Annex A - 1

ANGOLA

Vaccine Support for Pentavalent Vaccine

This Decision Letter sets out the Programme Terms

1. **Country: Angola**
2. **Grant Number: 0715-AGO-04c-X**
3. **Date of Decision Letter: 19 December 2014**
4. **Date of the Partnership Framework Agreement: 04 October 2013**
5. **Programme Title: New Vaccine Support**
6. **Vaccine type: Pentavalent Routine**
7. **Requested product presentation and formulation of vaccine: DTP-HepB-Hib, 10 doses per vial, liquide**
8. **Programme Duration[1]: 2006 - 2015**
9. **Programme Budget (indicative) (subject to the terms of the Partnership Framework Agreement):**

	2006 - 2014	2015	Total[2]
Programme Budget (US$)	US$54,029,167[3]	US$965,500	US$54,994,667

10. **Vaccine Introduction Grant: Not applicable**

[1] This is the entire duration of the programme.
[2] This is the total amount endorsed by GAVI for the entire duration of the programme. This should be equal to the total of all sums in the table.
[3] This is the consolidated amount for all previous years.

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11. **Indicative Annual Amounts (subject to the terms of the Partnership Framework Agreement):[4] The Annual Amount for 2015 has been amended.**

Type of supplies to be purchased with GAVI funds in each year	2006 - 2014	2015
Number of pentavalent vaccines doses		571,500
Number of AD syringes		534,200
Number of re-constitution syringes		0
Number of safety boxes		5,875
Annual Amounts (US$)	54,029,167[5]	965,500

12. **Procurement agency: UNICEF. The Country shall release its co-financing payments each year to UNICEF.**

13. **Co-financing obligations: Reference code: 0715-AGO-04c-X-C**
According to the co-financing policy, the country falls within the graduating group.
The following table summarises the co-financing payments and quantity of supply that will be procured by the country in the relevant year.

Type of supplies to be purchased with Country funds in each year	2015
Number of pentavalent vaccine doses	2,900,500
Number of AD syringes	2,709,000
Number of re-constitution syringes	0
Number of safety boxes	29,800
Value of vaccine doses (US$)	US$4,555,680
Total co-financing payments (US$) (including freight)	US$4,896,000

[4] This is the amount that GAVI has approved. Please amend the indicative Annual Amounts from previous years if that changes subsequently.
[5] This is the consolidated amount for all previously approved years.

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14. Operational support for campaigns: Not applicable

15. Additional documents to be submitted for future disbursements:

Reports, and other required documents	Due dates
2014 Annual Progress Report	**15 May 2015**

16. Financial Clarifications: The country needs to provide the external audits related to PCV and Rotavirus introduction grants disbursed by GAVI in 2013. Until those audit reports are received, Gavi will not make any additional cash disbursements to the country.

17. Other conditions: As the year is getting to a close, the country is reminded of its co-financing obligations for 2014

Signed by Mariya Dugan, OIC
On behalf of Gavi, the Vaccine Alliance

Hind Khatib-Othman
Managing Director, Country Programmes
19 December 2014

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Annex A - 2

ANGOLA

Vaccine Support for Pneumococcal Vaccine

This Decision Letter sets out the Programme Terms

1. **Country: Angola**
2. **Grant Number: 1215-AGO-12c-X**
3. **Date of Decision Letter: 19 December 2014**
4. **Date of the Partnership Framework Agreement: 04 October 2013**
5. **Programme Title: New Vaccine Support**
6. **Vaccine type: Pneumococcal Routine**
7. **Requested product presentation and formulation of vaccine: Pneumococcal (PCV13), 1 dose per vial, liquid**
8. **Programme Duration[6]: 2012 - 2015**
9. **Programme Budget (indicative) (subject to the terms of the Partnership Framework Agreement):**

	2012-2014	2015	Total[7]
Programme Budget (US$)	US$ 24,192,351[8]	US$4,086,000	US$28,278,351

10. **Vaccine Introduction Grant: Not Applicable**

[6] This is the entire duration of the programme.
[7] This is the total amount endorsed by Gavi for the entire duration of the programme. This should be equal to the total of all sums in the table.
[8] This is the consolidated amount for all previous years.

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11. **Indicative Annual Amounts (subject to the terms of the Partnership Framework Agreement):[9] The Annual Amount for 2015 has been amended.**

Type of supplies to be purchased with Gavi funds in each year	2012-2014	2015
Number of pneumococcal vaccines doses		762,900
Number of AD syringes		793,800
Number of re-constitution syringes		
Number of safety boxes		8,750
Annual Amounts (US$)	24,192,351[10]	4,086,000

12. **Procurement agency: UNICEF. The Country shall release its co-financing payments each year to UNICEF.**

13. **Co-financing obligations: Reference code: 1215-AGO-12c-X-C**

According to the co-financing policy, the country falls within the graduating group. The following table summarises the co-financing payments and quantity of supply that will be procured by the country in the relevant year.

