REPORT OF THE INDEPENDENT REVIEW COMMITTEE TO THE GAVI ALLIANCE ON THE REVIEW OF APPLICATIONS

July 2022

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List of Acronyms

ACSM	Advocacy, Communication and Social Mobilization
AEFI	Adverse event(s) following immunisation
bOPV	Bivalent oral polio vaccine
CCE	Cold-chain equipment
CCEOP	Cold-chain equipment optimization platform
CEO	Chief executive officer
cMYP	comprehensive Multi-Year Plan (for immunization)
COVID-19	Coronavirus Disease 2019
cVDPV	circulating Vaccine-Derived Poliovirus
DHS	Demographic and Health Survey
DSA	Daily Subsistence Allowance
EPI	Expanded Programme on Immunization
EVM	Effective Vaccine Management
EYE	Eliminate Yellow Fever Epidemics
GII	Gender Inequality Index
HCWM	Health Care Waste Management
HSCC	Health Sector Coordinating Committee (or Council)
HPV	Human papillomavirus
HR	Human resources
HSS	Health Systems Strengthening
ICC	Inter-Agency Coordinating Committee
IMCI	Integrated Management of Child Interventions
IPV2	Inactivated Polio Vaccine 2nd dose
IRC	Independent Review Committee
IRMMA	Identify – Reach – Monitor – Measure – Advocate
MCV	Measles-containing vaccine
MICS	Multi-Indicator Cluster Survey
MR	Measles-Rubella
NNHS	National Nutrition and Health Survey
NITAG	National Immunization Technical Advisory Group
NVS	New Vaccine Support
ODP	Operational Deployment Plan(s)
Ops	Operational Support
PCV	Pneumococcal conjugate vaccine
PCCS	Post-Campaign Coverage Survey
Penta	Pentavalent vaccine (DTP, Hib, HepB)
PFM	Portfolio Financial Management
PHC	Primary Health Care
PoA	Plan of Action
PNG	Papua New Guinea
PSC	Programme Support Costs
RI	Routine Immunization
SAGE	Strategic Advisory Group of Experts on Immunization
SARS-CoV-2	Severe acute respiratory syndrome coronavirus 2
SCM	Senior Country Manager
SIA	Supplementary immunization activity
TA	Technical assistance
TCA	Targeted Country Assistance
ToR	Terms of Reference
VPD	Vaccine preventable disease
WUENIC	WHO and UNICEF estimates of national immunization coverage
YF	Yellow Fever

Executive Summary

The Gavi Independent Review Committee (IRC) met from 27 June 2022 to 1 July 2022 and reviewed applications from three countries. This was the ninth IRC meeting held virtually because of the COVID-19 pandemic. Six IRC members participated throughout this round with a wide range of expertise that included immunisation services; surveillance of vaccine preventable diseases (VPD); immunization safety; health development and health systems strengthening (HSS); outbreaks, epidemics and emergency response; management and evaluation of health services; health policy and planning; primary health care (PHC); epidemiology; cold chain and supply chain management; health care waste management; health economics, health financing, grant management and auditing. One IRC member conducted in-depth financial reviews of the applications and another focused on supply chain and waste management. The IRC members focused on the following tasks during the review (a) Review of countries' funding requests and supporting documentation for vaccine introductions and campaigns to support national efforts to improve immunization coverage and equity; (b) Production of country-specific review reports and recommendations; (c) Development of a consolidated report of the review round, including recommendations for improving funding requests and strengthening routine immunization; and (d) Provision of recommendations to the Gavi Board and Alliance partners on improving processes relating to Gavi policies, governance, and structure. Review modalities included an independent desk review by designated members and virtual discussion in plenary with the participation of the full committee.

Results

The IRC recommended approval for two (Cameroon, Papua New Guinea) of the three applications for measles-rubella campaigns. The application from the Republic of Congo was recommended for re-review primarily because the Plan of Action was underdeveloped, application lacked sufficient detail on how special and hard-to-reach populations would be covered and how proposed follow-up campaign would be linked to a planned integrated nationwide mid-2022 Yellow Fever and Measles SIA. The overall total funding approved was US$7,830,114 for a target population of 6,800,158.

The IRC noted improvements in the quality of the applications resulting from adaptation of applications by the countries with focus on the IRMMA framework and better attempts to develop differentiated strategies. The challenges noted in this round of review were weakness of programmes to plan and budget for proposed integrated interventions, weak equity and gender analyses to inform strategies, and failure to conduct appropriate and timely epidemiologic analyses of available case-based surveillance data and measles outbreaks to inform strategies. On the other hand, the changes in approaches to preparing the budgets were found to have brought more clarity to the decision process. Finally, in Papua New Guinea application the IRC noted best practices and innovations where it included a budget for the second phase after the campaign to focus on providing an additional routine immunization round for zero-dose children identified during the campaign, to ensure these children catch up on other missed vaccinations.

Methods and Processes

The Gavi Independent Review Committee met from 27 June to 1 July 2022 on Zoom. This was the ninth virtual meeting because of the COVID-19 pandemic. IRC members communicated by email or met individually on Zoom outside the plenary sessions. Six members of the IRC participated in this round of reviews. One IRC member conducted in-depth reviews of the finance section of the

applications and another focused on supply chain and waste management (see Annex 1 for the list of participating IRC members and expertise). Two members of the IRC served in additional roles: interim chair, Benjamin Nkowane and vice-chair, Sandra Mounier-Jack.

