
IDSR	Integrated Disease Surveillance and Response
IHME	Institute for Health Metrics and Evaluation
IHPAU	Integrated Health Project Administrative Unit
ILRs	Ice-lined Refrigerators
IPA	Innovations for Poverty Action
IRP	Inventory Replacement Tool
LTWG	Logistics Technical Working Group
MCHW	Maternal and Child Health Week
MICS	Multi-Indicator Cluster Survey
MSF	Medicines Sans Fronteres
NIDs	National Immunization Days
NLWG	National Logistics Working Group
NMSA	National Medical Supplies Agency
NSID	Sub-National Immunization Days
ODK	Open Data Kit
PHU	Peripheral Health Unit
RRIV	Receipt, Report and Issue Voucher
SARA	Service Availability and Readiness Assessment
SMT	Stock Management Tool
TSA	Treasury Single Account
VPD	Vaccine Preventable Diseases

2 CHANGES IN COUNTRY CONTEXT SINCE LAST JOINT APPRAISAL

Brief background

Sierra Leone has seen significant improvement in immunization service delivery. From 2010 the national administrative coverage with Penta 3 has been above 90% until it dropped to 86% in 2015 with Ebola Virus Disease (EVD) outbreak which devastated the entire health system including immunization. With the post EVD recovery plan, in 2016, the services picked up and national Penta 3 coverage increased up to 97%. Despite significant progress made in increasing vaccine coverage and reducing the incidence of vaccine-preventable diseases, a significant number of children remain incompletely immunized, with 31,570 and 56,832 children below 1 year of age in the country not fully immunized in 2016 and 2017 respectively. Sierra Leone was selected as an early learning country for the Country Engagement Framework (CEF) given the timing of their new HSS proposal. Gavi and partners conducted a joint mission to address issues on the draft Programme Support Rationale (PSR) submitted to Gavi, and the February 2017 in country IRC review of the PSR which encompasses HSS and CCEOP proposals that were recommended for approval; final approval of support were granted in October 2017. Most of these priorities are being implemented whereas others have experienced a delay. In 2018 the country was occupied with protracted presidential elections, resulting in the election of a new party and fairly smooth transitions of leadership positions in MoHS. During the time of the JA, anecdotal information suggested that health care workers were negotiating for increased salaries and contemplating to go on strike. The current HSS grant has experienced delays due to protracted negotiations regarding fund flow. The recent PCA recommended to channel HSS funds through MoHS using the Integrated Health Project Administration Unit (IHPAU) which was deemed not yet ready to receive Gavi funds as it is currently going through a restructuring and recruitment of key staff. In the interim, an exceptional arrangement was made to channel funds through UNICEF and WHO until September 2019, and Gavi will conduct a monitoring review to access readiness or alternative arrangements for fund flow.

2.1 Country Profile

A country of just 7.1 million people, Sierra Leone has some of the highest rates of maternal and child mortality in the world, as well as a heavy disease burden from malaria, neonatal disorders, and tuberculosis.

Population	7.1 million (2015 Census)
Annual pop. Growth rate	3.2% (2015 Census)
Maternal Mortality Ratio	1,165 per 100,000 live births (DHS 2013)
Infant Mortality Ratio	92 per 1,000 live births (DHS 2013)
Under 5 Mortality Ratio	156 per 1000 live births (DHS 2013)
Proportion of 1 year-old children immunised against measles	78.6 (DHS 2013)
Percentage of women age 15 – 49 years who were attended by skilled health personnel during their most recent live birth	81.6% (MICS 2017)
Percentage of women age 15 – 49 years whose most recent live birth was delivered in a health facility	76.7% (MICS 2017)
Fertility rate, 2017	4.3 (IHME 2017)

As a cost-effective intervention for preventing life-threatening infectious diseases and reducing mortality, immunisation is a central focus of global health. Vaccination initiatives in Sierra Leone face

many challenges, from financing to demand generation to service delivery. For example, nearly half of women do not deliver in health facilities (DHS 2013), which impedes the ability for health workers to follow-up with caregivers and ensure that children receive the full immunisation schedule. Additionally, disparities in uptake between urban and rural regions, as well as between different districts, reduce equitable vaccine coverage in Sierra Leone.

Leadership, governance and management of the national immunisation program:
This report outlines updates in leadership, governance and management of the national immunisation program. At this time, the national immunisation program is now very stable with 12 full time technical staff. Additionally, there is an embedded technical advisor from Aspen Management for Health under GAVI leadership management and coordination support. The program is now fully assembled with competencies in :

1. Program management by the national Program Manager and his Deputy,
2. 1 National Logistician
3. 1 National Pharmacist
4. 1 National EPI communication officer
5. 2 National M&E officer
6. 2 National Cold Room Officers
7. 28 District Operations Officers (two in every district),
8. 28 District Cold Chain Technicians managing the cold chain,
9. 28 District Cold Room Officers managing the Immunisation supply chain,
10. 80 vaccine focal persons working in remote areas in 6 priority districts (61% of whom are volunteers)

Vacant positions declared by the program were:

1. 2 National EPI officers,
2. 1 Accountant.

Notably, the national immunisation program has achieved the following:

- Has established linkages with the National Pharmacy Board. This leads to positive engagement on the vaccine regulation function and immunisation safety monitoring including AEFI surveillance.
- Continues to strengthen coordination with the Disease Prevention and Control department of the MOHS to provide the functions of case-based VPD surveillance and sentinel surveillance for Paediatric Bacterial Meningitis and Rota Virus in the IDSR framework.
- Good relations with the Department of Policy, Planning and Information to obtain routine immunisation data through the DHIS2

Other programs working closely alongside EPI include:

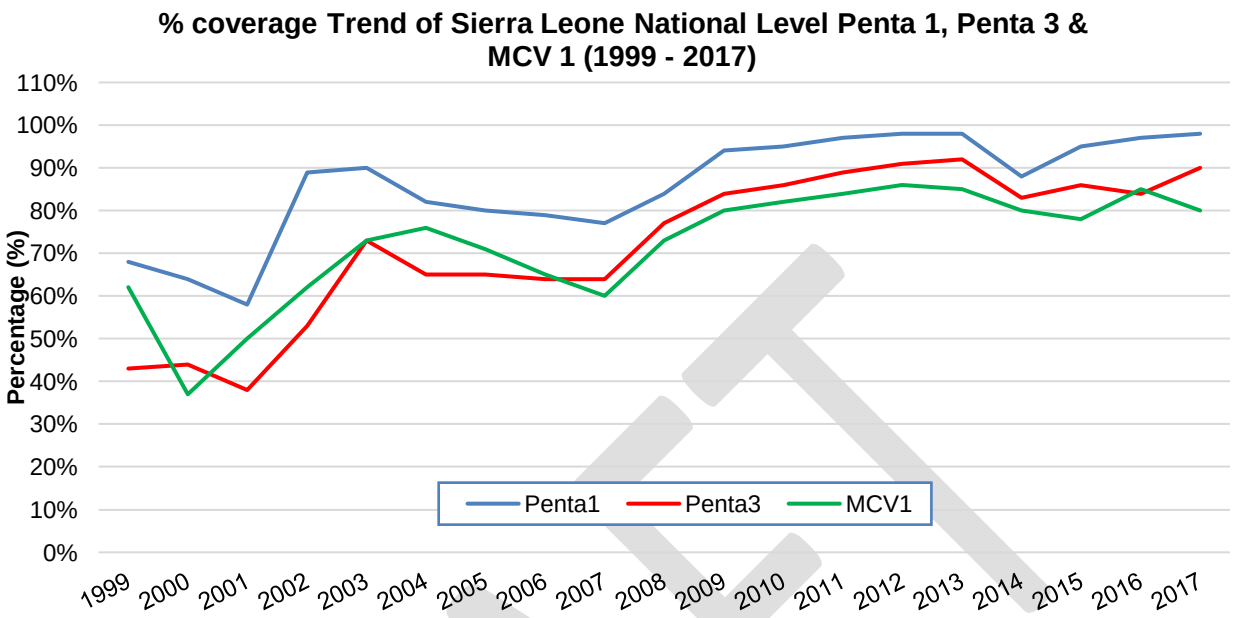
- Health Education Program
- National Malaria Control Program
- Directorate of Food and Nutrition

Gavi conducted an audit in Q3 2018 and the Ministry of Health and Sanitation leadership recently received the letter in October/November 2018, which is being reviewed and followed by a response and consequently this matter was not yet discussed at the JA. The Gavi Grant Management Requirements were also shared with the country in October and it includes a requirement for a Monitoring Review in Q2 of 2019 that will access readiness of MoHS architecture to receive Gavi funds. Delays in making a long term decision will further affect the implementation of the HSS grant post the short term agreed arrangements with UNICEF and WHO.