Type of supplies to be purchased with Country funds in each year	2015
Number of pneumococcal vaccine doses	1,607,700
Number of AD syringes	1,672,700
Number of re-constitution syringes	0
Number of safety boxes	18,425
Value of vaccine doses (US$)	US$5,424,466
Total Co-Financing Payments (US$) (including freight)	US$5,839,500

[9] This is the amount that Gavi has approved. Please amend the indicative Annual Amounts from previous years if that changes subsequently.
[10] This is the consolidated amount for all previously approved years.

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14. Operational support for campaigns: Not applicable

15. Additional documents to be submitted for future disbursements:

Reports and other required documents	Due dates
2014 Annual Progress Report	**15 May 2015**

16. Financial Clarifications: The country needs to provide the external audits related to PCV and Rotavirus introduction grants disbursed by GAVI in 2013, as per the Gavi audit policy. Until those long due audit reports are received, no additional cash will be disbursed to the country.

17. Other conditions: As the year is getting to a close, the country is reminded of its co-financing obligations for 2014.

Signed by Maryse Dugué, OTC
On behalf of Gavi, the Vaccine Alliance

Hind Khatib-Othman
Managing Director, Country Programmes
19 December 2014

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Annex A - 3

ANGOLA

Vaccine Support for Rotavirus Vaccine

This Decision Letter sets out the Programme Terms.

1. **Country: Angola**
2. **Grant Number: 1315-AGO-13b-X**
3. **Date of Decision Letter: 19 December 2014**
4. **Date of the Partnership Framework Agreement: 04 October 2013**
5. **Programme Title: New Vaccine Support**
6. **Vaccine type: Rotavirus Routine**
7. **Requested product presentation and formulation of vaccine: Rotavirus, 2 doses schedule**
8. **Programme Duration[11]: 2014 - 2015**
9. **Programme Budget (indicative) (subject to the terms of the Partnership Framework Agreement):**

	2014	2015	Total[12]
Programme Budget (US$)	US$4,355,500[13]	US$2,042,000	US$6,397,500

10. **Vaccine Introduction Grant: Not applicable**

[11] This is the entire duration of the programme.
[12] This is the total amount endorsed by GAVI for the entire duration of the programme. This should be equal to the total of all sums in the table.
[13] This is the consolidated amount for all previous years.

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11. **Indicative Annual Amounts (subject to the terms of the Partnership Framework Agreement):[14] The Annual Amount for 2015 has been amended.**

Type of supplies to be purchased with GAVI funds in each year	2014	2015
Number of rotavirus vaccines doses		766,500
Number of AD syringes		0
Number of re-constitution syringes		0
Number of safety boxes		0
Annual Amounts (US$)	4,355,500[15]	2,042,000

12. **Procurement agency: UNICEF. The Country shall release its co-financing payments each year to UNICEF.**

13. **Co-financing obligations: Reference code: 1315-AGO-13b-X-C**
According to the co-financing policy, the country falls within the graduating group.
The following table summarises the co-financing payments and quantity of supply that will be procured by the country in the relevant year.

Type of supplies to be purchased with Country funds in each year	2015
Number of rotavirus vaccine doses	717,000
Number of AD syringes	0
Number of re-constitution syringes	0
Number of safety boxes	0
Value of vaccine doses (US$)	US$1,834,827
Total Co-Financing Payments (US$) (including freight)	US$1,906,500

14. **Operational support for campaigns: Not applicable**

[14] This is the amount that GAVI has approved. Please amend the indicative Annual Amounts from previous years if that changes subsequently.
[15] This is the consolidated amount for all previously approved years.

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15. Additional documents to be submitted for future disbursements:

Reports and other required documents	Due dates
2014 Annual Progress Report	**15 May 2015**

16. Financial Clarifications: The country needs to provide the external audits related to PCV and Rotavirus introduction grants disbursed by GAVI in 2013, as per the Gavi audit policy. Until those long due audit reports are received, no additional cash will be disbursed to the country.

17. Other conditions: As the year is getting to a close, the country is reminded of its co-financing obligations for 2014

Signed by Maryse Dugue, OTC
On behalf of Gavi, the Vaccine Alliance

Hind Khatib-Othman
Managing Director, Country Programmes
19 December 2014

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Angola

Internal Appraisal 2014

1. Brief Description of Process

This Internal Appraisal was conducted for GAVI by independent technical expert **Gordon Larsen**, in close cooperation with the GAVI Senior Country manager for Angola**, Véronique-maeva Fages**, and is based on reports and documentation, including the Annual Progress Report (APR) supplied to GAVI by the national authorities and institutions in the country for the year 2013. It also reflects some of the key findings from the external EPI programme review that was conducted in June 2014.

