Memorandum on Papua New Guinea Programme Audit and investigation reports

The attached Gavi Audit and Investigations report sets out the conclusions on both the programme audit and Gavi's investigation of the Government of the Independent State of Papua New Guinea's Expanded Programme of Immunisation. The audit conducted in February 2016 and the investigation conducted in May 2016, both covered programme activities during the period 1 January 2013 to 31 December 2015.

Each reports' Executive Summary conveys the key conclusions (the details of which are set out in the body of each respective report). The Programme Audit concluded:

- 1. There is an overall rating of Unsatisfactory (page 4) which means that "internal controls and risk management practices were either not established or not functioning well. The majority of issues identified were high risk. Hence, the overall entity's objectives are not likely to be achieved".
- 2. 25 audit issues were identified, mainly caused by non-compliance with the Government's own guidelines as well as Gavi's Transparency and Accountability Policy (page 3).
- 3. Key audit findings were identified in the following areas (page 4):
 - a. Vaccine supply management;
 - b. Budgeting and financial management;
 - c. Expenditure and disbursements; and
 - d. Procurement of goods and services.
- 4. Key investigation findings were that irregular procurement practices resulted in misuse.
- 5. Overall conclusions were:
 - a. Misuse totalling US\$ 313,326 (table 3, page 6);
 - b. The wastage of 259,130 doses of Gavi-supported vaccine through shelf-expiry during the period audited (table 4, page 6). And
 - c. Investigation misuse totalling \$406,942 (page 3).
- 6. The results of the audit and investigation were shared with the Ministry of Health and Papua New Guinea's National Department of Health agreed to remediate the identified issues. Specifically in a letter of 8 June 2017, they have agreed to reimburse Gavi US\$ 719,255, being the total of misuse identified during the programme audit (US \$313,326) and the investigation (US\$ 406,942).
- 7. Gavi Secretariat will follow up and ensure that the Ministry of Health also addresses the following two additional outstanding actions:
 - To reimburse Gavi a further US\$ 51,395, being the value of shelf-expired vaccines;
 and
 - For the National Department of Health to clarify what actions were taken to minimise further wastage of up to 175,550 Pneumococcal Conjugate Vaccine doses due to expire by July 2016.

PAPUA NEW GUINEA

GAVI Secretariat, Geneva, Switzerland

Final Audit Report – December 2016



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1. Executive Summary

In February 2016, the Audit and Investigations team (the Audit Team) conducted a programme audit of Gavi funding that contributed towards the Government of the Independent State of Papua New Guinea's (GoPNG) Expanded Programme of Immunisation (EPI).

The audit covered the National Department of Health (NDoH) management of Health Systems Strengthening (HSS), Measles Rubella (MR) 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).

Table 1 below compares total expenditure reported by programme with expenditure reviewed by the Audit Team. The Programme Audit achieved a total overall coverage of 30% of the expenditure reported, as follows:

Programme	Disbursed from Gavi (USD)	Actual expenditure (USD)	Expenditure Reviewed (USD)	Actual Expenditure (PGK)	Expenditure Reviewed (PGK)
Health Systems Strengthening	1,103,854	441,472	393,919	1,072,488	981,000
Measles Rubella	1,953,000	2,069,585	319,314	5,661,501	819,812
Vaccine Introduction Grants	735,000	185,425	139,545	479,974	361,892
Total	3,791,854	2,696,482	852,778	7,213,963	2,162,704

1.1 Audit rating

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.

Table 2: Summary of audit rating by programme audit classification:

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

1.2 Key issues

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. The rating for the various issues is summarised in Annex 2.

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. These records were adjusted without supporting 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 and batch numbers. Vaccine management errors and misunderstandings led to the expiry of closed-vial antigens (Refer to issues 4.1 through 4.5).
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 some programmes were not clearly reflected in revised workplans, and the balance of funds reported as being available for reprogramming was not correct. (Refer to issues 5.1 through 5.3).
Expenditure and disbursements	The National EPI unit's primary accounting records were not consistently maintained in accordance with National financial guidelines and procedures. Provincial acquittals sent to the 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. (Refer to issues 6.1 through 6.4).
Procurement	Procurement did not comply with the applicable National regulations. Systemic internal control weaknesses in the procurement 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 good value was obtained on the use of Gavi's funds for procurement. (Refer to issues 7.1 through 7.3).

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.

The following table summarises amounts questioned by the Audit Team because of inadequate documentation or the ineligibility of expenditures:

Table 3: Summary of questioned amounts

Report section	Description	Amount (PGK)	Amount (US\$)
6.1	Expenditure related to non-Gavi activities but paid out of Gavi grants	680,788	274,572
6.2	Outstanding travel advances (2013 through 2015)	67,539	27,413
6.4.1	Lack of justification for payment of per diems	5,200	1,880
7.3.1	Unsupported Procurement (Excluding all other irregularities identified by the audit which will be investigated and reported separately)	24,540	9,463
	Total	778,068	313,326
	Procurement and expenditure irregularities	Determined in subseq	n a separate uent review

The following table is a non-exhaustive summary of vaccines that had or were due to shelf or temperature expire at the time audit fieldwork was completed:

Table 4: Summary of vaccines that had or were due to shelf or temperature expire

Report section	Description	Doses
4.3	Pneumococcal Conjugate Vaccine (PCV) scheduled to shelf-expire in June-July 2016 at the national Area Medical Store	175,550
4.4	Pentavalent vaccines temperature expired in consignment with the national logistics and forwarding company	13,500
4.4	Measles Rubella vaccines temperature expired pending collection from Western Province's airport cargo zone	29,000
4.4	IPV vaccines temperature expired pending collection from Western Province's airport cargo zone	280
4.5	VVM expiry of MR vaccines stored at room temperature in Eastern Highlands's provincial warehouse	40,800

2. Objectives and Scope of the Audit

2.1. Objectives

In line with the Programme legal agreements and Gavi's Transparency and Accountability Policy, the main objective of a Programme Audit is to ensure that the funds are spent in accordance with the agreed terms and conditions and that resources are used for the intended purposes.

In addition, the Audit Team also assessed the adequacy of the control processes regarding the reliability and integrity of financial, managerial and operational information, the effectiveness of operations, the safeguard of assets, and compliance with respective National policies and procedures.

2.2. Scope

The Programme Audit scope of review was from 1 January 2013 until 31 December 2015, and covered income, expenditure, procurement as well as elements of vaccine management at National and sub-National levels. However, the Audit Team identified expenditure in 2012 that was unrelated to Gavi programmes but nonetheless paid out of Gavi grants. As a result the Programme Audit scope was extended to 2012 exclusively in relation to this finding.

The review was performed at central level and included visits to the Eastern Highlands and Madang Provinces.

Table 5: Gavi cash grant disbursements to NDoH
Gavi cash dishursoments to the NDoH in USD

Gavi cash disbursements to the NDoH in USD						
Grant type:	<u>2006-2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>	
Health systems support	1	1	565,747	538,107	1,103,854	
Immunisation Services Support	434,000		1	1	434,000	
Measles Rubella operational costs	-		1,953,000	1	1,953,000	
Vaccine implementation grants –	200,000	188,000	375,000	172,000	935,000	
PCV and Injectable Polio Vaccine						
(IPV)						
Total disbursed	634,000	188,000	2,893,747	710,107	4,425,854	

2.3. Methodology & coverage

Audit evidence was gathered through interviews, review of relevant documents and substantive testing. Interviews were conducted with personnel from NDoH including the EPI unit, the Procurement Office, the Australian Government Department of Foreign Affairs and Trade's HHISP unit, UNICEF, WHO at National and regional levels, The World Bank, and the national logistics and forwarding company, among others.

2.4. Applicable rules and regulations

The Partnership Framework Agreement (PFA) signed between Gavi and the GoPNG on 29 November 2013 required minimum criteria for procurement, accounting and reporting. Amongst these, the PFA stipulated that goods and services were to be procured in compliance with the Public Finances (Management) Act 1995. The Financial Management Manual, issued by Department of Finance in May 2013, also stated applicable thresholds and required review and approval procedures for procurement.

Other relevant policies and procedures including the Central Supply and Tender Board's Good Procurement Manual, Public Services (Management) Act 1995 and the Health Sector Improvement Program (HSIP) Manual which provides guidance on the HSIP Trust Fund were reviewed.

2.5. Exchange rates applied in this report

Gavi funds were expended and accounted for in PNG Kina (PGK). For the purposes of this report, expenditure has been translated into US dollars (USD) according to the year in which it occurred using the rate of exchange prevailing at the time that Gavi disbursements in USD were converted into PGK, as follows:

Year	USD 1.00 = PGK
2013	2.59336
2014	2.41533
2015	2.76625

3. Background

3.1. Introduction

The constitution of PNG established the overall political and administrative structure, consisting of four regions made up of 22 Provinces as well as the National Capital District. Political power and governance is devolved to these Provincial electorates under which 89 local-level government electorates are sited. Separate Provincial legislature and executives are established, but with respect to health at the Provincial-level, this is currently undergoing a progressive restructuring with the creation of Provincial health authorities.

Health including Immunisation service delivery is a devolved function with the NDoH procuring vaccines and providing oversight for standards and quality through policy development. The EPI unit is currently supported technically and financially by several donors including the Australian Government Department of Foreign Affairs and Trade, World Bank, WHO, UNICEF, Rotary International as well as Gavi.

The majority of routine immunisation services are provided by government as well as some church run facilities, which are primarily publicly funded. In addition a small number of private sector and non-governmental organisation providers exist.

The National Health Plan 2011-2020 identifies improvement in vaccination of children and women as priority programs in Key Result Area #4 "Improve Child Survival" and Key Result Area #5 "Improve Maternal Health". A country Multi Year Plan was developed for 2011-2015 which was fully costed and clearly outlined activities for that period. As at 10 February 2016, the subsequent country Multi Year Plan for 2016-2020 was being finalised.

The GoPNG provides the majority of all traditional routine vaccinations, while Gavi assists with the procurement of Pentavalent and PCV as well as providing financial grants for HSS and ISS activities.

Between 2006 and 2015, PNG received Gavi cash grants totalling USD 4,425,854 (see *Table 5*) to support nationwide health systems strengthening, operational costs for MR, and the introduction of new vaccines, namely PCV and IPV.

A pilot programme to introduce the Human Papilloma Vaccine was recently funded by Rotary International.

3.2. Good Practices

A number of good practices were noted with regards to the EPI unit and its operating environment:

- The EPI unit was an established programme of the NDoH since 1977. The GoPNG considers the
 EPI unit as an important, cost effective intervention for reducing the morbidity and mortality of
 children from communicable diseases;
- Gavi Alliance partners focused on supporting immunisation and are proactive in this section. For example:
 - A dedicated WHO staff member was assigned to NDoH to advise on vaccine campaigns and country-wide implementation;
 - Similarly, UNICEF provided support in outreach and vaccine distribution, both strategically and operationally;

 The Australian Government Department of Foreign Affairs and Trade provided NDoH with its Health & HIV Implementation Services Provider (HHISP) services including a Finance and Accounting team, overseen by a Financial Controller, and a Finance and Audit Advisory unit.

- Established National PNG regulations were in place including the Public Finances Management Act (1995) (PFMA); and
- The HSIP Manual published by HHISP in November 2012 provided specific operational guidance in complement to the PFMA requirements. The HISP manual is currently under revision and will be updated during 2016.

3.3. Key challenges

Since early 2015, declining tax revenues following the fall of oil and natural gas market prices have had repercussions on government spending on public services. Recent articles in Australian and Guinean newspapers report of some health workers being forced to take pay reductions while others were laid off, notably in rural areas.

These budgetary constraints have also impacted the government's provision on National health services, while the 2017 health budget is potentially set to be reduced further. As a consequence, the country may have to rely further on non-governmental support for public healthcare and health infrastructure.

The country's diverse geography mean that the delivery of immunisation services is logistically challenging. 85% of the nation's population is rural-based. A range of different transportation modes for vaccines and immunisation supplies applies along the supply chain, while the country's tropical climate results in some vaccines being exposed to relatively elevated temperatures during the warmer seasons.

For example, the poor management and maintenance of cold chain equipment at the Area Medical Stores (AMS), situated in Port Moresby's Badili District, resulted in occasional heat-expired vaccines. Delays in distribution of vaccines also occurred due to constraints in cold chain facility capacity. The 2011-2015 Comprehensive Multi-Year Plan for National Immunisation Programme includes a budget of USD 9.4 million to purchase and upgrade existing cold chain equipment

A Joint International Review of the EPI unit which was carried out in September 2013 by immunisation partners including NDoH, WHO, UNICEF, CDC, Gavi and Oil Search Health Foundation. It concluded that "A lack of clarity around programme management roles and responsibilities at the Province, District and health centre level, as well as a lack of leadership at all levels, appears to be preventing (the achievement) of effective programme outcomes."

PNG is currently expected to transition out of Gavi financial support, forecast to be complete in 2021. Given implementation delays and poor absorption of the HSS grant, the Joint Appraisal carried out in March 2015 recommended that the country seek approval from Gavi's Independent Review Committee to reprogram the near USD 2.5 million balance of its existing HSS grant, and proposed a transition grant of up to USD 6 million be considered.

4. Vaccine Supply Management

 Poor record-keeping, inadequate and infrequent verification procedures and weak oversight resulted in significant errors between the physical stock count and immunisation supply records at the National level. This was compounded by two successive inaccurate annual forecasts and the resultant over-ordering of supplies without due regard to requirements.

- "Earliest-Expired-First-Out" was not applied, and effective systems were not in place to comply with this principle.
- A significant surplus of 753,000 doses of short-life PCV was on-hand some
 of which was excessive to requirements. Potentially a significant portion of
 this PCV is as risk of shelf-expiry by July 2016.



Country Context

The country has experienced recurring operational challenges in maintaining adequate supplies across the supply chain, due in part to a reported lack of clarity between the EPI unit at National level and the Provincial Health Authorities as to who was responsible for determining vaccine needs. These were further compounded by inadequate and inaccurate nationwide information on stock levels, as well as precarious cold storage facilities due to their age and neglect.

In February 2016, the acting EPI National manager identified the following logistic and operational challenges as having considerably burdened programme resources and their ability to maintain an effective cold chain supply:

- There was not currently enough vaccine storage capacity at the National, Provincial, District and Health Facility Level for the volume of vaccine required to maintain the schedule of National routine immunisation;
- The Provinces and Districts ordered fewer vaccines and supplies than planned in their annual forecast due to limited storage capacity while handling the additional vaccines required for the MR National-wide campaign;
- Several incidents of communication breakdown between the National, Provincial and District levels affected the timeliness and reception of vaccine delivery handled by the freight forwarder;
- Vaccines were occasionally heat-damaged due to improper storage conditions or due to insufficient storage capacity; and
- Funding constraints for the immunisation programme resulting in protracted stock-outs of BCG vaccines across the country, requiring an urgent order to be placed with the Medical Supply and Procurement Branch to secure additional supplies.

Most of the above difficulties were similarly reported in past annual EPI reviews (e.g. 2013, 2014 and 2015).

Further, the September 2013 joint "International Review of the Expanded Programme on Immunisation in Papua New Guinea" identified the following main areas of concern: poor maintenance of cold chain equipment, lack of understanding of temperature monitoring processes, a lack of qualified maintenance personnel, and deficiencies in knowledge on vaccine management at Provincial, District and health centre level.

In addition, the Audit Team noted that the overall resilience and sustainability of the vaccine distribution system was dependent upon commercial freight forwarding services to transport the vaccines and immunisation supplies by air. This forwarder currently supplies vaccines to 19 out of the country's 22 Provinces.

Effective Vaccine Management Assessment (EVM)

EVMs constitute an integral and important element to strengthen the country's vaccine supply chain management. An updated EVM is overdue as the last EVM for PNG was undertaken in June 2011, i.e. five years ago. An EVM was originally scheduled to take place in 2015, but has not yet been undertaken as at March 2016.

This corroborates with the 2015 Joint Appraisal's finding, which recommended to the NDoH that an EVM should be expedited and completed in Q1 2016 or Q2 2016.

4.1. Stock Recording and forecasting

The National Operational Guidelines for Special Integrated Routine Strengthening Program (SIREP) on the "recording of incoming and outgoing vaccines and ancillary products" states that the following procedures must be undertaken at points of reception:

- Always record all incoming and outgoing quantities of vaccines and ancillary items in a register (stock management record);
- Store all vaccines after Reception and Inspection (R&I) in the cold chain facility; and
- Regularly do physical stock counts and compare against findings against vaccine and ancillary products records.

In addition the guidelines clarify the importance adequate operational and logistical planning to ensure that adequate resources are available for each level of the supply chain, and that the supply chain is efficient by bundling the distribution of vaccines and immunisation supplies where possible.

However, from a review of the AMS, significant errors were noted in the stock management records. Per the February 2016 National records, stock balances on at least four items were significantly understated, with considerably more stock being on hand than the records identified:

- PCV was understated by at least 180,000 doses;
- Pentavalent was understated by approximately 300,000 doses;
- Auto-disabled syringes were understated by at least 700,000 units; and
- Safety boxes were equally understated.

Further examination of these records for the above four items identified recording errors, as follows:

- (a) Multiple large receipts (e.g. 100,000 units) of vaccines doses and supplies received into the country were never recorded in the stock register (including PCV, Pentavalent, safety boxes and syringes);
- (b) Formula errors were presented in the manual stock records resulting in errors in balances, overall leading these to be understated;
- (c) No stock movements were recorded for PCV for at least 6 weeks at the end of 2015;
- (d) Stock records were not routinely kept up to date (at least weekly) as stated;
- (e) Stock held under consignment with the national logistics and forwarding company were not adequately tracked, recorded and accounted for.

Also, physical stock counts were not performed correctly. Although inventory counts were routinely carried out, the results of these counts were neither reconciled with nor reflected in the stock records. Dry goods such as syringes and supply boxes had never been physically counted.

Further, there was evidence of tracking and recording batch numbers for any of the vaccines, apart from noting the batch number on initial receipt. As a result, neither the stock register, nor any of the medical stores issued vouchers recorded the vaccine batch number issued.

At both National level and in the two Provinces visited, the store managers' stock registers were neither reviewed nor checked by another staff member, and there was no segregation of duties between the National store manager receiving, managing and issuing vaccines and supplies

In addition, the records of all orders placed by Provinces and Districts at the National level were not all kept on file, with the quality of documentation being sporadic and incomplete, and the date the order was received not always recorded. On fulfilling these orders, the weight and number of parcels despatched was similarly not consistently recorded.

Approximately 18 months ago, the National medical supplies store introduced a stock management system – M-SUPPLY – to track and record both medical supplies, as well as immunisation vaccines and supplies. As validated by the warehouse staff, it was confirmed that although immunisation data was entered, all such data in the M-SUPPLY system was not accurate and was unreliable. This had no impact on the Audit Team's observations.

Finally, the EPI unit's National supplies forecasts for PNG for both 2015 and 2016 sent to UNICEF Supply Division were incorrect and significantly under-reported the number of doses of PCV, Pentavalent and 0.5ml syringes in stock. This contributed to compounding the problem of the country overstocking on its vaccines and immunisation supplies by accelerating orders fulfilled by UNICEF. For example, at the time of Audit in February 2016, it was noted that more than 12 months of PCV was currently held in stock at National level. In practice, guidelines recommend that between six and nine months of a vaccine should be held throughout the supply chain pipeline.

The Audit Team's visits to two Provinces indicated that stock records at the sub-National levels were similarly incomplete and inadequate. For example, in one Province, there was an unexplained gap of 6.5 months in 2015 when no vaccine records were maintained. Similarly, the same Province experienced a forced stock-out of all of its vaccines, due to its order submitted on 16 January 2016 still not having been fulfilled by the National stores more than four weeks later.

The Audit Team's observations highlighted the following weaknesses:

• Inadequate procedures for stock reporting, inadequate oversight, supervision and a general lack of awareness of existing procedure to be followed;

- Human error –staff do not display sufficient discipline and technical knowledge in record keeping;
 and
- Staffing in stores is limited.

Risks / Effect

A failure to comply with existing procedures for recording and keeping track of movements of vaccines and immunisation supplies resulted in the inability to accurately forecast future requirements. Vaccine oversupply potentially stress the country's limited logistical ability and cold-storage capacity.

Recommendation 1 (Critical)

The EPI unit should:

- Undertake a 100% physical inventory of all vaccines and immunisation supplies so as to amend and correct current stock records. Vaccine stock records should be reconstituted for 2014 and 2015. Any differences should be fully investigated and justified;
- Improve the quality and timeliness of stock recording, including recording batch numbers details for all receipts, issuances and when undertaking stock counts;
- Improve the accuracy and completeness of how National order fulfilments are documented, including placing all orders in a single consolidated folder, and recording both the date the order was received and shipped, as well as all details on the shipment including the total weight, for reconciliation with the freight-forwarder's subsequent invoice;
- Conduct and document routine physical inventories and ensure that any differences identified from the count are investigated and promptly adjusted, as necessary;
- Ensure that appropriately qualified staff are put in place at the AMS;
- Assure that all staff handling vaccines and supplies are provided with sufficiently detailed Standard Operating Procedures with clear roles and responsibility;
- Re-evaluable the suitability of the M-SUPPLY system for managing immunisation inventory; and
- Ensure that adequate stock records are maintained for all stock held externally or under consignment, and ensure that regular physical inventories are also conducted and reported to the National/ Provincial stores manager(s).

