Joint appraisal report

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

Country	Yemen
Reporting period	*Jan-Dec 2015*
Fiscal period	*Jan - Dec*
If the country reporting period deviates from the fiscal period, please provide a short explanation	*NA*
Comprehensive Multi Year Plan (cMYP) duration	*cMYP 2016-2020 (Final draft under preparation)*
National Health Strategic Plan (NHSP) duration	*2015-2025*

1. SUMMARY OF RENEWAL REQUESTS

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

Programme	Recommendation	Period	Target	Indicative amount paid by Gavi
Pentavalent in existing presentation	Extension	*2017*	708,765	US$ 2,095,000
PCV in existing presentation	Extension	*2017*	903,909	US$ 9,463,000
Rotavirus in existing presentation	Extension	*2017*	903,909	US$ 4,702,000
IPV in existing presentation	Renewal	*2017*	903,909	US$ 3,682,000
Core tranche of HSS	Renewal	*2017*	--	US$ 3,359,354

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

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

2. COUNTRY CONTEXT *(maximum 1 page)*

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

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

1- Yemen has been suffering from political unrest since 2011 which has worsened during the period 2014- 2016. Currently a state of fragmentation and a civil war like situation exists in the country. The elected Government in exile has returned to the South of the country which adds to the tenacity of the situation and also questions the current Government in the capital Sanaa.

2- Almost 25% of the health facilities remained non-functional during 2015. Though there has been a slight increase in the number of functioning health facilities but the operational cost has increased significantly. This is affected by the HR shortages at all levels which continues to impede many immunization activities.

3- The HSSCC (equivalent to ICC) is oversight body in the country for EPI and during the reporting period has been involved in approving the plans for all activities including polio campaigns and integrated outreach. In line with its TORs, the HSSCC also approved the 2015 Gavi/HSS re-allocation of resources. It convenes on a quarterly basis but can be prone to the political and security situation.

4- Since 2015 due to the prevailing economic and political crisis the Government of Yemen (GOY) has become increasingly unable to meet the financial requirements of the EPI including co-financing for which it has submitted a waiver to Gavi. All non Gavi routine vaccines are also being procured by UNICEF through its own resources since 2015. From July 2016 the GOY, considering its financial position, has decided to only meet the salary component of health staff and not met its other obligations. This has led to further difficulties in the delivery of health services.

5- In 2015 GAVI was the main financer of EPI with around 53% of the total financing for EPI. GOY (21%) UNICEF (14%) WHO (9%) WB (3%) (Source: draft cMYP 2016-2020).

6- In 2015 the WB approved a project of approximately USD 13.445 million to fund health related activities through WHO (US$6.450 million) and UNICEF (US$6.994 million) for the duration 2015-2017, including activities related to immunization which include::

   a. Support for polio campaign (US$ 2.767 m); integrated PHC training (US$ 0.196 million) (through WHO).

   b. Outreach rounds for five governorates (US$ 4.842 m); Procurement of Instrument kits, drugs for referral health facilities, drugs for outreach activities; printing of communication, training material, register (US$0.216 m); training of CHVs in six governorates (US$ 0.485 million) (through UNICEF) .

7- A cold chain improvement plan was developed in 2015 based on the EVM of 2013, which is being implemented to some extent. A cold chain inventory was undertaken by MoPHP prior to the polio switch in early 2015 and another is planned to be undertaken from October 2016 with support from UNICEF to update the existing inventory. Available and additional inventory data will inform the development of the CCEOP application by the country in early 2017.

8- In 2014, integrated disease surveillance was expanded nationwide and the completeness of the weekly reporting had reached to 82%. This trend continued partially through 2015 affected by the unfavorable conditions. The Government and partners have made efforts to sustain this as where possible. The nine sentinel surveillance sites for rotavirus and meningitis are functional but are at risk due to disruption in supplies.

9- The cMYP development work is in progress and a consultative workshop was held in March 2016 in Amman, Jordan with support of UNICEF followed by a country visit by WHO Regional Office staff in June 2016. The initial draft has been prepared and is being further refined by the national team. It is planned to be finalized by October 2016 to cover the period from 2016-2020.

10- On-going shortage of fuel for running cold chain equipment at 3920 health facilities is a serious problem for health facilities including EPI. To address this issue MOH EPI plans to:

   a) Raise the issue in the forthcoming Yemen donor meeting Aug-Sep 2016

   b) Reallocating available GAVI resource to maximum possible extent for meeting operational costs for fuel.

11- To meet EPI cold chain needs partners have procured solar equipment (117 through UNICEF, 178 through WHO) in 2015/16 for district vaccine stores. However it does not meet the current total needs and it is planned to enhance the capacity through the CCEOP Application.

12- The EPI task force which was established in 2014 has been fully operationalized since March 2015. It met initially on a weekly basis for a period of four months and now meets on a monthly basis. It is chaired by the Health Minister. The key actions by the task force in early 2015 have been in developing and implementing rapid assessment and supervision activities; establishing EPI emergency operational rooms with a central hotline for countrywide coordination of EPI. The EPI

task force is considered as being pivotal in preventing the much expected decline in EPI coverage and ensuring the safety of the stored vaccines and coordinating supplies of fuel in the wake of the total power outage in the country for a significant period of time. Pertinent to note that the fuel has been supplied through UNICEF support. The Task force also made consistent efforts to ensure that a maximum number of health facilities (including EPI centers) remained operational during the crisis.

13- Campaigns and outreach activities could not be conducted during the first half of 2015 but with the re-allocation of Gavi HSS resources and on ground support from UNICEF and WHO, EPI conducted one EPI outreach in July 2015, followed by four integrated outreach activities in September, October, November and December 2015. In addition two NIDS against polio were undertaken in August and November 2015. The August activity included a mop up activity for MR in 62 districts. The country introduced IPV in November 2015 and the annualized coverage for the period (Nov-Dec 2015) was 75%.

14- With a view to enhancing the data quality a DQSA was undertaken in all except five governorates from August to December 2015 targeting 2800 heath facilities. The outcome are being used to update the micro plans.

15- The National EPI conducted a Governorate level desk review in December 2015 at the central level with UNICEF support. Based on the outcomes of the review the district level situation of EPI was updated; priorities were agreed upon and the findings were used as a basis for updating the micro plans.

16- To address emergent situations the communication strategy has been revised and a draft is ready. MoPHP has hired a consultant with UNICEF support who will work and finalize the communication strategy. Communication plans for high risk Governorates/ districts are in place with focus on 55 highest risk district with an emphasis on community and school based interventions and capacity building at various levels.