2. Achievements and Constraints

Very few of the programme coverage targets were met for 2013 and the APR gives detailed explanations and justifications for some of the bottlenecks which hindered coverage performance. However, despite all challenges described in the APR and described further in this internal evaluation document, the latest WUENIC (UNICEF/WHO) data released in July 2014 is to be noted with an upward DTP3 coverage trend confirmed at 93%. This represents a slight increase from the previous year (91%).

One of the key findings of the 2014 EPI external review was that **over-reporting of immunization data** was a weakness at all levels and one that presumably affects traditional and NVS vaccines equally. At the same time, the APR refers to **unreliable population estimates** as being a recurrent problem in the country and taken together, these two factors may explain the potential confusion with setting of realistic targets and with reported coverage for several antigens being well over 100%. The external review also found 'weak data management and weak use of denominators' at central, municipal and health facility levels, and such shortcomings will inevitably contribute to the setting of unreliable and unrealistic targets, and together with over-reporting of data, to the subsequent reporting of high level of coverage.

Quality of the APR:

Few inconsistencies within the APR – the main reporting document which was used for this - are to be noted. They relate to baseline, coverage and targets data. GAVI will calculate an accurate 2015 dose allocation taking into account the 2013 achievements, the 2014 shipment plan, the revised 2014 and 2015 targets and in-country stocks.

A number of errors in Baseline table 4 affected many of the findings in this appraisal. It is unclear, for example, why several coverage targets of => 100% are included in

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this Baseline table, yet the APR makes no reference or comment on these obviously unrealistic values, or why 1st and 3rd dose targets for some multi-dose vaccines are the same. It is also unclear why separate and different targets are given for DPT1 and DPT3 vs Penta1 and Penta3, with separate and different achievements reported for each, but again, the APR makes no reference to these and gives no explanation for these confusing and contradictory figures. In addition, some results shown in Baseline table 4 are not consistent with figures reported by the country on the 2013 WHO/UNICEF Joint Reporting Form (JRF). Finally, it is noted that many of the figures in this APR for 2013 are not consistent with those that the country provided to GAVI in the previous APR (for 2012), and thus again, affecting the internal evaluation.

Below are additional details on the immunization performance in 2013:

- For traditional vaccines, stock-outs for several months at national and lower levels resulted in failure to reach target coverage rates, especially for BCG, Polio, TT and Yellow Fever, although targets were reportedly met for DPT1 and measles. The accuracy of the 2 latter results is questionable however, as the target set for DPT1 was 100% with reported result of 112%, while the target set for measles was 94%, with a reported result of 105%. It was noted that neither of these results is consistent with figures reported by the country on the 2013 WHO/UNICEF Joint Reporting Form (JRF), bringing some question to the reported data for 2013. Coverage figures shown on the WHO/UNICEF Joint Reporting Form for 2013 are DPT1 97% and measles 91%, and the inconsistencies in Table 4 of the APR are to be noted and should ideally be corrected. The APR also explains errors in data entry in some districts affecting the figures for measles, but the incorrect figure is still entered in Baseline table 4 of the APR.

- For the NVS, the target for Penta1 was apparently met, although since reported coverage was 112% against a target of 102%, it is also of questionable accuracy, in the same way as DPT1. The reported achievement is greater than target, so it could appear that the target was met though since both figures are above 100% reveal potential data quality or/and denominator issues which GAVI encourages Angola to address. Coverage for Penta3 is reported at 93% (ie, same as DPT3) but as the target set was102% according to APR Baseline table 4, this target was also missed, though GAVI notes the slight coverage increase from previous year.

- Targets for PCV-13 were not achieved reportedly because introduction of the vaccine was delayed until the second semester of 2013, with the result that many districts were unable to administer the 2nd and 3rd doses during the year. Coverage achieved was thus far less than planned.

- The country notes that 'targets for Rotavirus, due to be introduced in 2014, were reduced from the 80% initially planned for 2014 to 48%, because the later introduction of vaccine it is now expected to complete only in mid-year 2014'. This statement was not consistent with figures reported in Baseline table 4 however,

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where the rotavirus target coverage initially planned for 2014 is given as 92%, which again is to be noted and should be ideally corrected in the APR.

- Targets for DPT1-DPT3 drop-out were not met in 2013 (17% is reported, compared to a target of 6%). It is noted that in spite of missing the 2013 target by a significant margin, the target drop-out rates set for 2014 and 2015 remain unchanged at 6% and 5% respectively, although based on current programme performance, it appears these targets could be quite unrealistic. This shall be discussed further during the GAVI Alliance mission scheduled for 12-21 October 2014.

- There is no information provided on vaccine wastage rates, or of any programme attempts to measure or control them. For DPT and Penta, a rate of 15% is used throughout Baseline table 4, and the APR mentions only that 'wastage is near to15%' (for Penta), but gives no details of what data this figure is based on or how it is obtained. For PCV and Rotavirus vaccines, the maximum empirical values permitted by GAVI for are used throughout.

