1. Brief Description of Process

The appraisal mission was conducted from 16 to 20 June 2014 in India. The appraisal team was composed of representatives from: Ministry of Health and Family Welfare (MoHFW) including ITSU (Immunization Technical Support Unit), GAVI Secretariat, WHO Country Office (CO) India, UNICEF HQ, UNICEF CO India, UNDP CO India and Bill & Melinda Gates Foundation CO. The Joint Appraisal report was prepared by the members of the team. MoHFW/ ITSU and UN agencies jointly organized the agenda, meetings and field visits, and provided the required details.

The team presented its findings and recommendations to the IAG (Immunization Action Group) during a debriefing meeting chaired by Dr. Ajay Khera, Deputy Commissioner (Child Health & Immunization), MoHFW on 20 June. The IAG will endorse the findings of the mission with the minutes of the meeting.

The Appraisal Report was prepared as a draft by June 20 and finalized via email subsequently.

2. Achievements and Constraints

Coverage Estimates

The most reliable estimates of immunization coverage come from the Coverage Estimate Surveys (CES) conducted by UNICEF in 2009 and DTP3 coverage rate has held constant at 72% since then. A new CES is underway with data expected to be published later this year.

DTP 3 coverage\(^1\) varies widely within the country with an evaluated coverage of >85% in the southern states and < 60% in the northern Hindi heartland. For example, while DTP3 coverage in the state of Tamil Nadu is 90%, it is only 59.8% (source: AHS-2, 2011-12) in Uttar Pradesh (UP).

\[^1\] Official Country Estimates
The APR 2013 reported administrative coverage data of a few states/districts is often higher than the surveyed data and the estimates. The immunization coverage data is being reported electronically now only through Health Management Information System (HMIS) and the other modes of data reporting have been discontinued. Various activities are aimed at improving the data quality of the HMIS.

Vaccine coverage (reported) for 2013

<table>
<thead>
<tr>
<th>Antigen</th>
<th>JRF 2013</th>
<th>APR 2013 (Figures are for Eight Penta States only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCG</td>
<td>92%</td>
<td>111%</td>
</tr>
<tr>
<td>DPT -1</td>
<td>99%</td>
<td></td>
</tr>
<tr>
<td>DPT -3</td>
<td>76%</td>
<td>37% (see Penta-3 below)</td>
</tr>
<tr>
<td>Polio – 3</td>
<td>88%</td>
<td>108%</td>
</tr>
<tr>
<td>Hep B- 3</td>
<td>67%</td>
<td></td>
</tr>
<tr>
<td>Hib3</td>
<td>87%</td>
<td></td>
</tr>
<tr>
<td>Measles – (MCV-1)</td>
<td>88%</td>
<td>108%</td>
</tr>
<tr>
<td>Penta -3</td>
<td></td>
<td>79%</td>
</tr>
</tbody>
</table>

The difference in coverage by gender in various antigens is also evaluated in the Coverage Evaluation Surveys. The CES (2009) has reported that the differences in the coverage with various antigens were in the range of 1%. (e.g. BCG: (Male: 86.4%; Female: 87.5%); OPV3: (Male: 70.2%; Female: 70.7%); Measles:(male 74.8%; female: 73.2%); Fully Immunized (Male: 61.9% and Female: 59.9%); No immunization (Male: 7.9%; Female: 7.2%)).

However, the new cMYP (section 2.4.1, p. 8) notes that “there are significant inequities in vaccination coverage in different states based on various factors related to individual (gender, birth order), family (area of residence, wealth, parental education), demography (religion, caste) and the society (access to health care, community literacy level) characteristics”, and “there is a clear gender coverage differential as reported by different surveys. Boys generally have higher vaccination coverage than girls as reported by most surveys conducted across the country.”

The key objectives for the UIP thus include improvements of program service delivery for equitable and efficient immunization services by all districts and increased demand and reduced barriers for people to access immunization services through improved advocacy at all levels and social mobilization.
Section 6 (Data Quality) below includes further information on recently conducted surveys to update the CES.