3. GRANT PERFORMANCE AND CHALLENGES *(maximum 3-4 pages)*

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

3.1. New and underused vaccine (NVS) support

3.1.1. Grant performance, lessons and challenges

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

In 2015 the Penta 3 administrative reported coverage was 84% against the target of 87% while Penta 3 coverage in 2014 was 88% against the target of 86%. MCV1 coverage in 2015 was 75% against the target of 83% as compared to 2014 when the Measles coverage was 75% against the target 80%. In 2015 the immunization coverage could have been much lower given the country situation but was supported through the outreach activities. The WUENIC estimates for 2015 is 67% and the MoPHP has requested WHO and UNICEF to re-consider the estimates. No VPD outbreak were reported in the country during 2015.

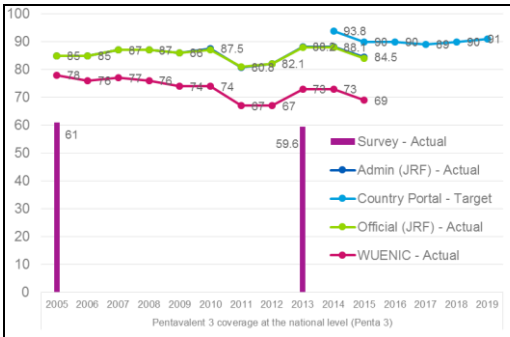


Fig1: Penta 3 Coverage

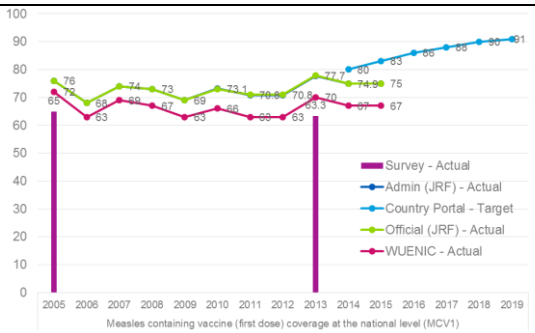


Fig 2: MCV1 Coverage

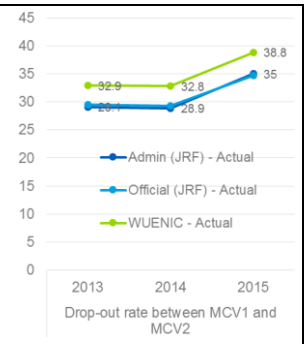


Fig 3: MCV1-2 drop out

The number of confirmed measles and rubella cases dropped to 468 and 162 in 2015 as compared to 2014 when the number of confirmed cases for measles was 815 and for rubella 1598. This reduction is attributable to the good quality of the national MR campaign in November 2014 and subsequent mop up campaign in 62 districts in August 2015. There was also a mop up campaign in January 2016 for 64 districts where the coverage had been considered low. It is generally felt that the surveillance system has been functioning to an acceptable level due to Gavi and partners support and Government oversight.

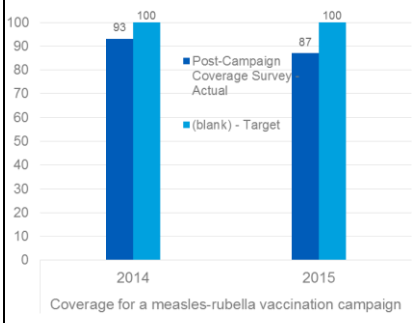


Fig 4: MR Campaign coverage

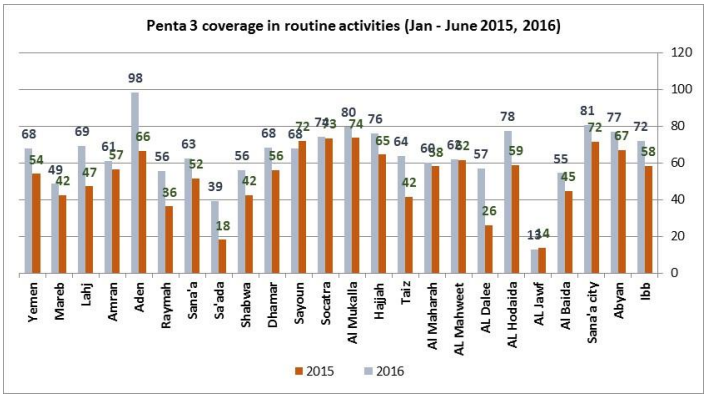
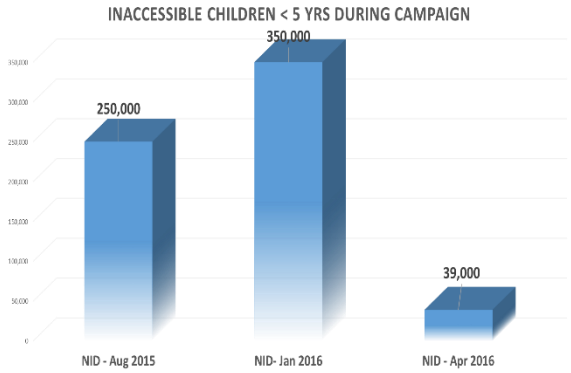


Fig 5: Penta 3 coverage from Jan to June (2015 and 2016)

<u>Key Challenges:</u>

1. Constant on-going conflict in the country which has led to inaccessibility in large areas has adverse effects on planning and implementation of activities. For example during the April 2016 polio SIA 39,000 children under five out of 5.1 million (0.76%) were inaccessible which raises issues of equity. This is however a reduction from the January 2016 SIA when 250,000 children out of the target of 5.1 million(4.9%) were reported to be inaccessible (source: January &April 2016 SIA reports). This is linked to the changing security situation at different times of the conflict.
2. 