Management comments

4.2. Cold chain equipment

The National Operational Guidelines for SIREP emphasise that good management of stocks is necessary to maintain the quality of the immunisation programme. Elements which are to be respected include that there be:

- Adequate storage facility (including cold storage and cold chain equipment) with sufficient capacity, secure storage and location, and free from humidity, pests, direct sunlight, etc.; and
- Quality storage facilities (including cold storage and cold chain equipment) with all cold chain equipment functioning.

Various programmatic and cold chain reviews undertaken over the past three years identified the need to upgrade and update components of the National cold chain due to the difficulties in maintenance, a lack of equipment standardization, a lack of qualified maintenance personnel and difficulties in obtaining spare parts. Similarly, NDoH's assessment of lessons learnt from SIREP acknowledged the insufficient and unreliable cold chain capacity in place at the Province and District level, as well as the impact this had on the inconsistency in demand for vaccines from Provinces and Districts.

During 2015, the receipt of significant amounts of MR vaccine and some PCV in May 2015, followed by further receipts of PCV and Penta in July and August 2015, became a significant burden to the supply chain. The EPI unit commented that in October 2015, seven of its twelve walk-in cold rooms were no longer working. This resulted in emergency repairs having to be conducted, with the cold rooms being fixed in approximately five days.

However, the Audit Team also noted that at least two reefers (refrigerated containers) had been hired on the premises of a nearby commercial company, using Gavi funds, at approximately the same time period so as to supplement cold chain capacity at the AMS. A third reefer, manufactured in 1994 and situated in direct sunlight in the AMS courtyard, had been procured around the same time, but neither the AMS nor EPI could provide an invoice or delivery note. The assistant store keeper commented that the reefer had never functioned properly and was not suitable for storage of vaccines due to a faulty thermostat that froze the reefer contents. The Audit Team questions whether value for money was obtained on the purchase of this equipment.

Further, at the time of the audit, it was noted that there was not a proper fixed asset register in place at the National level to track and demonstrate the overall age, condition, status, and location of all of the National cold supply across PNG.

Finally, no insurance was in place at the AMS, even though at the time of the Gavi audit in February 2016, approximately \$4.5 million worth of vaccines was held in stock.

Cold chain capacity was deemed insufficient by the EPI unit at both National and sub-National levels in order to meet additional needs following the introduction of new antigens (IPV, PCV and MR). However, beyond the introduction of PCV in 2013, no formal assessment of cold chain capacity was done to date. In addition, it was not clear whether the purchase of additional refrigeration units was adequately planned in consideration of overall longer term requirements.

Risks / Effect

Failure to ensure that sufficient and reliable storage capacity is available at every level of the cold chain in the country raises the risk of wastage due to improper storage, and requires additional operational resources to carry out extra incremental deliveries to compensate for insufficient capacity at subsidiary levels. In the absence of suitable insurance being in place, accidents – such as fire – could result in significant financial loss to immunisation products.

Recommendation 2 (Essential)

The Gavi Secretariat and Alliance partners should ensure that an adequate implementation plan, is promptly put in place following the imminent Q1/2016 Effective Vaccine Management (EVM) assessment, to strengthen the National cold chain system, while designing a supply chain which maximises sustainability, is technology appropriate and fit for purpose considering existing resource constraints (and overall maintenance capacity).

The government should fulfil its commitment to ensuring that cold chain equipment is routinely maintained by qualified persons with a view to prolonging their lifespan.

The EPI unit should ensure that National Operational Guidelines for SIREP are being adhered to.

In accordance with section 10 of the PFA, the government is required to insure programme assets, including vaccines and vaccine-related supplies.

Management comments

4.3. Vaccine stock management

The National Operational Guidelines for SIREP on the storage of vaccines states that:

 All vaccines must be clearly identifiable and accessible, and must be easily located and stored in Earliest-Expired-First-Out order, specifically vaccine vials with the closer expiry date must be distributed and administered first, however Vaccine Vial Monitoring (VVM) indicating greater heat exposure must be labelled for priority use;

• Temperatures must be monitored two times a day on a monitoring sheet.

The Audit Team observed various non-compliance with these guidelines.

The EEFO order principle was not systematically applied at National or Provincial levels (two Provincial stores were visited by the Audit Team). A stock count on 3 February 2016 at the AMS revealed that there were 175,550 doses of PCV which were due to expire by July 2016, i.e. in less than six months. The use of this PCV is a concern, given the country's logistical challenges, the significant lead time in the cold chain and that only approximately half of the country had introduced PCV into its routine immunisation. There remains a risk that significant amounts of this soon-to-expire PCV will shelf-expire.

The store manager confirmed that he had issued PCV not in compliance with the EEFO order principle, and from a review of the stock records it was demonstrated that at least 92,000 doses of PCV expiring 2017 had been incorrectly issued from the National stores prior to using the PCV vaccine which was expiring in 2016.

Furthermore, the necessary processes to issue vaccines according to EEFO were not in place, since there was no system in place to record, track and document the batch number for vaccine movements issued from the AMS. As such existing records did not indicate which Provinces had received PCV vaccine imminently expiring in 2016, undermining the EPI unit's ability to determine how best to allocate and distribute the remaining short-lived PCV.

In addition, although the AMS cold room temperature charts were up to date on 3 February 2016, on our subsequent visit on 8 February, the Audit Team noted that no entries had been made on the temperature charts for 5 consecutive days for all seven of the cold rooms. The team's third visit on 10 February revealed that temperature charts had been retroactively updated. It was explained that in the absence of the store manager, there was no additional individual to cover for the AMS temperature checks.

Finally, from discussion and from the Audit Team's observations at Provincial and health facilities, it was noted that the EPI unit had not distributed any thermometers or fridge tags to the sub-National levels since at least 2013. As a result, no temperature chart readings occurred at multiple points in the cold chain beneath National level, except where thermometers supplied prior to 2013 were still available. The acting EPI manager indicated that WHO purchased 2,600 vaccine thermometers in 2015. Although these were insufficient in number for the entire cold chain system, the thermometers would begin to be distributed from March 2016.

Risks / Effect

Unless measures are put in place to prioritise the despatch and usage of the PCV imminently expiring in July 2016, there is a risk that some of the vaccine will shelf-expire.

A failure to adhere to good practices in storing and managing vaccine raises the risk of wastage due to expiration or improper storage.

Recommendation 3 (Critical)

The EPI unit needs to substantially and urgently improve the management of its vaccines:

- The EEFO principle should be systematically applied at all levels through the supply chain; and
- Vaccines should be properly stored, and records maintained so as to facilitate the tracking and identification of the various expiry dates of product, as well as the temperature in situ throughout the various points in the cold chain.
- Fridge tags or thermometers need to be made available at all levels in the vaccine supply chain, and temperature records maintained such that vaccine exposure to temperature variations may be tracked. Additionally, temperature monitoring provides information on faulty cold chain equipment.

Every effort should be made to minimise the loss of PCV vaccine due to expire in July 2016.

Management comments

4.4. Vaccine wastage due to human error

The National Operational Guidelines for SIREP prescribes that in order to reduce the wastage of vaccines:

- Assure adequate transport means and adequate transport boxes;
- Always keep the vaccines at the correct temperature;
- Never expose freeze sensitive vaccines to freezing; and
- Never expose heat sensitive vaccines to more than the accepted temperature limit.

In addition, the guidelines discuss issues on how to minimise vaccine wastage and to plan supplies in consideration of the vaccine wastage factor. Practical suggestions promote to "use as much as possible all vaccine in a vial before opening a new vial."

The Audit Team were informed of the following recent cases of vaccine wastage due to human error:

- The national logistics and forwarding company held significant amounts of stock on consignment in response to cold storage capacity concerns at the AMS. During October 2015, 13,500 doses of Pentavalent, with an approximate value of USD 44'500, VVM expired. While the Audit Team was unable to obtain an exact recount of the cause for these expiries, the EPI stores manager at the AMS expressed concern over the national logistics and forwarding company's standards which required only a single cold room temperature check per day;
- Due to a breakdown in communication between NDoH and the national logistics and forwarding company, 280 doses of IPV and 29,000 doses of MR were heat exposed at Western (South Fly)
 Province's airport cargo zone between delivery by the said logistics company on 17 August 2015 and collection seven days later by the local EPI logistician on 25 August 2015; and
- In at least two Provinces, an unquantified amount of IPV vaccines had been accidentally frozen due to the receiving store confusing handling requirements with those pertaining to OPV vaccines.

Further, from discussions with the acting EPI manager and from the Audit Team's visits to two Provinces, it was noted that there was no information system in place through all levels of the cold chain system to track and report vaccine loss.

Risks / Effect

Poor practice or inappropriate storage of vaccine raises the risk of vaccine wastage.

Individuals handling vaccines may not have the necessary technical knowledge or discipline to ensure that vaccines are handled and stored appropriately.

An absence of complete and reliable data on closed and open vial loss makes it impossible for the NDoH to take appropriate, targeted corrective action.

Recommendation 4 (Critical)

The EPI unit should:

 Review and update its vaccine management guidelines and standard operating procedures in conjunction with the follow up resulting from the Q1/2016 EVM assessment, and suitable training should be shared and discussed with all individuals responsible for storing and handling the vaccine;

- Review and discuss its contractual arrangements with its national logistics and forwarding company to incorporate consignment services, including defining INCOTERMS and liability in the event of vaccine damage or loss. Compensation should be sought for the loss of 13,500 doses of Pentavalent while under the responsibility of the national logistics and forwarding company;
- Undertake an open vial wastage rate assessment to evaluate whether actual open vial wastage rates are in line with WHO benchmarked rates; and
- Adopt suitable procedures to ensure that open and closed-vial wastage are routinely recorded by District, Provincial and National levels and reported to the EPI unit, and that targeted corrective action is initiated by the EPI.

Management comments

4.5. Vaccine stock management in Eastern Highlands

The Audit Team identified various weaknesses in the vaccine management at the provincial warehouse of Eastern Highlands and concluded that there was scope for significant improvement in the Province's vaccine management processes.

In 2015, a total of 40,800 doses of MR vaccine valued at approximately USD 23'00 shelf or VVM expired due to inadvertent storage at room temperature.

Furthermore, the Audit Team's physical observation of vaccine storage identified a handful of vials of MR vaccine being stored at -20°C in lieu of -2 to -8°C. Thus the antigen had frozen, rendering the vaccine useless.

Temperature monitoring practices were found to be insufficient. Temperature monitoring charts were not always completed; there was no thermometer for one of the freezers; another freezer's thermometer was broken; vaccines were stored randomly in cold chain equipment irrespective of expiry dates; and vaccines were not grouped by product type when this would have been possible and logical from a storage capacity perspective.

The Audit Team also noted that National guidelines defined to prevent exposing freeze-sensitive vaccines to freezing were not being followed at the Provincial warehouse. In particular, vaccines were placed directly into isothermal boxes and surrounded by up to 16 frozen ice packs, rather than using liquefied ice packs as stipulated in the guidelines.

The Cold Chain Logistic Officer did not maintain any stock records and made no entries in the available stock movements ledgers. No credible information on the current stock levels was available.

Risks / Effect

Inappropriate storage of vaccine has led to wastage due to expiration.

Weak stock records may result in stock outs and/or excessive stock levels.

Recommendation 5 (Critical)

The EPI unit should ensure that:

- Individuals managing vaccines at Provincial levels are trained on vaccine management;
- An up-to-date standard operating procedure for vaccine management is made available and enforced at all levels of vaccine management;
- Stock records are adequately maintained and can be relied upon for vaccine forecasting and reordering purposes;
- Individuals handling the vaccines are sufficiently trained on temperature monitoring;
- Routine temperature monitoring is carried out and recorded; and
- Thermometers are verified to be accurate, in working condition and replaced where necessary.

Management comments

5. Budgeting and Financial Management

Reporting inconsistencies and inaccuracies in the financial data collected on Gavi monies were identified which significantly undermined the reliance that could be placed on information provided by the NDoH on the activities and outcomes of EPI programmes. This also weakened the ability of budget owners to make accurate financial decisions thereon.

Audit Rating
Unsatisfactory

Gavi's financial support to the NDoH is made through the HSIP Trust Account, a government instrument governed by PNG law which forms part of the overall National public accounts, created in 1996 by the Asia Development Bank. The financial statements of the HSIP Trust Account, into which multiple donors contribute financial support, were not disaggregated by funding source.

Gavi's relative financial contribution represented less than 1% of total receipts to the HSIP Trust Account in 2013, but increased in 2014 as a result of significant Gavi funds disbursed for the MR campaign.

The GoPNG's 2011-2020 National Health Plan was split into a country Multi Year Plan for 2011-2015 and one for 2016-2020. The 2011-2015 country Multi Year Plan stated that the "majority of [the estimated total EPI] costs will be funded by Government of PNG through its PGK 14.17 billion budget allocation for health services in the country. And the overall funding gap of USD \$18,492,028 (PGK 52,175,529) is expected to be met by donor partners." Gavi's HSS grant for a total of USD 3,072,923 helped fund part of this gap, however most of the activities set out in the GoPNG's Detailed Workplan and Budget did not correspond to those in country Multi Year Plan.

5.1. HSS workplan and progress reporting

In April 2013, Gavi's Independent Review Committee approved an HSS grant to the GoPNG totalling USD 3,072,923. As at the end of December 2015, USD 1,103,854 had been disbursed by Gavi, of which PGK 1,072,488 (USD 393,919) (see *Table 1*) had been spent. Based on the grant's operational timetable, it was expected that the grant would fund immunisation activities through until mid-2018. However as at the end of 2015, and following the first disbursement, 87% of the HSS grant remained unspent.

The EPI unit presented the Audit Team with a draft revised 5-year HSS workplan running from 2015 to 2019. The amended timeline was not satisfactorily explained. Furthermore, the revised plan was a crude approximation, as it assumed that the entire grant balance was still available rather than deducting any expenditure incurred to date.

The EPI unit was unable to demonstrate that it proactively reviewed and managed its programme budgets or that reference was made to the initial approved and current budgets as budgetary tools for the purpose of guiding and administering the programme against the approved activities and key milestones. In addition, there was no overall clarity on the remaining balance of Gavi funds.

The Audit Team concluded that the EPI unit's capacity and ability to proactively review and manage its budgetary and financial management commitments was inadequate.

Risks / Effect

Lack of budgetary control over the periodicity and prioritisation of HSS activities.

Sub-optimal management of the balance of HSS funds available for reprogramming.

Recommendation 6 (Essential)

Given the budgetary necessity to reprogram the balance of HSS funds, and to reprioritise unfulfilled workplan activities, the NDoH is requested to:

- Verify the relevance and accuracy of the 2014 Annual Progress Report and, if necessary, resubmit
 a corrected version to Gavi;
- Timely complete and submit 2015 reports as per Gavi's Financial management and audit requirements; and
- Submit a formal request to reprogram its remaining HSS grant funds in time for consideration by the next Independent Review Committee session.

Management comments

5.2. Reporting inconsistencies and delays

In February 2016 and prior to submission to Gavi of the 2015 Annual Progress Report, the EPI unit shared its 2014 and 2015 Annual Reports. These Annual Reports are not part of the standard reporting to Gavi but were shared with the Audit Team as an overview of the unit's performance. The 2014 report contained select references to activities and events which did not occur in 2014.

Similarly, the 2015 Annual Report was an exact copy of the 2014 Annual Report except in title and footer which had been relabelled 2015. The substantive reporting on pages 14 through 17 and recommendations on page 18 clearly related to 2014 and not 2015. The Audit Team concluded that the 2015 Annual Report was not updated to reflect actual 2015 activities and recommendations, and could not be relied upon.

Annual Progress Report

The EPI unit's 2014 Annual Progress Report submitted to Gavi on 15 May 2015 reported no HSS activity. However, this was contradicted by the 2014 accounting records which indicated that 48% of the immunisation expenditure in 2014 related to HSS. No satisfactory explanation was provided for this discrepancy.

The above inconsistencies were attributable to the preparation of financial reporting without involving finance personnel, and without review by personnel not involved in report preparation. Many financial reports from 2014 and 2015 had been prepared by an unaided, unsupervised EPI employee.

Risks / Effect

Reporting errors and inconsistencies occurred and went undetected.

Unless reports are relevant, accurate and complete, decision making will be sub-optimal.

Recommendation 7 (Essential)

The EPI unit needs to strengthen its reporting processes by putting in place:

- A process which ensures a greater level of scrutiny and involvement of persons who are familiar with both the financial and non-financial programme performance; and
- A formal review and authorisation procedure. This should be done by persons not involved in the report preparation.
- All financial reporting which is relied upon for decision-making is to be submitted to HHISP Finance and Accounting team assigned to the NDoH for a due review and approval process.

Management comments

5.3. External audit requirements

The PFA stipulates the requirement of an annual external audit, specifically: "38. The external audit shall cover all aspects of HSIP Trust Account activities implemented by the Government at central and Provincial and District levels. The audit shall include verification of expenditure eligibility, procurement files, programme performance and physical inspection of goods, works and services acquired at central and peripheral levels by all implementing entities. [...]"

The PFA goes on to stipulate: "39. The audit report and the Management Letter for each audited period shall be submitted to the Inter agency Coordinating Committee, Health Sector Finances Committee and the Gavi Secretariat not later than six months after the end of the Government fiscal year."

The latest HSIP Trust Account external audit report covered the 2013 fiscal year, and was belatedly issued in June 2015.

Furthermore, the financial statements presented the total funds disbursed to Provinces but without indicating when or whether these funds had been spent at Provincial level. As such, the accounting treatment was to fully expense these disbursements, rather than to treat the amounts as advances yet to be justified. As a result, the annual financial reporting to Gavi did not present an accurate position of the actual substance for how funds disbursed to the Provinces were spent.

As a consequence, the Annual Progress Reports for 2013 and 2014 presented a National level position only and did not reflect the actual substance of expenditure and activities implemented by the Provincial and District level public health instances. In effect, this was the same accounting treatment as presented in the 2013 HSIP Trust Account audited financial statements.

On 08 February 2016, the Audit Team met and confirmed with the Auditor General's Office that they were currently finalizing the selection of an HSIP Trust Account external auditor for 2014, 2015 and 2016 financial statements. They also acknowledged that the 2014 HSIP Trust Account financial statement audit is overdue.

Furthermore, the Auditor General's Office acknowledged that the past 2013 external audit of the HSIP Trust Account had not addressed Gavi's financial management requirements, but they indicated that it would be able to accommodate these requirements by including a donor-specific statement covering Gavi funds as an annex to the HSIP Trust Account financial statements. As such, this statement would present the actual expenditure on the activities implemented by the central, Provincial and District level public health instances – in substance the actual spending linked to the programme's performance – and would be independently audited.

Finally, the National accounting system did not track the actual expenditure by Provinces against respective donor funding sources. As a result, past financial reports – including the HSIP Trust Account financial statements – were unable to provide any donor specific reporting, or any Provincial level information other than the level disbursements from the National accounts.

Risks / Effect

Inaccurate financial reporting to Gavi (by over-reporting expenditure) due to the basis and treatment of Provincial allotments.

Financial numbers not reflective of programmatic progress enumerated in Annual Progress reports.

The preparation basis of the HSIP Trust Account financial statements failed to meet Gavi's financial management requirements.

Recommendation 8 (Essential)

In order to comply with Gavi's financial management requirements it is recommended that the NDoH:

- Beginning 2014, the HSIP Trust Account audited financial statements should include an additional Gavi specific certificate of income and expenditure which identifies in substance the income, expenditure and closing balances for each Provincial advance. This certificate may be included as an additional annexed disclosure to the overall financial statements;
- Strengthen its Provinces' capacity to continue to maintain donor-specific sub-ledgers and to monthly produce the "HSIP Trust Account funding source report" as required;
- Record all transfers of funds to Provinces as advances rather than as expenditure in accordance with paragraph 18 of the Financial Management Requirements of the PFA; and
- Complete external financial statement audits within six months of the GoPNG fiscal year-end in accordance with paragraph 39 of the Financial Management Requirements of the PFA.

Management comments

6. Expenditure and Disbursements

Reporting by Provinces on acquittals fell short of adequately substantiating programmatic expenditure. Absence of budgetary control over the Gavi grants resulted in USD 411,233 of ineligible expenditure at National level which did not relate to Gavi supported programmes.

Audit Rating
Unsatisfactory

This section elaborates on the:

- Use of Gavi funds for non-eligible activities by way of Gavi monies being loaned to cover other programme costs;
- Untimely retirement and justification of travel advances issued to NDoH staff; and
- Procedures and reporting relating to financial support for EPI programmes at Provincial level.

6.1. Ineligible expenditure

The Audit Team identified PGK 1,010,872 (USD 411,233) of expenditure that did not relate to Gavi supported programmes. According to the EPI unit and the HHISP Finance and Accounting team assigned to the NDoH, Gavi funds were used to implement non-Gavi activities pending receipt of funds from other EPI donors. This amounted to 32% (by value) of total EPI expenditure. When funds were received from the respective donors, they were insufficient to fully cover the costs incurred to date.

Prior to commencement of the audit, PGK 330,083 (USD 136,662) had been reimbursed to the Gavi programme. As of 10 February 2016, PGK 680,788 (USD 274,572) was yet to be refunded.