3. Governance

Immunisation Action Group (IAG)

The equivalent of an ICC in India is the Immunisation Action Group (IAG) under the leadership of Joint Secretary, MoHFW. The IAG is the primary governing body for the HSS grant and comprises of key national partners including – WHO, UNICEF, UNDP, USAID, WHO, National Institute of Health and Family Welfare (NIHFW) along with Ministry/ITSU and CSO representatives.

The IAG is required to meet every quarter and the last full-fledged meeting was held in October 2013. However, a smaller group of IAG members usually meets and interacts with the Ministry on a monthly and quarterly basis. The last discussion took place in May 2014 (minutes of these meeting are shared with the GAVI Secretariat). An IAG meeting was also scheduled to present the findings of the Joint Appraisal.

It was agreed upon during the mission that the Ministry will strengthen and institutionalize the working of IAG and include within its domain the overall national immunization program, with HSS and Penta projects as a subset. The following action points were agreed upon:

- Within the ambit of IAG a core group could be set up comprising of the Ministry/IT and the GAVI HSS implementing partners. Such a group could meet on a monthly basis with a wider representative IAG meeting quarterly.
- It is recommended for the Ministry/ITSU to develop ToR for IAG working in the future and discuss these with members and stakeholders.
- GAVI Secretariat should also be a member of the wider IAG.

NTAGI

The National Technical Advisory Group on Immunization (NTAGI) was established in India in August 2001 by the Dept. of Family and Welfare, Ministry of Health. It was reconstituted in June 2013 and now comprises of a Standing -Technical Sub-Committee and the larger NTAGI. The NTAGI Secretariat was established in 2013 at ITSU to provide technical and managerial support for the NTAGI.

The role of NTAGI is to address the growing need for a sustainable technical resource that provides guidance on technical and operational matters related to India’s immunization program and to guide national policy-makers and programme managers to enable them to make evidence-based immunization-related policy and programme decisions.

Over the past decade NTAGI has made several successful recommendations to the MoHFW which demonstrate its recently improved capacity and influence:

- New and underutilized vaccines: introduction of Hep B, JE and pentavalent vaccine
- Introduction of auto-disable syringes in UIP
- Release of the National Vaccine Policy - April, 2011
- Introduction and scale-up of pentavalent vaccine - 2011-2013

The NTAGI met on September 23, 2013 and May 18, 2012. A meeting of the NTAGI Standing Technical Sub Committee (STSC) meeting was held in August 2013 which recommended the nationwide pentavalent vaccine scale-up with careful monitoring of AEFI.

A NTAGI meeting was also held in June 2014 and the minutes of this meeting were not yet available during the appraisal mission.
Mission Steering Group

The Mission Steering Group (MSG, a cabinet sub-committee) was held in December 2013 and recommended the phase-wise scale up of pentavalent vaccine across the country through 2014 and 2015. The MSG also committed to self-finance the penta programme from 2016 onwards.

This decision demonstrates the overall high political support for health and immunization as part of the National Health Mission+ in India.

4. Programme Management

Programme management of the Ministry of Health and Family Welfare is currently focusing on the two GAVI Alliance supported programmes for pentavalent vaccines (2011-2015, up to 265 million US$) and the HSS grant (2014-2016, 107 million US$).

Pentavalent vaccine programme

The penta programme is being implemented since 2011 with the introduction of the vaccine in two states and an additional 6 states. India successfully applied for GAVI support in the beginning of 2014 for the nationwide scale-up of the programme in a further 11 states in October 2014 and the remaining 16 states in April 2015.

The application for the nationwide scale-up of penta was based on a revised and well developed cMYP (2013-17) for the Universal Immunization Programme (UIP) and a more specific introduction plan. In these plans reasons for low vaccination coverage in certain areas and for certain groups are analysed and strategies are suggested for improvement. The preparation of the document has been undertaken in wide collaboration with state immunization representatives and partners. A detailed financial analysis has been enclosed in the new cMYP. The financial commitment of the government of India for its vaccine program of more than 90% in the next years to come contributes to the sustainability of the Indian Universal Immunization Programme (UIP).