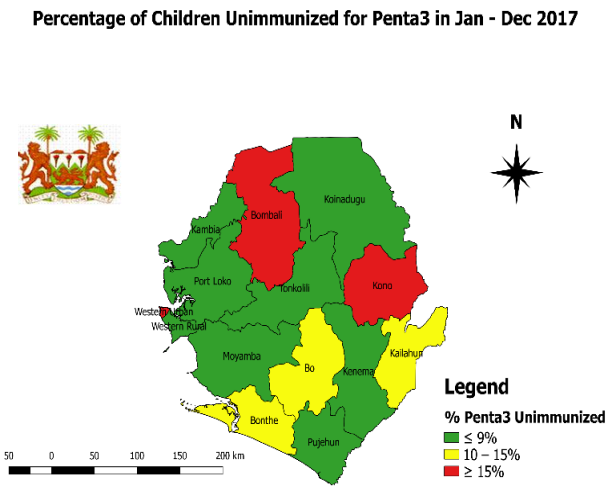
The latest GNI per capita for Sierra Leone (World Bank Atlas Method) shows that it increased marginally to $ 510 USD per capita in 2017 from $480 in 2016. In 2017, the government of Sierra Leone expenditure on health was LE 37,000 (less than US$5) per capita and budget allocation reached about 6.1% of total budget. The government covered approximately 6-8% of routine immunisation expenditures in 2017.

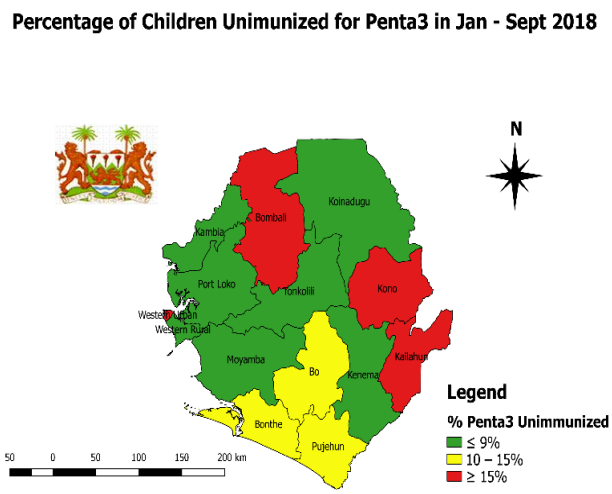
3 PERFORMANCE OF THE IMMUNISATION SYSTEM IN THE REPORTING PERIOD

3.4 Coverage and equity of immunisation

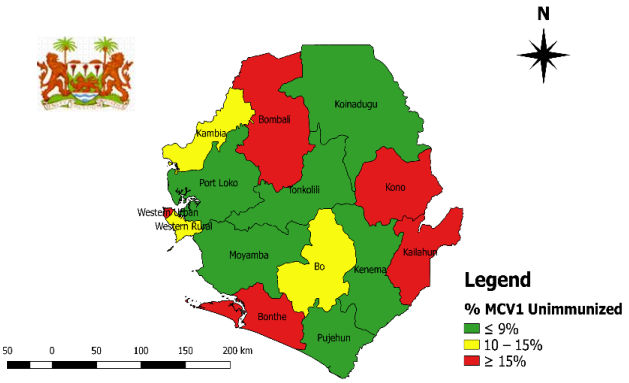


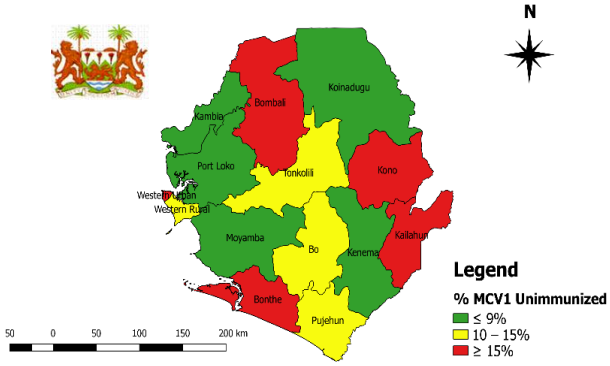
Significant progress has been achieved over the past twenty years in expanding the coverage of life-saving vaccines in Sierra Leone. While the graph above demonstrates average overall improvements in national coverage for Penta 1, Penta 3 and MCV1 between 1999 to 2017, it is of note that MCV1 coverage has dipped in recent years. In addition, the joint appraisal mission notes that reviewing national trends masks the disparities between certain groups; namely, geographic inequities in vaccine coverage persist





among the districts. 56,783 children below 1 year of age in the country were not fully immunized in 2017 and 7 out of 14 districts (50%) did not meet the 80% target for district level Penta 3 coverage, as set out in the 2011-2020 Global Vaccine Action Plan (GVAP). The Joint Appraisal Mission documents that the highest number of under vaccinated children in 2017 lived in Western Area Urban, Port Loko, Kono, and Bombali. A review of the distribution of the unimmunized populations by district showed geographic disparities between districts and regions. In the absence of a good equity analysis of coverage, the national immunisation program suspects that urban poverty, cultural beliefs, ethnicity, educational attainment, gender, and place of residence contribute the most disparities in coverage.





The National Immunisation Program for Sierra Leone commits to adjusting their immunisation delivery strategies and operations micro-plans to reach these unimmunized children and address the specific challenges their districts and communities face.

The Joint Appraisal Mission documents that several activities were implemented in the review period (July 2017 and November 2018) namely:

Major activities accomplished in 2017

- Comprehensive Cold Chain assessment
- Continued procurement, distribution and installation of additional refrigerators (46 ILRs)
- Continued support to districts for:
    - Outreach services although limited by shortages of funds
    - Defaulter tracing
    - Vaccine distribution (although JA noted challenges with vaccine visibility at lower level)
- Three rounds of National Immunisation Days (NIDs), one round of MCHW, and a polio SNID in 8 districts were conducted
- Snap Immunisation Equity Assessment
- Two rounds of Emergency Oral Cholera Vaccination in Western Area Urban & Rural following the mudslide and flooding that was a Grade 1 emergency according to WHO
- Conducted Post OCV Coverage Survey
- Health Sector Steering Group participation

Major activities accomplished in 2018 include:

- IPV was introduced into routine immunisation schedule
- Polio campaign and defaulter tracing
- Supply Chain System Design, Introduction & modelling workshop
- On-going CCEOP ODP Implementation
- Central Cold room temperature mapping
- Data Quality Self-Assessment
- Vaccine, stock and cold chain management training done for District Immunisation Officers and Cold room/store officers.
- Training on DVD-MT done for District Immunisation and Data managers
- Human resource for supply chain capacity assessment
- On-going Immunisation Coverage and Equity Assessment
- PCV Switch (training conducted at National & District Levels)
- Asset procurement and distribution

- 293 Motorcycles, 15 Laptops and 2 generators were procured
- 15 Technician toolkits, 15 Cold store fire extinguishers were procured
- Measles outbreak response in Koinadugu
- One supportive supervision visit was conducted but expansion of this activity was limited by financial resources and the protracted presidential election campaigns

3.5 Key drivers of low coverage/ equity

As highlighted in the performance section above, while coverage remains high for most antigens in 2018, there are still challenges, for example, it has been observed that:

- Improving but low coverage has been seen for MCV2 with high dropout rates from MCV1 to MCV2,
- Yellow fever coverage is lagging behind MCV1 coverage
- Recent MICS results showed much lower coverage than administrative records suggested in 2016,
- The number of incompletely vaccinated children (<1 year old) increased from 31,570 in 2016 to 56,832 in 2017
- The number of measles cases being reported in recent years is rising, despite reported high coverage and repeated measles SIAs
- Geographic equity has been improving overall in the previous 10 years; however, there seems to be a growing number of districts with DTP3 coverage less than 80% in the past year.
- The current four districts with the largest numbers of under-immunised children according to 2017 data are Western Urban, Kono, Bombali and Kailahun. In 2016 they were Western Urban, Bo, Kailahun and Bombali.

The program reported to the Joint Appraisal Mission that there remained challenges to immunisation coverage improvements that needed urgent attention and consideration by all partners (including GAVI) in future and these are:

- Late fund disbursement from GAVI (resulting in the deferment of some HSS activities to 2019)
- Difficulty accessing funds sent to MoHS Impress account. (e.g. new cold room connection delays). This is mainly attributed to having a single accountant at the MoHS handling funds for too many programs
- Funding is inadequate or unavailable for mobile outreach to reach remote areas and access those who are unable to visit facilities
- Irregular monitoring and supportive supervision due to shortage of funds
- Human resources challenges including a) Low staffing levels, b) Inadequate skills mix, c) Low motivation of health workers, d) Poor payroll management and e) Irregular on-the-job training of immunisation service providers
- Cold chain has improved, however, gaps remain and the country was recently informed by GAVI that CCEOP funds has a financial shortfall of US$2.4million against the original assessment and planning. There is no clarity where these funds will be sourced as their absence will affect programme implementation.
- Limited transport for vaccine distribution from central to district and district to PHU level
- Issues related to vaccine visibility at lower level
- A multitude of challenges on vaccine management were identified by the July 2018 GAVI audit, including poor record keeping, discrepancies between records and stock take, and poor accountability of vaccines at all levels and TCA will be sought from expanded partners to address these.