The meeting agenda, country review assignments, country applications with supporting documents, and briefing presentations of Country EPI programme managers were shared with IRC members on 17 June 2022, 10 days before the start of the meeting. IRC members reviewed and analyzed these applications and prepared draft reports on their assigned countries. The Secretariat provided clarifications and any additional documentation the IRC members requested.

The meeting was opened by Ms Verena Dedekind and she welcomed the IRC members on behalf Of Ms Lindsey Cole (FDR) and Ms Anuradha Gupta, Deputy CEO of Gavi. She also provided a brief update on the actions taken following the last IRC meeting in March 2022.

Additional briefings by Secretariat and technical partners included an update on actions regarding previous IRC recommendations, background on the EPI Manager presentation for M/MR applications, the key issues and areas the IRC should review in relation to the vaccine request focusing on the countries being reviewed in this round and an update on the measles and rubella. The Portfolio Financial Management (PFM) team provided clear guidance to the IRC what is expected from them in terms of financial review, with a particular focus on the new guidance, tools and the concept of materiality of budget and finance issues.

Review process

Each country proposal with the accompanying documentation was reviewed independently by a primary and a secondary reviewer, each preparing separate individual reports. Cross-cutting issues related to budgets and financial sustainability and supply chain and waste management were reviewed in each application by one financial crosscutter and one IRC member specialized in supply chain management. These reports were presented during the daily virtual plenaries and the initial findings were extensively discussed. The IRC then came up with the final, consensus outcome recommendation of either approval or re-review for each application. Specific action points for the country and Gavi to follow-up were agreed upon during the plenary. The Gavi Secretariat and Alliance partners supported the plenaries by providing information and clarifications when needed, on country-specific background and context. The first reviewers then consolidated the reports from the different reviewers in line with the outcome of the plenary discussion, including decisions and recommendations. These drafts were then finalized after editing, fact checking, consistency checking, and quality review. Applications from Cameroon, The Congo and Papua New Guinea were reviewed in this IRC meeting.

Criteria for review

Review of the applications was guided by the IRC Terms of Reference and key criteria in line with Gavi mission. These include justification for the proposed activities, soundness of approach, country readiness, feasibility of plans, contribution to system strengthening, programmatic and financial sustainability, and public health benefits of the investment. The IRC adhered strictly to these guidelines to ensure the integrity, consistency, and transparency of the funding decision.

Decisions

There were two decision categories:

1) **Recommendation for Approval** when no issues were identified that would require re-review by the independent experts.
2) **Recommendation for Re-review** when there were critical issues that require a new review by the independent experts; this will entail detailed revision of the application and a revised submission to the IRC.

Table 1 presents the review outcomes for this round. Two applications were recommended for approval and one was recommended for re-review.

Table 1: Requests from Countries and Review Outcomes

Countries	Application/ Support requested	Target population	Gavi requested amount Operational Costs (US$)	Review Outcome
Cameroon	MR follow-up campaign	5,564,940	3,060,471	Approval
The Congo	MR follow-up campaign	1,098,745	569,586	Re-review
Papua New Guinea	MR follow-up campaign	1,235,218	4,769,673	Approval

Thematic areas sub-committees

During the review, IRC members were organized into five sub-committees (New vaccine support; Equity, zero-dose focus, gender analyses, and strengthening routine immunizations; Data use and quality; Supply chain and waste management; Budget, financial management and sustainability); Best practices and country innovations. Each sub-committee identified issues in the applications that would be of general interest for Gavi and partners and could be presented in the debriefing session with Gavi Senior Management, Secretariat staff and partners as well as in this report.

Gavi Senior Management, Secretariat and Alliance partners debriefing and closing session

The debriefing took place on 1 July 2022. A summary of the IRC meeting's review outcomes and key issues and recommendations from the IRC to Gavi and Alliance partners was presented. This was followed by a brief discussion, questions/comments, and responses from the IRC. At the end of the debriefing session, Ms Anuradha Gupta, Deputy CEO, Gavi expressed her appreciation for the work of the IRC and noted the IRC's comments on improvements in the quality of applications and the role technical partners and Gavi Secretariat has played in this regard. She also noted the importance the IRC places on use of available epidemiologic data for developing data driven strategies, and priority Gavi will continue to give to implementation of high quality SIAs.