The new cMYP also provides the overarching framework for the HSS implementation and should serve as the basis of developing annual action plans for immunization. The Ministry improved with the development of the cMYP the coordination mechanisms for linking the immunization component of state Project Implementation Plans (PIPs) with supervision at the central level. Decentralized planning and need based funding through NRHM and state PIPs are the basis for the coordination at the central level.

The details of the penta programme implementation in the current 8 states and for the nationwide scale-up are provided in Section 11 (NVS Targets) below.

HSS grant

The HSS grant and programme is operational since November 2013 with the signature of the Memoranda of Understanding (MoU) of WHO, UNICEF and UNDP with the GAVI Secretariat. The implementation of the programme is thus in its first phase which required revisions of work plans and roles and responsibilities of the partners. These developments are summarized in Section 8 (Health Systems Strengthening).

With reference to programme management the HSS project now has an established Project Management Cell (PMC) that is based in ITSU. The PMC will have a staff of two (one already recruited) and will coordinate with the implementing partners on project planning, implementation and reporting.

The MoUs for the HSS grant defined quarterly progress and financial reporting to the MoHFW and GAVI Secretariat. For the first quarter of grant implementation (Q1 2014) the three implementing partners submitted individual reports to the MoHFW.

It was agreed that the PMC will work with the Ministry in developing a standardized reporting template for all agencies to track progress on a quarterly basis of the HSS grant and to consolidate reporting to the GAVI Secretariat. This will help unify and streamline the progress reporting on a single format. Ministry/ITSU will have regular (monthly) meetings on a bilateral basis with all the three implementing partners and organize monthly joint meeting of all partners.
5. Programme Delivery

Programmatic aspects of the penta programme are elaborated in Section 11 (NVS targets) and of the HSS grant in Section 8 (Health Systems Strengthening). This section focuses on the issues of EVM, data quality and M&E.

EVM

A national level EVM was conducted in March-April 2013, which included the eight states that have introduced pentavalent vaccine. The recommendations of this exercise shall inform the pentavalent vaccine management interventions in these states (e.g. partly implemented through HSS and EVM improvements plans) and help prepare the remaining states for an eventual nationwide scale of the vaccine in 2014.

The EVM assessment is critical and no criteria at any level of the 5 tier supply chain meet the WHO minimum recommended norm of 80%.

The cold chain as a whole needs to be revitalized in order to improve the current standards, capacity and quality. The associated costs are estimated at $342m over a 5-year period (2013 – 2017). The HSS equipment budget is approximately US$25m for cold chain logistics including equipment and US$21m for data management including cold chain stock, temperature management etc.. It was informed by MoHFW, that Govt. of India that indents for large quantity of Cold Chain Equipment under KFW assistance has been raised and are likely to be available by end of current financial year. It was also informed that under GAVI supported HSS, institutional strengthening is being done for two of the training centres viz. NCCVMRC (National Cold Chain & Vaccine Management Resource Centre) at NIHFW, Delhi and NCCTC (National Cold Chain Training Centre), where cold chain technicians (Around 450 Cold chain technicians are available under the program in the country at present) are being imparted trainings and refresher courses and also alternative technologies are tested to reduce the sickness rates of CCEs, thus making available large number of repairable CCEs for the program. A National level Cold Chain Assessment is going on and actions will be initiated, on availability of results.

There are major financial and operational challenges to achieving the required improvements. India will prepare a National Cold Chain and Vaccine Logistics Action plan (NCCVLAP) as the focal mechanism to address these barriers (August 2014).

6. Data Quality

Data Quality and Surveys

India has taken a range of actions to assess and improve the quality of its administrative data systems, including many actions through the GAVI HSS grant. ITSU has supported the state of Haryana to complete a DQA and is planning to conduct DQAs in four additional states this year. The government’s vision is to take DQAs to scale in all states, with ITSU serving as a data quality resource at central level and for the states. Through the HSS grant, ITSU will provide focused support on data quality to the states covered in the HSS grant. Assessments are followed by technical support from ITSU to complete data improvement plans, and follow through with states on implementation of improvement plans and tracking of improvement over time. ITSU is working on data quality summary measures. The appraisal team shared information with ITSU on the global work on development of data quality summary measures and proposed to share materials and link ITSU into those discussions.