The Joint Appraisal Mission documented that immunisation coverage rates are high due in part to non-representative denominators based on a) 2015 census projections, and b) using inter-census growth rates instead of annual growth rates.

Ongoing equity analysis:

The equity analysis is ongoing and will further inform the immunisation program of gaps and opportunities. The methodology of the ongoing equity analysis includes reviewing of literature and policy documents to identify inequity in immunization.

Secondary data analysis will include:

- Reviewing administrative data, survey data, surveillance data, campaign data, cold chain functionality, financing, and HR for immunisation. This data will help to identify unvaccinated children, where they live, and why they were not vaccinated with a particular emphasis on trends
- Identify districts wherein inequities exist for in-depth analysis in phase 2 to be conducted in early 2019.
- Validation of data and this process to be achieved in Q1 2019

Preliminary findings from the ongoing equity analysis and discussed at JA suggest the below:

- The number of unvaccinated children (under 1yr) increased from 2016 -2017 from 31,570 to 50,832 respectively.
- Districts with highest number of unvaccinated children (Western Area Urban, Port Loko, Kono, Bombali and Bo respectively). The reason for this is partly due to dwellers in urban slums, and porous borders for border districts.
- Health system factors; 70% of health workers are allocated to urban areas, however, the distribution of total population is higher in rural areas (62% of population in rural)
- Inadequate distribution of cold chain system (Kambia, Pujehun, Bo, Western Area Urban, Western Area Rural, Tonkolili and Kenema). These districts have 55% or less functioning cold chain equipment and the possibility to fill these gaps is limited under the current CCEOP allocation.

From data review and scoring the following districts were identified as key problem areas for equity. The table in Annex 4 highlights the scoring based on survey results which informed the shortlist of districts; Kambia, Kono, Port Loko, Tonkolili and Western Rural

However, large numbers of unvaccinated children were also noted as key concerns for Bo, Bombali, and Western Urban.

Next steps for the equity assessment include undertaking a critical analysis of the reasons for low coverage in the chiefdoms of the selected districts (phase 2) with a view to:

- Validate whether the low reported coverage is accurate
- Explore whether particular religious, ethnic, migrant or economic groups are disproportionately underrepresented in vaccine coverage, and plan innovative pro-equity approaches (strategies and activities) to reach such groups
- Engage with the private sector in urban areas to facilitate service delivery and harmonise data
- Prioritize the Cold Chain Equipment Optimization Platform which supports vaccine availability at facilities at all times for services (both fixed and outreach)
- Plan for sustainable health financing and national leadership
- Promote data harmonisation across systems

Potential underserved communities to be explored further include:

- Urban poor
- Border area communities
- Nomadic communities
- Inaccessible communities: islands, areas with seasonable isolation
- Households in under-performing Chiefdoms

The results of the equity analysis will inform detailed planning for the use of additional HSS fund allocation. Partners including Gavi are planning a meeting to discuss the key findings and recommendations of the equity analysis in Q1, with the intention of coming up with an implementation plan on activities that will target coverage and equity.

3.6 Data

Within the review period the following work was conducted with a focus on data analysis, quality and strengthening:

- 30 facilities were visited per districts
- Data quality self-assessment
- Identifying some of the gaps in data quality
- SMT training for DOOs
- DHIS2 training for M&E officers and DOOs
- DVDMT training for M&E officers and DOOs
- Inventory management at district and central on a quarterly basis
- Quarterly stock takes at central and completion of SMT
- Stock take at district level monthly
- VPD surveillance is implemented within the IDSR Framework
    - DSOs (2 per district) are the designated officials for both IDSR and case-based VPD surveillance
    - IDSR includes all VPD surveillance diseases/conditions in the priority diseases
    - Case definitions and alert thresholds are provided in all IDSR technical guides
    - Rapid Response Teams respond/investigate all epidemic prone diseases including Measles
    - e-IDSR and CBS roll out all include VPD surveillance diseases/conditions
    - Weekly analysis and monitoring of IDSR priority diseases includes VPD surveillance diseases/conditions

Pilot of Vaxtrack

a. 74 Health facilities trained in Western Area Urban
b. 168 MOHS staff trained

However a number of challenges were experienced through the use of Vaxtrack and the JA recommended that this tool be suspended while an evaluation is being considered.

Key data Challenges

1. Data inconsistencies / quality challenges
2. Immunisation data in DHIS2 report over 100% coverage in many instances; these errors could be attributable to floating populations within districts, health care workers inflating service delivery figures, or data entry errors into either the HF2 form of DHIS2.
3. Although RRIV data indicates a high vaccine stock-out rate, verbal reports from facilities suggest sufficient stock for almost all vaccines.
4. Routine harmonization or triangulation across data sources is not taking place on a routine basis at central level. In addition, minimal institutionalized accountability mechanisms are in place to review the accuracy and completeness of submitted vaccine data. This results in a lack of data harmonization system at all levels
5. Outbreaks occurred in some areas with over 100% coverage (Measles)
6. Different results seen from same data source – DVDMT and DHIS2 both pull data from the same health forms, thus suggesting a lack of accurate data entry.
7. Denominator issues at all levels
8. Inconsistencies in data at PHU level.
9. Number of children vaccinated is higher than number of vaccines that were received in country.Number of doses shipped by UNICEF according to the administrative report differs from number of doses of DTP administered, indicating a misalignment of numbers.

Data submission challenges

- DVDMTs are not reliably submitted, leading the central EPI M&E team to rely more heavily on DHIS2 data for tracking vaccine use.
- Late and incomplete data reporting.

Data tools are not fit for purpose

- PHU forms don't contain all required information
- RRIVs do not contain all data fields required to monitor vaccine stock; in addition, EPI does not actively use this information for stock planning.
- No wastage data - can only triangulate between sources but not between statistics to double check

Limited use of routine data for action at all levels

- Irregular supportive supervision at all levels
- RED coverage/drop-out & temperature monitoring charts are not found at health facilities or updated
- IRP assessments rarely take place, FT2 are expired (data is therefore unavailable) and reports are not consolidated at district level for analysis and use at central level. These systematic challenges lead to a gap in routine monitoring of CCE functionality.

The shortcomings of these data systems prevent EPI from identifying and responding to vaccine challenges, as well as methodically planning ahead to improve coverage, reduce stock outs, and ensure safe transport and storage of vaccines. To address these concerns, additional actions could be taken to strengthen vaccine data systems including:

1. Reviewing data elements for reporting
2. Identify key routine performance indicators and harmonise data collection tools e.g. wastage not in reporting tools but is needed and FT2 tags expired
3. Undertake a workflow optimisation exercise to identify data workflow from facility level
4. Improve accountability for reporting down to facility level through performance management system
5. Management reviews and responds to key indicators to target problem areas
6. Supportive supervision

District to PHU

1. Following up on previously low-performing PHUs to provide positive feedback and gather lessons learned
2. Use quality assurance metrics to help PHUs understand what is going wrong and how to improve performance
3. RED approach training
4. Timely feedback to districts on key coverage concerns based on findings for action

Priorities Identified for improvement of data management:

1. Migration of DVDMT to DHIS2
2. Assessment of data elements required to inform indicators (identifying which indicators are critical at each level)
3. Data harmonisation at district and national level (to make sure that the country can obtain these data elements with the tools and processes in place)
4. Revision of tools
5. Printing of tools to ensure that they are always available for capturing data
6. Supportive supervision (routine and responsive)
7. Routine supportive supervision to better understand challenges and current state
8. Feedback system of review and response from central and from districts (providing key data results to district level to enable them to target feedback to PHU)
9. Assessment of options for electronic reporting to gain timely and accurate data
10. Identifying areas for targeting data improvement
11. Triangulation of data (looking at numerator)
12. Identify means of improving denominator calculation
13. Data analytics to better understand system challenges
14. Source funds for implementation of Data Quality Improvement Plan (DQIP)

15. Data quality assessment results will further inform areas to target data improvement interventions

Future plans for Data Strengthening under WHO TCA:

1. Strengthen supportive supervision and capacity building approach.
2. Expand use of electronic monitoring systems, including vaccinations, defaulter tracking electronically.
3. Regular data harmonization meetings at all levels.
4. Regular data quality self-assessments.
5. Support active documentation for certification, including data proper archiving at national and district levels.
6. Review of denominators for both districts and PHUs
7. Support Routine Immunisation Micro planning.
8. Support DHIS2 Platform – Technically migrate DVD-MT to DHIS2

