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Health System Strengthening (HSS) Cash Support

Application Package – Proposal Form

COUNTRY NAME: ZAMBIA DATE OF APPLICATION: 12th October2015

This proposal form is for use by applicants seeking to request Health System Strengthening (HSS) cash support from GAVI, the Vaccine Alliance (Gavi). Countries are encouraged to participate in an iterative process with GAVI partners, including civil society organisations (CSOs), in the development of HSS proposals prior to submission of this application for funding.

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As an important supplement to this document, please also see the '*General Guidelines for Expressions of Interest and Applications for All Types of GAVI Support*, available on the GAVI web site:
http://www.gavi.org/support/apply/

The General Guidelines serve as an introduction to the principles, policies and processes that are applicable to all types of Gavi support, both Health Systems Strengthening (HSS) and New and Underused Vaccines Support (NVS).

All applicants are encouraged to read and follow the accompanying '*Supplementary Guidelines for Health System Strengthening Applications in 2014*' in order to correctly fill out this form. Each corresponding section within the Supplementary HSS Guidelines provides more detailed instructions and illustrative instructions on how to fill out the HSS proposal form.

Please note that, if approved, your application for HSS support will be made available on the GAVI website and may be shared at workshops and training sessions. Applications may also be shared with GAVI partners and Gavi's civil society constituency for post-submission assessment, review and evaluation.

Gavi's Key Elements for Health System Strengthening Grants

The following key elements outline Gavi's approach to health system strengthening and should be reflected in an HSS grant. They are presented as being either 'required' for a GAVI HSS Grant or 'recommended' for a GAVI HSS Grant:

Required Elements:

- One of Gavi's strategic goals is to "contribute to strengthening the capacity of integrated health systems to deliver immunisation". The objective of Gavi HSS support is to address system bottlenecks to achieve better immunisation outcomes, including increased vaccination coverage and more equitable access to immunisation. As such, it is necessary for the application to be based on a strong bottleneck and gap analysis, and present a clear results chain demonstrating the link between proposed activities and improved immunisation outcomes.
- Performance based funding (PBF) is a core approach of Gavi HSS support. All applications must align with the Gavi performance based funding approach introduced in 2012. Countries' performance will be measured based on a predefined set of PBF indicators against which additional payments will be made to reward good performance in improving immunisation outcomes. Under the PBF approach for HSS, the programmed portion of HSS grants must be used solely to fund HSS activities. Countries have more flexibility on how they wish to spend their reward payments, as long as they are still spent within the health sector. Neither programmed nor performance payments may be used to purchase vaccines or meet Gavi's requirements to co-finance vaccine purchases, and shall not be used to pay any taxes, customs, duties, toll or other charges imposed on the importation of vaccines and related supplies.
- Gavi's HSS application requires a strong M&E framework, measurement and documentation of results, and an end of grant evaluation. The performance of the HSS grant will be measured through intermediate results as well as immunisation outcomes including diphtheria tetanus pertussis (DTP3) coverage, measles-containing vaccine first dose (MCV1) coverage, fully immunised child coverage, difference in DTP3 coverage between top and bottom wealth quintiles, and percent of districts reporting at least 80% coverage of DTP3. Additionally, so as to systematically measure and document immunisation data quality and data system improvement efforts, independent and recurrent data quality assessments and surveys will be required for all HSS applications.
- Gavi's approach to HSS includes support for strengthening information systems and improving data quality. Strong information systems are of fundamental importance both to countries and to Gavi. Gavi requires that countries have in place routine mechanisms to independently assess the quality of administrative data and track changes in data quality over time. Countries are strongly encouraged to include in their proposals actions to strengthen data systems, and to demonstrate how their grant will be used to help implement recommendations or agreed action items coming from previous data quality assessments. The process of conducting periodic data quality assessments and monitoring trends should be credible and nationally agreed. For example, incorporating an independent element to the assessments could involve national institutions that are external to the programme that collects or oversees the data collection. Comprehensive information on reporting and data quality requirements are provided in the NVS/HSS General Guidelines for 2015. Please refer to section 3 on Monitoring and Reporting and Annex E on Data Quality.
- Gavi recognises the importance of effective and efficient supply chain systems for the management of existing and new vaccines and health commodities. Gavi has therefore developed and approved

in June 2014 a supply chain strategy[1]. (For more information about the strategy initiatives, see the factsheet http://www.gavi.org/Library/Publications/*Gavi*-fact-sheets/Gavi-Supply-Chain-Strategy/). The Effective Vaccine Management (EVM) assessment and improvement plan are essential steps in the strategic approach to supply chain improvement in countries.

  - **New Requirement**: As approved by the Gavi Board in June 2014 all future proposals (2015 and beyond) that include Gavi-financing for cold chain equipment intended for vaccine storage shall need to procure pre-qualified equipment by WHO through the Performance Quality and Safety (PQS) programme. The purchase of non-PQS pre-qualified equipment will only be considered on an exceptional basis, with justification and advance agreement from Gavi.

- Gavi supports the principles of alignment and harmonisation (in keeping with Paris, Accra and Busan declarations and the International Health Partnership, IHP+). The application must demonstrate how Gavi support is aligned with country health plans and processes, complementary to other donor funding, and uses existing country systems, such as for financial management and M&E. The IHP+ Common Monitoring and Evaluation Framework is used as a reference framework in the supplementary HSS guidelines.
- Gavi requests countries to identify and build linkages between HSS support and new vaccines implementation (Gavi NVS) – linkages to routine immunisation strengthening, new vaccine introduction, and campaign planning and implementation must be demonstrated in the application. Countries should demonstrate alignment between HSS grant activities and activities funded through other Gavi cash support, including vaccine introduction grants and operational support for campaigns.
- As part of vaccine introduction, Gavi HSS support should be used during pre-and post-introduction for strengthening the routine immunisation system to increase the coverage e.g. through social mobilisation, training, supply chain management etc. (see grant categories in table 1 of the Supplementary HSS Guidelines) for all the vaccines supported. This should complement other sources of funding including vaccine introduction grants from Gavi.
- Applications must include details on lessons learned from previous HSS grants from Gavi or support from other sources such as previous New and Underused Vaccine Support, the EVM assessment or PIE tools, EPI reviews etc.
- Applications must include information on how sustainability of activities and results will be addressed from a financial and programmatic perspective beyond the period of support from Gavi.
- Applications must include information on how equity (including geographic, socio-economic, and gender equity) will be addressed.
- Applications will need to show the complementarity and added value of Gavi support to reducing bottlenecks and strengthening the health system, relative to support from other partners and funding sources and relative to other funding from Gavi specific to new vaccines and/or campaigns.

Recommended Elements:

- Gavi supports the use of Joint Assessment of National Strategies (JANS). If a country has conducted a JANS assessment the findings can be included in the HSS application. The Independent Review Committee (IRC) will use the findings of a JANS assessment to gain an understanding of the policy and health sector context that will inform their assessment of the credibility and feasibility of the HSS proposal.

[1] See Gavi supply chain strategy section 3.5, http://www.gavi.org/About/Governance/Gavi-Board/Minutes/2014/18-June/Minutes/05---Gavi-Alliance-immunisation-supply-chain-strategy/

- Gavi's approach to HSS includes support for community mobilisation, demand generation, and communication, including Communication for Immunisation (C4I) approach.
- Gavi supports innovation. Countries are encouraged to think of innovative and catalytic activities for inclusion in their grants to address HSS bottlenecks to improving immunisation outcomes.
- Gavi strongly encourages countries to include funding for CSOs in implementation of Gavi HSS support to improve immunisation outcomes. CSOs can receive Gavi funding through two channels: (i) funding from Gavi to Ministry of Health (MOH) and then transferred to CSO, or (ii) direct from Gavi to CSO. Please refer to Table 1 for potential categories of activities to include in budget for CSOs and Annex 4 of the Supplementary HSS Guidelines for further details of Gavi support to CSOs.
- Recommended: Countries can incorporate new strategy elements in their NVS and HSS proposals that begin to address the three key elements of supply chain management fundamentals (supply chain managers, supply chain performance dashboards, and comprehensive supply chain management plans) and can use existing resources such as:
    - The EVM, EVM improvement plan and the Progress report on the EVM improvement plan which shall be submitted with applications, if available; and, which should contribute to providing evidence on the existing cold chain status and the country plans to address supply chain bottlenecks and inform the development of a comprehensive supply chain management plan.
- While Gavi's current PBF approach is applied to HSS grants at the national level, Gavi also encourages countries to consider using performance-based funding at sub-national levels. Where appropriate, countries may decide to align with other PBF programmes, such as the World Bank's results-based financing (RBF) programmes, and if so, sufficient information must be included with the Gavi HSS proposal on how funding will be aligned. If aligning to a World Bank RBF programme, please provide the concept note or programme design document. Describe which of the objectives of the grant are for the PBF/RBF programme. Please also attach the results framework and budget for the RBF programme. Please note that more than one immunisation-related indicator is expected to be part of any such PBF/RBF programme, if the GAVI HSS grant is proposed to be aligned with it (please see part IV of the Introduction to the Supplementary HSS Guidelines).
- Applicants are encouraged to identify technical assistance (TA) and capacity building needs for implementation and monitoring of the HSS grants. Applicants are required to include details of short term and long term TA if they are requesting TA as part of the HSS application to ensure strong implementation and effectiveness of Gavi HSS support.

PART A - SUMMARY OF SUPPORT REQUESTED AND APPLICANT INFORMATION

For further instructions, please refer to the Supplementary Guidelines for HSS Applications

Checklist for a Complete Application

A completed application comprises the following documents. Countries may wish to attach additional national documents as necessary.

HSS Proposal Forms and Mandatory GAVI attachments *→ Please place an 'X' in the box when the attachment is included*		
No.	*Attachment*	***X***
1.	HSS Proposal Form	*X*
2.	Signature Sheet for Ministry of Community Development, Mother and Child Health, Ministry of Finance and Health Sector Coordinating Committee (HSCC) members	
3.	Minutes of HSCC meeting endorsing Proposal	
4.	Minutes of three most recent HSCC meetings	
5.	HSS Monitoring & Evaluation Framework	*X*
6.	Detailed budget, gap analysis and work plan	*X*
7.	Detailed Procurement Plan (18-month)	*X*

Existing National Documents - Mandatory Attachments Where possible, please attach approved national documents rather than drafts. For a decentralised country, provide relevant state/provincial level plan as well as any relevant national level documents. *→ Please place an 'X' in the box when the attachment is included*		
No.	*Attachment*	***X***
8.	National health strategy, plan or national health policy, or other documents attached to the proposal, which highlight strategic HSS interventions	
9.	National M&E Plan (for the health sector/strategy)	*X*
10.	National Immunisation Plan	
11.	Country Comprehensive Multi-Year Plan for Immunisation (cMYP)	*X*
12.	Effective Vaccine Management (EVM) Assessment report (from an EVM conducted within the preceding 36 months). In addition the related documents must be attached if available. : if this is not available, please indicate when the next EVM is anticipated. ▪ Latest EVM Improvement Plan. In case an EVM Improvement Plan is not provided, the country shall provide a justification and identify a plan for developing the improvement plan. ▪ Latest Progress Report on the EVM Improvement Plan Implementation (no older than 6 months prior to proposal submission). In case a Progress Report on the Improvement Plan Implementation is not provided, the country shall provide a justification.	
13.	Terms of Reference (TOR) of Health Sector Coordinating Committee (HSCC)	*X*

Existing National Documents - Additional Attachments Where possible, please attach approved national documents rather than drafts. For a decentralised country, provide relevant state/provincial level plan as well as any relevant national level documents. *→ Please place an 'X' in the box when the attachment is included*		
No.	*Attachment*	***X***
14.	Joint Assessment of National Health Strategy (JANS) (if available)	*X*
15.	Response to Joint Assessment of National Health Strategy (if available)	
16.	If funds transfers are to go directly to a Civil Society Organisation (CSO) or CSO Network, please provide the 3 most recent years of published financial statements of the lead CSO, audited by a qualified independent external auditor	
17.	Health Supply Chain Strategy and/or national health implementation supply chain plans, please provide latest documents (final or draft). Other key supply chain analysis and/or activities including but not limited to supply chain network design & optimization, human resource assessments, supply chain information systems, etc.	
18.	Cold chain equipment inventory list and/or cold chain storage capacity analysis (if available)	
19.	Coverage Improvement Plan if available	

20.	Equity Analysis and Plan if available	
21.	Evaluation of previous HSS grant	
22.	List of target populations/districts, and criteria for selection (In this HSS Proposal Form)	*X*
23.	Post Introduction Evaluation Report	*X*
24.	EPI Review/evaluation Report	*X*
25.	Report from last completed household survey (ZDHS)	*X*
26.	Concept note or programme design document (including results framework and budget) of any World Bank Results-Based Financing (RBF) programme, or other PBF/RBF programme document, if the GAVI HSS grant is proposed to be aligning with such programme.	

1. Applicant Information	
Applicant:	*Ministry of Community Development, Mother and Child Health (MOH)*
Country:	*Zambia*
Proposal title:	*Strengthening Health Systems for Improving Immunisation Coverage in Zambia*
Proposed start date:	*June 2016*
Duration of support requested:	*3 years*
Total funding requested from GAVI:	US$9, 096, 176
Contact Details	
Name:	*Dr. Francis Dien Mwansa*
Organisation and title:	*Child health Specialist Ministry of Health*
Mailing address:	*P.O. Box 31958, Lusaka, Zambia*
Telephone:	*+260 211 222692; +260 977700083*
Fax:	*+260211235342*
E-mail addresses:	*fmdiedn@gmail.com*

2. The Proposal Development Process

This section will give an overview of the process of proposal development, outlining contributions from key stakeholders.

Address all the items listed below. Indicate if any of these are not applicable and explain why:

- ➔ *The main entity which led the proposal development and coordination of inputs. It is possible to have multiple lead implementers, however the country must decide which department will lead the proposal development process.*
- ➔ *The roles of HSCC and ICC.*
- ➔ *Cooperation between EPI programme and the other departments of MOH involved in the proposal development (including Departments of Planning, Child Health, HMIS, and Central Medical Stores (or related Supply Chain Units), etc.). nvolvement of subnational level (provincial, district, etc.) entities.*
- ➔ *The role of CSOs in the proposal development. Applicants must describe whether the HSCC/ICC worked with any CSO platforms/coalitions, or just with individual organisations. Please provide the names of the specific CSOs, with contact details, or of the CSO platforms involved.*
- ➔ *The names and roles of other specific development partners/donors.*
- ➔ *The role of the private sector, if applicable.*
- ➔ *Description of technical assistance received during the proposal development. Include the source of technical assistance and a comment on the quality and usefulness of that technical assistance.*
- ➔ *Description of the overall process of proposal development: duration, main steps of the proposal development, analytical work involved in the proposal development, links between the proposal development and national health sector planning/budgeting, links between the proposal development and JANS (if applicable).*
- ➔ *Description of the most challenging elements during the proposal development and how they were resolved.*

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2.1 Main entity which led the development of Zambia GAVI HSS Proposal

The Department of Planning and Information (DPI) in the Ministry of Community Development, Mother and Child Health (MOH) led the process of developing the Zambia Health Systems Strengthening (HSS) proposal to GAVI. All major stakeholders, namely, the public and private sectors, Churches Health Association of Zambia (CHAZ), civil society organisations (CSOs) and development partners participated and contributed to the development of this HSS proposal. In 2012 the Inter-Agency Coordinating Committee (ICC) decided that Zambia should apply for funding from GAVI after observing that funding for building capacity on immunisation was grossly inadequate[2]. In line with ICC's observation, this proposal includes an element of capacity building especially targeting frontline health workers, mid-level managers (MLM), CSOs and community members. An interdisciplinary team from GAVI and WHO visited Zambia from 7th to 11th April 2014 to orient stakeholders on the GAVI HSS proposal development process.

2.2 The role of the ICC

The ICC is chaired by the Minister of Community Development, Mother and Child Health and is comprised of all major stakeholders namely key Government of the Republic of Zambia (GRZ) ministries and departments, development partners (WHO & UNICEF), CSOs, private sector, academia and research institutions. The ICC provides guidance on policy and related issues on EPI interventions and acts as a forum for forging strong partnerships around immunisation. The committee meets every quarter to review progress in the immunisation programme. Currently, Zambia is in the process of establishing the National Immunisation Technical Advisory Group (NITAG) with support from Supporting Independent Immunisation and Vaccine Advisory Committees (SIIVAC). By end of 2015, the NITAG will be operational and SIIVAC will provide support to train members.

2.3 Involvement of the EPI programme, other departments in MOH and sub-national levels in proposal development

Members of staff in the Child Health Unit (CHU), the EPI programme and the wider MCH Directorate and relevant people from social mobilisation and communication were consulted during the development of this proposal. Other people in MOH who were consulted included personnel managing immunisation data, monitoring and evaluation and finance and procurement. This demonstrates that within MOH all key departments and units were involved in the process of developing this proposal. The Ministry of Health (MoH) participated in the development of this proposal and it has experience in the development and implementation of GAVI HSS interventions. The Accounts Unit in the MoH provided input on its experiences of managing GAVI financial resources. The Monitoring and Evaluation Unit explained how the HMIS is working including the challenges being experienced and the strategies which have been put in place to address issues relating to immunisation and related data.

Stakeholders made a decision to invest in Muchinga Province (Mpika and Chinsali Districts), Northern Province (Luwingu District) and Luapula Province (Lunga, Samfya, Mwense and Milenge Districts). Muchinga is a newly annexed province which was previously part of the Northern Province. The Provincial Medical Officers (PMO) for Muchinga, Northern and Luapula Provinces were consulted on interventions contained in this proposal. These districts were chosen because all of them have low immunisation coverage. Overall, both provinces are poor performing with regard to immunisation, are hard to reach and have no support from any of the key immunization and health system development partners working in Zambia. While acknowledging that there are some key donors working in these districts, most of these are in the area of HIV and AIDS and they do not support immunisation activities.

The development of this proposal was also informed by the review of literature. Zambia completed the EPI review in September 2014. Twelve districts namely Mufulira, Kalulushi, Mufumbwe, Chavuma, Nakonde, Mpika, Petauke, Nyimba, Lusaka, Kafue, Mazabuka and Sinazingwe were visited during the EPI review. The results of this review highlight a number of issues from the districts they visited. In 2012/13, UNICEF and MOH conducted a comprehensive knowledge, attitudes and practices (KAP) study covering Ndola, Kafue and Petauke Districts. This KAP study on immunisation recommends the need for proper messaging on immunisation.

2.4 Involvement of CSOs, private providers and development partners in proposal development

The CSOs played an important role in the development of this proposal. Interviews were conducted with Plan International, Centre for Infectious Diseases Research in Zambia (CIRDZ), Catholic Relief Services (CRS) and CHAZ to get their input into this proposal and understand their roles in the immunisation programme. CHAZ coordinated a number of meetings with other CSOs where participants discussed the interventions which should be included in Zambia's proposal to GAVI. CSOs felt that their main role should be to create awareness *about* and demand *for* immunisation among Zambians and to encourage

[2] Merck Vaccine Network Africa. (2014). *A summary report on the Merck Vaccine Network – Zambia Project activities 2008-2013*. Lusaka: Merck Vaccine Network Africa.

people to utilize existing immunization services, especially at community level where they already have a large presence. CSOs are members of the ICC and hence they also endorsed this proposal. Private practitioners were also consulted during the proposal development process. They highlighted the challenges they were experiencing and suggested the need for MOH to include them in their planning as some private providers were seeing a lot of clients especially in urban Zambia. Both UNICEF and WHO, in addition to providing inputs into the proposal, also participated in all the stakeholder consultation meetings which were held as part of this process. WHO IST in Harare, Zimbabwe identified a consultant who provided technical assistance during the development of this proposal. Both WHO Harare and Headquarters made comments on the proposal. **When this proposal was submitted to GAVI, the IRC recommended resubmission. The current proposal addresses all the major comments which were made by the IRC at its meeting in March 2015.** It is therefore evident that a wide range of stakeholders contributed to the development of the proposal.

2.5 Technical assistance during the development of the proposal and timelines

In 2006 Zambia successfully applied for a GAVI HSS grant amounting to US$6,598,118. In 2009 this grant, as was the case with any other external support to the health sector, was frozen. The GRZ has not been able to implement interventions contained in the 2006 GAVI HSS proposal because of lack of resources after the freezing of the grant. Some of the interventions which were proposed in 2006 are still pertinent but the situation has changed as detailed in this current HSS proposal. The development of this proposal, therefore, builds on earlier initiatives. The consultant, hired by WHO in consultation with the MOH, was provided literature in September 2014 and arrived in Zambia to work with MOH and stakeholders on 10th November 2014. Consultations were held with individual stakeholders followed by a stakeholder meeting held on 20th November 2014 at the MOH Conference Room where members deliberated on interventions which should be included in Zambia's proposal. A consensus was reached on the type of support which should be requested from GAVI. The draft proposal was circulated to all major stakeholders including WHO IST Office in Harare and comments were incorporated before endorsement by the ICC on 15th January 2015 during a meeting held at Mulungushi International Conference Centre in Lusaka and the subsequent submission to GAVI. In January 2015 Zambia received preliminary comments on the proposal from WHO Headquarters which were addressed before submitting the proposal to GAVI in February 2015. As mentioned above, the IRC recommended a resubmission and a Consultant was hired to work with stakeholders in Zambia to address the IRC's comments before submission to GAVI in August 2015. The process of developing this process was participatory. This proposal development process was, therefore, country driven and key stakeholders such as development partners and CSOs played an important role. The consultant only facilitated the process.

2.6 The JANS process

After the 2011-2015 National Health Sector Plan was drafted, it was subjected to the JANS process. The JANS team made a number of recommendations. During the development of this proposal, the JANS reports were reviewed together with the NHSP. Some of the major recommendations of the JANS were (i) the need for the situation analysis to be comprehensive and that it should use disaggregated data, should cover all levels of health care and all the 3 types of interventions. The final version of the NHSP has a very comprehensive situation analysis which includes determinants of health (Section 3.2), covers all the 3 types of interventions (Section 3) and throughout the NHSP there is use of disaggregated data. (ii) In the draft NHSP issues of quality were not adequately highlighted and the recommendation was that the quality dimension should be included in the objectives. Issues of quality are currently highlighted in the mission statement and also in Objective 5.1.2.2 of the NHSP as recommended by the JANS team. (iii) The JANS team also found that the draft NHSP had limited involvement of CSOs and private providers. Section 5.5.2 advocates for the development and implementation of a MoU with CPs and CSOs and promotes private sector involvement as recommended by the JANS team. (iv) The JANS recommended that the GRZ financial contribution should be sustained. The final version of the NHSP took this into consideration (Section 7.2.3.1) and set the ambition to meet the Abuja target. As it will be demonstrated later, Zambia is one of the few countries which have reached this target. Lastly the NHSP also incorporated the need to develop and implement a social health insurance. (v) The JANS team recommended that the linkage and coordination between different programmes and strategies should be improved. As per this recommendation the NHSP was developed based on the WHO building blocks and it encourages linkages between different programmes. It does not support verticalisation. (vi) With regard to financial management, as per recommendations of the JANS, the NHSP incorporated the strengthening of management of budgets and financial oversight. It also calls upon the strengthening of procurement mechanisms. (vii) In terms of health planning, the NHSP advocates for a bottom-up planning process and promotes the participation of communities. (viii) Lastly the JANS found that the M&E methods were incomprehensive and the final version of the NHSP provides quite a comprehensive list of M&E methods being used by the MOH and MoH in monitoring progress in the health sector.

The development of both the NHSP and the cMYP was a participatory exercise in which all stakeholders participated. The development of this HSS proposal was informed by the NHSP (which benefited from the JANS process) and the cMYP. This was further informed by the interviews conducted by the consultant and stakeholder meetings which were held as part of the process of developing this proposal. This explains how the development of this proposal is linked to the NHSP and the JANS.

2.7 Challenges during the development of the HSS proposal

There were no challenges in the development of this proposal. MOH and WHO made all the appointments with stakeholders and everyone was enthusiastic to participate in this process.

Signatures: Government endorsement

Please note that this application will not be reviewed or approved by GAVI without the signatures of both the Ministers of Health & Finance and their delegated authority.

Minister of MOH

Name: Hon. Emerine Kabanshi Signature:

Date:

Minister of Finance

Name: Hon. Alexander Chikwanda Signature:

Date:

Signatures: Health Sector Coordinating Committee endorsement

We the members of the HSCC, or equivalent committee met on the _____ (date) to review this proposal. At that meeting we endorsed this proposal on the basis of the supporting documentation which is attached. The minutes of the meeting endorsing this proposal are attached to this application.

Please list all HSCC members	Title / Organisation	Name	Please sign below to indicate the attendance at the meeting where the proposal was endorsed	Please sign below to indicate the endorsement of the minutes where the proposal was discussed
Chair				
Secretary				
MOH members				
Development partners				
CSO members				
WHO				
UNICEF				
Other				

Please tick the relevant box to indicate whether the signatories above include representation from a broader CSO platform: Yes ☐**x** No ☐

Individual members of the HSCC may wish to send informal comments to: gavihss@gavi.org
All comments will be treated confidentially.

PART B – EXECUTIVE SUMMARY

For further instructions, please refer to the Supplementary Guidelines for HSS Applications

3. Executive Summary

Please provide an executive summary of the proposal, of no more than 2 pages, with reference to the items listed below:

- ➔ *The main bottlenecks for achieving immunisation outcomes addressed within this proposal and how proposed objectives in this application will address these bottlenecks and improve immunisation outcomes.*
- ➔ *A summary description of the population to be covered by the intervention (i.e. total population targeted).*
- ➔ *Objectives and the related budget for each objective.*
- ➔ *The proposed implementation arrangements including the role of government departments and civil society organisations. Please include a summary of financial management, procurement and M&E arrangements.*

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3.1 Main bottlenecks for achieving immunisation outcomes

There are a number of health and immunisation system bottlenecks which affect the achievement of immunisation outcomes in Zambia. These include (i) the critical shortage of human resources for health (HRH) including limited knowledge and skills about immunisation among existing health personnel; (ii) inadequate financial resources which have led to failure by MoH and stakeholders to conduct outreach clinics and supportive supervision;(iii) inadequate transport at all levels; (iv) inadequate information, education and communication for immunisation (C4I) for routine immunisation programmes; (v) limited involvement of the private sector; (vi) limited community participation in planning and implementation of immunisation and other child health interventions; and (vii) limited data quality which can inform the EPI programme. The wider HRH bottlenecks are being addressed by the MoH,MOH and other stakeholders through the implementation of the HRH Strategic Plan[3]. The 2011 Effective Vaccine Management (EVM) study helped Zambia to identify cold chain bottlenecks ,the GRZ and development partners have addressed most of these challenges. Zambia plans to introduce IPV in 2015 and will consider introducing HPV at a later time. The current cold chain capacity in Zambia is adequate even if these new vaccines are introduced. Since cold chain is not a major system barrier in Zambia, this proposal does not include support for this, however, there will still be need for recurrent direct expenditure support for the same.

