

## 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.

<b>Country</b>	MYANMAR
<b>Reporting period</b>	2015
<b>Fiscal period</b>	1 April – 31 March
<b>If the country reporting period deviates from the fiscal period, please provide a short explanation</b>	Financial reporting of partners (WHO and UNICEF) covers the period January - December 2015
<b>Comprehensive Multi Year Plan (cMYP) duration</b>	2017-2021
<b>National Health Strategic Plan (NHSP) duration</b>	2017-2021 (not yet finalized)

### 1. SUMMARY OF RENEWAL REQUESTS

Programme	Recommendation	Period	Target	Indicative amount paid by Country US\$	Indicative amount paid by Gavi US\$
NVS – Pentavalent	Extension	2017-2021	940,612	360,500	4,604,000
NVS – IPV	Renewal	2017	807,520	-	1,993,000
NVS – PCV	Extension	2017-2021	940,612	336,500	4,636,000

Indicate interest to introduce new vaccines or HSS with Gavi support*	Programme	Expected application year	Expected introduction year
	JE	7/2016	2017
Rota	2017	2018	
HSS2	3/2016	2017	
HPV	2017	2018	

\*Not applicable for countries in final year of Gavi support

### 2. COUNTRY CONTEXT

#### Political context:

Myanmar's general elections were held on 8 November 2015, being the first openly contested elections in the country since 1990. As a result, the National League for Democracy (NLD) gained an absolute majority of seats in both chambers of the national parliament.

The new parliament convened in February 2016 and the first non-military president of the country since the 1962 coup d'état, Htin Kyaw, was elected in March 2016. In April 2016, NLD leader Aung San Suu Kyi, constitutionally barred from presidency, assumed the newly created role of State Counsellor, a role akin to a Prime Minister.

Dr. Myint Htwe is the new Minister for Health and Sports. He is a public health physician and previously served as the chairperson of the Preventive and Social Medicine Society, Myanmar Medical Association. In 1994, he was appointed as a Regional Adviser for World Health

Organization Regional Office for South-East Asia, and served for various positions including Programme Management Director until his retirement in 2010.

The Ministry of Health was renamed Ministry of Health and Sports and the Department of Sports and Physical Education was added to the organizational set-up. The other six departments remain unchanged (Department of Public Health, Medical Services, Health Professional Resources Development and Management, Medical Research, Traditional Medicine, Food and Drug Administration. The EPI Programme is under the Department of Public Health (DoPH)). The new government has not made rapid new appointments to the senior bureaucratic leadership of the MoH&S.

**Health sector situation:**

Myanmar did not meet the health related MDG targets despite constant progress over the last decade. The country has an U5 mortality of 46/1000 live births (MDG target of 37/1000) and 53% of these are neonatal deaths. Pneumonia accounts for 16% and Diarrhoea for 7% of U5 mortality. Underweight and stunting prevalence in children under five are 23% and 35%, respectively, and only 24% of newborns under 6 months are exclusively breastfed. Maternal mortality is at 200/100,000 live births (MDG target 150/100,000).

The health system in Myanmar is well structured with the tiered system focused on a Township Health System (330 Townships in total, average population 160,000), with Rural Health Centers (RHC), sub-RHC and a network of volunteers forming the backbone of the PHC system.

Myanmar's total health expenditure (THE) was below 2% of GDP in 2013 and per capita US\$14. Out-of-pocket (OOP) household expenditures of about 70% of THE remain the dominant source of financing for health. Government spending accounts for 27% of THE (or US\$4 p.c.) and the budget for health represents only 2% of the total government budget. This level of relative and absolute spending is very low compared to other countries in the region and countries at a similar level of income (e.g. Nepal at US\$ 36 p.c. and Bangladesh at US\$ 27 p.c.).

Myanmar's GDP grew by 6.5% since the political transition began in 2011/12 and the rate of growth is expected to reach 7.5% per annum by 2019/20. In recent years, GDP growth in Myanmar was accompanied by large increases in government health spending: 1% of economic growth from 2011 to 2014 translated into 6.3% public spending growth on health during the same period (World Bank). If this trend continues, the available public resources - in absolute terms - are expected to increase significantly over the next years.

Health financing is clearly a priority in the policy dialogue with government and very relevant to the overall financing of the immunization programme.

The main health system constraints relate to shortage and maldistribution of human resources across regions. As a result, in absence of an adequate number of other PHC staff (Public Health Supervisors and Nurses) the burden of immunization delivery has fallen on midwives.

**National health policy and the 100 days health plan:**

Myanmar has a draft **National Health Plan (NHP) 2017-2021** that focuses on strategies to control communicable and non-communicable diseases, improve maternal, newborn and child health (MNCH), nutrition, strengthen the health system and expand coverage in rural, peri-urban and border areas. The wider national health policy is expressed in the country's "UHC 2030 vision".

The EPI programme is an integral part of the NHP with defined objectives (Polio, Measles, MNT, improve coverage and surveillance of VPD) and concrete activities. The new government included immunization as one of the top priority programs in its **100 days health plan** and committed to the intensification of routine immunization and introduction of new vaccines.

On the basis of this plan, Myanmar implemented the switch from tOPV to bOPV in April 2016, nationally introduced PCV into routine immunization with a launching ceremony by the Minister on 1st July 2016 and celebrated the immunization week at the end of August 2015.

The government also made commitments to co-finance the procurement of Pentavalent vaccine and to fully self-finance all traditional vaccines which were previously covered by donor funds.

**Cooperation with other development partners:**

The lifting of sanctions in September 2012 and resumption of normal diplomatic relations led to a rapidly changing donor context and new actors (ADB, WB, USAID) entered the country to provide additional and sometimes substantial aid. There is currently over US\$ 1,100 million allocated by donors to the health sector for the period 2015-20 (information of May 2016). This has implications for both coordination and fund flow management to lower levels of the public health system (townships) and NGOs. Donors exchange information and cooperate through the Myanmar HSCC.

The main donors are currently the 3MDG Fund (US\$271m, 2012-2017, pooled funds, see below), GFATM (US\$132m), World Bank (US\$100m, additional \$100m potentially available), USAID (US\$150m) and DFID (US\$24m).

The 3MDG Fund is currently the largest development fund in Myanmar and seven bilateral donors contribute (Australia, Denmark, European Union, Sweden, Switzerland, UK and USA). It focuses on improving maternal, newborn and child health, combating HIV and AIDS, tuberculosis and malaria, and on health system strengthening. It is managed by the United Nations Office for Project Services (UNOPS). Implementing partners are UN agencies as well as international and national NGOs. Government/ MoHFW has responsibilities of governance and oversight through the Fund Board. With some overlapping funding identified with other donors, the continuation of the 3MDG Fund beyond 2017 is currently being discussed.

In January 2014, Myanmar became the 34th country to sign the IHP+ Global Compact. IHP+ reporting is ongoing but none of the tools to develop sector strategies and programmes (e.g. JANS) have been used until now.

**3. GRANT PERFORMANCE AND CHALLENGES**

**3.1. New and underused vaccine (NVS) support**

**3.1.1. Grant performance, lessons and challenges**

GAVI started supporting Myanmar in 2002 and has **committed a total of \$147.2 million until 2020**. \$117.9 million have been disbursed to the country to date. A second HSS grant (\$52m) was recommended for approval by IRC in March 2016 and is envisaged to start implementation in January 2017.