3.7 Role and engagement of different stakeholders in the immunisation system

National Coordination

The Health Sector Steering Group (HSSG) and Health Sector Coordination Committee (HSCC/ICC) remains functional. In 2018, the HSCC, which provides the ICC functions met once and discussed EPI to review and approve the MR and HPV application. The Technical Coordination Committee (TCC), which is the subordinate body for immunisation program coordination and management met fortnightly in 2017 and 2018. The role of the TCC is to provide a forum for management, engagement, guidance, and oversight of key program activities to ensure coordination amongst key operational partners. During SIAs, a task force is made up of TCC and other relevant partners. National Immunisation Technical Advisory Group (NITAG) will be responsible for providing strategic advice on immunisation activities. National Immunisation Technical Advisory Groups (NITAGs) are multidisciplinary groups of national experts responsible for providing independent, evidence-informed advice to policy makers and programme managers on policy issues related to immunisation and vaccines. This group will be made up of experts in medicine, paediatrics, and immunisation. EPI is a member and participates in the MoHS Supply Chain Technical Working Group under the leadership of DCMO1, Directorate of Drugs and Medical Supplies (DDMS), and National Medical Supplies Agency (NMSA)

Civil Society

In 2018, there was extensive engagement with civil society groups in demand generation, advocacy, social mobilization, and monitoring of health interventions at community levels. The main civil society groups the program engaged with were:

1. Health for All Coalition:
2. Health Alert
3. Focus 1000

The health education and promotion unit continues to engage multiple stakeholders to support CSOs in independent monitoring of immunisation services utilization.

Partners and NGOs

NGOs play a critical role in the immunisation and vaccination sector in the country. With funding mainly from GAVI, the following NGOs have supported the EPI program in various areas.

UNICEF as an alliance partner is fully engaged with the EPI program of the MoHS and serves as member of the TCC. During the 2018 Joint Appraisal, UNICEF country office reported the commencement of immunisation, supply chain system design and implementation, data collection, analysis and modelling, GAVI fund disbursement, and provided other technical assistance to the programme where needed.

WHO as an alliance partner is fully engaged with the EPI programme of the MoHS and serves as a member of the TCC. WHO provides support to the EPI programme in capacity building, supportive

supervision and monitoring, activity planning, surveillance, coordination and implementation, data quality management and harmonisation.

Clinton Health Access Initiative (CHAI) as an expanded partner is fully engaged with the EPI programme of the MoHS and serves as a member of the TCC. CHAI looks to provide support in supply chain management, coordination, and implementation and data management and harmonization.

EHealth as an expanded partner engages with the EPI programme of MoHS. They have implemented a pilot of Vaxtrack, which is patient by patient vaccine monitoring.

ICAP is implementing its programs with support from CDC as an expanded partner. ICAP engages with the EPI programme on data management training, research on demand generation, supportive supervision, coaching and mentoring on EPI services and logistical support.

IPA as an expanded partner engaged with the EPI in conducting operational research on demand generation.

Medicin San Frontiers (MSF) as an expanded partner engages the EPI programme by providing support to the programme during supplementary immunisation activities (SIAs) in their operational districts.

Private sector

Safer Future is a local agent providing services on behalf of B-Medicals as an expanded partner. Safer Future engages EPI by providing support on cold chain optimization and management

Orange Sierra Leone provides support to the EPI Programme of the MoHS through use of the Airtel Money platform for the distribution of EPI activity incentives. The EPI programme utilizes private facilities in implementing programme activities.

Cross sectoral collaboration
There has been extensive collaboration across MoHS programs and directorates in providing support to the EPI programme in the implementation of its activities, primarily through the TCC and other central coordinating bodies. The health education and promotion unit with support from UNICEF C4D section works with a broader civil society network. Communication objectives for promotion of immunisation services utilisation is well defined. EPI has engaged with the Ministry of Education on interventions targeting school going children such as HPV implementation, TT in school, and in stakeholder meetings. Traditional leaders, religious leaders, and other community structures have been engaged at district and community level as part of advocacy.

4 PERFORMANCE OF GAVI GRANTS IN THE REPORTING PERIOD

4.4 Programmatic performance

- Disbursement of HSS 3 funds from Gavi has been delayed due to ongoing discussions regarding fund flow. There was a disbursement gap between 2016 – August 2018. Therefore, several activities on the HSS grant including PIRI, KAP survey, trainings and mapping of communication platforms were reprioritized for 2019. The only disbursement made was for procurement and for new vaccine introductions and these specific activities have made significant progress. The country has developed an acceleration plan to cover priority activities between January – September 2019 (See annex 2 C with a partial list of priorities).
- **IPV Vaccine Introduction grant:** Sierra Leone received USD180, 000 for IPV Introduction. Program expenditure against this grant in the reporting period was USD$179,999.94 including the amount for the PIE. All activities related to IPV introduction were completed except the post introduction evaluation (PIE) pending the availability of TA from WHO. MoHS requested a 6 month no cost extension from GAVI to do the PIE.
- HSS procurement is largely completed (see annex 2B).
- Other TCA activities that were conducted are assessment of new vaccine (Rota, PBM, Men A) surveillance performances, Data Quality Assurance, Vaccine Quality Assurance

GAVI/ISS

- A total of Leones 160,990,000 (estimated to be equivalent to USD 21,900) was remitted from the GAVI/ISS account to finance procurement activities related to the construction and refurbishment of the central Vaccine Store.

Challenges:

- The newly introduced treasury single account (TSA) is a challenge for EPI program/MoHS to access funds for EPI activities especially at central level. Many activities including power connection to the vaccine warehouse, PCV switch, vaccine management training on HSS and other immunisation supply chain activities got delayed due to this challenge.
- Ministry's procedure for clearing of supplies is still challenging. Injection materials (Syringes and safety boxes) shipped in September 2017 and March 2018 are still at the port. EPI program indicated that MoHS wants to clear all MoHS related supplies at the port, but nothing has happened.
- Delays in Gavi fund disbursements has resulted in reprioritization of most planned activities to 2019. Planned activities in 2017/2018 were limited by shortage of funds

4.5 Not Financial management performance (for all cash grants, such as HSS, vaccine introduction grants, campaign operational cost grants, transition grants, etc.)

	Recipient on behalf of MOHS	Award Year	Grant Allocation	Grant Expenditure	Balance	Remarks
GAVI/ISS	**MoHS**	2012			$ 44,457	
GAVI/HSS	**UNICEF**	2018	$ 1,947,650.00	$ 124,769.87	$ 1,822,880.13	See annex 2 for details
GAVI/HSS (Procurement)	**UNICEF**	2018	$ 1,623,982.50	$ 921,575.72	$ 702,406.78	See annex 2 for details
IPV Vaccine Introduction grant	**UNICEF**	2016	$ 180,000	$ 179,999.94	$ 0.06	See annex 2 for details
GAVI/HSS	**WHO**	2018	$ 936,044	$ 27,733	$ 908,311	See annex 3 for details

In 2018, following the approval of GAVI HSS, funds will be channelled through UNICEF and WHO while the integrated management issues are being resolved or an alternative solution is being found. A programme capacity monitoring review will be conducted in Q2 2019 and this will inform the future process of HSS fund flow.

4.6 Sustainability and (if applicable) transition planning

The government continued to prioritize health and immunisation in 2017-2018. The government honoured its GAVI co-financing obligations for 2017 within the 2018 calendar year. This represented delayed payment of the 2017 co-financing obligations (totalling to $360,000). The Joint Appraisal Mission documented that the 2018 co-financing is currently due and pending; final payment date is scheduled for December 31st. **The 2018 co-financing payment amount due is $562,500.**

Within the next five years, the co-financing obligations are expected to increase up to USD 632,000 in 2019, which would constitute about 4% of the total GoSL *programmatic* expenditures on health, and less than 2% of the total government expenditures on health. [5] There is limited fiscal space to increase the contribution of GoSL to vaccines, given the limited economic development and lack of prioritization of service sectors in the Government's budget. In fact, Sierra Leone still shows high donor dependency: Government health expenditure is still four times less than what donors contribute to the total health expenditures, and overall only 6-8% of the total health expenditures in country.

The co-financing obligations are expected to be paid to UNICEF, who is responsible for the procurement of vaccines. There are consistent – often several months – delays in accessing the funds and disbursing it, leading to delays in procurement. Furthermore, the annual budgeting process for the MoHS has only in the last two years become more inclusive, enabling adequate budgeting for obligations. There are still

[5] If the absolute expenditures of GoSL remain approximately the same over the next five years, they will expected to stay at estimated USD 17 million annually for programmatic expenditures, and USD 46 million total annual expenditures if the salaries are included too.

challenges to accessing an approved budget, indicating wider cash flow issues, and weaknesses in public financial management.