Stakeholders made a decision to invest in Muchinga Province (Mpika and Chinsali Districts), Northern Province (Luwingu District) and Luapula Province (Lunga, Samfya, Mwense and Milenge Districts). Muchinga is a newly annexed province which was previously part of the Northern Province. The Provincial Medical Officers (PMO) for Muchinga, Northern and Luapula Provinces were consulted on interventions contained in this proposal. These districts were chosen because all of them have low immunisation coverage. Overall, the three provinces are poor performing with regard to immunisation, are hard to reach and have no support from any of the key immunization and health system development partners working in Zambia. While acknowledging that there are some key donors working in these districts, most of these are in the area of HIV and AIDS and they do not support immunisation activities.

There are huge inequalities in Zambia between high and low socio-economic groups and also among rural and urban populations in Zambia[4]. The ZDHS data in this table further shows that Luapula and Muchinga Provinces have the lowest DPTIII and full immunization coverage and the two are also provinces with some of the lowest proportion of pregnant women delivering at health facilities. Programme data also shows a downward trend in vaccination coverage. As mentioned earlier, the proposal is that the GAVI HSS grant should support the implementation of interventions in 7 districts namely Mpika and Chinsali in Muchinga Province and Lunga, Samfya, Mwense and Milenge in Luapula province and Luwingu in Northern Province.

The target is that each district should have a DPTIII coverage of >80% for children aged under 1. The selected districts have DPTIII coverage ranging from 49% in Lunga to 71% in Mpika. The measles coverage ranges from 50% in Samfya to 78% in

[3] See MoH. (2011). *National health sector plan 2012-2016,* Lusaka: Zambia and Ministry of Health and WHO. (2014). *Report on Comprehensive EPI, Post Introduction of New Vaccines Evaluation (PIE) and In-depth Surveillance Review.* Lusaka: Ministry of Health and WHO.

[4] Lewis, D. and K. Kamanga (2009). *GAVI health system strengthening support evaluation: Zambia case study.* London: HLSP (Page 21).

Mpika. As will be demonstrated later, there is no development partner supporting HSS interventions in selected provinces and districts. Other poor performing provinces such Western Province are either supported or there are plans that they will be supported by other development partners. All the districts included in this proposal are **remote rural districts with vast communication and mobility challenges and located very far** (>1,000 kilometres) **from Lusaka** (Zambia's capital city) where all development partners are based. **These are also regions where poverty levels are quite high: for example while at national level 68% of the people are poor in Northern Province this is at 74%[5].** The provinces and districts being target are, therefore, vulnerable: poverty levels are high; they are in rural and remote areas; and that they have some of the worst health indicators. This proposal is aimed at ensuring that the poor, people resident in far and remote areas and women are able to access services than is currently the case. This will contribute to addressing the huge health inequalities prevailing in Zambia.

3.2 Objectives of the proposal and how they will address bottlenecks to immunisation

This HSS proposal is aimed at improving immunisation outcomes by addressing some health and immunisation specific system barriers in selected poor performing districts in Zambia as mentioned above. This proposal has 5 objectives namely:

1. To improve the delivery of immunisation and other child health interventions in Zambia by ensuring that outreach clinics and supportive supervision are operational in target districts.
2. To improve the knowledge and skills of district managers and frontline health workers on delivery and management of immunisation and other child health services.
3. To develop and implement effective C4I and other child health intervention strategies through the involvement of CSOs.
4. To improve the collection and utilisation of HMIS data at all levels of the health care system with special focus on district and lower levels; and
5. To develop and implement a Performance-Based Financing system in the target districts with the aim of improving immunisation and other child health outcomes.

These objectives will contribute to addressing some of the major bottlenecks which affect the achievement of immunisation outcomes in Zambia. The grant will also revitalise outreach clinics and supportive supervision at all levels through making available transport (vehicles, motorcycles, bicycles and boats) and other logistical requirements. The availability of vehicles will also allow for easy movement of health supplies including vaccines from the central level to districts and from districts to health facilities as well as up to community levels. The availability of transport at facility level will help to address some of the challenges being experienced by health workers for example collection of salaries from district headquarters which is a major challenge especially in remote rural areas. Financial support is also being requested from GAVI for the maintenance of vehicles and motorcycles and as a contribution to rentals (where applicable), electricity, water, communication and staff time.

With regard to HRH, this proposal will build the capacity of health workers at district and lower levels in MLM and RED/REC strategies, respectively. The exposure of health workers to these trainings will ensure availability of knowledgeable and skilled staff in MoH who can effectively manage EPI activities including delivery of other child health interventions. RED/REC training will contribute to addressing inequalities as it emphasises on provision of outreach and mobile clinics so that factors such as distance, poverty and being busy are not reasons for children not being vaccinated. Staff in the Accounts Unit and the Procurement Unit within target districts will also be trained on how to manage financial resources from GRZ and donor agencies. The MoH attracts huge financial resources from development hence there is a need to capacitate existing staff in managing funds from GAVI and other development partners.

The HSS grant will also facilitate the Zambia Civil Society Immunisation Platform (ZCSIP) under the leadership of CHAZ to design and implement C4I interventions. ZCSIP will train people at community level (Neighbourhood Health Committees (NHCs), traditional and religious leaders, councillors and media personnel) on immunisation issues. This will improve demand for immunisation and other child health interventions and encouraging pregnant women to deliver with the assistance of skilled health personnel. Considering that there are challenges with data collection and data quality, the HSS grant will also enable the MoH to train district and health facility staff and community health workers (CHWs) in data management, analysis and utilisation. Lastly, in line with GAVI guidelines, this proposal seeks support for implementation of PBF interventions in target districts. The key interventions which will be implemented under PBF will be as follows: (i) the training of district and facility managers; (ii) the performance-based payments to health workers; (iii) the programme-based payments targeting health facilities; (iv) conducting validation of health workers and health facilities performance; (v) evaluation of PBF programme performance; (vi) conducting process evaluation; and (vii) contracting of health facilities and health workers to provide a package of services. Payments to health facilities and health workers including community health workers will only be made after data validation using the HMIS and other methods. The strengthening of data management, analysis and utilisation will complement the implementation of PBF interventions as such an intervention requires data of high quality.

[5] Also see Central Statistical Office. (2010). *Living conditions survey 2010*. Lusaka: Central Statistical Office.

3.3 Implementation arrangements

All technical immunisation activities such as the training in MLM and REC/RED and conducting supportive supervision and outreach clinics will be coordinated and implemented by the CHU. The recruited project manager will amongst other duties oversee the , the implementation of PBF interventions.. CHAZ and other CSOs will implement C4I interventions especially at community level. All procurement (with an exception of vehicles, motor cycles, bicycles and boats which will be procured by UNICEF) will be done by the Procurement Unit in MoH and will be guided by the Public Procurement Act of the GRZ. The Directorate of Policy and Planning, Accounts Section in collaboration with the Child Health Unit of Ministry of Health MOH will manage GAVI HSS finances and will use the GRZ financial management rules and regulations. These funds will be audited by the Auditor General of the GRZ as is the case with all other government ministries and departments. A separate account will be opened for GAVI HSS funds at the Zambia National Commercial Bank (ZANACO).

3.4 M&E arrangements

The existing HMIS will be used for monitoring and evaluation of the implementation of the GAVI HSS grant. An in-depth qualitative study will be done at the beginning to inform messaging on immunisation. Client satisfaction surveys will be conducted by members of the community at health facilities every quarter. A mid-term and final evaluation of the GAVI grant will be done as part of M&E in order to determine the impact of the HSS interventions on immunisation and other child health outcomes. The Zambia Demographic and Health Survey (ZDHS) conducted in 2013/14 will act as a baseline and the final evaluation will use a mixed methods approach to measure impact of the programme. It is expected that the implementation of this grant will result into >80% coverage rate for DPTIII and MCVII in the target districts and a significant reduction in DPTI-DPTIII drop-out rate.

3.4 Budget for each objective

The budget for each objective is as follows:

Objective 1: To improve the delivery of immunisation and other MCH interventions by ensuring that outreach clinics are operational; US$ **2,640,529**
Objective 2: To improve knowledge and skills of health workers on delivery and management of immunisation and other MCH services; US$ 939,894
Objective 3: To develop and implement communication for immunisation and other MCH interventions through involvement of CSOs; US$ **2,480,544**
Objective 4: To strengthen the collection and utilisation of HMIS data at all levels with a special focus on district and lower levels; US$ 2,031,541

Objective 5: To strengthen results-based management of health services to reflect strong evidence based decision making at district and lower levels; US$ 1,003,668

The total budget for the implementation of the interventions which have been suggested in this proposal is US$9,096, 176. The total population in the target districts which will be served by this grant will be 969,639 according to population projections made by the Central Statistics Office of GRZ. There are a total of 38,783 children aged under 12 months in the target districts.

4. Acronyms

➔ *Please detail the full version of all acronyms used in this proposal, including in the HSS M&E Framework (Attachment 3) and in the Budget, Gap Analysis and Work plan Template (Attachment 4).*

Acronym	Acronym Meaning
BHCP	Basic Health Care Package
C4I	Communication for Immunisation
CDC	Centre for Diseases Control and Prevention
CHA(s)	Community Health Assistant(s)
CHAZ	Churches Health Association of Zambia
CHU	Child Health Unit
CHW(s)	Community Health Worker(s)
CIDRZ	Centre for Infectious Diseases Research in Zambia
cMYP	Comprehensive Multi-Year Plan
CPR	Contraceptive Prevalence Rate
DDCC	District Development Coordinating Committee
DMO	District Medical Officer

EPI	Expanded Programme on Immunisation
EVM	Effective Vaccine Management
FAMS	Financial and Administrative Management System
HCC	Health Centre Committee
HIS	Health Information System
HMIS	Health Management Information System
HPV	Human Papilloma Virus
HRH	Human Resources for Health
HRIS	Human Resource Information System
IDSR	Integrated Disease Surveillance and Response
IEC	Information, Education and Communication
IMCI	Integrated Management of Childhood Illnesses
IPV	Intracellular Polio Vaccine
JAR	Joint Annual Review
JICA	Japan International Cooperation Agency
MCH	Maternal and Child Health
MNCH	Maternal, Neonatal and Child Health
MVN-A	Merck Vaccine Network-Africa
NHC	Neighbourhood Health Committee
NHSP	National Health Sector Plan
PIE	Post Introduction Evaluation
REC	Reaching Every Child
RED	Reaching Every District
SAG	Sector Advisory Group
SMAGS	Safe Motherhood Advisory Groups
ZCSIP	Zambia CSO Immunisation Platform
ZHWRS	Zambia Health Workers Retention Scheme
ZDHS	Zambia Demographic and Health Survey
ZPPA	Zambia Public Procurement Authority
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PART C– SITUATION ANALYSIS

For further instructions, please refer to the Supplementary Guidelines for HSS Applications

5. Key Relevant Health and Health System Statistics

- ➔ *Please use the tables below to provide information on vaccines currently used by the Immunisation Programme as well as on any vaccines planned for future use.*
- ➔ *In the textbox below the tables please provide the most recent statistics for the key health, immunisation, and health system indicators by referring to the most recent EPI Review, Health Sector Review or DHS. Please also attach the source document.*
- ➔ *If there is an existing coverage improvement plan / equity analysis and action plan, whether supported by GAVI, please list key findings/recommendations*
- ➔ *Where possible, data on the key statistics should be presented showing: rates for early marriage, maternal and infant mortality, vaccine coverage by wealth quintile differences, and coverage disaggregated by sex. Data on vaccine coverage by maternal education should also be included if available.*
- ➔ *If available, disaggregated data for the key statistics indicators showing differences by geographic location (region / province) and urban / rural should also be included in the space provided after the table.*
- ➔ *If relevant, please include information on the impact on the health system of refugee or internally displaced populations, whether due to natural disaster or conflict.*
- ➔ *Please include activities related to addressing equity issues or particular populations such as IDPs in sections 11 (Objectives of the Proposal) and 12 (Description of Activities).*

Vaccines Currently Used by the Immunisation Programme

Vaccine	**Year of introduction**	**Comments** (including planned product switches, wastage etc.)
BCG	1974	*None*
Measles	1974	*MR*
Measles 2nd Dose	July 2013	*MR*
Polio 1-3	1975	*tOPV to bOPV*
DPT	1975	*N/A*
DPT-Hib	2004	*N/A*
DPT-HepB+Hib	2005	*None*
Rotavirus	November 2013	*None*
PCV 10	July 2013	*None*

Vaccines Planned for Future Use by the Immunisation Programme

Note: This section should include any future vaccines currently under consideration by the country and does not represent a commitment by the country to introduce the vaccines listed below.

Vaccine	**Month / Year of Introduction**	**Comments** (including planned product switches, wastage etc.)	**Plan for vaccine introduction taken into account in HSS application? If not, why not?** (Requirements for cold chain, human resources etc)
IPV 10 dose[6]	December 2015	This will increase waste generation. Strategies such as burning, burying and use of incinerators will be used for waste disposal. Frontline health workers will be trained countrywide on the introduction of this vaccine.	GAVI has approved support of introduction of IPV in Zambia.

[6] The ICC endorsed the decision to introduce the IPV into the immunization programme schedule as part of the Polio End-Game Strategy.

		Within the training, waste disposal training will be provided for. (See detail in the IPV, tOPV-bOPV switch plan attachment……..).	
HPV	To be advised	HPV vaccine has been piloted in Lusaka Province with support from Merck Vaccine, GRZ, UNICEF, WHO, Catholic Mission Medical Board, American Cancer Society, PATH and CIDRZ. The costing and PIE for HPV have since been completed. The pilot was launched on 27th May 2013.	Demonstration shows high cost of delivery for the model Zambia has used. Some private clinics are already providing HPV vaccine.

Please use the space below to provide:

- **Further disaggregation of the data provided in the supporting documentation (if available). This data will be used to illustrate equity differences by geographic location and urban/rural.**

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Table 5.1 below shows key health and immunisation indicators from the 2007 and 2014 ZDHS. Between 2007 and 2014 Maternal Mortality Ratio (MMR), Under Five Mortality and Infant Mortality Rates significantly went down. The CPR over this period has increased. HIV prevalence, even though it has decreased, remains high and a significant proportion of pregnant women still deliver using unskilled provider. Full immunisation coverage over this period remained unchanged at 68%.

Table 5.1: Some key health indicators by residence, 2014

Indicator	2007	2014[7]
Maternal Mortality Ratio	591	398
Under Five Mortality Rate	119	75
Infant Mortality Rate	70	45
Percentage of children aged 12-23 who are fully immunised	68	68
Contraceptive Prevalence Rate (CPR)	41	49
HIV prevalence (among persons aged 15-49)	14.3	Males=11.3%; Females=15.1%;Total:13.3
Percentage delivered by a skilled provider	46.5	64.2

Table 5.2 below shows the proportion of children who received DPT3 and all vaccinations and percentage of mothers who delivered by skilled provider by sex, residence, province, mothers' education and wealth quintile:

Table 5.2: Key immunisation and other data by province (Source: ZDHS 2013/2014)

Characteristic	Indicators		
Sex	DPT III Coverage	% of children who received all vaccinations	% delivered by skilled health provider
Male	86.4	68.9	
Female	85.3	67.7	
Residence			
Urban	92.4	75.9	88.5
Rural	82.6	64.5	51.6
Province			
Central	82.7	66.3	45.7
Copperbelt	94.4	81.1	81.0
Eastern	87.8	63.6	65.0
Luapula	79.2	59.5	59.6
Lusaka	91.0	72.1	88.9
Muchinga[8]	79.4	60.8	56.7

[7] Central Statistical Office. (2014). *Demographic and health survey: preliminary report*. Lusaka: Central Statistical Office.

[8] Muchinga and Northern Provinces consistently are among those provinces with low immunization coverage including the proportion of mothers who do not deliver with skilled health provider which makes it difficult for the children to easily access immunization services.

Northern	86.6	72.2	45.3
North West	82.8	62.8	70.3
Southern	83.3	69.0	55.0
Western Province	81.2	63.0	57.2
Zambia	82.4	58.1	64.2
Mothers' education			
No education	75.3	51.6	46.2
Primary	84.3	66.6	56.7
Secondary	91.1	75.8	81.6
> Secondary	96.4	80.7	95.6
Wealth quintile			
Lowest	79.3	62.5	45.2
Second	83.4	63.5	52.2
Middle	85.1	67.0	62.3
Fourth	92.4	75.4	83.0
Highest	95.1	80.2	94.3
TOTAL	**85.8**	**68.3**	**64.2**

Table 5.2 shows there are huge inequalities in Zambia between high and low socio-economic groups and also among rural and urban populations in Zambia[9]. The ZDHS data in this table further shows that Luapula and Muchinga Provinces have the lowest DPTIII and full coverage and they are also provinces with some of the lowest proportion of pregnant women delivering at health facilities. Programme data also shows a downward trend in vaccination coverage. As mentioned earlier, the proposal is that the GAVI HSS grant should support the implementation of interventions in 7 districts namely Mpika and Chinsali in Muchinga Province and Lunga, Samfya, Mwense and Milenge in Luapula province and Luwingu in Northern Province. Table 5.3 below shows immunization coverage in these districts:

Table 5.3: Immunisation coverage in Target Districts (Source: Administrative Data, MOH 2014) Indicator

Indicator	Districts						
	Mpika	Chinsali	Lunga	Luwingu	Samfya	Mwense	Milenge
BCG dose < 1 year	92	80	216	95	81	69	71
DPT-HepB-Hib 3rd dose	71	66	49	60	61	68	75
OPV third dose	71	62	124	57	61	68	75
OPV 4th dose	22	80	26	13	54	14	15
Measles 1st Dose < 1 year	78	64	56	64	50	72	65
Immunised fully < 1 year	53	54	32	33	63	70	62
Under 1 year population	9,872	6,589	721	5,824	8,640	5,069	2,069

The target is that each district should have a DPTIII coverage of >80% for children aged under 1. The selected districts have DPTIII coverage ranging from 49% in Lunga to 71% in Mpika. The measles coverage ranges from 50% in Samfya to 78% in Mpika. As will be demonstrated later, there is no development partner supporting HSS interventions in selected provinces and districts. Other poor performing provinces such Western Province are either supported or there are plans that they will be supported by other development partners. All the districts included in this proposal are **remote rural districts with vast communication and mobility challenges and located very far** (>1,000 kilometres) **from Lusaka** (Zambia's capital city) where all development partners are based. **These are also regions where poverty levels are quite high: for example while at national level 68% of the people are poor in Northern Province this is at 74%[10].** The provinces and districts being target are, therefore, vulnerable: poverty levels are high; the area is rural and remote; and that they have some of the worst health indicators. This proposal is aimed at ensuring that the poor, people resident in far and remote areas and women are able to access services than is currently the case. This will contribute to addressing the huge health inequalities prevailing in Zambia.

[9] Lewis, D. and K. Kamanga (2009). *GAVI health system strengthening support evaluation: Zambia case study.* London: HLSP (Page 21).

[10] Also see Central Statistical Office. (2010). *Living conditions survey 2010*. Lusaka: Central Statistical Office.

6. Description of the National Health Sector

This section will provide GAVI with the country context which will serve as background information during the review of the HSS proposal.

- ➔ *Please provide a concise overview of the national health sector, covering both the public and private sectors, including CSOs, at national, sub-national and community levels, with reference to NHP or other key documents.*
- ➔ *Please include a copy of the National Health Strategy/Plan as Attachment 5. If the NHP is in draft format please provide details of the process and timeline for finalising it. If there is not an NHP, or if other documents are referenced in this section, please provide these other key relevant documents.*

It is recommended that applicants refer to Gavi's health system strengthening grant categories detailed in the Supplementary Guidelines for HSS Applications (Table 1). Please refer to the list of health sector aspects in the Supplementary HSS Guidelines and if any are not included in your reference documents then please provide a short commentary. In order to keep this section concise, please summarise the key elements in the context of the HSS support being asked for, and provide reference to the relevant section in the National Health Plan for further detail.

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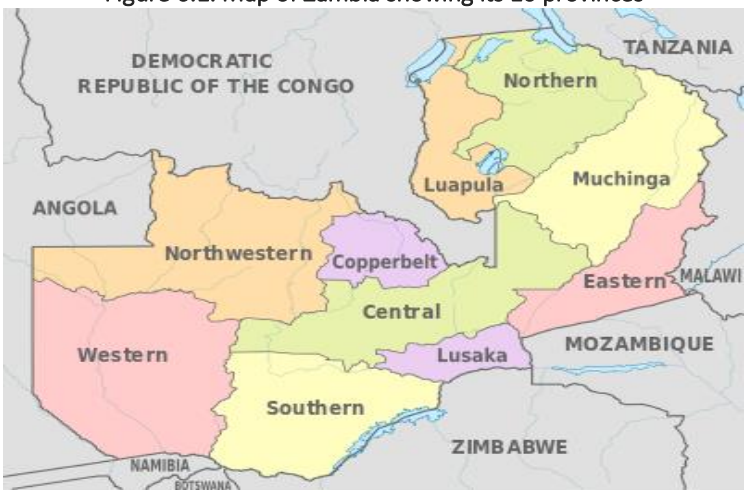
6.1 About Zambia

Zambia is a landlocked country and shares boundary with Democratic Republic of the Congo to the North, Tanzania to the North-East, Malawi to the East and Mozambique, Zimbabwe, Namibia and Botswana to the South and then Angola to the West. The country is divided into 10 provinces namely Northern, Muchinga, Luapula, Eastern, Lusaka, Central, Copperbelt, North-Western, Western and Southern provinces. There are 103 districts in Zambia[11]. Figure 6.1 below shows the 10 provinces of Zambia:

Figure 6.1: Map of Zambia showing its 10 provinces



Zambia is a vast country with a land area of 752,612 square km. In 2010 Zambia's population was estimated at 13.1 million and 49.3% were males and 50.7% were females. With a growth rate of 2.8%, the projected population for Zambia, as estimated by the Central Statistical Office, for 2014 is 15,023,315. Nearly 40% of the population live in urban areas while 60.5% live in rural areas. This makes Zambia one of the most urbanised countries in Sub-Saharan Africa[12].

6.2 Service delivery

The MOH are responsible for delivery of health services. In September 2011 the functions of MOH and MoH were realigned with MCH services delivery being transferred to Ministry of Community Development and Social Services MOH. This realignment was made to holistically deal with health and community issues by using available and existing community structures and strengthen existing health systems by dealing with health issues from the lower levels in a coordinated and

[11] Ministry of Health and WHO. (2014). *Report on Comprehensive EPI, Post Introduction of New Vaccines Evaluation (PIE) and In-depth Surveillance Review.* Lusaka: Ministry of Health and WHO.

[12] Central Statistical Office. (2012). *2010 Census of population and housing: Zambia*. Lusaka: Central Statistical Office.

integrated manner, and to enable the MoH to focus on health services coordination and management, development of strategic plans and policies, M&E, training, inspectorate and the provision of health care services at tertiary levels[13]. The training of health workers, research and development, disease surveillance and the specialist referral services are also under the MoH.

Other GRZ line ministries which also provide health services include Ministry of Home Affairs and Ministry of Defence. Other providers of health services include CHAZ; the private sector; and traditional providers. As of 2012 there were 1,958 health facilities in Zambia: 1592 (81.3%) belonged to the public sector. CHAZ owned 116 facilities (5.9%)[14]. The private health sector owned 250 facilities (12.8%). CHAZ is a major partner of MoH in health service provision, has mostly a rural presence and provides more than 50% of formal health care in rural Zambia[15]. Health facilities in Zambia are categorised as follows: health posts and health centres are located at community level and constitute the first level of health care. District hospitals constitute Level 1 hospitals while provincial hospitals constitute Level 2 hospitals. Tertiary hospitals are at national level and constitute Level 3 hospitals. The MoH oversees health posts, health centres, district hospitals and district medical offices (DMOs). It is also responsible for community mobilization, health promotion and prevention.

There are community health workers (CHWs) attached to health facilities and these work on a voluntary basis. Each facility is divided into zones and in each zone there is a CHW. At community level, NHCs have been established and these mainly consist of members of the community and they facilitate linkages between communities and the health system. In addition to this, the GRZ has embarked on the training of Community Health Assistants (CHAs) who are based at community level providing mostly preventive and promotive health services and are a link between health facilities and communities. Health services delivery at district and lower levels are free. It is only referral hospital which charge user fees. In order to ensure quality of service delivery, there is a provision for supportive supervision, an elaborate M&E system, service delivery manuals and the emphasis on well trained health workers delivering services.

6.3 Workforce and human resources

Zambia, like other countries in the region, experiences a critical shortage of HRH across all cadres. The number of health workers in public sector increased from 23,176 to 35,015[16] between 2005 and 2012 and this includes administrative staff. Just more than 50% (18,397) of the workers in health sector in 2010 were clinical staff. This translates into 1.24 public service health workers per 1,000 population. In 2012 there were 21,135 core health workers in Zambia which shows that there was an increase from 18,397 in 2010. The GRZ has recruited retired or returning health workers and foreigners and the use of CHWs especially at health centre and community levels in order to address shortage of HRH. These CHWs help in reducing health workers' workloads by engaging in activities such as the weighing of children, administration of oral vaccines and creating demand for immunisation services. NHCs are also key human resources which help to promote immunization and other health services at community level. The work of NHCs and CHWs compliment what is being done by health education technicians and health promotion officers whose responsibility is to manage the health education/promotion component of the immunisation programme.

