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	Papua New Guinea
Reporting period	*January – December 2015*
Fiscal period	*January – December 2015*
Comprehensive Multi Year Plan (cMYP) duration	*2016-2020 (currently in draft)*
National Health Strategic Plan (NHSP) duration	*2011-2010*

1. SUMMARY OF RENEWAL REQUESTS

Programme	Recommendation	Period	Target	Indicative amount paid by Country	Indicative amount paid by Gavi
Inactivated Polio Vaccine	*Extension*	*2017-2018*	*528,952*	*N/A*	*US$302,000*
Measles Rubella	*Renewal*	*2015-2017*	*175,300*	*0*	*US$ 51,500*
Pentavalent	*Extension*	*2016-2020*	*607,900*	*US$ 663,000*	*US$ 458,500*
Pneumococcal	*Extension*	*2016-2020*	*434,400*	*US$ 721,500*	*US$ 903,000*

Indicate interest to introduce new vaccines or HSS with Gavi support*	Programme	Expected application year	Expected introduction year
	HSS2 with CCEOP	*2017*	*2017*

2. COUNTRY CONTEXT *(maximum 1 page)*

[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]

Country context is little changed since the 2015 joint appraisal, but we emphasise the continuing major public finance and cash flow challenges in PNG. As a result, the overall health sector budget for 2016 was cut by a third. EPI at the national level received in 2015 only approximately a quarter of its budgeted allocation; and the story is not much better at the provinces, which received only approximately half of their budget. Disbursements are also tending to be very late indeed – with the first tranche often not until Q3 of the fiscal year. This obviously creates huge problems for the planning and implementation of activities – with outreach usually carried out twice a year, at best, rather than the planned four times.

2015 saw further reporting against the Millennium Development Goals – of which PNG is on track to meet only one (reversing malaria incidence). The health status of the population is not improving and on most-recent figures, the infant mortality rate is now 44.5 per 1,000 live births and the maternal mortality rate 733 per 100,000 live births. Whilst there has been progress against a number of key indicators since 2000, improvement appears to have stalled over the last few years. The health system is characterised by limited resources, deteriorating infrastructure, ageing workforce and lack of systematic in-service training, and inadequate and declining access to basic health services. These problems are worst in rural areas, where 87% of the population lives. An estimated 40% of rural aid posts (the lowest level of health facility) have closed or do not function fully and outreach services are almost non-existent.

The 2015 change in Gavi's eligibility policy meant that PNG entered Gavi's accelerated transition phase in 2016, following two extra years in the preparatory transition phase granted to countries faced with an exceptionally high increase of their GNI/capita, despite an average 2012-2014 figure of US$1940).

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

Describe only what has changed since the previous year's joint appraisal.

3.1. New and underused vaccine (NVS) support

3.1.1. Grant performance, lessons and challenges

Vaccination coverage

Vaccine coverage continues to fall below target across all antigens. Against the Penta3 national 72% target, the official estimate is 62%, as in 2014, down from 68% in 2013. A four point difference between administrative and official estimates for Penta3 is to account for children vaccinated in the private sector and not well monitored in remote areas. WHO/UNICEF estimates match each official estimate. MCV1 coverage (WUENIC) continues to decline from 70% in 2013, to 65% in 2014 and now 60% in 2015.

PCV was introduced formally in November 2013, but only in some provinces, and roll-out continued in 2014, though impacted significantly by delayed training and a major measles outbreak (described below) and without formal coverage estimates). The national roll-out in late 2015 is consistent with the official estimated coverage of 20%. IPV was introduced nationally with PCV in November 2015 but coverage estimates are not available for IPV, or for MCV2 (introduced in early 2016).

There was a large-scale measles outbreak from September 2013, with the last case reported in September 2015. In total, 2649 confirmed cases and no deaths were officially reported to WHO through the national surveillance system. However, the National Verification Committee report notes that there were more than 75,000 suspected cases during the same period. The sensitivity of the surveillance system as measured by performance on standard surveillance indicators (the rate of reporting of suspected cases with fever and rash that tested negative for measles and rubella) is not adequate. In 2016, the annualised national reporting rate of non-measles/non-rubella suspected cases is 0.5/100,000 population (target >2/100,000 total population at national level) and only 10% (target >80%) of provinces are achieving this recommended reporting rate.

More positively, there was an improvement in Penta1-3 drop-out, from 29% in 2014 to 25% in 2015, though this was still significantly worse than the target of 16%.

Provincial and district Penta3 coverage levels vary widely across PNG, from 20% to 97%, though there are concerns with both the numerator and especially the denominator, with the number of eligible children based on a 2011 national census adjusted for annual population growth.

