Dear Minister,

**Zimbabwe’s 2012 application to GAVI for the HPV Vaccine Demonstration Programme**

This letter is in response to Zimbabwe’s proposal to the GAVI Alliance for new vaccines support (NVS) for the HPV Vaccine Demonstration Programme, which was submitted to the GAVI Secretariat in October 2012.

The GAVI Independent Review Committee (IRC) reviewed all the proposals received and concluded that Zimbabwe’s application for HPV Vaccine Demonstration Programme needed to be resubmitted. This means that the IRC had fundamental concerns about the application, which are explained in the findings of the IRC assessment attached in Appendix A. A full fresh application should be submitted in a future NVS application round - the timing of which the GAVI Secretariat will communicate as soon as possible, but is likely to be in mid-2013.

Please do not hesitate to contact Charlie Whetham, GAVI’s Country Responsible Officer for Zimbabwe, if you have any questions or concerns.

Yours sincerely,

Hind Khatib-Othman
Managing Director, Country Programmes

Attachment: Appendix A: Report from the Independent Review Committee
Application for HPV Demonstration Project by Zimbabwe
Report from the Independent Review Committee

Country: Zimbabwe
Type of support requested: HPV Demonstration

Country profile/Basic data

<table>
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<tr>
<th>Population</th>
<th>Govt. Health expenditure as % of General Govt. Expenditure (WB)</th>
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<tbody>
<tr>
<td>Birth cohort</td>
<td>GNI/capita</td>
<td>640</td>
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<td>Surviving infants</td>
<td>Cervical Cancer Incidence (Globocan 2008)</td>
<td>47</td>
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<tr>
<td>DTP3 coverage (admin)</td>
<td>Cervical Cancer Mortality (Globocan 2008)</td>
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<td>DTP3 coverage (WHO/UNICEF)</td>
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<td>Infant mortality rate</td>
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<td>13,013,678</td>
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<td>42.8/1000</td>
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1. Type of support requested/Total funding/Implementation period

The first choice of HPV vaccine is the bivalent vaccine and the second choice is the quadrivalent vaccine. The executive summary states that the target population is 10 year olds, both in and out of school. The strategies will be mixed: school-based, health facility-based and outreach. Two districts have been selected – Beitbridge and Marondera – and both have a rural and urban mix, with a predominance of rural setting above 70% in both.

The demonstration targets 4,441 girls aged 10 years old in and out of school. The total value of the vaccines requested is US$151,114; there are no equipment-related costs. The cash grant requested is US$415,450, which is in excess of the GAVI maximum threshold for the country (US$279,681.60). The total budget for the demonstration is US$1,600,749.74

The implementation period for the project will be two years.

2. History of GAVI support

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<th>Table 1. NVS and INS support</th>
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<td>NVS and INS support</td>
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<tr>
<td>Pentavalent</td>
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<td>PCV 13</td>
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<th>Table 2. Cash Support</th>
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<td>Cash support</td>
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<tr>
<td>ISS 1</td>
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<td>ISS 2</td>
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3. Disease burden and eligibility

Cervical cancer is the leading cause of cancer-related morbidity. In 2009, cervical cancer contributed to 19% of all new cancers and 13% of cancer mortality. The 2009 Zimbabwe HPV and Related Cancers Summary Report estimated that cervical cancer accounted for 1,855 new cases and 1,286 deaths annually, and these are projected to increase to 2,587 new cases and 1,772 deaths by 2025. The same report indicated that in 2010 the prevalence of HPV in women with normal cytology was 24.7%, while in those with cervical cancer was 79.6%. The most prevalent serotypes of HPV in Zimbabwe are 16 (61%), 18 (18%), 33 (38%) and 35 (1%). The Globocan estimates for incidence is 47, while that of mortality is 33.

The country is eligible based on DTP3 coverage.

4. Role of ICC in application

The ICC membership includes MOHCW, UNICEF, UNFPA, MCHIP and WHO. Two sets of ICC minutes were available. There does not appear to be any CSO representation on the ICC/TAG and this needs to be addressed.

The meeting held in September 2012 discussed the intention and interest in HPV Vaccine as a way to address the high cervical cancer disease burden. The subsequent set of minutes indicates discussion on the endorsement of the HPV proposal. The MoHSW and MOE have signed the application. The role played by the ICC in the application was not clear.