India has had long gaps between surveys that cover the entire country, and this has been a major reason that WHO and UNICEF have flat-lined their coverage estimate for India for the last five years.

Government of India conducted Annual Health Surveys (AHS) in 9 priority states from 2010-2012, which provided immunization coverage estimates per district in these 9 states. However national estimates were only available from CES 2009. Under UNICEF’s lead, a large nationally representative sample survey was conducted in recent months—the Rapid Survey of Children (RSOC). The coverage survey was carried out in 29 states and will provide national and state
estimates. The field data collection was done from October 2013 to April 2014. The report will comprise of individual antigen coverage and full immunization coverage from children aged 12-23 months. Final report is expected in August 2014. UNICEF was analysing the data as of the time of the mission and agreed to share results as soon as possible upon completion of the analysis. India is also preparing to conduct the fourth round of the National Family Health Survey (NFHS-4) in late 2014 and early 2015 — this survey will provide estimates of most indicators at the district level for all 640 districts in the country, with a total sample size of more than 500,000 households. These surveys will help significantly to provide independent evidence on the extent to which immunisation coverage and equity have improved in recent years.

Monitoring & Evaluation

Overall immunization programme monitoring in India—with the exception of polio, which has strong systems, albeit highly vertical and hitherto rarely used for routine immunization—has limitations that are widely recognized by stakeholders within the country, but significant strengthening actions are being undertaken through the HSS grant, including:

- Development of a National M&E Framework for Immunization
- Development of an innovative platform to obtain routine, actionable data to measure progress and impact of program interventions related to child health and immunization ('Integrated Child Health and Immunization Surveillance' (INCHIS)
- Leveraging of polio surveillance and monitoring for strengthening routine immunization systems

The National M&E Framework and INCHIS both need further development, but meet important country needs and are on track. Significant progress has been made in leveraging polio monitoring and surveillance for strengthening routine immunization systems — the further scale up of these efforts has significant potential to improve routine immunization systems.

India has conducted two Post Introduction Evaluations (PIEs), following the two waves of pentavalent introductions implemented to date. The PIEs are of high quality, and the WHO country office has developed excellent checklists to translate the findings and lessons learned from the PIEs into improved introductions for the next wave of states.

The performance framework for India’s HSS grant needs to be updated. We agreed during the mission on what changes should be made. UNDP is taking the lead in updating the performance framework, and will send the revised framework, with documentation of the changes made.

The HSS implementers need to finalize their plan for the evaluation of the grant. It was agreed that the GAVI Secretariat would share sample templates and requests for proposals with the HSS implementers. It was further agreed that the evaluation plan should be finalized in the near term, and mapped against the HSS grant performance framework in order to rationalize data collection and analytical activities. The evaluation approach should be built into the grant from the beginning and be implemented in a forward looking manner, rather than waiting until the mid term or end of the grant and commissioning a backward looking evaluation.

The following action points have been agreed upon:

- Share National M&E Framework with secretariat when drafted (UNDP)
- Share next iteration of INCHIS concept note with secretariat (UNDP/ ITSU)
- Share RSOC results with secretariat (UNICEF)
- Share revised performance framework and summary of changes made with secretariat (UNDP)
- Share evaluation template and sample Requests for Proposals with HSS implementers (GAVI Secretariat)
- Share evaluation plan with secretariat (UNDP)
- Share data quality materials with ITSU and link them to global discussions around standard data quality summary measures (GAVI secretariat)
7. **Global Polio Eradication Initiative, if relevant**

The integration of Polio eradication activities into routine immunization is supported through activities of the HSS grant – see Section 8 for relevant information.