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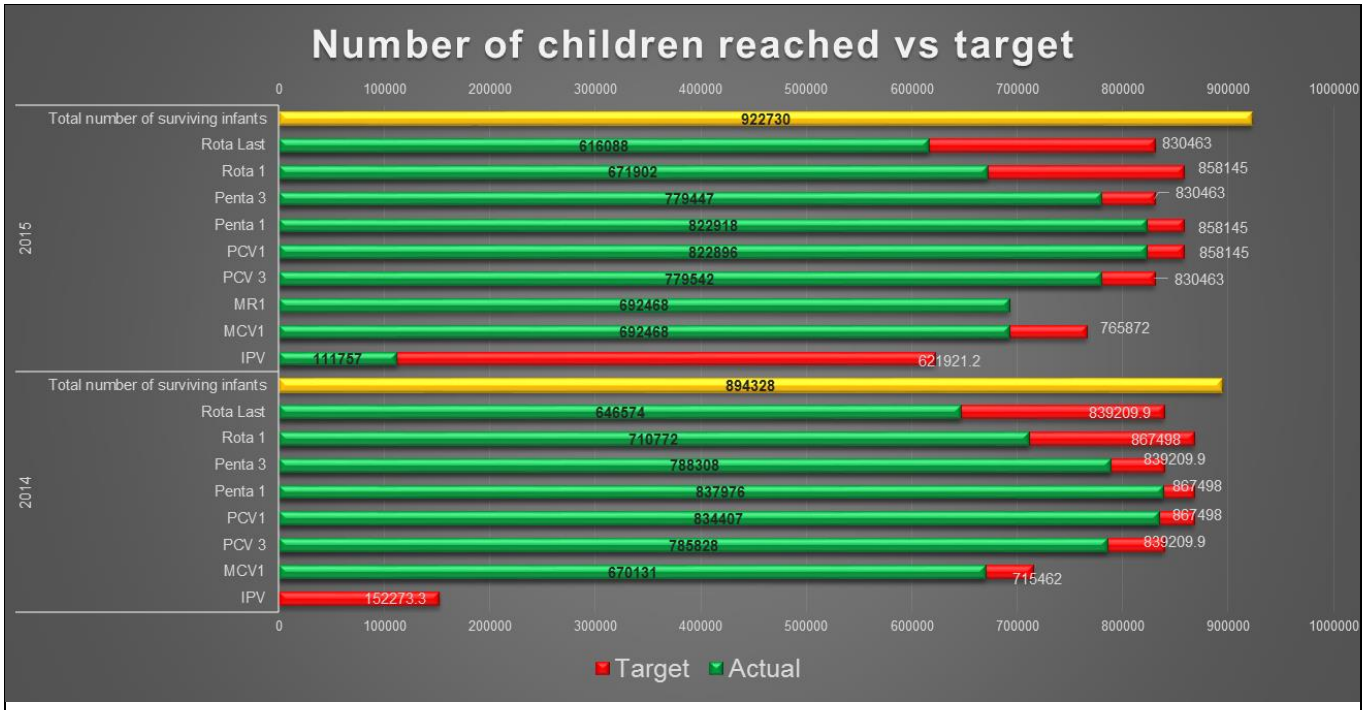


Fig 5: Number of children reached compared to the target (in 2014 and 2015)

2. At the peak of the crisis 900 health facilities (23%) out of 3920 public health facilities were nonfunctional due to destruction; lack of HR, access issues etc. However by extensive efforts of the Ministry of Health and partners as of July 2016 only 412 (10.5%) remain non-functional. With significant number of health facilities unable to provide immunisation, there is a glaring need to continue with the current strategy of extensive outreach activities where required despite the fact that the MOH plans to reduce outreach activities as they require considerable resources.

4.Ensuring an uninterrupted supply of vaccines from bringing vaccine into the country to distribution from central to governorate level and beyond to the health facilities is an increasing challenge. Since commercial flights are not allowed to land in Sanaa, alternative and expensive routes through Djibouti are being used which has financial and cold chain storage implications. As an example a charter flight cost between US$80 to 120,000 making the process highly resource intensive. In 2014-2015 MOH requested WHO and UNICEF to support transportation for vaccines from central to Governorate level. Now as of July 2016 the MOH has asked that WHO &UNICEF take on the additional responsibility of transporting the vaccines from Governorate to district and onwards to health facilities as its financial positions continues to weaken. Understandably this places additional burden on the both WHO and UNICEF who may not have the required financial resources for the purpose.

5. The country is facing an acute energy crisis which threatens the functionality of the cold chain at various levels. As per decision of EPI task force UNICEF has been providing fuel to central, governorate and targeted districts to keep the cold chain equipment functional and WHO provided fuel to targeted hospitals. There was also a strategic shift towards using solar technology for the cold chain maintenance. As of July 2016 the MoPHP has indicated that they don't have funds for the operational cost of health facilities including cold chain. The estimated cost of fuel running 3542 EPI centers is USD 200,000 per month. Strategies to address the issues are mentioned above. GOY does not have funds for payment for the traditional vaccines as well as to pay their share under the co-financing agreement.

6. As discussed above, the country is unable to fulfill it co-financing obligations and has requested UNICEF to provide all traditional vaccine.

7. For full implementation of the communication strategy, though HSS funds are available but given the wide range of activities the funds for communication remain insufficient.

8. The operational costs which were provided to the health facility level (covering utility bills etc) have been suspended by the Government from July 2016 due to financial crisis.

9. The current Gavi HSS grant has been re-allocated in 2015 to address unmet needs of the immunization program for increasing coverage and equity issues.

MR

- Measles/rubella vaccine (MR) was introduced following a nationwide campaign targeting children aged 9 months to 15 years in Nov 2014
- Another MR campaign, in 2 phases grouping different districts, was done in 2015.
- Sixty-two districts were covered in August 2015 prioritized by occurrence of outbreaks or low coverage in the post-SIA survey.
- The second MR campaign was planned for December 2015, but implemented in January 2016 due to management issues.

IPV

- IPV was successfully introduced in November 2015, in spite of challenges and some anecdotal reports of health worker resistance to administer multiple injections
- IPV was not under the open vial policy, which resulted in wastage close to 60% (for 10-dose vials) and likely affected coverage as well.
- In May 2016, IPV was included into the open vial policy and wastage has been reduced. MoPHP has requested for provision of 5 dose vial of IPV and which is expected to further reduce the wastage

PCV

- The Ministry of Public Health and Population (MoPHP) has agreed with the use 4 doses vial of PCV subject to discussion on open vial policy provision of support for updating guidelines and training of the staff.

BCG

- BCG global shortages affected availability of the vaccine in Yemen, which has not been prioritized for tuberculosis, thus, not prioritized for BCG access.

Rota

- Rotavirus coverage is lower than for other antigens and has high drop-out rates. This is likely affected by the country still having an age limit restriction for rotavirus vaccine.