Equity:

There is no specific mention of marginalised or hard-to-reach populations, but there is considerable focus on monitoring and improving equity of immunization services which is a positive activity GAVI wishes to acknowledge. The country confirmed that "at the sub-national level, routine coverage in 2013 was better distributed than in 2012; 89% of provinces (16/18) achieved Penta-3 coverage above 80%, compared to 78% of provinces (14/18) in 2012. Provinces with Penta3 coverage >=90% were 11/18 (61%) in 2013 against 9/18 (50%) in 2012. It is important to highlight special efforts by the province of Luanda to increase access to routine immunization in suburban areas, thus increasing (provincial) Penta3 coverage from 75% in 2012 to 84% in 2013'. For low-performing areas, it is noted that: 'In 2013 only 6 small districts with a total of 13,708 children younger than 1 year did not achieve 50% Penta3 coverage This may be compared to 19 districts with a total of 86,613 <-1 year children in 2012. For unvaccinated children (defined as children <-1 year old without Penta-3), the APR notes that: 'In 2013, unvaccinated children were much more dispersed than in 2012, with 80% located in 38 districts of 14 provinces of the country. By comparison, 80% of all unvaccinated children in 2012 were concentrated in only 25 districts of 6 provinces. There has been a marked reduction in numbers of unvaccinated children in the largest districts of the country, which left a smaller quantity of unvaccinated children scattered across other districts'. Absolute numbers of unvaccinated children are not given in the APR, but since national Penta3 coverage for 2013 has improved from 2012, there appears to be some basis for this claim.

Sex-disaggregated data on immunization is not routinely collected in the country and no data on coverage disaggregated by gender is available. However, the APR notes: 'No gender related barriers to access were identified, nor were there expected gender differences in coverage given the high immunization rate. However the

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ongoing national coverage cluster survey collects information on sex and analyses will be stratified on this variable'. There are reportedly plans to collect data in a disaggregated format at some point in the future, but no details or dates for this activity are given.

The main challenges facing the programme have been clearly identified and analysed, and plans for addressing these with support from the partner agencies and working through the ICC were discussed. These measures are considered to be appropriate and realistic. Key factors in the country not meeting its coverage targets for 2013 were the vaccine stock control problems encountered, attributed to the new semi-autonomous MOH institution that assumed responsibility for purchasing and distribution of vaccines and injection supplies during the year, the insufficient numbers of fixed vaccination posts in rural and suburban areas, the data quality problems with low completeness and timeliness of routine reports and the unreliable population estimates nationally. The 2014 EPI external review also mentions the issues of staff shortages at the central, district and peripheral levels and insufficient funding for mobile services and for EPI supervision. Some of those bottlenecks are to be discussed during the Graduation Mission scheduled in October 2014.

3. Governance

The ICC membership comprises a cross-section of government, international, bilateral and 2 CSO organizations, and the group held 9 meetings in 2012 and 10 in 2013. This is considered to be sufficiently often for providing effective programme support. Meetings are usually chaired by the Vice Minister of Health or Minister of Health and minutes of a meeting held on 13 May 2014 chaired on that occasion by the National Director of Public Health were provided, at which this APR was endorsed for submission to GAVI. The minutes indicate the names and designations of 20 members attending, together with a signature list of the minister of health and representatives of the partner agencies.

There is no HSCC in the country. There was no mention of any NITAG in the APR, although according to information provided by the country on the WHO/UNICEF Joint Reporting Form (JRF), such a group has been established since 2011 but mainly focusing on polio related activities. The graduation mission will also focus on strengthening such NITAG to expand to all immunization related issues. It is assumed there will be a degree of shared membership between ICC and NITAG.

Copies of the only ICC minutes provided show conclusions and actions to be taken which are acknowledged by GAVI. There is no indication that provinces other than Luanda are represented on the ICC. CSOs are members of the group and participate actively in meetings. There is no reference to any kind of beneficiary feedback and it is unclear whether any mechanism to encourage or facilitate such feedback has been established.

4. Programme Management

Activities are generally being implemented approximately to schedule and budget, although it appears that few, if any of the programme coverage targets were actually

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met for 2013, in spite of reported data showing some more positive results. There are a number of on-going challenges to be overcome as already noted, and given these realities, there appears to be a tendency to set overly ambitious programme targets.

Since the submission of the APR, the country has performed an external EPI review (along with an EVM and DQS) and a coverage survey which provided good insights of the immunization performance and various recommendations in the area of management, supervision, surveillance, training data quality, etc. The final report is yet to be shared with GAVI.

5. Programme Delivery

The latest EVM assessment was conducted in May-June 2011, and an Action Plan for Improving Vaccine Management, 2011 – 2015 based on the EVM findings was developed. In June 2014, another EVM was performed as part of the EPI external review and was shared with GAVI as part of its IPV application in September 2014.