There exist imbalances in the distribution of health workers in Zambia as most are located in urban compared to rural locations. The GRZ has tried to address this imbalance by implementing the Zambia Health Workers Retention Scheme (ZHWRS) whose objective is to ensure that remote rural areas are staffed with health workers as best as possible[17]. This initiative is inadequate to attract most health workers to rural and remote areas[18] and currently the lack of resources is affecting the operationability of the scheme. There are a number of health training institutions in Zambia whose objective is to produce health workers in various disciplines and at different levels of qualification. Both pre-service and in-service courses are being offered in various parts of Zambia by public institutions, CHAZ and private training institutions. A comprehensive HRH strategic plan expiring in 2015 is available whose objective is to address the critical HRH problems Zambia is facing. Poor road networks especially in remote rural Zambia which makes travelling difficult constitutes one of the factors which makes retention of health workers difficult in these areas. With support from development partners such as the World Bank Group, Zambia has embarked on improving its road network. As of now the World Bank has supported the upgrading of feeder roads in Luapula and the Northern Province and such an investment has reduced commuting times in these two provinces[19] which are target provinces for this Grant. The GRZ embarked on a rural electrification programme in 2010 which will run up to 2030.

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[13] Mumba, K. (2013). *Ministry of Community Development, Mother and Child Health: paper presented at the World Health Organisation Consultation workshop to inform the post-2015 TB Strategy and Action,* Sao Paulo, Brazil 29th April – 1st May 2013.

[14] Ministry of Health. (2012). *The 2012 list of health facilities in Zambia*. Lusaka: Ministry of Health.

[15] See www.chaz.org.zm/?q=about_us (accessed 11 November 2014).

[16] Against an establishment of 51,414 as approved by Cabinet Office (see HRH Strategic Plan for Zambia 2011-2015).

[17] Ministry of Health. (2011). *HRH strategic plan 2011-2015*. Lusaka: Ministry of Health.

[18] Kamwanga, J., G. Koyi, J. Mwila, M. Musenda and R. Bwalya. (2013). *Understanding the labour market of human resource for health in Zambia*. Lusaka: University of Zambia and Ministry of Health.

[19] World Bank. (not dated). *The World Bank Group: accelerating and sharing growth through improved competitiveness*. Lusaka: World Bank (http://siteresources.worldbank.org/INTZAMBIA/Resources/Zambia_Brochure_V_3.pdf - accessed 9th August 2015)

This programme targets electrification of 1,217 rural growth centres in Zambia and development of 29 mini hydro sites in Northern, Luapula and North Western Provinces. The investments in improving road networks as well as rural electrification already underway in target provinces will contribute to retention of staff in remote rural areas of Zambia. In addition to this the implementation of the PBF interventions as detailed in this proposal will also attract and contribute to retention of health workers.

6.4 Procurement and supply chain management

Public procurement in Zambia is governed by the Public Procurement Act which ensures, among other things, transparency and accountability in public procurement. The Zambia Public Procurement Authority (ZPPA) provides oversight in public procurement. MOH has a Procurement Committee and a Procurement Unit. The user departments in each procurement entity initiate procurement through a purchase requisition which is submitted to the Procurement Unit. The Unit checks availability of funds and quantities and specifications of goods and services. The Procurement Unit determines the method of procurement and develops the appropriate solicitation document, invites offers and coordinates the evaluation of offers received. The Procurement Unit then obtains the necessary approvals to proceed with the procurement. Once due approvals are obtained, the Procurement Unit arranges for the signing of the contract. In most cases the goods when delivered are consigned to storage. Vehicles are normally purchased using the prevailing GRZ procurement guidelines. The GRZ procures cold chain equipment either through UNICEF or WHO. Other partners such as the CIDRZ recently procured cold chain equipment for GRZ and used [its] own procurement mechanisms but obtained specifications from WHO. The immunisation programme uses a push system for supply chain management. The National Vaccine Store gets its supplies from manufacturers generally twice a year. The National Vaccine Store further distributes to 10 provinces using mainly cold boxes on a quarterly basis. Districts then collect their supplies from provincial vaccine stores on a monthly basis. Health centres collect from the district level also on a monthly basis[20]. The introduction of new vaccines created an opportunity for Zambia to expand its cold storage capacity.

In terms of cold chain system, the GRZ developed a vaccine cold chain expansion strategy to address identified cold chain gaps identified following the 2011 EVM. This expansion strategy run from 2011 to 2014 and was implemented in phases targeting different levels of the health system. Strong partnerships among stakeholders were key on the success of implementing the strategy. At **national level**, the vaccine storage warehouse was rehabilitated to accommodate the capacity expansion for new walk-In cold rooms and dry stores for storing injection safety materials. This was completed with the installation of five 40m^3 state of the art equipment for vaccine storage and the installation of a 63 KVA stand by generator. These WICRs are installed with continuous temperature monitoring devices (CTMD). Shelving for the dry store is yet to be completed. The programme has recently completed the rehabilitation and refurbishment of cold chain workshop for training purposes as well as for maintenance and repair of cold chain equipment from sub-national levels. In addition, over this period 380 cold boxes with about 20 litre capacity have been acquired and distributed to sub-national levels. Two 15 tonne trucks have recently been acquired. At **provincial level** 8 of the 10 provinces have had their provincial vaccine stores expanded with the capacity of 30m^3 WICR accompanied by the rehabilitation of existing buildings and installation of new standby generators. Two additional 30m^3 WICR have already been procured and are awaiting installation following erection of shelters. Meanwhile storage capacity for provinces with cold chain gaps has been supplemented by provision of a total of 20 units of positive refrigerator model MK-304 or TCW 3000. Expansion of cool-pack chilling capacity has been done for all the nine provinces through the procurement of 12 freezer model-314. At **district level**, cold chain capacity for positive storage has been increased by procurement of 50 units of MK-304. Additionally, a total of 377 refrigerators have been procured and distributed to increase district level vaccine storage capacity. 90 x 20 litres capacity cold boxes have been provided to different districts. At **facility level**, a total of 716 solar fridges have been procured and delivered. In addition, 250 x 24 litre capacity electric fridges and 550 vaccine carriers for health facilities have been procured to date. This explains why cold chain capacity is not a problem for Zambia even if new vaccines are introduced.

Waste management disposal including syringes and needles for immunisation is done at service delivery points where incinerators and burn and bury facilities are placed. Waste generated at outreach points has to be transported to the nearest disposal sites.

6.5 Health information systems

Each health facility collects data on all diseases and conditions that they see and compiles a report which is sent to the DMO every month using a paper-based system. The district aggregate data from all its health facilities and this is entered into an HMIS web-based database and then transmitted to the central level electronically. This system is mainly operational in public and CHAZ health facilities. The participation of the private for profit sector in the HMIS is limited: only a few private facilities

[20] Ministry of Health. (2011). *Effective vaccine management: towards improving immunization supply chain management in Zambia.* Lusaka: Ministry of Health.

submit reports to the DMO. The major challenge, however, is that there is limited analysis and utilisation of data at points of source. In order to ensure data quality, standardised tools for data collection and reporting have been developed and are in use in all health facilities. When funds are available health workers involved in the collection of data are also trained. A 2003 DQA for Zambia found that tally records, especially for outreaches, are not always available and this is mainly due to poor storage of these sheets or shortage of tally forms which leads to non-use during outreaches. It also found that vaccine stock records were also lacking. Vaccine records are important as they have impact on calculating wastage rates and forecasting vaccine requirements among other issues[21]. Supportive supervision, though conducted very rarely, contributes to better data quality as health workers are advised on technicalities of data entry, management and utilisation. Administrative data is validated through specific surveys such as the EPI coverage survey (the last one was conducted in 2011) and the ZDHS (the last one was in 2013/2014). EPI produces quarterly and annual programme performance reports. The comprehensive EPI review conducted in Sep 2014 identified lack of timely availability of data as a major challenge. At community level, there are community registers which are filled by CHWs. These registers contain community level data including names of children under the age of 12 months, the antigens they have received and when they are supposed to go back for more vaccines. The challenge, however, is that these registers are rarely filled and where they are filled, the data is not effectively used to inform programming by CHWs.

6.6 Community and other local actors

CSOs (such as World Vision, CHAZ and CIDRZ) also provide and support immunisation and other child health interventions at community level. There are, however, very few CSOs which are involved in immunisation programmes. The recently formed ZCSIP has embarked on mobilising CSOs to be involved in immunisation interventions. CHWs are volunteers and are chosen by community members. Each CHW is affiliated to a health centre. These CHWs are involved in the delivery of preventive and promotive health services. They also work at the health facilities helping health workers conduct under-five clinics. CHWs are quite helpful in collecting community level data as they are responsible for filling in the community registers. The register is, among other things, being used to identify unimmunised children and tracing defaulters. There are no established incentives for CHWs but some CSOs provide small incentives such as t-shirts, bicycles and a small allowance. NHCs at community level promote and contribute to an increased sense of ownership and responsibility for health issues by the community. The NHCs are composed of CHWs from different villages. The CHWs and NHCs are supervised by an Environmental Health Assistant/Nurse or Officer in Charge based at health centre. Each health centre has a Health Centre Committee (HCC) which includes members of the community. This committee advises health centre staff on health and welfare issues affecting the wider community. Safe Motherhood Action Groups (SMAGS) also constitute of community members and their main task is to promote safe motherhood. The GRZ developed a National Community Health Workers Strategy in 2010 which aims at training 5,000 new Community Health Assistants (CHAs) by 2015 and these undergo a one year training. The implementation of the National Community Health Workers Strategy started in June 2011 with a pilot phase lasting until 2013 during which 307 CHAs were trained[22]. The first group started working in August 2012. These CHAs are being recruited from remote rural communities and after training they deliver health services to underserved populations in their own communities where retention of formal health workers is a perennial challenge. Communities through SMAGS, CHWs, NHCs and being members of the health facility committees are playing an important role in the delivery of health services in Zambia. There is also a gap in terms of provision of IEC material which the community agents could use when disseminating key messages to families and communities.

6.7 Legal, policy and regulatory environments

The ICC has representation from a wide range of stakeholders including health service providers from public and private sectors, development partners (such as WHO, UNICEF and JICA) and CSOs. The ICC, among other things, is responsible for mobilisation of resources, advising and approving plans and budgets for routine and supplemental immunizations, the introduction of new vaccines, IMCI and child health promotion week activities. It is also responsible for advocacy for sustained political commitment and monitoring and evaluating EPI and other child health programmes. In terms of the key laws and policies that guarantee rights to health care and immunisation, Zambia has the following strategic documents: (i) the 6th National Development Plan 2011-2016; (ii) National Health Sector Plan 2011-2015; (iii) the National Health Policy, (iv) Child Health Policy, and (v) MOH Strategic Plan 2011-2016. The plans and the policies provide equity of access to high quality and cost effective health care to all the people in Zambia. The Child Health Policy includes immunisation as part of the Basic Health Care Package (BHCP). The Child Health Policy provides a platform for the delivery of immunisation services including introduction of new vaccines. The establishment of community level structures such as HCCs, CHWs, SMAGs and NHCs encourages voice and participation of the community in planning and monitoring of services. Specific surveys (such as client satisfaction surveys, ZDHS and KAP studies) are commissioned and conducted from time to time in order to get communities' views about services and how challenges can be addressed.

[21] LATH Consortium. (2003). *Immunisation data quality audit: Zambia*. Liverpool: LATH Consortium.

[22] Joseph Mumba Zulu, J.M., J. Kinsman; C. Michelo and A.K Hurtig. (2014). Developing the national community health assistant strategy in Zambia: a policy analysis. *Health Research Policy and Systems* 2013, 11:24 doi:10.1186/1478-4505-11-24.

6.8 Health and community systems financing

Every year the GRZ provides a budgetary allocation to MoH. Zambia's health sector still relies heavily on donor funding[23]. Zambia's total expenditure on health per capita is at US$96 while total expenditure on health as a percentage of GDP is at 4%[24]. The out of pocket health expenditure (as a percentage of private expenditure on health) in Zambia is estimated at 27%[25]. Immunisation services are provided free of charge. The GRZ's approach to health sector organisation focuses on decentralisation of planning, management and resources to the district level where health services are delivered. This approach is in line with Zambia's Decentralisation Policy. The DMO develops annual work plans. District grants are transferred from central level to districts every month for implementation of district work plans. Very little funds are transferred from the district to health facilities with some facilities getting as little as US$100 per month for recurrent expenditure. Zambia piloted the PBF programmes in Katete with funding from the World Bank and this programme has been scaled up to 11 districts, at least one district in every province. The objective of this PBF initiative is to increase coverage of key interventions which contribute to reducing maternal and child morbidity. The initiative strengthens the health system by, among other things, motivating health workers and their supervisors and rewarding innovation and results. Two of the 9 performance targets are (i) percentage increase in institutional deliveries and (ii) percentage increase in full immunisation of children under 1[26]. The evaluation of the pilot PBF initiative in Katete District[27] and the expanded programme generally demonstrate that PBF increases institutional deliveries and immunisation coverage[28].

7. National Health Strategy and Joint Assessment of National Health Strategy (JANS)

This section will be used to determine how immunisation is addressed in the national health plan, and what the key findings of an independent JANS of the strategy were. The Independent Review Committee (IRC) will use the findings of a JANS to gain an understanding of the policy and health sector context that will inform their assessment of the credibility and feasibility of the HSS proposal.

- ➔ *Please provide a reference to the relevant sections and pages in the NHP which outline immunisation policies, objectives, and activities.*
- ➔ *If a JANS has been conducted, please provide the JANS report as an attachment.*
- ➔ *Please provide a summary of how the government and partners have addressed the weaknesses and recommendations identified in the JANS or attach the country's response.*

ONE PAGE MAXIMUM

Zambia's NHSP covers the period 2011-2015 and it aligns with the 6th National Development Plan (SNDP) which was also for the same period. The SNDP was extended to 2016 and it was only the health section in this document which was extended to 2016. The NHSP was not reviewed. Among other interventions within the health sector, Zambia's NHSP and the SNDP[29] aims at scaling up family planning and maternal, neonatal and child health interventions which have been proven effective and have high impact in reducing maternal and child morbidities and mortalities. With regard to children, the NHSP's objective is to reduce under five mortality rate (U5MR). A number of child health interventions are being implemented in Zambia and these include delivery of immunisation and IMCI services which are coordinated by the CHU in MoH. These two programmes, namely, immunisation and IMCI, have contributed significantly towards the reduction in child mortality and morbidity. Because of these programmes, Zambia has (i) maintained polio free status; (ii) eliminated maternal neonatal tetanus; and (iii) reduced child morbidity and mortality due to measles. The Reach Every District (RED) /Community (REC)Strategy is the main approach being used in Zambia by the EPI. Significant progress has, therefore, been made in managing vaccine preventable diseases (VPDs) in Zambia.

One of the objectives of the NHSP is to reduce U5MR from 119 per 1,000 live births in 2007 to 63 by 2015. The SNDP estimates that by 2016 the U5MR will be at 56 per 1,000 live births. The scaling up of delivery of child health interventions including immunisation is one of the strategies being implemented to achieve this objective. Three key strategies are being

[23] Page 34 of the NHSP.
[24] See www.who.int/countries/zmb/en - accessed 19th January 2015.
[25] http://data.worldbank.org/indicator/SH.XPD.OOPC.ZS - accessed 19th January 2015.
[26] Chansa. (not dated). *Proposed results based financing to improve maternal and child health in Zambia*. Lusaka: Ministry of Health.
[27] Qamruddin, J., C. Chansa and A. Das. (2013). *Using evidence to scale up innovation insights from a results based financing (RBF) project for health in Zambia*. Washington: International Finance Company.
[28] See www.hritfreport.org.
[29] Page 120 of the SNDP

used to improve immunisation services delivery: (i) the strengthening of EPI; (ii) the introduction of new vaccines; and (iii) conducting of immunisation campaigns[30]. The availability of the Child Health Policy which includes immunisation as part of the BHCP provides a platform for the delivery of immunisation services including the introduction of new vaccines[31]. There are 104 districts in Zambia and the NHSP's target is for 90% of the districts to achieve a DPT3 coverage of 80%. In 2008 85% of the districts achieved 80% for DPT3 but this went down to 77% in 2009 and since then immunisation coverage has been going down. The MoH also provides immunisation services through mobile and outreach immunisation services. The NHSP 2011-2015 also recognises that there are other players such as the private sector, development partners and CSOs which are playing important roles in the EPI programme.

Both the NHSP and cMYP expire in December 2015. The process of developing a successor cMYP which will expire in 2018 is in its advanced stages. Zambia plans to develop a new NHSP by 2016 which will cover the period 2017-2021 in line with the National Development Plan. The MTR for the NHSP 2011-2015 is almost completed and it will provide recommendations for the development of the new NHSP for the period 2017-2021. Since Zambia does not have a national health sector plan and in line with guidelines from GAVI, this HSS proposal is for 3 years from 2016 to 2018. The NHSP 2011-2015 was assessed using the Joint Assessment of National Strategic Plans (JANS) approach. A comprehensive report on the JANS assessment was produced by the team which was assigned to do this but there is no report which spells out how GRZ responded to these issues. The JANS report for Zambia's NHSP has been attached. Going through the NHSP 2011-2015, it is evident that the GRZ took on board the recommendations made by the JANS team. Zambia's Vision 2030 is the overarching development agenda for Zambia which will guide investment up to 2030. This Vision 2030 guides the development of the National Development Plan and the NHSP.

8. Monitoring and Evaluation Plan for the National Health Plan

This section will provide background information on how the country organises M&E arrangements and whether this proposal is aligned and complementary to national M&E plans.

- ➔ *Please attach a copy of the M&E Plan for the national health plan.*
- ➔ *Please provide a summary of how the National M&E Plan is implemented in practice. In your answer refer to relevant sections of the M&E Plan in the national health plan for further details.*
- ➔ *Please attach a copy of data quality assessment report(s) conducted within the last 5 years and data quality improvement plans.*
- ➔ *Please provide a description of how development partners are involved in the M&E of the national health plan implementation and financing. Is there a Joint Annual Health Sector Review (f) and if so how and when are they are conducted? Please outline the extent of GAVI involvement in the JAR process.*
- ➔ *Please explain how immunisation programme reviews are linked to the JAR, and if they are not linked currently, what will be done to establish linkages.*

ONE PAGE MAXIMUM

8.1 Summary of the implementation of the National M&E Plan

Zambia does not have a separate M&E plan for monitoring the NHSP. The M&E Plan is part of the NHSP. The NHSP has a list of key indicators which are being used to monitor performance of the health sector. There is a functional HMIS which is the main system for collecting routine data in Zambia's health sector. The HMIS is a web-based system covering all health facilities and captures data on disease morbidity and mortality, maternal and child health services (including immunisation), service delivery, surveillance and financial services. It also reports on timeliness and completeness of data. The system has been modified to capture data on newly introduced vaccines. The following performance indicators are being used to assess progress of the EPI programme: (i) U5MR; (ii) % of fully immunised children under one year of age; and (iii) % of districts with >80% immunisation coverage[32]. Health facilities capture data on a daily basis and this is compiled and submitted monthly to districts where data is entered into the HMIS database. Once data is entered, it is available for use at the central level. The transmission of data from health facilities to districts is still paper-based unlike the transmission of data from the district to the central level which is done electronically. The HMIS is complimented by IDSR which covers 11 notifiable diseases and conditions. These diseases are reported immediately they are diagnosed to the next level of the health system to avoid possible outbreaks. VPDs, namely measles and tetanus, are among diseases being monitored by the IDSR. Disease surveillance covers collecting, collating, analysing and interpreting and disseminating to those who take appropriate action[33].

[30] Refer to the National Health Sector Strategic Plan 2011-2016. The following pages are critical: Pages 13, 39, 51, 57, 78, and 83.
[31] GRZ. (2014). *IPV introduction plan (Annex A)*. Lusaka: Government of the Republic of Zambia.
[32] Ministry of Health. (2011). *National health sector strategic plan 2011-2015*. Lusaka: Ministry of Health.
[33] EPI Review.

The NHSP also provides for an MTR and a final evaluation. An MTR of the NHSP will be finalised in 2015. The Directorate of Policy and Planning in MOH coordinate all health service-based health information activities and these include the HMIS, IDSR, Health Facility Census, Human Resource Information System (HRIS), Drug and Logistics Management Information System and the Financial Management Information System (FAMS). These are routine sources of health information. The National Health Accounts, as a source of information, is conducted periodically. The MoH and partners also commission specific studies to determine progress in the implementation of the NHSP. There are other routine surveys which are conducted by the Central Statistical Office for example the ZDHS which is conducted every 4 years; the Service Availability and Readiness Assessment (SARA) conducted every 2 years; the Living conditions and Monitoring Survey done on a yearly basis; the Malaria Indicator Survey done every 2 years; the EPI cluster survey every 3 years and the EPI reviews conducted every 4 years.

The National Population and Housing Census and other national household surveys are out of the control of the MoH. Nonetheless, these surveys are also being used to monitor performance of the health sector. The National Registration System under the Ministry of Home Affairs collects data on vital statistics and is responsible for conducting the Sample Vital Registration with Verbal Autopsy (SAVVY) survey which is done on an annual basis. Routine data is supposed to be reported on a monthly basis. Having accurate immunization data is essential for the EPI programme to track and improve program performance. In order to ensure that the routine data that is being collected and shared with stakeholders is of high quality, data quality surveys and data quality assessments are also conducted with support from WHO and UNICEF. While systems exist for routine collection of data in Zambia, some donors provide support to vertical programmes which are not integrated with HMIS[34]. The MoH produces an annual statistical bulletin based on data from the HMIS and this is made available to stakeholders. At district level, the DMO presents reports based on the HMIS data to the District Development Coordinating Committee (DDCC). The data being collected through the HMIS is supposed to be used for decision making at all levels. However, the use of data for this purpose is limited at all levels of the health care system in Zambia.

8.2 Involvement of development partners in M&E of the national health plan implementation and financing

Development partners are part of the ICC and the Health Sector Advisory Group (SAG). As members of these two groupings, they receive, comment and approve M&E plans and reports for immunisation as well as the wider health sector. Development partners are also involved in the planning and implementation of the Joint Annual Reviews (JAR) for the health sector and the mid-term and final review of the NHSP. In addition to participating in these reviews, development partners also participate in disease specific reviews such as the EPI reviews[35]. Donors also fund some M&E activities. The JAR is conducted the first quarter of the financial year and all development partners are involved. The JAR report is presented at the first SAG of the year. GAVI is not involved in JAR because it does not have representation at country level. However, the JAR includes indicators that are of interest to GAVI. The JAR is conducted every year except in a year when the MTR is conducted. It will be useful therefore if GAVI and GRZ explored the opportunity for GAVI to participate in the JAR as such an engagement would ensure that GAVI reviews utilise existing country mechanisms.

8.3 How immunisation programme reviews are linked to JAR

The JAR covers the whole health sector including the performance of the EPI. During the review, progress is presented on how the health sector is performing and recommendations made on how the challenges which have been identified can better be addressed. The trends on indicators which have been chosen to measure performance of the health sector are presented. Immunisation indicators are on the list of indicators which are used to measure performance of the health sector. The JAR, therefore, also looks at immunisation issues. Any recommendations made during the JAR which affect immunisation services are taken up by the ICC and the EPI programme for redress. The review of literature (for example specific studies on immunisation including the EPI reviews) is also part of the JAR. If the EPI reviews are done prior to the JAR, the findings and recommendations are further analysed and presented as part of the JAR findings and recommendations.

[34] Ministry of Health. (2009). *Health information system strategic plan 2009-2015*. Lusaka: Ministry of Health.
[35] See the 2014 EPI review where a wide range of development partners participated.

9. Health System Bottlenecks to Achieving Immunisation Outcomes

This section will be used to understand the main bottlenecks affecting the health system performance. The analysis here underpins the application, ensuring the proposed activities are designed to address the bottlenecks.

- ➔ *Please describe key health and immunisation system bottlenecks at national, sub-national and community levels preventing your country from improving immunisation outcomes. Consider constraints to providing services to specific population groups, such as the hard to reach, marginalised or otherwise disadvantaged populations.*
- ➔ *In order to keep this section concise, please summarise the key elements in the context of the HSS support being asked for, providing a reference to the relevant section in the National Health Plan for further detail.*
- ➔ *Please describe any gender and equity related bottlenecks to access to immunisation.*
- ➔ *Please reference the analytical work that led to identification of the bottlenecks.*
- ➔ *Describe the bottlenecks identified in any new and underused vaccine proposals submitted to GAVI, the National Health Plan, and any recent health sector assessments such as the Effective Vaccine Management (EVM) assessment or Post Introduction Evaluation (PIE).*
- ➔ *Which of the above specified bottlenecks will be addressed by the current proposal? Which bottlenecks are addressed by other national or externally supported programmes? Please refer to section 13 on the results chain to highlight linkages between bottlenecks identified and objectives and immunisation outcomes.*

In order to keep this section concise, please summarise the key bottlenecks and provide references to the relevant sections in existing bottleneck analyses. Please ensure the referenced analyses are provided as attachments.

FOUR PAGES MAXIMUM

The 2014 EPI review (which included the PIE) observes that between 2008 and 2010 immunisation coverage increased from 80% to 96% for key antigens. Such an increase demonstrated that mothers and their children were accessing services. EPI programme data shows that DPTIII and measles coverage started decreasing in 2009 and it was only in 2013 when Zambia started seeing a reversal of such trends in coverage[36]. The EPI review also found that coverage for new vaccines was poor: Rota1 was at 69% while Rota 2 was at 61%; MCV2 was at 27% at 18 months while at 9 months it was at 69%. These trends need to be reversed in order to ensure that Zambia's infants are adequately protected from VPDs. A number of reviews/assessments over the last 3-4 years have identified health and immunisation system factors which have led to the decrease in immunisation coverage. These assessments/reviews have informed the development of this HSS proposal. These reviews and assessments include the EVM assessment (2011), the EPI coverage survey (2011), the EPI review (2014), the 2013/14 ZDHS and the draft MTR report of the NHSP2011-2015. The weaknesses in Zambia's health system that affect the effective delivery of health services including immunisation services have also been highlighted in the cMYP (2011-2016) and the NHSP (2011-2016). The decrease in immunisation coverage is a major concern for all stakeholders in Zambia's health sector. This section highlights the key health and immunisation systems bottlenecks which prevent Zambia from improving and sustaining immunisation outcomes.