Equity

Just 18% of the 89 districts have Penta3 coverage above 80%, down from 20% in 2014. PNG has a GII value of 0.611, ranking it at 140 out of 155 countries in the 2014 index. Violence against women remains unacceptably high and violence (and the threat or fear of it) significantly reduces the range of actions a woman can take to support her family and enhance her health and education, as well as that of her children. Moreover, travel to health care centres has greater security risks for women.

Challenges

The challenges identified in the 2015 Joint Appraisal (and on which there is a good level of consistency across EPI-related assessments) remain. These are summarised well in the following table from the recently drafted 2016-20 cMYP, of which we particularly emphasise the constraining effect of the very low levels of conduct of outreach, which is vital to reach a population spread over forest, highlands and islands. The reasons for the very low outreach levels are linked to the heightened security risk in many parts of the country with frequent tribal clashes, but mostly to the lack of funding provided to facilities for activities. Similarly, the frequent lack of supportive supervision is a major constraint on effective EPI delivery: the EPI Review found that some facilities had not been visited by provinces in over two years. Finally, the national leadership of the EPI Programme from the National Department of Health (NDOH) is limited by a staffing crisis linked to concerns of financial mismanagement being investigated by Gavi.

Immunization System Analysis

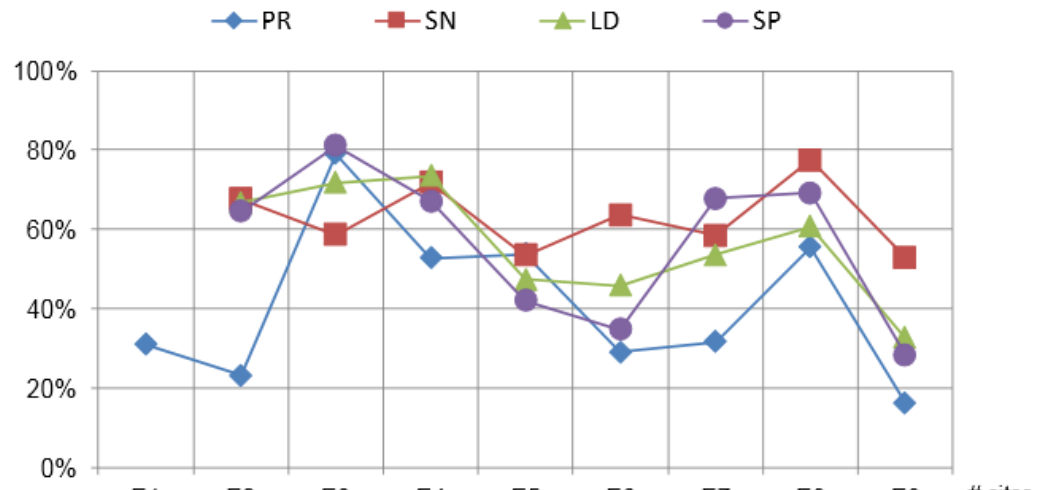
- Poor coordination between National and sub-national EPI
- Low motivation for RI
- Weak HMIS and unreliable statistics
- High dropout rates between successive vaccine doses due to lack of validation of data in field
- Lack of service providers in the rural areas
- Lack of qualification of the front line service providers
- Aging cold chain equipment

Health System Constraints

- Inadequate skilled health care workers in the rural areas
- Mal-distribution of health workers
- Inadequate vaccine management practices
- Inadequate reporting and surveillance systems
- Sub-standard reporting stkills

Since 2015, an EVM assessment has been completed – the key findings of which are shown below.

EVM Assessment Results



	E1	E2	E3	E4	E5	E6	E7	E8	E9	# sites
PR	31%	23%	79%	53%	54%	29%	32%	56%	16%	1
SN		68%	59%	72%	53%	64%	58%	78%	53%	13
LD		67%	72%	73%	47%	46%	54%	61%	33%	8
SP		65%	81%	67%	42%	35%	68%	69%	28%	31

Management is highlighted as a common weakness at all levels – and in particular the knowledge and skills of staff in vaccine and stock management. The majority of staff lack knowledge of how to calculate their vaccine quantity requirements for the agreed safety and supply interval. This resulted in overstock and stock-out of vaccines and safe-injection supplies in vaccine storage facilities.

The EVMA found that the EPI manual, developed with Gavi support, has enhanced the knowledge of staff. The absence, however, of a Cold Chain and Logistics Management Manual (CCLMM) is still a limiting issue and the EVM suggests that its development is essential. Health Facilities Branch is supposed to be responsible for overseeing maintenance of the CCE across the country, but this does not yet seem to be working and consequently provincial maintenance and repair are inadequate.

