

Joint appraisal report

When submitting this report, the country confirms that the grant performance framework has been reviewed as part of this joint appraisal. Performance against agreed metrics has been analysed, and explained where relevant.

Country	Ghana
Reporting period	1 January – 31 December 2015
Fiscal period	January-December
If the country reporting period deviates from the fiscal period, please provide a short explanation	NA
Comprehensive Multi Year Plan (cMYP) duration	2015 – 2019
National Health Strategic Plan (NHSP) duration	2014 – 2017

1. SUMMARY OF RENEWAL REQUESTS

[These tables will be pre-populated by the Gavi Secretariat. If there are any changes to be made, this should be discussed as a group during the joint appraisal and flagged in the report – see the guidance document for more details]

Programme	Recommendation	Period	Target	Indicative amount paid by Country	Indicative amount paid by Gavi
Pneumococcal (PCV13), 4 dose(s) per vial, LIQUID	Extension	2017	1,151,871		
Rotavirus, 1 dose(s) per vial, LIQUID	Extension	2017	1,151,871		
Pentavalent, 10 dose vial, LIQUID	Extension	2017	1,151,871		
Yellow Fever, 10 dose vial, LYOPHILISED	Extension	2017	1,151,871		
Meningococcal A Conjugate Vaccine, 10 dose vial, LYOPHILISED	Renewal	2017	1,151,871		

Indicate interest to introduce new vaccines or HSS with Gavi support*	Programme	Expected application year	Expected introduction year
noo with Gavi support			

*Not applicable for countries in final year of Gavi support

2. COUNTRY CONTEXT (maximum 1 page)

This section does not need to be completed for joint appraisal update in interim years

[If relevant, <u>comment only on any changes since the previous joint appraisal</u> to key contextual factors that directly affect the performance of Gavi grants – see guidance document for more details]

The Ministry of Health (MoH) is the policy-making arm of the Ghana health sector and maintains its role as the central decision-making body in health matters. The Health Sector Working Group (HSWG) also referred to as the Health Sector Coordinating Committee (in immunization circles) is the highest level decision making body of the health sector. This is chaired by the Honorable Minister of Health and oversees the overall implementation of Gavi support to Ghana. It is made up of representatives from MOH and its Agencies, Development Partners (DPs), CSOs, private sector and other stakeholders in the health sector.

The Inter-Agency Coordinating Committee (ICC) for immunization provides leadership and direction for the immunization programme. The Director General of the Ghana Health Service chairs ICC meetings. Its membership includes representatives from MOH, GHS, Ghana Coalition of NGOs in Health (GCNH) and DPs including WHO, UNICEF, USAID, JICA, Rotary Club, Latter Day Saints and Red Cross. Three ICC meetings were held in 2015.

Ghana is committed sustaining the gains made in the EPI Programme. Governments, past and present, have been supportive of the immunization programme. The country has been fulfilling its co-financing obligation with Gavi since 2004.

Ghana achieved high immunization coverage rates for all Gavi supported antigens. The country maintained the 95% coverage for Penta-3 in 2015. 112 (51.9%) districts achieved Penta-3 coverage of 90% and above, 62 (28.7%) districts had coverage rates between 80-89%, 41 (19%) districts had coverage rates between 50-79% and 1 (0.5%) district had coverage rate below 50%. The district that recorded the lowest coverage together with other districts with challenges were provided with technical and financial support to improve performance. These district participated in Bottleneck Analysis workshop which was geared towards identifying and addressing major bottlenecks impeding immunization performance. The results of the 2014 Ghana Demographic and Health Survey (DHS) demonstrate that there is no significant difference in immunization performance with regards to sex, socio-economic status and religion.

Ghana will enter Gavi graduation in 2017. A transition plan has been developed by the country with a detailed immunization financing and sustainability plan to ensure the continuous existence of the immunization programme. As part of efforts to secure funding for the co-financing of vaccines and going forward to transition from Gavi support, Cabinet has taken a decision to include statutory funds in sector budget allocation. Efforts are being made to explore domestic financing including: 1) increasing the 18.5% Social Security National Insurance Trust (SSNIT) tax; 2) "sin" taxes (e.g. tobacco, alcohol) earmarked for the health sector and portion of communication tax which are lower priorities but could help fill funding gaps; and 3) analyze level and role of local government funding.

The total immunization expenditure in 2015 was \$ 33,756,102. The Government of Ghana contributed \$ 7,954,623 (23.5%). This excludes shared health system cost including salaries of immunization workers which are fully paid by government.

There is adequate human resource for immunization service delivery from the national level to the service delivery point. There is a good immunization supply chain system in place for the distribution of vaccines and devices. Plans are underway for the country to deploy the logistics management information system (LMIS) for immunization commodities. Daily immunization services are provided in all health facilities. Outreach sessions are conducted to reach-out to communities. Camp-out and mop-ups are conducted where necessary. Vaccine preventable diseases surveillance (VPDs) constitutes a major part of the integrated disease surveillance and response (IDSR) in Ghana. Health staff at all levels are responsible for reporting all suspected cases of vaccines preventable and other priority diseases. There is a Communication Plan to guide implementation of communication activities in the health sector. There is collaboration between the NIP and the media for public awareness and support. Advocacy takes place at all levels.

The NIP collaborates with the Food and Drugs Authority (FDA) for safety monitoring. Adverse Events Following Immunization (AEFI) is monitored at all levels using a standard protocol .The Programme will collaborate with the Ghana Standard Authority (GSA) in calibrating cold chain equipment. The National Immunization Technical Advisory Group (NITAG) is still in the formative stage.

In Ghana, immunization services are not affected by political changes. Governments, past and present, have been supportive of the immunization programme. The current cMYP of the EPI Programme, dubbed "A Plan to Reach Every District to Reach Every Child" covers the period 2015 to 2019.

3. GRANT PERFORMANCE AND CHALLENGES (maximum 3-5 pages)

Describe <u>only</u> what has changed since the previous year's joint appraisal. For those countries conducting the joint appraisal 'update', only include information relevant to upcoming needs and strategic actions described in section 5

3.1. New and underused vaccine (NVS) support

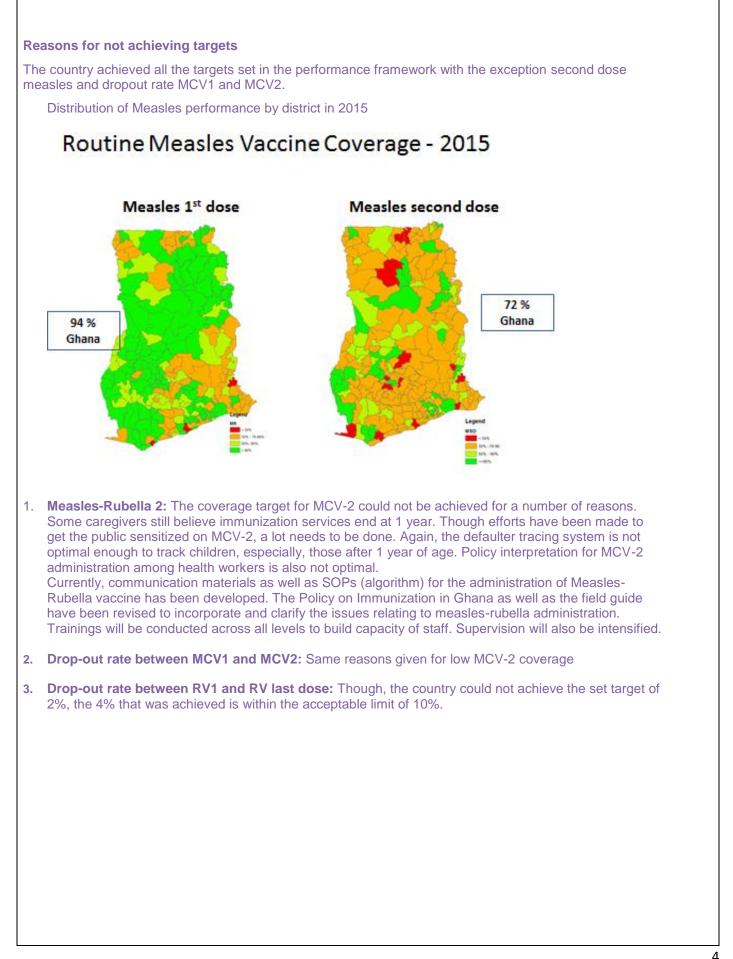
3.1.1. Grant performance, lessons and challenges