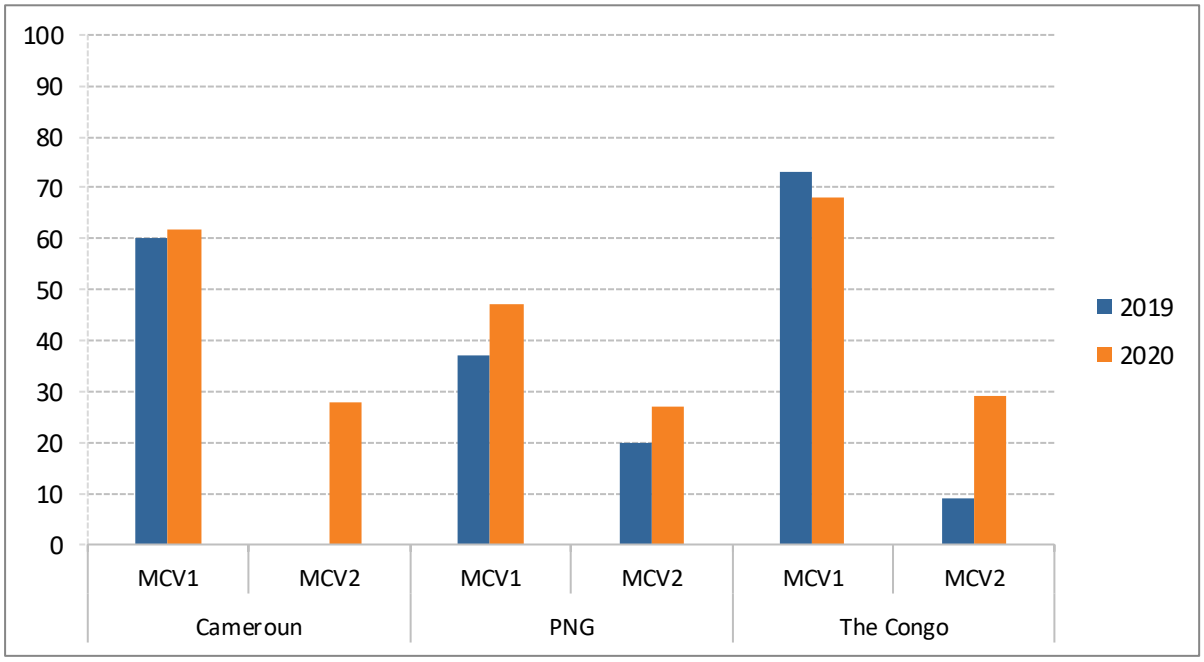
Key Findings and Recommendations

NVS (Routine and Campaign support)

Measles and Measles-Rubella applications

During this review window, the IRC reviewed three applications for Measles-Rubella support for follow-up campaigns: Cameroon and The Congo for the targeted age group of 9 to 59 months, and Papua New Guinea (PNG) for 6 to 59 months. The application from Cameroon, first reviewed in November 2021 and improved based on IRC feedback, and Papua New Guinea were approved, while The Congo was requested to submit its application for re-review. Funds requested for MR follow-up campaign operational costs amounted to US$ 8.39 million of which the amount of US$ 7.82 million was recommended for approval. All three countries have only recently established a routine two-dose measles vaccination schedule (MCV2 introduced in 2019 in PNG and The Congo, and in 2020 in Cameroon) and, given their inadequate MCV1 and MCV2 coverage, are relying on SIAs to control measles (Figure 1).

Figure 1: MCV1 and MCV2 coverage in applicant countries in 2019-2020 period (WUENIC)



Integration of high impact childhood interventions in campaigns

Mass vaccination campaigns are recognized as excellent platforms to deliver additional public health and nutrition interventions, with a clear benefit of rapid uptake of linked interventions and leveraged resources. All three countries list various interventions to be integrated with the MR follow-up campaign (Table 3). However, rationale of what to integrate is not elaborated in plans of action although PNG bases the selection of interventions on the integration feasibility and effectiveness assessment from the previous campaign (2019).

Table 3: Summary of integrated interventions listed in country applications

Cameroon	Papua New Guinea	The Congo
• Vitamin A supplementation • Screening for malnutrition • Active case finding of VPDs • Deworming (Mebendazole) • Advocacy for RI • Catching up 0 to 23 month group	•Vitamin A supplementation • bOPV administration • Active case finding of VPDs • Referral to routine	• Vitamin A supplementation •Deworming (Mebendazole) •Catching up unvaccinated or under-vaccinated children

None of the applications describe additional planning and preparation, training needs, or potential new challenges in their plan of action, or include added interventions in the budget. Countries appear to add interventions without considering impact on limited human resources, whether the mix of interventions is appropriate, how it would affect the main objective of the campaign, and how overall implementation would be supervised. For example, it is unclear who in the standard vaccination team (1 vaccinator, 1 recorder, 1 mobilizer) would be delivering the added activities, how that would affect time to deliver these interventions, recipients' waiting time, and consequently perceived quality of the campaign and demand. Of note, long waiting times are often listed as a reason for non-vaccination in post-campaign coverage surveys. If not very carefully selected and supported, the additional services to deliver may increase a risk of overburdening health workers, which then would impact service quality and reach. In addition, compatibility of interventions with regard to target population and recommended age does not appear to be considered.

Deworming with mebendazole is planned to be implemented in both Cameroun and The Congo, in target age 6 to 59 months and 9 to 59 months respectively. It should be noted that deworming with any preparation of mebendazole (chewable tablets or oral suspension) is not recommended in infants (under 12 months of age). Furthermore, WHO-PQ summary of product characteristics (SPC) explicitly lists administration of mebendazole tablets in children below the age of 1 year for mass treatment as a contraindication. Specifically, convulsions have been reported in infants below 1 year of age during post-marketing surveillance. If mebendazole and MCV are given concomitantly to this age group, without proper technical support, planning and preparation, possible convulsions could be interpreted as a serious adverse event following immunization, derail the campaign, and negatively impact immunization programme.

This is why it is of utmost importance that when considering integration, programme managers receive appropriate technical support (NITAG or similar, technical partners) and ensure compatibility, feasibility, optimal intensity, and quality of integrated interventions through adequate operational strategies such as training and supervision. Evaluation of integrated campaigns remains critical to better understand risks, benefits and efficiency of this approach.