The EVM notes that of the 89 districts there are only 8 district vaccine stores, and that consequently, most of the health facilities receive their vaccines direct from their provincial vaccine store. This set-up often results in vaccines delivered from a distant location and in-effective supervision.

These challenges were also identified in the Gavi audit of February 2016 and seen again in the SCM monitoring missions of June and August 2016. The February 2016 Gavi audit identified that 175,500 doses of PCV in the central cold store were due to expire by August 2016. This was a result of the significant delays in PCV introduction mentioned above. These doses were prioritised for distribution to

health facilities and a formal circular was issued to instruct facilities to use these doses in an expanded age-range, up to 2 instead of 1 year old (children missed in standard immunisation to be given 3 doses at 1 month of interval). A Gavi mission in June suggested that this had been partially implemented: only 350 doses remained in the central store; we saw doses from this batch in the district health facility we visited – but that facility was not aware of the circular and was not applying the expanded policy. There is no reliable system in place for the reporting of wastage back up the line (all records are paper-based, and compliance and diligence very low). Partners have been monitoring central PCV stock more closely, to ensure distribution of the earliest expiring vaccines first.

3.1.2. NVS future plans and priorities

A new cMYP for 2016-20 has just been drafted. It describes the following key priorities:

cMYP Summary 2016-2020

National immunization Priorities

- Increase routine immunization coverage for all antigens to reach every child and mother, especially in hear-to-reach areas
- Improve cold-chain operations at all levels
- Advance towards measles elimination
- Control hepatitis B
- Eliminate Maternal and neonatal tetanus
- Maintain PNG's polio free status
- HPV introduction into the RI Schedule
- Improve existing surveillance and data management systems
- Ensure participation and mobilization of communities in EPI

Immunization priority objectives

- Increase control of VPD diseases
- Increase coverage and equity of RI
- Improve service delivery practices
- Ensure community participation in RI service promotion
- Improve surveillance of VDP diseases and AEFI
- Improve effective vaccine management
- Improve monitoring and reporting of immunization services
- Increase sustainability of immunization financing

National Program Monitoring Framework

Indicator	2014	2020
BCG	81%	95%
Hepatitis B	87%	95%
OPV13	53%	95%
Measles	65%	95%
MR	n/a	95%
Penta	62%	95%
TT	50%	95%
PCV	n/a	95%
HPV	n/r	70%
IPV	n/a	95%
Fully immunized children	62%	95%

Priority Immunization Program Strategies

- Streamline EPI management structures
- Improve immunization delivery through:
- increasing skilled immunization staff
- ensuring micro-planning in health facilities
- Upgrade of physical infrastructure and logistics
- Increase sustainability of immunization through improved planning and budgeting
- Increase political and public awareness of the importance of immunization through evidence based advocacy, communication and social mobilization activities

The government's mechanism for improved delivery at the health facility level is the 'Special Integrated Routine EPI Strengthening Program' (SIREP) developed in 2014. This strategy is aimed at reaching every facility to help health workers develop village population based micro-plans, which should be implemented on a quarterly basis. SIREP was introduced through an initial campaign stage (SIREP Plus) through 18 of 22 provinces (as of August 2016). When executed to its full capacity, SIREP should ensure that the entire population receives immunisation and integrated maternal and child health services at least once per quarter. The initial rollout of SIREP Plus further demonstrated the need for increased capacity of the cold chain, and highlighted the significant need for increased leadership and financial allocations at the provincial and district levels. The decentralised system means there is piecemeal responsibility for immunisation delivery, with NDOH responsible for vaccine procurement and the nationwide cold chain and provincial and district levels for all operational costs.

Provinces and districts receive funds (though usually partial and very delayed) as: a) health functional grants for infrastructure, medical supply distribution and outreach; b) funds for the free health care policy; c) district Service Improvement Program Funds provided direct to local MPs; and d) internal revenue. The use of these funds is determined by the relevant decision makers at the provincial and

district level and managed by local managers – and as such the programme is heavily reliant these leaders. Historically, provinces and districts have committed some funds to EPI but not enough to meet outreach and coverage targets.

Commitment varies widely from province to province but the recent drops in coverage and outreach indicate that investment may have decreased. It is predicted that provinces and district levels will contribute between 30-50% of the SIREP budget (variable by province). In order to reduce this gap and prevent any further decrease in investment significant work needs to be done to advocate to relevant decision makers the importance and cost benefit of investment in EPI. This issue needs to be addressed rapidly to ensure that the programme is able to meet coverage targets.