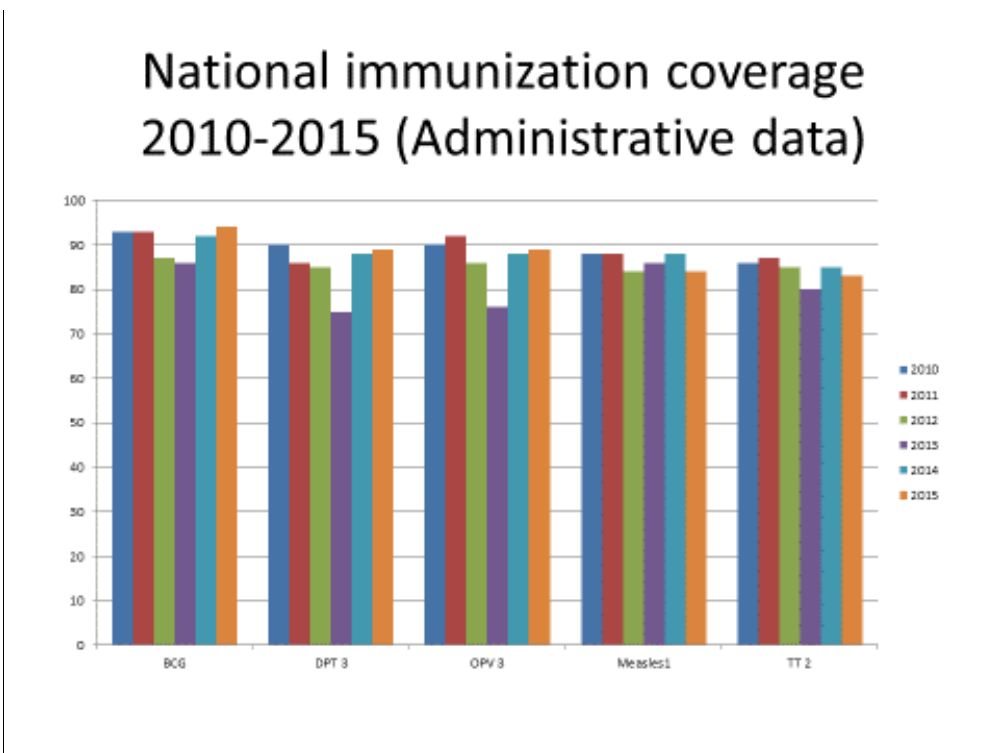
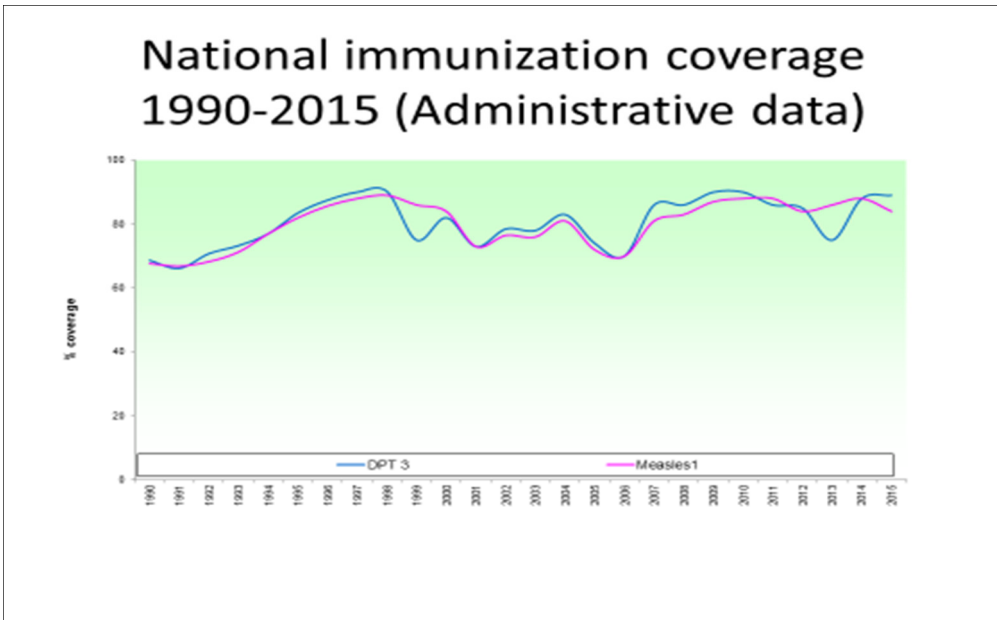
New vaccine support includes hepatitis B vaccine, pentavalent (2012-2016), measles 2nd dose (2012-2016), MR campaign (2014, 17.4m target population), IPV introduction (December 2015) and the PCV introduction (July 2016). The JE application was reviewed by the IRC in July and recommended for approval. Rota is envisaged for 2018. HPV for 2019 (cMYP).

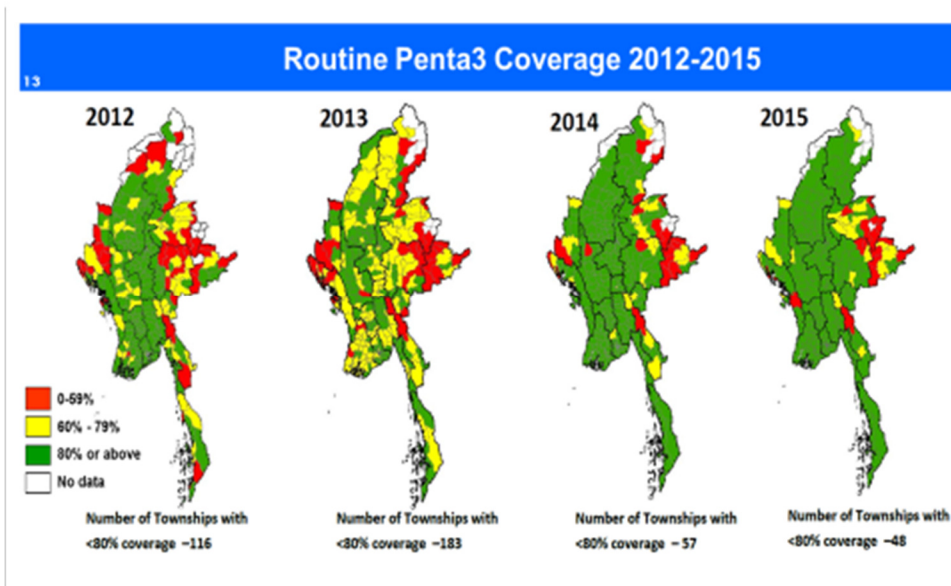
**Immunization coverage**

National routine immunization coverage for 2015 for **DPT3** is 89% by official estimates and 75% by WUENIC estimates of July 2016 (reasons for the difference are further detailed below). Of

the 330 townships in the country, 282 (85%) have DPT3 coverage greater than 80% in 2015 (JRF-2015). MCV2 coverage is 80%, and has been at this level for several years.