Issue 01: Integration of other health and nutrition interventions in measles containing vaccine campaign is positive, but it remains unclear if it is adequately planned and budgeted.

Recommendations:

- Countries should be encouraged to explain/describe in their plan of action how the interventions to integrate with the campaign were selected, how the integrated campaign will be operationalized, staff mobilized and trained, interventions budgeted, delivered, supervised, and evaluated.
- Gavi and partners should continue to support evaluation of integrated campaigns.

Second year of life (2YL) platform as strategy to improve vaccination of children in routine immunization programmes.

During this review round, IRC noted with concern that despite the recent introduction of MR2 into their immunization schedule, no country established a second year of life platform (2YL) in their routine programme nor had plans to do so.

IRC also noted that countries continue to plan for nationwide SIAs in 3-year cycles as a primary strategy to control measles. With inadequate MR1 coverage, very low MR2 coverage, and mostly suboptimal coverage achieved in previous campaigns, countries are not reaching level of population immunity needed to control measles, especially if SIAs have consistently been missing those not reached in routine. Measles outbreaks are frequent, and both Cameroon and The Congo have experienced multiple measles outbreaks over the last decade, with one in The Congo ongoing since the beginning of 2022. Measles is endemic in Papua New Guinea but weak surveillance prevents regular identification and reporting of cases. Outbreak response immunization activities and campaigns (usually non-selective), line up one after the other and undoubtedly offer their benefits notably in low-coverage settings. Because benefits of an integrated SIA align with those of the 2YL platform, this provides further disincentive for strengthening routine delivery and the 2YL platform.

In addition, countries do not consider reviewing their current immunization policy and schedule, formalize the changes, and implement them in practice. For example, The Congo limits the age eligibility for MR1 to 13 months and for MR2 to 21 months, precluding a large number of children to complete the MR schedule. Campaigns therefore become the second opportunity for these children to receive the second or the only dose of measles vaccine, and integrated campaign activities seem to be replacing a sustainable 2YL platform. While campaigns have a real potential to reach un- or under-vaccinated if well planned and prepared, they should not replace a functional routine.

As all countries have introduced MR2 and have in their national strategies control and elimination of measles, they should focus on different activities and strategies to increase MR2 coverage as a part of the 2YL platform, so that reliance on campaigns can be reduced. Whereas children should ideally be vaccinated as soon as they become eligible to reduce exposure to vaccine-preventable diseases, those coming late should not be denied vaccination. Therefore, the upper age limit for MR vaccination needs to be removed and relevant country policies changed and enacted.

Finally, while the 2YL strategy may be driven by the idea to increase vaccination coverage and catch up on missed vaccinations, it provides an opportunity for strengthening delivery of other health and nutrition services to children and mothers such as growth monitoring, vitamin A supplementation, health education and family planning.

Issue 02: Despite existing guidance, 2YL strategy is not recognized as an opportunity for increasing care and protection against vaccine preventable diseases (VPD).

Recommendations:

- Gavi and partners should encourage and assist countries in developing, establishing and strengthening an optimal and impactful 2YL platform to support vaccination in the second year of life and beyond, to allow catching up on missed vaccinations, and integrate other health and nutritional interventions.
- Gavi and partners should encourage countries to update policies and guidelines to remove upper age limit for measles vaccination, to allow all children to receive two doses of MCV.

Reaching vulnerable groups during campaigns and routine immunizations

While UNHCR provides monthly information on status and numbers of persons of concern (i.e. refugees, internally displaced persons, returnees, asylum seekers etc.), countries hosting these vulnerable populations, do not quantify their numbers, location, and explain whether these refugees – in or out of camps – are included in target population and budget. They also do not provide information on how and by whom (e.g. government, humanitarian actors) they would be vaccinated.

Camp conditions are common risk factors for measles transmission, and refugees in camps, mostly women and children, are usually in the care of various NGOs, therefore dependent on often unstable funding. Status of refugees living in communities or elsewhere outside of camps is even less clear. This can lead to lack of harmonization of vaccination practices, disruption of immunization services, and heterogeneity of vaccination coverage, with the potential to increase the number of susceptible individuals and likelihood of outbreaks of measles and other VPDs in camps and in host communities. For example, although UNHCR reports that there were about 485 000 refugees in Cameroun and 33 000 refugees in Congo (May 2022), the countries merely acknowledge their presence and provide no information on numbers and inclusion in the campaign target, or collaboration with other agencies or partners involved in their care.

Another large group of people of concern is the urban slum population. In The Congo, 70% of the total population and in Cameroon more than 56% live in urban areas, while in PNG capital district accounting for 20% of total population 13% live in urban slums. However, strategies proposed for urban settings do not go beyond fixed vaccination sites, and none of the countries in their plans of action addresses urban slum population despite ongoing outbreaks. The availability of accurate data on this population is likely limited, but marginalized and poor are more likely to be unvaccinated, and therefore more at risk for outbreaks which can quickly spread to the rest of the population.

Issue 03: Reaching vulnerable groups is mentioned in plans of action, but these groups are often not quantified and strategy to reach them is not clearly tailored.

Recommendations

- Countries should clarify the status and numbers of refugees with regard to the proposed intervention, and identify vaccination strategies or partner/other agency collaboration to reach them.