5. Gender & Equity

The proposal demonstrates some sensitivity to equity issues. Some strategies were outlined to reach out of school (OOS) girls. Some barriers and other factors that affect immunization coverage with vaccines targeted at the early adolescent age group were postulated and relate to geographical access and rumors concerning the vaccine. Equity issues raised in the proposal related to urban children having "more chance to be vaccinated compared to rural children and that those of Apostolic Faith and those professing no religion have lower immunization rates than children of other religious denominations" (2010 EPI Routine Immunization Coverage Survey). No strategies to address this were given in the proposal. The review of adolescent health interventions also presents an opportunity to consider strategies to reach OOS girls. The engagement of boys was not addressed. There does not appear to be any CSO representation on the ICC/TAG.

6. District choice

The two districts selected are primarily (~70%) rural districts, with total populations of 169,168 and 113,441 for Beitbridge and Marondera, respectively. Both districts have almost an equal number of rural health centers. The EPI Performance for the two districts is above 90% for Beitbridge and above 100% for Marondera for all antigens, with the exception of TT2+, where in both cases it is just below the 50% mark. There are 66 government and three private primary schools in Beitbridge and 90 primary government schools and six private primary schools in Marondera.

The Provincial Medical Directorates (Matabeleland South and Mashonaland East) are described as having strong support for the EPI program. These districts were selected on the basis of diversity of cultural and traditional norms and practices found in the rest of the country and lessons learnt will facilitate replication of the intervention during the national roll out. Both districts are reported to have well established school health services, where interventions such as prevention and control of diarrheal diseases, schistosomiasis mass treatment and malaria control are implemented.
7. Target Group & Delivery Strategy

The proportion of 9-13 year old girls in school is 94%. The target group (i.e. whether age or school grade) for in-school vaccine delivery in the application is not clear. The executive summary describes a mixed strategy with school-based, health facility-based and outreach delivery to 10 year old girls. The total number of girls to be vaccinated per annum is based on the total number of 10 year old girls, which is given as 4,441. The figures of 1,815 and 2,626 in Beitbridge and Marondera come from relatively old data from the MoESAC National Level Enrolment Statistics 2009 and Labour Force Survey 2004. This target age group is appropriate. National data estimate the % of 10 year old girls in school at 105%.

However, the proposal then mentions girls enrolled in primary school grade 5 and gives a total number of girls in grade 5 as 4,592. This implies that grade 5 children will be vaccinated but it is not clear if this would be only 10 year olds in grade 5 or all grade 5 female pupils. The grade is appropriate.

No details are given on how often the schools would be visited, whether this would be one dose/visit, whether dose 1 would be offered more than once, etc. Assuming an age-based strategy is used in school and for OOS girls, then strategies to confirm the girls’ age have not been explained. This can be a challenge in many parts of sub-Saharan Africa.

The section on reaching OOS girls, hard to reach groups and in-school girls who miss doses was given but the timing of these activities and who would do them was not specified. OOS girls will be identified by community based health workers and community leaders (although how they will know who these girls are was not explained). The girls will be vaccinated through “outreach and fixed facilities”.

Girls who miss vaccination in school will be identified using school- or community-based registers and individual HPV vaccination cards (not clear who will check these). Consultation with community leaders on vaccination days and follow up campaigns will be done, including house to house visits. The proposal states this will reach hard to reach communities. No information on when these campaigns would be done is given.

Re-sensitization and mobilization of communities is also mentioned. Again, it is not clear when this would be done and who would do this. The proposal states that “individuals will be given HPV vaccination cards and community based health workers will be given registers”. Presumably some sort of census of eligible girls in the community would need to be done first and it was not clear how the registers will be kept up to date.

The application states that “availability of adequate numbers of health workers and adequate transport and fuel for outreach work needs to be assured before commencement. Funding will also need to be guaranteed”. This is of particular concern since later in the application it is stated that “Special vaccine campaigns and administration in public and private health facilities by general practitioners, paediatricians, gynaecologists or other clinicians will be conducted”. It is not clear who would train and supervise these individuals. Private health facility vaccination services may have different levels of supervision by EPI than government health services and this may necessitate additional personnel.

8. Supply

Both vaccines would cover HPV 16/18 (the reason given in the application for justifying the bivalent vaccine). The quadrivalent vaccine is not licensed in Zimbabwe.