8. **Health System Strengthening**

**HSS update (Jan – May 2014) on progress by the respective objectives**

The MoHFW and the implementing partners agreed to re-align the 5 original objectives of the HSS grant in May 2014 as follows:

- **Objective 1:** Strengthen cold chain management in poor performing states through improved human resources capacity, institutional strengthening and supporting supervision (Led by UNICEF)
- **Objective 2:** Design and implement an eVIN that will enable real time information on cold chain temperatures and vaccine stocks and flows (Led by UNDP)
- **Objective 3:** Increase demand for RI through a national BCC strategy (Led by UNICEF)
- **Objective 4:** Strengthen the evidence base for improved policy-making (at all levels) on programmatic areas through a well developed and implemented national M&E plan and research framework (Led by UNDP)
- **Objective 5:** Leverage the success of the National Polio Surveillance Project to strengthen RI service delivery in 8 priority states (Led by WHO)

As a consequence of the re-alignment of the objectives, the areas where activities and budget allocation have been altered from the original work plans are:

- The VLM component from UNICEF has been transferred to UNDP (0.71 Million USD)
- All funds earmarked for M&E (4.5 Million USD) have been relocated to UNDP
- Activities for Public Private Partnerships under the original Objective 1 and its funding (10.3 million USD) have been merged with Objective 2 for UNDP

As per GAVI HSS re-programming guidelines (2013) the re-alignment of the objectives and budget re-allocations (inferior to 15% of the total HSS budget and thus no Re-Programming Submission is required) need to be discussed in country and reviewed by the HSCC or equivalent (IAG in the case of India). A notification by MoHFW should then be sent to GAVI stating this change, with the new workplan and budget following reallocation. The MoUs between the implementing partners and the GAVI Secretariat need to be amended with the revised budgets through a management letter of the GAVI Secretariat.

**UNDP**

The first quarter (January 2014-March 2014) of the grant implementation focused on establishing role clarity among the implementing partners on different components with a view to remove overlaps, formalizing annual work plans, setting up coordination mechanisms and implementation systems. Based on discussions with the MoHFW, ITSU and on the learning from the public-private models for vaccine management, one of the key decisions of MoHFW was to merge activities under Objective 1 &2 with a view to set up a robust electronic vaccine intelligence system. Expression of Interest to establish an Electronic Vaccine Intelligence Network for two states under objective 1 and 2 has been launched. It is expected that the contracting would be completed in third quarter and the eVIN system would be ready for roll out in the fourth quarter. UNDP will now be able to roll out this across 8 states, the number of states depending on the available funds in the allocated budget, after realignment of the original HSS objectives.
A state preparedness study to understand the capacity gaps of the personnel engaged in immunization at the state level has been commissioned. The study findings (August 2014) will inform the drawing up of capacity building plans to address those gaps that cannot be plugged through the National Health Mission. A Global Expression of Interest (EoI) on eVIN was floated and evaluated by UNDP. The Response for Proposal (RFP) process on eVIN is currently underway and expected to get completed by end of August. This also includes the temperature monitoring devices that integrate into the eVIN platform.

Together with ITSU, UNDP has been engaged in the finalizing the concept note on the National M&E Plan for immunization and is now actively seeking possible experts/agencies to draw up the National M&E plan. Discussions to scale up the HERMES like simulation models and setting up National Research Network (Immunization and Child Health Survey (INCHIS)) are underway with the MoHFW and other stake-holders.

In addition to the above programmatic actions, UNDP has put in place project quality assurance mechanisms and strengthened its own capacity by bringing on board additional skilled human resources at the national level. Recruitments for state level professionals is underway.

UNICEF

The national improvement plan for strengthening Cold Chain and vaccine management activity after National EVM assessment was developed and shared with the Ministry. National Cold Chain and Vaccine Management Action Plan (NCCVLAP) concept note prepared and approved by MOHFW. First meetings with partners were completed and national consultation was planned in June, 2014. Effective Vaccine Management (EVM) was completed for one state – Odisha and the report will be ready in Q2.

During the first quarter the Strategic Cold Chain Equipment and spare parts procurement plan was prepared and submitted to MOHFW and procurement has been initiated. Augmentation of NCCMIS was accelerated during the Q1 which shall be reviewed again in June 2014. Process for scale up of VLMIS (OVLMS) completed in four states and contract to be awarded by NCCVMRC to the developer for customization and GMSD module addition. However, MOHFW has decided not to proceed in this regard.