- Gavi and partners should encourage the countries to identify/map urban slum populations, and assist them in developing the policies and strategies that would address and prioritize the needs of disadvantaged populations as a part of a wider urban immunization strategy.

Equity, zero-dose focus, gender analyses

Gavi's 5.0 strategy has continued to intensify efforts in reaching the unreached and increasing equity in immunization coverage. Towards this goal, country managers need to have a comprehensive understanding of equity- and gender-related issues, in order to design specific strategies to tackle such barriers. One application (Papua New Guinea) made a positive step in providing a deeper equity and gender analysis, and linking some key issues with context-specific mitigating actions in the plan of action. Specific equity and gender concerns, namely vaccine hesitancy, geographical isolation, poor access for uneducated mothers, and sexual violence, were presented in a table with specific mitigating actions to be taken during the proposed immunization campaign.

The other applications (Cameroon, The Congo) did not examine gender-related issues in their strategies. Only standard inequity dimensions (geography, gender of child, education level of mother or wealth quintile) were described, without specific factors incorporated into the plans of action. This has been noted in previous IRC reports, that equity and gender analyses are often superficial, or stop at describing standard equity indicators in new applications. With application re-reviews, the IRC noted there is generally an improvement with more analysis to inform planning, but this often remains incomplete. Despite the importance of solid equity and gender analyses, this remains a challenge for countries. One possible, ongoing issue could be the lack of comprehensive data or analysis available in the country on these dimensions. Another cause may be lack of familiarity of country teams in using an equity- and gender-responsive lens to shape immunization strategies.

Issue 04: Equity and gender-based barriers remain superficial and are not incorporated into context-specific implementation plans.

Recommendations:

- Where quality information is lacking Gavi and partners should support comprehensive local studies to get contextualized data with concrete timelines. The studies should include comprehensive evidence- and experienced-based best practices for reducing equity and gender-based barriers.
- Across countries, best practice examples of tailored strategies to improve equitable immunization should be more actively shared, for idea generation and inspiration.
- A good, first-step practice in incorporating equity and gender-based barriers into implementation plans is for countries to include a simple table with these key issues, side-by-side with potential mitigating measures, and the level of resources needed.

Data Quality and Use

Data driven root cause analyses

All three countries incorporated lessons learnt from recent measles SIAs and Polio SIAs into to the development of improved strategies. All countries had identified priority areas with a high number of

zero dose children and difficult to reach communities and used a variety of data sources to estimate the target number of children in these settings. In addition, priority was given to data obtained from intra-campaign evaluations [rapid convenience monitoring (RCM), SIA technical reports as well as post campaign coverage surveys (PCCS)]. Papua New Guinea had not however conducted any PCCS before and was not planning to conduct one due to high costs for implementation of the survey and is opting to use RCM to assess coverage.

Issue 05: Papua New Guinea faces challenges in conducting PCCS and is opting to use RCM as an alternative strategy to estimate coverage.

Recommendation:

- Alliance partners should provide guidance or appropriate alternatives to the standard WHO recommended PCCS methodology, such as partial or "mini" surveys when there are significant operational challenges for implementation.

Analysis and use of available epidemiologic data

All the three countries provided analyses of data from their case-based surveillance system for measles and rubella. However, the analyses done were inappropriate and key epidemiological factors were missing such as vaccination status of the confirmed cases, and analysis of cases from recent outbreaks to determine risk factors for occurrence and spread of measles. In addition, except for one report from The Congo on a recent Pointe Noire measles outbreak and response, root cause analyses were not based on available epidemiologic data.

Issue 06: Countries are not using available epidemiological information from their case-based surveillance system for measles and rubella primarily because they do not conduct appropriate analyses of the data on a regular basis.

Recommendations:

- Gavi and technical partners should work with countries to conduct appropriate analysis of available data so as to use the information for strategy development and impact evaluation.

Supply chain and waste management

Effective Vaccine Management Assessment (EVMA)

The IRC noted that only one country, Cameroun, conducted an Effective Vaccine Management Assessment (EVMA) within the recommended timeframe of 5 years and that only Cameroun scored above the threshold EVM score of 80%. In contrast, The Congo and Papua New Guinea scored below 60% during their latest EVMA, however, both are outdated and likely do not reflect the country's supply chain situation. These two countries are urged to conduct as soon as possible an EVMA followed by the development of a comprehensive improvement plan (cIP) that needs to be monitored.

Issue 07: Outdated Effective Vaccine Management Assessments and lack of comprehensive implementation plans do not reflect the country supply chain situation.

Recommendation:

- Gavi in collaboration with WHO and UNICEF to support countries conducting EVMA within the timeframe limits of 5 years.

Cold Chain Inventories and dry storage

In this round of review, all three countries have enough cold storage capacity to accommodate routine and SIA vaccines. This is primarily due to recent Gavi CCE investments. However, Cameroon and The Congo did not provide annually updated inventories as recommended by WHO. Papua New Guinea on the other hand, should be commended for providing an updated CCE inventory gap analysis that includes newly procured CCE and for institutionalizing a bi-annual CCE inventory that includes passive containers. The IRC also believes that adding CCE funding sources to the inventory will help better understand partners' contributions to the process. As regards dry storage, The Congo has adequate capacity at all levels, Cameroon is planning for rental even though this is not reflected in the budget, and PNG is silent on dry storage.

Issue 08: Weaknesses are still noted in the country Cold Chain gap analyses due to outdated inventories which are also not comprehensive enough and do not include passive containers.