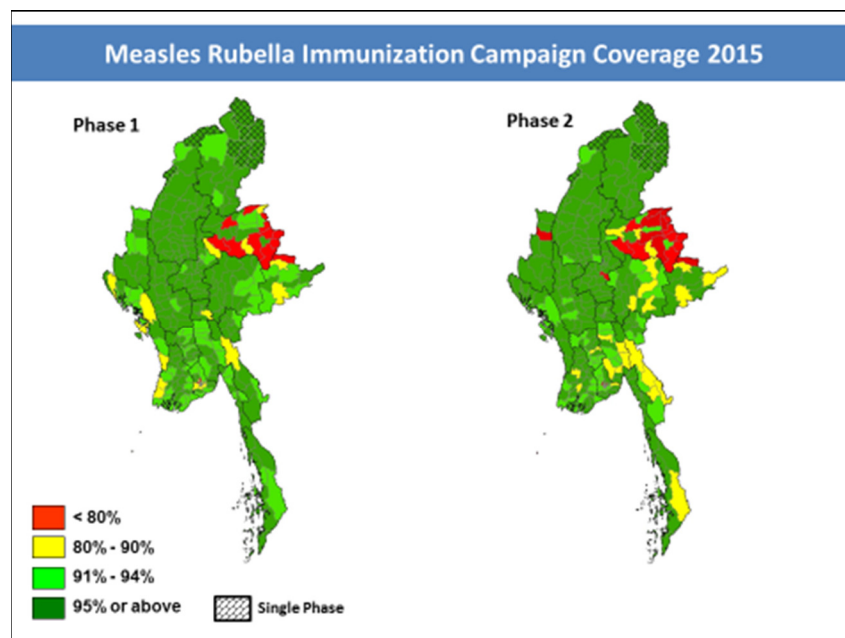
In respect to **MCV1**, the national coverage is 84% by official estimates and 86% according to latest WUENIC estimates.





Myanmar conducted a **MR campaign** in 2 phases in January (for school age children 5-14 yrs) and February 2015 (9 month-5 yrs) and replaced measles first dose (MCV1) with the MR vaccine in April 2015. The measles vaccine is used for second dose (MCV2), administered at 18 months of age. The administrative coverage was 94%.

Myanmar also introduced **IPV** in December 2015, and switched tOPV to bOPV on 29 April 2016.



### Implementation Progress

Although national immunization coverage is >80% for both DPT3 and MCV1, coverage is not uniform across the country and there are pockets of areas with high percentage of unimmunized children. The main reasons for children being missed are: 1) geographically and socially hard to reach areas, 2) migratory population, and 3) peri-urban and conflict areas.

In terms of immunization coverage trends:

**DTP3** coverage has been increasing as more and more districts reach >80% coverage.

On the other hand, **MCV1** coverage fell slightly in 2015, most probably due to the fact that measles vaccination was interrupted one month prior to the countrywide, wide age MR campaign in early 2015, in order to avoid the risk of administering two doses of measles vaccine within less than one month apart. As such, this dip in coverage is deemed to be temporary.

**IPV** coverage is low due to the vaccine being introduced only in December 2015. The current vaccine presentation of 10 dose vial led to high wastage rate in some areas with few 'eligible' (4 month-old) children (IPV given with DTP2), and the country is considering shifting to 5 dose vials.

The outbreak of circulating vaccine derived poliovirus (cVDPV) in Rakhine State (west of the country with well-known communal troubles) is indicative of a low immunity in population. Five rounds of polio campaigns were done in response to this outbreak.

Myanmar successfully conducted wide age group (9 months to 15 years) **MR campaign** with coverage of more than 94%.

In 2015, out of 243 measles suspected cases reported only 6 were lab confirmed. More recently, at the beginning of August 2016, a measles outbreak had been confirmed in a few villages in Naga self-administered area (bordering with India). Over 150 cases and as many as 25 deaths have been reported, however it is likely that other diseases (in addition to measles) may have been involved, as at least one case tested positive for meningococcal meningitis. Naga is an impoverished and geographically difficult to access area, and it may also have been missed out on the MR campaign as well, as 'routine' services for measles and other vaccines. A rapid response team was deployed following these findings.

In addition, 30 neonatal tetanus cases and 113 lab-confirmed JE cases were reported in 2015. As a response, Myanmar decided to conduct a **JE campaign** throughout the country in 2017.

**An effective vaccine management (EVM)** assessment was completed in May 2015. The overall EVM performance increased by 9% as compared to the 2011 EVM. However, gaps were noted in some of the EVM areas including temperature monitoring, building, equipment and transportation.

A cold chain expansion and replacement plan was implemented through UNICEF largely with funding from 3 MDG (nearly US\$ 6 million invested). In total more than 1,200 various type of cold chain equipment (Icelined refrigerators, freezers and SDD refrigerators were procured and about 60% installed before the end of 2015. To accelerate the installation, repair and maintenance of the cold chain equipment UNICEF recruited a third party company to support the work in 11 State/Regions where there are no Government cold chain technicians.

The Central Expanded Programme of Immunization (CEPI) continued to ensure that adequate vaccines were available throughout the year 2015 through timely forecasting, ordering and shipment as a result there were no reported stock out of all Gavi supported vaccines and injection. In addition, the Government was able to fulfill all co-finance obligations for pentavalent and pneumococcal vaccine through timely transfer of funds to UNICEF Supply Division.

The **community demand** for increased uptake of EPI services and advocacy events were implemented through various strategies at all levels. At central level the Ministry of Health organized launching ceremonies for measles and rubella campaign, IPV introduction and also in addition organized for the felicitation ceremony to recognize partners who contributed in improving immunization services. All these key events were officiated by high government officials including the vice president and the Minister of Health.

### Implementation bottlenecks and challenges

- Immunization equities. The vaccination coverage is not uniform throughout the country, only 85% of townships have >80% DPT3 coverage and 71% have >80% MR coverage. Migrant, hard to reach population, peri-urban and conflict area children are often missed.
- Data quality; difficulties with denominators. EPI uses head count as denominator because census data from 2014 did not cover all townships (conflict areas). Every year annual EPI evaluation meetings are held at central level to discuss the coverage and target data for next year. DQSA and EPI coverage survey will provide more accurate information on data quality and coverage (planned for later in 2016). WHO has been engaged to provide technical assistance for conducting an in-depth data review which will hopefully lead to the development of a pragmatic data quality action plan.
- Service delivery. Vaccination is carried out essentially by midwives. Each month they cover 8-13 villages through outreach sessions, when they have to travel many times on their own expenses, as no extra funds are provided to support their transportation. Besides, retention of midwives is challenging in remote and hard to reach areas. The volunteers are not always well trained and updated on EPI.
- Cold chain and vaccine management. Although most of the cold chain equipment items have been distributed some have not been installed and hence jeopardizing the storage capacity at various levels. Furthermore, the cold chain equipment inventory is not updated on regular basis. Most of the appointed Cold Chain Key Persons (CCKP) have not received a formal training on cold chain and vaccine management and Standard Operating Procedures.
- Management of vaccine and injection materials. Due to long processes required for port clearance, there were delays in timely shipment of some of the vaccine and injection materials supported through Gavi. More specifically the Ministry of Health has to apply for the import permit and then the tax exemption for all shipments with the Government as consignee. The two processes require almost the same documents for approvals and result in administrative delays.
- The communication of the plan of action for strengthening routine immunization has been slower than anticipated due to other competing priorities.
- Participation of communities. Community participation for demand generation and ensuring every child is vaccinated is not always at high level and needs to improve.
- Human Resources Capacity. Basic health staff (BHS) need refresher trainings. PHA2 category of staff could be trained on EPI to carry out vaccination or support midwives. The data person and other supervisors at all level need capacity building trainings on technical and managerial skills.
- Data management and action oriented use of information. Analysis of data and use of information at township level and below level are sub-optimal. HMIS has expanded data management system in 120 townships and has plans to roll-out to other townships.
- Confusion among vaccinators due to use of MR and measles vaccine, especially when faced with children >12 months who have not been vaccinated for first dose<sup>1</sup>.
- Other challenges include: Some duplication of funding among partners, low implementation due to focus on MR campaign in 2015, inadequate human resources for absorption of HSS funds, delayed fund flows to townships, sustainability of health financing components (HEF, voucher scheme) and fully functional infrastructure etc.