Table 6: Non-Gavi activities paid out of Gavi grants and status of refunds and balances (c.f. Annex 1)

Activity	Expenditure PGK	Refunded PGK	Balance PGK	Balance USD	Audit Comment
Gas Supplies	247,244	-	247,244	97,363	Related to procurement of gas cylinders from 2012/2013, funded by other donor
Gardasil Project 2012	3,792	-	3,792	1,462	Non-Gavi funded project. Gavi had not provided support for HPV in PNG
Data Collection & assessment ¹	38,259	-	38,259	15,609	Non-Gavi activity, funded by GoPNG
National EPI Surveillance Meeting	253,053	152,388	100,665	41,678	Non-Gavi activity, funded by other donor. Partially refunded.
Hepatitis B Birth dose survey	151,124	151,124	-	-	Non-Gavi funded activity, fully refunded
Measles Outbreak	87,069	-	87,069	34,099	Funded by GoPNG
Newborn Care	40,335	26,571	13,764	5,699	Non-Gavi activity, partly refunded

¹ Including Sentinel Site Surveillance

Table 6: Non-Gavi activities paid out of Gavi grants and status of refunds and balances (c.f. Annex 1):

Activity	Expenditure PGK	Refunded PGK	Balance PGK	Balance USD	Audit Comment
Vaccine Management forms & Frequently Asked Questions (FAQ) booklets for Routine Immunisation Activities ²	189,995	-	189,995	78,662	Annual Implementation Plan of NDoH, indicated GoPNG as funding source for these activities. The expenses were paid from the HSS grant but this did not include an allocation for these activities. The total HSS budget for printing materials (posters) was USD 9,523 over five years. The FAQs were for Measles, Vitamin A, Tetanus Toxoid and Japanese Encephalitis, these programmes were not supported by Gavi in PNG.
Total Balance not yet refur	nded		680,788	274,572	

Risks / Effect

Use of Gavi grants for unapproved activities contradicts the PFA and relevant grant terms and conditions.

Immunisation programme objectives funded by Gavi may be delayed due to lack of cash flow/liquidity.

Recommendation 9 (Essential)

NDoH should:

- Review the accounting records, from the inception of Gavi grants to date, identify and quantify all
 instances of ineligible expenditures, and promptly refund all outstanding balances to Gavi; and
- Adhere to the terms and conditions of PFA and relevant grant agreements in regards to its ability to use Gavi funds for unplanned activities, including emergency situations.

Management comments

² Transactions related to use of Gavi grants for non-Gavi activities, in routine immunization, may be subject to further review in any separate Gavi investigation.

6.2. Outstanding travel advance

The Audit Team identified poor controls over the acquittal of advances related to travel. These advances were either issued to NDoH staff or to hotels and venues where the activities were held. At the end of January 2016, the total amount yet to be acquitted, for period 2013-2015, was PGK 67,539 (USD 27,413) of which PGK 55,489 (USD 22,974) was outstanding from 2014.

GoPNG's Financial Management Manual allows for temporary cash advances to Government Officers for approved purposes. The Manual requires that the "advances must be repaid in full as early as possible where no repayment date is specified..."

Some of the advances had been issued to individuals who had not yet completed the submission and acquittal of prior advances. This practice was not in accordance with the Manual which states that no new advances should be provided while prior advances to the same staff member remained unacquitted.

Table 7: Aging of	acquittais jo	r tne perioa	2013-2015

Year	Advances issued PGK	Un-acquitted advance PGK	Un-acquitted advance USD
2013	51,755	3,409	1,315
2014	461,694	55,489	22,974
2015	660,441	8,641	3,124
Total	1,173,890	67,539	27,413

Risks / Effect

Loss of Gavi funds due to non-recovery of advance payments or advances being used for a purpose other than intended.

Recommendation 10 (Critical)

NDoH should:

- Clarify the timeline for submission, review, approval and acquittal of staff advances; and
- Ensure the provisions of Financial Management Manual are adhered to, specifically "A new advance will not be made for any purpose while the previous one to the same person is unacquitted except where evidence is produced that payment is still continuing and repayment action on the first advance is not deliberately delayed."

Management comments

6.3. Incomplete and untimely Provincial acquittals

Per Financial Management Manual Section 16-4, those responsible for the maintenance of the HSIP Trust Accounts should ensure that: "a cash account is submitted to the Public Account of the Department of Finance for each month, not later than seven days after the end of the month (unless a different period is allowed under the trust instrument). The receipts and payments during the period and the closing balance should be accompanied by a bank reconciliation statement. This is necessary for incorporation of the trust transactions in the monthly and quarterly Statement of Public Accounts by the Department of Finance."

Per the November 2012 HSIP Manual of Procedures "accurate financial reporting is depending on the relevant Provincial coding details (in the expense code fields) being entered in the cashbooks. At issue is that the allocation of costs to programs [...] is accurately identified and reported. Separate vote coding (Chart of Accounts) is necessary to facilitate this requirement."

The HSIP Manual also states that "Accurate coding of expenditure will allow the NDoH and NDoH Financial Management Service Branch compliance function to effectively monitor progress against Medium Term Expenditure Framework priority areas."

The Audit Team's review of a sample of HSIP acquittals received from the Provinces for the period June to November 2015 revealed the following weaknesses:

- Acquittals were often received late for example as at 10 February 2016 more than 50% of the November and more than 75% of the December acquittals had not yet been received by the National HHISP Finance and Accounting team assigned to the NDoH;
- The quality of the acquittals was weak as more than half of the submissions over the six month period did not adhere to the vote number structure (the Provincial chart of accounts);
- Acquittals frequently attributed Gavi funds to other donors or failed to code Gavi-funded activities correctly to the programme "Family Health Services/ Immunisation";
- There was a lack of transparency as to what Gavi was funding since the Provincial accounts comingled funds from all three principal immunisation sources under the category "Other donor";
- Acquittals were often incomplete as only 25% of the Provinces submitted the required "HSIP Trust Account funding source report" and, of those Provinces which did submit a report, at least a third did not complete this report correctly;
- More than half of the Provinces did not maintain a sub-ledger for each funding source as required;
- Without these required sub-ledgers, the Provinces' ability to track the balance of funds was undermined, and they were not able to accurately prepare a funding source report, as required;
- Because there was no overall aggregation of the financial information from each Province, NDoH management with overall responsibility for the budgets did not have the necessary information and insights into the rate at which Provincial funds were used; and
- The HHISP Finance and Accounting team assigned to the NDoH responsible for visiting Provinces to validate their underlying supporting documents undertook such visits infrequently. Moreover, these visits were often only triggered by Provincial requests rather than following a routine programme. As a result, each Province was being visited on average once every two years.

One of the key purposes of the "HSIP Trust Account funding source report" was to ensure that, whatever HSIP funds were comingled and disbursed to Provinces, these funds could still be tracked by funding source. Further, the existence of such a report validated that suitable mechanisms were in place to compute the cumulative year-to-date expenditure for each funding source, as well as remaining funding source balances.

The current configuration of the Provincial Government Accounting System only contained details on disbursements made to the Provinces, and was unable to consolidate and provide any donor specific reporting other than the total funds disbursed from the National to the Provinces.

Risks / Effect

Without any aggregate year-to-date information on expenditure against the various HSIP funding sources, the EPI unit and the Financial Management Service Branch were unable to:

- Effectively monitor progress against immunisation priorities areas; and
- Fulfil their fiduciary and oversight responsibilities on the use of EPI funds disbursed to the Provinces.

Furthermore, the level of detail in the budget and workplan undermined EPI management's ability to monitor and make decision on the use of Gavi's funds at Provincial levels.

Recommendation 11 (Critical)

HHISP Finance and Accounting team in conjunction with the NDoH should:

- Update the funding source segment of its Provincial chart of accounts by creating a Gavi-specific segment, so as to enable the tracking of Gavi's funding independent from other sources also funding immunisation;
- Ensure that relevant sub-National personnel are knowledgeable with the accounting structure of Provincial Government to properly classify receipts and payments, with particular focus on accounts fields Program/Activity (fields #10/#11) and Donor Identification (field #15);
- Follow up with all Provinces and confirm that they comply with financial regulations and
 instructions, maintain funding source specific sub-ledgers, and timely submit complete acquittals
 including the "HSIP Trust Account funding source report";
- Ensure all relevant personnel are briefed and trained on the above changes; and
- Improve the "funding source report" by inserting a balance brought forward column into the template.

Management comments

6.4. Payment of per diems in Eastern Highlands Province

The Audit Team noted the following inconsistencies in the payment of per diems in Eastern Highlands Province.

6.4.1 Lack of justification for payment

Per diems and allowances may be paid to staff while on duty travel to cover their subsistence and incidental expenses.

The Audit Team noted that the Eastern Highlands Province was paying incidentals from Gavi funds to personnel who had not travelled to carry out their work. Specifically, daily payments of PGK 40 were disbursed to 13 staff over the 10 day period between 7 and 16 September 2015 for the SIREP campaign which took place in their home town duty station in Goroka. Total expenditure was PGK 5,200. No justification for these claims was provided.

Risks / Effect

The validity of payments of per diems and incidentals could not be confirmed without adequate supporting documentation to validate the entitlement.

Recommendation 12 (Essential)

- Per Diem allowances should only be paid to staff who qualify for the allowance. Such payments should only be made where there is a valid approval on file; and
- The HHISP Finance and Accounting team assigned to the NDoH should follow up on and quantify any per diem payments paid over the entire grant duration (including a review of the Goroka hospital case) where entitlement cannot be justified.
- Any and all unjustified payments identified over the entire grant duration should be reimbursed to the grant.

Management comments

6.4.2 Payment of allowances without proof of receipt

In both the SIREP campaign and multiple other cases where staff were required to attend training away from their duty station, allowances for multiple staff members were paid to a single person for onward distribution to their colleagues. This was described to the Audit Team as common practice whenever it is not possible to pay personnel individually. In the case of Goroka, no documentation was on file to evidence the fact that these onward payments were effected, or that the claimants had received their entitlement.

Risks / Effect

Without evidence of receipt of allowances, it is not possible to confirm that amounts were distributed appropriately to individual.

Absence of such evidence increases the risk of theft or fraudulent claims going undetected, while also offering no protection to individuals responsible for redistribution of cash allowances.

Recommendation 13 (Essential)

- HHISP Finance and Accounting team in concert with the NDoH should ensure that the transfer of all cash payments, including allowances, are supported by a receipt signed by the recipient, documenting the amount of funds received, their identity card and their contact details; and
- Shortly after campaigns, training and other events resulting in entitlements to allowances, HHISP Finance and Accounting team should randomly contact staff members and volunteers to confirm attendance and amounts received.

Management comments

7. Procurement

Procurement processes did not comply with the requirements of National regulations or the PFA. Systemic internal control weaknesses were identified across multiple stages of the procurement process, with errors not being timely addressed, as a result of ineffective oversight by NDoH management. The Commercial Support Services Branch of NDoH, designated as responsible for National-level procurement, was not involved. Instead, procurement was carried out autonomously by the EPI unit which resulted in inadequate segregation of duties.



Background

Procurement files were examined to provide assurance that procurement was carried out in compliance with the PFA and National regulations; and included complete documentation to support budgeting and planning, tendering, contracting, delivery and receipts of goods, payments, and assets management.

The procuring entity within the Population and Family Health Services Branch of NDoH was the EPI unit. GoPNG's Public Finances (Management) Act 1995 (PFMA) specifies that departmental heads are responsible for ensuring that the provisions of PFMA, including for the procurement, are complied with.

Total expenditure reported by NDoH during the period 2013-2015 was PGK 7,213,963 (USD 2,696,482), of which procurement related expenditure totalled PGK 2,447,111 (USD 967,106). Of this, the Audit Team sampled and audited 80% of total procurement expenditure for the period 2013-2015, totalling PGK 1,954,167 (USD 771,067).

Table 8: Coverage of procurement and expenditure for the period 2013-2015

Description	%	Amount PGK	Amount USD
Total expenditure, procurement & non-procurement		7,213,963	2,696,482
Of which total procurement	34%	2,447,111	967,106
Of which total procurement	of total expenditure 2013-2015	2,447,111	
Of which total audited	80%	1 05/ 167	771 067
Of which total addited	of total procurement 2013-2015	1,954,167	771,067

The Audit Team identified systemic weaknesses across all procurement transactions reviewed (sections 7.1 & 7.2). In addition, 64% of procurement items audited were inadequately supported (section 7.3).

Table 9: Summary of procurement transactions reviewed by the Audit Team for the period 2013-2015

Description	Amount PGK	Amount USD
Printing & Stationary	910,019	364,772
Accommodation	416,153	156,491
Supply & Utility	295,232	114,710
Service- Catering/Car hire/Repair	155,436	62,957
Air Fare	114,327	46,054
Equipment	63,000	26,083
Total	1,954,167	771,067

7.1. Non-compliance with the applicable procurement regulations

The Audit Team found that the procurement processes did not comply with the National procurement regulations. Non-compliance occurred during the various stages of the procurement process, with key instances being identified as follows:

7.1.1 Procurements were unplanned

The PFA requires the NDoH to prepare an Annual Procurement Plan and submit it to the Inter-agency Coordinating Committee and Central Supply and Tenders Board for their review and approval. Prior to the implementation of the plan, the NDoH was required to communicate the approved Plan to the Gavi Secretariat.

In addition, the Financial Management Manual, 2006 issued by the Department of Finance of GoPNG, and the Good Procurement Manual, January 2008 issued by Central Supply and Tenders Board, required the procuring entity to develop a procurement plan before commencement of procurement.

The Audit Team found instances of procurement that were carried in an ad-hoc and piecemeal manner without identifying the programmatic needs. For frequently purchased consumables such as stationery and printed materials, a costed Annual Procurement Plan would have achieved better value for money by identifying potential economies of scale, and by enabling the procuring entity to negotiate more favourable pricing.

An Annual Procurement Plan would have enabled the EPI unit to consider different options such as entering into a Long Term Agreement for the repeat purchase of consumables.

In addition, Annual Procurement Plans also facilitate the measurement of progress against procurement targets.

Risks / Effect

Opportunities for economies of scale and price negotiations with vendors were potentially foregone through failing to adequately plan for procurement.

The practice of initiating piecemeal procurement instances carries the risk of procurement being subdivided to avoid competitive bidding processes.

The EPI unit's administrative and transaction costs were potentially higher than necessary.

Recommendation 14 (Essential)

 The EPI unit, in consultation with its technical partners, should prepare a credible Annual Procurement Plan and submit for approval as defined by the PFA and National regulations. The Plan should similarly be shared with NDoH's procurement unit prior to commencement of programme activities.

Management comments

7.1.2 Consideration was not given to existing "Whole of Government" contracts

The PFA and GoPNG's procurement regulations required, for procurement up to an aggregate value of PGK 300,000, that priority should be given to "Whole of Government" (WoG) contracts insofar as they exist for the goods or services that are being procured.

The Audit Team noted from its sample review of procurement instances above this threshold, that there was no evidence to demonstrate that WoG contracts had been considered prior to self-procuring.

Risks / Effect

Opportunities for value for money with existing WoG contracts were missed by not considering these during the procurement process.

The administrative burden on the EPI unit was unnecessarily increased by self-procurement on occasions when WoG contracts existed.

Recommendation 15 (Essential)

NDoH, in compliance with National procurement regulations, should ensure that all instances of procurement up to an aggregate value of PGK 300,000:

- Duly incorporate a consultation step of existing WoG contracts;
- Formally document that the consultation of WoG contracts has been carried out;
- Formally document the respective decision-taking thereon; and
- Select WoG contracts whenever these provide better value for money than self-procurement.

Management comments

7.1.3 No evidence of requests for quotation from tendering vendors

The Financial Management Manual, 2006 issued by the GoPNG's Department of Finance required that quotations be requested from tendering vendors in writing. This was applicable for all procurement with an aggregate value of between PGK 5,000 and PGK 300,000.

The procuring entity is to provide the potential vendors with a complete "Description of Requirement", including, but not limited to, quantity, description, delivery requirement, timings, specifications, standards, drawings, and special conditions etc.

The Audit Team noted that there was no evidence of any form of communication with the vendors prior to submission of the quotations. There was no documentation on how the vendors had been shortlisted and requests for quotation undertaken. Furthermore, there was no documented evidence of due process to review and evaluate vendor quotations.

Risks / Effect

The absence of documented communication with tendering vendors does not provide assurance that requests for quotation were public, fair and transparent.

Similarly the undocumented nature of vendor quotation ratings and short-listing tendering vendors did not demonstrate due process and fair, unbiased decision-taking.

Recommendation 16 (Essential)

For procurement between PGK 5,000 and PGK 300,000, NDoH should ensure that the EPI unit complies with the provisions of the Financial Management Manual, 2006 issued by the Department of Finance of GoPNG, specifically documenting and placing on file:

- End-to-end communication with the tendering vendors; and
- Short-listing and vendor selection procedures.

Management comments

7.1.4 Quotation register not maintained

The Financial Management Manual, 2006 issued by the Department of Finance of GoPNG required the procuring entity to maintain a quotation register to capture pertinent information on supplier quotes including: quote date, description of goods/service, price quoted, bidder name, name of departmental officer obtaining the quotation, quote selected to supply goods/services, reason for selection of the successful quote, and all three quotations received. This requirement applies for cases of procurement up to an aggregate value of PGK 500,000.

A quotation register provides transparency over how supplier quotes are managed, and it helps to identify cases of direct procurement or single-sourced supplies.

However, the EPI unit did not maintain a quotation register as required during the period 2013-2015.

Risks / Effect

The absence of a quotation register undermines assurance that the most competitive quotes were selected for each procurement incident.

Recommendation 17 (Essential)

NDoH should put in place and maintain a quotation register to transparently manage and track all respective supplier quotes, in compliance with National regulations.

Management comments

7.1.5 Procurement without Minor Contract Agreements

Section 5.2 of Financial Instruction 2-2013, issued by the Department of Finance in May 2013 as an amendment to the Public Finances (Management) Act to increase the threshold for major procurement, states that a Minor Contract Agreement should be executed between the procuring entity and the vendor(s) for procurement between PGK 50,000 and PGK 500,000. Section 5.1 of the Financial Instruction required that such contracts be "…executed by the Head of the procuring Agency".

The Audit Team reviewed a sample of 41 procurement transactions, totalling PGK 2.5 million (USD 0.97 million) carried out by the EPI unit between 2013 and 2015. However, none of the transactions qualifying for a Minor Contract Agreement, had been executed with a contract.

Such written contracts were necessary for locking into an agreed price, quantity and quality, and for stipulating terms and conditions for delivery, cancellation, and payment terms.

Risks / Effect

In the absence of a suitable contract or credible purchase order, the procuring entity is at substantial risk of financial loss and/or sub-standard performance without recourse.

Recommendation 18 (Critical)

In compliance with National regulations, the NDoH should ensure that the EPI unit puts in place valid Minor Contract Agreements for all procurement instances which meet the stated thresholds.

Management comments

7.1.6 Fixed assets registers were not maintained

The Financial Management Manual, 2006 issued by the Department of Finance of GoPNG required entities at all levels to maintain fixed assets registers to duly record acquisitions and disposals. The Manual also defined the criteria for what constituted a fixed asset and the requirement for annual physical inspections of these assets.

The Audit Team noted that no fixed assets registers were maintained for assets acquired with Gavi funds. Similarly, the EPI unit was unable to substantiate that annual physical inspections had been carried out. Finally there was no documentation on file evidencing the physical existence, location, working condition, ownership or usage of assets, as required in the PFA between the NDoH and Gavi.

As a consequence, the EPI unit did not plan and budget for maintenance, repairs and replacement of its fixed assets.

Risks / Effect

Failure to track and manage fixed assets may result in the unplanned use, loss or theft of items being undetected.

Not conducting routine physical inspections could contribute to the lack of maintenance and poor working state of fixed assets.

No information is readily available for the EPI unit to plan and budget for maintenance, repairs and replacement of its fixed assets across the country.

Recommendation 19 (Critical)

The NDoH should strengthen its management and oversight over fixed assets by:

- Carrying out a full physical inventory of existing assets, including verifying the working condition of items, on a regular basis. Where remediation is necessary, it should ensure that necessary maintenance is performed and documented;
- Recording all assets in a suitable fixed assets register that can be consolidated by funding source at National level.

Management comments

7.2. Weak internal controls over the EPI unit's procurement activities

The Audit Team identified systematic internal control weaknesses in procurement handled by the EPI unit. Ineffective oversight by NDoH over the EPI unit's purchases resulted in significant shortcomings in how procurement was conducted.

Specific gaps identified in the procurement processes as reviewed by the Audit Team were as follows:

7.2.1 Procurement undertaken outside of the designated procurement unit

The Audit Team noted that the EPI unit duly procured immunisation items and services without engaging Commercial Support Services as required. Commercial Support Services was intended as the unit responsible for procurement within the NDoH.

There was no segregation of duties in procurement carried out by the EPI unit over the period 2013-2015. Roles and responsibilities of the individuals involved in procurement were undefined and unclear. The person receiving and evaluating the quotation was also found to have received the goods or services, and to have prepared the request for payment. No suitable controls were in place to compensate for these incompatible duties.