In addition, there are two separate **pilot programmes:**

'Addressing Inequalities to Strengthen Immunisation'

In this pilot project from September to November 2015 UNICEF provided technical and financial support for vaccine and cold chain management, outreach activities, supportive supervision, on site trainings and data analysis, based on collective bottle-neck analysis. In consequence, implementation re-started in 10 out of 15 health facilities, and outreach activities re-started in 5 facilities. Penta3 coverage improved, with two districts rising from 7% to 34%; and from 22% to 67%. PEF is funding an extension of this pilot into a further five provinces. The cost-effectiveness of the programme has not yet been evaluated, though.

Rural Primary Health Service Delivery Project

The Rural Primary Health Services Delivery Project (RPHSDP) is an eight year (2011-19), US$81.2 million joint initiative by NDOH, the Asian Development Bank (ADB) and Australian DFAT. WHO and UNICEF sit on the Steering Committee. Implementation is through a Project Support Unit, led by Australian Bob Akers. The goal of the RPHSDP is to strengthen the rural health system in selected areas of PNG by expanding the coverage and quality of primary health care in partnership with State and non-state providers.

Amongst other deliverables, RPHSDP is constructing 32 high quality Community Health Posts and refurbishing over 100 Health Sub-Centres, with funding for their contents and small vehicles; introducing a new health information systems based on mobile technology and geographic information systems; and health sector human resource development. Again, the cost-effectiveness of the programme has not yet been evaluated, though.

Data

The last National Immunisation Coverage Survey was conducted in 2004. The last survey of vaccination coverage was from a Demographic and Health Survey (DHS) conducted in 2006. The country is currently training enumerators for a DHS to be conducted September through December 2016. Preliminary data analysis for the 2016 survey should be available mid-2017. The planned 2016 DHS includes nearly twice as many households as the 2006 DHS (19,200 households in 800 villages in all 22 provinces). The 2016 DHS will enumerate all children in surveyed households born in 2013-2016 and ask about vaccination coverage. Enumerators will first ask for written vaccination records (Baby Book) and transcribe dates of vaccination to survey form. If a Baby Book is not available, a verbal report of vaccination will be taken. No information on reasons for non- vaccinated will be gathered.

Advanced publicity in the communities will be used in the community to prepare households for survey. Surveys will be conducted on paper forms, then entered into an electronic database first in the field so the teams can return to households if needed to clarify responses. Surveys will then be double entered in Port Moresby. The 2016 DHS is estimated to cost 12 million Kina (~US$3 million), plus $700,000 for ICM Macro International, a DHS consulting firm. The 2016 DHS is not specifically powered to estimate vaccination coverage at a provincial level – and, based on the cases identified from 2006 DHS, this looks unlikely.

HPV vaccine

There is a political drive for PNG to introduce HPV vaccine, which is included in the draft cMYP for 2017 introduction (ahead of rotavirus in 2018). But Partners are very concerned that PNG's EPI system is not currently able to cope with the addition of HPV. The Government understands that they are not eligible for further NVS support from Gavi, now that PNG is in the accelerated transition phase, though we confirmed that PNG is able to access Gavi prices for HPV.

Partner support, PEF-funded TCA

Both WHO and UNICEF have been working on some key work areas set out in their 2016 PEF TCA, including the important EMVA and cMYP revision, though their spending against 2016 TCA is at a low level (UNICEF 13%, WHO 28%). This needs a focused effort on implementing the identified activities, though in the context of very limited EPI leadership from NDOH, Partners are stepping far into EPI implementation itself and consequently are over-stretched and unlikely to meet TCA targets on especially SIREP and the UNICEF pilot project. UNICEF is, though, recruiting a PEF-funded P4 Immunisation Specialist, and supplementing this with a national EPI Focal Point, both of which are key.