<sup>1</sup> These children should receive MR vaccine. The WHO recommendation is that MR vaccine should be used for both routine doses of MCV.

### Enabling factors

- Government political and leadership commitment for immunization and CEPI.
- Dedicated health staff including midwives at township and below level in the health system.
- Head count due list, defaulter tracking system, involvement of local leaders to improve coverage and equity.
- Increased MoHS budget for human resources and vaccines co-financing.
- Use of HSS funds to support package health service tours, hospital equity fund, maternal voucher scheme, provision of vehicles, crash strategy for hard to reach communities, VIG for capacity building, financial management trainings, advocacy meetings, cold chain support.
- Remaining balances of GAVI cash grants (VIG, operational costs) could be used to support CEPI.
  - The government has proposed to use the remaining balances of GAVI cash grants (US\$ 560.000) to support development of an annual work plan at township level; develop special strategy for reaching children in conflict areas, geographically and socially hard to reach area, migratory population and peri-urban; advocacy meeting with state and regional ministers and high level officers; training of volunteers in prioritized townships; refresher training to all basic health staff; data management training for data focal person from state/region and townships; initiation of immunization in hospitals; advocacy and orientation workshop with village and urban administrators and community leaders, field allowances to midwives, operation support for supervision and monitoring, quarterly review meeting at all level and crash program in Nagaland region. These activities are in process of implementation and will be completed by end of December 2016.

### Surveillance

- Case-based surveillance<sup>2</sup> for vaccine preventable diseases (VPD) is conducted by a network of WHO supported surveillance medical officers (1 national coordinator and 16 regional surveillance officers). Currently, these staff are funded by GPEI and there is uncertainty about how this essential surveillance capacity will be funded in the future. It is envisaged to develop a Polio transition plan later in 2016 and this needs to be included in future analysis.
- There are national laboratories supporting surveillance for polio, measles, rubella, JE and rotavirus.
- Sensitivity of surveillance remains less than the minimum standard (>2 per 100,000) for AFP (1.8 per 100,000) and non-measles/non-rubella cases (0.6 per 100,000) Specimen collection for measles and rubella is a problem especially if suspected cases are seen in rural health centres.
- There is an urgent need to both maintain and strengthen surveillance for VPDs especially for polio, measles/rubella, and JE that are prone to outbreaks.

### Costs and financing of CEPI

The total cost of the immunization program was USD \$67.0 million in 2015 (see Table), of which 19% was spent on routine vaccine supply and injection supplies for routine immunization

<sup>2</sup> Case-based surveillance refers to surveillance systems that collect information about each case at the individual level usually including clinical specimens for laboratory confirmation.



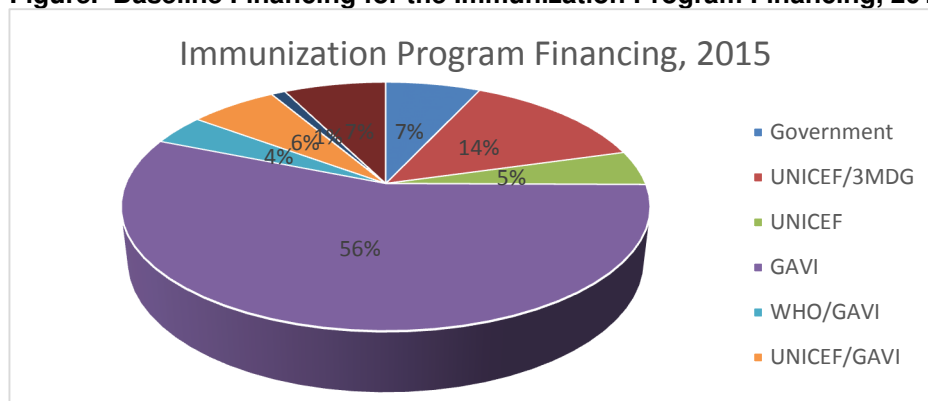
and 41% was spent on SIAs. The remaining costs were allocated to program management (2%), service delivery (5%), disease surveillance (3%), and advocacy and communication (5%). The contribution to shared health system costs was 14%.

**Table: Baseline Cost Profile of Immunization Program in 2015 (cMYP 2017-2021)**

Cost Category	Expenditure in 2015 (USD)	% of Total
Vaccine and Injection Supplies (Routine Immunization Only)	12,708,157	19%
Service Delivery	3,455,111	5%
Advocacy and Communication	3,041,338	5%
Monitoring and Disease Surveillance	1,752,758	3%
Program Management	1,012,618	2%
Capital Costs	\$8,412,403	12%
Supplemental Immunization Activities (SIAs) (includes vaccine and operation costs)	27,568,686	41%
Shared Health Systems Costs	9,387,619	14%
<b>Total</b>	<b>67,338,690</b>	<b>100%</b>

The government financed 7% of the immunization program (14% share for routine immunization due to high SIA costs). This funding went for health worker salaries, operational costs, transportation, and building costs. GAVI was the largest source of financing (56%) and financed over half of the costs of the program. The second largest source of financing was 3MDG<sup>3</sup> (15%) and went towards purchasing new cold chain equipment through UNICEF. Other sources of financing were UNICEF funding for traditional vaccines and injection supplies (5%), GAVI funding implemented through UNICEF (6%) and WHO (4%) for training, microplanning, and IEC/social mobilization, and CDC funded channeled through WHO for surveillance and the polio SIA (7%)

**Figure. Baseline Financing for the Immunization Program Financing, 2015 (cMYP 2017-2021)**



<sup>3</sup> The 3MDG project is funded by a consortium of agencies – AusAID, Danida, European Union, Swiss Confederation, Sweden, DFID, and USAID.

### 3.1.2. NVS future plans and priorities

#### Vaccine targets

Head count data was used for the 2015 targets and projections based on this have been calculated for subsequent years. The 2015 target population was estimated at 928,612 and 823,377 children are reported to have received penta3 while 876,598 received penta1. The initial 2016 target was 1,466,517, however based on the 2015 actual achievements, 2014 population census and cMYP estimations, it is being proposed to reduce the 2016 target to 931,115 to be used for PCV, penta and measles. The ongoing challenges with denominators in the country, made challenging the proposal of realistic coverage targets. However, there is great willingness within the country to do further work to improve this. For example, further work to analyse population projections based on the most recent census data and compare these to headcount data is planned.