The principle of segregation of duties is necessary to ensure that no one individual maintains excessive control over an entire procurement process. This principle significantly mitigates the risk of mismanagement and the inappropriate awarding of contracts.

Risks / Effect

Failing to engage with NDoH's designated procurement unit:

- Undermined the principle of segregation of duties by failing to separate key responsibilities; and
- Burdened the EPI unit with procurement related tasks that could and should have been delegated to the Commercial Support Services unit.

Recommendation 20 (Critical)

- Future procurement involving Gavi funds should be carried out with the appropriate involvement of NDoH's Commercial Support Services unit;
- There should be a clear segregation of duties between procurement, ordering, receiving goods or services, preparing requests for payment, approving supplier invoices and executing payments to suppliers; and
- This segregation of duties should be reviewed regularly to ensure it remains appropriate and relevant.

Management comments

7.2.2 Budget overrun and unbudgeted procurement

The absence of planning, budget monitoring and linking of procurement expenses to budgeted activities resulted in a significant proportion of Gavi funds being spent on activities that were not in the grant proposal, nor approved in subsequent workplans.

In 2014, expenditure on printing and stationeries totalled PGK 290,995 (USD 112,208). This contrasted adversely with the respective HSS budget allocation for the 5-year grant which totalled USD 9,523. As such, in 2014 alone, the EPI unit exceeded the entire 5-year budget by more than thirty-fold without any formal budget reallocation and without the necessary due approval and documentation justifying this overspend.

Risks / Effect

Overspend on individual budget lines went unchecked, without any due oversight.

Insufficient funds remained for other budgeted activities, potentially taking away from the achievement of programme outcomes.

Recommendation 21 (Critical)

- Budgetary amendments, variations and reallocation of funds should be formally justified and approved according to the provisions of the PFA;
- Procurement should be carried out as per the workplan and with appropriate involvement from NDoH's Commercial Support Services unit; and
- Supplier payments should be released only by the HHISP Financial Controller assigned to the NDoH after confirming both the appropriateness of the budget line and the availability of funds.

Management comments

7.3. Inadequacies in procurement documentation and other irregularities

The Audit Team selected a sample of 41 procurement transactions and reviewed associated documentation relating to vendor selection, delivery of goods and services, supplier invoices and supplier payments.

Of these 41 transactions:

- 11 were not related to the Gavi programme but had been paid out of Gavi grants;
- 17 were inadequately supported and contained multiple irregularities; and
- 13 contained major inconsistencies including timing discrepancies (e.g. purchase preceded requisition), irregular supplier documentation, disproportionate costs, potential duplicate funding and other matters. The Audit Team was unable to conclude that procurement had been conducted correctly.

Consequently, the overview summarised in the table below is preliminary, for information purposes only, and will be subject to change during a further investigation by review. Final details will be provided in a separate report.

Table 10: Overview of procurement transactions reviewed by the Audit Team (indicative figures only)

Description		Number of transactions	PGK	USD
Procurement transactions audited	Α	41	1,954,167	771,067
Procurement unrelated to Gavi programme funded by Gavi grants ³	В	11	699,602	284,649
Procurement related to Gavi and funded by Gavi grants (A minus B)	C	30	1,254,564	486,419
Procurements inadequately supported and with irregularities (see sections 7.3.1, 7.3.2, 7.3.3 & 7.3.4)		17	638,179	245,944
Procurement with major inconsistencies, not concluded at the time of audit		13	616,385	240,475

Key observations made by the Audit Team are reported in the following sub-sections.

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³ Expenditure relating to non-Gavi activities included both procurement and non-procurement expenditure. Therefore the overall status of the refunds and balances is reported under budgeting and financial management section of this audit report (refer to section 6.1).

7.3.1 Unsupported procurement

No supporting documentation could be provided to the Audit Team for one transaction amounting to PGK 24,540 (USD 9,463).

Section 20.1, paragraph (c) of the PFA requires that "...all expenses relating to the use or application of funds are properly evidenced with supporting documentation sufficient to permit Gavi to verify such expenses."

Risks / Effect

Inadequate assurance on the appropriate use of Gavi's financial support.

Risk of Gavi's financial support being utilised for purposes other than those intended.

Recommendation 22 (Essential)

NDoH is required to:

- Ensure that all transactions and contracts entered into are supported with adequate and complete supporting documentation; and
- Put on file all necessary supporting documentation adequately cross-referenced to the relevant accounting records.

Management comments

7.3.2 Contracts awarded without demonstrating competition

Out of a total of 6 transactions, vendors had been selected without obtaining the necessary three quotations in 5 instances.

For the remaining transaction, documentation on file demonstrated that three quotations had been obtained. However, the decision for selecting a more expensive supplier quotation had not been documented, and no satisfactory explanation could be given to the Audit Team.

The supporting documentation for each instance of procurement must be able to demonstrate that open, transparent competition was applied and value for money was obtained.

Risks / Effect

Where the selection of vendors is not duly documented and justified, there is an increased risk of contracting with unqualified or non-competitive vendors.

Recommendation 23 (Critical)

In conformity with National regulations, NDoH should ensure that:

- Vendor selection for Gavi-supported activities is competitive and duly documented;
- Only quotations from qualifying suppliers are short-listed and selected; and
- Vendor selection be made on the principle of considering best value for money, and any exception should be duly documented and authorised by an executive function independent of the vendor selection process.

Management comments

7.3.3 Inadequately supported delivery

9 transactions were identified where delivery or receipt of goods were not adequately supported. Key observations were:

- Air travel for EPI employees for which hand-written or incoherent quotations were on file.
 However, neither supplier invoices nor evidence of travel, such as boarding pass stubs, was placed on file; and
- The delivery of goods to the National NDoH office (Waigani) and to the AMS (Badili) could not be observed on either site, had not been recorded in any stock or supply registers, and were not supported by delivery notes or bills of lading. Personnel from EPI and the AMS explained that most of these goods were destined for nationwide distribution, however there was no record of such distribution in the AMS dispatch books, and no trace of delivery in either of the two Provinces visited by the Audit Team.

Risks / Effect

Satisfactory delivery of goods and services cannot be demonstrated or reconstituted without adequate substantiation for performance.

Inadequate assurance on the appropriate use of Gavi's financial support.

Recommendation 24 (Critical)

NDoH should ensure that the EPI unit:

- Obtains and maintains in its records adequate proof of delivery from all suppliers; and
- Develops and maintains a dry goods inventory incorporating a record of delivery and distribution of any such goods procured with Gavi's financial support.

Management comments

7.3.4 Payments not supported by a valid invoice and timing inconsistency

3 payments had been made to vendors solely on the basis of their quotations rather than original supplier invoices. In one instance, payment had been made prior to the date of delivery and without any written instruction or justification.

Risks / Effect

Control over incomplete or non-delivery of goods and performance of services is undermined when advance payment is made.

Non-compliance with the Public Finances (Management) Act 1995.

Recommendation 25 (Essential)

Payment for goods and services should only be made on the basis of:

- Original supplier invoices; and
- On credible confirmation of satisfactory delivery of goods or performance of services in accordance with agreed terms and conditions.

Management comments

Annex 1 – Expenditure related to non-Gavi activities but paid out of Gavi grants

Reference	Payee	Description of Goods/Services	Date	Amount	Amount
Reference		Description of Goodsy services	Date	PGK	USD
210306	Origin Energy (PNG) Ltd	Gas Cylin SIA SHP 2012:GAVI	21/11/2013	6,693	2,580.67
210306	Origin Energy (PNG) Ltd	Gas Cylin SIA WHP 2012:GAVI	21/11/2013	13,961	5,383.27
210306	Origin Energy (PNG) Ltd	Gas Cylin SIA Enga 2012:GAVI	21/11/2013	24,125	9,302.64
210306	Origin Energy (PNG) Ltd	Gas Cylin SIA ESP 2012:GAVI	21/11/2013	42,483	16,381.49
210306	Origin Energy (PNG) Ltd	Gas Cylin SIA Vanimo 2012:GAVI	21/11/2013	43,828	16,899.90
210306	Origin Energy (PNG) Ltd	Gas Cylin SIA Madang 2012:GAVI	21/11/2013	44,896	17,311.78
212606	Origin Energy (PNG) Ltd	Gas CylindersX4Prov:GAVI	15/08/2014	71,260	29,503.09
212000	Ltu				
		Gas Supplies	BALANCE	247,244	97,363
212718	Air Niugini	Gardasil Proj WNBP H/Train:GAVI	30/08/2012	1,283	495
212719	Kimbe Bay Hotel	Gardasil Projct WNBP H/Train:GAVI	30/08/2012	1,531	590
212720	Gerard Sui	Gardasil Projct WNBP Sch H/Train:GAVI	30/08/2012	978	377
		Gardasil Project 2012	BALANCE	3,792	1,462
212645	Air Niugini	Data Quality Assess Vst MBP:GAVI	25/08/2014	1,075	445
212647	Masurina Lodge	Data Quality Assess Vt Alotau:GAVI	25/08/2014	1,520	629
212649	Vienna Nonwo	Data Quality Assess Vt MBP Aug14:GAVI	25/08/2014	1,121	464
212775	Air Niugini	Data Quality AssessLaex2Dist:GAVI	19/09/2014	1,882	779
212776	Robin Misiel	Data QualityAssessLaex2Districts:GAVI	19/09/2014	1,321	547
212777	Huon Gulf Hotel	Data QualityAssess Laex2Distr:GAVI	19/09/2014	4,146	1,716
212828	Paik Tade	Data Assess Morobe Oct 2014:GAVI	30/09/2014	921	381
212841	Air Niugini	CollectDataSelctSntinalEHP:GAVI	09/10/2014	1,133	469
212846	Edilson Yano	CollectDataSelctSentinalSitesGka:GAVI	09/10/2014	1,156	479
212848	AB Lodge	Collect Data SelectedSitesEHP:GAVI	09/10/2014	800	331
212970	Air Niugini	Collct Data Sentinental Ste:GAVI	28/10/2014	1,107	458
212976	Madang Resort Hotel	Collct Data Sentinal Ste Mdg:GAVI	28/10/2014	2,136	885
212978	Edilson Yano	Collect Data Sentinal Ste MDG:GAVI	28/10/2014	921	381
213071	Air Niugini	CollectData SentinalSitesLae:GAVI	31/10/2014	911	377

Reference	Payee	Description of Goods/Services	Date	Amount PGK	Amount USD
213074	Edilson Yano	CollectDataSentinalSiteNov14Lae:GAVI	31/10/2014	921	381
213078	Phils Hotel	CollectDataSentinalSitesLae:GAVI	31/10/2014	945	391
213241	Air Niugini	Data Collect Nov&Dec14 Hgu:GAVI	25/11/2014	1,125	466
213242	Hotel Kimininga	Data Collect Nov14&Dec14 WHP:GAVI	25/11/2014	1,364	565
213247	Edilson Yano	Data Collect Nov14&Dec14 WHP:GAVI	25/11/2014	1,156	479
213425	Masurina Lodge	Data Collect Dec14 MBP:GAVI	12/12/2014	1,520	629
213430	Edilson Yano	Data CollectMeningitis&Survei:GAVI	12/12/2014	1,121	464
213446	Air Niugini	Data Collect Dec14 MBP:GAVI	12/12/2014	773	320
213470	Air Niugini	CollectData Dec14-Jan15ENBP:GAVI	16/12/2014	1,455	602
213471	Kokopo Village Resort	Collect Data Dec2014-2ndJan15:GAVI	16/12/2014	900	373
213473	Edilson Yano	Collect Data Dec14-2ndJan15 ENBP:GAVI	16/12/2014	1,156	479
213494	Paik Tade	Data Collect Lae Huon Dis Dec14:GAVI	18/12/2014	1,264	523
213734	Edilson Yano	Collect Data Sent Site NIP Feb15:GAVI	30/01/2015	1,086	393
213736	Kavieng Guest House	Collect Data Sent Site NIP:GAVI	30/01/2015	1,750	633
213738	Air Niugini	Collect Data Sent Site NIP:GAVI	30/01/2015	1,575	569
		Sentinal Site Data Collection	BALANCE	38,259	15,609
213245	ЈАСОВ ҮАКОРО	Nat.EPI&Surveil Meet Dec14 NCD:GAVI	25/11/2014	816	338
213252	Julie Liviko	Nat EPI&Surveil Meet Dec14 NCD:GAVI	25/11/2014	851	352
213253	Air Niugini	NatEPI&SurveilMeet Dec14 NCD:GAVI	26/11/2014	28,113	11,639
213290	Judy Minape	Nat EPI&Surveil Meet Dec14 NCD:GAVI	27/11/2014	1,016	421
213301	Granvile Motel	Nat&EPI Surveil Meet Dec14 NCD:GAVI	28/11/2014	46,455	19,233
213345	LINNAH ALE	EPI&Surveil Meet Dec14 NCD:GAVI	28/11/2014	838	347
213347	Ernest Giton	EPI&Surveil Meet Dec14 NCD:GAVI	28/11/2014	851	352
213348	Gekso Dawa	EPI&Surveil Meet Dec14 NCD:GAVI	28/11/2014	838	347
213349	Margaret Malaisa	EPI&Surveil Meet Dec14 NCD:GAVI	28/11/2014	851	352
213350	Reuben Maiwax	EPI&Surveil Meet Dec14 NCD:GAVI	28/11/2014	838	347
213351	Elvis Pyrikah	EPI&Survil Meet Dec14 NCD:GAVI	28/11/2014	851	352

Reference	Payee	Description of Goods/Services	Date	Amount PGK	Amount USD
213352	Casper Amin	EPI&Surveil Meet Dec14 NCD:GAVI	28/11/2014	851	352
213353	Narua Kaparu	EPI&Surveil Meet Dec14 NCD:GAVI	28/11/2014	981	406
213354	Alice Honjepari	EPI&Surveil Meet Dec14 NCD:GAVI	28/11/2014	816	338
213355	Ben Bal	EPI&Surveil Meet Dec14 NCD:GAVI	28/11/2014	686	284
213363	Lina Laki	EPI&Surveil Meet Dec14 NCD:GAVI	28/11/2014	838	347
213364	Jack Seimoni	EPI&Surveil Meet Dec14 NCD:GAVI	28/11/2014	851	352
213365	Lucy Morris	EPI&Surveil Meet Dec14 NCD:GAVI	28/11/2014	981	406
213366	Maupua Toraea	EPI&Surveil Meet Dec14 NCD:GAVI	28/11/2014	981	406
213367	Patricia Mitiel	EPI&Surveil Meet Dec14 NCD:GAVI	28/11/2014	816	338
213368	Morfa Aruko	Incid EPI&Surveil Meet Dec14 NCD:GAVI	28/11/2014	258	107
213369	Wenani Bokung	EPI&Surveil Meet Dec14 NCD:GAVI	28/11/2014	838	347
213370	Joshua William	EPI&Surveil Meet Dec14 NCD:GAVI	28/11/2014	816	338
213371	Ridley Mwaisiga	EPI&Surveil Meet Dec14 NCD:GAVI	28/11/2014	816	338
213372	Anthony Mala	EPI&Surveil Meet Dec14 NCD:GAVI	28/11/2014	816	338
213373	Esley Tabagani	EPI&Surveil Meet Dec14 NCD:GAVI	28/11/2014	816	338
213374	Moses Mimat	EPI&Surveil Meet Dec14 NCD:GAVI	28/11/2014	851	352
213375	Dickson Kungkene	EPI&Surveil Meet Dec14 NCD:GAVI	28/11/2014	851	352
213408	Bethseba Peni	Nat EPI&Surveil Meet Dec14 NCD:GAVI	10/12/2014	851	352
213431	Conrad Kambi	Nat EPI&Surveil Meet Dec14 NCD:GAVI	12/12/2014	838	347
213447	Likas Lakain	Nat EPI&Surveil Meet Dec14 NCD:GAVI	12/12/2014	816	338
213448	ALOIS PUKIENEI	Nat EPI&Survei Meet Dec14 NCD:GAVI	12/12/2014	981	406
213476	Edwin Benny	Nat EPI&Surveil MeetDec14 NCD:GAVI	16/12/2014	816	338
213492	Max Manape	Nat EPI&Surveil Meet Dec14 NCD:GAVI	18/12/2014	851	352
213493	Julie Wialu	Nat EPI&Surveil Meet Dec14 NCD:GAVI	18/12/2014	816	338
213235	Air Niugini	Nat EPI Surveil Meet NCD Dec14:WHO	24/11/2014	53,144	22,003
213243	Philip Wanua	Nat EPI&Surveil Meet Dec 14 NCD:GAVI	25/11/2014	851	352
213244	Jackson Appo	Nat EPI&Survey Meet Dec14 NCD:GAVI	25/11/2014	851	352

Reference	Payee	Description of Goods/Services	Date	Amount PGK	Amount USD
213248	Albert Paliago	Nat.EPI&Surveil Meet Dec14 NCD:GAVI	25/11/2014	816	338
213251	Lina Kua	Nat EPI&Survey Meet Dec14 NCD:GAVI	25/11/2014	851	352
213254	Roselyn Gatana	Nat EPI&Surveil Meet Dec14 NCD:GAVI	26/11/2014	981	406
213255	Nicholas Larme	Nat EPI&Surveil Meet Dec14 NCD:GAVI	26/11/2014	873	361
213256	August Mann	Nat EPI&Surveil Meet Dec14 NCD:GAVI	26/11/2014	816	338
213257	Samuel Disin	Nat EPI&Surveil Meet Dec14 NCD:GAVI	26/11/2014	981	406
213258	Helen Lale	Nat EPI&Surveil Meet Dec14 NCD:GAVI	26/11/2014	816	338
213259	Fred Mondo	Nat.EPI&Surviel Meet Dec14 NCD:GAVI	26/11/2014	816	338
213260	Obert Abel	Nat EPI&Surveil Meet Dec14 NCD:GAVI	26/11/2014	873	361
213261	Peter Robin	Nat EPI&Surveil Dec14 NCD:GAVI	26/11/2014	873	361
213262	Jinga Haine	Nat DPI&Surveil Meet Dec14 NCD:GAVI	26/11/2014	851	352
213263	Pana Rim	Nat EPI&Surveil Meet Dec14 NCD:GAVI	27/11/2014	258	107
213264	Copland Ihove	Nat EPI&Surveil Meet Dec14 NCD:GAVI	27/11/2014	686	284
213265	John Pokam	Nat EPI&Surveil Meet Dec14 NCD:GAVI	27/11/2014	816	338
213266	David Lapun	Nat EPI&Surveil Meet Dec14 NCD:GAVI	27/11/2014	816	338
213267	Jerry Kubu	Nat EPI&Surveil Meet Dec14 NCD:GAVI	27/11/2014	851	352
213268	Steven Show	Nat EPI&Surveil Meet Dec14 NCD:GAVI	27/11/2014	851	352
213269	Micah Zilu	Nat EPI&Surveil Meet Dec14 NCD:GAVI	27/11/2014	851	352
213270	Michael Mombu	Nat EPI&Surveil Meet Dec14 NCD:GAVI	27/11/2014	816	338
213271	Mark Dupi	Nat EPI&Surveil Meet Dec14 NCD:GAVI	27/11/2014	851	352
213272	Robin Yakomb	Nat EPI&Surveil Meet Dec14 NCD:GAVI	27/11/2014	851	352
213273	Matilda Soagai	Nat EPI&Surveil Meet Dec14 NCD:GAVI	27/11/2014	981	406
213274	Henry Yapen	Nat EPI&Surveil Meet Dec14 NCD:GAVI	27/11/2014	851	352
213281	Granvile Motel	Nat EPI&Surveil Meet Dec14 NCD:GAVI	27/11/2014	68,765	28,470
213285	Joachim Taulo	Nat EPI&Surveil Meet Dec14 NCD:GAVI	27/11/2014	838	347
213286	Jeffery Langi	Nat EPI&Surveil Meet Dec14 NCD:GAVI	27/11/2014	851	352
213287	Jenny Walete	Nat EPI&Surveil Meet Dec14 NCD:GAVI	27/11/2014	851	352