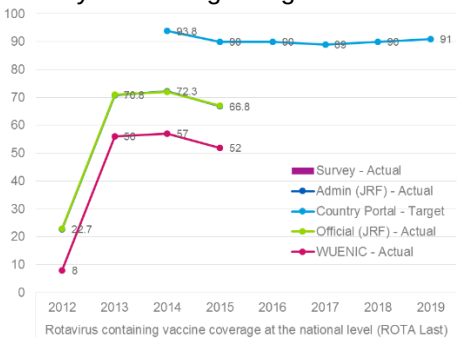


Fig 6: Rota last coverage rates

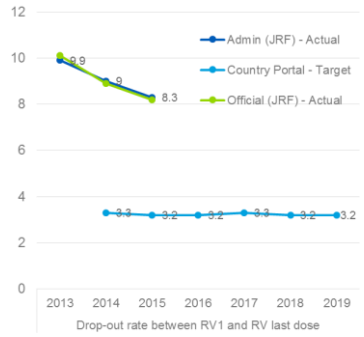


Fig 7: Rota 1 to last drop-out rate

3.1.2. NVS future plans and priorities

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

The request for renewal for vaccine (Pneumo, Penta, Rota and IPV) was submitted in time to GAVI through new online portal system. Ministry of Public Health and Population (MoPHP) is undertaking an in depth analysis (reduction in wastage, cost of transportation and required storage capacity) to reach an informed decision regarding the use 4 doses vial of PCV. The country has implemented the multi dose vial policy since August 2016 for IPV which is expected to further decrease the wastage rates.

In the process of developing the new cMYP (2016-2020) the targets for the five years are being established based on the existing country projections.

As discussed above the political and ensuing financial crisis in the country may have negative impact on delivery of immunization services unless alternate mechanisms are identified by the MOH which might

require further contributions from in-country partners and identification of internal donors. To mitigate the effects on immunization services the Government needs to be assisted by the partners in mobilizing additional resources for the health sector including for immunization.

The country plans to undertake MR follow up campaign in 2018 as a national campaign and mop up activities in 2019 and 2020 and will submit application to Gavi in 2017. As currently MR for RI is being supplied by UNICEF, country is requesting GAVI to allow it for applying for RI MR.

The EPI management considers delivery of immunization services through fixed EPI centers as the most appropriate and cost effective strategy but given the prevailing situation in the country for the foreseeable future it would need to continue to rely on quality and timely outreach activities. The cMYP under development is considering the inclusion of appropriate interventions for strengthening of the routine immunization under prevailing condition especially in areas of HR, logistics management and service delivery.

3.2. Health systems strengthening (HSS) support

3.2.1. Strategic focus of HSS grant

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

Strategic focus:

The HSS grant has the following objectives:

1. Enhancing equitable access to immunization and integrated PHC services

2. Improving the integrated health information including surveillance, monitoring and evaluation systems and research

3. Community empowerment and civil society participation in provision of immunization and essential health services including and not limited to community.

After the start of the conflict last year it was decided to re-prioritise certain activities that could not be implemented in the current situation, instead there was a shift of resources towards integrated outreach activities to ensure immunisation coverage remained viable. This continues to be the current and near future approach until substantial improvements in the country situation take place.

During 2015 the country estimates that 30-35 % of coverage was obtained through outreach activities. Country experience has shown that the demand for immunization through outreach services are enhanced when integrated package of services are provided. During 2015 one round of immunization specific outreach activity and 4 rounds of integrated outreach activities were held. In the current situation with 25% of health facilities not functioning, the outreach remains critical to continuation of immunisation services. To ensure that populations changes including IDPs(2.82 million May 2016 UNOCHA) are reached, microplanning is updated to address shift in IDP population and other migration. The Gavi HSS grant is being prioritized and pooled with other donor support to focus on integrated outreach.

Through the 5 rounds of outreach conducted in 2015, coverage similar to 2014 has been maintained in the challenging conditions. In 2016, five rounds of outreach have been approved with a parallel effort to strengthen and rehabilitate fixed sites. The intent was to spread the integrated outreach sessions over the year, however due to financial management challenges the first round planned in March was delayed to May. In May the first integrated outreach round was conducted in all governorates except Al Jawf. The second round planned for June is yet to be implemented due to challenges in financial management. Subsequent rounds will be held from September to December 2016.

The country recognizes the need to strengthen delivery of services through fixed centers. Outreach activities were enhanced as a transitional arrangement in the situation. Longer term efforts to rehabilitate / strengthen fixed sites and referral health facilities needs to be accompanied by availability of funding for medicines to optimize the effectiveness of the health facilities.

3.2.2. Grant performance and challenges

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

Activities implemented and results in 2015.

In 2015, there were 5 outreach activities implemented. The first outreach round was only EPI and implemented in July.

The next four outreach activities were integrated. They were implemented from September to December 2016.These activities helped prevent a major drop in coverage in 2015; contributing to 34% of the 2015 total coverage.

Partners involved were World Health Organization (WHO), UNICEF, World Bank (channeling funds through UN agencies) and Gavi.

- Of the supported 276 districts, the distribution was: 114 Gavi, 104 UNICEF and 75 World Bank.
- Coordination is ongoing with humanitarian organizations, eg. MSF, to gain access to certain areas
- In 2015 supervision was increased to ensure appropriate oversight.
- Increased number of districts have been included in the outreach activities based on low coverage for targeted support through integrated outreach for 2016.

In 2016, only one integrated outreach activity has been implemented due to difficulties in timely accessing of funds due to various factors which have now been largely addressed.

Regarding objective 2: the relevant activities for health information that were prioritised as part of the updated workplan have been partially implemented which includes the development of guidelines and training for surveillance. However in the current context, some of the originally planned activities such as SARA has not been possible to implement.

EPI coverage survey was planned and budgeted ($250,000) for 2016 supported by WHO with Gavi funds. However the limitations are timing required for the planning and implementation and the access compromised by security. Given the constraints to implement a quality coverage survey, the possibility of conducting a rapid assessment in 2016 needs to be explored.

Regarding Objective 3: Country reports that community communication and social mobilisation plans are developed and available at all 22 governorates. There has been a plan to train community health volunteers since 2014, however this has yet not been done. The funds were prioritized for outreach activities

There are activities for civil society participation. However, currently CSOs have limited capacity that needs to be strengthened. Given the limited capacity, CSOs could be used to support logistics and distribution to hard to reach areas. CSOs have access to some districts where government does not currently have access. CSOs also have a potential role in outreach activities. In the last HSSCC meeting an NGO has been identified which will implement the activities defined in Objective 3 under the agreement between UNICEF and the NGO in close consultation with MoPHP

***Coverage and Equity**:*

Geographic:

- Access of health services through outreach targets all geographic areas. Gavi supported outreach is mainly concentrated on hard to reach areas with low coverage. The Gavi initiated outreach activities in 2015 have provided a nodus of support which has brought support from partners and donors in country. Through outreach activities integrated services including Immunization, screening, IMCI, deworming and reproductive health services have been provided to vulnerable population in high risk areas. Areas which were affected by ongoing war in the country mainly in Aden, Sa'ada, Hajjah, Al Jawaf, Marib, Taiz etc. Integarted outreach activities have also proved to be a very effective strategy to reach the population in hard to reach and security compromised

areas. This has remained as the major source of sustained immunization during 2015/16. While outreach has maintained access, but there is concern of sustainability of maintaining these activities and hence in some areas the potential of replacing outreach by rehabilitation of health centers needs to be encouraged.