Recommendation

- Countries to conduct a nationwide inventory at least once a year. These inventories should include passive containers and indicate CCE sources of funding (such as CCEOP, HSS, JICA, and others).
- Gavi to consider making annual CCE inventories mandatory for all support requests.

High vaccine wastage

Countries are proposing high MCV wastage rates (Papua New Guinea) without valid arguments, such as historical use. Countries may not be aware of results of recent vaccine wastage studies (including those supported by Gavi in three countries) showing the pros and cons of selecting MCV 5 doses vials vs MCV 10 doses vials. In addition, available tools such as the "WHO vaccine wastage calculator" are not used for vaccine presentation selection[1].

Issue 09: High vaccine wastage rates are proposed by countries without valid arguments.

Recommendation:

- Gavi and Alliance partners should disseminate results of recent vaccine wastage studies around dose per container conducted in 3 countries with Gavi support.
- WHO to reinforce the use of the "Vaccine Wastage Calculator Tool".

[1] https://www.researchgate.net/publication/313331078_Doses_per_vaccine_vial_container_An_understated_and_underestimated_driver_of_performance_that_needs_more_evidence.
https://publications.jsi.com/JSIInternet/Inc/Common/_download_pub.cfm?id=19421&lid=3

Waste management

IRC happy to note that efforts are being made by countries to describe and budget for waste management activities related to the campaign. Two good practices to be highlighted are a) Cameroun has mapped all its functional incinerators and developed loops around each of them for waste collection and disposal; b) PNG and Congo have included costs for waste transportation and disposal in the campaign budget. These practices are short-term and limited to the planned campaigns.

Issue 10: Efforts are made by countries to describe and budget for waste management activities; however, these are time-bounded and not within a long-term framework.

Recommendation

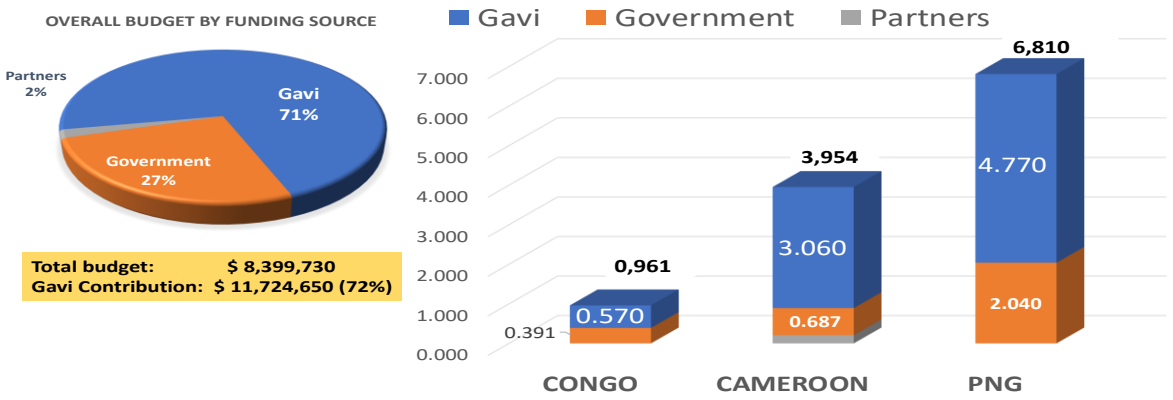
- Gavi and Alliance partners to encourage and support countries to develop a sustainable nationwide multiyear waste management plan.

Budgets, Financial Management and Sustainability

Budget overview

The three applications in this round had budgets totalling US$11,724,650. The requested Gavi contribution was US$8,399,730 (72% of total), while government contributions were relatively high at 27% (17% in Cameroon, 30% for PNG and up to 41% in the Congo.) This is because the 3 countries are in transitioning out of Gavi support. Only Cameroon had Partner contributions amounting to US$206,714, representing only 1,8% of the total budget. PNG indicated in the application a contribution of US$353,721 by "other donors but this was not reflected in the budget template and was therefore not included in the analysis (Figure 3).

Figure 3. Non-Gavi contributions to budgets



PNG requested US$4M above the ceiling as it benefited from a special Board strategy which allows flexibility on funding (US$4,769,673 budget against a US$555,848 ceiling). The operational costs are therefore US$4,34 per child, far than the standard of US$0,45/child. High costs were mainly driven by transport costs (US$2,67 per child) and HR costs (US$0,67 per child). Cameroon and the Congo were within the grant limit of US$0.55 per child for campaigns

Improvements in the financial review process

The process of budget review is continually revised and updated. The pre-screening process is more detailed and has impacted positively on the quality of budgets received by IRC for review. For this round, budget issues did not lead to re-review decision. However, the IRC observed some inconsistencies between the applications, the PoAs and budgets. In The Congo proposal, the ceiling indicated in the application form is higher than the one in the budget by US$34,689 due to a difference in the target population by 63,070 children. In PNG, there are several significant differences in the requested amounts between the application, the PoA and the budget.