9.1 Health system bottlenecks to achieving desired immunisation outcomes

9.1.1 Shortage of HRH: The shortage of HRH has been highlighted in the HRH Strategic Plan (2011-2015). The health worker: population ratio is much lower than recommended by WHO: The WHO Recommended health worker: population ratios for Africa are 1:5,000 and 1:700 for doctors and nurses respectively. For Zambia this is at 1:18,000 and 1:2,000, respectively which implies that health workers in Zambia are actually significantly[37]. The 2014 EPI Review acknowledges that there is limited skilled health facility staff responsible for EPI and surveillance. Staff members also have too many other competing responsibilities. Immunisation services delivery is, therefore, being constrained by shortage of staff as is the case with other services. The NHSP and HRH Strategic Plan also identify the inequitable distribution of health workers[38] in Zambia as a problem as most of them are located in urban areas. The shortage of health workers in rural and remote areas of Zambia affects the delivery of immunisation and other health services. There is also high staff turn-over; hence the need to build the capacity of newly recruited staff in EPI management[39]. The cMYP also notes that inadequate funds contribute to failure of the health sector in Zambia to implement RED/REC strategy and the training of health workers (e.g. in MLM and

[36] EPI Review.

[37] Zambia Forum for Health Research. (2011). *Implementation of health worker retention strategies in Zambia: are there gaps? policy dialogue report.* Lusaka: Zambia Forum for Health Research.

[38] For example see Page 31 of the NHSP

[39] See Page 24 of the cMYP.

RED/REC Strategy) including CHWs who provide services in hard-to-reach areas. RED/REC is a community-based strategy which aims at identifying unimmunized children (not immunised for various reasons such as distance, poverty and mothers being busy with household chores) in respective communities and defines community-based approaches to improve service utilization.

The introduction of new vaccines is always accompanied by training and capacity building. This is done in order to ensure successful implementation. Routine immunization, which is the bedrock of the EPI, is inadvertently neglected and carries on in the background. The shortage of staff and lack of training have, therefore, contributed to the downward trends in routine immunization coverage in the past five years. The other challenge with capacity building, as identified by the 2014 EPI review, is that for routine EPI, the needs assessment were documented in 2008[40], more than five years ago. Currently, there is no scheduled routine training in EPI plans or budgets for capacity building of staff.

9.1.2 Lack of outreaches: The MoH offers routine immunization services integrated with other child health interventions such as Vitamin A supplementation, growth monitoring, deworming and treatment of childhood diseases. The GRZ established integrated outreach clinics in order to ensure that distance is not a major barrier to accessing health services including immunisation. Such an integrated approach also ensures that a child eligible for any of the health services is able to receive them at the time they attend immunization sessions; hence removing the need for repeated visits to facilities particularly in areas situated very far from health facilities. The 2014 EPI review found that out of the planned 4,531 outreach immunisation clinics, only 13% actually took place. The failure to conduct outreach clinics has negatively impacted on immunization coverage. Outreach schedules are not in most cases adhered to due to lack of transport (such as vehicles, bicycles and motor cycles[41]), shortage of staff[42], lack of shelter in harsh conditions and the lack of financial resources[43]. The EPI review and stakeholders identified failure to undertake outreaches as one of the major reasons which have contributed to decrease in immunization coverage in Zambia. Outreaches ensure equity in service delivery; hence the failure to conduct outreaches implies that hard to reach and marginalized populations are not effectively reached; hence the need to revitalize the implementation of outreach services. The failure to conduct outreaches, for reasons as detailed in this section, has great impact on women who bear the sole responsibility of taking children to health centres.

9.1.3 Lack of transport: The NHSP recognises that effective provision of health services (including immunisation) requires the existence of an efficient transport system (including vehicles) for distribution of medicines and other supplies and for managerial and supervision purposes. The inefficient and insufficient transport system in Zambia's health system is acknowledged in the NHSP and this affects, among other things, the conduct of outreach, referral and supportive supervision services[44]. The issue of transport, as a barrier to delivering services, was also raised during the 2014 EPI review and during consultations with stakeholders during the development of this proposal. Section 9.1.2 emphasises that the lack of transport at all levels has impacted negatively on the conduct of outreach clinics; hence failure to effectively reach marginalised and hard to reach populations. The people who were consulted as part of the proposal development process pointed out that the lack of transport at all levels affects not only the failure to carry out integrated outreach services but also the collection and distribution of health supplies including vaccines. In addition, the transportation of infectious sharps including syringes and needles for immunisation for disposal at the health facility has been a challenge. The last time the MCH Directorate bought vehicles was in 2008. Some motorbikes are there but they have outlived their lifespan, hence no longer reliable. At community level there are no bicycles for use by CHWs when working in their communities or when they visit health centres to assist health workers deliver immunisation and other MCH interventions. Transport inventories are conducted and details are available at provincial level. These inventories are updated each year and contain details such as vehicle number, engine number, type of vehicle and model among other details. The reviews of the transport inventories generally demonstrate that there are no vehicles/motorcycles/bicycles in the target districts. The lack of transport (vehicles, motorcycles, boats and bicycles) has affected the delivery of immunisation and other health services; hence contributing to, as argued in Section 9.1.2, the decrease in immunisation coverage in Zambia over the past 4-5 years.

9.1.4 Data quality and availability: The HMIS is being used nationally to collect routine data for EPI and this is available to MoH. A number of problems have been identified concerning the HMIS and these include the lack of systematic training of District Health Information System (HIS) staff, rapid turnover of staff (implying the need for training), very little analysis and interpretation of data (especially at points of source) and poor data quality including lack of timeliness and completeness of data[45]. Because of lack of trust in HMIS some development partners have actually developed and are implementing their own

[40] Page 28, cMYP.
[41] See Page 24 of the cMYP.
[42] See Page 24 of the cMYP.
[43] For example to purchase fuel for the vehicles/motor cycles (see Page 24 of the cMYP).
[44] See Page 30, NHSP.
[45] Heywood, A., E. Nielsen and S. Orzeszyna. (2005). *Assessment of the Zambian Health Management Information System*. Final report submitted to Ministry of Health, Lusaka.

data collection systems. HMIS reviews generally demonstrate that there is inadequate understanding of why the data is being collected, how to analyse or interpret the data and what to do with the data that is being collected[46]. The lack of utilisation of data for planning and management exists at all levels of the health system. There is also inadequate disaggregation of HMIS data by gender, socio-economic status and geographical location for routine data collected through the HMIS[47]. Long distances to health facilities constitute a challenge in terms of health workers from health centres to deliver data to the district.

All health facilities in Zambia are supposed to submit data including on immunisation to their respective districts. This is mainly the case with public facilities and those belonging to CHAZ. During discussions with stakeholders including with private practitioners it was noted that most private health facilities do not submit reports. There are a few private clinics which report such data. Most private health facilities are located in urban areas. Since they do not report their activities to their respective districts, there is a problem that the HMIS is missing some of the children who have been vaccinated. There have also been problems when calculating immunisation coverage. Health workers are advised to use official population data from the Central Statistical Office which in most cases is much older than the date of use. For example in 2014 the MOH and stakeholders are still using projections from the 2010 census data. The population estimates from the Central Statistical Office have proved unreliable. Budgets, vaccines and other resources are allocated based on census population and population projections and this has often led to stock-outs or wastage of vaccines[48] and other health supplies. Due to under-estimation of population data, some facilities have reported over 100% immunisation coverage. The EPI review further notes that many health care workers do not understand how to calculate EPI and surveillance indicators used to monitor program performance. Data issues, therefore, need to be addressed at all levels of the health care system and such data should effectively be used for making decisions.

However, evidence is there for data utilisation during vaccine forecasting, budgeting, resource allocation and development of micro-planning and district and facility levels. GRZ is implementing interventions of data campaigns to stimulate data culture among health workers at all levels of the health system using initiatives such as Epidemiology for Data Users (EDU) , Quality Improvement through Data Use (QIDU) and the Better Immunisation Data (BID).

9.1.5 Inadequate supervision: The MoH recognises that on-going supportive supervision is critical to ensure quality program performance. Supportive supervision helps staff to improve their performance. It does not aim at fault-finding but builds confidence among staff that they are doing their work in the right manner. Both the NHSP[49] and the 2014 EPI review[50] acknowledge that there is limited supervision of staff at all levels. This was also expressed during consultations with stakeholders. The conduct of supportive supervision is constrained by lack of funds, shortage of staff, inadequate supervision checklists and transport constraints[51]. The 2014 GAVI full country evaluation report also pointed out the limited supervisory visits after the launch of new vaccines[52]. There is also limited supervision of private health facilities by the public sector. This entails that provinces and districts do not provide adequate technical guidance and feedback to lower level facilities (including remote and rural health facilities) to improve service delivery. Health workers, especially at district and lower levels, are in most cases left undirected and unguided with few or no milestones to help them to assess their performance. Even where supervision has been done, there is very little evidence of the supervision having ever been done as there is in most cases no report; hence no follow up[53]. The EPI review also found that immunisation specific microplans are not available at district and at health facility level. Partly, this is due to the fact that health workers are not supervised and hence not reminded about the need for microplans to guide their work.

9.1.6 Inadequate funding: Every year the GRZ allocates funding to ministries and departments. This funding, however, is inadequate to meet requirements[54]. While this is the case, it should be acknowledged that Zambia is among the few African countries which have reached the Abuja target on proportion of overall government expenditure spent on health as this is now at 16%. Zambia relies heavily on support from development partners for budgetary support. The NHSP estimates that over 40% of total health expenditure comes from various development partners[55]. The EPI review found that in general immunisation services are usually underfunded but it does not show the level of underfunding and which aspects of the programme are underfunded. Every month the central level is supposed to release funding to the districts to use for provision

[46] Heywood, A., E. Nielsen and S. Orzeszyna. (2005). *Assessment of the Zambian Health Management Information System.* Ministry of Health, Lusaka (see page 32).

[47] [47] Ministry of Health. (2007). *Assessment of the Health Information System in Zambia.* Lusaka: MoH.

[48] EPI Review

[49] Page 61, NHSP.

[50] This is a problem at all levels of the health system. Data is not available to show the proportion of planned number of supervisory visits which were carried out per level.

[51] See EPI review and CMYP.

[52] See GAVI full country evaluation first annual progress report, January 2014.

[53] See cMYP, Pages 28-29.

[54] Page 31, NHSP

[55] Page 54, NHSP.

of services including immunisation services. These grants are inadequate and irregular hence this affects the delivery of health services. A NORAD/GAVI report also highlights that insufficient financial resources are barriers to improving immunisation outcomes especially the slow and irregular disbursement of funds to the peripheral levels[56]. Other activities which are under-funded include surveillance, supervision and disease outbreaks. There is also some lack of transparency in the way funds are disbursed from the central level: the cMYP says that usually there is no information on EPI budget at both district and facility level. Inadequate funding to the health sector has led to a number of problems as stipulated above: failure to conduct outreaches, lack of supportive supervision, lack of transport including fuel, lack of training of HRH and poor data quality.

9.1.7 Inadequate information, education communication for immunisation: A 2013 KAP study on immunisation reveals key knowledge gaps among caretakers of under-five children: (i) many caretakers do not know why children should be immunised; (ii) some do not know diseases prevented by immunisation; (iii) misperceptions about immunisation exist e.g. that it causes diseases and it makes children infertile; and (iv) though in small numbers some religious groups (e.g. Zion Church) do not allow their members to access immunisation services. Zambia has one of the lowest proportions of pregnant women who deliver with the help of skilled staff; hence some children miss antigens given at birth because they are born at home. Among some cultures in Zambia a newly born child is kept in the house for as long as 6-8 weeks for witchcraft and other cultural related reasons; hence such children miss some antigens which are supposed to be given to children at this age[57]. The results of the KAP study highlight the urgent need for C4I. The general lack of adequate demand creation interventions for immunization has resulted into lack of awareness among communities about the importance of immunization. The EPI review also noted that there were inadequate EPI IEC materials on routine immunization in health facilities. Stakeholders consulted during the process of developing this proposal also mentioned that C4I in most cases accompanies the introduction of new vaccines at the expense of routine immunisation. The EPI review, therefore, recommends continuous efforts in communication. While demand for immunisation seems to be there, this needs to be maintained especially with the introduction of new vaccines which need further demand creation interventions.

9.1.8 Inadequate involvement of the private sector in immunisation services: The EPI review found that very few private health facilities deliver immunisation services and submit reports to DMOs[58]. During discussions with stakeholders it was also pointed out that in most cases the private sector is not involved in immunisation specific trainings organised by MOH. While some private providers have interest in delivery of immunisation services, they are, however, not supported by the GRZ. For example private practitioners use normal fridges to keep their vaccines despite the fact that this is not recommended. The non-participation of the private sector in the delivery of immunisation services, especially in urban areas, creates the potential of missing children who are seen and attended to by private health providers.

9.1.8 Limited participation of community members in immunisation services: The EPI review also found that in some districts the community participates in the planning and management of immunisation services as key stakeholders through community structures such as CHWs, NHCs, SMAGs[59] and as members of the HCCs. These local level structures create demand for immunisation, influence families to take their children for immunization and create an enabling environment for supporting immunization services in the communities and other health services. CHWs also reduce health workers' workloads. The challenge, however, is that, although CHWs are key in delivery of health services, most of them are not active: the EPI review found that at community level, only 19% of CHWs and 10% of trained Traditional Birth Attendants (TBAs) were active in providing services within their communities. The inadequate participation of community members has also contributed to weak defaulter tracing mechanism, a problem which was also identified by the EPI review.

9.1.9 Gender: A UNICEF study on equity demonstrates that there are no major differences between the proportion of girls and boys who are vaccinated[60]. The same results were also obtained in the 2007[61] and 2014 ZDHS[62]. The responsibility of taking children for immunisation falls on women. If they are sick or they are busy (for example preferring to go to the market other than for immunisation), it means the child will not be taken for immunisation. Women have a lot of chores in the home and if they find long queues at the health centre some may not have time to wait and will return home to do their chores. Women also fail to go for immunisation because they do not have transport money to get to health facilities for immunisation and other health services. In the majority of cases men do not take their children for immunisation because of, among other reasons, the fear of being perceived as '*jealousy*'. UNICEF's KAP study also found that women will in general not go for immunisation because they do not have anything decent to wear and they do not want to appear to their friends in dirty or

[56] GAVI and NORAD. (2004). *Alleviating system wide barriers to immunization: issues and conclusions from the second GAVI consultation with country representatives and global partners, 7-8 October 2004*, Oslo: GAVI and NORAD.

[57] RuralNet Associates Ltd. (2013). *Knowledge, attitudes, practices, barriers and social norms in health seeking behavior on immunization and child care in Zambia.* Lusaka: RuralNet and Associates Ltd.

[58] Data is not available on exact proportion of private health facilities which provide immunization services including the proportion of those which provide immunization services which submit reports to the DMO. Stakeholders, however, report that very few private health facilities provide immunization services and report to DMO.

[59] EPI Review.

[60] UNICEF. (2011). *Reaching the MDGs with equity: identifying Zambia's most excluded people*. Lusaka: UNICEF.

[61] Central Statistical Office. (2007). *Zambia demographic and health survey 2007*. Lusaka: Central Statistical Office.

[62] Central Statistical Office. (2014). *Zambia demographic and health survey 2013/2014*. Lusaka: Central Statistical Office.

worn out clothes. The KAP study demonstrates that in general women are more knowledgeable about immunisation than men and this is mainly because they are the ones who go with their children for immunisation[63]. This proposal has a very large focus on C4I which among, other things, will aim at creating awareness about immunisation among both men and women and will encourage men especially to actively take part in immunisation activities including taking their children for immunisation. The implementation of RED/REC approach will imply that services will be taken to where the women are for example having mobile services in market places. The RED/REC trainings will also help to encourage health workers to discuss with husbands to take up the responsibility of taking their children for immunisation.

9.1.10 Socio-economic issues: Most people in Zambia are poor: 60.5% of the population live below the poverty line and 42.3% of Zambians are described as extremely poor. More people in rural areas (77.9%) are poor compared to 27.5% in urban areas. As mentioned earlier, the Northern Province (split into two and the other being Muchinga), where this programme will be implemented, is one of the poorest provinces with extreme poverty estimated at 55.8% compared to the national average of 42.3%. Poverty is an important determinant of use of health services[64]. The ZDHS consistently shows that the poor have worse health outcomes compared to the non-poor. UNICEF argues that investments in RED/REC initiatives in immunisation which target the underserved districts where many poor people live have increased access to immunisation services. The districts being targeted in this programme have a large remote rural population and are extremely poor hence the implementation of interventions for example RED/REC strategy and others will help to improve access to health services including immunisation. Lastly, the higher the educational level of the mothers/caretakers the higher the proportion of children who receive all basic vaccinations[65]. In addition to implementing RED/REC strategies in order to reach marginalised populations, the MoH will also link poor people to its social cash transfer programme where this intervention is being implemented.

9.1.11 Other issues: Immunisation services are not delivered on an everyday basis with an exception of urban areas where there are many clients. In rural communities these services are not offered every day because of small numbers of children who come for these services (hence the fear to waste vaccines) as well as shortage of staff as they need to provide other services as well. Many rural health facilities with EPI fridges conduct one fixed session on a weekly basis. As a result of this, there are many children on scheduled immunization days; hence long waiting times. Because of such queues, some caregivers prefer going to markets or other day jobs in order to avoid opportunity costs associated with waiting at the facility. In Zambia there are some populations which are quite mobile and difficult to get for immunization.

9.2 HSS interventions being addressed

Section 9.1 has highlighted major health and immunisation system factors which affect the effective delivery of immunisation services in Zambia. Zambia conducted an EVM assessment in 2011 which informed the development and implementation of the Vaccine Cold Chain Expansion Strategy. The GRZ together with development partners have mobilised resources to address the cold chain gaps identified by the 2011 EVM. Zambia's application to GAVI for support to introduce IPV notes that there are no cold chain gaps at central, provincial and most district levels[66]. Where there are gaps, attempts are being made to address these gaps. MoH, CIDRZ and cooperating partners are confident that Zambia has enough cold chain capacity for the next 10 years or so even when other new vaccines are introduced. Cold chain is, therefore, not a priority challenge in Zambia as of now. The introduction of new vaccines contributed greatly towards the expansion of the cold chain. This GAVI HSS proposal does not include support for cold chain as this is being adequately addressed by GRZ and its development partners. However, plans to assess cold chain through EVM on a two yearly basis are in place. In addition there is on-going cold chain inventory that is undertaken on a regular basis.

The shortage of HRH is being addressed by GRZ and its cooperating partners and this has not been included in this proposal. As stated earlier, there are also other initiatives being implemented by the GRZ with support from other development partners for example the rural electrification programme and the road network improvement programme which will motivate health workers in remote rural areas to remain where they are based. The only HR component which has been included in this proposal is the training of HRH. The PBF programme implementation, the availability of transport and allowances and provision of subsistence allowance for outreaches and supportive supervision[67] and the GRZ hardship allowance given to civil servants including health workers will also motivate HRH and address the issue of retention. For remote rural health facilities whose staffs sometimes fail to get their salaries at district headquarters for example they will be able to get salaries as transport will be made available. The EPI review found that there are quite a number of challenges with surveillance. This is being addressed, though not adequately, by funding from GRZ and WHO. The GRZ and its partners have also reviewed the in-service curricula and it includes immunisation issues. This, however, needs strengthening hence it has been included in this

63 RuralNet Associates Ltd. (2013). *Knowledge, attitudes, practices, barriers and social norms in health seeking behavior on immunization and child care in Zambia.* Lusaka: RuralNet and Associates Ltd.

64 See Central Statistical Office. (2012). *2010 Census of population and housing: national analytical report*. Lusaka: Central Statistical Office.

65 UNICEF. (2011). *Reaching the MDGs with equity: identifying Zambia's most excluded people*. Lusaka: UNICEF.

66 GRZ. (2014). *Proposal for the introduction of IPV in Zambia*. Lusaka: GRZ

67 Support is being requested for these interventions.

proposal.

9.3 Support being requested from GAVI

In this proposal support is being requested from GAVI for the purchase of vehicles, boats, motorcycles and bicycles. This intervention is aimed at addressing the gross transport bottlenecks prevailing in Zambia's health sector. The provision of transport will ensure that outreaches and supportive supervision are being conducted at all levels. Support is also being requested to enable CSOs to develop and implement C4I interventions and create demand for immunisation at community level. Support is also being requested to improve the HMIS in the target districts. Lastly, the World Bank piloted a PBF project in Katete in Zambia which, among other things, improved immunisation outcomes. The PBF model as implemented in Katete exists and with support from GAVI this will be expanded to other districts as described in this proposal. The target districts for the GAVI grant are poor performing and the GRZ will develop and implement a PBF programme in the target districts Interventions funded by this grant will be implemented in Muchinga, Luapula and Northern provinces of Zambia. In Muchinga these interventions will be implemented in Mpika and Chinsali Districts while in Northern Province it will be implemented in Luwingu District and then Samfya, Milenge, Mwense and Lunga Districts in Luapula Province. As mentioned earlier, all these districts have been poor performing as far as immunisation coverage is concerned. Currently, there are no key development partners which are supporting similar initiatives in these three provinces. **The bottlenecks which have been outlined above impact negatively on immunisation coverage especially in poor performing districts including the 7 target districts; hence the need to urgently address them.**

10. Lessons Learned and Past Experience

This description will highlight to GAVI how lesson-learning has been incorporated into the design of the activities. It will provide the evidence base that demonstrates that the proposed activities will be effective, and that implementing them will achieve the desired intermediate results and immunisation outcomes.

- ➔ *Please use the table in the proposal form to summarise the evidence base and/or lessons learned related to each of the objectives in the proposal. Applicants are asked to detail the lessons learned from relevant interventions specific to their country that were successful.*
- ➔ *In addition, please illustrate the challenges to successful implementation.*

**Where possible, please provide evidence of this learning by providing a reference or a web-link to a published document related to the specific interventions.*

Objective	Lessons learned, highlighting both successes and challenges; include any lessons learned from grant implementation
Objective 1: To improve the delivery of immunisation and other child health interventions in Zambia by ensuring that outreach clinics and supportive supervision are operational in target districts.	The conduct of outreach clinics has significant impact on immunisation outcomes e.g. a study conducted in peri-urban Zambia found that distance to health centres was associated with lower immunisation coverage. Immunisation coverage, however, improved significantly after outreach clinics were established[68]. Making transport available is key to successful outreach programmes. The CHU in MoH last procured vehicles for the EPI in 2008 with support from GAVI. This contributed significantly to the increase in immunisation coverage. The DMO is provided with a grant every month from the central level for recurrent costs such as fuel, allowances and supervision. These grants are inconsistent and inadequate; hence failure to conduct outreaches and supportive supervision. The GAVI HSS grant will supplement what GRZ disburses to districts so that adequate resources are available for effective and efficient conduct of outreaches and

[68] Sasakim S. K. Igarashi, Y. Fugino, A. Comber, C. Brunsdon, C.M. Muleya and H. Suzuki. (2011). The impact of community-based outreach immunization coverage with GIS network accessibility analysis in peri-urban areas, Zambia. *Journal of Epidemiology and Community Health* 65:1171-1178 doi:10.1136/jech.2009.104190. See also Halwindi, H., S. Siziya, P. Magnussen and A. Olsen. (2013). Factors perceived by caretakers as barriers to health care for under-five children in Mazabuka, Zambia. *ISRN Tropical Medicine* http:dx.doi.org/10.1155/2013/905836. This study found that weak outreach programmes constitute a major barrier to health care for under-five children, especially among hard-to-reach and marginalized communities and populations. In this study health workers also acknowledged that outreach programmes fail mainly because of unreliable vehicles

	supportive supervision. Over the 3 year period funding from GAVI will be consistent and at the end of this period GRZ will take over this responsibility. The revival and intensification of outreach clinics will ensure improvement in immunisation coverage as e.g. evidenced by a study by Sasakim et al[69]. Ensuring the conduct of scheduled supportive supervision will ensure that service providers are provided with adequate technical knowledge and skills, guidance and feedback to improve service delivery. GAVI[70] and WHO also do recommend the conduct of outreaches saying that these account for more than half of all immunisation contacts in most countries if properly managed. The major challenge which can lead to implementation of this intervention is the shortage of HRH and difficulties of reaching some mobile populations in target districts.
Objective 2: To improve the knowledge and skills of district managers and frontline health workers on delivery and management of immunisation and other child health services. 1.	There is high turn-over of staff within Zambia's health sector. New staff remains untrained in immunisation issues. There is a need to offer trainings especially in MLM and the RED/REC strategy as these courses have proved quite useful in improving immunisation outcomes. These courses are also recommended by WHO and GAVI. These trainings also include micro-planning which the EPI review found lacking at health facilities. The Merck Vaccine Network-Africa (MVN-A) acknowledged that chronic under-capacity in immunisation workforce characterises most of African countries. MVN-A, funded by Merck Company Foundation and endorsed by GAVI, was a 10 year programme which provided customised and hands-on-training to immunisation managers in Zambia and 3 other African countries. MVN-A employed a train-the-trainer approach and focussed on improving knowledge, skills and confidence of immunization managers, who, in turn, provided training and support to junior workers. MVN-A worked in selected poor performing districts[71] in Zambia and in 83% (19 out of 23 districts) of the districts immunisation coverage improved to above 70% and an additional 13% (3 out of 23 districts) improved coverage to between 60% and 70%. The MVN-A increased participants' knowledge and skills relating to immunisation[72]. The MVN-A report recommended that MLM training should be included in Zambia's GAVI HSS proposal as currently there are no resources earmarked for this intervention[73]. Mutabaruka et al have also found that MLM training in immunisation in Africa improves work performance and also leads to an increase in immunisation coverage[74]. This demonstrates that training of district managers and frontline workers in MLM and RED improves immunisation outcomes. The EPI review also stressed that most of the staff currently managing the immunisation programme have not been trained in RED/REC; hence it recommended the building of capacity of newly appointed staff in immunisation management to address high staff turnover. It is also important to provide training to health workers on interpersonal communication as poor interpersonal skills is a barrier to families to bring their children for vaccination.
Objective 3: To develop and implement effective C4I and other child health intervention strategies through the involvement of CSOs.	Zambia has a comprehensive EPI communication strategy developed in 2012. All communication activities are implemented as per the strategy. C4I has proved to be an important tool for increasing demand for immunisation services. Zambia has launched quite a number of new vaccines over the last 5 years and all these have been preceded by massive social mobilisation and communication campaigns. A GAVI full country evaluation for the introduction of PCV identified social mobilisation and communication as an area of

[69] Sasakim S. K. Igarashi, Y. Fugino, A. Comber, C. Brunsdon, C.M. Muleya and H. Suzuki. (2011). The impact of community-based outreach immunization coverage with GIS network accessibility analysis in peri-urban areas, Zambia. *Journal of Epidemiology and Community Health* 65:1171-1178 doi:10.1136/jech.2009.104190.