National mass media plan for immunization was prepared and released in Q2. The plan was approved by MoHFW. Other demand side activities included: National Communication Planning workshop was held in Odisha, media was engaged through field visits and roundtables with Urdu editors and workshops with Association of Radio Operators for India (AROI, media planning and purchase of airtime, using SMNet to disseminate RI messages in UP and Bihar, setting-up state BCC cells and the development of a media kit/guide for AEFI in collaboration with ITSU.

UNICEF has also supported the transition of the entire Polio Social Mobilization Network towards boosting Routine Immunization coverage. Over 8,000+SMNet are mobilizing the most marginalized communities and parents living and reaching over 3 million households every month with RI messages (tracks pregnant women (TT) & children (polio + RI), and are also being used to improve RI microplanning activities in these communities. Polio technical staff are leading in designing & roll out of RI mass media campaigns and all media and advocacy interventions give equal weightage to RI and polio.

WHO

As of 31 March 2014, WHO NPSP has monitored more than 15,900 session sites and 118,000 children (in the age group of 0-35 months). This was in addition to 1,500 sessions and 7,200 children monitored during the special immunization weeks (SIWs) held in eight priority states. District task forces for immunization (DTFI) meetings have been held in 66.2% districts under the eight priority states with monitoring feedback being discussed through DTFI in 62.4% districts. One of the major activities under GAVI HSS-WHO action plan for 2014 was to complete the tagging of 400,000 high risk areas identified under the polio programme with RI. Nearly 97% HRAs have been tagged to RI session sites. Monitoring data showed that 92% HRAs were receiving RI services.
On the training front, WHO NPSP conducted six workshops for the capacity building of all District Immunization Officers (DIOs) in Uttar Pradesh and Bihar training them on technical and managerial aspects of routine immunization. WHO NPSP has developed training materials and tools for frontline health workers. It is regularly tracking the quality and progress of front-line workers’ training and monitoring session sites in eight priority states through its network of field units. The findings showed that 8,803 district trainers have been trained through 329 training of trainers sessions in 287 districts. WHO NPSP is finalizing guidelines and training materials for the launch of VPD surveillance in at least one state by the third quarter of 2014. CMC Vellore has been identified as the national reference lab for VPD surveillance.

9. Use of non-HSS Cash Grants from GAVI

Not relevant in the Indian context

10. Financial Management

The GAVI Secretariat continued negotiations with MoF/DEA and MoHFW regarding the outstanding PFA, which has been submitted to MoHFW in March 2013. Specific queries by government (tax exemptions, liability clause, arbitration processes) have been put forward to the GAVI Secretariat. The discussions will be continued with a response of the GAVI Secretariat as quickly as possible.

The financial reporting of the HSS grant will be implemented in accordance with the agreements in the MoUs with the partners with the Q2 2014 reports to MoHFW and to the GAVI Secretariat. (See Section 8.)

11. NVS Targets

NVS targets

The application for the nationwide penta roll-out and post IRC documents determine the NVS targets and should be used to capture a phased roll out across multiple years. See below for the summary table:
The key assumptions for the above table include:

1. In the year 2014, the additional cohort for 11 States will start from Oct 2014 onwards. Therefore the birth cohort taken as 25% of annual target (surviving infants) and vaccine supply for this additional cohort has been calculated for 3 months only. Thus, for 2014, the calculation has been done as (equal to 3 months of supply or one fourth of annual cohort with 100% coverage in 1st year.

2. In the year 2015, the additional cohort will start from April 2015 onwards. Thus additional supply has been calculated for 9 month period. Thus, for 2015, the calculation has been done as (equal to 9 months of supply or three fourth of annual cohort for 100% coverage in 1st year.

3. The one time buffer stock has been calculated for additional birth cohort starting in that year and equivalent of 25% requirement for annual cohort.