3.2. Health systems strengthening (HSS) support

3.2.1. Strategic focus of HSS grant

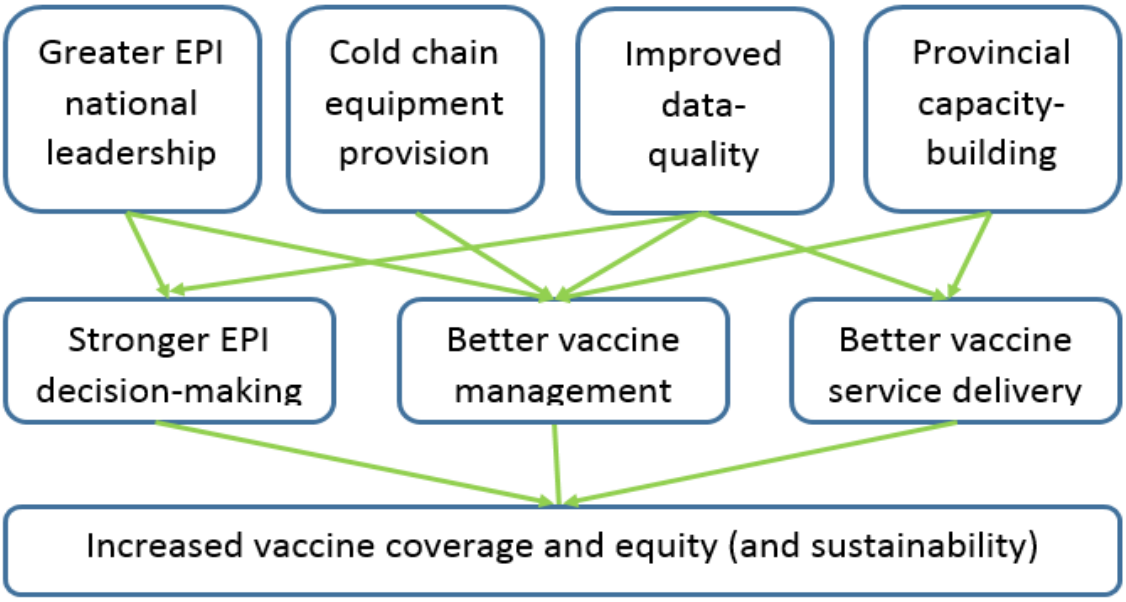
PNG's first Gavi HSS grant was approved for a period of 5 years from July 2013 to June 2018, for a total value of US$ 3,072, 923. But by the end of 2014 the total spent was US$ 563,718. A reprogramming of the HSS was subsequently requested and recommended for approval by the IRC in March 2016. The remaining US$ 2,512,205 is due for implementation by June 2017 and will prepare the ground for a subsequent combined HSS2transition grant of US$ 6million for 2017-2020.
The IRC made several comments, including relating to the models of cold chain equipment proposed. Gavi identified the need to go further than this, to produce a cohesive cold chain expansion plan based on the recent EVMA and cMYP, and in light of the piecemeal procurement to-date (including directly by provinces), as well as the opportunity for support from Gavi's Cold-Chain Equipment Optimisation Platform (CCEOP). Furthermore, DFAT already funded new CCE which has been sitting in the Health Facility Branch since January, because of lack of fund for distribution and installation. Stakeholders agreed that supporting the distribution and installation of this CCE was of higher priority than the procurement of additional new CCE. The final response to comments is due by mid-October.

3.2.2. Grant performance and challenges

Negligible progress during 2015, which was a major driver of the need for the reprogramming described above recommended for approval by Gavi in March 2016.

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

PNG will start to prepare their proposal for a second phase of HSS ($6m 2017-20) for submission to Gavi in March 2017, along with an application to the CCEOP. This timing of this HSS2 submission will also leverage other in-country discussions, including for the Global Fund grant, which will also relate to improving implementation at the service delivery level. During the Joint Appraisal, stakeholders developed the following theory of change, relating both to urgent current EPI problems, as well as the medium and longer term changes to which Gavi HSS could contribute.



Detail
Key to actions: short-term, medium-term, longer-term

a) Greater national EPI leadership

- Approval from Department of Personnel Management for restructuring of the EPI Team, including upgrading of the EPI Manager post and provision for a Deputy EPI Manager.
- Recruitment of the EPI Manager. Most feasible is likely to be, for the moment, an international recruitment into the in-line post for three years, in parallel with capacity-building of national staff. Recruitment probably managed via the DFAT Health and HIV Implementing Service Provider (HHISP) mechanism (or, if they can't take money from other donors, one of the GFATM Implementing Partners – e.g. Oil Search, World Vision or PSI), with Gavi providing the 'International Market Allowance' top-up, ideally in a performance-based way. Consider rewarding the broader EPI team with increased professional development opportunities.
- Whilst recruiting the three-year international post, recruit a shorter-term (6-months) consultant immediately, again managed by HHISP and paid by Gavi.