#### Future plans and priorities

- New vaccines introductions - Pneumococcal vaccine was introduced into routine immunization in July 2016. A thorough training of all basic health staff (BHS) was conducted to build up knowledge and confidence as Myanmar will introduce 3 injections to children on the same visit. Communication skills of health staff should be enhanced while dealing with parents and information on new vaccines. Current use of measles vaccine as second dose will be changed to MR. Application for JE vaccine will be submitted. Rota surveillance will continue.
- Improve access to vaccination in urban, socially and geographically hard to reach, migratory and conflict areas – Each identified township/area will get support to develop special strategy to reach unvaccinated children based on challenges/ problem identified. Based on these strategies, mapping of the donors will be done to support the township. Various local NGOs/INGO will be identified who are able to provide support in EPI. Besides existing MCH clinics, the government is also planning to expand immunization in all hospitals. Vaccination will be integrated with other child health services. Hospital staff will be trained, cold chain and other logistics will be supported.
- In the context of prevailing ceasefire in communities traditionally inaccessible by government cadres, existing micro plans will be updated to include these communities and other vulnerable communities e.g., migrant or transient cross border communities, urban poor populations (a comprehensive list of these communities needs to be generated)
- In non-government controlled areas where government employed staff are not easily accepted, it needs to be considered to provide technical and logistical support to facilitate delivery of immunization and other basic health services. This requires to identify non-governmental organizations to implement immunization plans in these communities.
- Improve service delivery – The midwives will be supported with motorcycles and or transportation cost where motorcycles cannot be used for EPI outreach sessions. Additional staff will be trained on midwifery courses from very hard to reach areas so that after the completion of the training they will remain in their villages and support immunization. An assessment will be carried out at the end of 2016 comparing areas where motorcycles are provided with those where motorcycles are not provided to assess the impact of provision of transportation on immunization.
- Increase community ownership and participation toward vaccinating every eligible child – orientation sessions will be held for village and township administrators, village leaders, religious leaders and volunteers to improve community ownership, awareness and participation to support vaccination. They will also be encouraged to ensure

vaccination of every child and declare their rural health centers (RHC) as fully immunized.

- Capacity building of health staff at all levels – Provide refresher trainings on EPI, training on management, cold chain and vaccine management, micro planning to all basic health staff, supervisors and managers. Strengthen infrastructure and other logistics of training centers, develop training packages and develop pool of master trainers so that quality of training is maintained at all levels.
- Strengthen data management system at all level – Training on data management tools and its use will be done in all townships. The townships will computerize data system for recording, reporting and analysis of information. Training on DQSA will be conducted at central level followed by data self-assessment. The DQSA result will be disseminated for improvement. Each year certain number of townships will carry out data management.
- Advocacy and communication – Advocate for immunization with policy makers, professional organizations, local and religious leaders. Increase demand generation through dissemination of messages from TV, radio and other print media. Mobile application will be developed to disseminate the messages to health care providers, clinicians and parents.
- Social mobilization and immunization demand creation a) accelerate the implementation of the communication plan of action for strengthening routine immunization including assessment of the effectiveness of the current interventions and also initiate the baseline survey for Knowledge, Attitude and Practices on immunization (KAP); b) at state and township level, include communication plan in the EPI operational plan and also in the townships appoint a dedicated focal persons for communication and community mobilization.
- Conduct EPI review meetings and develop township level annual EPI work plan – Quarterly review meeting at township, state and regional and central level will be conducted to review EPI data, analyze the information and identify challenges and action for improvement. Each township will develop annual EPI work plan based on analysis of their situation, challenges, and successes. The annual work plan will be costed time bound and supported by performance indicators. Following the annual work plan donors will be identified to support certain part of the plan so that there is no duplication in support.
- Monitoring of performance – Conduct monthly meeting with EPI, UNICEF and WHO to monitor the progress against the target, review coverage data, wastage rate, number of session conducted versus planned.
- Cold chain and effective vaccine management strengthening - The major focus will be accelerating the implementation of the 2015 EVM improvement plan including; a) capacity building of Cold Chain Key Persons (CCKPs) and other cadres engaged in cold chain and immunization supply chain management; b) continue to expand cold chain up to RHC level based on EVM improvement plan so that it can accommodate more new vaccines (JE, Rota and HPV); c) cold chain in non-government controlled areas especially those which have signed ceasefire agreement. This will bring immunization services closer to the communities and also encourage intensification of immunization session; d) strengthening the capacity of Ministry of Health especially CEPI and procurement & supply unit in managing the clearance of Gavi supported supplies including simplification of clearance procedures.
- Continue the efforts to ensure smooth transition of government financing for traditional vaccine including subscription to the UNICEF supported vaccine independent initiative

(VII) which will minimize the lead time and prevent stock-out. In addition, the Government will ensure co-financing of penta and PCV as per initial agreement.

- Continue to maintain **polio free status** – introduction of IPV, switch from use trivalent oral polio vaccine to bivalent OPV, outbreak response plan for post switch period and finalize laboratory containment. Ensure high standard AFP surveillance and respond to any outbreaks.
- Achieve **measles elimination and control of rubella and CRS** - develop a plan for achieving elimination of measles and rubella that includes, achieving high level population immunity through vaccination at least 95% of target children either through routine or supplementary immunization, expanding case-based surveillance throughout the country by 2017 supported by laboratory which will require additional resources, expansion of measles lab to Mandalay, adequate response to any suspected measles outbreaks, and initiate CRS surveillance in 3 sites by end of 2016 with possibility of further expansion in coming years.
- Maintain **MNT elimination status**
- Initiate AES surveillance for Japanese Encephalitis - develop AES surveillance guideline, conduct training for clinicians and health staff to know JE disease burden followed by to know impact of vaccination, integrate AES surveillance with AFP surveillance
- Continue **integrated VPD surveillance**; expand rota surveillance to 3 more sentinel sites, conduct disease burden studies e.g. for HepB.

### 3.2. Health systems strengthening (HSS) support

#### 3.2.1. Strategic focus of HSS grant

The strategic focus of HSS1 was on strengthening of PHC services especially in hard to reach areas through program coordination, capacity building and human resource management.

The grant was implemented by WHO and UNICEF as support to MoHS. The Myanmar Red Cross Society was responsible for the construction of rural health centers.

GAVI HSS1 (2012-2016 with a no-cost-extension) served as a successful model that has significantly influenced later arrived donors such as World Bank and 3MDG Fund for support to the regional levels of the health system. The programme intervened in 20 townships in 2011-12, and expanded to 120 out of 330 townships/districts nationwide in 2014-15. Townships were selected using a combination of criteria: DTP3 coverage below 80%, skilled birth attendance below 60% and hard to reach/remoteness.

The programme focused on both **immunization services and broad mother and child health (MCH) interventions** delivered by auxiliary midwives and community health workers. Aims were to accelerate DTP3 coverage for children (under 12 months old) from 70% to 90% at a national level, and increase the assistance of skilled birth attendants (SBA). There was also demand side financing through an MCH voucher scheme and a Hospital Equity Fund targeting the township poor, focusing on MCH services to accelerate progress of MDG 4 and 5.

The mid-term evaluation (2013) after two years of implementation showed that the outreach services contributed to increased coverage of key indicators such as ANC, TT2, SBA, DTP3 and BCG.