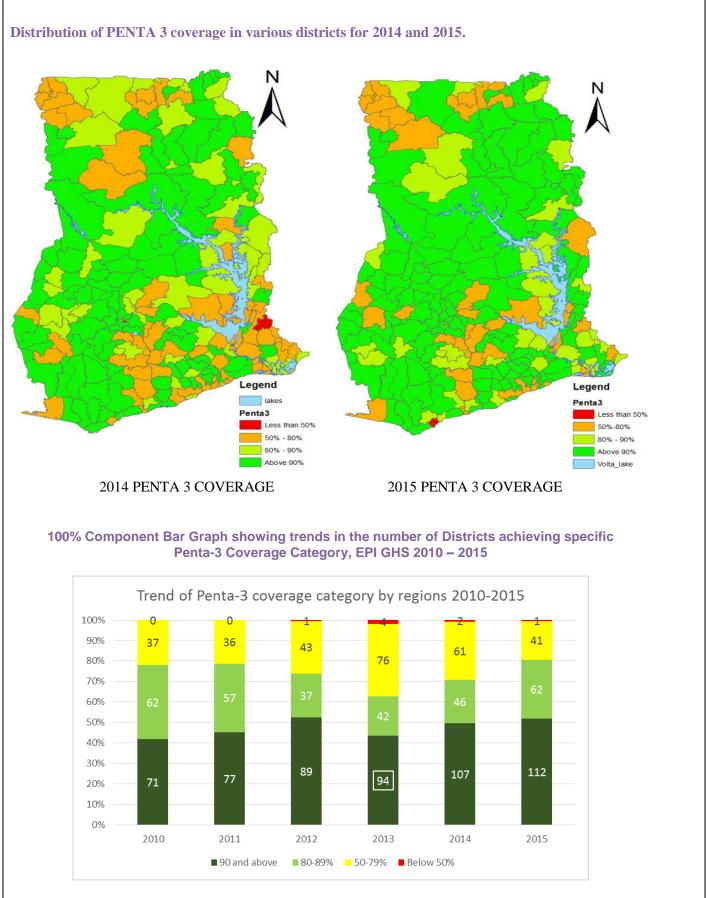
[Comment on the relevant bolded areas listed in the table in this section of the guidance document, e.g.: programmatic performance of each vaccine programme against approved targets and planned activities, including progress and bottlenecks in implementation; actual versus planned financial expenditure, associated challenges, proposals for using unspent funds, and complementarity between all cash grants]

Programmatic Performance and Challenges

The table below shows key indicators for Gavi supported programme, the approved targets and the achievements in 2015;

Indicators	Target	Achievement
Penta-3 Coverage	94%	95%
PCV-3 Coverage	94%	96%
Measles-Rubella-1	94%	94%
Measles-Rubella-2	85%	72%
Rota-2	94%	94%
Yellow Fever	94%	95%
Drop-out rate between Penta1 and Penta3	2%	2%
Drop-out rate between PCV1 and PCV3	2%	2%
Drop-out rate between MCV1 and MCV2	10%	23%
Drop-out rate between RV1 and RV last dose	2%	4%
Percentage of districts or equivalent administrative area with Penta3 coverage greater than 95%	60%	54%
Percentage of districts or equivalent administrative area with Penta3 coverage greater than 80%	80%	81%
Percentage of districts or equivalent administrative area with Penta3 coverage between 50% and 80%	20%	19%
Wastage rate - Penta	20%	
Wastage rate - PCV	5%	
Wastage rate - Rota	5%	
Wastage rate - Measles	25%	
Wastage rate – Yellow Fever	25%	





The Graph above shows trends in the number of districts achieving Penta-3 Coverage of 90%. From the graph, whilst 107 districts achieved 90% and above coverage for Penta 3 in 2014, about 112 districts achieved this

in 2015. Whilst the number of districts that achieved Penta 3 Coverage of less than 50% reduced from two (2) districts in 2014 to one (1) district in 2015. The district that recorded the lowest coverage together with other districts with challenges were provided with technical and financial support to improve performance. These districts participated in Bottleneck Analysis workshop which was geared towards identifying and addressing major bottlenecks impeding immunization performance.

In 2014, Ghana reported an administrative coverage rate of 95% for Penta-3 in the WHO-UNICEF Joint Reporting Form (JRF) and the Gavi Joint Appraisal (JA). The country achieved the same administrative coverage rate (95%) in 2015 which was reported in the 2015 JRF and JA.

With regards to the official estimate, Ghana reported 98% in the JRF in 2014. The source of this coverage estimate was the results of EPI Cluster survey that the Ghana Health Service (GHS) contracted an independent institution to conduct. Such surveys are done on annual basis to validate the administrative data. The sample size was small.

In 2015, Ghana reported an official estimate of 89% in the JRF. The source of this coverage estimate was the Demographic and Health Survey (DHS).

The methodology and the sample size used for the DHS was different from that used for the EPI Cluster survey conducted by the independent institution, hence the difference.

Demonstrate Of Obil			Use Dessived Dente	0	
	dren Age 12-23	3 ivionths v	Vho Received Penta	3	
Background			Background		
Characteristics	2014	2008	Characteristics	2014	2008
	SEX		RESIDENCE		
Male	86.8	88.8	Urban	88.5	87.2
Female	90.3	88.8	Rural	88.5	89.8
EDUCATION			REGION		
No Education	86.7	84.5	Western	83.5	96
Primary	83.7	90.1	Central	89.5	81
Middle/JSS	90	91.8	Greater Accra	91.1	88.6
Secondary +	94.3	88.1	Volta	85.6	89.5
WEAL	TH QUINTILE		Eastern	89.8	91.5
Lowest	87.4	88	Ashanti	92.5	91.4
Second	86.3	86.5	Brong-Ahafo	88.2	95.7
Middle	87.8	82.1	Northern	80.7	75.1
Fourth	90.1	95.8	Upper East	93.3	95.8
Highest	91.7	93.3	Upper West	96.7	94.8
			TOTAL	88.5	88.8

Equity Analysis for Penta 3 for 2008 and 2014

Distribution of Measles vaccination coverage by district in 2015

SOURCE: 2008 and 2014 Ghana Demographic and Health Survey

Progress in the Implementation of New Introduction and Campaigns

1. Inactivated Polio Vaccine Introduction;

Introduction of IPV which was originally planned to be introduced in September 2016 has been postponed to 4th Quarter of 2017 due to global vaccine shortage

2. Meningococcal A Conjugate Vaccine Mini Catch-up Campaign;

The introduction of Men A into routine immunization was planned for November 2015. The campaign has been postponed to July 2016. The delay and subsequent postponement was due to delay the release of funds from Gavi subsequent to the defaulting situation of Ghana for co-financing.