Reference	Payee	Description of Goods/Services	Date	Amount PGK	Amount USD
213288	Johannes Kundal	Nat EPI&Surveil Meet Dec14 NCD:GAVI	27/11/2014	816	338
213289	Dr Hamiya Hewali	Nat EPI&Surveil Meet Dec14 NCD:GAVI	27/11/2014	1,016	421
213291	Julianne Hayara	Nat EPI&Surveil Meet Dec14 NCD:GAVI	27/11/2014	1,016	421
213292	Norman Vakore	Nat EPI&Surveil Meet Dec14 NCD:GAVI	27/11/2014	851	352
213293	Edward Maika	Nat EPI&Surveil Meet Dec14 NCD:GAVI	27/11/2014	838	347
213294	Gedjolly Aaron	Nat EPI&Surveil Meet Dec14 NCD:GAVI	27/11/2014	838	347
213295	Rebecca Thoridoe	Nat EPI&Surveil Meet Dec14 NCD:GAVI	27/11/2014	851	352
213296	Singut Bieb	Nat EPI&Surveil Meet Dec14 NCD:GAVI	27/11/2014	258	107
213346	Micah Yawing	EPI&Surveil Meet Dec14 NCD:GAVI	28/11/2014	651	270
213362	Micheal Uaiz	Incid Nat EPI&Surveil Dec14 NCD:GAVI	28/11/2014	258	107
75		Chq#213228,245,252,330&443	24/12/2014	1,667	- 690
53		Hepatitis B Birth Dose	27/10/2015	- 152,388	- 63,092
		National EPI Surveillance Meeting	BALANCE	100,665	41,678
22		Hepatitis B Birth EPI	21/05/2015	- 151,124	- 62,569
213170	Bayviews Apartments	Veh HepatitisB Birth DoseM/Bay:GAVI	19/11/2014	8,150	3,374
213171	Air Niugini	Hepatitis B Birth Dose Surv:GAVI	19/11/2014	15,111	6,256
213172	Kimbe Bay Hotel	Hepatitis B Birth Dose Survey:GAVI	19/11/2014	5,760	2,385
213173	Birdwing Butterfly Lodge	Hepatitis B Birth Dose Survy:GAVI	19/11/2014	5,950	2,463
213174	Nortons Rent A Car	Veh Hepatitis B BirthDose Surv:GAVI	19/11/2014	10,100	4,182
213175	Westoil Transport Services	VehHepatitis B BirthDoseSurvey:GAVI	19/11/2014	7,700	3,188
213176	Bayviews Apartments	Hepatitis B Birth Dose Survey:GAVI	19/11/2014	4,650	1,925
213178	Catholic Guest House	Hepatitis B Birth Dose Survey:GAVI	19/11/2014	3,500	1,449
2424=2	Newton Pacific&Associates		10/11/2011	0 =04	2.522
213179	PNG	Veh Hepatitis B BirthDose Surv:GAVI	19/11/2014	8,701	3,602
213277	Johnnie Arava	Hepatitis B Survey Hela&Enga:GAVI	27/11/2014	1,756	727
213278	Dr Edward Waramin	Hepatitis B Survey ARoB Dec14:GAVI	27/11/2014	2,556	1,058
213279	Gerard Sui	Hepatitis B Survey WNB Nov-Dec14:GAVI	27/11/2014	2,521	1,044
213282	Magaru Maluo	HepatitisB Survey Hela Nov-Dec14:GAVI	27/11/2014	2,521	1,044

Reference	Payee	Description of Goods/Services	Date	Amount PGK	Amount USD
213283	Louis Samiak	Hepatitis Survey Oro Prov Dec14:GAVI	27/11/2014	1,143	473
213284	Philip Vagi	Hepatitis Survey ENBP Nov-Dec14:GAVI	27/11/2014	2,556	1,058
213299	Kokopo Village Resort	HepatitisBBirthDoseSurv11Prov:GAVI	28/11/2014	3,300	1,366
213300	Johnnie Arava	Hepatitis BBirthDose Surv11Prov:GAVI	28/11/2014	1,172	485
213304	Martha Pogo	Hepatitis BBirthDoseSurvey10Prov:GAVI	28/11/2014	2,172	899
213305	Louis Samiak	HepatitisBBirthDoseSurvey10Prov:GAVI	28/11/2014	721	299
213306	Sebastian Robert	HepatitisBBirthDoseSurvDec14WNBP:GAVI	28/11/2014	2,486	1,029
213307	Nelson Mek	HepatitisBBirthDoseSurv11Prov:GAVI	28/11/2014	2,521	1,044
213308	Joseph Wasam	HepatitisBBirthDoseSurvey11Prov:GAVI	28/11/2014	2,556	1,058
213309	Emily John	HepatitisBBirthDoseSurvey11Prov:GAVI	28/11/2014	2,743	1,136
213336	Freda Walai Sui	AcomHepatitusBBirthDoseSurv:GAVI	28/11/2014	600	248
213337	OnePine Vehicle Hire Service	Veh Hepatitis B BirthDosesCP:GAVI	28/11/2014	9,273	3,839
213338	Nortons Rent A Car	VhHepatitisBBirthDoseSurveEnga:GAVI	28/11/2014	4,150	1,718
213339	Freda Walai Sui	Hepatitis B Birth Dose Survey CP:GAVI	28/11/2014	810	335
213340	OnePine Vehicle Hire Service	VehHepatitisBBirthDoseSurvGulf:GAVI	28/11/2014	9,273	3,839
213342	Hani's Inn	HepatitisBBirth Dose SurvARoB:GAVI	28/11/2014	4,318	1,788
213343	Yakam Resort Co-op Society Ltd	Hepatitis B BirtDose SurvEnga:GAVI	28/11/2014	3,864	1,600
213344	West Winds Hire Cars	VehHepatitisBBirthDoseSurvARoB:GAVI	28/11/2014	10,800	4,471
213410	Island Mobile Hire Cars Ltd	VehHepatitisBBirthDoseSurvOro:GAVI	10/12/2014	7,691	3,184
		Hepatitis B Birth dose survey	BALANCE	-	-
210240	Maho Media	Measles O/Break B/Lets Hosp:GAVI	11/10/2013	11,051	4,261
210241	Maho Media	Measles O/Break G/Lin B/Lets:GAVI	11/10/2013	14,300	5,514
210165	Air Niugini	Outbreak Measles Nov13 ESP:GAVI	31/10/2013	1,473	568
210166	Sea View Hotel	Measles Outbreak Nov13 ESP:GAVI	31/10/2013	1,700	656
210167	Gerard Sui	Measles Outbreak Nov13 ESP:GAVI	31/10/2013	1,286	496
210242	Maho Media	Measles O/Break G/Line B/Lets:GAVI	11/11/2013	11,051	4,261
210243	Maho Media	Measles O/Break G/Line B/Lets:GAVI	11/11/2013	14,300	5,514

Reference	Payee	Description of Goods/Services	Date	Amount PGK	Amount USD
210262	Stephens Printing & Stationary	Measle O/B GuidIne B/Let Hosp:GAVI	12/11/2013	13,440	5,182
211308	Air Niugini	O/S TT Rpt&Monitor Measles:GAVI	17/06/2014	1,127	466
211309	Madang Resort Hotel	O/S TT Rprt&Monitor Measles:GAVI	17/06/2014	1,591	659
211311	No.1 Hire Car	Veh O/S TT Rpt&Monitor Measles:GAVI	17/06/2014	3,546	1,468
211312	Vienna Nonwo	O/S TT Rprt&Monitor Measles MDG:GAVI	17/06/2014	1,156	479
212917	Rael Limited	Veh Measles O/Break Jul14 NCD:GAVI	22/10/2014	11,050	4,575
		Measles Outbreak	BALANCE	87,069	34,099
212593	Travel Planners (PNG) Limited	New Born CarePom 18-22/8/14:GAVI	15/08/2014	8,710	3,606
212595	Stella Jimmy	NewBorn Care TOT 18-22/8/14 Pom:GAVI	15/08/2014	1,346	557
212597	Belinda Yamkeok	NewBorn Care TOT 18-22/8/14 Pom:GAVI	15/08/2014	1,346	557
212598	Paul Wari	NewBorn Care TOT 18-22/8/14 Pom:GAVI	15/08/2014	1,181	489
212599	Karen Sanga	NewBorn Care TOT 18-22/8/14 Pom:GAVI	15/08/2014	1,181	489
44		Chq#211051,600,675,676,680&etc	30/09/2014	- 1,181	- 489
212594	Hotel Hodava	Confer Room&Accom NewBorn Care:GAVI	15/08/2014	25,225	10,444
212596	Angela Seginami	NewBorn Care TOT Pom 18-22/8/14:GAVI	15/08/2014	1,346	557
212600	Julie Liviko	NewBorn Care TOT 18-22/8/14 Pom:GAVI	15/08/2014	1,181	489
53		Hepatitis B Birth Dose	27/10/2015	- 26,571	11,001
		Newborn Care	BALANCE	13,764	5,699
212708	Countrywide Business S&Distrib	Vaccine Routine Mgmnt Forms:GAVI	30/08/2014	142,995	59,203
212969	MAF & PRINTZ	FAQs Routine Immuniz Measles:GAVI	28/10/2014	47,000	19,459
		Routine Immunization Activities	BALANCE	189,995	78,662

Annex 2 - Definitions of Ratings and Recommendation Priorities

A. AUDIT RATINGS

The Gavi Programme Audit Team's assessment is limited to the specific audit areas under the purview and control of the primary implementing partner administrating and directing the programme of immunisation. The three audit ratings are as follows:

- Satisfactory Internal controls and risk management practices were adequately established and functioning well. No high-risk areas were identified. Overall, the entity's objectives are likely to be achieved.
- Partially Satisfactory Internal controls and risk management practices were generally
 established and functioning, but needed improvement. One or more high- and medium-risk
 areas were identified that may impact on the achievement of the entity's objectives.
- **Unsatisfactory** Internal controls and risk management practices were either not established or not functioning well. The majority of issues identified were high risk. Hence, the overall entity's objectives are not likely to be achieved.

B. CATEGORIES OF PRIORITISATION RATING

The prioritisation of the recommendations included in this report includes proposed deadlines for completion as discussed with the National Department of Health, and an indication of how soon the recommendation should implemented. The urgency and priority for addressing recommendations is rated using the following three-point scale, as follows: Critical – Essential – Desirable.

Annex 3 - Classification of expenditure

Adequately supported – Expenditures validated on the basis of convincing evidence (evidence which is sufficient, adequate, relevant and reliable) obtained by the auditors during the carrying out of their mission on the ground.

Inadequately supported – This covers two sub-categories of expenditure:

- a) Purchases: This is expenditure for which one or more of the essential items of documentary evidence required by the country's regulations on procurement are missing such as procurement plan, tender committee review, request for quotation, invoice, contract, purchase order, delivery note for goods and equipment, pro-forma invoice, the final invoice, etc.
- b) Programme activity: This is expenditure where essential documentation justifying the payment is missing. This includes but is not limited to travel without a travel authorisation, lack of a technical report or an activity report showing completion of the task, signed list by participants. Lack of the same documents to support liquidation of advances/floats given for meetings/trainings/workshops etc.

Irregular Expenditure – This includes any deliberate or unintentional act of commission or omission relating to:

- a) The use or presentation of documents which are inaccurate, incomplete/falsified/inconsistent resulting in the undue use or payment of Gavi funds for activities, or the undue, withholding of monies from funds granted by Gavi,
- b) The embezzlement or misappropriation of funds to purposes other than those for which they were granted.

Ineligible expenditure – Expenditure which does not comply with the country's programme/grant proposal approved by Gavi or with the intended purpose and relevant approved work plans and budgets.

Annex 4 – Audit Procedures and Reporting

Audit procedures

Using risk-based audit procedures, the audit included an analysis of reported expenditure (in the Annual Progress Reports or any other periodical financial reports), inquiry/ discussions, computation, accuracy checks, reconciliation and inspection of records/ accounting documents and the physical inspection of assets purchased and works performed using grant funds.

The following procedures were carried out:

- Review of the Financial Management arrangements for the programmes, focusing on the control procedures e.g. appropriation and approval, segregation of duties, roles and responsibilities, reconciliation, verification of delivery of goods and services, invoice verification, retirement of advances controls and imprest;
- Review of the arrangements for managing the bank accounts, including tracing withdrawals and transfers from the programme and designated accounts to determine that they are for eligible expenditure for the programmes;
- Verification, on a sample basis, of procurement undertaken to ensure that the applicable
 policies and procedures are strictly adhered to and that transparency and value for money is
 maintained;
- Review of the mechanism for channelling cash advances from the NDoH to the various budget management centres at the various levels (regional and District) to ensure that there are adequate internal controls in place to timely liquidated such advances;
- Undertaking field visits to regions and Districts to review flow of funds and to determine whether principal activities took place according to the work plan/ schedule of cash advances;
- Visit to the central, regional and District stores to ensure that stock management procedures are being well implemented;
- Physical verifications, on a sample basis, to check the actual delivery of goods, works and services purchased as per the source documents;
- Review of expenditure and identifying expenditure which are not eligible for funding from Gavi programme funds.

Reporting

At the end of the audit, key findings were discussed with the senior management team of PNGs NDoH on 16 February 2016, and to a broader audience of EPI and core partner representatives on 17 February 2016 comprising a presentation summarising these findings.

Annex 5 – Acronyms

AMS Area Medical Stores

CDC Centers for Disease Control, Department of Health and Human Services, U.S.A.

DoF Department of Finance

EPI Expanded Programme on Immunisation

EVM Effective Vaccine Management

GoPNG Government of the Independent State of Papua New Guinea

HSS Health Systems Strengthening

HSIP Health Sector Improvement Program

HHISP Health & HIV Implementation Services Provider

IPV Injectable Polio Vaccines

ISS Immunisation Services Support

KRA Key Result Area MR Measles Rubella

NDOH National Department of Health
NGO Non-governmental organisation
PCV Pneumococcal Conjugate Vaccine
PFA Partnership Framework Agreement
PFMA Public Finances (Management) Act 1995

PGK Papua New Guinean Kina

PNG Independent State of Papua New Guinea

R&I Reception and Inspection

SIREP Special Integrated Routine EPI Strengthening Program

TAP Transparency and Accountability Policy

USD United States dollars

VIG Vaccine Introduction Grant VVM Vaccine Vial Monitoring

Annex 6 – Management comments and action plan as at 17 October 2016 – Vaccine Supply Management (1/3)

RECOMMENDATION	ACTION PLAN	TIMELINE	PROGRESS
4.1 Stock Recording and Forecasting (CRITICAL)			
4.1.1 Undertake a 100% physical inventory of all vaccines and immunization	100% physical inventory		Physical stock count of all vaccines and devices done on 11th & 12th August 2016
supplies so as to amend and correct current stock records. Vaccine stock records	2014	8th - 12th Aug	2014 & 2015 inventory is incomplete due to missing
should be reconstituted for 2014 and 2015. Any differences should be fully	2015	15th - 19th Aug	order and issue vouchers
investigated and justified	2016	22nd - 26th Aug	2016 inventory currently updating
4.1.2 Improve the quality and timeliness of stock recording, including recording	Maintain stock card for each vaccine	22nd - 26th Aug	Once the 2016 inventory for each vaccine is updated,
batch numbers details for all receipts, issuances and when undertaking stock	Update existing stock card for each vaccine	22nd - onwards	the information will be shared into the stock card and
counts			maintained
4.1.3 Improve the accuracy and completeness of how National order fullfiments	Documentation of National vaccine orders		
are documented, including placing all orders in a single consolidated folder, and	2014	8th - 12th Aug	A lot of missing orders for 2014 & 2015 vaccine orders
recording both the date the order was received and shipped, as well as all	2015	15th - 19th Aug	hence unable to document
details on the shipment including total weight, for reconciliation with freight-	2016	22nd - 26th Aug	Documented 2016 vaccine orders
forwarder's subsequent invoice			
4.1.4 Conduct and document routine physical inventories and ensure that any	Develop a database for vaccine order and distribution	8th Aug - 26th Aug	Database developed and ready for input of data
differences identified from the count are investigated and promptly adjusted,	per province		
as necessary			
4.1.5 Ensure that appropriately qualified staff are put in places at AMS	Urgent recruitment of staff according to the new approved EPI staffing structure including the staff for AMS	04th Aug - end of Dec	
4.1.6 Assure that all staff handling vaccines and supplies are provided with sufficiently detailed Standard Operating Procedures with clear roles and	Training of all staff handling vaccines on PNG Technical Guideines on Vaccine and Cold chain Management		Addressed during the TOT training on the newly developed EPI Technical Guidelines from 26th to 29th
responsibility	Orientation of Freight Forwarders (including airline staff)	Aug - Dec 2016	September 2016
4.1.7 Re-evaluate the suitability of the M-Supply system for managing immunization.	Adaptation of M supply software for vaccine management (orientation on using M supply)	_	M-supply software has already being provided; just waiting to be installed and oriented to user
4.1.8 Ensure that adequate stock records are maintained for all stock held	Regular supervision and monitoring of national logistics and forwarding company managing vaccines		Stock count of devices stored at national logistics and forwarding company submitted to STA AMS and TA
externally or under consignment, and ensure that regular physical inventories			AMS and entered into mSupply
are also conducted and reported to the National/Provincial store manager(s).			

Annex 6 – Management comments and action plan as at 17 October 2016 – Vaccine Supply Management (2/3)

RECOMMENDATION	ACTION PLAN	TIMELINE	PROGRESS
4.2 Cold Chain Equipment (Essential)			
4.2.1 The Gavi Secretariat and Alliance partners should ensure that an adequate	Develop an annual implementation plan based on 2016 EVM Assessment Report	Dec-16	
implementation plan, is promptly put in place following the imminent Q1/2016			
Effective Vaccine Management (EVM) assessment, to strengthen the National			
Cold Chain system, while designing a supply chain which maximises			
sustainability, is technology appropriate and fit for purpose considering existing			
resource constraints (and overall maintenance capacity)			
4.2.2 The government should fulfil its commitment to ensuring that cold chain	Hardware and Software training on Cold Chain Management	Sep-16	
equipment is routinely maintained by qualitfied persons with a view to			
prolonging their lifespan			
4.2.3 The EPI unit should ensure that National Operational Guidelines for SIREP	NDoH circuar to all provinces about the use of the National Operational Guideines for SIREP	Aug-16	Pending
are being adhered to			
4.2.4 In accordance with section 10 of the PFA, the government is required to	Further discussion with Planning Division and Medical Supply and Standards Branch (NRA) (draft inter office memo to relevant officers responsible)	Aug-16	No date has been agreed on for a meeting to discuss this agenda
insure programme assests, including vaccines and vaccine-related supplies			
4.3 Vaccine Stock Management (Critical)			
4.3.1 The EEFO principle should be systematically applied at all levels through	Training for AMS vaccine officer on EEFO and VVM type and	Aug 2016 - onwards	Addressed during the TOT training on the newly developed EPI Technical Guidelines from 26th to 29th
the supply chain	stage Regular Update of stock records	Aug 2016 - onwards	September 2016
		-	'
4.3.2 Vaccines should be properly stored, and records maintained so as to	Checking of VVM and recording of the temperature upon	Aug 2016 - onwards	All incoming shipments of vaccines are checked upon
facilitate the tracking and identification of the various expiry dates of product,	receipt of vaccines from Supplier and provide fridge tags for every delivey of vaccines to the provinces.		arrival at the airport and upon delivery to AMS Badili before storage and a VAR is submitted to UNICEF (as
and the decimination of the full out expiry duties of producty	levery derivey of vaccines to the provinces.		much as possible within the 72 hours deadline)
as well as the temperature in situ throughout the various points in the cold			much as possible within the 72 hours deadline)
chain	Timely submission of VAR	Aug 2016 - onwards	
4.3.3 Fridge tags or thermometers need to be made available at all levels in the	Training of officers at all levels on the use of fridge tags and avaiability of fridge tags at all levels	Aug 2016 - onwards	Addressed during the TOT training on the newly developed EPI Technical Guidelines from 26th to 29th September 2016
vaccine supply chain, and temperature records maintained such that vaccine	Follow up on PCV-13 vaccine expired July 2016	Aug-16	Cold Chain Officer has checked with provinces, only
exposure to temperature variations may be tracked. Additionally, temperature			Gulf no report. 6300 vials expired at the provincial level, this is from Sandaun (2000), NIP (2700), Enga
monitoring provides information on faulty cold chain equipment			(100) & Misima (1500), all other province distributed their stock.