9. Effective Vaccine Management

Although the 2010 Cold Chain assessment indicated that there was inadequate cold chain capacity, this has been addressed through the support of UNICEF. Cold chain systems are adequate to support the
inclusion of HPV vaccine in the two districts and surveillance will be an integral part of the information collected. The proposal refers to general challenges, which include transport and fuel for outreach, poor working conditions and low staff morale, although these have not negatively impacted on previous immunization coverage.

10. Training, Community Sensitization & Mobilization Plans, Evaluation

Training, Sensitisation and Mobilization
This section was rather brief. Initial activities comprise an advocacy meeting for ICC and NITAG members to sensitise them on the demonstration projects, meeting with provincial and district managers (with MOH and MOE, including school health at district level) and ward health team meetings and operational research on Knowledge, Attitudes and Practices on cervical cancer and HPV vaccine (it was not clear who will conduct this research). A statement is given that the communities will be sensitised on the demonstration programme and that this will be through interpersonal communication, print and electronic media and lobbying. The project will be relying on the community-based health worker program and the fact that there is a high literacy rate, so printed information can be used (although it is not clear how this will be distributed).

Challenges mentioned included fear of new vaccines, religious beliefs, internet rumors, sufficient human resources and funding constraint for outreach work: “Mobilization of additional transport for outreach work especial at the introduction phase of the HPV vaccine will be done to ensure that all planned outreach points are covered”.

Evaluation
The application states that the assessment will follow a Post Introduction Evaluation (PIE) type evaluation and will be conducted at the end of year 1, with technical support form WHO and/or PATH. The MoHCW will "request WHO to appoint a competent consultant to lead the assessment process and produce a report of the findings”.

11. Assessment of adolescent health interventions

A situation analysis of adolescent health services will be conducted by a consortium of stakeholders including the MOHCW, UN agencies and the University of Zimbabwe. This will include review of legislation, policies, and strategies and will complement the 2008 review of laws, policies and strategies related to ASRH. These will inform the process of development of an Adolescent Health Program Implementation plan/ strategy and the Monitoring and Evaluation plan. There will be setting up of various TWGs and sub-committees of various backgrounds with specific activities, resource requirements defined, timelines, indicators, roles and responsibilities assigned. The assessment shall be conducted at the end of the year 1 and results shared with a second round implementation plan.

These activities appear appropriate, although the review of legislations is often a lengthy and tedious process, so there is a risk that this might not be achieved in the timeframe set. A simpler assessment of interventions to be integrated in the ADH services would be more appropriate.

The application states that an end of Round One assessment will be conducted at the end of Year 1 “to assess the results and effectiveness of the programme in integrating adolescent health with HPV vaccination”. This suggests the proposal submission team were confused between the desk assessment and the testing of integration of adolescent services with vaccine in the field. A report and a Second Round Implementation Plan will be prepared within three months of this assessment. According to the timeline no joint delivery will be done in Year 2.

The current status of the Cervical Cancer Prevention and Control Strategy is unclear and the process to develop/update this appears to be somewhat cumbersome. The application mentions reviewing “all relevant Cervical Cancer Control documents, studies, national policies and guidelines, relevant international conventions and resolutions that the country has ratified and or endorsed in relation to Cancer Control”. It is not clear whether relevant Cervical Cancer Control includes a draft strategy.

It is then proposed to carry out “key informant interviews with policy makers and implementers of Cervical Cancer Control activities at the MoHCW and to conduct field visits to select Province/districts to verify information and identify good practices and bottlenecks”. It is not clear whether field visits would be essential for the development of the Strategy. An updated situation analysis report will then be prepared followed by a national workshop and finalization of the report.

A Draft/Update of the Cervical Cancer Control Strategy based on the situation analysis report will be done followed by a workshop reviewing the Cervical Cancer Control Strategy and finalization of the report. No lead has been identified (a consultant will be appointed on behalf of the MOHCW).

13. Technical Advisory Group

This group comprises the University of Zimbabwe, MOHCW (EPI, PMTCT, Paediatrics, Disease Prevention and Control), UNICEF, MCHIP, UNFPA, WHO, Medicines control authority and Ministry of Education.