3. Meningococcal A Conjugate Vaccine Introduction;

The introduction of Men A into routine immunization, which was originally scheduled for January 2016,

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has been postponed to November 2016. The delay and subsequent postponement was due to delay in the approval and the release of funds from Gavi subsequent to the defaulting situation of Ghana for co-financing.

4. Yellow Fever Preventive Campaign;

The yellow fever campaign was scheduled for 23 – 28 July 2015. The campaign has been postponed indefinitely.

Status of Implementation of Recommendations from IRC, HLRP and Senior Country Manager

A. Key M&E recommendations from 2015 JA

The Ghana Health Service (GHS) with the support of Gavi HSS Funds and technical support from WHO (-HQ/AFRO and WHO-country team) organized data quality and harmonization workshop. The objective of this workshop was to optimize data reporting systems in the country. Prior to this activity, there was a parallel system for reporting immunization data. EPI data was being reported to the National EPI Programme with the WHO-supported District Vaccination Data Management Tool (DVDMT). EPI data was again reported through the GHS District Health Information Management System (DHIMS).

Key immunization indicators have been incorporated into the DHIMS. Immunization data is currently reported only in the DHIMS. A data exchange tool, which automatically populates the DVDMT with data from the DHIMS, has also be developed.

The Service Availability and Readiness Assessment (SARA) and Data quality audit (DQA) were not done in 2015. The funds for SARA is available and will be carried out in 2017. The DQA which the programme planned to conduct is unfunded. Technical support will be needed for both assessments.

B. Data Quality concerns and requirements

The DQA which was planned for 2015 was not conducted. This was due to funding challenges. Joint EPI & Disease Surveillance Annual Review meeting was held in May 2016 to review immunization and VPD surveillance performance. Data completeness and timeliness were extensively discussed. Performance challenges were also discussed.

The EPI Programme is currently conducting data management training for lower level staff. The objective is to train staff on the new data reporting system as well as all data collection tools.

There is a data quality improvement plan which was developed by the EPI Programme, the Monitoring and Evaluation Department of Ghana Health service and the World Health Organization. The implementation of the plan is monitored by all stakeholders.

The performance of Ashanti and Western regions in the 2014 DHS was lower than what they achieved in 2008. This was mainly due to inadequate funds and transportation for outreach activities. With the Gavi HSS support coming on board and the motorbikes that have been procured and distributed, the performance of these two regions is expected to improve in future surveys.

As already communicated, MICS and EPI Cluster survey will be conducted in 2017. Routine meningitis vaccination, which will be introduced in November 2016, will not be part of any of these surveys. A post introduction evaluation will be conducted 6 months after its introduction.

Vaccine preventable diseases (VPDs) constitutes a major part of the integrated disease surveillance and response (IDSR) in Ghana. Over the period, the Disease Surveillance Department (DSD) monitored VPDs including diseases for which vaccines are given under the EPI.

Stakeholder Engagement

Health partners are involved in the planning and implementation of immunization activities. Key stakeholders including WHO, UNICEF, JICA, DFID, Rotary International, Ghana Coalition of NGOs in Health, Paediatric Society of Ghana, Red Cross Society of Ghana are members of the ICC.

Activity budgets for HSS implementation are presented to the ICC for approval before funding is secured. The

Ghana Coalition of NGOs in Health is also an implementation partner with regards to the HSS Support.

The EPI Programme has also received support from some partners, particularly, WHO and UNICEF. WHO and UNICEF has been providing technical and financial support for immunization services.

Church of Jesus Christ of Latter Day saint have also been very supportive in developing and printing immunization communication materials for creating demand for immunization services.

An integrated monitoring and supportive supervision involving stakeholders are conducted to service delivery points. This provides opportunities to offer on-the-spot couching to front-line immunization service providers.

Surveillance system strengthening:

Ghana is implementing the Integrated Disease surveillance and response (IDSR). Vaccine preventable disease surveillance is a key component of the IDSR. There is currently an on- going support from Centre for Disease Control (CDC) in United State and World Health Organization (WHO) to provide logistical and technical assistance. Staff involved in disease surveillance at all levels are being trained. National and Subnational Public Health Reference laboratories have been refurbished to provide support to IDSR.

The NIP collaborates with the Food and Drugs Authority for safety monitoring. Adverse Events Following Immunization (AEFI) is monitored at all levels using a standard protocol. To improve AEFI reporting and response, Vaccine Safety Trainer of Trainers (ToT) Workshop was organised in collaboration with Food and Drugs Authority (FDA) from 18-20 November, 2014.

Routine AEFIs have been under-reported and AEFI monitoring has been a challenge over the years. However, monitoring and reporting improved in 2014: there were 22 reports from 8 districts in three (3) Regions as against in 7 reported cases in 2013. All cases were non-serious with 100% full recovery. The mean and median ages were respectively 12.2 and 12.0 week with a range of 6 to 24 weeks. The number of AEFIs reported in 2015 however reduced as 13 cases were reported.

Lessons learnt to inform future routine vaccine introductions or campaigns

A. EPI Review

The last comprehensive EPI review was conducted from 1-29 March 2012. Key findings, recommendations and status of implementation of the recommendations is attached.

B. PIEs

The post introduction evaluation (PIE) of the PCV, Rota and MSD introduced into the routine immunization programme in 2012 was conducted in August 2013. Partners involved were CDC, UNICEF and the GAVI Secretariat. The assessment was conducted in 12 districts in 4 regions to document lessons to guide future new vaccines introduction programmes. The key findings, lessons learnt and recommendations are attached as an annex.

C. HPV Coverage Survey

Coverage survey for the HPV demonstration has been completed. Tamale metro had 93% for fully vaccinated and 6.1% received only one dose whilst in Dangme West 66.8% completed the two doses whilst 8.6% had one dose.

D. Impact on routine immunization

New vaccine introductions as well as support for operational campaigns have had positive impact on routine immunization. Cold chain expansion that usually precedes vaccine introduction improves the cold chain system for routine immunization. Trainings and supervision are also not limited to the new vaccine in question but rather, they cover all components of the immunization programme with emphasis on the new vaccine.

Key Implementation Bottlenecks

1. Vaccine and Logistics Management

The programme has identified that there are weaknesses in vaccine and logistics management. Conditioning of ice pack is not a well-known concept. There are also issues with forecasting of vaccines leading to occasional over/under-stocking of vaccines. With the support of the Gavi HSS funding, some of the activities in the improvement plan are being implemented. Cold chain training of CHOs has been conducted in all the

regions.

2. Cold Chain Capacity at National Level

The national level has 4 positive walk-in cold rooms (WICR) with a gross volume of 160m3. The positive storage capacity required for accommodating current vaccines and the proposed introduction of IPV and Men A vaccines is 80m3. The fire outbreak in January 2015 at the central medical stores destroyed 80m3 cold room which was yet to be installed hence the need for replacement.