- Periodic updates of micro plans is planned for which technical guidelines have been updated. During 2015 micro plans were modified to address the security and accessibility driven issues.

- Due to the changing security landscape access to some districts is at times not accessible to the government and these have been accessed through third party or NGOs for distribution. The CSO/NGO sector in Yemen is quite nascent and as such this support is limited but there are encouraging efforts by the Government in situ to engage through the social sector. It will be useful for Gavi to gauge the success in this area with a view to strengthening this area in the coming years.

- Currently 150 mobile teams have been working in hard to reach and security compromised areas with UNICEF support. They have been providing services to high risk population including IDPs, refugees, and specific communities where immunisation acceptance can be a challenge.

- At the time of the proposal writing the country was supported by larger number of donors, and the selection of supported governorates supported was also based on on-going donor support specific to governorates. Due to the ongoing changes in the country since the proposal was approved three years ago, the donor landscape has changed with withdrawal of support by some donors, and shifts in populations and coverage by district / governorates. Going forward it is critical that a partner led dialogue identifies available donor support to sustain the immunization activities beyond the current 2017/2018 period. UNICEF is taking the lead in this area by hosting a Yemen donor meeting from 21-22 August 2016. UNICEF has also been successful in mobilizing extraordinary resources through efforts at all level. With rising uncertainty on the resolution of the crisis, coupled with the 'semi-legal-status' of the Government in situ an element of ad-hocism is beginning to creep into the working of the present Ministry of Health. While the Ministry continues to function, there is both an element of apprehension on the sustainability of the efforts and fatigue due to the extraordinary efforts that the Ministry staff has been making during the period 2014-2016.

- There are also differences between implementation statuses for governorates depending on the support available. For example Al Jawaf governorate has not yet started the integrated outreach *while districts in this Governorate are badly affected by the conflict. This lack of activity is due to security and governance issues.*
- *There are remaining challenges in streamlining the supply of medicines which requires to be addressed through appropriate financial management processes. Delays in the release of funds for essential medicines included in the package of integrated interventions resulted in insufficient stock to provide the full package in all locations where the campaigns were carried out.*

There is a need to reflect on innovative ways to access hard to reach populations: other solutions / strategies to reach the unreached – school and community health volunteer could provide vaccination services. Creative ways for defaulter tracing using community volunteers, schools and Mosque, to follow up with the community and beneficiaries.

- ***Recommendation****: to review the status and selection of the supported governorates / district based on coverage levels, number of un-immunized / under immunized children.*

Gender *Utilization of health services is almost equivalent for girls and boys.*

- Gender related barriers to immunizations are addressed by inclusion of minimum one female health worker as part of the outreach team. Sometimes there is difficulty to get female health workers, as there are some areas where female education is low and they do qualify for the work. Currently 33% of trained (IMCI) health workers are female. However all community health volunteers (chv) are female.
- Generally the health workers will be from the community. However, in exceptional cases in cases unavailability of qualified health workers, health workers are brought from the nearest neighboring area. However this can be challenging as there are cultural variations to be considered.

Wealth

- Majority (80%) of the population is lower income and access government health facilities. The private sector is not strong, not available at the rural level and the quality is generally poor. Only1% of private facilities provide RI services. The MOH provides the vaccines, trainings, and registries to these facilities and facilities report on the use of vaccines.

Coordination

- Coordination: health cluster (WHO , MOH), Nutrition, WASH, EPI task force (MOH, WHO, UNICEF, NGOs) at central level and sub cluster at Governorate and lower level.
- Division of areas of work is necessary and flagging of issues and finding collective solution is critical. Identification access to various areas in the changing situation is an important need. UNICE may consider a TA position for identifying access bottlenecks and ensuring that access is possible in conflict situations. This will allow better implementation of the planned outreach activities.
- The country and partners identified further challenge for coordination and access for NGOs to some areas. Six health workers were killed during last outreach round in border areas.
-

***Challenges**:*

Conflict has resulted in damage to health care facilities and affected transportation (for users to access facilities and for supply distribution) and displacement of population resulting in the reduction and interruption in provision of health care, including vaccination, in several areas. The conflict has severely affected water, sanitation and the food supply, making health a second priority for the population.

Financial challenges:

The financial crisis has led the Government to seek a waiver on co-financing from Gavi and the GOY is also unable to procure routine vaccinations which is now being done by UNICEF.

- The decision to channel Gavi HSS funds through WHO & UNICEF led to new procedures to be established for these organisation to channel the funds to governorates. Establishing the procedures caused delays in receipt of funding at governorate level and subsequent delay of implementation of activities.
- The GOY is requesting WHO & UNICEF to open independent account for Gavi Cash support through the ICC account to limit the delay of the implementation of the planned activities in the future for next tranche of funding.
- UNICEF and WHO are requested to undertake appropriate measures to mitigate any financial misuse of funds.

Supply chain

- Cold chain affected due to conflict: Lack of electrical power, lack of funds for fuel, some cold chain equipment has been stolen, due to health facilities not being protected, overall infrastructure damaged.
- The country has discussions about use of solar-powered equipment, but there are concerns about investments and sustaining the maintenance of such equipment.
- Due to non-availability, vehicles are usually rented, but this is an expensive option especially due to shortages in fuel supplies and the security situation.
- During the crisis, international flights are not allowed to land in Yemen and currently private chartered flights transport via Djibouti. This has financial implications resulting in higher cost of transport and cold chain implications from having the vaccines in Djibouti with potential interruption of the cold chain. Once the vaccines reach the Central Cold Rooms, there is a challenge to transport the vaccines form central to governorates. Governorates request support to pay for transport of vaccines from Central to governorates. During the crisis UNICEF has been covering the cost of chartered flights, and now has also been requested to support the transport to governorates, including air fright to Sacutra Island which is an offshore island. The additional financial implications of the supply chain cost is a challenge.