4. Wastage rate for vaccine has been calculated at 15% and wastage multiplication factor is 1.18.

5. The 2nd year onwards requirement of vaccine would be based on replacement quantity i.e. coverage taken at 80%.

Financial resource requirements

The GAVI Executive Committee in May 2014 and the Board in June 2014 have approved on the basis of the successful application of India an additional 100m US$ (committed 60m US$) for the support of the Indian penta programme in 2014 and 2015 (Indian FY2015 which includes Q1 2016). Unused GAVI funds from the in 2009 approved 165m US$ amount to approx. 111m US$. The totally available GAVI funds in 2014 and FY2015 are sufficient to procure approx. 100m doses of penta vaccines. (2.11 USD per dose. 35m doses in 2014 and 65m doses in 2015. Total dose requirement 2014-FY2015 is approx. 138.5m). The forthcoming Decision...
Letter for the penta programme for 2014 and 2015 will include these resource requirements.

The GAVI support complies with the restrictions defined by the GAVI Board in June 2013 (max. of 100m US$ additional funds and max. 2/3 of doses financed by GAVI for the final year of the roll-out. 1/3 of the dose should be procured by government). On the basis of the planning of the roll-out GAVI finances 100% of the vaccine requirements of 2014 and 78% of calendar year 2015 (63% of 2015 and Q1 2016 combined).

The Government has committed to fully self-finance the penta programme from FY2016 onwards (starting in April 2016). In the recent discussions with MoHFW in India during the GAMR Joint Appraisal mission it became clear that GoI has not made budgets provisions for the final year of the penta roll-out to fund at least 1/3 of the vaccine doses in FY2015. **Without additional resources the penta programme is underfinanced by 81m US$ for 2014-FY2015.** (The financing gap for the calendar year 2015 amounts to US$ 40 million and for Q1 2016 to US$ 41 million.)

The financing deficit in the FY2015 poses a high risk to the successful penta roll-out according to the IRC approved application and plan. The HLRP is thus requested to discuss the issue, consider Government of India’s position (see below) and make recommendations on how to mitigate this risk considering the conditionalities of the support as defined by the GAVI Board in June 2013.

**Government of India’s point of view:**

Following discussion with the GAMR mission and JS (RCH) along with the National Immunization Division on the above mentioned issues the Ministry had put forward its view and perspective on the overall Penta grant for GAVI HLRP and Board to consider. These included:

- The Mission Steering Group (MSG), which is the highest decision making body, has taken a decision to scale up Pentavalent vaccine in phased manner. The decision to accept full support for the scale up was taken in context of the MSG approval. The Govt of India is committed to take over the entire cost of Penta vaccination from 2016 and expects GAVI to provide full support for the same till 2015.
- It was requested that GAVI should offer flexibility to the ministry to carry over to 2015 all unspent amount from the 2009 grant ($165 million +$30 million top-up offered) and the additional grant of $100 million for 2015.
- The Govt had also request GAVI not to impose any limits on both – the amount of funds to be used or the doses to be covered by GAVI (put at 2/3rd doses for 2015)
- The Govt also requested that the decision of GAVI Board on support of pentavalent scale up in phased manner should be conveyed at the earliest in view of approaching timelines for first phase in October, 2014 so that UNICEF may give commitment on procuring Penta vaccine for October scale up.

**Coverage targets and state preparedness**

The coverage targets for the penta scale-up look appropriate given the progress in the 8 states covered so far:
It is worth noting the progress in implementation of the open vial policy and achievement of reduced wastage rates in these 8 states. For the next phase of 11 states in October 2014 and the 15 states in 2015, the targets also appear appropriate given the excellent readiness preparations being currently conducted.

The readiness plans and indeed the whole penta introduction are being used as a strengthening opportunity for EPI across the country. The introduction plans being made for other new vaccines show significant momentum and the coverage levels are expected to benefit from these efforts across many of the traditionally challenging states. Highlights from the in country review are as follows:

- Consolidated lessons learned from the post introduction evaluations (PIEs) in the states where penta is already rolled are being taken into consideration.
- A full and complete penta introduction check list for state and each district is being used.
- The MOH is using a two weekly videoconference where status updates using the check list at state level are shared in plenary.
- The management use the video conference to allow each state in turn to provide their update allowing overall progress to be monitored and also the states themselves to benchmark their progress.
- Topics covered in the check list are: EVM assessments, AEFI training, cold chain facility assessments, IEC materials translation and printing and ceremony preparations.