3. Cold Chain Capacity at Regional Level

Northern and Greater Accra regions have 80m3 WICR. Ashanti, Brong Ahafo and Central regions have 40m3 and all other regions have 30m3 WICR. All the ten (10) Regions have Walk-in cold rooms with capacity to accommodate Men A and IPV into routine. Expansion is therefore not required at the Regional level.

4. Human Resource Management

There is weakness in deployment and retention of health workforce especially CHOs in deprived and hard to reach communities hence the need for clear policy guidelines to address the issues. There is absence of clearly defined system for measuring health worker force productivity and the need to scale up management capacity at the district and sub district levels.

5. Service Delivery Challenge

Service delivery and supervision is negatively affected by inadequate funds and transport. 200 motorbikes have been procured within the Gavi HSS to support outreach services. There is an ongoing discussion with the Ministry and other partners to procure additional motorbikes and vehicles for service delivery.

6. Hard to reach areas in Volta Basin

The Volta Lake has created difficulties in accessing routine immunisation services especially communities within the Volta Basin catchment area leading to low coverage performance. There also exists high operational cost in terms of fuel and man-hours spent to reach these hard to reach communities. Within the Gavi HSS, two (2) fiberglass boats with accessories have been procured to support outreach activities. Additionally, boat accessories were procured for other existing boats in the country to make them functional.

7. Urban and Peri-urban unimmunized

Over the years there has been increasing number of unimmunized children in the urban and peri-urban districts/communities. Urban areas such as Sekondi-Takoradi Metropolitan and Ho Municipal recorded the lowest Penta-3 coverage of 48% and 52% respectively in 2015. Mop-ups and special initiatives such as weekend service are being initiated to address the challenge.

8. Vaccine and Logistics Management

The programme has identified that there are weaknesses in vaccine and logistics management. Conditioning of ice pack is not a well-known concept. There are also issues with forecasting of vaccines leading to occasional over/under-stocking of vaccines. With the support of the Gavi HSS funding, some of the activities in the improvement plan are being implemented. Cold chain training of CHOs has been conducted in all the regions.

3.1.2. NVS future plans and priorities

[Comment on the relevant bolded areas listed in the table in this section of the guidance document, e.g.: for existing vaccines - reasonableness of targets for next implementation year, plans for any changes in presentation or type, risks to future implementation and mitigating actions; for new applications – any expected future applications (include in table 1 above), emerging new priorities for the national immunisation programme]

The country hereby requests an extension of Gavi support for the period 2016 to 2019 for the following vaccines:

- Pneumococcal (PCV13), 4 dose(s) per vial, LIQUID
- Rotavirus, 1 dose(s) per vial, LIQUID
- Pentavalent, 10 dose vial, LIQUID
- Yellow Fever, 10 dose vial, LYOPHILISED
- Inactivated Polio Vaccine, 10 dose vial, LIQUID

Meningococcal A Conjugate Vaccine, 10 dose vial, LYOPHILISED

The country has successfully switched from the use of tOPV to bOPV in April 2016 in the routine immunization. The switch is a global strategic endgame plan to eradicate polio. Measles-rubella vaccine is being used for both first and second dose measles vaccination at 9 and 18 months. Recording, monitoring and reporting tools have all been reviewed to incorporate the new vaccines.

The use of MR for both first and second dose measles vaccination is intended to reduce vaccine wastage and operational challenges of substituting one vaccine for another which may lead to a child not receiving rubella vaccine.

The planned Yellow Fever campaign and routine introduction of Inactivated Polio Vaccine (IPV) in 2015 have all been postponed due to global supply constraints of the vaccines. The activities will be conducted as and when the vaccines become available.

Future consideration will be given to introduction of HPV vaccination into routine immunization programme following the successful implementation of Gavi demonstration vaccination project. The country has also applied to WHO to pilot the introduction of the malaria vaccine RTS,S in selected districts.

3.2. Health systems strengthening (HSS) support

3.2.1. Strategic focus of HSS grant

[Comment on the extent to which the HSS grant contributes to improve coverage and equity in access to immunisation, and how it helps to address the technical, health systems and financial bottlenecks that might jeopardize the sustainability of these gains. See guidance document for more details]

The Gavi HSS objectives have been aligned strategically to facilitate the achievement of the overall health sector goal of having a healthy population and productive population that reproduces itself safely. Hence in achieving the goals, the HSS two grant will focus on the following five main objectives outlined in the grant:

1.To strengthen and scale-up community health interventions aimed at improving the quality of primary health care services (Service Delivery)

2.To strengthen health worker capacity and distribution so as to address equity issues at the district level. (Workforce and Human Resources)

3.To improve storage, distribution and management of logistics and ensure the availability of potent, quality and safe vaccines, medicines and devices (Procurement, Logistics and Health Technologies)

4.To empower civil society for increased demand creation for health services at the community level (Empower Communities and local actors)

5.To strengthen governance and health information management for improved health service delivery

These objectives align adequately with the systemic bottlenecks to achieving and sustaining high immunization coverage. The key health system challenges confronting the health sector are in the areas of governance (weak coordination, ineffective inter-sectoral collaborations, participation and integration); gaps in geographical and financial access to quality health care, inadequate and inequitable distribution of critical staff mix.

As part of the process of achieving the objectives and also reducing the disparities in access to maternal and child health services, there is the need to strengthen and accelerate the CHPS implementation to complement other efforts on service delivery and health financing. The GAVI/HSS support will build on efforts initiated by the MoH in using the CHPS strategy to reduce geographical barriers to health care. With a focus on deprived and remote areas, the strategy brings services closer to clients and uses community-based health structures that are familiar with the socio-cultural environment. For instance, in order to ensure that services are provided for those in the hard-to-reach areas the health sector through the support of the World Bank project MCHNP has introduced a pilot of the Community Performance Based Financing (CPBF) to establish evidence based approach to improve health outcomes at the community level. The overall objective is to explore whether providing incentives to community health teams could influence behavior change resulting in improved access, utilization and quality of health services including moving immunization coverage to an appreciable level of improvement. Funds from the HSS grant was also transferred to the various levels of service delivery targeted to the achievement of health indicators and also taking into consideration the need to ensure that more funds get to the lower levels of service delivery.

Additionally, the annual integrated monitoring and supportive supervision visit institutionalized in 2014 will also be conducted at all levels. Other interventions such as collaborating with the CSO to create demand for various service

delivery interventions will be scaled up. Newly created districts often financially challenged and are not able to meet their targets will be supported in an effort to leverage resources for the achievement of the overall HSS 2 objectives. Stakeholders engagement in the implementation of activities in HSS 2 will be strengthened especially the private sector, other development partners and philanthropic organisations such as WHO, UNICEF, DFID, JICA, KOICA, Rotary international and Latter Day Saints who provide some funding and technical support for immunization services. In addition UNICEF procure vaccines.

Ghana did not receive the performance payment in 2015 since the country did not achieve DTP3 coverage of greater or equal to 80% in 90% of the districts.