[70] GAVI and NORAD. (2004). *Alleviating system wide barriers to immunization: issues and conclusions from the second GAVI consultation with country representatives and global partners, 7-8 October 2004*, Oslo: GAVI and NORAD.

[71] A district is defined as poor performing if it has immunization coverage of less than 60%.

[72] Mpabalwani, E.M., J.A. Menon, G. Phiri, A. Malambo, E.K. Mbozi, P. Kalesha, C.C. Ngosa, G. Louw, P. Seddon and M.P.S. Ngoma. (2011). Assessing the delivery and effectiveness of a new immunization training initiative at district level in Zambia. *Medical Journal of Zambia* 38(1):8-12.

[73] Merck Vaccine Network Africa. (2014). *A summary report on the Merck Vaccine Network – Zambia Project activities 2008-2013*. Lusaka: Merck Vaccine Network Africa.

[74] Mutabaruka, E., C. Dochez, D. Nchimiriman and A. Meheus. (2010). Evaluation of mid-level management training in immunization in the African region. *East African Journal of Public Health* 7(1): 37-43.

	great success in launching this vaccine and applauded the campaign strategy to effectively convey the message to people in Zambia. The lack of resistance to PCV introduction was attributed to the success of social mobilisation and sensitisation activities preceding the launch[75]. The earlier introduction of pentavalent was also preceded by massive campaigns utilising more than 30 radio stations, television, newspapers, posters and daily health talks in health facilities. There was strong advocacy for pentavalent leading to good acceptance by the community[76]. Community mobilization through SMAGs and NHCs is another strong and proven channel for motivating families to bring children for immunization. It is evident that C4I activities which characterise new vaccines introduction have proved to be quite effective. While the cMYP recommends the need for effective C4I interventions, the EPI review observed that such activities are non-existent for routine immunisation. Continuous efforts in C4I are required to create and sustain demand for immunisation.
Objective 4: To improve the collection and utilisation of HMIS data at all levels of the health care systems with special focus on district and lower levels.	The EPI review highlights teething problems being experienced in the collection and utilisation of data especially at points of source. With this GAVI grant health workers will be trained on data collection and utilisation for purposes of improving programming. Technical support for HMIS will be provided by the central level. The DQS conducted in Zambia in 2012 also highlighted a number of problems with regard to data and recommended, among other interventions, the training and retraining in data management in all health facilities in Zambia, the need for districts to be trained on how to conduct DQS and conducting a national DQS[77]. These are yet to be done and this grant will address some of these problems. A number of trainings have been done in Zambia aimed at improving data collection and some of these have been quite successful. For example the MoH with support from USAID used a quality improvement approach to improve immunisation coverage in Gwembe District in Southern Province of Zambia. The project was implemented at Munyumbwe Rural Health Centre which had a full immunisation coverage of 56%. A comprehensive package of immunisation interventions including addressing data issues was implemented. Data quality in this health centre was sub-standard as a result of sub-optimal record keeping practices. The health centre in charge oriented other health centre staff on correct completion of under 5 registers then the health centre staff identified and corrected missing information on under five cards and registers. Health centre staff conducted weekly and monthly reviews of under-five registers and monitored quality and completeness of documentation. This intervention resulted into immunisation data being recorded correctly by health centre staff and they were able to complete and submit data monthly and quarterly to the DMO through the HMIS which was not the case before implementation of this comprehensive package[78]. This demonstrates that training/orientation and follow up improve data collection initiatives at health facility level.
Objective 5: To develop and implement a Performance-Based Financing system in the target districts with the aim of improving immunisation and other child health outcomes.	With funding from the World Bank, Zambia implemented a pilot PBF program in Katete. Zambia aimed at reducing maternal and child mortality and morbidity. An evaluation found that the additional resources health facilities received motivated staff and increased productivity. This also led to creativity such as employment of local staff to address HRH shortages. The program also resulted into increased use of health services and it improved data recording and reporting (see http://www.rbfhealth.org). This GAVI supported programme will build on this success.
TWO PAGES MAXIMUM	

[75] UNZA et al. (2014). *GAVI full country evaluation first annual progress report.* Lusaka. UNZA.

[76] WHO, UNICEF, CDC, USAID and MoH. (2009). Final report on the post introduction evaluation of the pentavalent vaccine in Zambia February. Lusaka: MoH.

[77] Ministry of Health. (2012). *Data quality self-assessment for DPTIII and measles coverage data*. Lusaka: Ministry of Health.

[78] This report did not look at the outcomes of the improvement on data recording and reporting such as improvements on vaccine and supplies forecasting or reduction in wastage.

PART D - PROPOSAL DETAILS

For further instructions, please refer to the Supplementary Guidelines for HSS Applications

11. Objectives of the Proposal

This section will be used to assess whether the proposed objectives are relevant, appropriate and aligned with the National Health Plan and cMYP, and contribute to improving immunisation outcomes. It will also ensure alignment with the bottleneck analysis above.

➔ *Please succinctly describe the immunisation and HSS objectives to be addressed in this proposal and explain how they relate to, and contribute to, reducing HSS and immunisation bottlenecks (identified in section C.9 above) and strengthening of the health system. Please describe how these objectives are aligned with those in the national health plan.*

The objectives need to be aligned to and numbered in the same way in the HSS M&E Framework (Attachment 5) and also in the detailed Budget, Gap Analysis and Workplan Template (Attachment 6).

➔ *For each objective, please describe:*

a) Which immunisation outcomes will be improved by implementing the activities, and how will the activities contribute to their improvement? Please focus on the key activities related to each objective rather than every single activity. Please demonstrate this link in the next section on the results chain.

b) Whether and how the proposed objectives relate to the equity and gender related barriers to access as identified in the bottleneck analysis, and how the objectives will result in narrowing the equity gap in immunisation coverage and contribute to reaching the under reached, underserved and marginalised populations. Countries are requested to consider gender related and geographic barriers to access of immunisation and other health services.

➔ *Please list and describe all of the proposed activities in the Budget, Gap Analysis and Workplan Template. Please organise the activities accordingly by objective. If GAVI funding is requested to go into pooled funds, please attach the Annual Work Plan and Budget for the pooled fund and related TORs.*

➔ *If this GAVI HSS grant (either a portion or all of it) is proposed to be aligned with the World Bank's RBF programme or any other existing PBF programme in the country, then please attach the concept note or programme design document. Describe in this section which of the objectives of the grant are for the PBF/RBF programme and how the grant will be aligned.*

TWO PAGES MAXIMUM

Objective 1: To improve the delivery of immunisation and other child health interventions in Zambia by ensuring that outreach clinics and supportive supervision are operational in target districts.

Activity 1.1: Purchase short wheel base vehicles; Activity 1.2: Purchase 4X4 vehicles; 1.3: Purchase motorcycles[79]; and Activity 1.4: Purchase of bicycles including spare parts for CHWs; and 1.5: Purchase 20 tonne truck for distribution of health supplies including vaccines; 1.6: Purchase of speed boats for Lunga and Samfya Districts; Activity 1.7:Distribute bicycles to districts; Activity 1.8: Distribute motorcycles to districts; and Activity 1.9: Distribute bicycles from districts to health facilities: In 1st year 12(4X4) vehicles will be purchased and distributed as follows: 2 for MoH-CHU; 1 for each target province; and 1 for each of the target districts. Vehicles at headquarters will be used for supportive supervision not only in target districts but nationwide. Those at provincial headquarters will also be used for supportive supervision in all districts in the provinces. Vehicle at district level will be used for conducting integrated outreaches for hard to reach and remote rural areas. Short wheel base vehicles, not attractive for retention at district and headquarters, will be purchased for 14 zonal health centres in target districts to serve health centres and they will be used for outreach/mobile immunisation services and collection and distribution of health supplies. A motor cycle will be purchased for each of the 107 health facilities in target districts for outreaches and collection and distribution of health supplies. CHWs will be provided with bicycles for use in their catchment areas, during outreaches and when going to health centres. This investment will address transport challenges being experienced in target districts, provinces and at national level. For those in remote rural areas, these different forms of transport will also be used to collect their salaries among other things. The trucks currently being used for distribution of vaccines and other health supplies are old, expensive to maintain and need to be replaced. One truck will be purchased in 2017 and this will address challenges being experienced during distribution of vaccines and other health supplies from central to provinces and districts.

[79] These should be fitted with pre-fitted vaccine carriers so that it should be able to carry two persons.

These trucks will be used nationwide and not only in target districts. There are two districts which have large water bodies namely Samfya and Lunga. One speed boat will be purchased for each of these districts in order to enable health facilities conduct outreaches as well as transport health supplies. The provision of different forms of transport will help achieve geographical equity as it will make services available to children in remote rural areas who fail to access services because of distance and location. Activities 1.7-1.9 will be for distribution of motorcycles and bicycles from Lusaka to districts and lower levels.

Activity 1.10: Conduct supportive supervision by districts to health facilities; 1.11: Conduct outreach clinics from health facilities to outreach clinics; 1.12: Conduct supportive supervision from MoH headquarters to districts and selected health facilities; 1.13: Conduct internal audit of districts and health facilities; 1.14: Conduct external audit of districts and health facilities; 1.15 Provide administrative grant to MoH; and 1.16: Provide administrative grant to districts. The monthly grants disbursed from central level to districts for recurrent expenditure is inadequate. This GAVI grant will be used to support the conduct of supportive supervision from districts to health facilities and also from headquarters to districts. It will also be used to support districts and health facilities to conduct outreaches as scheduled. Some funds have also been set aside in order to maintain the vehicles and motorcycles at all levels and as a contribution towards water, electricity and rentals. The central office will also audit district accounts twice every year to ensure finances are being used for intended purposes. An external audit will be conducted by the Auditor General's Office once a year. These activities will ensure that outreaches and other mobile services are conducted hence ensuring geographical equity as well as poor people accessing services and not being barred because of transport costs.

Objective 2: To improve the knowledge and skills of district managers and frontline health workers on delivery and management of immunisation and other child health services.

Activity 2.1: Conduct ToT on the RED/REC strategy; Activity 2.2: Train health workers in RED approach and Activity 2.3: Print RED/REC modules: The RED strategy improves delivery of immunisation services, identifies strategies to ensure every child is reached and promotes outreaches especially in hard to reach areas. It also encourages conduct of supportive supervision. There is a need for continuously training health workers on RED/REC taking into consideration new staff within the context of high staff turnover. The training will adopt the ToT approach after which those trained will train others. This will ensure that all children regardless of their socio-economic status and location are reached as such training emphasises on outreaches and mobile clinics. Once the curricula for training institutions has been reviewed the conduct of in-service trainings such as MLM, RED/REC will be reduced and only targeting those who left training institution before introduction of such courses. Under this GAVI supported programme, modules will be printed for the planned RED/REC trainings and sets of modules will also be reserved for the national, provincial and district health offices.

Activity 2.4: Train MoH staff in GAVI financial accounting and reporting; and 2.5: Employ TA in MoH; Programme Manager, and Accountant : The MoH is handling huge amounts of funds now that it deals with MCH interventions as well. Capacity needs to be built within Department of Finance on GAVI financial accounting and reporting. A TA with extensive experience in managing donor resources will be recruited for the project period. He will also work on other finance issues in MoH including other external support. He will also train staff at central and district levels on financial and accounting reporting. He will also be responsible for compiling reports for submission to GAVI. This will ensure that technical staff members concentrate on programme implementation.

Activity 2.6: Train tutors in health training institutions on EPI and related interventions as ToTs; Activity 2.7: Orient tutors in EPI; Activity 2.8: Develop EPI modules for nursing; and Activity 2.9: Print EPI modules*:* A lot of resources are spent on training of health workers on EPI interventions such as MLM and RED/REC. For purposes of sustainability, a ToT workshop targeting tutors in health training institutions will be conducted and these tutors will in turn orient others in the training institutions. The curriculum for training institutions has been reviewed and EPI issues have been incorporated. This GAVI grant will support the development and printing of training modules on EPI. This intervention is important as future graduates will be knowledgeable about EPI interventions.

Activity 2.10: Conduct MLM ToT training; Activity 2.11: Train district managers in MLM; and Activity 2.12: Print MLM modules: In order to improve the ability of district managers to address barriers to uptake of immunisation and other services and reach unimmunised children, support is being requested from GAVI to train 35 (at least 5 from each district) mid-level managers in MLM in 2016. The lack of training in MLM has been identified in the situation analysis and was also recommended by the MVA. Currently the MoH does not have already printed MLM modules. These modules are recommended by WHO for use during MLM training. 100 MLM modules will be printed and these will be adequate for all trainings in MLM. A set will be reserved for the national, provincial and district health offices.

Activity 2.13: Engage a consultant to finalise the EPI manual; Activity 2.14: Organise a meeting to review the draft EPI manual; and Activity 2.15: Print EPI manual: The EPI manual was last revised in 2008 and a lot of things have changed including the introduction of new vaccines. A consultant will be hired to revise the EPI manual and a draft manual will be reviewed in a small meeting comprised of key stakeholders. The meeting will be held at MoH. The consultant will then finalise the manual and adequate copies of the manual will be printed for all health facilities in Zambia.

Activity 2.17: Print job aids: The EPI has 10 key job aids which are recommended by WHO for use in EPI e.g. injection safety and VVM. Currently such job aids are not available in Zambia; hence through this support 2000 copies of each of the 10 job

aids will be printed and these will be distributed to all health facilities in Zambia. This intervention targets the whole country.
Activity 2.18: Conduct refresher course for cold chain technicians: The GRZ with support from development partners has trained almost all cold chain technicians in Zambia. A refresher course for cold chain technicians will be conducted in 2018.
Activity 2.19 Print cold chain maintenance manual: There is a need for cold chain technicians to be guided by existing guidelines. Zambia has never had a cold chain maintenance manual. One has, however, been drafted and a consultant will be hired to finalise the manual after which a meeting will be called to review the manual and the consultant will incorporate the comments after which it will be printed. WHO regional office will be requested to provide a consultant to facilitate this process. Each of the 107 health facilities will get a copy of the manual. The GRZ will work with other partners to print and distribute the cold chain maintenance manual to the rest of the country.
Activity 2.20 Print EPI Logistics SoPs: Zambia has just developed the EPI Logistics SoPs. These SoPs have never been used. Support is therefore being requested for printing adequate copies of the SoPs for all the 107 health facilities in the 3 target provinces. The GRZ is currently working with other partners to mobilise resources for the rest of the country.

Objective 3: To develop and implement effective C4I and other child health intervention strategies through the involvement of CSOs.
Activity 3.1:Conduct ToT workshop in C4I for CSOs at national level; Activity 3.2: Train church leaders in C4I at district level; Activity 3.3: Train NHCs and SMAGs in mobilisation for immunisation and health education and conducting client satisfaction surveys; Activity 3.4: Train drama groups in immunisation at district level; Activity 3.5: Perform drama/outreach activities on immunisation and other child health issues; Activity 3.6: Print posters/pamphlets on immunisation; Activity 3.7: Develop radio spots on immunisation; Activity 3.8: Air radio spots 7 times a week on 3 community radio stations; Activity 3.9: Air radio spots 7 times a week on 1 national radio station; Activity 3.10: Develop TV messages on immunisation; Activity 3.11: Air TV messages on immunisation; Activity 3.12: Print T-Shirts with immunisation messages for distribution to CHWs, NHCs and chiefs; Activity 3.13: Print golf T-Shirts for the launch of the GAVI HSS programme: The participation of CSOs in immunisation services has been limited. CSOs will create demand for immunisation services especially at community level as they already have a large presence at that level. They will train and work with community level structures including drama groups to create and sustain demand for immunisation and other child health interventions. The CSOs will also use community and national radio stations, drama, posters/pamphlets and interpersonal communication to disseminate information on immunisation and other child health issues. T-shirts with immunisation messages will be printed as a way of creating awareness about immunisation. The continued creation of awareness about immunisation and creating demand for vaccines is important as Zambia has introduced and intends to introduce new vaccines and that immunisation coverage is going down. Currently a mapping exercise is underway to map CSOs involved in immunisation programmes.
Activity 3.14: Conduct client satisfaction surveys: Traditionally client satisfaction surveys are conducted by professionals but with this grant CHAZ will train community members to do this every quarter and have meetings with health workers to improve service delivery.
Activity 3:15: Train immunisation champions who will advance immunisation and other child health issues: CHAZ will train immunisation champions to help in creating awareness about immunisation including advocating for increased allocation of resources to immunisation and other child health interventions.
Activity 3.16: Assess CSOs' capacity to conduct C4I interventions; Activity 3.17: Supervise CSO activities at district level: At the beginning of the GAVI HSS programme, CHAZ and members of the CSO immunisation platform will visit target districts to assess capacity of CSOs and select one with which they will work. These district based CSOs will be responsible for implementing CSO activities (e.g. training of drama groups, working with community leaders and ensuring that those trained are doing their work) in the district. CHAZ will visit each district once a quarter to supervise activities. District CSOs will be facilitated in order for them to implement and supervise activities at community level.
Activity 3.18: Conduct 5 day training/refresher course for members of Zambia CSO immunisation platform; and 3.19: Conduct annual Zambia CSO Immunisation Platform: With the leadership of CHAZ, CSOs in Zambia have been trained on immunisation. Refresher courses have been planned and that each year there will be an annual conference bringing together all CSOs involved in immunisation activities for them to discuss progress in implementation of GAVI HSS interventions and explore new funding opportunities for CSOs' involvement in immunisation activities.

Activity 3.20: Purchase a 4X4 vehicle for CHAZ and 3.21: Purchase motorcycles for district CSO offices: CHAZ will be responsible for coordinating CSO immunisation activities. A vehicle will be purchased for CHAZ for it to better coordinate these activities in target districts. Motorcycles will be purchased for district based CSOs to enable them visit communities and work with them.

Activity 3.22: Employ accountant and a Senior programme Officer at CHAZ to manage the programme: A Senior programme Officer will be employed at CHAZ to manage and coordinate all the GAVI supported C4I activities. He will be supported by an accountant.

Activity 3.23: Support monitoring and support visits by CSOs to NHCs and other community level interventions: This grant will support district based CSOs to visit communities to monitor and support NHCs, community leaders, client satisfaction surveys and drama groups.

Activity 3.24: Conduct internal audit of district based CSOs; and Activity 3.25: Conduct external audit of district based CSOs: In order to ensure that financial resources are being managed properly, CHAZ will coordinate the conduct of both internal and external audits of district based CSOs. These CSOs will be given funds to manage all district level activities. Internal audits will be done twice a year while external audits will be done once a year.

Objective 4: To improve the collection and utilisation of HMIS data at all levels of the health care system with special focus on district and lower levels;

Activity 4.1: Conduct ToT on data management and utilisation and Activity 4.2: Train frontline health workers on data management and utilisation: Four people from each of the 7 target districts will attend a 5 day ToT workshop for data management and utilisation conducted by staff from MoH headquarters. These people will train other health workers in their respective districts.

Activity 4.3: Conduct support visits by national office to districts and selected health facilities; Activity 4.4: Support monthly district HMIS data reviews and validation meetings: Staff from headquarters will spend 15 days each quarter to support district and lower level health workers on data issues. The GAVI HSS grant will also support monthly HMIS reviews and data validation meetings in target districts. At these meetings data management strengths and weaknesses will be identified and opportunities for redress discussed and implemented. These HMIS reviews will also be attended by private sector. This activity will ensure the availability of high quality data for the sector and for immunisation in particular.

Activity 4.5: Train CHWs on use of community registers: The majority of CHWs who fill the community registers remain untrained. Community registers are important because, among other reasons, they are used to improve routine immunization management through defaulter tracing. CHWs will be trained on importance of immunisation, vaccines given to children, filling of community registers, how to use registers to trace defaulters and the need for them to use the data that they collect.

Activity 4.6 Conduct a detailed baseline study using mixed methods to inform programming; Activity -4.7: Conduct mid-term evaluation of programme; and Activity 4.8: Conduct an end of term evaluation: A comprehensive baseline study will be conducted in early 2016 looking at, among other things, knowledge, attitudes, practices and beliefs which affect the uptake and delivery of immunisation services in target districts. This study will inform the development of C4I and other interventions. A mid-term and final evaluation will be conducted in order to determine the progress and impact of the programme. This baseline survey will also provide baseline statistics.

Activity 4.9: Support monthly health facility meetings with CHWs to review data from community registers: Data from community registers is not used by health facilities and CHWs for decision making. After training of CHWs, the programme will support monthly health facility meetings with CHWs to review data from community registers and ensure that it is used for decision making and that it is integrated into the HMIS.

Activity 4.10: Employ TA in MoH; Monitoring and Evaluation Specialist: Activity 4.11: **Train districts to conduct DQS; Activity 4.12: Support districts to conduct DQS and Activity 4.13: Conduct national DQS:** These activities were suggested in the 2012 DQS for Zambia and to-date they have not been conducted because of lack of resources. Staff from each of target districts will be trained to conduct their own DQS and then a grant of US$30,000 will be provided for each district to conduct a DQS. A national DQS will be conducted in 2017.

Activity 4.14: Conduct data utilisation campaigns: As mentioned above there is low utilisation of data at all levels of the health care system. The MoH will organise campaigns at all levels of the health care system in order for people to understand why they need to use the data they generate. Data use campaigns will aim at addressing human/behaviour elements needed to create a culture of data use within the immunization health system. This intervention will target health workers at facility, district and provincial levels. The campaign will stimulate the excitement and demand for data at individual level by generating a sense of community between users in addition to an understanding that data is being prioritized throughout the immunization system. It is envisaged that once health workers develop the culture of data use, they will interrogate the data and will subsequently help to improve data quality. In addition to talking about data use during the training in data management as well as during support supervision, brochures and posters will be printed. These materials will be stuck on walls to remind health workers on the use of data in planning and decision making process. Two thousand brochures and 2000 posters will be produced for all health facilities in Zambia to promote data utilisation.

Activity 4.15: Print under five cards; Activity 4.16: Print community registers; Activity 4.17: Print facility registers; 4.18: Print data use campaign posters; and Activity 4.19: Purchase computers for central and district offices: In order to effectively capture data from both the community and facility levels, there will be a need to print a number of tools namely under-five cards and community and facility registers which are currently in short supply. Zambia has never had data use campaign posters and support is being requested from GAVI to support printing of these posters. Computers will also be purchased for target districts and central level in order to enhance data transmission as well as communication through emails among others.

Objective 5: To develop and implement a Performance-Based Financing system in the target districts with the aim of improving immunisation and other child health outcomes.

With support from World Bank, Zambia piloted the PBF program in Katete. This program was very successful as described earlier. In this GAVI HSS initiative the GRZ would like to implement a PBF strategy modelled after the World Bank. The PBF programme will be fully developed by the end 2016. The key activities in this programme will be:

Activity 5.1: Develop PBF implementation manual: Towards the end of 2016 a PBF manual will be developed which will outline how PBF interventions will be implemented including interventions such as the trainings at different levels, how programme and performance based payments will be paid out and how facility and health workers' performance will be conducted.

Activity 5.2: Train provincial offices in PBF; Activity 5.3: Train district managers in PBF; Activity 5.4: Train health facility managers in PBF; and Activity 5.5: Train community leaders in PBF: PBF will be new intervention in most target districts. The trainings at provincial, district and facility levels will be done over a 5 day period and this will focus on how they can implement a PBF programme as per GAVI guidelines as well as based on the lessons from Katete.

Activity 5.6: Conduct results verification for PBF: Objective 4 aims at strengthening the M&E system. The monthly review meetings at community, facility and district levels in Objective 4 and the monthly supervisory visits to facilities by DMO and the supervisory visits to districts by PMOs will be used to validate data hence there is no separate cost for this.

Activity 5.7: Pay incentives to facilities and communities which meet targets: Immunisation coverage in target districts is known. Contracts will be signed between health facilities and community health workers; between DMOs and health facilities. Payments to health workers (including community health workers) will be based on any additional child reached as per GAVI guidelines. Based on current population of under 1 population in target districts, 2014 DPT III coverage and also assuming an immunisation coverage of 95% by the end of the 3rd year of implementing this grant, it has been estimated that US$ 599,200 would be required as incentive pay-outs to facilities at all levels as well as health workers. A total of US$749,000 has therefore been set aside for programme and performance based payments. Some of the funds which have been budget for administrative costs will be used to pay the DMO who will be contracted for quality control.

Activity 5.8: Contract district hospitals for quality control: The measurement of the performance of health workers and facilities is not only based on achieving targets for indicators but also ensuring that services being delivered are of good quality. District hospitals in the target districts will be contracted for quality control.

Activity 5.9: Conduct external evaluation of the PBF programme: AN independent institution will be hired in towards the end of 2018 to conduct an external evaluation of the PBF programme.

Activity 5.10: Print a PBF implementation manual: A PBF implementation manual will be developed by a group of experts in this field and MOH will ensure that persons involved in the Katete Pilot are also involved in the development of the implementation manual for this programme. This manual will be printed in early 2016 in reediness for programme which is scheduled to start in March 2016.

Activity 5.11 Develop PBF training manual and Activity 5:12: Print PBF training manual: A number of trainings will be conducted at provincial, district, facility and community level. A detailed training manual will be developed for these trainings at different levels and once completed it will be printed.

12. Description of Activities

This description will be used to assess if the proposed key activities will be sufficient to achieve the identified immunisation outcomes.

→ Please present a description of key activities organised according to the above specified objectives in the table below. Clearly explain how the proposed activity is linked to improving immunisation outcomes. Please ensure that activities described here are aligned with activities that are included in the Budget, Gap Analysis and Workplan Template.