Annex 6 – Management comments and action plan as at 17 October 2016 – Vaccine Supply Management (3/3)

RECOMMENDATION	ACTION PLAN	TIMELINE	PROGRESS
4.4 Vaccine wastage due to human error (Critical)			
4.4.1 Review and update its vaccine management guidelines and standard	Please refer to the action point against recommendation 4.1.6		
operating procedures in conjuction with the follow up resulting from the Q1/			
2016 EVM assessment, and suitable training should be shared and discussed with all individuals responsible for storing and handling the vaccine			
4.4.2 Review and discuss its contractual arrangements with its national logistics	Schedule a meeting with the national logistics and	11th Aug 2016	
and forwarding company. Compensate should be sought for the loss of 13 500	forwarding company to discuss the issue on the loss of 13		
doses of Pentavalent while under the responsibility of the freight-forwarder	500 doses of Pentavalent		
4.4.3 Undertake an open vial wastage rate assessment to evaluate whether	Conduct vaccine wastage rate assessment survey in both national and sub national level	2017	
actual open vial wastage rates are in line with WHO benchmarked rates			
4.4.4 Adopt suitable reporting procedures to ensure that both open- and closed-	Review and update reporting forms and tally sheets to include wastage	Aug-16	Pending (officer responsible currently engaged in DHS)
vial wastage is duly quantified and reported back to the NDoH EPI unit from the			
District, Provincial and National levels			
4.5 Vaccine stock management in Eastern Highlands			
4.5.1 Individuals managing vaccines at Provincial levels are trained on vaccine	Training, coaching and mentoring the PCCLO in 6 priority	Sep - Dec 2016	
management	provinces (includng EHP) on vaccine and cold chain		
4.5.2 An up-to-date standard operating procedures for vaccine management is made available and enforced at all levels of vaccine management	management		
4.5.3 Stock records are adequately maintained and can be relied upon for vaccine forecasting and reordering purposes			
4.5.4 Individuals handling the vaccines are sufficiently trained on temperature monitoring			
4.5.5 Routine temperature monitoring is carried out and recorded			
4.5.6 Thermometers are verified to be accurate, in working condition, and			
replaced where necessary	Province to identfy an under-study to PCCLO to be trained		
	on vaccine and cold chain management		

Annex 6 – Management comments and action plan as at 17 October 2016 – Budgeting and Financial Management (1/2)

RECOMMENDATION	ACTION PLAN	TIMELINE	PROGRESS
5.1 HSS workplan and progress reporting (Essential)			
5.1.1 Verify the relevance and accuracy of the 2014 Annual Progress Report and if necessary, resubmit a corrected version to Gavi	NDoH has reviewed the 2014 Annual Progress Report, Workplan and Budget and resubmitted the corrected version of the Budget Expenditure report to IRC with Gavi HSS reprogamming Grant Application	Done in Jan 2016	
5.1.2 Timely complete and submit 2015 reports as per Gavi's Financial	Submission of Joint Appraisal Report (JAR) 2015	Sep-16	
management and audit requirements		-	
5.1.3 Submit a formal request to reprogram its remaining HSS grant funds in time	Submission of GAVI HSS Reprogramming Grant Application	Done in Jan 2016	
for consideration by the next Independent review Committee session.			
5.2 Reporting inconsistencies and delays			
5.2.1 A process which ensures a greater level of scrutiny and involvement of persons who are familiar with both the financial and non-financial programme	A focal person in HSIP will work closely with the EPI; an independent review of transactions and monthly reports		On going monthly activity
performance	will also be performed by HSIP	Aug 2016 - onwards	
5.2.2 A formal review and authorisation procedure. This should be done by persons not involved in the report presentation.	Family Health Manager to finally review and Approval the Financial reports		On going monthly activity
5.2.3 All financial reporting which is relied upon for decision-making to be	Conduct regular coordination meeting with HSIP and EPI unit	Aug 2016 - onwards	Review GAVI activities and see if need to meet every
submitted to HHISP Finance and Accounting team assigned to the NDoH for a			month or every quarter. HSIP and EPI team met in October on demand to clarify some outstanding
due review and approval process			issues

Annex 6 – Management comments and action plan as at 17 October 2016 – Budgeting and Financial Management (2/2)

RECOMMENDATION	ACTION PLAN	TIMELINE	PROGRESS
5.3 External audit requirements			
5.3.1 Beginning 2014, the HSIP Trust Account audited financial statements	2015 and 2016 Audit Financial Statements to to include GAVI	Aug 2016 - onwards	2014 Audit Completed awaiting Audit Cerificate. GAVI
should include an additional Gavi specific certificate of income and expenditure	specific statement of Income and xpenditure as an annexed		Income and expenditure form part of the main
which identifies in substance the income, expenditure and closing balances for	disclosure to the overall financial statements		Financial statements; There was no additional
each Provincial advance. This certificate may be included as an additional			Annexed disclosure for GAVI specific Certificate;
annexed disclosure to the overall financial statements			2015 Audit is on progress and the audited financial
			statements will reflect a GAVI specific Income and
			expenditure disclosure as an annex to the main
			statements.
5.3.2 Strengthen its Provinces' capacity to continue to maintain donor-specific	Provinces are asked to provide monthly reports and separate		On going monthly activity
sub-ledgers and to monthly produce the "HSIP Trust Account funding source	ledgers are kept for different funding source. The Ledgers		
report" as required	are checked monthly by HSIP provincial Section.		
5.3.3 Record all transfers of funds to Provinces as advances rather than as	This will be taken into account in future funding		
expenditures in accordance with paragraphs 18 of the Financial Management			
Requirements of the PFA			
·	The post and post Future I And the conditions of the conditions		
5.3.4 Complete external financial statement audit within six months of the	The 2014 and 2015 External Audit was delayed for reasons		
GoPNG fiscal year-end in accordance with paragraph 39 of the Financial	beyond HSIP control but 2016 External Audit will be		
Management Requirements of the PFA	conducted within six months of GoPNG fiscal year		

Annex 6 – Management comments and action plan as at 17 October 2016 – Expenditure and Disbursements (1/2)

RECOMMENDATION	ACTION PLAN	TIMELINE	PROGRESS
6.1 Ineligible expenditure			
6.1.1 Review the accounting records, from the inception of Gavi grants to date,	Discussion with the EM Public Health regarding this	9th Aug	Gavi funds should not be used for other activities
identify and quantify all instances of ineligible expenditures, and promptly	recommendation		outside Gavi set activities
refund all outsting balances to Gavi			Provincial workplan must highlight source funding for
6.1.2 Adhere to the terms and conditions of PFA and relevant grant agreements			each activity
in regards to its ability to use Gavi funds for unplanned activities, including			
emergency situations			
6.2 Outstanding Travel Advance			
6.2.1 Clarify the timeline for submission, review, approval and acquittal of staff	Procedures are in place and well documented and available	Aug-16	Strict implementation of existing procedures
advances	for review by GAVI authorities		
6.2.2 Ensure the provisions of Financial Management Manual are adhered to,	Review and adhere to FMM: No acquittals No travel	Aug 2016 - onwards	No new advance unless the previous one has been
specifically "A new advance will not be made for any purpose while the			acquitted; Letters circulated to the hotels; Salary
previous one to the same person is unacquitted except where evidence is			deduction as per NDoH Audit Committee
produced that payment is still continuing and repayment action on the first			recommendations
advance is not deliberately delayed."			
6.3 Incomplete and untimely Provincial acquittals			
6.3.1 Update the funding source segment of its Provincial chart of accounts by	HSIP to review the Provincial Chart of Account and create a	Jan 2017-Onward	HSIP Administative staff reminded to properly record
creating a Gavi-specific segment, so as to enable the tracking of Gavi's funding	GAVI specific segment independent from other sources		the receipts and expenditure according to funding
independent from other sources also funding immunization	funding immunisation		source; separate ledger be kept for each source.
macpenaent from outer sources also randing minianization			
6.3.2 Ensure that relevant sub-National personnel are knowledgeable with the	HSIP Provincial section continuously assist in capacity		
accounting structure of Provincial Government to properly classify receipts and	building to the provinces to ensure the personnel are		
payments, with particular focus on accounts fields Program/Activity (field #10/	properly equiped to perform their duties.		
#11) and Donor Identification (field #15)			
6.3.3 Follow up with Provinces and confirm that they comply with financial	HSIP Provincial section continuously assist in capacity		
regulations and instructions, maintain funding source specific sub-ledgers, and	building to the provinces to ensure the personnel are		
timely submit complete acquittals including the "HSIP Trust Account funding	properly equiped to perform their duties.		
source report".			
6.3.4 Ensure all relevant personnel are briefed and trained on the above change	As above		
6.3.5 Improve the "funding source report" by inserting a balance brought	As above		
forward column into the template	A3 above		
iorward column into the template			

Annex 6 – Management comments and action plan as at 17 October 2016 – Expenditure and Disbursements (2/2)

RECOMMENDATION	ACTION PLAN	TIMELINE	PROGRESS
6.4 Payment of per diems in Eastern Highlands Province			
6.4.1 Lack of justification for payment			
6.4.1.1 Per Diem allowances should only be paid to staff who qualify for the	Advance Register be maintained and updated regularly	8th or 9th Aug	
allowance. Such payments should only be made where there is a valid approval			
on file			
6.4.1.2 The HHISP Finance and Accounting team should follow up on and quantify			
any per diem payments paid over the entire grant duration (including a review			
of the Goroka hospital case) where entitlements were unjustified			
6.4.1.3 Reimbursement of any and all unjustified payments identified over the			
entire grant duration			
6.4.2 Payment of allowances without proof of receipt			
6.4.2.1 Ensure that the transfer of all cash payments, including allowances	The signed receipts by the recipients to be maintained with	8th or 9th Aug	
are supported by a signed receipt by the recipient	the Advance Register; No other person will sign on behalf of the recipient		
6.4.2.2 After every activity, HSIP team should confirm attendance of all participants and amounts received	Advance Management officer to reconcile the attandance list with the advance paid after every activity		

Annex 6 – Management comments and action plan as at 17 October 2016 – Procurement (1/2)

RECOMMENDATION	ACTION PLAN	TIMELINE	PROGRESS
7.1 Non-compliance with the applicable procurement regulations			
7.1.1 Procurements were unplanned			
7.1.1.1 Prepare a credible Annual Procurement Plan as defined by the PFA and	Develop a Annual Procurement Plan	Aug - Nov 2016	Vaccine Procurement is done, share with all
National regulations and submit for approval.	1. Vaccines		Develop a procurement plan for all other supplies
	2. Logistics		according to workplan
7.1.2 Considerations was not given to existing "Whole Government" contracts			
7.1.2.1 Duly incorporate a consulation step of existing WoG contracts	All procurement of vaccines and cold chain through UNICEF	2016 - onwards	Copy of national logistics and forwarding company
7.1.2.2 Formally document that the consultation of WoG contracts has been	SD. All other items will go through the normal government		contract must be shared with EPI
carried out	process. Procurements less than PGK300, 000 will go through		
7.4.2.2 Formally document the respective decision taking the same	the NDoH Commercial Procurement Branch		
7.1.2.3 Formally document the respective decision-taking thereon	_		
7.1.2.4 Select WoG contracts whenever these provide better value for money			
than self-procurement.			
7.1.3 No evidence of requests for quotation from tendering vendors			
7.1.3.1 End-to-end communication with the tendering vendors	Discussion and involvement of the Commercial Procurement	Aug 2016 - onwards	For supply of stationary, contract in place, no need for
	Branch for any procurement for EPI		3 quotes, submit list of requirements to Commercial
7.1.3.2 Short-listing and vendor selection procedures.			Support Branch
7.1.4 Quotation register not maintained			
7.1.4.1 Put in place and maintain a quotation register to manage and track all	Discussion and involvement of the Commercial Procurement	Aug 2016 - onwards	
	Branch for any procurement for EPI		
supplier quotes, in compliance with National regulations			
7.1.5 Procurement without Minor Contracts Agreements			
7.1.5.1 In compliance with National regulations, ensure valid Minor Contract	Discussion and involvement of the Commercial Procurement	Aug 2016 - onwards	
	Branch for any procurement for EPI		
Agreements for all procurement instances which meet the stated thresholds			
7.1.6 Fixed assets registers were not maintained			
7.1.6.1 Physical inventory of existing assets, verify working conditions	Develop a EPI Fixed Asset Register and update	Aug 2016 - onwards	
on regular basis and provide and document maintenance performed where			
necessary			
7.1.6.2 Record all assests in a fixed assets register and consolidate by funding	1		
source at National Level			
STATE OF THE STATE			

Annex 6 – Management comments and action plan as at 17 October 2016 – Procurement (2/2)

RECOMMENDATION	ACTION PLAN	TIMELINE	PROGRESS
7.2 Weak interna controls ove the EPI units procurement activities			
7.2.1 Procurement undertaken outside of the designated procurement unit			
7.2.1.1 Future procurement involving Gavi funds should be carried out with	Discussion and involvement of the Commercial Procurement	Aug 2016 - onwards	All procurement request to be authorised by
support of NDoH's Commercial Support Services unit	Branch for any procurement for EPI	_	Executive Manager Public Health before being
7.2.1.2 Clear segregation of duties between the different steps from			submitted to Commercial Procurement Branch
procurement through to executing payments to suppliers			
7.2.1.3 Segregation of duties should be reviewed regularly to ensure it remains			
appropriate and relevant.			
7.2.2 Budget overrun and unbudgeted procurement			
7.2.2.1 Budgetary amendments, variations and reallocation of funds should be	Monthly update of EPI budget and expenditures (recurrent	Aug 2016 - onwards	
formally justified and approved according to the provisions of PFA	and DPs Funds)		
7.2.2.2 Procurement should be carried out as per the workplan and with			
involvement from the Commercial Support Services unit			
7.2.2.3 Supplier payments should be released only by the HSIP Financial	-		
Controller after confirming both the appropriateness of the budget line and			
availability of funds.			
7.3 Inadequacies in procurement documentation and other irregularities			
7.3.1 Unsupported procurements	All Control of the co		
7.3.1.1 Ensure that all transactions and contracts entered into are supported	All transactions for EPI should be in line with the AIP or GAVI	Aug 2016 - onwards	
with adequate and complete supporting documentation	Budget Framework		
7.3.1.2 Put on file necessary supporting documentation adequately cross-			
referenced to the relevant accounting records.			
7.3.2 Contracts awarded without demonstrating competition			
7.3.2.1 Vendor selection for Gavi-supported activities is competitive and duly	Discussion and involvement of the Commercial Procurement	Aug 2016 - onwards	
documented	Branch for any procurement for EPI		
7.3.2.2 Only quotations from qualifying suppliers are short-listed and selected			
7.3.2.3 Vendor selection be made on best value for money, and any exception			
be duly documented and authorized by an independent function			
7.3.3 Inadequately supported delivery (Critical)			
7.3.3.1 Obtains and maintains in its records adequate proof of delivery from all	Develop a dry goods inventory	Aug 2016 - onwards	Drafted a template for inventory
suppliers			
7.3.3.2 Develop and maintains a dry goods inventory incorporating a record of			
delivery and distribution of goods procured with Gavi's financial support.			
7.3.4 Payments not supported by a valid invoice and timing inconsistency			
7.3.4.1 Original supplier invoices	Koon file and inventory	Aug 2016 onwards	
<u> </u>	Keep file and inventory	Aug 2016 - onwards	
7.3.4.2 Credible confirmation of satisfactory delivery of goods or performance			Three EPI individuals to sign off on all delivery
of services in accordance terms and conditions			dockets



Audit and Investigations

Final Investigation Report

Misuse of Gavi Funds in the
Papua New Guinea

National Department of Health

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1. Executive Summary

- 1.1 Gavi's audit and investigations team has found that Gavi funds were misused by the Expanded Programme on Immunisation (EPI) unit at the Papua New Guinea National Department of Health (NDoH). The misuse comprised of irregular procurement practices.
- 1.2 The majority of these procurement practices were conducted, controlled or authorised by a senior EPI official. The methods of misuse included forging quotations; colluding with suppliers to overcharge for purchases; awarding contracts for supplies that were not needed or delivered; and, making duplicate payments for the same purchase.
- 1.3 There was a lack of proper control in place over the expenditure of Gavi funds within the EPI unit, and while more stringent controls and verification could have reduced the opportunities for misuse, even the observance of normal controls should have given the Finance Unit the ability to question much of the expenditure.
- 1.4 The total expenditure questioned in this investigation is US \$408,942 (which comprises approximately 42% of all procurement expenditure in 2013-15), comprised as follows:

<u>Description</u>	<u>Amount</u>
Inflated prices for purchase of office supplies (paragraph 3.18)	6,878
Inflated prices for printed supplies (3.30)	122,126
Manipulated procurement process by fabricated quotations (3.38)	63,940
Unjustified repeat procurements of factsheets (3.48)	39,220
Unjustified and manipulated procurement of labels / packing tape (3.61)	34,441
Printing of unsuitable booklets (3.70)	20,195
Goods not delivered or misappropriated (3.78)	18,678
Manipulated procurement process – faulty cold storage (3.92)	25,403
No evidence of services supplied for cold store maintenance (3.96)	21,170
Duplicate payments paid by Gavi and another donor (3.105)	7,875
Unnecessary/unjustified purchase of safety boxes (3.112)	17,324
Unnecessary/unjustified purchase of indelible markers (3.113)	17,870
Unnecessary/unjustified purchase of toner cartridges (3.114)	5,936
Award of business to dormant vehicle hire companies (3.118)	7,886
Total estimated value (USD)	408,942

- 1.5 The Gavi investigation team recommends that EPI procurement responsibilities are transferred to a centralised function within NDoH, and that the Finance Unit should be more stringent in rejecting payment requests based on documentary irregularities. It further recommends that NDoH consider whether any conduct by individuals within the EPI team should be referred for further action by the appropriate national authorities.
- 1.6 The NDoH has not responded to the findings or recommendations in this report.

2. Introduction

- 2.1 Concerns over procurement practices were first raised when Gavi conducted a routine programme audit at the NDoH in January 2016, which reviewed a number of programmatic and financial activities taking place since 2012.
- 2.2 In the course of this audit, Gavi noted multiple irregularities in a number of procurements undertaken by the EPI department. These included excessively high prices; discrepancies in tender practices; missing records; questions as to the need for some of the purchases; and, the veracity of assorted documentation.

- 2.3 The majority of questionable procurements took place between 2013 and 2015, under the management of a senior EPI official. As of January 2016, the official had been replaced on an interim basis by an EPI programme officer.
- 2.4 After consultation with senior officials at the NDoH, Gavi considered that there was a prima-facie case of misuse of its funds within the EPI programme and agreed with the Health Secretary that Gavi would consider the possibility of an investigation.
- 2.5 Subsequently, Gavi commenced an investigation pursuant to section 22 of Annex 2 of the Partnership Framework Agreement dated 29 November 2013 between Gavi and the NDoH. The purpose of the investigation was to establish whether misuse occurred; and to assess the extent of any funds involved. An investigation team returned to the NDoH from 23 May to 3 June 2016.
- 2.6 The investigation focussed on the activities of the EPI team, and consisted of reviews of the documents; interviews with staff; liaison with in-country partners; and, visits to suppliers.
- 2.7 The investigation team also conducted a forensic analysis of computers used in the EPI team. This identified several company header/quotation templates in the computer used by one senior EPI official, and other information suggestive of forgery or collusion. The analysis pointed towards such documents having been modified on the computer, but stored on a separate external disc, which was not provided to the investigation team.
- 2.8 In this report, employee and supplier names have been redacted or changed to maintain the confidentiality of the investigation process. Cheque numbers are however provided throughout the report to facilitate NDoH's review of documents.
- 2.9 A draft copy of this report was sent to the NDoH on 20 October for comment. Despite following up, no response has been received, and Gavi therefore maintains the findings and recommendations unchanged in this final report.
- 2.10 Amounts in local currency are converted to US dollars at the date of payment, where applicable.

3. Investigation

Background

- 3.1 NDoH Procurements must adhere to the Public Finance (Management) Acts of 1995 and 2013 which requires them to be fair, equitable, transparent, competitive and cost-effective. However, the investigation found that this was not the case in many instances and misuse was perpetrated using a variety of methods.
- 3.2 In almost all cases described herein, payments were made to a small number of suppliers who appear to have been favoured by individuals in the EPI team at the expense of other vendors. In each case, the existence of documentary irregularities was identified, the use of which helped to circumvent proper procurement procedures, but which also presented opportunities for the finance unit to identify unusual transactions. Whilst a few suspicious transactions were indeed detected and challenged, most were not.
- 3.3 A number of the procurements were authorised during the absence of the relevant Executive Manager who oversaw the activities of the EPI team. This allowed procurements to be authorised by others without the expertise or scrutiny that would ordinarily have been applied.

Favoured Suppliers

3.4 Certain suppliers to the EPI team appeared to receive favourable treatment, and payments to these vendors form the majority of expenses questioned by Gavi in this report.

- 3.5 Many of the questioned transactions related to printing. This is a high risk activity, partly because printing can be easy to justify even where the benefit may be questionable, but also because of the difficulties in establishing value for money, and verifying quantities and specifications of printed items delivered. Together with the fact that printed items are fungible, this makes it difficult to determine whether value was received and heightens the risks of misuse. Gavi notes that printing and stationery firms dominated the list of vendors that appear to have been favoured by individuals within the EPI team.
- 3.6 Among these suppliers were five businesses, each ostensibly individual entities. However, further inquiries showed that they are either owned by the same person, or someone with the same surname; and/or share an addresses indicating ownership by the same family. Further, a comparison of some of the invoices showed that some vendors in the group shared almost identical invoice wording and templates and/or consecutive phone numbers. One of these vendors has previously failed to deliver the invoiced quantity of goods and was the subject of NDoH internal audit inquiries. In each case where Gavi identified the use of one of these businesses, there were significant irregularities in the procurement process. Each of these companies were awarded EPI contracts at different times, but there was no acknowledgment that the companies were related. In some instances, the companies competed in the same tender which helped to steer the winning contract to the same people. A senior EPI official also had a copy of one of the supplier's quotation templates on his computer. These vendors are referred to as **CW, VB, IS, GP** and **ST**.
- 3.7 Another company, **MM**, appeared to be in collusion with a senior EPI official. As with the above suppliers, a quotation template for this business was found on the senior EPI official's computer. On 22 May 2014, this vendor sent the employee an email with the subject header, "Child Health Register". The text stated, "[EPI Official's name], you are full of it. You have orchestrated this all long [sic] along for your own personal gain."
- 3.8 Another supplier was company **VY** which was owned by an NDoH employee who worked closely with the EPI team. The employee has subsequently left NDoH employment. A strategy used to award business to this vendor was to acquire competing quotes from overseas rather than local suppliers, in order to make VY appear more competitive.

Document Irregularities

- 3.9 In awarding contracts, particularly to favoured suppliers, the investigation observed a pattern of irregularities in the procurement documentation. These included:
 - Missing documents, including quotations, invoices and delivery notes;
 - Frequent absence of justification for purchases;
 - The absence of correspondence with vendors;
 - Purchase orders being submitted after the supply has taken place;
 - Payment before delivery;
 - The lack of inventory records for non-vaccine stock; and,
 - Forged documents.
- 3.10 Despite various irregularities and the absence of critical documents, few payments were questioned by the finance unit, who proceeded to process payment in almost all cases.