The analysis of the Vaccine Management improvement plan for 2011 – 2015 (based on the 2011 EVM) as submitted in the 2013 APR comprised mainly a situation analysis, some policy guidelines and strategies to be followed, but no details of what actions were to be taken under the plan, what quantities of each of the recommended items were to be procured to improve the cold chain and what time-line was to be followed for implementation of the various activities. Broad budget categories and amounts by year were given, but there were no indications of what funding sources were planned or available to cover the approximately US$13 million estimated for the necessary improvements. The updated 'Implementation Status' provided as part of the annual report showed only percentage implementation of broad categories of activity, and gives no. details of what actions have actually been taken under the plan, what items and quantities of each of the recommended items have been procured and installed, what numbers of staff have been trained by level and by location, what GAVI or other budget amounts have been utilized and what actions under the plan are still outstanding. As an example, according to APR table 5.5a, some GAVI funds are to be used as a contribution to cold chain equipment purchase in 2013, but it is not known whether this relates to improvement activities under the EVM plan, and status of this funding is not given. Therefore, whether improvement activities are being implemented to schedule and budget cannot be determined from the information provided.

The 2011 EVM found weak management and stock control of vaccines and supplies at the district and peripheral levels with performance scores of 45% and 50% respectively, which were both seriously below the required EVM performance pass level of 80% each. The 2014 EPI external review also reported weak vaccine management at district and particularly at health facility levels, with performance scores in this case given as 67% and 38% respectively, although it is not known whether these two scoring systems can be directly compared. Given these scores, it was therefore surprising that there was no mention in the EVM of either over- or

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under-stocking at these levels, although it is not known whether the EVM protocol used actually addressed this issue.

As mentioned in section 2, there were stock-outs for several months at national and lower levels in 2013 which resulted in failure to reach target coverage rates with a number of traditional vaccines. Stock control problems with the traditional vaccines were attributed to the new semi-autonomous MOH institution CECOMA, that assumed responsibility for purchasing and distribution of vaccines and injection supplies under new regulations for the public sector in 2013, bringing with it 'an extended large bureaucratic process for vaccine purchasing'.

It is noted that one of the recurrent concerns of the ICC as listed in APR section 5.7 is to 'prevent vaccine stock-outs through better coordination with CECOMA', and this suggests that over- or under-stocking of vaccines may have been an issue for the ICC on previous occasions. The trend in vaccine management and stock control over a longer time period and any stakeholder views on these findings are not clear and should be looked at as part of the graduation mission and plan.

The introduction of PCV vaccine in June 2013 did not go entirely according to the original plan and schedule and was delayed by almost one year because of difficulties in purchasing the required cold chain equipment by some districts. The Government decentralized Primary Health Care funds to district level in 2010 and consequently the MoH at central level no longer has the responsibility for purchase of cold chain equipment, and only makes recommendations for technical specifications and quantities. As a result of these delays, PCV coverage achieved in 2013 was far less than planned as already described in section 2, but it appears that MOH expects coverage to be back on track in 2014, as estimated coverage for PCV13 3rd dose as indicated in APR Baseline table 4 is raised from 73% to 85%.

6. Data Quality

It is noted that the APRs for 2012 and 2013 show significant differences between country data and UN Population Division figures for numbers of births, deaths, surviving infants and pregnant women for each of the years 2012 – 2015. For 2013, births indicated by country data are 16% higher than UN projections for the year, and for surviving infants, 9% higher than the corresponding UN figures. It is not known whether other stakeholders have any views or concerns on these differences, nor whether the data currently used by MOH is considered to be of sufficiently high quality to be used instead of UN projections. However, the problem of unreliable population estimates nationally was already mentioned as one of the key challenges facing the programme in section 2 above. It is noted that the last national census was conducted in 1970 and a new census was planned by the National Institute of Statistics to be conducted between May 15th and 30th 2014. This was subsequently carried out as planned and was followed by the external EPI programme review that was conducted in mid- 2014. One of the immediate recommendations of this EPI review was that results of 2014 general census be made available as a priority.

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There have been no recent coverage surveys; the last survey (MICS) was conducted in 2000. However, no discrepancies were noted between official country reported data and WHO/UNICEF estimated coverage rates in recent years. A preliminary (Powerpoint) report from the 2014 external review refers to a 2014 survey of immunization coverage, but it is unclear whether a survey was carried out as part of the review itself or was conducted as a separate activity. In either case however, no data or survey findings have been provided on this reported 2014 survey of coverage, and the 2000 MICS study is the only survey data known to be available at present. If no survey planned for 2014/2015, Angola is strongly encouraged to plan for the next survey. GAVI could provide technical assistance in this area.