→ Countries should demonstrate alignment between HSS grant activities and activities funded through other GAVI cash support, including vaccine introduction grants and operational support for campaigns.

Objective / Activity	Explanation of link to improving immunisation outcomes
Objective 1: To strengthen the delivery of immunisation and other child health interventions by ensuring that outreach clinics and supportive supervision are fully operational in selected districts.	
Activity 1.1: Purchase 14 short wheel base vehicles.	Stock-outs of vaccines in Zambia occur mainly because of poor forecasting and lack of transport to collect vaccines at district stores. The availability of short wheel base vehicles at zonal health facilities in target districts will facilitate the collection of vaccines and other health supplies from districts and subsequent distribution to health facilities. This will ensure availability of vaccines and that children will not be returned without getting vaccinated. These vehicles will also be used for outreach clinics and they will ensure that outreaches are conducted as scheduled hence unimmunised children due to distance and other factors will be reached. This will contribute to

	geographical equity as children living far from facilities will be vaccinated. This activity therefore contributes to immunisation outcomes such a (i) DPT III coverage rate; (ii) Equity in DPT III coverage rate; (iii) MCV1 coverage rate and (iv) the proportion of children who are fully immunised.
Activity 1.2: Purchase 4X4 vehicles	All the 12 4X4 vehicles will be used for supportive supervision as it will be able to accommodate a recommended team formation for supportive supervision and this will take an integrated approach with other health service delivery programs i.e. child health, maternal, data etc.[80]. Supportive supervision is currently almost absent at all levels because of lack of transport. Supportive supervision increases knowledge and skills of health workers; hence ensuring that staff are delivering services according to existing guidelines. Health workers will also spend quality time with clients explaining to them why immunisation is important and when they should come back for other antigens. This will, therefore, also increase uptake of immunisation services. This intervention will contribute significantly to the following immunisation outcome: (i) DPT III coverage rate; (ii) Dropout rate from DPT1 to DPT III; (iii) MCV1 coverage rate; and (iv) the proportion of children who are fully immunised.
Activity 1.3: Purchase motorcycles.	All health centres in target districts will have motorcycles mainly for outreaches. These motorcycles will also be used to get vaccines and other supplies from the district. The immunisation outcomes which will be achieved through the conduct of outreach clinics (**Activities 1.1 and 1.2**) will also be achieved for **Activity 1.3**. It is anticipated that motorbike riders would be those with driving competency issued by the ministry of transport and communication.
Activity 1.4: Purchase bicycles for CHWs including spare parts	CHWs are mainly responsible for promotive and preventive health services which include creating awareness among community members about the importance of immunisation. They will use these bicycles for transportation around the community, when going to health centres and outreach clinics. These bicycles will also be used to carry vaccines from health centres to health posts and outreach clinics; hence ensuring that immunisation services are available. Since CHWs are involved in creating awareness, ensuring that vaccines are available and that they will identify unimmunised children through the use of community registers, they will be contributing to the achievement of immunisation outcomes such as children being fully immunised and increasing DPTIII and MCVI coverage.
Activity 1.5: Purchase 25 ton truck for distribution of health supplies including vaccines	The availability of a new 20-ton truck will ensure that vaccines are timely and efficiently transported from central to provincial and district levels. The stockouts of vaccines and other health supplies will be minimised; hence ensuring that immunisation services are delivered. This activity will contribute to achievement of immunisation outcomes such as DPTIII and MCVI coverage and proportion of children fully immunised.
Activity 1.6: Purchase boats for Samfya and Lunga Districts	These boats will be used for transporting vaccines and other health supplies and for outreaches and supportive supervision. This activity will contribute to same immunisation outcomes as for Activity 1.1-1.5.
Activities 1.7: Distribute bicycles to districts; -Activity	This activity is related to Activities 1.3-1.4. These bicycles and

[80] The distribution of these vehicles has been explained in Section 11.2

1.8: Distribute motorcycles to districts; and Activity 1.9: Distribute bicycles from districts to health facilities.	motorcycles have to reach health facilities. The same immunisation outcomes as for Activities 1.1-1.6 will be achieved.
Activities 1.10: Conduct supportive supervision by district to health facilities; Activity 1.11: Conduct outreach clinics from health facilities to outreach posts; and Conduct supportive supervision by MoH headquarters to target districts and selected facilities; and 1.12: Conduct supportive supervision from MoH headquarters to districts and selected health facilities;	GAVI HSS support will be used to purchase fuel and payment of allowances for staff at different levels for outreaches and supportive supervision. Making available these resources at district level will ensure that supportive supervision and outreach clinics are conducted. Immunisation outcomes which will be achieved for Activities 1.1-1.6 will also be achieved with this activity.
Activity 1.13: Conduct internal audit of districts and health facilities; and Activity 1.14: Conduct external audit of districts and health facilities.	GAVI HSS grant will also be used to support auditing of GAVI resources at different levels of the health system in order to ensure that the resources are being used for the purpose they were meant for. DSAs will be provided to auditors and their drivers and fuel will also be provided.
Activity 1.15: Provide administrative grant to MOH headquarters; and Activity 1.16: Provide administrative grant to target districts.	The grants provided to MoH headquarters and district will be used to maintain vehicles, motorcycles and boats. This will ensure that vehicles are in good condition and hence will contribute to same immunisation outcomes as for Activities 1.1-1.6 above. Where need be these financial resources will be used to contribute towards water, electricity and rentals.
Objective 2: To improve the knowledge and skills of district managers and frontline health workers on delivery and management of child health services including immunisation.	
Activity 2.1: Conduct ToT on RED/REC strategy; Activity 2.2: Train health workers on RED/REC strategy; Activity 2.3: Print RED/REC modules.	Investing in RED/REC training will contribute towards achievement of immunisation outcomes such as an increase in DPTIII coverage, MCV1 coverage and the proportion of children who have been fully immunised.
Activity 2.4: Train MOH staff on GAVI financial and accounting reporting; Activity 2.5: Employ TA in MOH who will act as GAVI HSS manager	This activity will ensure that GAVI HSS finances are properly managed and used for intended purposes. Activity 2.4 will make available a TA who will provide training for the staff in Department of Finance. This implies that resources will be available for implementing activities as planned. Immunisation outcomes such as DPTIII, MCVI coverage and proportion of fully immunised children will be achieved.
Activities 2.6: Support ICC to launch the GAVI HSS Programme at national level.	This activity may not necessarily have impact on immunization outcomes but will be aimed at creating awareness among stakeholders about the GAVI funded HSS interventions.
Activity 2.7: Train tutors in health training institutions as ToTs on EPI and related interventions; Activity 2.8: Orient tutors in EPI; Activity 2.9: Develop EPI modules for nursing schools; and 2.10: Print EPI modules.	As mentioned earlier, such an orientation of staff in health training institutions will ensure that graduates are knowledgeable about EPI interventions such as RED/REC and MLM. This activity will eventually also lead to improved coverage of DPTIII, MCV1 and full immunisation.
Activity 2.11: Conduct MLM ToT training; Activity 2.12: Train district managers in MLM; and Activity 2.13: Print MLM manual.	District managers will be trained in MLM. This will ensure that skilled personnel are available who can effectively manage and deliver immunisation and other health services. Evidence demonstrates that MLM and RED/REC training improves immunisation coverage[81].

[81] See earlier evidence for impact of MLM training.

Activity 2.14: Engage a consultant to review and finalise the EPI manual; Activity 2.15: Organise a meeting to review the draft EPI manual; Activity 2.16: Print the EPI manual; and Activity 2.17: Print job aids	The EPI manual provides a comprehensive overview of the vaccines provided in Zambia's EPI programme, the immunization schedule, adverse events following immunisation, the vaccine cold chain and EPI disease surveillance follow-up and reporting. New vaccines have been introduced in Zambia hence the need to revise the current manual. This activity will ensure that vaccinators follow the procedures for providing vaccines hence this will contribute to the following immunisation outcomes: DPT III coverage, MCV1 Coverage; decrease in dropout rates.
Activity 2.18: Conduct refresher course in cold chain and vaccine logistics management; 2.19: Print cold chain maintenance manual; and Activity 2.20: Print EPI logistics standard operating procedures	This course will improve health workers' knowledge about the cold chain and management of vaccine logistics. It will ensure that vaccines are available and stored properly. The activities will also therefore increase DPT III coverage and MCV1 Coverage among other immunisation outcomes.
Objective 3: To develop and implement effective communication for immunisation and other child health intervention strategies through the involvement of CSOs.	
Activities 3.1-Activity 3.19: Conduct community mobilisation and sensitisation activities on immunisation and other child health issues.	The main task of CSOs in the implementation of this grant is to create demand for immunisation among members of the community. CSOs will work with CHWs, NHCs and traditional and religious leaders at community level to create awareness about the importance of immunisation, the need for pregnant women to deliver with assistance of skilled health workers among other MCH interventions. It is expected that through these activities people in target districts will be aware of the importance of immunisation and will demand immunisation. One of the immediate results will be an increase in the proportion of pregnant women delivering in health facilities; hence children will not miss the antigens given at birth. The C4I interventions which will be implemented by CSOs will result into improved immunisation outcomes (such as DPTIII coverage, full immunisation and MCV1 coverage) as people will be aware of the need for immunisation.
Activity 3.20: Purchase 4X4 vehicle for CHAZ; and Activity 3.21: Purchase motorcycles for district CSO offices.	The vehicle and motorcycles will ensure that C4I interventions at district and lower levels are being done properly; hence will increase demand for immunisation services. This will contribute to an improvement in immunisation outcomes such as DPTIII coverage, MCV1 coverage and a decrease in dropout rates.
Activity 3.22: Employ a Senior Programme Officer and an Accountant for the GAVI HSS programme.	The Senior Programme Officer will ensure that the HSS activities are being run professionally while the accountant will ensure that the resources are being spent on activities according to budget. This activity will result into an improvement of all immunisation outcomes. This is the first time that CHAZ and other CSOs are involved in immunisation activities. CHAZ will continue leading the C4I activities and the plan is work with other CSOs and mobilise more resources for these activities. The Senior Programme Officer and accountant will therefore be full time employees in CHAZ and will also be doing other things within the organisation.
Objective 4: To improve the collection and utilisation of HMIS data with special focus on district and lower levels.	
Activity 4.1: Conduct ToT on data management and utilisation at district level; Activity 4.2: Train frontline health workers in data management and utilisation;	This will ensure that there is availability of high quality data[82] which can be used to inform programming at all levels of the health system. Such data will be useful in monitoring trends in immunisation

[82] Intermediate result

Activities 4.3: Conduct support visits to districts and selected health facilities by the MoH headquarters; and Activity 4.4: Support monthly district HMIS data reviews.	outcomes.
Activity 4.5: Train CHWs on use of community registers.	Community registers need to be filled correctly as they are important, among other things, in tracing children who have not been immunised. CHWs will be trained on how to collect and use data and how they can fill the registers properly. Data will, therefore, be available at community level which they can use to make decisions. This activity will ensure that all children in a zone are immunised as defaulters will be easily identified. This training will contribute to the following immunisation outcomes: DPTIII coverage, full immunisation, equity in DPTII coverage, MCV1 coverage and reduction in drop-out rate as unimmunised children will be easily identified and mothers/guardians will be encouraged to take their children for immunisation.
Activity 4.6: Conduct a detailed baseline study using mixed methods to inform programming; Activity 4.7: Conduct a mid-term evaluation; and Activity 4.8: Conduct a final evaluation	This GAVI HSS grant aims at improving immunisation outcomes. It will be important to understand the context in which immunisation and other child health services are delivered in target districts. The study will also identify the barriers to and enablers of access to immunisation services. The C4I interventions will be designed based on this study and other available evidence. This activity will provide baseline data for key immunisation outcomes namely DPTIII coverage, full immunisation, equity in DPT III coverage and MCV1 coverage. Data obtained at mid-term and the final evaluation will compared with that at baseline to determine improvements in immunisation outcomes.
Activity 4.10: Employ TA in oH; Monitoring and Evaluation Specialist; Activity 4.11: Train districts to conduct DQS; Activity 4.12: Support districts to conduct DQS; and 4.13: Conduct national DQS.	These activities are aimed at improving the HMIS; hence ensuring the availability of quality data to measure immunisation outcomes.
Activity 4.14: Conduct data utilisation campaigns; Activity 4.15: Print under-five cards; Activity 4.16: Print community registers; Activity 4.17: Print facility registers; Activity 4.18: Print data use campaign posters; and Activity 4.19: Purchase computers.	These activities are aimed at improving data availability and data utilisation which are key in measuring immunisation outcomes.
Objective 5: To develop and implement a Performance-Based Financing system in the target districts with the aim of improving immunisation and other child health outcomes.	
Activities 5.1-5.12: Develop and implement PBF interventions	The implementation of the PBF programme in target districts will make available resources to health facilities and motivate health workers to work and achieve pre-determined immunisation outcomes such as DPTIII coverage.
THREE PAGES MAXIMUM	

13. Results Chain

This description will detail to GAVI how the proposed activities will result in improved immunisation outcomes.

➔ *Please present a Results Chain using the template provided below for each objective. This diagram should demonstrate how activities contribute to achieving intermediate results and how intermediate results contribute to achieving immunisation outcomes. The intermediate results should link directly to the HSS bottlenecks identified in Section 9 and should address or contribute to addressing the selected bottlenecks for the GAVI HSS proposal.*

(Please only include the key 4-5 activities for each objective that are central to delivery of intermediate results and immunisation outcomes. It is not necessary to list all activities for each objective as these are listed in Section 12 Description of Activities and in Section 15 Detailed Budget and Workplan Narrative.)

➔ *The Results Chain should be consistent with the HSS M&E Framework. For every activity and intermediate result listed in the Results Chain there should be corresponding indicators to measure achievement detailed in the box below. Immunisation outcomes indicators do not have to be related to any specific objective, they are related to the programme as a whole so are not included in this results chain. Indicators should align to those detailed in the HSS M&E Framework.*

➔ *Please note that a GAVI HSS proposal must include an independent and systematic data quality assessment and an improvement plan described in the Supplementary HSS Guidelines Key Terms Section. Applicants must identify specific data quality problem areas where funds will be used.*

Objective 1: *To strengthen the delivery of immunisation and other child health interventions by ensuring that outreach clinics and supportive supervision are fully operational in target districts.*

Key Activities:	Intermediate Results:	Immunisation Outcomes:
• *Procurement of transport (vehicles, motorcycles, bicycles and boats.* • *Conduct supportive supervision and outreach clinics.* • *Conduct internal and external audits* • *Provide administrative grants to MOH and districts.*	• Availability of transport at zonal health centres for outreach services. • Availability of transport for (i) distribution vaccines and supplies; (ii) outreach services. • Availability of transport for outreach services. • Availability of transport for community mobilisation, defaulter tracing and client satisfaction surveys. • Availability of transport for distribution of vaccines and supplies to provinces. • Resources available for strengthening for supportive supervision and outreach clinics	• *DPTIII coverage rate.* • *Equity in DPTIII coverage.* • *Fully immunised child* • *MCV I Coverage* • *DPTI-DPTIII drop-out rate*
Related Key Activities Indicators: • *Number of vehicles purchased.* • *Number of motorcycles purchased.* • *Number of bicycles purchased.* • *Number of boats purchased.*	**Related Intermediate Results Indicators:** • *Proportion of health facilities reporting stock-out of vaccines.* • *Proportion of planned outreach clinics which are actually conducted* • *Proportion of defaulting children traced*	

• *Number of outreach clinics conducted (out of planned ones).* • *Number of districts receiving the funds for planned activities.* • *Number of health facilities receiving funds for planned activities from districts.* • *Number of supervisory visits conducted by district level team.* • *Amount of funds disbursed to districts*	• *Proportion of funds disbursed to districts against what was planned.* • *Proportion of funds disbursed to facilities against what was planned.* • *Proportion of planned supervisory visits conducted by the district level team.*	

Objective 2: *To improve the knowledge and skills of district managers and frontline health workers on delivery and management of child health services.*

Key Activities: • *Conduct ToT on RED/REC strategy* • *Train district managers in MLM* • *Train frontline health workers in RED/REC strategy* • *Orient tutors in EPI*	**Intermediate Results:** • *Availability of skilled health workers for planning, logistic management and monitoring of the EPI programme.* • *Availability of skilled health workers' with capacity to effectively manage EPI including in hard to reach areas.*	**Immunisation Outcomes:** • *DPTII coverage rate.* • *Equity in DPTIII coverage* • *Fully immunised child* • *District DPTIII coverage* • *Percentage of health facilities with >80% DPTIII coverage* • *Percentage of children aged 12 – 23 months who are fully immunised*
Related Key Activities Indicators: • *Number of health workers trained in MLM* • *Number of health workers trained in RED/REC.* • *Number of tutors trained in EPI.*	**Related Intermediate Results Indicators:** • *Percentage of health facilities with skilled health workers trained in RED/REC Strategy* • *Proportion of districts with personnel trained in MLM*	

Objective 3: *To develop and implement effective communication for immunisation and other child health intervention strategies through the involvement of CSOs.*

Key Activities: • *Train community based health workers in community mobilisation for immunisation and other child health interventions* • *Conduct community mobilisation activities for immunisation* • *Air radio and TV spots on immunisation.* • *Print posters and pamphlets on immunisation.* • *Print T-shirts with messages on immunisation.*	**Intermediate Results:** • Increased Human Resource for community mobilisation • Increased demand for immunisation and other child health interventions. • Increased awareness of the need for immunisation. • Increased participation of communities in health governance	**Immunisation Outcomes:** • *DPTIII coverage.* • *Equity in DPTIII coverage* • *Fully immunised child* • *Dropout rate DPT1-DPTIII* • *Percentage of health facilities with >80% DPTIII coverage* • *MCV I coverage.*

• *Conduct client satisfaction surveys*		
Related Key Activities Indicators: • *Number of community based health workers trained.* • *Number of community mobilisation activities conducted.* • *Number of radio and TV spots on immunisation aired.* • *Number of posters and pamphlets produced.* • *Number of client satisfaction surveys conducted.* • *Number of T-shirts printed.*	**Related Intermediate Results Indicators:** • *Percentage of children aged 1 year who have received DTP III immunization.*	

Objective 4: To improve the collection and utilisation of HMIS data with special focus on district and lower levels.

Key Activities	Intermediate Results	Immunisation Outcomes
• Train frontline health workers in data collection, analysis and utilisation. • Support quarterly district HMIS data reviews • Train CHWs on use of community registers. • Support monthly health facility data review meetings with CHAs/CHWs • Conduct national DQS • Conduct baseline, mid-term and final evaluation.	• Availability of skilled health workers in data collection, analysis and utilisation. • Availability of skilled CHAs/CHWs in data collection. • Availability of timely quality data. • Evidence based decision making.	• *Equity in DPTIII coverage* • *Fully immunised child* • *Dropout rate DPT1-DPTIII* • *District DPTIII coverage* • *Percentage of health facilities with >80% DPTIII coverage*
Related Key Activities Indicators: • Number of frontline health workers trained. • Number of monthly district HMIS reviews conducted Number of CHWs trained on use of registers.	Related Intermediate Results Indicators: • Proportion of districts with personnel trained in data collection, analysis and utilisation. • Proportion of health facilities timely reporting complete data to district • Proportion of health facilities with action plans informed by health facility data •	

Objective 5: To develop and implement a Performance-Based Financing system in the target districts with the aim of improving immunisation and other child health outcomes.

Key Activities	Intermediate results	Immunization outcomes
• Training of provincial, district and health facility managers in PBF implementation.	• Availability of district staff with knowledge in PBF implementation	• *Equity in DPTIII coverage*

• Contracting of health facilities to deliver a package of services (EPI and other child health issues) • Conduct verification of PBF results • Pay incentives to health workers, districts and facilities. • Carry out an external evaluation of the PBF program every 6 months	• Availability of signed service contracts • Availability of performance claims • Improved immunization services	• *Fully immunised child* • *Dropout rate DPT1-DPTIII* • *District DPTIII coverage* • *Percentage of health facilities with >80% DPTIII coverage*
Related Key Activities Indicators: • Number of district and health facility managers in PBF implementation • Number of health facilities contracted to deliver a package of services (EPI and other child health issues) • Number of health facilities and districts paid based on the programme • Number of health workers including community health workers paid based on the programme	Intermediate result indicators • Percentages of provincial and district staff trained in RBF implementation • Proportion of health facilities contracted to deliver a packed n immunization services • Percentages of validation claims made. • Percentages of performance payments made.	

IMPACT: Please provide an impact statement and indicator(s)

- There are three impact indicators which are being used in the cMYP and NHSP to monitor the impact of child health interventions and these are under five mortality rate, infant mortality rate and prevalence/incidence of vaccine preventable diseases. Under five mortality and infant mortality are measured periodically using the ZDHS and other national surveys. Immunisation is one of the interventions which contributes significantly to the reduction in child mortality and morbidity. The percentage of people who have heard about the importance of immunisation and the percentage of people who say that children can be protected from vaccine preventable diseases by accessing immunisation services are the two indicators which will be used to measure demand creation. These indicators will be obtained from the baseline, mid-term and final evaluations which will be conducted through- out the programme implementation lifecycle.

ASSUMPTIONS:

- *Political will.*
- *Adequate funding for interventions.*
- *Availability of HRH*
- *An effective data collection system*
- *Availability of transport*
- *Community participation*
- *No vaccine stock outs at facility level*

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For further instructions, please refer to the Supplementary Guidelines for HSS Applications

14. Monitoring and Evaluation

This description will enable GAVI to assess how programme performance will be monitored, and to ensure alignment with National M&E arrangements. The proposed M&E framework for the HSS grant should link to the proposed Results Chain. While the Results Chain provides the rationale for how the proposed activities will result in improved immunisation outcomes, this section provides details of how the monitoring and evaluation will be undertaken.

Please note that the detail on activities, intermediate results and immunisation outcomes and their related indicators represents only a portion of what Monitoring and Evaluation consists of. As highlighted by the IHP+ Common M&E Framework diagram (Figure 2 in the Supplementary HSS Guidelines), the additional elements of data collection, analysis and synthesis, and communication and use are equally important. This section should therefore focus on providing a detailed description of how this proposal intends to tackle these elements.

**Where possible, GAVI asks for both country administrative data as well as data from 'other' sources. 'Other' recommended data sources are DHS/ Multiple Indicator Cluster Survey (MICS) or recent coverage estimates from WHO/UNICEF.*

- *Please provide an HSS grant Monitoring & Evaluation Framework as Attachment 3 (please complete the GAVI template).*
- *Please provide a description of how the monitoring and evaluation will be carried out for the grant, indicating how M&E is aligned with the national health plan results framework.*
- *Which sources of data will be used? Please provide an explanation of any disparities between administrative statistics and 'other' statistics and details of any plans to improve data quality to address these disparities. Please detail whether these plans are being implemented or if their resourcing and implementation are to be covered in the current HSS application.*
- *How much budget will be allocated to monitoring and evaluation, which will include M&E for this grant as well as for national M&E systems strengthening?*
- *Please describe the M&E system strengthening activities to be funded through this proposal.*
- *Please identify one or more immunisation outcomes for each objective.*
- *Please identify a number of intermediate results indicators related to each objective of the grant that shall be used for tracking the overall progress of the grant implementation (these will be used for PBF – please refer to the Introduction in the Supplementary HSS Guidelines). These are the same intermediate results indicators that are included in the Monitoring & Evaluation Framework, and will be used to measure the outputs / intermediate results that are included in the results chain in Section D.13.*
- *If this GAVI HSS grant (either a portion or all of it) is proposed to be aligned with the World Bank's RBF programme or any other existing PBF programme in the country, then please also attach the results framework for that programme. Please describe in this section how that results framework is relevant for Gavi's programme objectives. Please note that more than one immunisation-related indicator is expected to be part of any such PBF/RBF programme, if the GAVI HSS grant is proposed to be aligned with it.*
- *GAVI requires an end-of-grant evaluation by an independent third party to be planned and budgeted for as part of the grant design and funding request. If countries propose to use an existing evaluation for this purpose, they should provide appropriate justification. GAVI also strongly recommends a mid-term evaluation to help inform possible improvements to the implementation of the grant. Please provide details about the planned evaluation of the HSS grant.*

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The last ZDHS was conducted in 2013/2014. The choice of provinces where the GAVI HSS programme will be implemented was based on the ZDHS. At the beginning of implementing the HSS interventions, a comprehensive baseline study, using a mixed methods approach, will be conducted in order to determine factors which affect the uptake of immunisation services in the target districts. The qualitative component will inform the design of C4I interventions while the quantitative component will provide baseline data representative at provincial and district level.

The National M&E system will be used in order to monitor the GAVI HSS grant. Despite existing challenges as explained in Section 9.1.4 of Part C, Zambia has an HMIS which is being used to collect routine data on immunisation and other health conditions and programmes. All health facilities in the target districts, as is the case with other districts in Zambia, will collect data and send it to the district level where it will be entered into the web-based DHIS system. During the period of implementing this grant the system of sending data from the health facilities to the district level will still be paper-based. The existing HMIS will be used to monitor implementation of the GAVI grant and no separate system will be introduced.

There are quite a number of M&E activities which have been included in this HSS proposal in order to strengthen the M&E framework. With this grant, health workers will be trained in data collection and utilisation. Evidence, as presented earlier, has demonstrated that with training and constant supportive supervision, health centres can effectively collect and utilise data for decision making. In this proposal, there is also a provision for monthly HMIS review meetings for target districts. This will include the participation of the private sector. Currently community level data is not being effectively collected and utilised by CHWs as well as health facility staff. The CHWs will also be trained as part of this HSS grant so that they can effectively collect this data and use it to, among other things, trace defaulters.

In addition to the HMIS, there are also other data sources which will be used in order to monitor the implementation of the GAVI HSS grant. The MOH and partners are already planning to conduct an EPI coverage survey in 2015. This survey will act, as is the case with the ZDHS, as a baseline for the GAVI HSS grant. At the end of the grant, a separate survey will be conducted in target districts in order to determine the impact of the GAVI HSS Grant. An independent consultant will be hired to conduct this end-line survey in target districts. These activities have been budget for in this grant proposal and it is estimated that the M&E component will cost about US$1.94 million which represents 21% of the total budget. Objective 4 is all about M&E. Section 13 above describes the immunisation outcomes for each of the 5 objectives and related intermediate results and the indicators which will be used to track progress. While there will be national level indicators (e.g. DPTIII coverage, dropout rates etc.) where possible district level indicators will be used in order to monitor progress. This was also recommended in the 2009 GAVI HSS support evaluation. An HSS grant M&E Framework has been attached to this proposal (Attachment 3). The following indicators will be used to track progress: (i) DPTIII coverage; (ii) Measles coverage; (iii) Geographical equity of DPTIII coverage; (iv) Equity in immunisation coverage; (v) DPTI-DPTIII dropout rate; and (vi) Fully immunised child. Where possible these indicators will be produced by target district.