Specific Instances of Misuse

3.11 The investigation found specific instances of misuse, which were either used alone or in conjunction with other types of misuse, as described below.

- *Inflated Prices of Goods*
- 3.12 The price of many goods purchased was significantly higher than expected. Most inflated prices were for printed goods (described further, below) but in one procurement (NDoH cheque number 214820) it applied to the purchase of stationery items.
- 3.13 In this instance, the EPI team was procuring ordinary plastic biro pens ordinarily worth just a few cents at the equivalent of \$3 each. This was despite the fact that the same unit had procured pens in another procurement (cheque 213521) at just \$0.27 (PGK 0.80) per packet of 12. The EPI unit also procured 4gb USB drives at \$60 each, despite them being readily available at retail outlets for just \$10 each (PGK 29 to 30).
- 3.14 Given the need to show that winning bids are the most competitively priced, anyone manipulating the procurement process in favour of an over-priced supplier has to show that competing bids are priced even higher still. This was achieved through at least two different methods: forged documentation and 'support quotes'. Sometimes as in this case both methods were used together. (Support Quotes are where a company deliberately prepares a quotation with inflated prices. These may be prepared by employees without authorisation, often as a favour to or in return for a small payment from the person asking for the quote. These quotes are then presented as legitimate quotes in a procurement in order that another bidder can be selected for presenting lower but still overinflated prices.)
- 3.15 In this procurement, a losing quotation from a legitimate supplier was forged. The employee named on the quote confirmed that it was a legitimate quote but when shown the NDoH copy, advised that the prices were inflated. The font for the inflated figures was slightly different to the rest of the text suggesting software was used to configure forged quotes. (Gavi's computer forensic analysis also revealed that various supplier headers and quotation templates were created on the computer of a senior EPI official, suggesting that manipulation of quotations may have been attempted on multiple occasions, as described further in this report).
- 3.16 The other losing quotation was a support quote. The vendor confirmed that the quote with their letterhead indeed contained inflated prices and was not officially authorised by them, but rather appeared to have been issued by a former employee. Both suppliers provided Gavi with actual prices for the goods quoted:

Supplier	Method	Inflated Quote	Actual Price	Excess in Kina	Excess in USD @2.77
A1*	Forged Quote	25,431.34	6,148.72	19,282	6,961
A2*	Support Quote	26,556.20	5,468.98	21,087	7,612
ST	Winning Quote	n/a	24,522.30		
Excess paid over lowest correct quote			19,0)53.32 Kina or \$6	5,878

^{*} Quotes may vary by about 50 kina due to different packet sizes for pencils

- 3.17 The purchases were for a workshop in the region of Lae. However, rather than procure the goods locally, the purchase was made at inflated prices to supplier ST, based in Port Moresby. EPI staff could not explain why the goods were procured centrally, thus requiring staff to transport a heavy consignment of paper, toner cartridges, several hundred pens, a hundred calculators and other assorted items in their luggage.
- 3.18 Gavi therefore questions the sum of **US\$6,878**.

- Inflated Prices for Printing of Temperature Charts and Vaccine Order Forms
- 3.19 The investigation also found irregularities in the procurement of various printed goods, including temperature monitoring charts and vaccine order forms. The procurements were supported by fabricated vendor quotations; the price paid for the goods was excessive (some were inflated by over 1,000%); there was no documented business need for the procurement; no assurance that the goods were delivered; and, no stock/distribution records were available.

	#	Winning Supplier	Cheque	Quotations	Stated Delivery	Total Paid (PGK)
oring rts	Α	ММ	210269	Vendor 1 & 2- 400 Vendor 3 - 500	No delivery note (paid 14 Nov 13)	37,582.60
Monitoring Charts	В	Delisted	213495	Vendor 1 & 2 - 500 Vendor 3 - 3,000	16-Dec-14	50,600.00
Forms	С	ММ	210268	Vendor 1 & 3 - 400 Vendor 2 - 500	Not available	37,582.00
Vaccine Order Forms	D	Delisted	213725	Vendor 1 & 2- 500 Vendor 3 - 3,000	16-Dec-14	50,600.00
Vac	Е	IS	213540	Quoted - 2,000 Supplied - 700	19-Dec-14	137,500.00
Other	F	CW	212708	20,000 28-Aug-14		157,294.50

Procurements of printed goods – two separate tenders for monitoring charts, three for vaccine order forms and one for other forms.

- 3.20 The above table shows the inconsistencies in the quotes received. There was no evidence that the EPI team communicated the correct specifications to the vendors. Given the different quantities quoted by suppliers, it was not possible for EPI to fairly compare prices across the different tenders and there was no indication that they queried the inconsistencies.
- 3.21 These procurements were conducted without defining the business needs either for the products themselves or the quantities. The senior EPI official told Gavi that all the procurements between 2013 and 2015 were done on ad-hoc basis.
- 3.22 Purchases A and C were awarded to supplier MM. Both tenders involved the same winning and losing companies. The senior EPI official maintained graphical files containing the logos and headers of various suppliers on his computer. Amongst the files found were electronic copies of quotation forms from the two losing bidders. In one instance, the official had the blank template form, while in the other the form had an identical quote number but the date and the contents were different, thus suggesting these documents were fabricated. There was also no evidence of delivery for these purchases.

- 3.23 In Procurements B and D, it was noted that the supplier was removed from the PNG national register of companies on 4 December 2014, i.e. 12 days before it issued an invoice to the NDoH or allegedly delivered the books in question. Moreover, the purchase order was not raised for a further two days after the invoice date, and the samples of the form on file were printed by a different company to the winning bidder, casting further doubt on whether the winning supplier was properly selected and/or actually undertook and delivered the order.
- 3.24 All the quotations were at inflated prices: The per unit price (PPU) paid by EPI was PGK 93.96 for procurement A and PGK 101.20 for procurement B. The investigation team obtained quotations from two reputable local vendors, according to which the average price per unit was under PGK 11. In comparison, the average price paid by EPI was PGK 98 suggesting, i.e. 796% higher. The price inflation was even higher in relation to vaccine order form books, reaching 1,100%.

Purchase	Price per Unit	Market Price	Excess	Total Paid	Max Payable	Overpaid (PGK)
Α	93.96		796%	37,582	5,440	32,142
В	101.20			50,600	5,440	45,160
С	93.96	10.88		37,582	5,440	32,142
D	101.20		1100%	50,600	5,440	45,160
Е	196.43			137,500	21,760	115,740
Total				313,864	43,520	270,344

- 3.25 According to the winning quotation in purchase A, a single booklet of temperature monitoring charts contained 24 pages of 80gsm standard quality A4 paper, as used in office environments. However, when shown samples of the temperature monitoring chart obtained from the procurement file, local vendors confirmed to Gavi that the paper was of a lower specification, i.e. 60 gsm.
- 3.26 Gavi interviewed the relevant EPI staff members, and even though various staff's names were on the quotations, all staff denied being involved, and stated that other staff members had put their names down as contact points. Ultimately nobody in the EPI team took responsibility for obtaining the quotes or could explain how they were obtained, and Gavi suggests that this is further indicative of misuse.
- 3.27 The temperature monitoring charts were meant to be used at the provincial vaccine storage facilitates. However, no stock records were maintained to show the receipt or distribution of the procured materials, and thus there was no assurance that they were received, especially given that the delivery note to the NDoH was unsigned.
- 3.28 Procurement E was won by supplier IS, who offered 2,000 units for PGK 137,500. However according to the delivery note and invoice, only 700 units were delivered but the EPI team nevertheless made the full payment. No follow-up for the incomplete delivery was conducted, and no EPI officials could explain the discrepancy. Furthermore, the goods were purportedly delivered the day after the purchase order was issued which would allow insufficient time for the supplier to receive, print, check and deliver the order. Further, the invoice date of 12 June was several months before the quotation date of 6 November 2014. In view of the irregularities, Gavi visited a local vendor whose name appeared on one of the losing quotes. The company confirmed that the quotation was not legitimate and contained several errors, e.g. the phone number and email address in the header were incorrectly formatted and did not match the details at the bottom of the same quotation.

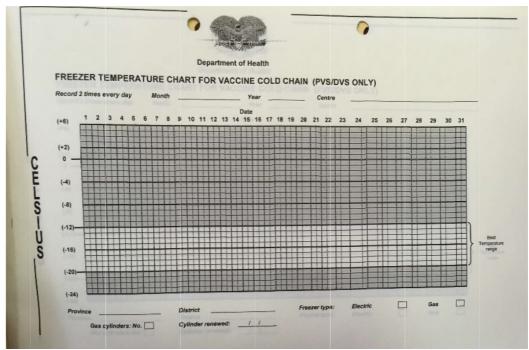
- Furthermore, the individual who had allegedly signed on the quotation had left the organization before the date on the quotation.
- 3.29 Consistent with the findings in other procurements and applicable to all the purchases of vaccine order forms described above, there was no documented justification or other evidence for the need to purchase either the temperature monitoring charts or the vaccine order forms, or that the procured quantities were appropriate. In addition, the absence of stock records raises questions as to whether these forms were received or distributed appropriately.
- 3.30 While the inflated prices are calculated to have cost a premium of PGK 270,344, or US **\$105,192** (at the exchange rate of 2.57), in the absence of any proof of delivery Gavi questions the full amount of the purchase in the sum of PGK 313,864 or **US\$122,126**.

Fabricated Quotations

- 3.31 Another procurement which was neither fair nor transparent was in the printing of vaccine temperature management forms (cheque 212708). Vendor quotations were fabricated to give the impression that the procurement was competitive, when in fact the contract was awarded to vendor CW, which was owned by the same owners of other favoured suppliers and who were known to have previously failed to deliver on contracts to NDoH.
- 3.32 In this purchase, the following quotations were found in the procurement file:

Vendor	Quantity	Total	PPU
Vendor CW - winner	20,000	157,294.50	7.8647
Vendor 2	20,000	158,378.90	7.9189
Vendor 3	20,000	159,159.00	7.9580

- 3.33 The Gavi investigation team visited the two losing vendors (2 and 3), who stated that the quotes found in EPI's procurement files were not issued by them. Although the name of individuals that purportedly issued the quotes were actual employees of the vendors, the signatures in both the quotes were fabricated. Both losing vendors had previously provided quotes to NDoH and according to them it appeared as if the earlier quotations were altered to serve as a new quote. Vendor 3 also mentioned that the company logo in the quotation was outdated and had not been in use at the time of the fabricated quote in June 2014.
- 3.34 These vendors also stated that the product specifications in the quotations were vague and insufficient for them to be able to quote a price and proceed with production. The product descriptions were also not comparable across vendors. For instance, one of the fabricated quotes mentioned a different (but still vague) product description of "International Review" compared with the other two quotes, for "Effective Vaccine Management Forms".
- 3.35 The quotation from the winning bidder referred to 20,000 copies of a single item. However the payment voucher referred to four different types of vaccine management forms, thus suggesting other irregularities, e.g. a delivery that did not match the goods ordered. Indeed, the lack of care that went into the product requirement was demonstrated through a sample of one of the forms attached to demonstrate proof of purchase, which were for freezer temperature charts indicating an optimal vaccine storage temperature range of -12 to -20c. However, Gavi does not support vaccines requiring freezer storage in PNG. Gavi supported vaccines require an optimal storage range of +2 to +8c of vaccines supported by Gavi in PNG. Thus, the purchase (even if delivered) was not fit for purpose.



Vaccine forms specifying incorrect temperature range

- 3.36 Gavi found two almost but not fully identical copies of an original invoice from the winning supplier on the procurement file, which had the same invoice number and other details, but where the printing was aligned differently in each case and contained slightly different signatures. It is unclear why the EPI team would need to have different copies of the same incomplete supplier invoice, and this suggests some EPI involvement in the production of these documents. Multiple copies of the same invoice were found on other occasions from the same group of companies, as described further on in this report.
- 3.37 No warehouse records were maintained to demonstrate that printed goods were received and distributed to the provinces.
- 3.38 Gavi therefore questions the amount of PGK 157,294.50, or US \$63,940 (at the exchange rate of 2.46).
 - Repeat procurement of identical materials
- 3.39 The procurement of printed materials was further questioned in relation to the purchase of Frequently Asked Questions (FAQs) and Factsheets relating to Pneumococcal Conjugate Vaccine (PCV-13). The investigation found that favoured suppliers were used once again, and the EPI team had conducted repeat procurement of identical materials without appropriate identification of business need, supporting documentation or proof of delivery. Some quotations were fabricated, and prices were inflated:

Incidence	Purchase Order	Delivery date	Invoice Date	Cheque date	Units	Amount in PGK
Purchase G Chq 210187 Supplier CW	31 Oct 13	04 Nov 13	4 Nov 13	31 Oct 13	FAQ - 500 Factsheet - 500 (Total 1,000)	50,545.00
Purchase H Chq 210277 Supplier MM	19 Nov 13	No evidence of delivery	5 Nov 13	19 Nov 13	FAQ - 500 Factsheet – 500 (Total 1,000)	51,791.84

Total						102,336.84
Purchase J Chq 213518 ¹ Supplier CW	18 Dec 14	Non- delivery See para 3.47	19 Dec 14	19 Dec 14 cancelled	FAQ - 2,000	76,780.00

- 3.40 PCV-13 was to be introduced in the second quarter of 2013, and FAQs and factsheets are usually distributed at the time of the vaccine introduction. However, the introduction of PCV-13 was delayed and did not take place in either 2013 or even 2014. Accordingly, there was no business need for these purchases at the time, and no justification was available.
- 3.41 There was also no justification for the quantities to be procured or any documented reason for making a second identical purchase shortly after the first one. Both involved 500 copies of the FAQ and the Factsheet, which is a disproportionately low number for a national rollout. (In comparison, UNICEF supplied 10,000 such factsheets in October 2014 in anticipation of the roll-out).
- 3.42 Despite the low quantities, the amount spent was more in alignment with the cost expected in a high quantity of printed materials. The investigation questions the price of over 50,000 Kina per order, or about 50 kina or US \$20 per FAQ booklet or factsheet, which is disproportionate to the value received. Indeed, using a sample of the same printed materials, the Gavi investigation team approached two other reputable local vendors who quoted prices at a third of those paid by the NDoH:

Description	FAQ	Factsheet
Average PPU paid by EPI for Purchases G and H	52.89	49.44
Market survey PPU	14.22	18.59
Difference	38.67 (272%)	30.85 (166%)

- 3.43 In purchase G, the winning vendor (supplier CW) and one of the losing vendors (ST) were part of the same group of companies, thus giving the false appearance of competition, and the third vendor was supplier MM, thus allowing the pricing of the quotes to be distorted. In fact the very same losing quote from MM became the winning quote in purchase H.
- 3.44 The unfair competition is also seen in other irregularities. In Purchase G, the quotation from the winning vendor was dated 11 days before they were invited to bid by a letter dated 22 October 2013. The invitation letter was fabricated as evidenced by the signature which did not match that of the signatory (another EPI employee) who confirmed that it was not their own. In addition, a cheque was issued to the vendor before the goods were reportedly delivered or the invoice was received. In procurement H, the vendor invoice was dated 5 November 2013, which was a week before the purchase requisition request, and two weeks before the purchase order. There was no evidence of any form of communication between EPI and the vendors in the procurement files, which would have been a necessity given the need for product specifications and/or artwork and content for the materials to be printed.

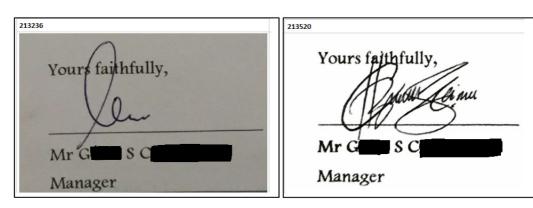
¹ In relation to Procurement J, the payment to a vendor was withheld for an incomplete delivery of goods. Paragraph 3.47 refers.

- 3.45 No register was maintained at the central medical warehouse to confirm the receipt or movement of these goods, and there was no evidence of onward distribution of the materials to its intended users. In procurement H, there was no delivery note available.
- 3.46 Gavi therefore contends that the procurements were not fair, transparent, or provided value for money. Indeed, Gavi questions whether the procurements took place at all as the irregularities point to the enrichment of favoured suppliers over fulfilling a legitimate business need.
- 3.47 The issues relating to these first two procurements were duplicated in a further attempted procurement from CW, (the winner of procurement G). In this case, (procurement J), CW won another contract for the same goods. However, the NDoH identified that the vendor had not properly fulfilled the order and withheld payment. This further calls into question whether CW actually supplied the goods paid for in procurement G.
- 3.48 Gavi questions the sum of 102,336.84 or US **\$39,220** (PGK 50,545 at 2.64 and PGK 51,791.84 at 2.58).
 - Irregularities in Purchase of Labels and Packing Tape
- 3.49 Another repeat purchase without the appropriate justification was in the use of Gavi funds for the procurement of 'vaccine rush' delivery labels and packaging tape. These purchases were made from favoured suppliers; vendor selection was not transparent; supporting documents were fabricated; there was no justification for making two separate purchases, and there was no evidence that the goods were delivered.

Procurement	Supplier	Cheque date	Units	Cost (PGK)
Purchase K Chq 213236	VY	24 Nov 14	5,000 units each of: - vaccine rush label (Item 1) - packaging tape (Item 2)	47,300
Purchase L Chq 213520	GP	19 Dec 14	5,000 units each of: - vaccine rush label (Item 1) - packaging tape (Item 2) - serum rush label (Item 3)	41,030
Total				88,330

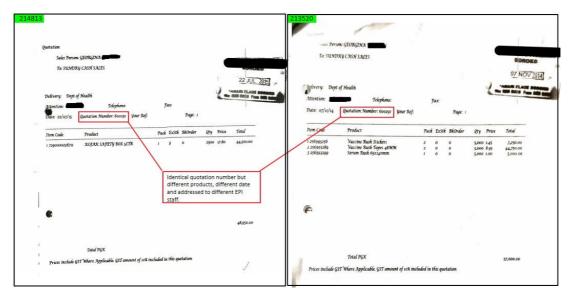
- 3.50 Purchase K was made from supplier VY, owned by an NDoH colleague who left after his association with the company was discovered. Purchase L was made from supplier GP, a supplier associated with vendors CW, VB, IS, and ST.
- 3.51 Inquiries at the warehouse confirmed that the vaccine rush and serum rush stickers as being the same item. However in Purchase L, the labels were described as two separate items and were procured twice with different names without any justification or documented business need.
- 3.52 UNICEF advised that vaccine deliveries are labelled as 'Time & Temperature Sensitive', consistent with IATA's perishable cargo regulations, and vaccine manufactures routinely label the vaccine boxes as such at source. Vaccines are usually packed in Styrofoam boxes for transportation from central to provinces. The warehouse staff advised that there was a shortage of Styrofoam boxes and therefore the vaccines were transported in cardboard boxes and hence the need for the labels. However, given that vaccines are packaged in boxes (together with pre-printed labels) appropriate to the quantity delivered, it is unclear

- why there would be such a shortage of boxes, or a need for further labels. Further, there was no clear reason for having two separate purchases just a few weeks apart.
- 3.53 In Purchase K, there were four quotes on the file, rather than three as in every other procurement file reviewed. The file for purchase K contained an internal memo about the need for the labels (but not packaging tape) dated 16 October 2014. However, all four quotations were dated prior to October 2014 suggesting an attempt to justify the procurement retrospectively. EPI staff could not explain this anomaly.
- 3.54 Two of the losing quotes were obtained from overseas suppliers, instead of local companies. This was one of only two instances (the other also involving company VY (see paragraph 3.113) where Gavi observed the use of overseas rather than local suppliers for no documented reason. This helped ensure that the prices were higher than those quoted by the EPI team's colleague at Supplier VY.
- 3.55 While the two overseas quotes were obtained in September 2014, the other losing quotation was the one dated six month earlier, in March. This was from favoured supplier, GP, the winning vendor in procurement L for the same goods. However, a comparison of the losing quote of 26 March in procurement K and the winning quote of 10 November in procurement L show that they had the same quote reference ('5002'), but different dates and prices. The signatures on the two quotes (from the same person) were also different, thus pointing to at least one set of falsified documents:



Quotes from the same supplier (GP) in two procurements six months apart using the same reference number and the same employee but different signatures

- 3.56 Neither winning vendor was issued with a purchase order (all five copies remained on the NDoH file despite one being a customer copy issued as standard in all government contracts) thus leading the investigation to question whether the orders were legitimately placed.
- 3.57 In purchase K, all three quotes were addressed to one EPI official, and the fourth to another. However, both denied being involved in obtaining the quotations. Separately, in purchase L, all three quotations, were addressed to another official, who also denied obtaining the quotations, stating that he had been on long term leave at the time. There was no evidence of communication with the vendors in either of the procurements.
- 3.58 In Purchase L, the Gavi investigation team visited two vendors that had allegedly provided quotations. Neither recognised having issued the quotations found in the EPI file and neither did they not stock the goods in question. Indeed, one of these falsified quotations was almost identical to a losing quote in a separate procurement, with the date stamp appearing to be aligned in an identical manner but with different dates, thus suggesting graphical manipulation. The quotes were dated four months apart but had an identical quotation number:

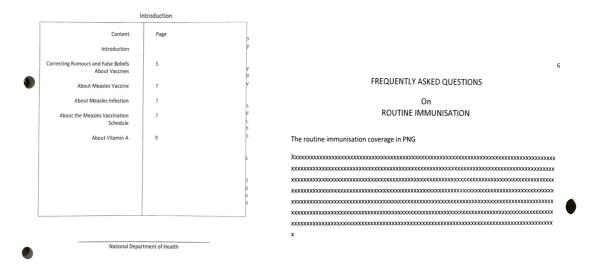


Similarities between falsified supplier quotations in separate purchases. The vendor confirmed that this was not their own quotation template or typeface.