The JA also further discussed the following in regards to immunization financing:

- MoF in 2018 proposed budget planning including sharing of 3 years co financing projection in July each year. It was requested that Gavi include these projections either through the vaccine renewal process or sending an official communication to MoHS/MOF. This will allow MOHS/MOF to forecast and predict the potential vaccine co-financing expectations in advance.
- The possibility of GoSL accessing Vaccine Investment Initiative (VII), it was suggested for UNICEF Country office to explore the high-level discussion between GoSL and UNICEF supply Division to understand the concept of the VII and how the country could benefit from it for the timely payment of the co-financing
- There was no information available at the JA regarding the development of Health Financing Strategy and resource mobilization strategy as most of the development partners (including IMF, WB, and DFID) were not at the JA meeting. Gavi was requested to follow up directly with these partners and also share the information with MOHS/EPI
- Sierra Leone Social Health Insurance Scheme (SLeSHI) (Act in 2017) was also reported at the joint appraisal to be under development. Information on the status, representation of immunization in the package and linkage with free Health Care Initiative (FHCI) was not immediately available and the program would follow up with relevant institutions.
- On Public Financial Management, the need to coordinate with WB and IMF on their support was noted as critical, although there was no information regarding any TCA requirements in this area. Gavi was requested to follow up directly with the WB.
- MOHS was requested to also follow up with the WB regarding coordination of Development Partners on health financing, and the status of the publication of the public health account.

4.7 Technical Assistance (TA)

The Joint Appraisal Mission documented that targeted country assistance agreements (TCA) with in-country GAVI alliance partners is strategic to health and immunisation systems development. In Sierra Leone, this TCA mechanism was in 2017 used to support US/CDC, UNICEF and WHO. And the table below summarizes the grant performance reported by the recipient agencies:

	Recipient	Award Year	Grant Allocation	Grant Expenditure	Balance	Remarks
2018 GAVI PEF/TCA	**UNICEF**	2018	386,019.81	81,828.63	304,191.18	See annex 2 for details
2018 GAVI PEF/TCA	**WHO**	2018	105,200	57,133	48,067	Balance to be utilized for remaining activities in 2019.
2018 GAVI PEF/TCA	**CDC**	2018	$13,080.00	N/A	N/A	Figure is from GAVI approved TCA
2018 GAVI PEF/TCA	**CRS**	2018	$191,809.05	N/A	N/A	Figure is from GAVI approved TCA
2018 GAVI PEF/TCA	**University of Oslo**	2018	$19,361.00	N/A	N/A	Figure is from GAVI approved TCA

2018 GAVI PEF/TCA

TCA for GAVI alliance partners in Sierra Leone were given to WHO, UNICEF, CDC, CRS, and University of Oslo according to the approved TCA. WHO and UNICEF provided updates which have been included above and in annex 2 and 3 concerning the implementation of TCA activities. CDC, CRS, and University of Oslo did not present results or achievements during the joint appraisal. The Joint Appraisal Mission documented that there may be an opportunity for expanded partners to benefit from TCA. This is highlighted in section 6. Meanwhile, UNICEF and WHO as alliance partners will maintain the same ceiling.

5 UPDATE OF FINDINGS FROM PREVIOUS JOINT APPRAISAL

Provide the status of the prioritised strategic actions identified in the previous Joint Appraisal[6] and any additional significant IRC or HLRP recommendations (if applicable).

	Prioritised actions from previous Joint Appraisal	**Current status**
Key finding 1	New and Under Used Vaccines Introduction	
Agreed country actions	• Measles Second Dose Introduction • Promotion of MCV2 uptake in planned PIRI and Routine Immunisation outreaches revitalization	Promotion of MCV2 was done using the various social mobilization platforms available including media programs, religious leader's platforms and CHW supported from other sources. PIRI did not happen due to delays in receiving related funds from Gavi.
	• MCV2 Post Introduction Evaluation (PIE) deferred to February/March 2018.	Field work for MCV2 PIE was not conducted but a desk review of the MCV2 conducted with the support of WHO. WHO to conduct the PIE in 2019 Q1
	• Measles/Rubella Vaccine Introduction • Develop a measles/Rubella Elimination Strategy for Sierra Leone by December 30th	Completed
	• Develop a cMYP addendum to support introduction of Rubella Containing Vaccine	cMYP midterm review is planned for 2019 to include HPV and MR to be introduced in 2019
	• Re-submit MR introduction application by January 15th	Application for MR introduction was resubmitted and approved by Gavi Board in 2018 for introduction in April 2019 following a catch up campaign
	• Delayed IPV Introduction following Global Supply constraints • Revised projected 2018 Total Population for Sierra Leone is 7,007,805.	The projection was revised for introduction which happened in February 2018 as planned. The targeted population was children 14 weeks from the date of introduction. The backlog cohort are being planned for when supply chain of IPV improves
	• At a target coverage of 90%, Vaccine wastage rate of 20% and a 25% buffer stock, the total	The target coverage did not change. Completed on 23 February.

[6] Refer to the section "Prioritised Country Needs" in last year's Joint Appraisal report

	IPV request for 2018 is calculated as 394,195 doses • IPV introduction date confirmed as February 2018, unless supply constraints persist • Nation-wide introduction of HPV • Procure a national consultant to facilitate HPV introduction application. • Conduct a national HPV proposal review and validation Worksop	HPV stakeholder meeting held in 2018 drawing participant from districts, PHUs, partners including CDC, WHO, UNICEF and NGOs including Focus 1000, and Marie Stopes The workshop was followed by development of application which was approved by Gavi board for introduction in October 2019
Associated timeline	• MCV2 Post Introduction Evaluation (PIE) deferred to February/March 2018 • MR introduction application by January 15th, 2018 • IPV introduction/Launching Date confirmed as February 5th, 2019 • HPV introduction Application by January 15th, 2018	Desk review was conducted in second quarter of 2018 MR introduction application submitted in January IPV introduction took place on 23 February 2018 HPV application was submitted in January 2018
Technical assistance needs	• MCV2 PIE in Q1 of 2018 • IPV Post Introduction Evaluation (PIE) in August 2018 • Logistician to support the three planned new vaccine introductions	
Key finding 2	Equity is not yet fully institutionalized in routine Immunisation programming	
Agreed country actions	• Prioritize Equity in routine Immunisation programming in all GAVI grants plans for Sierra Leone: • Provide targeted additional support to districts with a) lowest health workers density per 10,000 population (Ref SARA survey) and b) high numbers of un/under immunized children (targeting Western Area Urban/rural, Bombali, Kono, Bo and Kailahun • Rationalization of immunisation services delivery through RI micro-planning	The results of the equity analysis will inform prioritization and further planning A total of 80 health workers were identified in the 6 priority districts for hard to reach communities with incentive from Gavi disbursed in October 2018 to be paid to HWs • Micro planning reprioritized for early 2019 due to late disbursement of funds and competing priorities • Performance based incentive introduced for outreach services in all PHUs, for DOOs, Cold

	• Introduce performance-based incentives for routine immunisation Affirmative action in deployment of immunisation resources (transport and cold chain) to target hard to reach or marginalized districts/populations Conduct a detailed Immunisation Equity Analysis	Chain technician and program staff at national level. Funding was disbursed in October 2018 and implementation is suggested to commence in Q4 2018. Orange money transfer platform is being engaged by MoHS to ensure the targeted beneficiaries are reached • Ongoing activities: CCEOP implementation and procurement and distribution of motorbikes • Immunisation equity assessment commenced in November 2018 due to delayed fund disbursement and challenge identifying TA in appropriate time. • Preliminary report of the national level desk review and data analysis which identified 8 districts was presented and district level detailed CEA is to be completed before end of Q1 in 2019
Associated timeline	GAVI/HSS operations plan and Budgets reflecting geographical Equity by 30th November Immunisation Equity Analysis by Q3 2018	Assessment commenced in November (Q4) 2018 to be completed by before the end of Q1 in 2019
Technical assistance needs	Immunisation Equity Analysis	
Key finding 3	Immunisation Supply Chain for Sierra Leone will benefit from optimizations in a) established vaccine supply schedules, b) retooling the cold chain assistants/operators (skills and kits), c) introducing vaccine utilization monitoring and d) systems design review and re-configurations in the life of CCEOP and HSS grants	
Agreed country actions	Improving Vaccine Supply and security Conduct regular preventive maintenance and repair of cold chain equipment; Include expansion of Vaccine Supply trucks and fuel for intra-district vaccine distributions in operational plans for GAVI/HSS Implement and monitor the EVM comprehensive improvement plan	Ongoing. 28 Cold chain technicians two from each district of the 14 districts were trained on preventive maintenance and installation of solar refrigerators is near completion under the CCEOP implementation Procurement of 2 refrigerated truck for vaccine distribution on going, Fuel for vaccine distribution available from Gavi and being used The EVM improvement plan implementation is ongoing especially with the CCEOP. Recently commenced implementation of HSS around 50% of activities are completed or ongoing. 15 set Cold chain tool kits were procured one for each districts and national level on the Gavi HSS in 2018