3.2.2. Grant performance and challenges

[Comment on the relevant bolded areas listed in the table in this section of the guidance document, e.g.: achievements of targets and intermediate results; actual versus planned activity implementation and financial expenditure; use of PBF reward and budgets/plans; degree of participation of key stakeholders in implementation of HSS proposal; implementation bottlenecks and key challenges regarding financial management of HSS grant; compliance with data quality and survey requirements]

Ghana received approval for the health systems strengthening cash support in 2014 and received the first disbursement in August of the same year. The total amount received was US\$4,299,000. Out of this amount 84.3% (US\$ 3,442,958.01) has been utilized as at the end of April 2016.

Objective 1: To strengthen and scale-up community health interventions aimed at improving access and quality of primary health care services

The first objective is to strengthen community health systems to improve quality of primary health care services with a focus on immunization services. The first year focused on procurement of cold chain equipment, motorbikes, and boats as well as printing of immunization registers, tally cards and training for Community Health officers in cold chain management. Gavi Alliance funds for HSS supported the development of an integrated monitoring and evaluation framework including a checklist developed to harmonize all M&E activities, ensuring removal of duplication of M&E activities and further provide timely and evidence based reports for management decisions.

Objective Two: To strengthen health worker capacity and distribution so as to address equity issues at the district level

The first year activities for objective two includes developing performance based financing systems and strengthening management capacity at subdistrict and community levels. The health sector implemented a pre-pilot performance based financing system through another programme (Maternal Child Health Nutrition Project – MCHNP). Documentation and experience from this pilot will be used to modify the scope and design for the performance based financing system to improve coverage in equity in immunization services a the district level. In 2015, funds were disbursed to support service delivery (including specific funds to deprived districts), supervision and monitoring.

Objective 3: To improve storage distribution and management of logistics and ensure the availability of potent, quality and safe vaccines, medicines and devices

The major activities performed in 2015 under objective three was the training of staff in nine out of ten Regional Medical Stores on Logistics Management Information System (LMIS) to enhance stock visibility and improve on store inventory. Six out of the ten Regional medical Stores are currently implementing the LMIS. The remaining four regions are yet to start implementation pending the availability of computers and network systems

Objective 4: To empower civil society for increased demand creation for health service at the community level Activities under objective four is devoted to strengthening Civil Society Organisations and empowering them to increase demand for immunization services. In some of the more deprived communities where there are no midwives, the CSOs were to mobilise and engage retired and private midwives to support in service delivery. The Ghana Coalition of Non-Governmental Organisations in Health (GCNH) is the umbrella body coordinating the activities of Non-Governmental Organisations (NGOs) supported by funding from Gavi. Activities of the CSOs in 2015 included mobilization and sensitization of communities, strengthening capacity of NGOs in project implementation and management, liaise with district assemblies, participate in outreach activities and district reviews.

Objective 5: To strengthen governance and health information management for improved health service delivery. The key activities implemented in 2015 were to integrate various logistics and immunization information system with the District health Information System as well as strengthen capacity for micro planning at district level.

Financial performance and challenges

Two bank accounts are used to manage the Gavi HSS funds- a Dollar and a Cedi account at ECOBANK GHANA LTD and UNIBANK Ghana Limited respectively. The dollar account is the receiving account in which the funds are lodged from source. The Cedi account is the operational account. Funds are transferred from the dollar account to the cedi account for general home currency transactions.

Ghana has no outstanding funds for the HSS 1 implementation. For the HSS 2, an amount of US\$4,299,400 was received in August 2014 for the year 2014 activities according to proposal work plan and timelines submitted. Due to the late release of the 2014 funds, the 2014 activities were largely implemented in 2015. The outstanding balance as at December 2015 for HSS 2 was US\$ 671,595.47 for GHS & US\$125.82 for CSO. In terms of expenditure, the GHS had spent 83.5% and CSO had spent 99.9% of the total amount received as at the end of December 2015.

The status of completion of activities under HSS 2 are shown below: Table of actual vs. planned expenditure

GAVI	YEAR ONE	FINANCIAL STATUS REPORT AS AT 31/12/15		
Ref №	Activity Code	Activity name and description	Activity cost (\$)	Activity Actual (\$)
		To strengthen and scale-up community health interventions aimed at		
	OBJ 1	improving access and quality of primary health care services		
1	1.1	Procure cold chain equipment to support service delivery_300 refrigerators	400,000	400,000
2	1.2	Procure cold chain equipment to support service delivery _100 Freezers	200,000	200,000
3	1.3	Procure cold chain equipment to support service delivery_1000 Cold Boxes	185,200	152,210
		Procure cold chain equipment to support service delivery 5000 Vaccine		
4	1.4	Carriers	26,000	-
		Procure cold chain equipment to support service delivery-Temperature		
		Monitoring Devices (1150 Fridge Tags, 20 Continuous Temp. Monitoring		
5	1.5	Device)	150,000	147,049
6	1.6	Procure Motorbikes to support service delivery (100 Motor Bikes)	1,200,000	843,936
7	1.7	Procure Boats to support service delivery (2 Fibre Boats)	-	-
		Procure Vehicles to support service delivery _7 (4X4) Pick UPS, 1 trekking		
8	1.8	vehicle and 2 saloons	-	-
		Procure needed logistics to support service delivery_14 Tool Kits for Regional		
9	1.9	and National Cold Chain Technicians	20,000	-
		Procure Voltage stabilizers for refrigeration equipment (500 Voltage Stabilizers		
10	1.10	for refrigeration equipment)	-	-
		Procure Generators for regional and national cold rooms _3 Generators for		
11	1.11	Regional and National Walk in Cold Rooms)	-	-
12	1.12	Procure Spare Parts for cold chain equipment maintenance	-	-
		Procure Public Address Systems (PA system) to support service delivery		
13	1.13	_120Public Address Systems)	-	-
		Procure needed logistics to support service delivery - Printing of 15000 Tally		
14	1.14	Books	20,000	20,000
15	1.15	Procure needed logistics to support service delivery_6000 Vaccine Ledger	8,000	8,000
		Procure needed logistics to support service delivery - Printing of 300,000 Child		
16	1.16	Health Record Books	-	-
		Procure needed logistics to support service delivery - Printing 250000		
17	1.17	Immunization Monitoring Charts	2,500	-
18	1.18	Construction 50 Incinerators	-	-
19	1.19	Renovation of Incinerators 100 Incinerators	-	-
20	1.20	Conduct Training in Waste Management for staff	-	-
	4.24	Funds to support sub district health teams (including CHOs) to undertake	224.000	224.000
	1.21	outreach activities	234,000	234,000
22	4.00	Support National, Regional, district health teams to conduct supervision and	co. 000	50.000
22	1.22	monitoring	60,000	59,909
23	1.23	Conduct cold chain inventory	-	-
24	1.24	Conduct quarterly EPI review meeting	-	-
25	1.25	Procure computers for data management	-	-
26	1.26	Conduct Training in MLM for EPI Staff,	-	-
27	1.27	Build capacity of Regional EPI Cold chain Technicians	-	-