New guidelines for finance review were introduced. The main change is related to the concept of materiality of budget and finance issues. Materiality of an issue is defined as a relative percentage of the overall cost category and/ investment area and also regarding a fixed limit. This use of this concept allows to focus the analysis on the key driving costs, thus contributing to improving the quality the decision process and reports. However, it appears though that the proposed limits and rules adopted in this round are not adapted for small budgets. For example, The Congo has US$600k budget so all findings can be considered non-material. Even if 90% of costs are HR costs, these can still be below threshold and therefore non-material issue. To improve the quality of IRC reviews, it would be important to compare the actual spending and past approved budgets. This would help to understand the appropriateness of certain expenses, their relative importance but also implementers' capacity to execute planned grant budget. The IRC understands that this information is difficult to obtain especially because of the unavailability of expenses breakdown at country level and because of certain disclosure information rules from partners. Information on actual spending could be provided as case studies of sample countries to be reviewed and discussed by the IRC.

Issue 11: The introduction of materiality concept in budget review, while it improved the process, raised some issues for smaller budgets. Information on actual spending of past approved budgets is lacking, thus making assessment of the level of planned expenditures challenging to assess.

Recommendation:

- **Gavi Secretariat to continue current efforts in improving financial process review**
    - Test the concept of materiality on different grant types and adjust thresholds accordingly.
    - Conduct case studies, comparing past approved budgets with actual expenditures after activity completion.

Gavi 5.0 guidelines and templates improved overall quality

The Gavi 5.0 budget template was used by all countries with a satisfactory level of conformity. Also, calculations details and assumptions were sufficiently provided. This is mainly due to the reinforced pre-screening process. The new guidelines on investment areas and cost inputs classifications has led to breakdowns of single activities into several budget items in the main budget table so as to reflect the right cost categories (e.g: HR costs, transport costs related to one event). This provides more accuracy in analysing budget composition but tends to inflate the number of budget lines. All the three countries did not provide a common reference to budget lines of the same activity which makes it difficult to read the main budget table. Cameroon presented much more details in the main budget table than required by guidelines: this included an excessive number of budget lines (307) in the main

tab with 102 items less than US$ 100 which prevented from making a broad analysis. PNG did not link the main table items with calculation details. This made it difficult to analyse and check some budget items.
The new guidelines on PSC costs stipulate that they should be funded under Gavi FM & RA fund when budget is above the ceiling. Countries appear unaware of this new provision. Cameroun and The Congo presented PSC in their OPC grant included in the ceiling while PNG -which budget was above the ceiling due to special arrangements- did not present PSC costs.

Issue 12: Countries are using new budget templates and guidelines with improved conformity but there are still issues in presenting the budget details and the use of the new PSC provisions.

Recommendation:

- Gavi Secretariat to continue current efforts in improving financial process review
    - Continue commendable efforts of pre-screening budgets.
    - Improve the budget template to facilitate the link between budget main table and details.
    - Request countries to provide easy link between budget main table and details, ensure proper budget items labelling to group them by activity and present a fair level of detail and budget lines in the main budget.
    - Partners to strongly discourage countries to present a budget sliced in a large quantity of low-cost budget items.
- Gavi and Alliance partners to continue providing support to countries on the new budget template.

Staffing requirement and HR-related costs

The Gavi 5.0 HR guidelines have improved the analysis of HR costs, but issues with compliance remain. The new guidelines introduced an indicative limit of 40% of HR related costs to the total budget (HR & HR-related costs, with inclusion of HR events and travel related costs). The calculation of this limit was clarified, and the budget template provides a summary table alerting countries in case of excess. The accuracy of the calculation depends on the correct classification in cost input. All 3 countries presented HR related costs under the 40% but these rates had to be corrected due to misclassification issues: HR related costs are over the limit of 40% for 2 countries: while the error in the Congo budget was not material (US$7k representing 1% of the total budget), the Cameroon excess was material (US$ 435,454 representing 14% of the total budget) resulting in HR of 54%. This is due to a misclassification of the transport allowance of some campaign stakeholders in a wrong cost input not included in the 40% limit calculations (2.6 instead of 2.5). For Papua New Guinea, the rate presented by the country was at 38% (US$ 1,789,373). HR related costs should be at 14% only as there are significant consultant costs (US$ 1,143,012, 24% of the total budget) that are misclassified under Human resources and transport costs.

Delivery strategy, team workload and supervision

The delivery strategies are better presented in the new POA template, and all countries presented the link with target populations. Cameroon and Papua New Guinea presented separate budget items for mop-ups and zero-dose strategies. Issues however remain in relation to assumptions and calculations of team workloads and supervisor to team ratios and inconsistencies between the POA and the budget. For The Congo, there were inconsistencies in the number of fixed and mobile teams and the

ratio of supervisors to teams in both The Congo and Cameroon ranged from 1:1 to 1:6 between the budget and the POA. Furthermore, in the Cameroon budget, the number of requested supervisors appears inflated (9 supervisors for each region, district supervisors at a ratio of 1 for 3 HF, and the team supervisors at 1 supervisor per team compared to 1/5 in the PoA). Papua New Guinea presented a daily workload of 21 children per vaccinator, half the WHO recommended ratio without justification in the POA or a reference to past experience.

Issue 13: Countries are still not budgeting within the recommended HR thresholds and although differentiated delivery strategies are better presented in the POA, the link between teams involved in the campaign is still not adequately presented.