Since India has a national HepB program as well as DTP, the introduction of pentavalent vials will not only bring the Hib antigen into the program, it will reduce complexity significantly with HepB being combined with DPT (and Hib) so that there is a space saving, time saving and operational resource saving effect.

From the supply side, there is sufficient capacity, provided production is started in time. Hence for the Oct roll out in the 11 states there are already enough agreements in place with suppliers to ensure supply meets demand. For the 15 states in April 2015, readiness preparation and product procurements will have to be well planned to ensure there are no delays.

The table below shows the in country shipment of doses and stock levels reported in 2012 and 2013 APR as well as the expected shipments for 2014 and 2015 which exemplify the logistical challenges in India:
12. EPI Financing and Sustainability

Total UIP costs in 2012 were $718 million, including shared health systems costs. Expenditures on the routine program were $261 million and campaign activities $182 million. The 2012 UIP costs were used to project resource requirements for the 2013-2017 cMYP ($5,282 million). The resource requirement will increase due to the new vaccine introduction and other program improvements.

The Government of India paid for most of the program expenditures (90%) in 2012. Other sources of financing were WHO (4%), UNICEF (3%) and GAVI (3%). The health budget is expected to increase in the coming years to meet the growing resource requirements of the UIP. India will fund vaccination with pentavalent vaccine once GAVI Alliance support has ended in 2016.

Financial sustainability, because of the high share of national funding is one of the key strengths of the Indian immunization programme if the required budget increases are realized as planned.

13. Renewal Recommendations

<table>
<thead>
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<th>Topic</th>
<th>Recommendation</th>
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<tr>
<td>HSS</td>
<td>HSS approval of value $41.09m as per MoUs (2013).</td>
</tr>
<tr>
<td>NVS</td>
<td>1) The continuation of the penta programme in the 8 states which introduced the vaccine in 2011-2013 does not require a renewal recommendation for 2015.</td>
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<td></td>
<td>2) The forthcoming Decision Letter (after the EC/ Board meeting in May/ June 2014) for the scale-up of the penta programme for 2014 and 2015 will include the related financial resource requirements. There is thus no renewal decision to be taken by the HLRP.</td>
</tr>
<tr>
<td>NVS</td>
<td>The HLRP is requested to discuss the current financing deficits of the Indian penta programme in FY2015 as per section 11. Government of India requests that</td>
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<td></td>
<td>GAVI should offer flexibility to the ministry to carry over to 2015 all unspent amount from the 2009 grant (approx. US$111 million of US$165 million) +$30 million top-up offered for 2014 and the additional grant of $100 million for 2015.</td>
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<td></td>
<td>GAVI not to impose any restrictions on the amount of funds to be used or the doses to be covered by GAVI (e.g. 2/3rd doses for 2015)</td>
</tr>
</tbody>
</table>
### 14. Other Recommended Actions

<table>
<thead>
<tr>
<th>Topic</th>
<th>Action Point</th>
<th>Responsible</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSS</td>
<td>Inform GAVI Secretariat about IAG endorsement of HSS grant objectives and budget re-alignment in accordance with GAVI Alliance guidelines for re-programming submission for HSS grants (2013).</td>
<td>MoHFW</td>
<td>30 days of receipt of Information Letter</td>
</tr>
</tbody>
</table>
| Action Points as defined during the JA | 1) Section 3 (Governance) regarding the strengthening of the IAG  
2) Section 6 (Data Quality) regarding the Monitoring and Evaluation follow-up and evaluation of the HSS grant  
3) Section 10 (Financial Management) regarding the negotiations of the PFA and the strengthening of programmatic and financial reporting of the HSS grant | MoHFW, GAVI Secretariat, partners | With immediate effect and ongoing                                      |