28	1.28	Training CHOs in Cold Chain Management	90,000	90,000
		Upgrade eRegister to include GIS and expand its coverage to include other		
29	1.29	childhood illness and maternal health	50,000	49,894
		Strengthen Institutional clinical governance and information	50,000	49,851
30	1.30	Conduct Child Health Promotion Week	20,000	18,824
		To strengthen health worker capacity and distribution so as to address		
C)BJ 2	equity issues at the district level		
31	2.1	Develop PBF tools and manual for management	100,000	100,000
51	2.1		100,000	100,000
		Funds for performance based financing for deprived and low performing		
32	2.2	districts	100,000	45,412
33	2.3	Training of CHOs and SDHMT in management	-	-
)BJ 3	To improve storage distribution and management of logistics and ensure the		
	/07.5	availability of potent, quality and safe vaccines, medicines and devices		
34	3.1	Supply Chain Management training for managers at all levels	-	-
35	3.2	Strengthen LMIS at regional and district hospitals and link with RMS	100,000	47,683
36	3.3	Rehabilitation of Regional Medical Stores in Volta Region	-	-
50	5.5	To empower civil society for increased demand creation for health service at		
C)BJ 4	the community level		
27				
37	4.1	Quarterly Monitoring of CSO activities by National Secretariat	-	-
38	4.2	Organize annual CSO Health Forum	8,000	8,000
39	4.3	Coordination of CSOs by National Secretariat	20,000	20,000
		Train implementing NGOs in project management, community entry,		
40	4.4	mobilization and reporting	5,200	5,200
		Sensitize community leaders and men on importance of immunization and to		
41	4.5	support their families.	10,000	10,303
		Partner District Assemblies, DHMTs, Womens' Groups and Traditional Leaders	20,000	20,000
12	4.6		2 000	2 000
42		to identify and select satellite points implementation	3,000	3,000
43	4.7	Provide logistical supports to satellite activities	-	-
		Provide resources to support volunteers' activities at satellite sites and		
44	4.8	community levels	18,000	18,000
		CSOs to participate in Regional and DHMT quarterly and annual review		
45	4.9	meetings	-	-
46	4.10	Support CSO to participate in NIDs and other immunization campaigns	10,000	11,109
47	4.11	CSOs Regional and District Coordination activities		-
		Contract retired/private midwives and private community health nurses to		
48	4.12	support project implementation		
40	4.12	Provide logistical support to trained retired/private midwives and private		
40	4 1 2		8 000	8 000
49	4.13	community health nurses to support project implementation	8,000	8,000
50	4.14	To carry out quarterly community outreach activities	22,500	23,182
51	4.15	Engage in quarterly community durbars, advocacy activities	18,000	18,545
52	4.16	Develop IEC materials to support community level activities	20,000	16,129
		Conduct quarterly review meetings with Traditional leaders and community		
53	4.17	volunteers	3,000	3,091
		Identify and train traditional leaders as immunization advocates at community		
54	4.18	levels	-	-
55	4.19	CSOs at peripheral levels undertake quarterly monitoring activities	15,000	15,455
55		Procure Vehicles to support CSOs activities at national and also for established	13,000	10,700
E <i>C</i>	1 20			
56	4.20	satellite sites 3 (4x4) Pick Ups		-
57	4.21	Support vehicle running activities	5,000	5,645
58	4.22	Provide logistics for CSOs satellite sites and community level activities	50,000	50,000
)BJ 5	To strengthen governance and health information management for		
		improved health service delivery		
59	5.1	Strengthen planning systems at the sub district level	-	-
60	5.2	Upgrade DVD-MT and integrated with DHIMS11	20,000	20,000
61	5.3	Upgrade FMIS and integrate with DHIMS 11	20,000	17,924
62	5.4	Upgrade LMIS and integrate with DHIMS 11	50,000	
63	5.5	Orientation of district and sub district staff in HMIS	50,000	
03	5.5		-	-
		Support quarterly technical and financial data validation at districts and sub-		
C A	5.6	district levels	30,000	30,000
64				
04		Support operational research and document of best practices in general and		
65	5.7	Support operational research and document of best practices in general and particularly in immunization	-	-

66b	5.8b	Coordinate planning - MoH	43,000	43,000
		Provide technical support for the use of upgraded management information		
67	5.9	system at sub district level.	-	-
		Build capacity in planning, project management, monitoring and evaluation at		
68	5.10	national level	-	-
		Organize and coordinate standardized training programme for district and sub		
69	5.11	district health teams and technical managers	30,000	27,135
69b	5.11b	Monitor HR training and capacity building programmes	25,000	-
70	5.12	Develop health account	100,000	99,348
71	5.13	Support GHS and other providers in joint annual sector performance review.	-	-
		Support overall MTDP monitoring and evaluation of the MoH and joint annual		
72	5.14	sector reviews with partners sector at MoH level	50,000	50,000
		Review and revise existing records management information system (manual		
		and electronic) and expand the use of the hospital electronic information		
73	5.15	software	-	-
74	5.16	Conduct Service Availability and Readiness Assessment survey (SARA)	200,000	200,000
75	5.17	Conduct EPI cluster survey	250,000	250,000
76	5.18	Evaluation of HSS grant	-	-
77	5.19	Programme management	50,000	48,442
GHS A	CTIVITIES		4,083,700	3,412,145

Overall, the Health Sector has in place a robust legal and institutional framework for Public Financial Management across all levels of the sector. Presently the Ministry of Health (MOH) Accounting, Treasury and Financial Reporting, Rules and Instruction manual has been reviewed and awaiting approval. The review has considered DPs interest in the area of traceability and visibility of donor funds to the Health Sector in financial reporting at all levels. In addition to the periodic external audit undertaken by the Ghana Audit Service, the health sector has strengthened its internal audit processes to ensure accountability and value for money for all resources received. However, planning and budget execution is weak especially at the districts and sub-districts levels as a result of inadequate human resource with regards numbers, capacity, lack of automation and the erratic nature of cash releases to BMCs.

The MOH has received the draft report of the GAVI Cash Audit carried out in year 2015 of which measures have been put in place based on the report recommendations. The MoH through the PFM plan and with other partners intends to strengthen financial management capacity at the district levels and below.

3.2.3. Describe any changes to HSS funding and plans for future HSS applications

[Present the rationale for a new tranche of HSS funds (and the associated amount as per table in section 1) or no-cost extension, or any planned changes in terms of re-allocation or reprogramming]

Ghana is implementing its second Gavi Alliance HSS cash support proposal (2014-2018). In this proposal, Objective 3, Activity 3.3 for year 3 has a budget of US\$250,000 for renovation of the Volta Regional Medical Stores. However, the January 2015 fire outbreak at the country's only Central Medical Stores (CMS), affected EPI supplies, thereby leading to some major health sector decisions. Government intends to construct a new CMS and refurbish all Regional Medical Stores (including the Volta Regional Medical Stores).

The Ministry is therefore requesting that the funds earmarked for the Volta Regional Medical Stores for year 3 be reprogrammed to renovate the storerooms for EPI logistics and offices for the EPI programme. Government will ensure the stores are insured with government funds.

The government is also requesting that the budget of US\$400,000 (Activity 1.18) for construction of incinerators will be reprogrammed as follows:

- US\$200,000 for the construction of incinerators
- US\$80,000 be used for the procurement of cold chain equipment and
- US\$120,000 for construction of regional cold rooms.