- **Cold Chain:** Due to the crisis there have been acute electricity shortages and the health workers move vaccines out of the cold rooms to other places. Different strategies have been adopted to respond to the challenge of high fuel prices and interruption in electricity: UNICEF and WHO provide support for fuel. Also 200 units have been equipped with solar powered cold chain. An

additional 117 units have also been supported for direct drive units (by UNICEF and WHO), 8 staff will be trained as trainers in Amman with UNICEF support and return to train other staff to maintain the equipment.

- National EPI review was conducted in 2015 and provided additional recommendations: Key priorities identified. UNICEF has recruited a consultant for Djibouti and Yemen to work on cold chain equipment optimization platform requirements: Work on proposal will start in September – November. The consultant will develop the CCE inventory, and the replacement plan and the CCEOP proposal. A previous cold chain inventory was produced in April for the IPV switch.

- There is currently no objective for cold chain in the HSS grant, and the joint investment for the CCEOP application is proposed to come from HSS grant. There will therefore have to be a reprogramming of the HSS grant towards cold chain along with the CCEOP proposal.

- Maintenance and availability of spare parts: Maintenance is critical. Large ILRs are nonfunctional due to minor defects. There is the technical capacity in the larger governorates, so there should be strengthened either regional level or governorate level capacity for maintenance and repair. WHO is providing some of the spare parts, but there is a general shortage.

- **TA (PEF):** UNICEF is providing 4 positions for cold chain and vaccine management one central, one in Sadaa, Taiz and Hodaida and 5 C4D consultant one at Central level and one in Taiz, Aden Hodeaida and Sa'ada each WHO is providing an international medical officer for EPI. Recruitment is in progress. One Data management officer also supported by WHO, already in place.

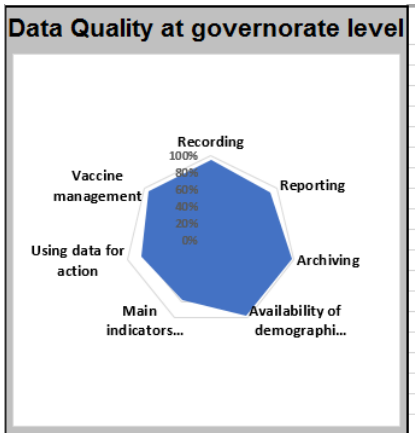
- **TA need:** TA to strengthen data management for supply chain at the central level to make the operation of data management more effective for both RI, cold chain management.

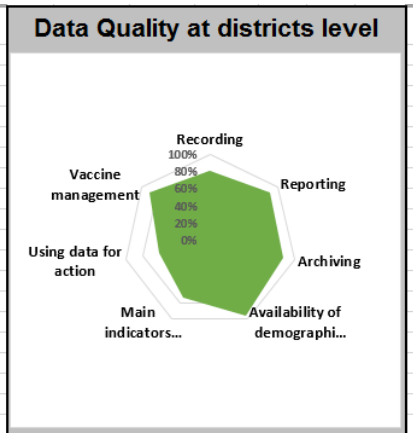
Human resources:

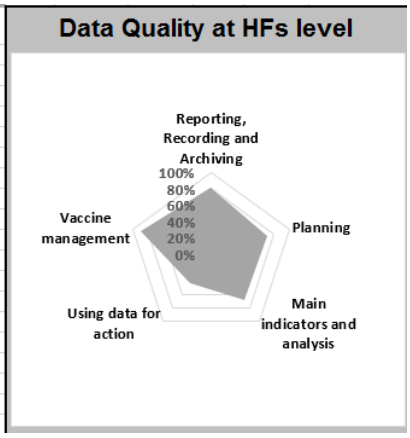
- Usually only 1 health care worker per facility is trained, thus, with absence of staff delivery issues occur and facilities may not provide services.

Data quality

- Data quality self-assessment has been conducted in both 2014 and 2015. Final report of 2015 is available.
- DQS is done by central supervisors, and WHO is involved in the analysis
- Findings from the DQS (see figure):
    - One issue is the implementation of DQS (only done in 11 governorates)
    - The DQS is combined with supportive supervision. The supervisors are collecting data from their own data. The findings suggest that while the accuracy is good, the reporting is not timely and complete. Data usage, analysis and feedback is the biggest issue at the facility level and district level







- Two national level EPI coverage surveys have been done in last five years (DHS and Social Protection Survey) but there is no independent data quality verification. Data quality needs to be strengthened at the sub district and governorate level.

- The data is currently collected in separate tools for different services. There have been discussions to identify a person to collect integrated data at the directorate and district level. The funding for this needs to be identified. Currently most data from the outreach activities and campaigns are collected and reported in a timely manner.

Recommendations for data quality:

- DQS need to be further strengthened and to lend credibility to the findings it would be useful where possible to have oversight from staff of different districts.
- To develop a data quality improvement plan based on the recommendations of the DQS and positive experiences and to be adopted by the MOPH (this plan could be developed as part of the annual EPI plan and CMYP)

Surveillance:

- Surveillance has been adversely affected by the conflict. Although the surveillance system was considered one of the stronger systems in the region, the conflict has led to challenges in transportation of specimens and cost of testing has increased in 2015, due to interruption of flights, reagents and specimens were shipped through UNHAS to and from Djibouti. There was a backlog of about 6 months before samples could be shipped. There are also difficulties in sending teams to investigate cases also linked to closure of a number of sentinel sites. The issue with importing reagents from other countries has affected availability. In late 2015 the guidelines for integrated surveillance were released and training of health workers started.
- The Adverse Events Following Immunization (AEFI) surveillance system is non-functional and did not report a single case in 2015.

- **Recommendation**

- GAVI HSS resources to be used for strengthening of surveillance related activities

- **Recommendation for Demand and communication**:

- Main challenge: lack of availability of funds for routine activities for demand creation. The use of female health workers has been crucial in reaching mothers and promote good health practices. There are also targeted approaches in female schools and in the community.
- UNICEF has conducted an EPI communication workshop in March 2016 and is supporting MoH in hiring a consultant to develop a comprehensive communication strategy. While there is a plan for communication with hard to reach areas but there is no regular provision of funds and therefore plans are developed piecemeal and not consistently.
- There are issues in some areas about refusal and vaccine hesitancy. There needs to be tailored approaches for communication with different communities. There is a shift in strategy from mass media to interpersonal communication approaches that might come forward in the strategy.
- There is a need to advocate for sustainable budget for communication at governorate level due to differences between governorates that need to be adapted and tailored. There should be a separate budget line for governorates
- TA: PEF: UNICEF is providing 4 C4D to increase technical level at central and governorate level. This PEF support needs to extend until end of 2017.