However, as the programme expanded from 20 to 120 townships, absorption difficulties **led to a balance of approximately US\$ 7.4m** in the WHO account for 2016 (US\$ 5.42m 'no cost extension', US\$1.23m carried forward from 2015, US\$0.74m EPI support (amendment No 1 of the grant agreement)).

The identification of procurement and other activities to be implemented by the end of **2016 (no cost extension)** was agreed upon in June 2016.

The Myanmar Red Cross Society (MRCS) is the 3rd party for the reconstruction part of the HSS grant, and a Grant Agreement between GAVI, MoH and MRCS was signed in April 2014 for their project to build 30 sub-rural health centers with total budget of \$US 1,137,570. The first tranche of 60% (US\$ 682k) was disbursed in June 2014, 30% were disbursed in June 2016 and overall progress of the component is promising.

Additionally, there is a balance of US\$ 3.3m at Gavi level which will not be disbursed given the high in-country cash balance and which are considered as unutilized funds.

### 3.2.2. Grant performance and challenges

#### Achievements and results

Out of 757 RHC under 120 townships, about 44% (331 RHC) were supervised at least 6 times per year using a quantified checklist. Capacity building on management covered 5,075 managers/ trainers / BHS at township level. Other achievement is no single RHC under 120 townships had stock out of essential supplies in 2015. Only 21 townships could be staffed with standardized number of staff (midwife and PHS2) according to national HR standards.

36% of townships (119 out of 120 GAVI HSS townships- one township could not implement due to civil unrest) have developed and implemented coordinated plans according to the national framework.

End reviews/assessments will be conducted in late 2016 at the end of the "no cost extension" period for the HSS 1 grant. No survey was conducted during 2015. All the achievements and results in 2015 were from regular reports from project townships. The same set of metrics were not routinely tracked and reported on for HSS1 since the beginning of the grant. However metrics and targets have been agreed upon for remaining HSS1 funds and additional dedicated time spent on the proposed metrics for HSS2.

#### Implementation progress

In 2015, 119 townships developed and implemented coordinated township health plans and delivered outreach services of PHC activities (EPI, MCH, nutrition and general medical services) at hard to reach areas. Through the outreach tour services, 45,734 doses of immunization were given to under one year old children, BHS could provide antenatal care services to 36,442 pregnant women, post-natal care services to 11,359 patients and general medical care to 219,054 patients. 2,752 unimmunized children were identified and these children could be immunized during outreach services. Nutritional status of 346,664 under 5 children was measured and detected 13,741 malnourished children (1,218 - severely malnourished).

21,371 patients benefited from the Hospital Equity Fund where 5,473 under 5 year old children were treated for life saving conditions, 10,910 mothers were treated for obstetric cases and 146 cases for gynecological problems. Through the Maternal Voucher Scheme, which is implemented in 2 townships, 3,202 pregnant women benefited for 3 ANC visits, delivery, PNC and 5 immunizations to neonates.

Although expansion of Gavi HSS townships stopped in 2015, 632 AMWs were recruited according to the need of 33 townships. 521 MW kits, 100 RHC kits, 11,549 PHS II kits, 1,800 CHW kits and 404 BEmONC kits were procured by UNICEF during 2015.

Investments into the cold chain by procuring 330 ILRs for the townships benefitted immunization services directly.

### **Bottlenecks and proposed corrective actions**

Changes in organizational structure of budget and finance unit under Department of Public Health during 2015 led to delayed financial disbursement from central to townships. This situation caused financial gaps for the implementation of continuous activities like the Hospital Equity Fund, MCH Voucher Scheme and outreach tour activities and resulted in low utilization of funds at township level.

To monitor the implementation of HSS activities and to fill the gap of township medical officers at township level, Health System Strengthening Officers (HSSOs) have been recruited through the Special Service Agreement mechanism by WHO. Due to change in civil service policy, recruitment of the new batch of HSSOs took more than one year and there was a gap for 11 HSSOs during 2015 which impeded the program implementation across 120 townships.

To address the identified issues, corrective actions were proposed as follows:

- Improvements in handling ministerial procedures to avoid the funding gap at township level.
- Cash balance from operational costs and health financing schemes will be used for procurement of 20 vehicles and 180 motorbikes in order to access hard to reach communities by townships and state/regional health care providers.
- Following negotiations with related ministries regarding the recruitment process of HSSOs, HSSOs will be in place during the no-cost-extension period.
- With the conclusion of Gavi HSS1, alternative funding resources would need to be mobilized for the equity fund and the voucher scheme. The budget still includes funding for an evaluation of these components and the assessment of their sustainability should be included in the scope of work.

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

#### **New HSS 2 grant (IRC review in March 2016)**

Myanmar has a ceiling of US\$ 100m (and additional performance based funding (PBF)) for GAVI HSS covering the period 2016-20. The country applied for US\$ 52m support for the period 2017-2019, which was recommended for approval by the IRC in March 2016. The clarifications process has been completed and the Decision Letter should be issued in September 2016.

The six key determinants for sub optimal routine immunization coverage in the country were identified as: access, resource availability (skilled human resources, vaccines and cold chain), service delivery, information use, managerial capacity and management of adverse event following immunization.

The new HSS proposal focuses on 199 townships (100 underperforming, 99 in hard to reach areas and with VPD outbreaks. There is a significant overlap with the 120 townships of the HSS1 grant) and therefore most of the work related to immunization which has been initiated will be continued through HSS2 grant. The programme has the following objectives and budget allocations:

HSS Proposal Objectives	US\$ amount	%
1. Objective "1" To strengthen demand for immunization services	6,215,193	12%
2. Objective "2" To implement cold chain expansion and improvement plan	19,876,526	38%
3. Objective "3" To strengthen leadership management capacity and coordination	7,885,540	15%
4. Objective "4" To improve equitable access to service delivery	6,282,000	12%
5. Objective "5" To strengthen EPI data management, M&E system	8,299,874	16%
6. Program management	3,440,867	7%
<b>Total</b>	<b>52,000,000</b>	<b>100%</b>

The proposal defined responsibilities for the implementation among the different actors:

- **DoPH, MoH&S** will manage the implementation and will be directly responsible for; recruitment & deployment of the various human resources, operational support for scaling up provision of the immunisation services in conjunction with CSOs and other implementing partners.
- **UNICEF** will be responsible for procurements and strengthening immunization supply chain, cold chain and effective vaccine management as well as technical guidance and support to CEPI and CSO in strengthening efforts for communication and demand generation.
- **WHO** will undertake provision of technical support, trainings, strategic information, surveillance and data management activities.

MoH&S will receive 41% of the funding as per current budget planning. The implementation of the government component requires a Programme Capacity Assessment (PCA) by Gavi which is scheduled for late 2016. The objective of the PCA will be the identification and recommendation of options to channel and monitor funding which is disbursed directly to government. Funds are expected to be disbursement in early 2017 once agreements are signed with WHO and UNICEF and therefore there will be no any anticipated funding gap since the current HSS1 grant ends in December 2016.

Country colleagues have invested considerable time to bring further refinements to the HSS2 proposed grant performance framework metrics to ensure these are of better quality and more SMART than for HSS1.