CHAZ will be responsible for implementing the C4I interventions at community level. It will utilise the baseline study commissioned by MOH to develop immunisation messages which will be used to create demand at community level as well as those which will be aired on TV and radio. CHAZ will also train community members to conduct client satisfaction surveys with immunisation and other child health services. The members of the community will conduct these surveys once every year and reports will be submitted to district based CSOs and CHAZ as a way of monitoring how these client satisfaction surveys are contributing to improving service delivery. CHAZ will also compile quarterly reports on its activities which will be presented to ICC. Since CHAZ will also be working at community level it will document the challenges which mothers/caretakers experience in accessing immunisation services. Such information will be necessary to inform further programming. CHAZ will take advantage of monthly HMIS reviews to share the experiences at community level.

Districts where these interventions will be implemented will be required to report every quarter to MOH headquarters detailing the different activities they have conducted over the period. The report will among other things describe (i) the number of outreach clinics they have conducted against those planned. An explanation will be required if a district has not conducted some outreaches. (ii) Whether they have been able to conduct supportive supervision to health facilities as scheduled; (iii) the number of people trained in MLM/RED and HMIS issues; (iv) number of supervision visits from the central level; (v) amount of money they have received from the central level; (v) an annual report of how GAVI HSS resources have been used. These reports will be shared with other stakeholders at district level. The 2009 GAVI HSS support evaluation found that the APR for example of 2008 had brief descriptions of the HSS activities which were undertaken but there were no district breakdowns. For the implementation of these GAVI HSS interventions, the MOH will present APRs with activities undertaken by each district. The 2009 GAVI evaluation also reported that there was no detailed reporting of how the money had been spent at district level. With this grant districts will be required to produce financial reports on how the funds have been used every quarter as well as annually. The APR will contain detailed financial reports on how funds have been spent. In the future the plan is to replace these with joint appraisals and performance frameworks.

Funds from the central level to districts will be released upon production of quarterly reports. At national level reports on supportive supervision to districts will be produced detailing what was accomplished and follow up action points. Districts will be required to document the challenges they are experiencing and how they are dealing with them. The process of implementing the GAVI HSS grant will be a lesson learning exercise and experiences will be shared with GRZ, CSOs and development partners to demonstrate that with proper and strategic investments, it is possible to improve immunisation outcomes in poor performing districts.

PART E – BUDGET, GAP ANALYSIS AND WORKPLAN

15. Detailed Budget and Workplan Narrative

This description will be used to assess if the proposed budget shows sufficient justification for the proposed activities and activity costs within the HSS grant.

- ➔ *Please provide a detailed budget and workplan as Attachment 6 to this proposal. Please refer to the Supplementary HSS Guidelines for the list of items required from the budget and workplan. It is highly recommended that applicants use the GAVI HSS Budget, Gap Analysis and Workplan template as Attachment 6. However, countries can also provide this information in the format of an existing national Annual Operational Plan or equivalent document.*
- ➔ *Please provide a summary of the amount budgeted by year in the table below.*
- ➔ *Please include additional information on the assumptions within the budget and justification of unit costs to demonstrate that they are reasonable and supported by in-country planning. These assumptions and unit cost justifications may be inserted here or attached as separate documentation.*
- ➔ *Please provide a detailed Procurement Plan (PP) for the acquisition of goods, works and consultant's services covering the first 18 months of programme implementation. This should be submitted as Attachment 7 together with the workplan and budget (Attachment 6). This PP shall be reviewed and approved together with the workplan and budget by the HSCC/ ICC of the country.*
- ➔ *If this GAVI HSS grant (either a portion or all of it) is proposed to be aligned with the World Bank's RBF programme or any other existing PBF programme in the country, then please also attach the budget for that programme. Please describe in this section what portion of the GAVI HSS grant budget is proposed to be aligned with that programme and how. Also describe what budget portion is supported by the World Bank and any other funding sources for the RBF/PBF programme. Please complete the GAVI HSS Excel budget and workplan template accordingly to reflect the budget and workplan related to the RBF/PBF programme.*

Year	***Total Amount Budgeted***
2016	***US$ 3,000,099***
2017	***US$ 2,749,805***
2018	***US$ 2,576,012***
2019	***US$ 740,260***

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The total budget of implementing the GAVI HSS interventions as detailed in this proposal is US$9,096,176. Zambia does not have an NHSP nor cMYP hence it can only apply for a grant for 3 years. The annual ceiling for the first year is US$3.5 million and then US$2.8 million for subsequent years. For these 3 years Zambia can therefore only apply for a maximum of US$9.1 million; hence Zambia's HSS proposal budget conforms with annual limits set by GAVI.

16.1 Justification of Unit Costs

In terms of unit costs, these are based on the current market prices as well as the prevailing GRZ subsistence and lunch allowances converted into US$ at the rate of 1US$=11.7 Zambia Kwacha.

- The prices of 4X4 vehicles, the truck, the short wheel base vehicles and the boats were obtained from UNICEF. UNICEF will procure all vehicles detailed in this proposal using their global procurement system.
- Motorcycles are supposed to be fitted with carriers so that those going for outreaches for example should be able to easily transport vaccine carriers/cold boxes. Once these have been fitted then at least two people can go for outreaches. UNICEF again provided the unit cost of motorcycles at US$3,000 each.
- UNICEF provided a price of US$85 per bicycle without freight and other charges. This was adjusted to US$100.00 per bicycle.

- The per diems for central level staff including drivers going to the two target provinces are based on prevailing GRZ rates namely about US$109.4 for senior staff and US$54.7 for drivers when going to the target provinces and districts. It is estimated that the central level will spend 15 days providing supportive supervision to target districts. On each trip there will be 4 officers and a driver.
- The cost of fuel in Zambia is currently at US$1.2 per litre. It is estimated that a 4X4 would cover a distance of 5km per litre. A short wheel base vehicle would cover about 10km per litre while a motorcycle 20km per litre.
    - The distance from Lusaka to Muchinga, Luapula Northern provinces has been estimated at 5000 km return including local running during supportive supervision and providing support to districts on data management and utilisation to districts.
    - The 2012 Health Facility Survey report contains distances from health centres to outreaches as well as districts to health centres. These distances have been used to calculate distances covered by DHMTs for supportive supervision. These distances have also been used to calculate mileage covered by health centres during outreaches.
    - The cost of distribution of motorcycles and bicycles have also been calculated based on distances as provided for in the 2012 Health Facility Survey including 2 people who will be distributing these to districts and health facilities.
- For training and meetings in major urban areas including accommodation, transport refunds, lunch, stationery, facilitators and venue hire, the unit price has been calculated taking into consideration several issues. For trainings at community level the major cost is lunch allowance at US$10 and transport refund at US$10 as well.
- There is also a provision for administrative support to MOH headquarters, CHAZ headquarters, DMOs and District-based CSOs to cover the maintenance of vehicles and motorcycles and as a contribution to electricity, water and rentals. It will be difficult to maintain vehicles etc without support from GAVI until such a time when GRZ is prepared for this.
- The costs for the printing T-shirts, pamphlets/posters and airing of TV and radio spots are based on current market prices in Zambia.
- The consultancy rates for the development of radio and TV spots are based on current market rates and the desire to get someone who can do an excellent job.
- A TA will be employed in the MOH and an accountant and a Senior programme Officer will be employed at CHAZ. They will be paid a monthly salary of US$5,000 a month for the duration of the programme. This will cover medicals, pension and their salary as well.
- For studies including evaluations these estimates are based on current market prices.

16.2 Procurement Plan

A detailed procurement plan has been developed for first 18 months. The procurement of vehicles, bicycles and motorcycles will be done in the first quarter of 2016. The procurement of all vehicles will be done by UNICEF Zambia. Using UNICEF as a procurement agency has helped to significantly reduce the cost prices of vehicles and motorcycles. MOH and CHAZ will be responsible for procurement of other things such as printing and hiring of consultants to do assignments such as the conduct of surveys and development of TV and radio adverts. Attachment 7 is a procurement plan for the first 18 months.

16. Gap Analysis and Complementarity

This description will ensure GAVI is aware of support provided by other donors, thereby avoiding overlap or duplication, and highlighting the value-added of the requested GAVI support.

- ➔ *Please complete the gap analysis tab in the GAVI HSS Budget, Gap Analysis and Workplan Template. This gap analysis should be related to each of the proposal objectives to show the total resource requirements for health system strengthening related to that objective, and the different resources for HSS financing already in place, as available in National Health Sector Strategy/Plan, cMYP, or other gap analysis conducted.*
- ➔ *For each of the objectives, applicants should list different resources for HSS financing already in place that contribute to the proposal objective, including government and external donor contributions, the project name if applicable (or indicate budget support), duration of support, funding amount provided (in US$), and geographic location covered by the support. The Supplementary HSS Guidelines provide more detail on the key required elements of the gap analysis.*
- ➔ *In the box below, please provide a narrative description of other efforts by the Government or development*

partners that focus on the bottlenecks that are addressed by the proposal objectives, including the timeframe and the geographic location of this support, thereby highlighting the value-added of GAVI support and how the current proposal complements those efforts.

GAVI encourages the use of data from existing gap analyses, rather than undertaking a new gap analysis.

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Table 16.1 below shows the amount of resources required for the implementation of the cMYP from 2014 to 2018. It is estimated that the implementation of the cMYP would cost US$1.01 billion. So far the GRZ has secured US$178,666,123. The GRZ may also get some extra resources amounting to US$469,936,204 over this period. This demonstrates that the funding gap for the implementation of the cMYP is US$354 million for the period 2014-2018.

Table 16.1: Resources required for implementation of the cMYP 2014-2018

Resources required and funding gaps						
	2014	2015	2016	2017	2018	Total
Total resources needed	185,957,131	182,993,570	212,713,725	207,030,898	220,177,818	**1,008,873,142**
Secured funding	26,845,352	82,934,780	20,899,059	20,040,868	27,946,063	**178,666,123**
Possible funding gap	159,111,779	100,058,790	191,814,666	186,990,030	192,231,755	**830,207,020**
Probable funding	111,249,762	52,336,537	134,987,154	80,942,774	90,419,976	**469,936,204**
Probable funding gap	47,862,017	47,722,254	56,827,512	106,047,256	101,811,788	**360,270,816**
Composition of funding gap						
Vaccines and injection equipment	3,285,508	-	-	-	-	3,285,508
Personnel	42,742,836	43,777,820	42,753,233	94,825,058	98,636,830	**322,735,778**
Transport	27,666	17,657	43,431	219,079	80,413	**388,248**
Activities and other recurrent costs	1,071,835	2,923,635	6,903,498	1,991,663	3,008,888	**15,899,489**
Logistics(vehicles, cold chain and other equipment)	734,171	1,003,140	1,880,280	2,935,764	85,676	**6,639,032**
Campaigns	-	-	5,250,000	-	-	5,250,000
Total funding gap	**47,862,017**	**47,722,254**	**56,830,442**	**99,971,564**	**101,811,778**	**354,198,055**

It is evident from Table 16.1 that there are huge shortfalls in the budget for activities and other recurrent costs, logistics, and personnel. There is no funding gap for the purchase of vaccines and injection equipment and issues of cold chain are being addressed. The HRH strategic plan outlines how HRH issues will be addressed. In this proposal, as highlighted earlier, the support being requested from GAVI will be used for procurement of vehicles/motorcycles/bicycles, financial support for conducting supportive supervision and outreach clinics, the training of health workers including CHWs, implementation of C4I interventions especially in target districts and strengthening of HMIS and the implementation of the PBF programme in target districts. The total budget for these interventions is estimated at US$9,059,475.20 as justified above as well as in Attachment 6.

This HSS proposal does not address everything in the cMYP. The GRZ, therefore, isolated all budget items in cMYP related to Objectives 1-5. The total available resources over the period 2016-2018 is USUS68,885,930. The funding gap over this period is as can be seen in Table 16.2 below is US$571,036,450.

Table 16.2: Total Resource Requirement, Total Resources Available, Funding Sources and Funding Gap 2016-2018

		Year		
Funding Source	**2016**	**2017**	**2018**	**Total**
Government of Zambia	7,319,331	3,409,324	11,839,817	22,568,472
Government Co-funding of GAVI Vaccines	2,376,342	2,792,694	3,356,136	8,525,172
GAVI NVS	9,230,287	13,838,850	12,750,110	35,819,247
WHO	1,500,359	-	-	1,500,359

UNICEF	15,918	-	-	15,918
CIRDRZ	119,868	-	-	119,868
JICA	119,868	-	-	119,868
PATH	217,087	-	-	217,087
Total Resources Available	**20,901,076**	**20,042,885**	**27,948,081**	**68,885,991**
Total Resource Requirement	**212,713,725**	**207030898**	**220177818**	**639,922,441**
Total Funding gap	**191,812,649**	**186,988,013**	**192,229,737**	**571,036,450**

Table 16.2 further shows that GRZ and GAVI are the major sources of funding for the cMYP over the period 2016-2018. In the gap analysis there is no provision of other funders apart from GRZ and GAVI NVS. It should also be noted that the amount being requested from GAVI and the financial gap for objective 2 and objective 3 is more than the required resources as specified in the gap analysis. This is because over the years there has not been a lot of emphasis on communication for immunisation with an exception of the period preceding the introduction of new vaccines. This is the first time when Zambia will make a huge investment in communication for immunisation and other child health interventions. The budget for capacity building has always been small and in the cMYP there were no plans for MLM and RED/REC training. These courses were identified during the EPI review as well as during the implementation of MVA-Z interventions. Investing in Objectives 1 and 2 is critical to the success of the immunisation programme in Zambia.

As highlighted earlier, these HSS interventions will be implemented In the three provinces of Muchinga, Luapula and Northern. In these provinces there are no key development partners funding any health and immunisation systems interventions. The districts which have been selected have been consistently poor performing districts. The European Union will be supporting 11 districts in Lusaka and Copperbelt Provinces and its focus will be on districts with poor health indicators. The EU will be implementing a whole package of RMNCH interventions including immunisation. Discussions are underway between World Bank and GRZ to support implementation of health services including immunisation in 5 provinces namely Eastern Southern, North Western, Central and Western. This leaves out 3 provinces namely Northern, Luapula and Muchinga. A decision was made by stakeholders that GAVI funded interventions should be implemented in 7 districts mainly because of poor performance as well as other issues such as the districts being remote rural and quite poor and not being supported by any other development partner. The target by the end of this grant is to increase immunisation coverage to >80% in these target districts. All the districts which have been selected are remote rural districts; hence this will ensure geographical equity. All these districts have enormous challenges in health services delivery. Stakeholders in Zambia have the view that GAVI supported interventions should be implemented in selected provinces and districts for maximum impact and also to allow easy demonstration of results. All health facilities in the selected districts including those belonging to CHAZ will benefit from these HSS interventions. Currently there are no resources to finance these HSS interventions in the selected districts. This applies to the C4I interventions which will be implemented by CSOs.

17. Sustainability

This description will enable GAVI to assess whether issues of sustainability have been adequately addressed.

- ➔ *Please describe how the government is going to ensure sustainability of the results achieved by the GAVI grant after its completion. This should encompass sustainability of financing for immunisation services and health system strengthening, as well as programmatic sustainability of results.*
- ➔ *If there are other recurrent costs included in this proposal please describe how the country will cover these costs after the funding finishes.*

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This GAVI grant is aimed at addressing a number of HSS challenges which have impact on immunisation coverage. The funds will be used to purchase vehicles, motorcycles and bicycles; training of health workers including CHWs; the involvement of the CSOs in community mobilisation and sensitisation; the production of immunisation posters/pamphlets; the airing of immunisation messages on TV and radio and the implementation of a PBF programme in the 5 target districts. The GRZ is committed to the EPI programme and this explains why it purchases all the traditional vaccines which are being used in Zambia and co-funds underutilised vaccines with GAVI. It has also largely funded the procurement of cold chain equipment. Due to economic difficulties currently being experienced in Zambia, the GRZ is failing to adequately provide transport and other logistical support for the EPI and other health services. This is why in this proposal a provision has been made to purchase different forms of transport. These transport forms generally have shorter lives and will require maintenance and replacement after a few years. This investment is necessary for the different levels of health care to successfully implement

health services and ensure a healthy and vibrant nation. In order to ensure that that there is enough fuel and resources for maintenance of vehicles some of the funds from GAVI will be used to supplement the PHC grant that the central government disburses to the districts. In terms of sustainability the GRZ will continue mobilising resources and increase the PHC allocation to districts so that they have adequate resources for maintenance of vehicles, purchase of fuel and the payment of allowances for supervision and outreach clinics. The inclusion of these budgetary items is to allow time for the GRZ to prepare and take over the financing of these activities.

In terms of human resources for health, this GAVI grant will help to strengthen institutional sustainability through the training of tutors in health training institutions in Zambia. These trainings targeting tutors will be important as they are aimed at imparting knowledge and skills among health workers. Not every health worker in the target districts will be trained through this grant. Those who will be trained will be advised to share their knowledge and skills with their co-workers. For example a USAID funded project implemented in Gwembe District in the southern Province of Zambia used an officer in charge to orient her fellow health workers at the health facility about implementing a comprehensive immunisation package which resulted into the improvement of immunisation outcomes. The GRZ also has plans to incorporate some of the immunisation specific courses in pre-service training programmes: so far the curriculum for training institutions has been revised and EPI has been included. In this GAVI HSS proposal some tutors from health training institutions will attend a ToT training for EPI and these will in turn train other tutors. These training will cover all health training institution in Zambia. As part of this GAVI HSS proposal EPI modules will be developed and printed and this will help standardise the teaching of EPI in health training institutions. In a few years time graduates from health training institutions will be knowledgeable about MLM, RED/REC and other EPI issues and the requirement for these short courses will eventually be reduced. The inadequate knowledge and skills among health workers as well as support staff in the health sector has been acknowledged. This is partly the reason why support is being requested from GAVI for programme management. The managers who will be recruited for MOH and CHAZ will be experienced people who will be able to build the capacity of health workers for example to manage finances, run the PBF programme as well as running the HSS activities as contained in this proposal. The use of programme management specialists during the 3 year grant implementation period will ensure that capacity has been built within the health sector to implement similar interventions. In addition to capacity strengthening, the specialists will help in absorbing the extra workload that the project will come with. Government will engage the proposed TA staff on conditions that the TA will be self-terminating. Alternatively, the TA staff will be engaged in negotiations with the view to absorb them in the government HR structure or request support from other partners should it be clear that their services will be required at the end of the project.

MOHThe involvement of the CSOs in immunisation programmes is a new thing in Zambia. Most CSOs are involved in HIV, tuberculosis, malaria and other diseases and conditions. The CSO grant which will be managed by CHAZ for the duration of the programme is meant to catalyse interest in immunisation and related activities among the CSO community so that at the end of the day they should be able to mobilise resources on their own to implement immunisation programmes. During the course of the programme, discussions will continue on how CSOs can help in mobilising resources for immunisation. Once the interest in immunisation among CSOs is created, they will be able to mobilise extra resources as they already have the capacity to do this. This is why there is a need to support an annual CSO conference, as proposed in this GAVI HSS application, where they can be briefed about the progress in the implementation of the GAVI HSS CSO grant, the challenges being experienced and how such challenges can best be addressed. At these meetings CSOs will also discuss how they can further be engaged in activities aimed at improving immunisation outcomes. Ultimately, the support CSOs will get from GAVI will be catalytic in nature and they will be able to mobilise resources and implement interventions. The selection of CHAZ to coordinate CSO activities is also key to sustainability as it is already well established and very much involved in the delivery of health services including immunisation.

A good proportion of the GAVI grant will be spent on strengthening M&E systems by training health workers including CHWs on data management, analysis and utilisation. This is a stop-gap measure as initiatives are already underway to strengthen the collection of data. The MOH is currently working with PATH and are piloting the Better Immunisation Data (BID) initiative. This programme focuses on how the health sector can enhance data collection, analysis and utilisation at all levels. In this initiative all the under-five immunisation cards will have a barcode and data entry will be simplified since this will just be scanned and the HMIS system will be able to pick up the details. Once the card is scanned it will show the antigens that the child has received and those yet to be received and will also create a reminder as to when the child is supposed to report for other antigens. If the child does not come on that date the health facility will generate a list of children who have not reported and give this to the CHWs to check on them and encourage them to go for immunisation. This simple technology will reduce data entry errors and the Ministry will have real time data. The BID initiative is currently being piloted in Livingstone after which it will be implemented in the other districts in the Southern Province before scaling up to all the provinces in Zambia. It is anticipated that this initiative will be completed nationwide within the next 4 years. The paper based system at health centre level will continue until the BID initiative is implemented nationwide.

In order to sustain the implementation of intervention in the health sector, the GRZ is developing a health financing strategy through which it will mobilise additional resources for the sector. These additional resources will be used to take

over the implementation of interventions specified in this proposal. Zambia has also demonstrated that it has the capacity to take over the funding of some of the interventions. For example after the freezing of the donor aid in the health sector in 2009, GRZ increased its funding to the sector which enabled the country to fund the procurement of traditional vaccines, significantly expand the cold chain system and purchase of reproductive health commodities. Lastly, Zambia's commitment to funding the health sector is also demonstrated by the fact it is one of the few countries in Africa which have achieved the Abuja Declaration.

TWO PAGES MAXIMUM

PART F – IMPLEMENTATION ARRANGEMENTS AND RISK MITIGATION

For further instructions, please refer to the Supplementary Guidelines for HSS Applications

18. Implementation Arrangements

This section will be used to determine if the necessary arrangements and responsibilities for management, coordination, and technical assistance inputs of the implementing parties have been put in place to ensure that programme activities will be implemented. Please describe:

- ➔ *How the grant implementation will be managed. Identify key implementing entities and their responsibilities.*
- ➔ *Please describe governance and oversight arrangements.*
- ➔ *Mechanisms which will ensure coordination among the implementing entities.*
- ➔ *Financial resources from the grant proceeds that will be allocated to grant management and implementation.*
- ➔ *The role of development partners in supporting the country in grant implementation.*

TWO PAGES MAXIMUM

The lead implementer of the interventions is the MOH. The DPI and the CHU within the MOH will be responsible for leading and coordinating the implementation of the interventions detailed in this proposal. In line with the national planning process, each of the 7 target districts will develop annual implementation plans (including C4I interventions to be implemented by CHAZ) which will include the interventions specified in this proposal and these plans will be submitted to the national level where they will be integrated to form the annual implementation plans which will be approved by the Sector Advisory Group (SAG). The CHU in consultation with stakeholders will isolate HSS interventions from the annual implementation plans and present these to the ICC for consideration and approval. CHAZ will also develop an annual workplan which will also be presented to the ICC for approval. The implementation of the interventions will start after the plans by MOH and CHAZ have been approved by the SAG and ICC. In line with Zambia's decentralisation policy, districts will be responsible for planning and implementation of interventions. The MOH will release grants to target districts on a monthly basis based on their plans and after they have liquidated the previous month's grant. The Programme Manager will be tasked with the responsibility of appropriately building the capacity of the districts to liquidate the funds they have received in time so that the implementation of activities should be as scheduled. In terms of audit, the GAVI funds will be audited according to the existing auditing procedures and guidelines of the GRZ. The conduct of internal and external auditors at 6 and 12 months intervals, respectively have been budgeted for in this proposal. CHAZ will also ensure that resources are channelled to the district based CSOs timely and these will also be audited accordingly.

The project will target five (5) highly experienced and competent technical experts. In order to retain these professionals, the project has budgeted for all aspects of their renumeration (this includes all employment taxes and other benefits such as NAPSA and PAYE, Gratuity, Leave days and Medical Expenses). This is intended to attract the correct staff and prevent high turnover during the course of the proposal implementation.

The CHU has the technical capacity to implement immunisation specific activities and will be responsible for training of health workers including CHWs in MLM and the RED strategy. As mentioned earlier, the implementation of MLM training will follow the approach which was used by MVN-A. MOH will involve MVN-A in the delivery of MLM courses. The M&E section in MOH will be responsible for training of health workers in data collection and utilisation. As far as training is concerned, other stakeholders such as UNICEF and WHO will also be involved. CHAZ will be responsible for implementing C4I interventions. In each district a CSO will be identified which will be responsible for coordinating and supervising C4I activities being

implemented at community level. These CSOs will work with community members including CHWs who will be responsible for demand creation at community level. CHAZ will be responsible for overall coordination and supervision of CSO activities at district and community level as well as training of different stakeholders.

UNICEF Zambia will be responsible for the procurement of vehicles, motorcycles and bicycles for the programme. UNICEF will procure for both MOH and CHAZ. For other things such as printing and engagement of consultants MOH will be responsible for this. Procurement under CHAZ of other things other than vehicles and motorcycles will be done by CHAZ itself. The Finance Department will be responsible for managing the GAVI HSS resources including production of financial reports. The CHU with assistance from the Technical Assistant in the Finance Department in MOH will be responsible for coordinating these interventions and will report to the ICC on progress. About 3%[83] of the total budget has been allocated to grant management and implementation as per GAVI guidelines. Development partners such as UNICEF and WHO are members of the ICC. They will therefore play an important role as they will participate in the review and approval of annual plans and budgets for GAVI supported interventions. They will also be requested to participate in the trainings which have been scheduled in this proposal. Lastly, The GRZ has decided to implement a PBF programme in target districts. It has experience of implementing such programmes especially funded by the World Bank. The PBF programme as presented in this proposal is designed after the Katete Programme which was quite successful. There will be a Senior programme Officer for the PBF component who will be based in Mpika District and will have oversight on all the 7 target districts. He will work very closely with the PCNOs and DCMOs.

19. Involvement of CSOs

This description will be used to assess the involvement of CSOs in implementation of the proposed activities. CSOs can receive GAVI funding through GAVI HSS grants going to the MoH and then transferred to the CSO[84].