	Improving skills and competencies of cold chain assistants and technicians Plan and procure cold chain tool kits for all cold chain assistants/operators in year 1 of GAVI/HSS Prioritize Training of all cold chain Assistants/operators using GAVI/HSS Medium to long-term training for immunisation logisticians Improving systems design for effective cold chain investments Conduct an immunisation systems design workshop to generate key considerations for future investments (using CCEOP or HSS grants) CCEOP operational deployment plans should among others include per capita cold chain coverage analyses	Cold room officers and the District operation officers were trained on Vaccine management in 2018 under the HSS Two pharmacists (one from EPI program and the other from Directorate of Drugs and medical supplies) under the HSS are undergoing a post graduate program in supply chain management Workshop was completed and report disseminated in June CCEOP operational deployment plan (ODP) was informed by the comprehensive cold chain assessment and implementation of the ODP is on-going
Associated timeline	Procure 2 Vaccine trucks in 2018 • EPI logistician initiated into a medium-term training program by 30th November 2017 • Immunisation Systems workshop conducted by Q2 of 2018	The procurement has commenced and delivery planned for end of Q1 in 2019 The training program of two supply chain officers in Rwanda commenced as planned in October 2017 Immunisation system design introduction and modeling workshop happened in June 2018 as planned
Technical assistance needs	National Cold Chain/EPI logistician Immunisation Systems Design review for Sierra Leone	
Key finding 4	Immunisation monitoring in Sierra Leone is bedevilled by a) poor census statistics, b) lack of institutional mechanisms for data quality assurance, c) lack of immunisation specific coverage survey data and d) Low coverage case-based surveillance for VPDs	
Agreed country actions	• Improving Immunisation Target populations • Obtain the latest national housing and population report from Statistics Sierra Leone • Collate NIDs outputs data to validate population reports from Statistics Sierra Leone • Conduct Head counts in districts with large variations (>10%) population estimates from	Report obtained and incorporated into 2019 forecasting This was not completed This was not completed

	Statistics Sierra Leone and NIDs projections. • Improving institutional mechanisms for Data Quality Assurance • Develop and implement a Data Quality Improvement plan • Bi-annual immunisation Data Quality Validation missions • Integrate use of EPI performance monitoring graphs in all supportive supervision visits • Immunisation coverage monitoring • Collate immunisation coverage data generated from other national surveys like DHS and MICS • Use Case-based surveillance databases to generate routine EPI coverage estimates for measles and OPV • Use and monitor immunisation coverage trends using the WHO/UNICEF estimates • Conduct an EPI-specific coverage verification survey • Improving case-based Surveillance sensitivity • Review Active Surveillance planning for all districts • Introduce ODK monitoring of all active surveillance visits by all District Surveillance Officers • Review and explore linkages between AVADAR and emerging community-based surveillance for IDSR	Data quality improvement plan was created and disseminated Data quality self-assessment was conducted in 2018 Partly implemented. Supportive supervision activities were limited due to funding constraints and made use of data to identify areas of concern DHS was not completed in 2018. MICS and SARA data was analysed. This activity was covered by surveillance with information about VPDs conveyed to EPI This takes place on an annual basis and ad hoc as needed to provide reporting based on estimates. This was not completed in 2018 due to lack of TA and late disbursement of funds. Quarterly active surveillance plan is reviewed by DHMT quarterly ODK was introduced as planned and currently in use. AVADAR currently used for AFP surveillance in 4 districts. Review has not taken place for use in IDSR.
Associated timeline	• Obtain the population report from Statistics Sierra Leone by November 30th, 2017 • Provide Target Populations for 2018 to all Districts by January 30th, 2018 • Data Quality Improvement plan finalised by Q1 of 2018 • Introduce ODK for Active Search documentation in all districts by June 2018	

	• EPI Coverage survey conducted by Q4 of 2018	
Technical assistance needs	Data Quality Improvement plan 2018-2021 EPI Coverage Survey	
Key finding 5	Immunisation program leadership, management and coordination is challenged by a) Low staffing levels, b) Irregular/infrequent oversight from the political leadership, c) Irregular review and updates of national immunisation policy implementation guidelines and d) lack of a fully constituted National Immunisation Technical Advisory group and	
Agreed country actions	• Improving immunisation program staffing	
	• Strategic investments in medium to long term training programs	Two pharmacists (one from EPI program and the other from Directorate of Drugs and medical supplies) under the HSS are undergoing a post graduate program in supply chain management Activity not completed
	• In-service training (IIP and RED/REC	
	• Embedded technical assistance to the immunisation program	Consultant from Aspen Management for Health is in place within EPI Not yet completed
	• Strategic and selective short-term Technical assistance from in-country alliance partners using GAVI technical cooperation modalities.	
	• Conduct immunisation Training Needs Assessment to inform development of a training plan.	Formal assessment of needs was not conducted , however, training needs were identified within the cMYP
	• Improving coordination and oversight of immunisation program functioning	
	• Make EPI a standing Agenda for all scheduled HSSG/HSCC meetings	EPI was on agenda during 2018 HSSG, however, only one HSSG meeting occurred in 2018. Not completed
	• Develop a bi-annual Immunisation Program League table of performance and publish through high visibility media outlets	
	• Conduct monthly review meetings at district and chiefdom levels with health facility in-charges, councils, civil	Review meetings take place during the in-charge meetings These meetings did not take place in 2018

	society and other community stakeholders; • Conduct bi - annual EPI review meeting with DHMT's, Council and District Officers (DO's), key civil society representatives and Community stakeholders • Update key immunisation program policy implementation guidelines • Conduct a comprehensive EPI program review and use findings to update the cMYP (2017-2021) • Conduct an EPI Coverage verification surveys and use the findings to update the milestones articulated in the 2017-2021 cMYP • Update and publish Immunisation in Practice guidelines	No comprehensive EPI program review has been conducted in 2018 This coverage verification survey has not been completed in 2018. IIP guidelines were last updated in 2016.
Associated timeline	• Investments in training integrated in the GAVI/HSS programming for 2018 by 30th Nov 2017 • GAVI and alliance Partners in-country should prioritize embedded TA proposals in the PEF TCAs by 30th November • National EPI/IDSR review meetings quarterly • Comprehensive EPI program review by Q3 of 2018 • Updated Immunisation in Practice guidelines by Q4 of 2018	
Technical assistance needs	• Embedded TA for HSS coordination and National Immunisation Operations Officer • Immunisation Training Needs Assessment and Training Plan development • Comprehensive external EPI Program review	
Key finding 6	• Community dialogue and promotion of demand generation for immunisation is been largely for promotion of SIAs and less if any for routine immunisation	

Agreed country actions	• Advocacy • Plan and implement a high visibility immunisation week for 2018. • Conduct media training on crisis communication • Creation of a Paramount chiefs forum for immunisation • Communication • Develop a brand (logo and other visual aides) for immunisation • Development and production of EPI promotional materials • Appointment of a National Immunisation Champion to kick start Immunisation Brand Promotion • Integrate crisis communication within the already existing risk communications • Community engagement • Establish an Immunisation Social Mobilization network in the six priority districts • Immunisation defaulters tracing • Development and production of immunisation promotional drama on immunisation • Support at least 2,000 CHWs in priority districts with large numbers of unimmunized children • Formative studies for immunisation • KAP study for immunisation • Formative studies for IPV introduction • Epidemiology of Immunisation Defaulters	No in-country immunisation week was conducted in 2018 This has not taken place in 2018 Chiefdom meetings take place during SIAs, however, no specific immunisation forum for paramount chiefs was created This was not completed VVM posters were created, banners on immunisation schedule, PPM, and other promotional materials were created and disseminated N/A Draft of this was created by the Health Communication Hub; however, it is currently in draft. Kombra network was formed and comprised of all stakeholders nationwide. Defaulter tracing is taking place through the CHWs. ICAP also supported defaulter tracing in 10 facilities in each of 4 districts, and Vaxtrack in WA Urban. Jingles, skits and other were created in 2018 for SIAs 2,136 CHWs were supported in Kono and Bombali KAP will be completed in 2019. Not undertaken. Not undertaken.
Associated timeline	Immunisation week in April 2018 Media Training in crisis communication by Q2 2018	
Technical assistance needs	KAP Study on Immunisation Documentation and study of immunisation defaulters	

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).

28 out of 40 recommendations made in the Joint appraisal of 2015 were either done or ongoing. The pending or not implemented recommendations are due to delays in Gavi disbursements as a result of ongoing discussions regarding fund flow.

6 ACTION PLAN: SUMMARY OF FINDINGS, ACTIONS AND TECHNICAL ASSISTANCE NEEDS IDENTIFIED AND AGREED DURING THE JOINT APPRAISAL

Briefly outline the **key activities to be implemented next year** with GAVI grant support.