Human resources:

- Human resources availability and deployment are not uniform. With closed health facilities and dispersed health workers in the current situation, facilities are under strain and where possible health workers (HW) are working in outreach activities. HW displaced as IDP have been known to also start mobile clinics in the IDP camps and work with mobile teams and outreach in addition to being contracted by NGOs in some areas. Health workers who are fixed employees by MOH receive salaries monthly till now but the situation has worsened since July 2016 with the Central Bank facing serious liquidity issues.

- Refresher training, supervision training and other capacity building is part of the Gavi supported activities. Trainings have not yet taken place in 2016, but are planned for the next six months, and will be conducted through UNICEF.

- Challenges related to Human Resources: uneven distribution, with a preference for urban areas. In some areas there are less HR available to support the implementation of activities, health workers are being asked to work more than 5 days, or health workers are mobilized from other areas. EPI related health workers are paid less than other health workers, since there is no contribution from beneficiaries (for other services beneficiaries are paying some fees to the health centers and health workers. For EPI there is no fee.) Therefore turnover is higher in EPI.

- Human resource: female health workers are employed in outreach for reproductive health. There are sometimes shortage of females for reproductive health activity implementation and hence a strong need to strengthen the capacity for female health workers in some Governorates. World Bank is supporting training of 150 female health workers for 3 years in certain governorates on reproductive health.

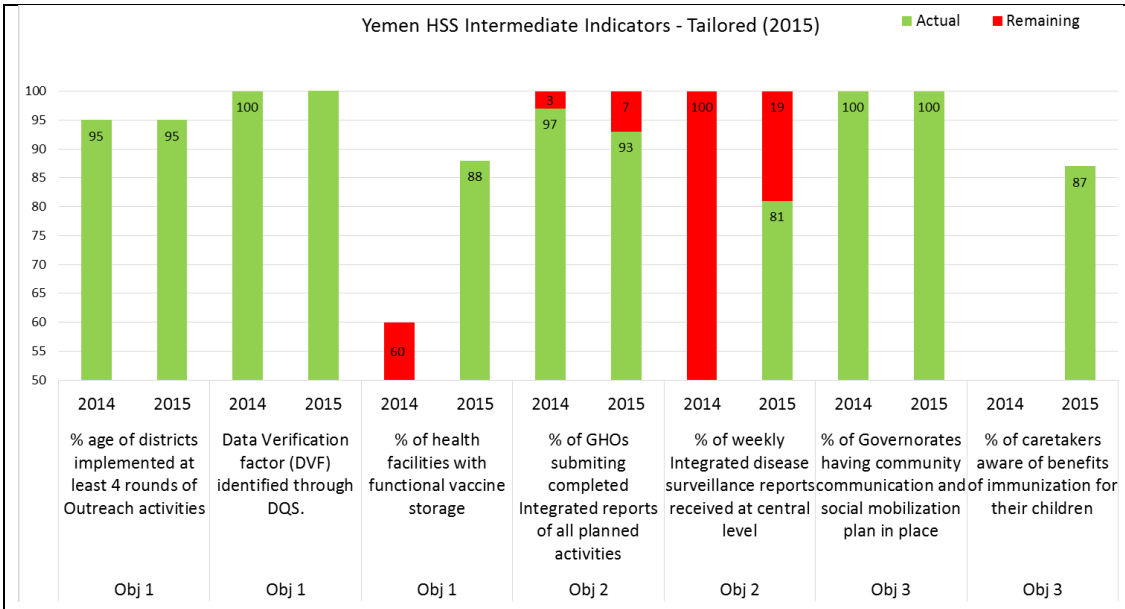
  Recommendation: review HR strategy for incentivizing health workers or doctors in rural areas.

Community health volunteers:

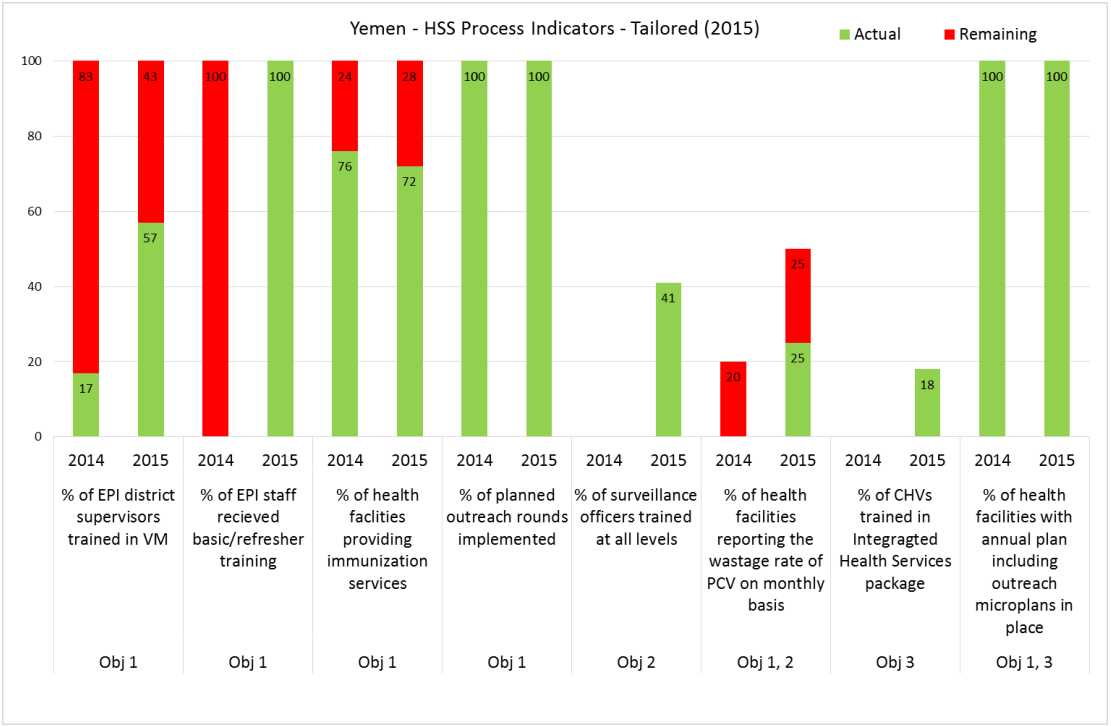
- CHV are part of the outreach activities and mobilise the community for outreach sessions and other health related activities where possible. They prepare the location and ensure the readiness of the community and increase utilization of the health services provided in the outreach. CHV can assist the outreach team in implementation of some activities: such as measure MUAC for the mother and other activities, and identification of missed children / drop outs, CHV will follow up with beneficiaries, and encourage referral to health facilities.
- CHV is motivated by altruism and respectable position in society, no monetary incentives. Sometimes trainings and some gifts.
- There is 136,000 settlements of population in Yemen: there is a need for 136,000 CHV, currently there are 10,500 CHV.