- 3.59 The file for Purchase K did not contain any evidence of delivery of the goods. The purchase order, invoice and cheque were issued on the same day. It is unlikely that the purchase order was approved and issued; the vendor was able to provide samples and receive feedback thereon, produce, check, pack and deliver the goods; the EPI team was able to validate the samples and confirm receipt of the same goods and communicate this to the Finance Unit; and that the Finance Unit could process and issue the cheque all within the same day. In Purchase L, while there was a handwritten delivery note, this was issued by a favoured vendor and there are no stock records to confirm receipt of the goods.
- 3.60 Also, the procurement file contained two copies of the winning vendor's invoice. One invoice had a company header and the other did not. Neither invoice had a company stamp or the signature of a company representative. It is unclear why the EPI team would need to have different copies of the same incomplete supplier invoice, and this suggests some EPI involvement in the production of these documents, consistent with other purchases (see for example paragraph 3.36).
- 3.61 The investigation questions the payments of PGK 88,330 or US **\$34,441** (exchange rates of 47,300 at 2.56 and PGK 41,030 at 2.57)
 - Printing of unsuitable booklets
- 3.62 Another purchase for printed materials in the sum of PGK 51,700 on 28 October 2014 (cheque 212969) does not appear to have been valid under the terms of the Gavi funding. This was for assorted booklets.
- 3.63 It is not known how the winning vendor was identified as a potential supplier. The Gavi investigation team attempted to visit the firm but could find no trace of it even at the address specified on their company registration form.
- 3.64 One of the booklets procured in this exercise related to Vitamin A, which was not financed by Gavi at the time. Additionally, the printed books clearly state that they relate to NDOH, UNICEF and WHO. There is no reference to Gavi, whose budget should not have been used for the purchase.
- 3.65 Also included within the procurement file were other sample printed booklets to show what had been printed. However, one sample on file was for Japanese Encephalitis which was not specified on the invoice/quotation. Gavi does not support this vaccine in PNG, and

the printed output was merely a copy of the FAQs taken directly from the Gavi website on how to apply for funding support (the only difference was that the Gavi logo was replaced by the PNG logo). It is unclear why these booklets were included in the same procurement file or indeed if they were paid by Gavi. There was no business case for printing these booklets, and even if Gavi had supported this vaccine, the EPI team could have directed potential applicants to the Gavi website at no cost.

- 3.66 The file did not contain any correspondence with the bidders, and the winning bidder did not provide a quotation only an invoice laid out in the template of a quotation.
- 3.67 The delivery note was inconsistent with the invoice both in quantity and specification the invoice was for 4,000 booklets on routine immunisation, vitamin A and tetanus while the delivery note was for 6,000 copies of routine immunization FAQs, vitamin A and measles.
- 3.68 The printing was of poor quality and there was no evidence that the prints were ever reviewed; that errors were reported to the suppliers; and/or the poor printing was rectified. For example the first of the following images show the contents page of the measles vaccine, while the second image shows the introduction and contents pages of the FAQ booklet on routine immunisations, both with either formatting or typographical errors:



Errors in printing of booklets funded by Gavi

- 3.69 Accordingly, such booklets should have been rejected on quality control grounds.
- 3.70 The litary of errors, inconsistencies and ineligibility point towards a procurement that should not have been charged to Gavi funds. The investigation therefore questions the payment of PGK 51,700, or US \$20,195 (at an exchange rate of 2.56).
 - Goods not delivered or misappropriated
- 3.71 On 8 December 2014, the EPI team received three quotes for various equipment, which included a Nikon D4 professional camera (value approximately \$5,000), four computers (laptops and desktops) a multimedia projector and various other equipment. These quotes ranged from PGK 48,002 to 52,143.
- 3.72 On 15 December 2014, a purchase requisition was submitted for the purchase of 'office equipment'. The winning quote was from supplier VB in the sum of PGK 48,002.90 (cheque 213521) and delivery and payment made on 19 December. There was no documented justification for acquiring the equipment, or the specifications thereof.

- 3.73 There was no invoice on the file to substantiate the purchase, and no delivery note to corroborate the delivery of the goods. However, unlike the majority of instances where quotations were addressed to junior EPI staff, the quotations in this procurement were addressed directly to the senior EPI official.
- 3.74 The senior official stated that the camera was to be purchased on behalf of the communications team to assist with EPI publicity but he could not explain why the communications team were unable to procure their own equipment, or why such an expensive camera was needed instead of a more basic one at a fraction of the price.
- 3.75 The goods were recorded as being received by the warehouse official who confirmed receiving them but stated he had handed them over to the senior EPI official. However, the latter denied having received them. Given that the goods were acquired in mid-December, the Gavi investigation team asked whether the goods had been ordered as Christmas gifts for others, rather than for EPI business. The official denied this.
- 3.76 Gavi noted that there were no newly procured computers in the EPI team, and that some of the employees were even resorting to using their private computers.
- 3.77 The senior EPI official was told by NDoH senior management to bring the camera and computer hardware in his possession to the NDoH premises to show to the Gavi investigation team, but he came without any assets, saying they were never in his possession.
- 3.78 Gavi therefore questions the sum of PGK 48,002.90, or **US \$18,678** (at an exchange rate of 2.57).
 - Purchase of Faulty Cold Storage Containers
- 3.79 An effectively functioning cold chain is fundamental to the success of any vaccination program. The poor management of cold storage needs can lead directly to ruined vaccines and would be considered a key failing in performance deficiency by the EPI team.
- 3.80 The investigation established that two used refrigerated containers, locally known as reefers, were procured by EPI with PGK 63,000 of Gavi funds (cheque 212964). Neither was functional. They were procured without assessing business needs or developing product specifications; they were unsuitable for vaccine storage; and, were not purchased transparently or with the proper authority. One of the reefers was delivered to the EPI warehouse in Port Moresby but was faulty and of the wrong specification for vaccine storage. The second reefer was delivered to Wewak province in October 2014 but was never actually installed or functioning.
- 3.81 The same supplier was also engaged to provide repair and maintenance services for existing cold room facilities. The senior EPI official initiated the engagement with the vendor in April 2014.
- 3.82 In PNG, the local UNICEF office provides technical support to EPI on the cold chain and vaccine management matters. The EPI team did not consult UNICEF over the cold chain needs or any other aspects of this procurements. Asked about this, the senior EPI official stated that UNICEF was "somehow missed out".
- 3.83 In addition, despite the value of these procurements, the senior EPI official attempted to sole-source them (further quotes were only obtained late in the process on the intervention of a high ranking NDoH official); a final invoice and delivery documentation were not available and there were multiple inconsistencies in the procurement files.
- 3.84 According to a senior EPI official the reefers were designated as a permanent storage for Gavi supported vaccines. He cited the breakdown of existing cold storage and a large

- volume of incoming vaccines as the main reasons for the need of additional storage capacity. However he could not explain the requirement for the reefer at Wewak province.
- The senior EPI official issued a letter dated 15 April 2014 to the vendor requesting the supply and installation of two 'standard' chillers, one destined to National Vaccine Store in Port Moresby and the other to Wewak province. The quotation from the winning bidder was dated 17 July 2014. There was no explanation as to why it took three months for the vendor to submit a quote after receiving the letter.
- 3.86 The reefer delivered to the EPI warehouse initially did not switch on due to an incompatible power supply. After adjusting the power voltage, it was found that the reefer could only maintain the temperature between -5°C to -20°C which was inappropriate for Gavi supported vaccines which require a temperature of between +2°C to +8°C. Upon finding the reefer unsuitable for vaccines, it was used instead for storing ice packs for about one month before it ceased functioning altogether. The reefer was never repaired and was awaiting disposal at the time of the investigation, despite the fact that the same supplier was engaged to provide repair and maintenance services to other cold rooms (see next section). Notably, there was no requirement for the supplier to service and repair the reefers.
- 3.87 According to another EPI employee, given the unsuitability of the reefers for storage of vaccines, the NDoH was obliged to outsource the vaccine storage by contracting a local logistic company. (The investigation has not found these costs being charged to Gavi).
- 3.88 The senior EPI manager stated that he was unaware that the reefers were unsuitable for vaccines and had stopped working after a month.
- 3.89 On 8 August 2014, the EPI unit submitted a purchase requisition. On 21 August 2014, an authorising officer made a remark in the payment vouchers instructing the ex-EPI manager to "provide two more quotations as per the PFMA". Subsequently, quotations from two losing bidders were dated 27 & 28 August 2014. There was no explanation on how these two additional vendors were identified, and no correspondence with them on file. The losing bidders were only allowed 7 days to prepare and submit bids, in contrast to the 90 days for the winning vendor. Also absent was any evidence of communication with these vendors. However, one of the quotes was for one new and one used reefer, while the other quote did not specify whether they were new or used. Accordingly, the quotes were not directly comparable. The senior EPI official mentioned that some of the deficiencies may have been as a result of the urgency of the procurement. However, there was no reference to any urgent need in the procurement file and the whole process took six months thus providing ample time to refine product needs and specifications and conduct a satisfactory procurement exercise. These combined anomalies point to an inequitable selection process.
- 3.90 An undated contract from October specified that the goods had been delivered, implying that the contract was raised only after the delivery (the senior EPI official stated that "it was to formalise payment"). There was no other confirmation of delivery, and no invoice. Nevertheless, payment was made to the supplier on 27 Oct 2014. Further, the procurement contract with the vendor was signed by former EPI manager on behalf of NDoH. In doing so, the former EPI manager acted above his authority as he was not authorised to enter into a contract on behalf of NDoH, a right was reserved for certain senior managers only.
- 3.91 The invalid contract, and absence of a final invoice should have given the finance department sufficient grounds to question and/or delay processing of this payment.
- 3.92 Gavi questions the payment for PGK 63,000 or US \$25,403 (at an exchange rate of 2.48)

Cold Room Maintenance

- 3.93 Subsequently, on 24 October 2014 EPI paid a further PGK 53,350 from Gavi funds to the same supplier that had provided the faulty reefers. This payment was for the repair and maintenance of cold rooms at Area Medical Stores. The selection of vendor was neither competitive nor transparent and there were inconsistencies in the procurement files.
- 3.94 Though the procurement files contained a basic inspection report which stated the scope of work, it was not costed. There was no other documentation or quotation referring to the cost of the maintenance work and no vendor invoice was available. Indeed there was no evidence to even confirm that any maintenance work had been carried out. The senior EPI manager stated that the Health Facility Standard Branch was involved in assessing required maintenance service, but, there was no confirmation from them as to what work if any was performed. The maintenance work was allegedly completed by August 2014 but the purchase order was not issued until October 2014. Therefore, the investigation is unable to gain assurance that the monies paid for the maintenance work was justified.
- 3.95 The contract, which was signed by a senior EPI official who lacked the authority to do so, stipulated that two 'cool rooms' were serviced. However, in an earlier inspection the vendor had identified three cold rooms that required maintenance work. It is unclear why one cold room was omitted.
- 3.96 Given the lack of evidence of service delivery, missing documents and various inconsistencies listed above, Gavi considers that the evidence on which the payment was made was unreliable and should have been rejected by the NDoH finance unit. Accordingly, Gavi questions the payment of PGK 53,350, or **US \$21,170** (at an exchange rate of 2.52).

Duplicate Payments

- 3.97 The investigation established that in one programme ('SIREP+') which was supported by multiple agencies, the EPI team made duplicate payments to the same suppliers despite knowing that the purchases were also being funded separately.
- 3.98 SIREP+ was launched in August 2015 and introduced Gavi funded vaccines for Measles Rubella and Inactivated Polio. The program was led by NDoH with support also being channelled through in-country partners, including WHO and UNICEF. A communication and social mobilisation committee was set up with representatives from each of these agencies. The committee was required to authorise the procurement of promotional items including printed materials and T-shirts.
- 3.99 The EPI team made duplicate payments for the same goods. PGK 19,294 of Gavi funds were spent on posters and brochures in two separate payments, but it was established that another agency had paid for some of the same items from the same company separately. The duplicate payments were for item 2 (20,000 A3 posters) and part of item 3 (100,000 brochures) in the procurement, below:

#	Item	Quantity	Total units	Price	Duplicate Payments
1	A2 Posters	25,000 x 3 types	75,000	42,790.00	n/a
2	A3 Posters	20,000 x 1 type	20,000	6,231.50	6,231.50
3	Brochures	50,000 x 3 types	150,000	19,030.00	13,062.50
4	Brochures	12,000 x 2 types	24,000	3,690.50	n/a
Tot	al PGK	19,294.00			

- 3.100 Gavi funds were used to pay for these items on 7 August 2015, and the items were delivered shortly afterwards. The senior EPI official was on the SIREP campaign committee together with another NDoH official who received the quotes on behalf of the EPI unit. Both would have been aware that the items were also being funded by a partner agency. The purchase requisition was made when the Executive Manager responsible for the EPI team was absent.
- 3.101 One of the losing vendors confirmed it had provided several quotes with different quantities at EPI's request. This allowed the EPI team to submit different quotes from the same vendor to multiple donors.
- 3.102 The relevant procurement files provided to Gavi did not contain the purchase order, invoice or delivery note. The NDoH finance team could not explain how the cheques were issued for payment in absence of key supporting documents.
- 3.103 There would not normally be any motivation to make a duplicate payment unless the company benefiting from it had links to the person arranging the scheme.
- 3.104 In another instance, the EPI unit used Gavi funds to purchase promotional t-shirts from another supplier. The same t-shirts were subsequently part of a separate invoice addressed to another SIREP partner. In this instance, the partner identified that the goods had already been paid for by Gavi, and declined to make further payment. This suggests that the duplicate payment attempts were part of a pattern of behaviour.
- 3.105 Gavi questions the payment of PGK 19,294, or US \$7,875 (at the rate of 2.45). Unnecessary Purchases
- 3.106 A separate issue was the purchase of items for which there appeared to be no legitimate business need.
- 3.107 Safety boxes (cheque purchase 214813) are one example. These are cardboard boxes used for the safe disposal of syringes. Gavi finances the purchase of these from UNICEF in sufficient quantities to match the purchase of syringes for the administration of vaccines.
- 3.108 In May 2015, UNICEF provided EPI with vaccines together with 48,000 safety boxes. However, just shortly afterwards, the EPI team attempted to purchase a further 5,000, despite the absence of a business need for this.
- 3.109 The EPI team noted that two of its suppliers (VB and IS) each had approximately 2,500 boxes in stock despite the unusual nature of the product. In the event, although approval was granted to procure from both suppliers, the second purchase was later cancelled for unspecified reasons.
- 3.110 There was however, a forged quotation from another supplier (see paragraph 3.58, above).
- 3.111 Even if there was a need to procure the safety boxes, the EPI team would be aware that they can be supplied by UNICEF at a low cost. The investigation was advised that UNICEF would have supplied extra boxes at approximately 50 cents each, instead of at the cost of \$5.50 or 17.45 kina as quoted. However, the procurement was conducted in the temporary absence of the relevant Executive Manager who may have been best placed to query such matters, and approval was given by an acting manager from another department.
- 3.112 The delivery of goods is also in question as the delivery note was signed by the NDoH warehouse staff on 8 August 2015, which is the same date as the purchase order but two days before the date of the delivery note itself. In view of the combined irregularities, Gavi questions the purchase PGK 47,987.50 or US \$17,324 (at the exchange rate of 2.77).

- 3.113 In the case of supplier VY, there was a purchase for 10,000 indelible markers (cheque 214821) which lacked a business case despite being marked as 'urgent'. The procurement was initiated and approved in the one week period when the relevant Executive Manager was absent. There was no justification for the large quantity ordered, and no specifications were communicated to suppliers, who were approached a day before approval for procurement was sought. In this case, rather than the usual practice of seeking quotes from local suppliers, the EPI team sought quotes from overseas companies, which were inherently uncompetitive, particularly when delivery costs are added. The amount questioned is PGK 49,500 or US \$17,870 (at the exchange rate of 2.77).
- 3.114 Another purchase from supplier VY (cheque number 214829) relates to the acquisition of toner cartridges at a unit cost of PGK 979 (890 excluding GST, or US \$300) when they commonly cost approximately PGK 300, or \$100. The justification presented was that they were required for the printing of SIREP materials, but there was no information as which materials, and why this was needed when all other printing was being outsourced to printing companies. The total invoiced on 10 August 2015 was US \$16,445, or US \$5,936 (at the exchange rate of 2.77).

Vehicle Hire

- 3.115 In two instances, the investigation questions the use of vehicle hire firms, both of which provided quotes directly to a senior EPI official, which was unusual given that most quotes (except for the one for missing IT equipment (see paragraph 3.73)) were addressed to other staff members.
- 3.116 On 22 October 2014, the EPI team spent PGK 11,050 (cheque 212917) on a two week trip to a nearby province. The investigation questions the identification and selection of the vehicle hire business, a company which could not be located at the PNG business registry. The firm issued invoice 9 to NDoH in May 2014, and invoice 10 also to NDoH in October 2014. This sequence of invoice numbering suggests that the company was a largely dormant business. The Executive Manager queried the expenditure in writing to a senior EPI official that "there will be NO future acceptance of this type of funds commitment".
- 3.117 The following week, however, when the Executive Manager was away, the EPI team submitted a further invoice for vehicle hire for PGK 11,900 (cheque 212909) dating from 19 July. In avoiding the Executive Manager's scrutiny, this invoice from three months earlier was approved by an acting manager on 8 October. No reason was given for the delay but other irregularities included the fact that the vendor that did not submit a quotation, and one of the losing quotes was invalid, being almost four months older than the other quotes and referring to a different hire duration. There was no indication of who needed the vehicle or any justification for why it was not possible to use NDoH vehicles. The vendor selection is also queried as it is not known how such a small company was identified (the company only having started trading seven months earlier and having only made two previous sales in that time, according to invoice numbering). Accordingly Gavi questions whether the supply took place at all for NDoH business purposes.
- 3.118 Gavi questions the two payments, totalling PGK 22,950, or US \$7,886 (at an exchange rate of 2.91).

Role of Finance/Admin

3.119 Many of the deficiencies in the procurement process could have been detected by the Finance Unit prior to payment. It is unclear why the Finance Unit processed payments despite the multiple irregularities present in almost all purchases by the EPI unit.

4. Analysis

- 4.1 The purchases described in this report cover the majority of all procurements undertaken by the EPI team, other than for travel (with the national airline, Air Niugini) and hotel accommodation in the provinces. Thus, most of the purchases where the EPI team had discretion to select a local supplier ended in a contract award to a preferred supplier.
- 4.2 These procurements involved inflated prices; unnecessary or unjustified purchases; repeat payments for single purchases; faulty goods; and goods that were not delivered, or where proof of delivery was absent. The repeated use of falsified documentation points to deliberate and systematic misuse of Gavi funds.
- 4.3 The investigation also notes that other IT equipment was not made available for Gavi to inspect. This included various computers provided by one of the favoured suppliers, and an external disc drive identified by the forensic review as having been used by a senior EPI official. The absence of these items is considered to be a significant omission and the investigation is unable to discount the possibility that further evidence of misuse may be concealed therein.
- 4.4 Also of note is the timing of a number of invoice submissions to take place during the absence of the relevant Executive Manager. In avoiding his scrutiny, the EPI team was able to complete a number of procurements through approval by acting managers who may have lacked the expertise necessary to challenge significant irregularities, and this suggests deliberate manipulation of the procurement process in order to circumvent controls.
- 4.5 Notwithstanding any management scrutiny, the next line of defence is the review by the finance unit. The investigation notes that very few procurements were challenged despite the absence of critical documentation including invoices in some instances. Accordingly, Gavi considers that there is significant scope for the finance unit to query expenditure where issues are noted.
- 4.6 Ultimately, however, responsibility for initiating questionable procurement processes lies with the EPI team itself, and this report indicates that questionable practices operate within the unit, which need to be addressed before making any future payments using Gavi funds.
- 4.7 Pursuant to the Partnership Framework Agreement dated 29 November 2013 between Gavi and the NDoH, Gavi finds that there has been misuse of Gavi funds. This was perpetrated through irregular procurement processes within the EPI team.

5. Recommendations

In the absence of any response to this report from the NDoH, it is recommended that:

- 6.1 All procurement responsibilities using Gavi funds should be removed from the EPI team and placed in a more independent structure, (such as the corporate services branch see also the Gavi audit report).
- 6.2 Arrangements should be implemented whereby expenditure approvals made in the absence of the appropriate Executive Manager are reviewable on the Manager's return.
- 6.3 The NDoH Finance Team should decline to make payment in the absence of key documentation such as invoices and delivery notes, and should be given the necessary management support when challenging irregular items.
- 6.4 NDoH senior management should consider whether further measures need to be taken in referring any conduct by individuals to the appropriate law enforcement authorities for further action.