- ➔ *Please describe how CSOs will be involved in the implementation of the grant activities, indicating the approximate budget allocated to CSOs.*
- ➔ *If CSOs will not be involved in implementation please provide an explanation of why they are not involved and what steps will be taken to facilitate future involvement of CSOs in GAVI HSS activities.*
- ➔ *Please detail the role of CSOs in reaching equity groups, e.g. uneducated mothers, remote areas, poorest quintiles, conflict affected populations.*
- ➔ *Please ensure that any CSO implementation details are reflected within the detailed budget and workplan.*

TWO PAGES MAXIMUM

As has been highlighted earlier, CSOs have never been involved in the implementation of immunisation interventions in Zambia. GAVI has supported CHAZ to coordinate the CSO activities in immunisation activities. A number of meetings have been organised where CSOs have discussed the interventions which should be part of the Zambia HSS proposal to GAVI. Most of these proposals have been included. As has been explained earlier, CSOs have a large presence at community level; hence during the implementation of this grant they will mainly work at community level creating awareness about immunisation. At community level, the CSOs will be responsible for training traditional leaders, religious leaders, CHWs, NHCs, SMAGS and other community based organisations on the importance of immunisation and other child health interventions. Once these community structures have been trained they will be responsible for creating awareness and generating demand for immunisation. CSOs will therefore work very closely with these structures over the course of implementing this grant. Some funds have also been set aside to allow for annual meetings of CSOs where they can discuss progress in the implementation of the grant, the challenges they are experiencing and how these can best be addressed. MOH will attend these meetings. CHAZ will report to the ICC on the progress they are making in in the implementation of activities. CSO activities have been clearly spelt out in the budget for this proposal. The CSO implementation details are reflected in the attached budget and work plan. A total of US$2,424,544 has been allocated to CSO activities and this represents 27% of the overall budget.

20. Technical Assistance

This description will outline to GAVI how technical assistance and National Institutions will support implementation

[83] Refer to Attachment 6 on resources allocated to program management.

[84] In special circumstances grant funds can go directly from Gavi to a CSO, please refer to the Supplementary HSS Guidelines for further information.

of the proposed activities.

- ➔ *Please describe technical assistance (consultancy services) included in the grant activities. Please describe how this technical assistance will improve the way health systems and the immunisation programme function.*
- ➔ *Please outline how technical assistance will improve institutional capacities of government agencies and CSOs and contribute to sustainability.*
- ➔ *Please explain the role that any National Institutions will be given. This could be for a research or training institution with expertise in data quality assessments and monitoring.*
- ➔ *If no technical assistance is planned to support implementation of this HSS grant please provide an explanation of why it is not planned.*

ONE PAGE MAXIMUM

Technical assistance will be required for effective implementation of interventions detailed in this proposal as follows:

1. Implementation of the PBF in target districts: The MOH will engage a Programme Manager for the GAVI supported PBF programme who will work very closely with the GRZ in order to design and implement the PBF programme in target districts. His major role will be to coordinate the implementation of the programme including ensuring that the process is well documented for sharing results. This close working relationship will be key as it will be aimed at building the capacity of GRZ employees to learn and understand how PBF can be designed, implemented and evaluated. The actual implementation will be by the district and health centre staff. A local Zambian research institution will be identified to evaluate the PBF programme.
2. Conducting baseline, midterm and end term evaluations: It will be critical that the baseline, mid-term and end-term evaluations should be conducted professionally. These jobs will be advertised in order to recruit an organisation which will conduct these surveys and provide meaningful results. The Procurement Unit in MOH will be responsible for recruitment of consultants to support these activities. The Procurement Unit will work with the CHU, UNICEF and WHO to develop ToRs for these studies.

21. Risks and Mitigation Measures

This information reflects the risk of a country not being able to implement the proposed activities within this grant proposal and/or spend the funds as approved by GAVI. It is expected that the Lead Implementer will be responsible for assessing and ensuring that risk mitigation measures are actually implemented.

- ➔ *If the country has existing health sector risk analysis, please attach these assessments and provide a brief reference to the relevant sections.*
- ➔ *If the country does not have existing health sector risk analysis, please complete the table below for each of the proposed objectives. Please refer to the Supplementary Guidelines for HSS Applications for a description of the various types of risk. If the risk is categorised as 'high', please provide an explanation as to why it is 'high'.*

Description of risk	***PROBABILITY (high, medium, low)***	***IMPACT (high, medium, low)***	***Mitigation Measures***
Objective 1:			
Institutional Risks: HRH shortage	*High*	*High*	• *A comprehensive HRH Strategic Plan is being implemented in Zambia.* • *A community health assistants training strategy is being implemented to address shortage of human resource at facility level and creating a link to the community.. The training of CHAs will help to relieve workload in health facilities and create awareness at community level*
Institutional Risks: Inadequate funding	*High*	*High*	• *GRZ continues mobilising financial resources for the health sector including this application.* • *Given the high shortage of skilled health workers, GRZ will have to increase the budget for health service delivery/activity implementation to 60% from the current 40%.* • *GRZ will develop and implement other alternative financing mechanisms.* • *Partners to increase budgetary allocation to health sector*
Institutional Risks: Inadequate supervision	*High*	*High*	• *This proposal contains interventions that address supervision in target districts.*

			• *The activities will be implemented with additional funding through the annual plans and budgets for the targeted districts.*
Fiduciary Risks: Inadequate financial management capacities	*Medium*	*Medium*	• *The HRH Strategic Plan addresses this risk and this proposal also provides training in financial management and finance for non-finance managers.* • *GRZ will continue to implement the Governance and Management Capacity Strengthening Plan 2012-2016 through the annual action plans and budgets in order to strengthen the fiduciary systems.*
Operational Risks: Inadequate transport	*High*	*High*	• *This HSS grant will address this problem and that there are government efforts to improve the road infrastructure in the country.*
Programmatic and Performance Risks: Delays in procurement	*Low*	*Low*	• *The GMCSP will address this issue. See Chapter 4 on Page 27 &28 under theme2: Pharmaceutical Policy and Procurement and Supply Chain Management*
Other Risks:	-	-	-
Overall Risk Rating for Objective 1	*High*	*High*	• *Mechanisms are in place to address these risks.*
Objective 2: To improve knowledge and skills of health workers on delivery and management of immunisation and other child health services.			
Institutional Risks: HRH shortage	*High*	*High*	• *A comprehensive HRH Strategic Plan is being implemented in Zambia.* • *A community health assistants training strategy is being implemented to address shortage of human resource at facility level and creating a link to the community.. The training of CHAs will help to relieve workload in health facilities and create awareness at community level*
Fiduciary Risks: Inadequate funding	*High*	*High*	• *GRZ continues mobilising financial*

			resources for the health sector including this application • *Given the high shortage of skilled health workers, Government will have to increase the budget for health service delivery/ activity implementation to60% from the current 40%.* • *The GRZ will design and implement other alternative financing mechanisms.* • *Partners to increase budgetary allocation to health sector.*
Programmatic and Performance Risks: Shortage of HRH	*High*	*High*	• *A comprehensive HRH Strategic Plan is being implemented in Zambia.* • *A community health assistants training strategy is being implemented to address shortage of human resource at facility level and creating a link to the community.. The training of CHAs will help to relieve workload in health facilities and create awareness at community level*
Overall Risk Rating for Objective 2:		*High*	*Strategies are in place to address the risks*
Objective 3: To develop and implement communication for immunisation and other MCH interventions through involvement of CSOs.			
Institutional Risks: HRH shortage	*Low*	*Low*	*The programme will employ staff for CHAZ. At district level staff from CSOs will manage and supervise district interventions.*
Fiduciary Risks: Inadequate funding for CSOs	*High*	*High*	*This HSS grant will ensure that CSOs are involved in immunisation activities. The annual CSO meetings will provide opportunities for them to explore other sources of funding.*
Fiduciary risk: Fraud and corruption	*Medium*	*Medium*	*Institution of audits to ensure that funds are used for the purpose. A budget has been provided in this proposal for both internal and external audits.*
Operational Risks: Shortage of HRH	*Low*	*Low*	*See under institutional risks Objective 3.*
Programmatic and Performance Risks: Weak M and E system		*Low*	*M&E system will be improved with this grant and this will also cover CHAZ facilities*

Programmatic and performance risks: Delays in procurement	*Low*	*Low*	*CHAZ has a good and effective procurement system*
Overall Risk Rating for Objective 3		*Low*	*Where risk is high mechanisms exists to address this.*
Objective 4: *To improve the collection and utilisation of HMIS data with special focus on district and lower levels.*			
Institutional Risks: HRH Shortage	*High*	*High: see Objective 1*	*See Objective 1*
Fiduciary Risks: See Objective 1 and 2	*See objectives 1 and 2*	*See objectives 1 and 2*	*See objectives 1 and 2*
Operational Risks: Weak M&E system	*Medium*	*Medium*	*An M&E Framework will be developed to address this issue. This grant will also address M&E weaknesses in target districts.*
Programmatic and Performance Risks: Poor data management and utilisation practices	*High*	*High*	*During the course of this grant, training will be provided to staff on data management and utilisation.*
Other Risks: Already addressed in the other risks			
Overall Risk Rating for Objective 4		*High*	*Mechanisms exist to address these risks.*
Objective 5: **To strengthen results-based management of health services to reflect strong evidence based decision making at district and lower levels.**			
Institutional Risks: See objectives 1 and 2	*See Objective 1 and 2*	*See objectives 1 and 2*	*See objectives 1 and 2*
Fiduciary Risks: See objectives 1 and 2	*See objectives 1 and 2*	*See objectives 1 and 2*	*See objectives 1 and 2*
Operational Risks: See objectives 1 and 2	*See objectives 1 and 2*	*See objectives 1 and 2*	*See objectives 1 and 2*
Programmatic and Performance Risks: See objectives 1 and 2	*See objectives 1 and 2*	*See objectives 1 and 2*	*See objectives 1 and 2*
Other Risks:			
Overall Risk Rating for Objective 5	*High*	*High*	*Mechanisms exist to address these risks.*
TWO PAGES MAXIMUM			

22. Financial Management and Procurement Arrangements

In this section applicants are requested to describe:

- ➔ *a) The proposed financial management mechanism for this proposal*
- ➔ *b) Financial Management Arrangements Data Sheet: The proposed processes and systems for ensuring effective financial management of this proposal, including the organisation and capacity of the finance department and the proposed arrangements for oversight, planning and budgeting, budget execution (incl. treasury management and funds flow), procurement, accounting and financial reporting (incl. fixed asset management), internal control and internal audit, and external audit. CSOs can receive GAVI funding through two channels: (i) funding from GAVI to MOH and then transferred to CSO, or (ii) direct from GAVI to CSO. Please refer to Annex 4 of the Supplementary HSS Guidelines for further details*
- ➔ *c) The main constraints in the (health sector's) financial management system. Does the country plan to address these constraints/ issues? If so, please describe the Technical Assistance needs in order to fulfil the above functions.*

4 pages (more pages necessary if more than one lead implementer)

Question (a): applicants should indicate whether an existing financial management mechanism or modality will be employed (pooled funding, joint financing arrangements or other), or if a new approach is proposed. If an agency-specific financial arrangement will be used, specify which one. A rationale for this choice should be provided.	Half page The GAVI HSS funds will be managed by MOH using GRZ financial management rules and regulations. A separate account will be opened for GAVI HSS funds at ZANACO and funds will only be released if required for programme implementation. This approach will allow for easy management of funds including auditing of funds by GRZ Auditor General. CHAZ will be responsible for C4I interventions. An MoU will be signed between GAVI and CHAZ. Funds for all interventions which will be implemented by CHAZ will be sent directly to CHAZ but the MOH will need to know for purposes of monitoring implementation. CHAZ has ever received funds from GAVI before for engaging CSOs in immunisation activities. UNICEF will be responsible for procurement of vehicles, bicycles and motorcycles. All funds for procuring these items will be sent to UNICEF Zambia to enable it procure these items.

Question (b): Financial Management Arrangements Data Sheet		
Any recipient organisation/country proposed to receive direct funding from GAVI must complete this Data Sheet (for example, MOH and/or CSO receiving direct funding).		
1.	Ministry of Health (MOH	Churches Health Association of Zambia (CHAZ
2. Name and contact information of Focal Point at the Finance Department of the recipient organisation.	Chief Accountant	Golden Mwila – Head Finance, HR and Administration

3. Does the recipient organisation have experience with GAVI, World Bank, WHO, UNICEF, GFATM or other Development Partners (e.g. receipt of previous grants)?	Yes	**YES**
4. **If YES** • Please state the name of the grant, years and grant amount. • **For completed or closed Grants of GAVI and other Development Partners:** Please provide a brief description of the main conclusions with regard to use of funds in terms of financial management performance. • **For on-going Grants of GAVI and other Development Partners:** Please provide a brief description of any financial management (FM) and procurement implementation issues (e.g. ineligible expenditures, mis-procurement, misuses of funds, overdue / delayed audit reports, and qualified audit opinion).	The MOH has mainly been handling large amount of resources mainly for the social cash transfer programme. The budget for the social cash transfer programme in Zambia is estimated at 0.5% of the GDP and 2% of the total GRZ budget. The major development partners funding this programme are GTZ, DFID, Irish AID and Care International[85]. A total of K150,000,000 (GRZ) and K49,239,378 (Donor Funds) annually are spent on social cash transfer programme in Zambia.	1.CDC – CART Program –Total Grant USD16.6 million for 4 years 2.Global Fund –HIV,TB and Malaria –Total Grant more than USD100 million for more than 10 years 3. UNICEF-Total grant for 3 years-ZMW 3.2 million. 4.Gavi Program –Total Grant for 1 year-ZMW 448,161 Brief description on fund management. The organization adheres to donor requirement and applies systems which are in existence for proper monitoring and tracking of funds.
Oversight, Planning and Budgeting		
5. Which body will be responsible for the in-country oversight of the programme? Please briefly describe membership, meeting frequency as well as decision making process.	The ICC will be responsible for in-country oversight of the programme. It meets once every two months and has membership from the public and private sectors, cooperating partners and CSOs. All programming plans and progress reports including for HSS are submitted to the ICC for approval. The ICC is the highest policy making body for immunisation and related activities.	

[85] ODI. (2009). *Cash transfers: affordability and sustainability.* ODI: London.

6. Who will be responsible for the annual planning and budgeting in relation to GAVI HSS?	Director of Planning and Information in MOH.	Manager Advocacy and Public Relations.
7. What is the planning & budgeting process and who has the responsibility to approve GAVI HSS annual work plan and budget?	Each target district will develop annual implementation plans including budgets which will be submitted to the Director of Planning and Information in MOH for consolidation. CHAZ will also develop its annual workplans. The Permanent Secretary in MOH will be responsible for approving GAVI HSS annual work plan and budget.	CHAZ will also develop its annual workplans. The Executive Director will authorise and the Zambia Civil Society Immunisation platform Executive will be responsible for approving GAVI HSS annual work plan and budget for CSOs.
8. Will the GAVI HSS programme be reflected in the budget of the Ministry of Health submitted every year to the Parliament for approval?	Yes, it will be in budget	Yes, it will be in the budget.
Budget Execution (incl. treasury management and funds flow)		
9. What is the suggested banking arrangement? (i.e. account currency, funds flow to programme) Please list the titles of authorised signatories for payment release and funds replenishment request.	The Ministry prefers that GAVI funds should be transferred directly to Zambia National Commercial Bank (ZANACO) where it, together with all government ministries and departments hold their accounts. Cheques will be written when there is an activity. The signatories to this account will be the Chief Accountant, Director of MCH, Assistant Director of MCH and Director of Planning and Information. The rationale for the preference by the Ministry that funds be transferred directly to its account held at ZANACO is to avoid unnecessary delays.	The bank account is held in Local currency Signatories: Name Title Karen Sichinga - Executive Director Golden Mwila - Head of Finance, HR & Admin Dr. Dhally Menda - Head of Health Programs Marlon Banda -Head of Pharmaceuticals & Logistics Michael Kachumi -Head of Grants, Compliance & Procurement
10. Will GAVI HSS funds be transferred to a bank account opened at the Central Bank or at a commercial bank in the name of the Ministry of Health or the Implementing Entity?	A separate account will be opened for GAVI funds at ZANACO specifically for HSS operations.	The bank account is held with a commercial bank under CHAZ.
11. Would this bank account hold only GAVI funds or also funds from other sources (government and/or donors- "pooled account")?	This account will only hold GAVI funds	This account will only hold GAVI funds
12. Within the HSS programme, are funds planned to be transferred from central	YES; funds will be transferred from the central level to the district	YES; funds will be transferred from the central level to the

to decentralised levels (provinces, districts etc.)? **If YES**, please describe how fund transfers will be executed and controlled.	level. The DCMOs for targeted districts will be required to come up with annual district plans detailing the activities which they will carry out in that year. Once these plans have been submitted to the central level, arrangements will be made to transfer the funds they require on a monthly basis as per GRZ requirements.	district level CSOs. The CSOs in targeted districts will be required to come up with annual plans detailing the activities which they will carry out in that year. Once these plans have been submitted to CHAZ, arrangements will be made to transfer the funds they require on a quarterly basis.
Procurement		
13. What procurement system will be used for the GAVI HSS Programme? (e.g. National Procurement Code/Act or WB/UNICEF/WHO and other Development Partners' procurement procedures)	The Ministry will use the GRZ Procurement System as provided for in the Public Procurement Act under the Zambia Public Procurement Authority (ZPPA). A number of rules and regulations exist which govern the procurement of goods and services using public finances. These rules and regulations will be followed when procuring goods and services using funding from GAVI. For example for the procurement of any goods and services worth K500,000.00, a formal tender will be made. For anything costing less than K500,000 an informal tender approach will be used i.e. 3 quotations will be sourced upon which the procurement committee will make its decision. As can be seen in the proposed interventions, most of the purchases will be of high value hence a formal tender (i.e. it will be advertised in the local papers) will be made. This procurement system will apply for specific items as specified in the budget template. The procurement of large items namely vehicles and bicycles will be done through UNICEF.	The CHAZ will use its Procurement System. CHAZ procurement Policy and guidelines govern the procurement of goods and services. These rules and regulations will be followed when procuring goods and services using funding from GAVI.
14. Are all or certain items planned to be procured through the systems of Gavi's in-country partners (UNICEF, WHO)?	All the procurement, with an exception of vehicles, bicycles and motorcycles, will be managed by the MOH and CHAZ as it has the capacity to manage such purchases.	All the procurement, with an exception of vehicles, bicycles and motorcycles, will be managed by the MOH and CHAZ as it has the capacity to manage such purchases.
15. What is the staffing arrangement of the organisation in procurement?	The Procurement Unit at the MOH includes stores management and there are about 8 members of staff. CURRENT STRUCTURE-8 1. Senior Procurement & Supplies Officer x1 2. Procurement & supplies Officers x 3 3. Assistant procurement officers x 3 4. Stores Officer x 1 5. Handyman - Borrowed from ICU to assist in stores	The Procurement Unit has five members of staff comprising of Manager-Procurement, 2 Senior Procurement Officers, 2 Procurement Officers reporting to the Head of Grant, Compliance and Procurement. CHAZ has a Pharmaceutical services department which serves the stores function. The Department has 22 staff.

	STRUCTURE-TO BE FILLED -3 POSITIONS THIS YEAR (INTERVIEWS ALREADY CARRIED OUT) BY PSMD
	1. Head of Procurementx1
	2. Chief Procurement & Supplies Officerx1
	3. Senior Procurement & supplies Officer x1
	
	APPROVED STRUCTURE-11
	1. Head of Procurementx1
	2. Chief Procurement & Supplies Officerx1
	3. Senior Procurement & supplies Officer x2
	2. Procurement & supplies Officers x 3
	3. Assistant procurement officers x 3
	4. Stores Officer x 1
		• Head Pharmaceutical and Logistic services
		• Manager Pharmaceutical services
		• Senior Programme Officers
		  ○ Biomedical Scientist
		  ○ Laboratory Supplies
		  ○ Logistics Officer
		  ○ Procurement Planning Officer
		  ○ Stores officer
		  ○ Logistics Officer Non-Health
		• Programme Officers
		  ○ Malaria Logistics Officer 2
		  ○ Lab Specialist
		  ○ Stores officers 3
		  ○ Stores and Logistics Data Entry Clerks 2
		• Porters 4
		• Driver
		• Administrative Assistant

16. Are there procedures in place for physical inspection and quality control of goods, works, or services delivered?	Once goods have been purchased the Procurement Unit will call the auditors from the Ministry to check if the quantities of goods which have been brought to the Ministry are as specified on the local purchase order. Once this has been verified, the user department which provided the specifications for the goods is called to examine the goods especially if they meet the specifications which were provided. If the user department verifies that the supplier has adhered to the specifications then the goods are entered into the ledgers and then issued to users as need arises.	Standard Operating Procedures (SOPs) are in place for physical inspection and quality control of goods, works, or services delivered.
17. Is there a functioning complaint mechanism? Please provide a brief description.	After getting tenders from invited bidders, decisions are made by the Procurement Committee based on whether the bidders have adhered to specifications as well as if their bids are competitive. A debriefing is done for all bidders to explain to them the process and who has been given the tender and why others have failed. After this briefing, if anyone is not satisfied he or she is free to get in touch with the ZPPA.	After getting tenders from invited bidders, decisions are made by the Procurement Committee based on whether the bidders have adhered to specifications as well as if their bids are competitive. A debriefing is done for all bidders to explain to them the process and who has been given the tender and why others have failed. After this briefing, if anyone is not satisfied he or she is free to appeal.
18. Are efficient contractual dispute	Efficient contractual dispute resolution procedures are in place.	Contractual dispute resolution procedures are in place and

resolution procedures in place? Please provide a brief description.	Ideally before any contract is signed consent is sought from the Ministry of Justice. The Ministry only signs once this consent has been obtained. Following of this procedure is important because if there are any contractual disputes the Ministry of Justice should be able to defend Government.	covers both local and international suppliers. In case of a dispute between the Purchaser and a Supplier who is a foreign national, the dispute shall be settled by arbitration in accordance with the UNCITRAL Arbitration Rules. For contracts with Suppliers who are Zambian or registered in Zambia, the dispute shall be referred to adjudication or arbitration in accordance with the laws of Zambia.
Accounting and financial reporting (incl. fixed asset management)		
19. What is the staffing arrangement of the organisation in accounting, and reporting?	There are 14 members of staff in the Finance Department in the MOH and these are at different levels and the Department is headed by a Chief Accountant. Members of staff in the Finance Department have the view that the number of accounting staff is adequate to handle any amount of funds getting into the Ministry.	There are 11 members of staff in the finance department. The Finance Department the Department is Headed by the Head Finance and Administration. There are 12 members of staff in the Grants and compliance department. The grants and compliance department manages the sub granting and reporting to institutions which CHAZ contracts to implement programmes. The Department is Headed by the Head grants, compliance and procurement. Accounting staff has got different responsibilities at all levels to ensure segregation of duties is in place.
20. What accounting system is used or will be used for the GAVI HSS Programme? (i.e. Is it specific accounting software or a manual accounting system?)	The MOH, as is the case with all other government ministries and departments, use an integrated financial management information system (IFMIS). This is a computerised financial management system.	CHAZ uses the Sun System and GAVI will use the same.
21. How often does the implementing entity produce interim financial reports and to whom are those submitted?	The financial reports are produced by the Finance Department in the MOH on a quarterly basis and these are submitted to the Ministry of Finance through the Permanent Secretary in the MOH.	Monthly management reports are prepared and they are submitted to Management.
Internal control and internal audit		
22. Does the recipient organisation have a Financial Management or Operating Manual that describes the internal control system and Financial Management operational	Financial Management and Operating Manuals exist in the MOH and this manual describes the existing internal control systems and financial management operational procedures. These internal control systems and operational procedures are not	Financial Management and Operating Manuals exist in the MOH and this manual describes the existing internal control systems and financial management operational procedures.

procedures?	different from those in other GRZ Ministries and Departments.	
23. Does an internal audit department exist within recipient organisation? If yes, please describe how the internal audit will be involved in relation to GAVI HSS.	An internal Audit Department exists within the MOH. This Department will, as is the case with other financial resources that the Ministry manages, be responsible for auditing GAVI resources both at the Ministry Headquarters as well as in Mpika and Chinsali Districts in Muchinga province where most of the interventions in this application will be implemented.	There are 4 members of staff in the internal Audit Department. The Department provides CHAZ with an independent, objective assurance and consulting activity to improve risk management control and governance processes. The department is Headed by the Head internal Audit. As is the case with other financial resources that CHAZ manages, the department will be responsible for auditing GAVI resources both at the Secretariat as well as in the implementing CSOs in the Districts.
24. Is there a functioning Audit Committee to follow up on the implementation of internal audit recommendations?	Yes	Yes
External audit		
25. Are the annual financial statements planned to be audited by a private external audit firm or a Government audit institution (e.g. Auditor General)?[86]	The annual financial statements of the MOH are audited by the Auditor General of the GRZ. GAVI financial statements will also be audited using the Auditor General. If GAVI insists that its financial statement should be audited by a private external audit firm, arrangements will be made to perform the audit in this manner. The preference of the Ministry will be to have the funds audited by existing GRZ audit system.	The Financial Statements will be audited by an external audit firm.
26. Who is responsible for the implementation of audit recommendations?	The Permanent Secretary in the MOH is responsible for the implementation of the audit recommendations.	Executive Director
THREE PAGES MAXIMUM		
Question (c): Please indicate the main constraints in the (health sector's) financial management system. Does the country plan to address these constraints/ issues? If so, please describe the Technical Assistance needs in order to fulfil the above functions		

[86] If the annual external audit is planned to be performed by a private external auditor, please include an appropriate audit fee within the detailed budget.

HALF PAGE MAXIMUM Some of the members of staff have been exposed to managing donor funds including financial reporting requirements. It is important to expose staff at headquarters as well as from target districts on financial reporting for donors. This explains why in this proposal an intervention on financial reporting targeting staff in finance has been included.	Members of staff have been exposed to managing donor funds including financial reporting requirements. It will be important to recruit additional staff due to increased work load that the project will entail. These additional staff will require capacity building. The Budget includes this provision.