A Data Quality Auditing Self-assessment (DQSA) was carried out in 2012 by a national team comprising central EPI staff and 5 provincial EPI supervisors who had all been trained in DQSA procedures. The assessment was conducted in 100% of health facilities of 9 districts of 5 provinces with participation of the respective provincial EPI teams. Differences in coverage and failures in data management processes were discussed locally, and the results reported during the ICC meeting. Other activities aimed at improving data quality included nationwide cascade training on data collection forms, data consolidation, standard reports and completing coverage and dropout monitoring charts and training of all provincial and main districts data managers (statisticians) and EPI officers on data management. Improved data quality and its utilization is listed in the APR as one of 7 priority activities for the programme in 2014-15. The 2014 EPI external review also recommended a series of measures aimed at improving data quality and better data utilization at peripheral, district, provincial and national levels, and the revival of the monthly 'data harmonization meetings' at these levels that were formerly used for internal verification and validation of immunization performance data. A DQS was performed in June 2014 as part of the EPI external review.

7. Global Polio Eradication Initiative

The last reported case of wild polio virus was in 2011, and the country is now in a 'consolidation phase', so that conducting 2 annual rounds of Polio NIDs is confirmed as a specific priority activity for the programme in 2014-15. There are no polio-supported field staff engaged in the country, and it appears that routine programme and polio eradication activities are managed in an integrated way. The introduction of IPV countrywide to replace oral polio vaccine is one of the priority activities for the programme in 2014-15, and country applied to GAVI to support this change in September 2014 (for the November IRC).

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There is no mention or discussion of any change in targets for immunization coverage rates when switching from the oral to an injectable vaccine against polio. This is a bit surprising, given that OPV coverage in 2013 is already the lowest among the routine vaccines, and has been so for several years, and it seems probable that switching to an injectable vaccine will put further downward pressure on coverage rates. Some concerns are voiced that introduction of IPV will result in all children receiving yet more injections in an already heavy immunization schedule. This issue will be further discussing during the review of the IPV application by the IRC in November 2014.

Country has not identified high-risk districts for polio, and national DTP3/Penta3 coverage has remained at similar levels for the recent past with only small fluctuations. Furthermore, district-specific coverage data for DTP3/Penta3 is not normally provided by country as part of the APR process, so year-on-year rates of increase for any district, whether high-risk or otherwise, cannot be assessed.

8. Health System Strengthening

Angola does not have an active HSS grant.

9. Use of non-HSS Cash Grants from GAVI

Country is not reporting on Immunisation Services Support (ISS) fund utilisation in 2013. Similarly, the country is not reporting on CSO support fund utilisation (neither Type A or B) for 2013. Funds received in 2013 as the PCV and Rotavirus Vaccine Introduction Grants amounted to US$1,740,978 and the amount used during the year was US$391,972, leaving a balance of US$ 1,349,006 carried forward to 2014. There were no funds carried forward from 2012, and a financial statement verifying each of these amounts is provided.

Funds expended in 2013 were used for training of health workers and purchasing cold chain equipment. The balance of funds for 2014 onwards will be/were used for: additional cold chain equipment , training on introduction of Rotavirus vaccine introduction, production of training materials and conducting a post-introduction evaluation of the PCV13 vaccine
The completeness and quality of the country's reporting against the use of VIG funds is considered to be satisfactory.

10. Financial Management

Assess the quality of the country's financial management of GAVI's cash grants, including budgeting, oversight, budget execution, reporting and auditing requirement compliance. Comment in particular on the country's progress in fulfilling the terms of GAVI's Partnership Framework Agreement (PFA) and Aide Memoire, and in resolving any outstanding financial management or reporting issues.

No FMA has been conducted.

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11. NVS Targets

Introducing new vaccines inevitably places additional demands on all programme sectors, activities and personnel. The EPI programme is already facing a number of on-going challenges as noted in the sections above, and given these realities, there appears to be a tendency to set overly ambitious targets for the new vaccines. This is especially so since insufficient numbers of fixed vaccination posts in rural and suburban areas, described as one of the major challenges for the programme, will not be quickly or easily resolved, and immunization coverage cannot be expanded without an adequate network of functioning facilities.

For the traditional vaccines, as already noted in section 7, there is no mention or discussion of any change in targets for immunization coverage rates when switching from the oral vaccine (OPV) to an injectable vaccine against polio (IPV) which is scheduled to take place in 2015. Given that OPV coverage in 2013 is already the lowest for the routine vaccines, and has been so for several years, and it seems probable that switching to an injectable vaccine will put further downward pressure on coverage rates, and it would be prudent to anticipate this and plan accordingly. This issue will be discussed further as part of the IPV application review during the November IRC review.

For Penta vaccine, targets set for 3rd dose coverage are 94% for 2014 and 95% for 2015, (in common with targets for all traditional vaccines – ie, BCG, OPV3, DPT3 and measles) and based on a reported Penta3 achievement of 93% in 2013, these targets appear to be reasonable.