Leads to…

Stronger EPI decision-making

- Planning and communication of costing of service delivery to feed into annual budgeting and planning by NDOH, based on the EPI Comprehensive Multi-Year Plan (cMYP).
- Engagement in GoPNG's Medium-Term Expenditure Framework (MTEF) with NDOH Health Economist, to advocate for increasing resources as Gavi contributions decline to 2020 transition.
- Increasing collaboration across MCH in the above financial processes.
- Increased evidence-based immunisation policy and decision-making through establishment of a National Immunisation Technical Advisory Group (NITAG), as set out in the national EPI Policy. Feedback over introduction of HPV and rotavirus vaccines show that current decision-making processes could be strengthened.
- To begin with, the Government should start making use of the opportunity of the growing, active network of NITAGs in the Western Pacific, through which to access technical support or participate joint trainings on evidence-based decision-making skills.
- Greater use of surveillance and routine EPI data to determine decisions on focus of EPI resources towards areas of greatest need.

And…

Better vaccine management

- Improved stock management at the national cold store, e.g. to avoid distributing to provinces vaccines very close to expiry dates, and communication to ensure no wastage during distribution. Rigorous temperature monitoring at the national cold store. The national stock management manual was only updated last in 2008 and at least the EPI component should be updated. Other actions as specified in the EVM Improvement Plan and NDOH response to the Gavi audit need to be completed.
- A wastage survey would quantify the high levels of wastage and prompt better management.
- Establishment of a forecasting ICC sub-committee for EPI (across traditional vaccines too).
- Better planning of the EPI training programme across national, provincial, district and health-facility levels. The mission found examples of staff not receiving training for 5 years at the provincial level and 10 years at the health facility level.
- Emphasis in particular on improving the quality of supervision is important. District Health Management training is being provided by Divine Word University in Madang Province, and could be further supported.
- Development of a cold chain and logistics management manual (as recommended in the EVM Improvement Plan) which pulls together in a practical way the national guidelines which exist for EPI. PNG's national multi dose vial policy does not follow WHO guidelines.

Also supported by…

b) Cold chain equipment provision

- There is a vital need for an action-oriented cold chain improvement plan (CCIP), based on an updated inventory and including consideration of the EVM Improvement Plan recommendations (including to increase the number of district vaccine storage (DVS) facilities (currently 8 of 89 districts)). UNICEF to update the existing draft CCIP to reflect the 2016 cold chain inventory as well as the DFAT-procured equipment which is due to be distributed. The CCIP should consider replacement of rural health facility refrigerators with solar direct drive technology, and should consider procurement of refrigerators without freezer compartments, and complementing these with a commercial freezer when the power supply permits.
- Application to the CCEOP would permit PNG to invest in the latest technology, which entails the minimum user response to temperature incursions, above the level required for WHO pre-qualified. The CCEOP support off-sets the additional costs of this technology. PNG would need

to provide 50% of the funding, but this is allowed to be provided by a new or existing HSS grant – submission of which should be in March 2017.

- Newly-procured CCE (combined with that recently procured by DFAT) should be limited to a small number of types or models, facilitating maintenance and spare part procurement. At the national and provincial levels (where computers are available), temperature logging devices should also be provided, along with training on their use.
- Government needs to ensure a mechanism for distribution of CCE and devices.

Combined with

c) Improved EPI coverage and surveillance data quality

- 2016 DHS will provide national and regional coverage estimates, with preliminary results due in the first half of 2017. Consequently, an EPI Survey, given country capacity, not before 2018 – whether national or focused on specific regions or provinces – would feed into planning for transition from Gavi and into development of the next National Health Plan, from 2020. But the ($2-3m) costs for the EPI Survey would need to be considered. A feasibility assessment in 2017 might determine the decision relation to this.
- The Rural Primary Healthcare Project digitisation of the paper-based HMIS forms, which may be extended to national roll-out if funds are made available, and other e-health initiatives, will benefit EPI, especially in enabling provinces to have more real-time data for management.
- Improve nationwide case-based surveillance for AFP and AFR through provision of increased technical support from STOP or Field Epidemiology Training Programme (FETP) graduates to increase capacity of Provincial/District Disease Control Officers. Gavi can fund these.
- Increase capacity for surveillance at sentinel sites of CRS, rotavirus, invasive bacterial diseases and JE to inform decision-making relating to new vaccine introductions, and the measure the impact of those introductions.