14. Timeline

No dates are given on the timelines. The activities at the start of the year, especially M1, look quite tight. Vaccine is anticipated to arrive in M2, with transport to districts in M3. Implementation of the communication plan is allocated to start immediately before the operational research on Knowledge, Attitudes and Practices mentioned in the communications section and while IEC materials and communication plans are being adapted. Dose 1 is due to be delivered in M4. Dose 6 has been allocated 8 months after dose 1 instead of 6 months. No timeline has been given for preparing final recommendations for the scale up for national HPV vaccination.

15. Financial Analysis

GAVI funding requested: US$ 415,750 (US$ 270,500 in Year 1 and US$ 145,250 in Year 2)
Total budget: US$ 1,600,749.74
Other funding sources: US$ 1,185,999 (US$ 763,974 in Year 1 and US$ 422,025.28 in Year 2)

The budgetary requirements are high. This project is estimated to cost US$ 1,600,749.74 to vaccinate 4,441 girls per annum (US$ 180 per girl). The largest components of the budget are personnel (33%), monitoring and supervision (14%), training (10%) and community sensitization (10%). Very little funding has been allocated to evaluation of vaccine delivery (US$ 6,600, allocated to WHO). 74% of the budget is from other sources (listed only as GOZ, UNFPA, WHO, UNICEF, HTF). These include the whole of objectives 2 and 3, for personnel (GOZ), TAG meetings (HTZ), transport (GOZ-HTF), AEFI monitoring (HTF UNICEF), evaluation of year 1 (PATH/WHO/MCHIP), feasibility of adolescent health intervention integration and drafting the national cancer control strategy (UNFPA/PATH), and technical experts (WHO). Year 1 is over the GAVI threshold. No costs are allowed for testing of joint delivery of integration of adolescent health interventions, as the country is not planning to do this. Therefore, Year 2 is over the GAVI threshold.

16. Overview of the proposal: Strengths & weaknesses

Strengths
The country has a clear justification for adding HPV vaccination as a strategy to control cervical cancer and has extensive experience in delivering new vaccines.

**Weaknesses**
- The proposed delivery strategy in schools is not clear. At points the proposal reads that all girls in the school aged 10 will be selected for vaccination but elsewhere it implies only pupils aged 10 or all pupils in primary school grade 5 may be vaccinated.
- The training and sensitization section was weak and specific agencies to lead the evaluation and conduct the operational research KAP survey were not mentioned.
- Concerns have been raised over adequate numbers of health workers, adequate transport and fuel and funding for outreach work and a statement that this needs to be guaranteed.
- The budget is over the GAVI thresholds and is very expensive for 4,441 girls per annum. According to the CRO, this budget was not adjusted after an initial draft application for a larger target population.

**Risks**
- If an age-based strategy is used, the country may find it difficult to determine ages for some girls (since age-awareness could be low in some rural areas) and this could lead to uncertainty in denominator and numerator data for coverage estimates.
- Mobilization of additional transport is seen as essential for the outreach work. If this is unsuccessful then it could impact on the program's vaccine delivery and coverage.
- There are no dates on the project timelines. Activities look tight for the 1st quarter of Year 1. Some activities have no timelines.
- A high proportion of the budget is allocated to other funding sources. If this funding is not obtained it is doubtful that the project would be successful.

17. IRC Recommendation

**IRC Recommendation:** Resubmission

**Rationale:**
- GAVI guidelines state that, for in school delivery, the country selects either one school grade OR one specific age. The application seems to mention several delivery strategies including (i) pupils aged 10 in primary school grade 5, (ii) all pupils in grade 5 (iii) all girls in the school aged 10.
- Please check the estimates of the number of girls aged 10, since these are based on data from >4 years ago and could underestimate the actual number of eligible girls.
- What is the estimated month of dose 1 of vaccine in Year 1?
- Please check the vaccination schedule, as the period between dose 1 and dose 3 is incorrect in the timelines.
- Please clarify the status of the national cervical cancer control strategy.
- The budget appears to be incorrect (according to the CRO, this was not adjusted after an initial draft application for a larger target population). This will need amendment.
- What is the status of sourcing the 74% of the budget from the other named sources?
- It is not clear which activities are being conducted to explore integration of adolescent health interventions. Will the country test an integration strategy, as it was stated that "an end of Round One assessment will be conducted to assess the results and effectiveness of the programme in integrating Adolescent Health with HPV vaccination"?
- The country should outline strategies to address the issue of resistance based on religious beliefs identified in the proposal.
- Please consider increasing the CSO representation on ICCs and TAG.