3.3. Transition planning (if relevant)

[Comment on all bolded areas listed in the table in this section of the guidance document, e.g. progress of implementation of planned activities; implementation bottlenecks; changes required to the transition plan for coming years, including rationale and costing/proposed financing]

Ghana's transition was initially planned for 2017 – 2021. However due to current economic challenges, Ghana's request for an extension of the transitional period from five to seven years (2016-2022) has been accepted by Gavi. Gavi supported Ghana to develop a draft transitional plan for Ghana to be weaned off the current Gavi support. A follow up mission to finalize the draft will be held comprising introductory meetings, specific meetings and interviews, Transition planning workshop and validation meetings. The expected outcomes after the transition mission are:

- 1. Finalized transition plan
- 2. Validated and finalization of the implementation plan by country and partners;
- 3. Submission of the finalized transition plan and the request for Gavi transition grant by national authorities with endorsement from partners;
- 4. Approved transition plan and Gavi transition grant by Gavi CEO;
- 5. Timely implementation and monitoring of the transition plan.

3.4. Financial management of all cash grants (e.g. HSS, VIG, campaign operational cost grant, transition grant)

[Comment on the bolded areas listed in the table in this section of the guidance document, e.g.: cash utilization performance and financial capacity constraints; modifications to financial management arrangements; major issues arising from cash programme audits or monitoring review; degree of compliance with Financial Management Requirements]

Cash utilization performance and financial capacity constraints

There is a broad financial management system, which is not limited to DP specific reporting. In addition partner funds can easily be tracked at the national level but below the national level, program activities (based on disease burden) become more visible whiles the specific partner financial information becomes less visible. However, with the revised ATF there will be traceability of DPs funds below the national level and that government PFM is having a review bill which is in parliament to be approved.. The platforms for transactions processing, financial information storage and reporting are largely manual below the national level through the use of electronic ATF tool for resource tracking this challenge can be addressed. Real time financial information generation and reports across levels are therefore almost non-existent. Financial monitoring and supervision at all levels has been very low mainly due to the lack of logistics to facilitate such activities. To address this issue, there is need to build the capacity of key technical and financial officers on IPSAS at the various levels on the use of the tool developed.

There has been adequate improvement in the transfer of funds from national level to the lower levels due to the development of Standard of Operating Procedures (SOPs) which has stipulated timelines attached to each level.

Modifications, if any, made to the financial management arrangements

The MoH is working to ensure the introduction of automated accounting system at all levels to ensure improved accountability. This has already been discussed at the HSWG and a committee chaired by the Financial Controller of MOH has been formed as part of the health sector Public Financial Management arrangements to address the issue. The Ministry is in discussion with MoF to explore the use of GIFMIS to incorporate all areas for all funds in the following year.

Any major issues arising from Cash Programme Audits or Monitoring Reviews

Gavi secretariat completed a cash audit in 2015 and submitted its draft report to the MoH for comments. MoH provided feedback to Gavi secretariat and the final report has since been received. The Gavi secretariat is currently awaiting the final comments from the MoH before 15th July 2016 and subsequent publication on the Gavi website. There are key findings and recommendations which the MoH welcomes and will take forward in the implementation of the new Gavi cash grant. Significant among the issues in the area of procurement, visibility of sources of funds at all levels; ensuring advances transferred to lower levels of the service are recorded by source to enable reporting and considering tax exemptions for goods procured with Gavi funds.

Degree of compliance with Financial Management Requirements (Annex 6 of Gavi's Partnership Framework Agreement) and outstanding issues

One key outstanding issue in the Partnership Framework Agreement/ Aide Memoire is the provision of tax exemption for goods and services procured with Gavi Alliance funds. This has not been complied with in the past. However with Ghana signing the Partnership Framework Agreement, MoH will use reasonable efforts to engage with MoF to ensure tax exemption of goods and services procured with Gavi Alliance funds in the current support. MoH will discuss and write to MoF to issue a letter for the tax exemption certificate to enable the ministry comply with PFA.

4. UPDATE OF FINDINGS FROM PREVIOUS JOINT APPRAISAL

[Status of top 5 prioritized strategic actions from previous joint appraisal and any additional IRC or HLRP recommendations (if relevant)]

Prioritized strategic actions from previous joint appraisal / HLRP process	Current status
1. Key M&E recommendations from 2015 JA	The Ghana Health Service (GHS) with the support of Gavi HSS Funds and technical support from WHO (HQ/AFRO and WHO-country team) organized data quality and harmonization workshop. The objective of this workshop was to optimize data reporting systems in the country. Prior to this activity, there was a parallel system for reporting immunization data. EPI data was being reported to the National EPI Programme with the WHO-supported District Vaccination Data Management Tool (DVDMT). EPI data was again reported through the GHS District Health Information Management System (DHIMS).
	Key immunization indicators have been incorporated into the DHIMS. Immunization data is currently reported only in the DHIMS. A data exchange tool, which automatically populates the DVDMT with data from the DHIMS, has also be developed.
	The Service Availability and Readiness Assessment (SARA) and Data quality audit (DQA) were not done in 2015. The fund for SARA is available and will be carried out in 2017. The DQA which the programme planned to conduct is unfunded. Technical support will be needed for both assessments.
2. Data Quality concerns and requirements	The DQA that was planned for 2015 was not conducted. This was due to funding challenges. Joint EPI & Disease Surveillance Annual Review meeting was held in May 2016 to review immunization and VPD surveillance performance. Data completeness and timeliness were extensively discussed. Performance challenges were also discussed.
	The EPI Programme is currently conducting data management training for lower level staff. The objective is to train staff on the new data reporting system as well as all data collection tools.
	There is a data quality improvement plan, which was developed by the EPI Programme, the Monitoring and Evaluation Department of Ghana Health service and the World Health Organization. All stakeholders monitor the implementation of the plan.
	The performance of Ashanti and Western regions in the 2014 DHS was lower than what they achieved in 2008. This was mainly due to inadequate funds and transportation for outreach activities. With the Gavi HSS support coming on board and the motorbikes that have been procured and distributed, the performance of these two regions is expected to improve in future surveys.
	As already communicated, MICS and EPI Cluster survey will be conducted in 2017. Routine meningitis vaccination, which will be introduced in November 2016, will not be part of any of these surveys. A post introduction evaluation will be conducted 6 months after its introduction.
	Vaccine preventable diseases (VPDs) constitute a major part of the integrated disease surveillance and response (IDSR) in Ghana. Over the period, the Disease Surveillance Department (DSD) monitored VPDs including diseases for which vaccines are given under the EPI.

5. PRIORITISED COUNTRY NEEDS¹

¹ Subsequent planning and discussions on Targeted Country Assistance will take place - detailed guidance on the process will be shared in May 2016.