For PCV, targets set for 3rd dose coverage are 85% for 2014 and again 95% for 2015, and according to the APR section 5.1, the rationale for the rapid increase in coverage from the 9% achieved in 2013 was that *'introduction of this vaccine was almost completed at the end 2013 and it is expected to reach slightly lower coverage than DTP-HepB-Hib vaccine in 2014 due to these vaccines are administered together'*. This appears to be a reasonable explanation, and if Penta3 coverage can reach 95% by 2015, there is no obvious reason why PCV3 should not achieve the same result.

For Rota2, the target set for 2014 was reduced to 48% as already mentioned in section 2, because introduction of this vaccine was expected to be complete only by mid-year 2014. The target set for 2015 is again 95% in common with all other vaccines, and using the same reasoning as for PCV, there is no obvious reason why Rota2 should not be able to achieve the same result as Penta3.

However, the broader question is whether any of the reported coverage figures are realistic, especially given the programme challenges described, with widespread vaccine stock control problems, insufficient numbers of fixed vaccination posts in rural and suburban areas, data quality problems and the unreliable population estimates nationally. It is thus debatable whether 95% coverage by 2015 is a

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feasible target for any of the NVS, but in the absence of any recent survey to validate the country's administrative data there is little basis for a forming an opinion. If a survey of immunization coverage actually was carried out in 2014, as has been mentioned in the preliminary (Powerpoint) report from the 2014 external review, this would provide valuable data on which to base an assessment of whether the coverage targets set for 2015 are feasible and realistic. Nonetheless, GAVI will recommend the renewal of vaccines based on above mentioned targets but do recommend that further analysis is made to fine tune baseline and target data.

12. EPI Financing and Sustainability

Angola started mandatory co-financing of pentavalent vaccine in 2011, has been every year in co-financing default for several months. The non-fulfilment of the co-financing requirement seems to be linked to administrative and procedural issues rather than lack of political commitment. As an illustration, at the time of the finalization of this document (end of September 2014), Angola was still in default with its co-financing obligations for PCV as follows:

- 2012: $1,175,113 (to be paid as part of the 2013 co-financing obligations)
- 2013: $826,969
- 2014: $5,277,500 (technically not in default yet)

It is worth to note that the country has not initiated payment for the 2014 obligations for the other vaccines as per the below details:

- Angola's co-financing requirement for Rotavirus Vaccine for 2014: $1,026,000
- Angola's co-financing requirement for Pentavalent Vaccine – 2014: $3,109,500

According to the GAVI co-financing default policy, if a country remains in default for more than one year, the GAVI Board will consider suspending support for the concerned vaccine until all co-financing arrears are duly paid. Official correspondences with this information were communicated to the country – the latest official letter dated from 10 September 2014.

However, the Government has been prioritising health sector and has finalized the National Health Plan 2014-2025. Health budget is increasing in total amounts and also as a share of government budget. Potential room to increase resources further as allocation is lower than Abuja's target.

Government share of the total EPI budget increased substantially from 73% as shown in the 2012 APR to almost 84% in 2013. The national contribution continued to cover 100% of the country's traditional vaccine costs, together with a very significant part of the NVS costs, the latter increasing from 39% in 2012 to 51% in 2013. At the same time, the total budget increased almost 19% over that period, from US$45 million in 2012 to US$53.5 million in 2013, so the dollar value of Government's share increased by around 35% in the year, from US$33 million in 2012 to almost US$45 million in 2013. Longer term trends cannot be assessed without additional data however, and it is not known what direction Government's

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contributions to EPI have taken in general or will take in the future. It is noted that country is currently classified as a 'GAVI-Graduating country', with a GNI in 2012 estimated at US$4,580. According to APR section 7.4, support from GAVI, in the form of NVS and injection supplies is not reported in the national health sector budget. This shall be discussed during the upcoming GAVI Alliance mission (October 2014).

One of the greatest successes is the increase of funds for health and immunisation. In 2009, the Government procured 100% of traditional vaccine needs (UNICEF pays vaccines used for campaigns), when only 14% were covered in 2004. Although there could be gap for vaccines funding, the country appears to be confident of being able to sustain the programme, particularly because the oil companies will be asked to support it, if and when required.

As a graduating country, Angola's co-financing has increased from $0.10 to $1.20 per dose (in 2013 for pentavalent - the minimum level being $1.17). As an illustration, the trend for pentavalent vaccine is 2011: $0.76 ; 2012: $0.98 ; 2013: $1.20 ; 2014: $1.42 (minimum was 1.30) ; 2015: estimated minimum level at $1.41. The country will be fully graduated for pentavalent in 2016 (first year in which the country received no more support for this vaccine).