Achievements:

Achievement of intermediate results



- Achievement of process indicators results



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

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

Funds with government (These funds are present prior to the decision to channel funds through partners WHO and UNICEF from 2015)

HSS1: $91,000

HSS2:	$219,080
Total HSS savings:	$310,080
IPV VIG:	$132,158
MR campaign:	$223,737
ISS:	$538,812

Proposed use of funds:
GOY proposes to use $665,975 for procurement of medicines. Funds will be channeled to UNICEF to procure essential medicines (antibiotics, iron supplements). It is considered that availability of medicines at HFs and outreach encourage the population to use these options and thus it also helps in reaching the service providers with immunization to the target population.

Remaining balance will be used for:
1. Support operational cost of EPI at all levels (cold chain maintenance, communication fuel).
2. Central vaccine store maintenance, supervision and power supply
3. Vaccine supply and transportation & surveillance

Proposing to use remaining balance of HSS1 ($91,000), HSS2 ($219,080), IPV VIG ($132,158), and operational costs of MR Campaign ($223,737) to procure essential medicines that will be used as part of the integrated outreach activities. Essential drugs for outreach was an approved activity under the HSS2 proposal, and there is a shortage of available supplies which is affecting the quality of the service delivery of the integrated outreach activity which is critical for the demand for EPI services. The JA team recommends to utilise the remaining balances HSS1, HSS2, IPV VIG, and operational costs of MR Campaign for procurement through UNICEF to address this urgent need to continue with integrated outreach activities in 2017.

Given increased fuel prices and withdrawal of other support to the health system, there are critical funding gaps for operational costs of the EPI programme, affecting transport, supply chain, cold chain maintenance and repairs, and supervision activities. The JA team proposed that remaining balances from ISS ($538,812) will be reallocated towards meeting these funding needs. These funds will be utilized by the end of 2017.This implies a no cost extension for utilization of these funds to be considered by the HLRP.

3.3. Transition planning *(if relevant)*

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

Not applicable

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

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

The ongoing HSS support is channelized through UNICEF & WHO

4. UPDATE OF FINDINGS FROM PREVIOUS JOINT APPRAISAL

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

Prioritised strategic actions from previous joint appraisal / HLRP process	Current status
1. Reaching to vulnerable/high risk population through Integrated Outreach rounds	Ongoing, 4 integrated rounds were conducted in 2015 as detailed above.
2. Use of the Solar Powered Refrigerated Units for improving the vaccine storage at district level	200 solar powered refrigerated units have been installed and a further 217 will be installed by UNICEF and WHO. Based on the improvement plan further quantities will be procured during 2017-2019.
3. Capacity building of the Health workers especially in field of vaccine management	165 district supervisors trained on vaccine management who provide on-job training to 6100 health workers; an extensive capacity building plan for the health workers including training on vaccine management is being considered for inclusion in the cMYP; 1000 community health volunteers (CHV) trained during 2015 with UNICEF support.
4. Monitoring of the EPI activities	The national EPI has 25 supervisors. These supervisors are supported by partners for monitoring EPI activities at the Governorate level. The Governorate staff is also supported by UNICEF and WHO for monitoring at district and sub-district level for integrated outreach activities, campaigns and routine immunization. DQS in 2015 was supported by WHO.
5. Surveillance of the VPDs	**All the integrated surveillance officers (34 at Governorate and 333 at district level) have been provided with refresher training trained in 2015 and 2016.** **Sensitization meetings were conducted for VPD surveillance for physicians and health workers at all levels.** **Integrated VPD surveillance indicators are on track.**

5. PRIORITISED COUNTRY NEEDS[1] (for 2017)

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

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

Prioritised needs and strategic actions	Associated timeline for completing the actions	Does this require technical assistance?* *(yes/no)* If yes, indicate type of assistance needed	Lead Partner Agency
1. Regular (bi annually at National; quarterly at Governorate and monthly at district level) Analytical desk review		Partners to provide format for data collection; and discussions with the objective of analytical review Proposed lead UNICEF	WHO
2. Microplanning to be updated on an annual basis in general and in districts where there are significant changes to be updated bi-annually.		In country partners to support the activities.	WHO
3. Undertaking quality and timely Integrated Outreach Activities		From partners for effective planning, , monitoring and documenting on outcomes.	WHO UNICEF
4.Inventory/Assessment of cold chain equipment and development of replacement plan of cold chain equipment towards developing CCOP application.		Partners to provide technical support.	UNICEF
5. Comprehensive EPI review and EVMA (subject to security situation) and review of integrated outreach rounds.		Partners to provide support	WHO
6. Update communication plan and implementation of the key defined activities.			UNICEF
6. Support operational cost (at the governorate and district **7.** A. gas for cold chain , transportation of vaccines) B.Supervision	UNICEF WHO	Funds to be channeled through partners who will provide supervisory support.	UNICEF

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

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

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

Brief description of how the joint appraisal was endorsed by the relevant national coordination mechanism	
Issues raised during debrief of joint appraisal findings to national coordination mechanism	
Any additional comments from: • **Ministry of Health** • **Gavi Alliance partners** • **Gavi Senior Country Manager**	

9. ANNEXES

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

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

The draft Join Appraisal document prepared through a consultative process. Early discussion started between GAVI secretariat and MoPHP, WHO and UNICEF to start the joint appraisal. The MoPHP showed ownership and effective leadership of this program.

A consultative meeting was held in Amman from August 7-10 through UNICEF support with participation from the MOH Yemen, WHO, UNICEF and Gavi secretariat.

All discussions were based on the report/recommendations of National EPI review meeting and monitoring reports from the partners, NIDs report, draft cMYP 2016-20, Performance frameworks document and other assessment s previously conducted like DQs, EVM, in depth EPI review and national health system review. All partners were keen to reach to realistic and actionable plans and recommendations. UNICEF and WHO play a pivotal role in implementation of immunisation services in Yemen.

Annex B: Changes to transition plan *(if relevant)*

Changes proposed	Rationale for changes	Related cost (US$)	Source of funding for amended activities	Implementation agency	Expected result