Overview of key activities planned for the next year:

The Joint appraisal reviewed the functioning of the national immunisation programme and documented that the investments in post-Ebola recovery were yielding fruits. The trends in national immunisation programme coverage for all antigens had increased in 2016. DTP-3 had increased from 86% in 2015 to 98% in 2016. The Joint appraisal then discussed and agreed on the following priorities for 2018/2019:

- Functionalization of National Immunisation Technical Advisory group
- Updating National Immunisation Policy and Operational/implementation guidelines
- Rationalization of immunisation services delivery through RI micro-planning
- GAVI/HSS programming orientations to invest in priority districts for geographical equity in health workers density per 10,000 population and immunisation coverage (targeting Western Area Urban/rural, Bombali, Kono, Bo and Kailahun
- Revitalization of routine immunisation outreaches (performance based incentives)
- Vaccine security and quality assurance
- New vaccine introductions of HPV, MR SIA and RI
- Conduct a comprehensive EPI program review and Coverage verification surveys
- GAVI co-financing obligations
- Immunisation workforce development
- Strategic investments in medium to long term training programs
- In-service training (IIP and RED/REC)
- Embedded technical assistance to the immunisation program
- Strategic and selective short-term Technical assistance from in-country alliance partners using GAVI technical cooperation modalities.
- Immunisation data quality improvement
- Strengthening Vaccine-preventable diseases surveillance, with emphasis on scaling up case-based surveillance for measles, New Vaccines surveillance and NNT
- Advocacy, community engagement and communications for immunisation demand creation
- All these priorities have been considered in finalization of the HSS implementation plan for year 1 and PEF/TCA requests by the in-country alliance partners for Sierra Leone

Thematic Area 1:	Supply Chain Management
Agreed country priority actions	• Capacity building of service providers on vaccine management especially on wastage (IIP) • Cold chain management - temperature monitoring, mapping of cold room and provision of Fridge Tags • Supportive supervision – revision of check list and conduct supervision at all levels • Strengthen immunisation waste management • Continue immunisation Supply Chain system design process • Procurement of cold chain equipment and vehicles for vaccine distribution • Conduct comprehensive EVM self-assessment • Increase visibility of vaccine utilization at all levels (Supply chain data) and make use of this information in distribution planning

	• Training of National Cold Chain Engineers • Repair of Cold Chain Equipment
Associated timeline	Complete or commence all above within 2019
Technical assistance needs	UNICEF CHAI ICAP
Thematic Area 2:	Service Delivery
Agreed country priority actions	• Intensifying Defaulter tracing and outreach services at facility level • Provide incentives and transportation to ensure that outreach services take place and are effective • Conduct micro-planning for routine immunisation, MR, and HPV • Conduct monitoring & supportive supervision at all levels • Enhance the role of CHWs in immunisation activities (defaulter tracing, demand generation, etc.) • Introduction of new vaccines (MR and HPV) (CDC and CHAI) • Institutionalizing monitoring of AEFIs • Conduct EPI coverage surveys • Implement innovative strategies from findings of equity assessment in order to provide services with a focus on addressing equity issues • Conduct operational research to identify improvements in service delivery
Associated timeline	Complete or commence all above within 2019
Technical assistance needs	UNICEF WHO Focus1000 IPA CHAI
Thematic Area 3:	Social Mobilization/Demand Creation
Agreed country priority actions	• Enhance routine immunisation sensitization messages • Bring in service providers as part of the social mobilization process (community engagement) • Integrate messaging with other programs and directorates e.g. child health activities, reproductive health activities, • Evidence generation on social and cultural norms (equity in social mobilization messaging) • Integrate AEFI into social mobilization messaging • Provide messages that are tailored to ensure equity and appropriate messages with the most suitable messenger • Capacity building of social mobilization officers to improve on communication skills • Strengthening community structures on social mobilization (including CHWs, VDCs, SM pillars, etc.)
Associated timeline	Complete or commence all above within 2019
Technical assistance needs	CDC (no Gavi TCA required) UNICEF Focus1000 HED IPA WHO
Thematic Area 4:	Data Management Systems

Agreed country priority actions	• Migrate DVDMT to DHIS2 tool • Investigate possibility of development of app to capture immunisation data at facility level • Review of required data elements, revision of tools and printing • Training of staff on updated tools • Supportive supervision at all levels including routine and provision of appropriate feedback • Data Quality Interventions including implementation of data improvement plan • Evaluation of vaxtrack for electronic reporting to identify recommendations for continuation and linking to DHIS2 or discontinuation. • Triangulation of data to identify numerator challenges and options to improve denominator, and improve data quality
Associated timeline	Complete or commence all above within 2019
Technical assistance needs	WHO CDC (no Gavi TCA required) CHAI eHealth
Thematic Area 5:	Leadership, Management & Coordination
Agreed country priority actions	• Leadership and management capacity building at all levels • Coordination of logistic working group • Defined roles and responsibilities of all MoHS personnel • Partner mapping and areas of scope of work • Coordination with CHW Programme • Coordination of stakeholders (through TCC, HSCC, and HSSG) • Facilitation of NITAG
Associated timeline	Complete or commence all above within 2019
Technical assistance needs	AMP Health ICAP WHO CDC (no Gavi TCA required) UNICEF CHAI

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

Briefly describe how the Joint Appraisal was reviewed, discussed and endorsed by the relevant national Coordination Forum (ICC, HSCC or equivalent), including key discussion points, attendees, key recommendations and decisions, and whether the quorum was met. Alternatively, share the meeting minutes outlining these points.

If applicable, provide any additional comments from the Ministry of Health, GAVI Alliance partners, or other stakeholders.

This joint appraisal report was not approved in a formal sitting of the Ministry of Health and Sanitation HSSG/HSCC meeting because the fourth quarter session did not take place after the annual JA process and a sufficient review period did not exist. The Ministry of Health and Sanitation, WHO, UNICEF, and partner representatives have reviewed the report and endorsed the contents for submission to the High-level Review Panel.

The MoHS is committed to supporting the implementation of the priorities highlighted in this JA in collaboration with the Gavi alliance and expanded partners.

Minister of Health and Sanitation

Minister for Finance/Planning

UNICEF Country Representative to Sierra Leone

WHO Country Officer in Charge

ANNEX 1

Compliance with GAVI reporting requirements

Please confirm the status of reporting to GAVI, indicating whether the following reports have been uploaded onto the Country Portal.

It is important to note that delayed reporting may impact the decision by GAVI to renew its support.

	Yes	No	Not applicable
Grant Performance Framework (GPF) reporting against all due indicators	X		
Financial Reports		X	
Periodic financial reports		X	
Annual financial statement		X	
Annual financial audit report		X	
End of year stock level report	X		
Campaign reports		X	
Immunisation financing and expenditure information		X	
Data quality and survey reporting		X	
Annual desk review		X	
Data quality improvement plan (DQIP)		X	
If yes to DQIP, reporting on progress against it			X
In-depth data assessment (conducted in the last five years)		X	
Nationally representative coverage survey (conducted in the last five years)	X		
Annual progress update on the Effective Vaccine Management (EVM) improvement plan		X	
Post Introduction Evaluation (PIE)		X	
Measles-rubella 5 year plan		X	
Operational plan for the immunisation program		X	
HSS end of grant evaluation report			X
HPV specific reports			X
Transition Plan			X

ANNEX 2

B. **MoHS HSS grant performance related to procurement**

- Procurement related component of Gavi HSS support was disbursed to UNICEF in February 2018. Many of the procurement activities have been completed with items delivered to MoHS. The table below shows the details of the implementation status.
- Current balance including commitment of $303,338.25 is for procurement of refrigerated truck is **$702,406.78**

B: Update on procurement:

Item	Quantities	Procurement status
Motor Bikes for Vaccinators	293	Procurement completed. The motorcycles are already assembled for distribution
Cold chain maintenance kits	14	Completed and delivered to EPI program of MoHS
Fire extinguishers for the cold room	15	Completed and delivered to MoHS (EPI program)
Generator	1	Completed and delivered to MoHS (EPI program) Installation to be supported
Laptops for new DOOs	15	Completed and delivered to EPI program of MoHS
CCEOP clearance	220	Completed. Clearance and demurrage payment outstanding
Refrigerated Trucks	2	There was initial delay due to insufficient funds. Additional funds disbursed in October and procurement on going for delivery before April 2018
Connection of central cold store structure to priority power line		Though with initial delay, electrification is completed. EPI is returning the funds back to UNICEF for the connection to priority line to be completed by EDSA before the end of the year. The operationalization of the new cold rooms is expected early in 2019
Printing and distribution of EPI tools and document		This is delayed as the tools are to be reviewed at a workshop before printing. The funds for the review meeting arrived only in October. Now the meeting is planned for early 2019.
Procure Electronic Vaccine Management Systems (Tablets and battery)	65	Procurement discontinued at the request of EPI program based on the information from CDC indicating the availability of tablets in all PHUs that could be used for VaxTrack services
Procure protective gear/clothes for the cold room		Specification has been a challenge for the protective gear. However, UNICEF is checking if PPE available in the warehouse may be useful in the cold room
Bombali and Kono districts CHWs and peer supervisors' incentives	2,145	Kono and Bombali districts are among the few districts where the incentive payment started with DFID's funds and UNICEF's technical/implementation support. As DFID's support for the incentives ended in September

		2018, UNICEF started to use Gavi grant for the incentive payment in these two districts.