### 3.3. Transition planning *(if relevant)*

Myanmar with a G.N.I of US\$1280 p.c. (2015) is in the preparatory transition phase and is projected to enter the accelerated transition phase in 2021.

Government is aware of the increasing co-financing obligations and has for 2016 and 2017 made appropriate budget provision and plans.

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

The following is a list of the finance-related issues which were discussed during the JA:

- 1. Compliance:** Attached is a detailed compliance sheet including disbursements up to 31/5/2016. Missing reports and key due dates are as follows:

Grant	Recipient	Reports missing/due	Period ends	Comment
HSS 1	WHO	Certified Statements of expenditure	31/12/2011-14 31/12/2015 due 30/6/2016	\$3.12m cash held by WHO 31/03/16 per MoH consolidate report
HSS 1	MoH (as a sub-recipient)	Audit report	31/12/2015 due 30/6/2016	Note special requirement in the PFA & (HSS 1 Decision Letter) that MoH reports are provided to Gavi.
HSS 1	UNICEF	Certified Statements of expenditure	31/12/2011-14 (31/12/2015 due 30/6/2016)	\$61,792 uncommitted cash (and \$2.2m committed) held by UNICEF at 31/12/15 per MoH consolidated report.
HSS 1	Myanmar Red Cross	Audit report + construction technical report	31/12/2015 due 30/06/2016	\$415 balance, Funds mostly utilized.
ISS	WHO	Certified Statements of expenditure	31/12/2014 and 2015 due 30/6/2016	
Measles-Rubella OC	WHO & UNICEF	Certified Statements of expenditure	31/12/2015 due 30/6/2016	
VIG - IPV	WHO & UNICEF	Certified Statements of expenditure	31/12/2015 due 30/6/2016	
VIG - Penta	WHO	Certified Statements of expenditure	31/12/2015 due 30/6/2016	
VIG - Measles	WHO	Certified Statements of expenditure	31/12/2015 due 30/6/2016	

Notes: MoH had prepared a consolidated statement of MoH, WHO, UNICEF and Red Cross Society expenditures combined. However, this overview requires clarifications as different reporting periods are used for different grants.

- 2. Financial performance generally** – HSS1 absorption rate was low in the past and reporting compliance has deficits (see section 7 below). Full delivery on all outstanding reports and reconciliation of cash balances will be needed in advance of HSS2.
- 3. Actions required before PCA and HSS2**  
It is recommended for the MoH to prepare a consolidated statement at both 31 December 2015 and 30 June 2016 – the expenditure figures should agree with the total of expenditures in the accounts of MoH + WHO + UNICEF + Red Cross Society and the balance (after excluding commitments) should agree with the reconciled cash balance of MoH and Red Cross Society, plus the reported cash of UNICEF and WHO.
- 4. Fiscal year reporting out of sync** between partners (WHO/UNICEF), Jan-Dec and MoHS, April-March



5. **Myanmar Red Cross Society audit** – Completion of technical audit to release 30% of grant value. This has been submitted post JA mission in July 2016.
6. **HSS2 proposal budget issues** – IRC clarifications highlighted budget inconsistencies, detailed assumptions for larger activities are lacking value-for-money and sustainability concerns. This would still need to be addressed in the preparation of the HSS2 programme.
7. **HSS2 proposals for financial management of the grant.** The proposed financial management mechanisms requires substantial work prior and in the context of the PCA. The mechanism requires to analyse and include lessons learnt from the World Bank Essential Health Services Access Project (EHSAP).

4. UPDATE OF FINDINGS FROM PREVIOUS JOINT APPRAISAL

<b>Prioritised strategic actions from previous joint appraisal / HLRP process</b>	<b>Responsibility</b> (government, WHO, UNICEF, civil society organisations, other partners, Gavi Secretariat)	<b>Timeline</b>	<b>Status</b>
<b>COLD CHAIN:</b> Conduct EVM and closely monitor implementation of improvement plan	MoH, National EPI, UNICEF	2015/16	Done. Some activities initiated in 2016 and most of EM-IP integrated into HSS2 programme for implementation
<b>COLD CHAIN:</b> Accelerate implementation of cold chain expansion and replacement plan in preparation for vaccine introduction	MOH, National EPI, UNICEF	2015/16	Done. Financial support of 3MDG Fund (approx 6 million USD).
<b>COMMUNICATION AND SOCIAL MOBILISATION:</b> Develop routine immunization communication strategy/plan of action and roll out implementation	MOH, National EPI, UNICEF, WHO	2015/16	Ongoing, most of the works to be implemented in late 2016 and to continue under HSS2 in 2017.
<b>DATA QUALITY:</b> Plan Coverage Survey and implement data quality improvement activities	MoH, National EPI, WHO and UNICEF	2016	Planned for late 2016. EPI coverage survey under HSS2 in 2017.
<b>DATA QUALITY:</b> Update target populations based on newly published census data	MoH, EPI program	2015	Ongoing.
<b>HSS:</b> Appoint HSS Officers to assist scale up of HSS & Plan for evaluation of HSS 1	MoH, GAVI HSS	2015/16	Done. GAVI HSS1
<b>EQUITY/HSS:</b> Implement REC/planning approach for hard to reach populations and urban migrant populations as indicated in the EPI improvement plan	MoH, National EPI, NHSC, Partners, UNICEF and WHO	2015/16	Ongoing and continuing under HSS2 in 2017. MoHS, UNICEF, WHO and other partners
<b>TRAINING:</b> Conduct Training of Public Health Supervisors contribute in the immunization service provision especially in hard to reach areas	MoH, national EPI	2015/16	Done. GAVI HSS1
<b>FINANCIAL MANAGEMENT:</b> Need for follow up by GAVI Secretariat of Financial Management requirements (external audits HSS and new vaccine introduction grants)	GAVI Secretariat with implementing partners	2015	See section 3.4.

## 5. PRIORITISED COUNTRY NEEDS<sup>4</sup>

### 5.1. 2016 TCA

The PEF supported TCA in 2016 had a total budget of US\$ 1.1m and was allocated for activities of UNICEF, WHO, CDC and the World Bank. The activities were as follows:

#### UNICEF (US\$ 389.000):

- **Supply Chain**
  - Support the implementation of the EVM improvement plan (most of the work have been initiated and will be continued through Gavi HSS2 programme).
  - Support country in its feasibility assessment for electronic logistics information management systems and the initial improvements towards use of logistics information (the assessment of the immunization supply chain data use has been completed and the consultant is currently finalizing the possible options for electronic logistics information management system).
  - Finalize cold chain replacement expansion and maintenance plan (REM) and develop CCE resourcing plan (e.g. GAVI CCE OP) – (the consultant has been recruited and most of the work will be initiated in quarter 4 of 2016 and most of 2017).
  
- **Financing**
  - Assessment of supply financing options exercise, including feasibility of access to Vaccine Independent Initiative (VII) and/or Commercial Financing (with support of UNICEF Supply Division, initial consultative discussions have been initiated with Ministry of Health and Sports & Ministry of Planning and Finance. The draft VII plan is in place awaiting approval from the Ministry of Finance, once approved the Ministry of Health will be able to receive vaccines in advance and pay later to UNICEF. The Government has allocated budget of nearly USD 6.7m for procurement of all vaccine to be used in routine immunization including for the first time the traditional vaccines.
  