Combined with

d) Provincial capacity-building

- On structure, the mission found that greater financial independence was important in overcoming or mitigating the significant delays in cash flow from provincial treasuries. The Provincial Health Authority structure seems to facilitate this (but we understand that the District Development Authority structure may complicate the PHA model).
- To increase capacity, a programme of training and supervision organised by the national EPI programme for provinces on technical problems (e.g. forecasting, target-setting and micro-planning, which tends to have been done in a rushed way, and not used in an ongoing way) will be key; combined with lesson-learning from province to province to overcome bureaucratic hurdles (like cash-flow).
- Advocacy with Parliamentarians (for example in the use of their 15m Kina annual allocation) should be combined with greater sub-national advocacy by civil society (including that health and EPI receive budgets appropriate to the prioritisation allotted them by national policy, and accountability for provincial results) and community education to increase demand generation. Initial work on these is already included in the Gavi HSS reprogramming ($40,000 for advocacy strategy development, $40,000 for demand generation, and $20,000 for MP-advocacy)
- A focus of Gavi HSS2 support should be on people-centered integrated service delivery of primary healthcare in the (16) poorest performing districts (as per the HSS reprogramming support to SIREP). The mechanism for this support should be determined on a province by province basis, and might involve REC-based micro-planning and supportive supervision through SIREP the UNICEF bottleneck pilot, or the Rural Primary Healthcare Initiative.
- The planned SIREP Plus activities should be completed as soon as possible (with 5 provinces still to start), and reporting against objectives submitted to Gavi (for information, 12 Provinces completed last year 5 started in June).

Leads to…

Better vaccine service delivery

- Provinces need to achieve at minimum, quarterly opportunities for community outreach (whether mobile or patrol) integrated with other MCH services. At the moment, the norm seems to be fewer than two. The limiting factor seems to be cash flow, so structural, capacity or advocacy approaches to overcoming this should make a difference.
- The role of the NDOH in proactively enabling provinces, and provincial partnerships with non-state actors (churches and other NGOs – e.g. the Safe Motherhood Alliance) will be important in improving service delivery.

Resulting in…
Increasing vaccine coverage and equity (and sustainability) over the next 18 months.

3.3. Transition planning *(if relevant)*

Following a transition assessment in 2014, Gavi exceptionally agreed to double the ceiling for an HSS2 grant to PNG, bringing the amount to US$ 6m. As recently as March 2016, though, the IRC concluded that 'given the many and serious financial and systemic constraints faced by PNG its readiness for "graduation" is 'seriously questioned. The problems are long-standing and will – in all likelihood - persist for some time'. This Joint Appraisal further emphasises that conclusion.

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

In February 2016, Gavi conducted a programme audit of NDoH management of Gavi's HSS, MR campaign operational costs and vaccine introduction grants (VIG) funds from 1 January 2013 to 31 December 2015. During this period, the overall Gavi-related expenditure reported by the country totalled PGK 7,213,963 (USD 2,696,482).

The Audit Team assessed the NDoH management of Gavi funds as unsatisfactory, which means that "Internal controls and risk management practices were either not established or not functioning well. The majority of issues identified were critical risk. Hence, the overall entity's immunisation programme objectives are not likely to be achieved and risks were not appropriately mitigated or managed." Table 2 below summarises ratings for each of the categories reviewed.

Category	Audit Rating
Vaccine Supply Management	Unsatisfactory
Budgeting and Financial Management	Unsatisfactory
Expenditure and disbursements	Unsatisfactory
Procurement	Unsatisfactory
Overall rating	**Unsatisfactory**

The Audit Team raised 25 issues, which were mainly caused by non-compliance with the GoPNG's own guidelines as well as Gavi's Transparency and Accountability Policy. To address these issues, the Audit Team made 25 recommendations, of which 12 (or 48%) were rated as being critical in priority, which means that "action is required to ensure that the programme is not exposed to significant or material incidents. Failure to take action could potentially result in major consequences, affecting the programme's overall activities and output." In particular, the Audit Team determined that reliance could not be placed upon the controls and systems in place administering procurement.

Among the high priority issues noted in this report, the most significant are presented below:

Vaccine Supply Management

Stock records at the central vaccine warehouse were not timely updated, with the last entry being done in Oct 2015, four months prior to the audit. The records were adjusted without support documentation and unexplained differences were not investigated. Stock issuance at all stores visited did not follow "Early-Expiry-First-Out" principle and vaccine records did not track expiry dates or batch numbers.

Budgeting and Financial Management

Insufficient detail in the annual workplans directly resulted in significant overspending on some budget lines. Management and financial reporting within the NDoH and to Gavi, respectively, was incomplete, inaccurate and untimely. Delays in the implementation of programmes were not clearly reflected in revised workplans, and the balance of funds reported as available for reprogramming was not correct.

Expenditure and disbursements

The EPI unit's primary accounting records were not consistently maintained in accordance with National financial guidelines and procedures. Provincial acquittals sent to the National EPI unit were not transparent, with reports being on a pooled-fund basis. Examples of Gavi monies being utilised to fund activities unrelated to the programme were identified.