Recommendations:

- Gavi Secretariat to continue current efforts in pre-screening budgets with focus on the appropriate classification of HR related costs, and alignment of the budget with the POA *(staffing requirement vs target population*).
- Gavi and partners to sustain ongoing efforts to fully implement past IRC recommendations, including:
  a) Ensure that technical staff and finance staff work together on budget preparation and that countries to demonstrate that budgets are aligned with POAs
  b) Ensuring inclusion in the budget of the costs associated with operationalizing differentiated delivery strategies.
  c) Ensuring that campaign staffing requirements are calculated based on WHO standards
  d) Adhere to the budget thresholds for HR costs.

Allocation of budget funding by donors

All 3 countries are in the transition phase process and all included Government contributions. The allocation of donors to budget items presented some issues. Cameroon Government contribution will fund microplanning activities with US$ 180,716 (66% of all microplanning budget) and vaccination activities with US$ 446,287 (17% of the activity). The teams DSA and transport allowances will be shared between Gavi and Government while allowances of other levels staff (from district to central) will be funded mainly by Gavi. For The Congo, Government share included DSA and transport allowances for volunteers and transport for supervision teams (31% of DSA during campaign), vehicle rentals and related fuel for supervision and teams transport for US$52,641 (77% of fuel and renting costs) and a share of other implementation costs (vaccinators, charger/constituter, registrars/recorders, district supervisors).

While it is commendable to have Government participation in campaign costs, these allocations between Government and Gavi may present a risk for campaign implementation in case of delays in payments at the delivery level where different teams at operational level will be paid from different funding sources depending on the strategy, especially when lack of funding of operational costs at operational level has been observed in the past. Cameroun allocated the entire training budget during the campaign to “Other donors” without specifying who they are. This may represent a risk for implementation of these critical activities.

Issue 14: Countries allocate different donors to support different categories of vaccination teams at operational level, and some critical activities have no identified funding source.

Recommendations:

- Gavi and Alliance partners to request countries to ensure the budget allocation of all operational team allowances at the same level are under one donor.
- Gavi and alliance partners to ensure that donors of critical activities are identified/disclosed.

Best Practices and Country Innovations: Strengthening routine immunizations

The IRC noted some best practices and innovative approaches described by countries in areas of planning and implementation to improve their campaign and strengthening routine immunization performance. As a good practice example, Papua New Guinea has assigned a distinctive "Phase 2" stage which follows after the integrated MR-bOPV-Vitamin A follow-up campaign is completed. The aim of Phase 2 is to provide an additional routine immunization round for zero-dose children identified during the campaign, to ensure these children get caught up on other missing vaccinations. These additional activities for zero-dose children in Phase 2 were reflected in the budget, including additional weeks, human resources, and logistical costs. The campaign specifically made efforts to strengthen routine immunization by registering zero-dose children during the campaign, with a simple, double registration card system which has been used successfully in other countries. The child's information is recorded twice on this double card system, and one card piece kept by the health facility, for call back for routine immunization follow up.

Review process

EPI manager presentations

Presentations were more focussed since the last IRC and provided the opportunity for questions and answers (Q&A). The presentation slides provided good summaries of priority issues related to the applications. The questions and answers sessions were very useful in that they provided additional country context information that was useful for the IRC to consider in their deliberations.

Overall review process

The IRC noted and recognized that Gavi 5.0 has led countries to adapt applications to the IRMMA framework and focus on zero dose children in developing differentiated strategies. The recent changes in the pre-screening process adopted by Gavi Secretariat and Technical Partners have led to improvements in the applications, in particular, the changes in approaches in preparation and review of the budgets in the applications. The IRC also noted the improvements due to technical support and oversight from Alliance partners in addressing recommendations of the IRC in particular with applications that were previously recommended for re-review. Challenges however remain in that countries are not using the available epidemiological data for developing appropriate data driven strategies for both campaigns and strengthening routine EPI. Gender and equity considerations remain weak in the applications because contextual information is either not available or not utilized at the country level by programme managers.

Concluding remarks

The IRC appreciates the efforts of the Gavi Secretariat and technical partners in ensuring that previous IRC recommendations are considered. This is particularly evident in applications that were submitted as re-reviews. The IRC welcomes the budget review guidelines including the introduction of the "materiality concept", which though not adapted for small grants, brings more clarity to the decision making process. Gavi should consider providing historical data on actual spending on past approved budgets.

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Annex 1: IRC Members for the 27 June – 1 July 2022 Meeting

	Name	Nationality	Profession and Specialization	Gender	French	Expertise
1	Aleksandra Caric	Croatia	Independent consultant	Female	FR	Measles, AEFI Surveillance and vaccine safety, programme management, primary health care.
2	Sandra Mounier-Jack, Vice-Chair	France, UK	Associate Professor in Health Policy, LSHTM Faculty of Public Health and Policy	Female	FR	HPV, measles, immunisation programmes, HSS, health policy and health financing.
3	Wassim Khrouf	Tunisia	Chartered accountant and independent consultant.	Male	FR	Financial & budget analysis, audits, project assessment.
4	Tippi Mak	Canada	Independent consultant	Female		Vaccinology, scientific reviews for immunization policy, safety and regulation. Late-phase vaccine development. Epidemiology, primary care.
5	Benjamin Nkowane, Interim Chair	Zambia	Independent consultant	Male		Measles, epidemiology, mass vaccination campaigns, technical support for field operations in risk areas.
6	Ousmane Tamba Dia	USA, Senegal	Independent Consultant	Male	FR	Routine immunization, Project/Program management, Supply chain management, Biomedical equipment maintenance, Health care waste management.