- **Data**
  - Support the planning, implementation and analysis of the EPI coverage survey (this will mainly be mainly coordinated through WHO and UNICEF will provide needed support).
  
- **Coverage & Equity**
  - Conduct equity assessment. Provide technical support and guidance in accelerating the implementation of UNICEF supported interventions mainly in addressing inequities through REC, linking with demand promotion activities (specific training materials for increasing skills of health workers in interpersonal communication are being finalized and will mainly be available in 2017).
  - Deployment of national technical experts to support the Ministry of Health in addressing the inequities in the access and utilization of immunization services in all areas with very low immunization coverage (UNICEF deployed 3 consultants who supported the review and assessment of immunization performance mainly in the low performing state/regions and townships).
  - Support development of micro plans for hard to reach areas with linkage with communities (demand promotion) – (most of this work will be done in coordination with WHO, UNICEF main contribution will be on the demand creation and social mobilisation).

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<sup>4</sup> Subsequent planning and discussions on Targeted Country Assistance will take place - detailed guidance on the process will be shared in May 2016.

- Document the process of implementation of REC in all areas/communities with very low immunization coverage (the documentation will be initiated in the second half of 2016 through Q1 of 2017).
- **Demand Promotion**
  - Develop EPI Communication Plan emphasizing RED/REC approach and support implementation and monitoring (there is good progress in the implementation using different approaches).

UNICEF has recruited all the staff to implement or plan for the activities. Until the period of June 2016 no milestone reporting has been received as this is too early given the processes in this first year of TCA and all indicators related to UNICEF are expected to be reported in the end-year reporting (as indicated in the PEF reporting portal). However, most of the activities as mentioned above have been initiated, it is expected there will be a good progress mainly in Q3/Q4 in 2016 and some of the pending work will be carried forward in 2017.

**WHO (US\$ 431.000)** has been supporting the following activities mainly by financing international and national staff costs (incl. travels, transport etc.):

- **Coverage & Equity**
  - Support implementation, monitoring and evaluation of reaching every community strategy
- **Supply chain**
  - Support vaccine management assessment and monitoring of improvement plan.
  - Support immunisation supply chain systems and establishment of electronic logistics information management systems.
- **Data**
  - Support surveillance and AEFI systems development to monitor impacts and promote safety.
  - Coverage surveys and data quality improvement.
  - Technical support for VPD data management.
- **Vaccine sub-groups**
  - Technical support for new vaccine introductions (bOPV switch, PCV introduction, HPV demonstration).
  - Preparation of the HPV application to GAVI and implementation.
  - Preparation of the JE vaccine application to GAVI and implementation.
- **HSS**
  - Address health system bottlenecks impeding EPI activities.
  - Technical support for planning, implementation, M&E and reporting of HSS interventions supported by GAVI HSS proposal.
  - Support health systems planning and management at all levels.

The **WHO reporting on milestones** for the first half of 2016 is as follows:

1. AEFI monitoring committee and national plans developed – AEFI reporting system and AEFI committees in place. All AEFI cases are reported and investigated. (Completed.)
2. Critical bottlenecks to health systems planning and management at all levels included in HSS proposal – Health system bottlenecks for immunization outcomes were analyzed and reviewed while developing HSS 2 proposal. (Completed.)

3. Preparedness and support in introduction of PCV – PCV was introduced throughout the country on 1 July 2016. (Completed.)

The **World Bank** has a budget of US\$ 200.000 to support work on financial sustainability and health financing in Myanmar (Health System Financing Assessment, HSFA). The activities were initiated in the first half of 2016 by meetings of the World Bank and Gavi and remain highly relevant.

## 5.2. 2017 TCA

Prioritized needs and strategic actions for 2017 were identified as a continuous development of the support in 2016. The final selection and budget allocations will be determined by the Alliance wide process until November 2017.

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
Review, update and development of EPI planning including micro planning guideline	April 2017	Existing plan/guideline will be reviewed and adjusted according Organisation: WHO
Develop, conduct and implement specific strategic plan for reaching hard to reach, migratory, peri-urban and conflict area	April 2017	Specific strategy need to be developed for reaching children in hard to reach, migratory and conflict area in coordination with partners and local NGOs in the ground. Organisation: WHO & UNICEF
Develop data management tools	March 2017	A data management tool will be developed and implemented at township, state/region and central level for better recording and analysis of information in coordination with HMIS. Organisation: WHO
Communication and demand creation especially in areas with low immunization coverage and hard to reach areas	October 2017	Yes; a) assessment of existing innovation to inform development of new innovative that could influence behavior change; b) KAP survey for immunization; c) accelerate implementation of communication plan of action. Organisation: UNICEF
Strengthening cold chain and effective vaccine management including accelerating the implementation of EVMM improvement	December 2017	Job-aids for the cold chain key persons; b) Assessment of the progress in EVM implementation; c) Establish web-based cold chain equipment inventory; d) Strengthen management of EPI supplies including immunization logistics information management systems. Organisation: UNICEF
Expansion of cold chain system to lower levels especially in the priority Rural Health Centers	April 2017	Yes: a) Re-analyses the existing storage gaps; b) Documenting the cost benefit of expanding cold chain to lower level; c) Guidance on establishing cold chain system at lower levels including policy change. Organisation: UNICEF

Implementation, monitoring and evaluation of EPI activities	2017	Quarterly evaluation at state and regional level and monthly review of data at central level against the indicators set in the HSS application. Organisation: WHO
VPD surveillance and disease burden studies	2017	Integrated VPD surveillance will continue to guide the program. Organisation: WHO
Coverage survey and data quality assessment	2 <sup>nd</sup> quarter of 2017	A full coverage survey will be conducted in country. Organisation: WHO

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

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

<b>Brief description of how the joint appraisal was endorsed by the relevant national coordination mechanism</b>	The contents and main decisions of the Joint Appraisal mission were discussed at the NHSC meeting on July 4 <sup>th</sup> in Naypyidaw. This was followed on July 5 <sup>th</sup> by a meeting with the Minister of Health and Sports.  This Joint Appraisal reports reflects the main points from these discussions and decisions.
<b>Issues raised during debrief of joint appraisal findings to national coordination mechanism</b>	(integrated into the priorities and recommendations for CEPI 2016/2017)
<b>Any additional comments from:</b> <ul style="list-style-type: none"> <li>• Ministry of Health</li> <li>• Gavi Alliance partners</li> <li>• Gavi Senior Country Manager</li> </ul>	

## 7. ANNEXES

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

The JA dates and process was agreed during a Gavi mission to Myanmar in the beginning of May with sufficient lead time until the in-country JA, June 27<sup>th</sup> to July 5<sup>th</sup>. WHO and UNICEF HQ participated with one representative in the mission and debriefing. Development partners (3MDG Fund, DFID, World Bank) joined for field visits and/or the NHSC de-briefing. Comprehensive field visits were conducted by several teams to different regions.

During the JA PCV was launched nationwide by the Minister of Health & Sports on July 1<sup>st</sup>.

Extensive and excellent support was provided by DoPH, CEPI and WHO and UNICEF country offices.

The drafting of the report was a collaborative effort by DoPH/CEPI, WHO HQ and CO, UNICEF CO and Gavi Secretariat.