The economy is currently heavily dependent on oil revenues however, and the GNI (upon which GAVI eligibility is determined) can fluctuate considerably and rapidly depending on commodity market conditions. The heavy dependence on oil revenues may reduce somewhat over time, as the non-oil sector, which had a growth rate close to 10% in 2010, has now been growing faster than the oil sector for the third year in succession, and may continue to do so in the near term.

A joint WHO/GAVI fact finding mission took place in June 2013. Despite the significant efforts and achievements on immunization, several sustainability related areas requiring improvements were identified: i) Timely payment of GAVI co-financing; ii) Efficient and timely vaccine procurement and iii) Long-term sustainability of new vaccine introduction subject to affordability of prices and other competing priorities. Preliminary list of recommendations were developed around vaccines financing; vaccine procurement; and human resources. The identified challenges facing Angola in this period of transition are mainly related to slow administrative procedures for purchasing and procuring vaccines and lack of sufficient trained staff to deal with procedural issues. Another joint GAVI Alliance mission (WHO; UNICEF, AMP and GAVI secretariat) is scheduled for October 2014 to finalize the Graduation Plan for Angola as part of the revised graduation policy. It is hoped that some institutional reforms especially around international payments and procurement policies will be envisaged by the Government. A graduation grant may be associated to the future graduation plan.

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13. Renewal Recommendations

Topic	Recommendation
New Vaccine Support	**Renewal of vaccination funding, with no change in presentation.** Coverage targets of 95% have been approved. - DTP-HepB-Hib - PCV13 - Rotavirus **Renewal is subject to the country fulfilling the 2013 co-financing requirements.**

14. Other Recommended Actions

Topic	Action Point	Responsible	Timeline
General comments on quality of APR	Signature by the Minister of Finance or delegated authority signing and endorsing the APR was still missing at the time of this analysis. This is an absolute requirement. *(Reminders were sent. It is hoped that the signature will be provided to GAVI prior the Panel review).*	Ministry of Health	Submitted
	Furthermore, the APR appeared to contain a substantial number of errors in Baseline table 4, which affected many of the findings in this appraisal. Also, some results in Table 4 were not consistent with data country had reported through the WHO/UNICEF Joint Reporting Form (JRF) for 2013 nor with the 2012 APR. All these errors and inconsistencies should ideally be corrected.	Ministry of Health	As soon as possible
	GAVI recommends that further analysis is made to fine tune baseline and target data. The coverage survey performed in 2014 along with the census data (census performed in May 2014) could help refining the data.	Ministry of Health	As soon as possible
	Dose calculations will be fine-tuned once the clarifications on baseline, targets and stock levels are received.	GAVI Secretariat	By end of 2014
	The country is encouraged to look at the issues observed in this appraisal and make the necessary corrections. The upcoming 2014 APR (to be provided by May 2015) gives the opportunity to enhance the quality of the reporting to GAVI.	Ministry of Health	As soon as possible
Equity	The country is encouraged to share an update with regard to the disaggregated reporting format currently under development as well as any information emerging from the national coverage cluster survey which collected information on sex. The survey's analysis will be stratified on this variable.	Ministry of Health	By end of 2014

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Governance	The country is encouraged to share more details on the ICC representation and composition. The country is encouraged to strengthen its NITAG. Such activity is part of the graduation and transition plan.	Ministry of Health	By end of 2014
Programme Management and performance	The country is requested to share the final report of the EPI external review, the coverage survey and DQS.	Ministry of Health	By end of 2014
	The cMYP should be updated taking into consideration results from the review.	Ministry of Health	By end of 2014
	The country is encouraged to address some of the bottlenecks (procurement, EVM related issues, etc.) mentioned in the APR and in the EPI external review in the upcoming graduation plan.	Ministry of Health with support from GAVI Alliance	By end of 2014
Data quality and NVS targets	The country should share the latest DQS results and information about the national census which took place in May 2014. GAVI recommends that further analysis is made to fine tune baseline, coverage and target data. The coverage survey performed in 2014 along with the census data could help in refining the data.	Ministry of Health with support from GAVI Alliance	2015
	Angola is encouraged to plan for its next population survey. Technical assistance by GAVI is available.	Ministry of Health with support from GAVI Alliance	As soon as possible
Polio	The country's cMYP should be updated to integrate the IPV introduction. The planning for the next CMYP should start ideally early 2015.	Ministry of Health	Early 2015
Financial management	The country needs to provide the external audit related to VIGs disbursed by GAVI in 2013, as per the GAVI audit policy.	Ministry of Health with support from GAVI Alliance	As soon as possible
	GAVI urges the Government of Angola to complete full payment of all co-financing arrears, with as a matter of utmost priority, the payment of the 2012 and 2013 PCV arrears to avoid the risk of GAVI's support suspension.	Ministry of Health	As soon as possible
Immunization sustainability and co-financing	Graduation Transition Plan to be finalized.	Ministry of Health with support from GAVI Alliance	By end of 2014

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