Procurement Summary of Expenditures (USD) at 27 Nov 2018	
Description	Cumulative Expenditure
Programmable Expenditure:	877,691.16
Indirect support cost 5%	43,884.56
Total:	921,575.72
Funds Received in USD:	1,623,982.50
Unspent Balance:	702,406.78

C: **Gavi grant for MoHS HSS performance**

- Delays in Gavi fund disbursements affected achievements of HSS targets. Funds were received in early October 2018 and the country is preparing an acceleration plan. However, PCV switch exercise was pre-financed by HSS, while the country waited to receive Gavi funds for this specific activity. Current grant balance stands at $**1,822,880.13** including cost savings **($194,831).**

C: Below are the ongoing HSS priorities shifted to 2019

Activities	**Status**
Incentive of HCWs to carry out immunisation services (80 new HCWs per year)	Effective from October 2018 UNICEF supported in identifying service provider for mobile money transfer, developing the agreement between Orange SL and MoHS. Agreement is now with MoHS for CMO's signature. EPI program has been finalizing the list of beneficiaries for payment already reviewed by Orange.
Incentive of 28 new DOO's	Same as above
Incentive for District Cold Chain Technician (2 per district)	Same as above
Transport allowance for outreach	Same as above
Performance based incentives for vaccinators for outreach	Same as above
Incentives for EPI Program Management Staff	Same as above
Train DOOs and District Cold Chain Officers in each district in logistics, cold chain and stock management, including training in FT3 (conducted in Western Area)	Activity completed with the support of UNICEF including the CCL consultant on the TCA
National Logistics Working Group	Ongoing. UNICEF supports the organization of the meetings together with the CCEOP Project Management Team (PMT)
Vaccine clearing	Ongoing
Vaccine distribution from districts to PHUs	Funds transferred early in October 2018 to EPI program for central – district level distribution and to the 14 DHMTs for district – PHUs level distribution for Q4.
EPI Operational Program Support Costs	Funds transferred to EPI program early in October
Perception Study (KAP): Tools, Trainings, Pre-Test, Data Collection, Analysis, Report, Dissemination	Protocol development finalized. Data collection to resume in January 2019
Central level temperature monitoring device (an item under CCEOP in the detailed HSS budget)	Procurement already commenced

Review the 2014 EPI-RI communication strategy and incorporate the findings of the KAP study. Print materials and organize mass campaigns	Prioritized for 2019
Platform and network partners to actively participate in the design, development of community action plans etc.	Prioritized for 2019
Review the existing partner and social mapping to understand geographic spread and areas of activity focusing on community engagement	Prioritized for 2019
Capacity building on community engagement principles and approaches, monitoring, strengthening skills to develop linkages between health facilities and communities to disseminate effective communication messages for community based platforms.	Prioritized for 2019
Monitoring and Coordination by Health Education Division (HED) of MoHS	Prioritized for 2019
Conduct PIRI in 6 priority districts	Prioritized for 2019

C: HSS Summary of Expenditures (USD) at 27 Nov 2018 (funds channeled through UNICEF for priority activities)

Description	Cumulative Expenditure
Programmable Expenditure:	118,828.45
Indirect support cost 5%	5,941.42
Total:	124,769.87
Funds Received in USD:	1,947,650.00
Unspent Balance:	1,822,880.13

2018 PEF/TCA (partnership engagement framework/Targeted country assistance) activities performance UNICEF supported the following:

- CCEOP 2017 Operational Deployment Plan (ODP) implementation. At about 90% completed and the National Logistics Working Group (NLWG)/ CCEOP project Management Team (PMT) remain functional.
- Immunisation Supply Chain system design introduction and modeling workshop. With the support of UNICEF Supply Division, TA has been identified for data collection and analysis and modeling, the result of which will be presented to stakeholders in 2019 at a workshop where the MoHS will choose a model to pilot and subsequently scale up
- Introduction of IPV into the routine immunisation system in the country. The pending Post introduction evaluation (PIE) is because of WHO's inability to mobilize a TA for the activity. This resulted in the request of MoHS to Gavi for 6-month no-cost-extension of the grant
- Social mobilization and community engagement to promote routine immunisation through community based platforms and mass media.
- TOR for equity analysis. Though it has been delayed due to late funds transfer and unavailability of TA, which resulted in use of national consultant identified by Gavi, UNICEF supported the activity with two HQ staff both with mission to the country and remotely. It is expected that UNICEF will also support phase 2 of the analysis in Q1 2019
-

TCA UNICEF Summary of Expenditures (USD) at 27 Nov 2018

Description	**Cumulative Expenditure**
Programmable Expenditure:	75,767.25
Indirect support cost 8%	6,061.38

Total:	81,828.63
Funds Received in USD:	386,019.81
Unspent Balance:	**304,191.18**
Note: As part of unspent balance, $196K is in commitments and pre-commitments for salaries. This leave $65k as unspent, which includes RI communication TA for KAP and RI strategy development and HQ cost.	

ANNEX 3: Select slides from WHO Presentation at JA

2018 PEF/TCA Key activities implemented, WHO/SLE

#	Supported EPI program areas	Main milestones attained
1	Support Country to introduce MR into routine	Supported MoHS to: ▪ Develop e MR application and POA for submission to GAVI. ▪ Plan pre-implementation activities for MR Introduction Strategy, ▪ Develop tools, guidelines and training materials for MR introduction.
2	Support the introduction of IPV into Routine Immunization, and PIE for IPV & MCV2	• Supported IPV introduction – Training, Monitoring & Supervision. • MCV2 PIE conducted in May 2018 • Plans for IPV PIE in advanced stage – Q1 2019
3	Assessment of new vaccine (Rota, PBM, Men A) surveillance performances	• Sentinel surveillance meetings facilitated. • Quarterly performance reviews of NUVI sentinel sites • Monthly surveillance and laboratory support provided to NUV sentinel sites
4	Support Data Quality Assurance	• Supported development of Data Quality Improvement Plan (DQIP) • Supports Bi-annual EPI data Validation • Quarterly VPD and IDSR data harmonization meetings.
5	Vaccine Quality Assurance	• Monitor implementation of EVM improvement plan. • Establishment of Sentinel Vaccine Utilization Monitoring, till DHIS provides nationwide data
6	Leadership and management coordination	• Recruitment of Tech Officers – EPI (Int'l & NOC) in progress while plans in advanced stage to receruit the other 2 NOC Positions.

GAVI HSS With WHO/Sierra Leone, 2018

	Award Year	Award Expiry	Total Grant Allocation $	Cost for agreed Q4 Activities	Q4 Expenditure so far $	Balance $	% Budget Impl.	Remarks
GAVI HSS	2018	31st March 2019	936,044	46,003	27,733	18,270	60.3%	Grant was released to WHO towards end of September 2018. At a TCC planning/workplan review meeting held in UNICEF Conference hall in October 2018 TCC agreed that given the limited time in Q4 with a plethora of activities, that implementable activities be identified . The remaining ones were moved for re-programing & implementation in 2019 to allow for quality activity implementation.

However, against initial Q4 budget of $241,185, implementation rate = 11.5%

ANNEX 4: Equity Analysis Summary Districts Score Table

Key for Scoring

The number of unvaccinated children for DTP3 as updated. Based on the numbers reported by district, I have given weighted scores as "≥5000=0, 1000-4999=2 and <1000=4"

1. DTP3 coverage from MICS using the scores ">90%=2, 81%-90%=1 and <81%=0"
2. MCV1 coverage from MICS using the scores ">80%=2, 71%-80%=1 and <71%=0"
3. ANC4+ coverage from MICS using the scores ">80%=2, 71%-80%=1 and <71%=0"
4. Skilled birth attendants coverage from MICS using the scores ">80%=2, 71%-80%=1 and <71%=0"

Summary Districts Score Table

District name	EPI Coverage Data	Survey Results (MICS 6)				Total scores
	Score for unvacc.	Score DTP3 cov	Score MCV1	Score 4+ ANC visit	Score SBA	
Year of data : ->	2017	2017	2017	2017	2017	Cum scores
Bo	0	2	2	1	2	7
Bombali	0	1	2	2	2	7
Bonthe	2	1	2	1	2	8
Kailahun	2	2	2	2	2	10
Kambia	4	0	1	1	0	6
Kenema	4	2	2	1	2	11
Koinadugu	4	1	2	1	1	9
Kono	0	1	2	0	2	5
Moyamba	4	1	2	1	0	8
Port Loko	0	0	0	2	0	2
Pujehun	2	2	2	2	2	10
Tonkolili	2	0	1	1	1	5
Western Rural	2	0	1	0	1	4
Western Urban	0	1	2	2	2	7