Procurement

Procurement did not comply with the applicable National regulations. Systemic internal control weaknesses in the process were identified. Procurement was conducted outside of the NDoH's Commercial Support Services Branch, which was responsible for procurement. Spending on printing and stationary materials by the EPI unit for the period 2013-2015 exceeded the approved budget. As a result, it was not possible to determine that value was obtained on the use of Gavi's funds for this.

It was jointly determined by NDOH and the Audit Team that issues raised by the Programme Audit relating to procurement and expenditures required further work. As a result a subsequent review was undertaken by Gavi's Investigation unit in May 2016. Findings from this additional assessment, including the determination of misuse, if any, will be reported upon separately.

Grant financial status and funds utilisation for Gavi programmes is summarised here:

Grant	Amount	Disbursed	Expenditure	Balance	Comments/Action
HSS1	3,072,923	1,103,854	563,718	-	Zero balance due to reprogramming. This expenditure requires audit
HSS-Repro	2,509,205	540,136	-		No expenditure incurred to date
VIG-IPV	172,000	172,000			No financial report submitted
VIG-Measles	187,500	187,500	5,667,239	9,369	All three measles grants merged by the country. Requires audit
MROPC	1,953,000	1,953,000			
VIG-MR	187,500	187,500			
VIG-PCV	188,000	188,000	180,852	7,148	

Given the above mentioned audit findings, the HSS Reprogramming funding will be channeled through WHO and UNICEF (and perhaps through DFAT). There remains $540,136 in country which needs to be transferred from HHISP accounts to one of the core Gavi partners however international transfer sanctions impose a difficulty to do so. The Gavi Alliance will work with the country and other partners to identify a solution to avoid further delays in implementation.

4. UPDATE OF FINDINGS FROM PREVIOUS JOINT APPRAISAL

Prioritised strategic actions from previous joint appraisal / HLRP	Current status
1. Roll out Special Integrated Routine EPI Strengthening Program (SIREP) to achieve high and equitable vaccination coverage	Currently 18 of 22 provinces completed.
2. The roles of NDoH and Provincial staff, including monitoring and supportive supervision, should be clearly defined for all levels based on the existing National Health Standards	Not yet achieved
3. Supportive linkages (program and management) between national, provincial and district level to address the management disconnect;	Not yet achieved
4. Introduction of 2 new vaccines (MR & IPV) in routine EPI under SIREP Plus	Both vaccines introduced as scheduled
5. Revive cold chain system of the country	Not yet achieved. CCE plan being developed post EVMA

5. PRIORITISED COUNTRY NEEDS

Prioritised needs and strategic actions **NB details above**	Associated timeline for completing the actions	Does this require technical assistance?* *(yes/no)* If yes, indicate type of assistance needed
Recruitment of new national EPI Manager	Dec 2016	Yes – from WHO
Payment of 2016 Co-financing	Dec 2016	No – but Gavi to write
NITAG establishment	Mar 2017	Yes – from AMP & WHO

Improved national stock management	Nov 2016	Yes – from UNICEF
Planning of national EPI training programme	Mar 2017	Yes – from WHO
Develop CC Expansion Plan	Oct 2016	Yes – from UNICEF
Application to HSS2	Mar 2017	Yes – from WHO
Application to CCEOP	Mar 2017	Yes – from UNICEF
Improve AFP and AFR surveillance	June 2017	Yes – from WHO & STOP
(Partial) disbursement of HSS1 reprogramming	Oct 2017	No – but Gavi to lead

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

Brief description of how the joint appraisal was endorsed by the relevant national coordination mechanism	Theory of change and recommendations were discussed with ICC members at conclusion of JA mission. Formal sign-off subsequently to be obtained for final report.
Issues raised during debrief of joint appraisal findings to national coordination mechanism	All points made have been incorporated
Any additional comments from: • **Ministry of Health** • **Gavi Alliance partners** • **Gavi Senior Country Manager**	Any from MoH, or Partners?

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

The mission for this Joint Appraisal was held in PNG 29 August to 3 September 2016, hosted by the Government of PNG, in close partnership with WHO and UNICEF Country Offices and with external participants from Gavi (SCM and Programme Finance Senior Manager), WHO Headquarters, WHO Regional Office for the Western Pacific (for both NVS and HSS), and UNICEF Regional Office for East Asia and the Pacific. During the mission, field trips were held to two high-performing provinces in order identify best-practice for provincial EPI leadership. The trip conclusions were presented to, and agreed by, members of the ICC, consisting of the above, including the Australian Mission, and with Government represented at Deputy Secretary level.