[Summarize the highest priority country needs and strategic actions that could significantly improve coverage, equity and financial sustainability; the timeline for completing the actions and the type of technical assistance needed if applicable – see guidance document for more details]

Prioritized needs and strategic actions	Associated timeline for completing the actions	Does this require technical assistance?* (yes/no) If yes, indicate type of assistance needed
Strengthen routine immunization through the 'Reaching Every District/Child (RED/REC) Approach	Ongoing	No
Improve monitoring and supervision	Quarterly	No
Strengthen the uptake of immunization activities in the second year of life (2YL)	Ongoing	Yes – Communication, development of training materials and job aides
Polio eradication Transition plan	By end of July 2016	Yes- Preparation of transition plan
Men A vaccine introduction	1 st November 2016	Yes- Development of training materials, communication and Post Introduction evaluation
Yellow fever preventive campaign	Based on vaccine availability	Yes- Microplanning, AEFI and Post campaign evaluation
Establish Congenital Rubella Syndrome surveillance	By end of 2016	Yes – Training and setting up of the sentinel sites
Strengthen data management	By end of September 2017	Yes- 1. Creating a DVDMT- like data visualization dashboard in DHIMS, 2. Building capacity to use Geographic Information System in EPI data management
Improve communication, advocacy and information dissemination	Jan to Dec 2016	Yes- Materials development
Strengthen Measles Rubella Elimination surveillance system and Vaccine Safety Monitoring	By end of October 2016	Yes – Materials development, Training, supervision,
Middle Level Management capacity building	By end of November 2017	Yes- Adaptation of AFRO MLM modules and in-country training
Conduct Cold Chain inventory	By end of October 2016	No
Establishment of National Immunisation Technical Advisory Group (NITAG)	By end of December 2016	Yes- Training of NITAG Members

*Technical assistance not applicable for countries in final year of Gavi support

6. ENDORSEMENT BY ICC, HSCC OR EQUIVALENT AND ADDITIONAL COMMENTS



This section does not need to be completed for joint appraisal update in interim years, instead the EPI manager is expected to endorse the joint appraisal report.

Brief description of how the joint appraisal was endorsed by the relevant national coordination mechanism	The TWG developed the draft Joint Appraisal report and this draft was circulated to members of the Health Sector Working Group (HSWG) and Inter-Agency Coordinating Committee (ICC) on immunization for their review and comments.				
	Following this, a joint HSWG and ICC meeting was organized for the TWG (HSS & EPI) to present the Joint Appraisal Report for endorsement.				
	The report was unanimously endorsed by HSWG & ICC members for submission to Gavi Alliance.				
Issues raised during debrief of joint appraisal findings to national coordination mechanism	 The ministry was tasked to undertake stock taking of medical waste management especially incinerators across the country with regards to their numbers, use and functionality. The Human Resource training modules to be reviewed and institutionalize to include the routine training in the health sector to ensure sustainability of health programmes. 				
 Any additional comments from: Ministry of Health Gavi Alliance partners Gavi Senior Country Manager 					

7. ANNEXES



This section does not need to be completed for joint appraisal update in interim years. Please include the following Annexes when submitting the report, and any others as necessary

Annex A. Description of joint appraisal process (e.g. team composition, how information was gathered, how discussions were held)

The basis of the joint review is enshrined in the health sector review process, which generates the data for review by the Technical Working Group (TWG). All health partners and stakeholders participate in the annual performance review which starts at the district level and ends with a National Health Summit. The Technical Working Group (TWG) comprise of Government (MoH and GHS) and key immunization Partners (WHO, UNICEF and CSOs) to finalize the JAR. In doing so, the sequence of activities was as follows;

- 1. A planning meeting was organized in the office of the Director PPME-MoH to discuss Ghana's 2015 Joint Appraisal process including outlining the sequence of activities to be undertaken.
- 2. The Joint appraisal process was thus initiated with the review of the membership of the Technical Working Group
- 3. Letters of invitation was sent to all members of the TWG (including representatives from MoH, GHS, CSO, WHO, UNICEF, KOIKA, Rotary International, JICA) to participate in the process.
- 4. The various groupings under the TWG (HSS, EPI and CSO) worked on the first draft of the 2015 JAR.
- 5. The MoH collated the initial draft JAR and circulated to all members of the TWG.
- 6. A two-day workshop was organized for the TWG to review the draft report and also to solicit comments on the report for further inputs.
- 7. A two-week mission was organized to review and update the draft 2015 JAR and also to finalize Ghana's Transition plan. Present during the mission was the Gavi Regional head, Anglophone Africa/country programmes who provided Technical support for the development of the JAR and implementation plan as well as the finalization of the transition plan. Also present was the CSO member on the Gavi steering committee for Ghana.
- 8. As part of the mission, the Gavi Regional head paid courtesy calls to MoH, GHS, CSO, UNICEF, USAID, WHO, FDA, Ghana Supply Commission and Ministry of Finance.
- 9. The mission comprised in-depth review of reports, TWG meetings, and discussions on the various components of the report.
- 10. The draft report was shared with Gavi and regional partners (WHO and UNICEF) for review.
- 11. The comments from Gavi and Regional Partners were incorporated into the draft report and were shared with the Health Sector Working Group (HSWG) and the Inter-Agency Coordinating Committee (ICC).

12. ICC meeting was held to present the draft report to members for comments and endorsement for submission.

Annex B:

Measles Surveillance 2015

- Total suspected measles cases reported in. 2015was 1,034.
- Percent suspected measles cases investigated 100%
- Out of the 216 districts in the country, 182 (84.2%) reported at least one suspected measles case.
- 23 (2%) were confirmed positive for measles,
- 2 of the positives were vaccine related/AEFI
- 78% of specimens arrived at the NPHRL within 7days of collection
- No Measles death was reported.

Table 5:Measles Surveillance Performance Indicators, 2015

REGIONS	NO.OF DISTRICTS	REPORTING AT LEAST ONE SUSPECTED CASE	% DISTRICTS REPORTING AT LEAST	NO. OF CASES REPORTED	NO. CONFIRMED	% CONFIRMED	NO. CONFIRMED RUBELLA
ASHANTI	30	23	77	86	1	1.1	1
BRONG-AHAFO	27	27	100	335	12	8.3	2
CENTRAL	20	16	80	39	0	0	0
EASTERN	26	22	85	148	3	2	2
GREATER ACCRA	16	13	81	78	1	12	0
NORTHERN	26	13	50	51	1	2	2
UPPER EAST	13	13	100	38	2	5.2	0
UPPER WEST	11	8	73	13	0	0	0
VOLTA	25	25	100	101	1	0	3
WESTERN	22	22	100	144	2	1.3	2
TOTAL	216	182	84.2%	1034	23	2.1	12

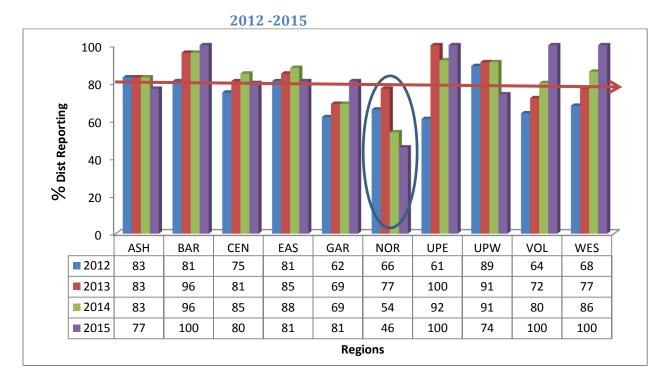


Fig 3:Percentage of Districts Reporting At Least one Suspected Measles case

Table 6: Vaccination Status of Positive Measles Cases, by Age group, 2015

Age group	No. of Cases	Vaccinated with one dose	Vaccination Not Due	Total
Less than 9			1	
mths	1	N/A		1
9 to 11 mths	2	2	0	2
1 to 4 yrs	10	6	0	10
5 to 9 yrs	4	3	0	4
10 to 14yrs	5	1	0	4
15 yrs & above	2	Unknown	0	2
Total	23	12	1	23

In 2017 Ghana plans to conduct Measles Rubella SIA in children from 9 months to 4 years to reduce the build of susceptibles whilst we strengthen the routine immunisation.