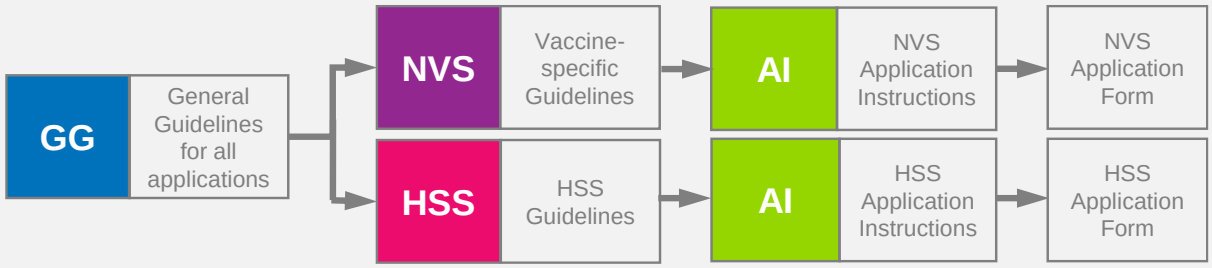
Application Form:
Health System Strengthening (HSS) Support
in 2016

Deadlines for submission of application:
15 January 2016
1 May 2016
9 September 2016

Document dated: October 2015
(This document replaces all previous versions)

Application documents for 2016:

Countries applying for all types of Gavi support in 2016 are advised to refer to the following documents in the order presented below:



HSS Application Form

Purpose of this document:

This application form must be completed in order to apply for Gavi's HSS Support. Applicants are required to read the HSS Application Instructions prior to completing this application form and are advised to refer to these instructions whilst completing the application form. Applicants should first read the General Guidelines for all types of support as well as the HSS Guidelines before this document.

The application form, along with any attachments, must be submitted in English, French, Portuguese, Spanish, or Russian.

Weblinks and contact information:

All application documents are available on the Gavi Apply for Support webpage: www.gavi.org/support/apply. For any questions regarding the application guidelines please contact applications@gavi.org or your Gavi Senior Country Manager (SCM).

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PART A: SUMMARY OF SUPPORT REQUESTED AND APPLICANT INFORMATION

1. Applicant information		
Total funding requested from Gavi (US $)	$ 10,079,465	
Does your country have a finalised and approved National Health Sector Plan?	Yes ☒ Yes	No ☐
	The current National Health Sector Plan runs between 2012 -2016. But preparation for the next Health Sector Plan (2017 -2021) is well under way and the situation analysis component of it has already been completed. The country will ensure that the contents of this GAVI HSS proposal are captured and aligned with the forthcoming HSSDP. This means that implementation dates of this grant will be in perfect alignment with the HSSDP as well as the cMYP	
Does your country have a finalised and approved comprehensive Multi-Year Plan (cMYP)?	☒ Yes	No ☐
	Like the HSSDP, the existing cMYP runs for the period 2012 – 2016. With technical support from WHO/IST the country has started preparation for undertaking EPI program assessment with findings to be incorporated in the development of the cMYP 2017-2021. Therefore, implementation of the next cMYP will also be in perfect alignment with this Gavi HSS grant.	
Proposed HSS grant start date:	January 2017	
Proposed HSS grant end date:	Dec. 2021	
Joint appraisal planning:	Annual joint appraisal is planned to be conducted in July and the report will be submitted to the 5-7 Oct. HLRP meeting	

2. Application development process

The main entity that led, coordinated and oversaw the development of this proposal is the Ministry of Health (MOH) under the overall guidance and political support from the Minister of Health. Within the MOH the Department of Policy Planning and HRD was in-charge of the proposal development process right from inception to the end. This stewardship role was further asserted by the fact that the chairperson of the HSCC (in which members of the ICC are included) is the Director General of the Policy, Planning and HRD, while the Director of Policy and Planning Division of the department is the secretary of HSCC. Wider participation from within the MOH entailed participation of representatives of the departments of Medical Services and Public Health as members of the Gavi HSS Proposal Write-up Team as well as being members of the Heath Sector Coordinating Committee. The EPI manager is a member of the Proposal Write-up Team and plays a pivotal role in the identification of health systems bottlenecks to achieving better immunization outcomes. Similarly, the Directors of Healthcare Services Delivery and Environmental Health were both members of the proposal write up team and the HSCC; this ensured impediments to effective

services delivery, patient safety and proper healthcare waste management linked to the immunization services received due attention during the proposal development process. Hence, there was wider involvement of all the three major departments of the Ministry of Health.

In order to ensure wider stakeholder participation in the Gavi HSS proposal development process, during the most recent MoH, semi–annual meeting conducted in 15 July 2015 (and in which all zonal/regional medical officers participated), imminent GAVI HSS proposal development was widely discussed. In this regard, the Expression of Interest (EOI) which the MOH Eritrea submitted on 8th May 2015 was also presented to meeting participants. This ensured sub-national (zonal) medical officers participation actively in the identification of operational level health systems barriers to achievement of better immunization outcomes, and also secured consensus on how the Gavi HSS proposal will be more focused on and clearly linked to the EPI program outcomes of the country.

Participation of our development partners was also ensured right from the outset. UNICEF and WHO technical officials were crucial members of both the proposal write-up and major deliberations accomplished that preceded the write-up of the application. These included the writing of the EOI and the JAR. Two members each from UNICEF and WHO have actively participated and valuably contributed to development of the proposal. UNICEF has covered all financial expenses incurred during the four day retreat aimed at writing the zero draft of the proposal document.

Although MOH retained full ownership and stewardship of the whole proposal write up process, technical assistance was duly solicited through WHO to augment the in-country efforts towards development of quality proposal. The consultant was part of the Proposal Writing Team for about a month in Eritrea. He had a pivotal role in shaping the writing process, conducting both group and one-on-one discussions with relevant stakeholders as well as participating in the four day retreat that was solely devoted to the proposal development process. Similarly, WHO has availed one of its senior technical advisors from the sub-regional office to support the efforts of completing the budget, gap analysis and work plan template.

The CSOs, whose inputs were incorporated in the proposal development process, were the National Union of Eritrean Women (NUEW), the National Union of Eritrean Youth and Students, the Catholic Faith Based Organization and the BIDHO (PLWAs) Association. In this context a consensus meeting chaired by H.E. the Minster of Health was organized to validate the contents and scope of the information and data captured in the proposal. The CSOs contribution during this meeting was highly pronounced and their comments incorporated into the document. In Eritrea the private sector participation in immunization service delivery is not strong; hence their participation in the proposal development process was seen as of negligible significance.

Eritrea is implementing its first HSSDP that runs from 2012 – 2016. Prior to the development of the first National Health Policy and HSSDP documents, which were supported by the first round of GAVI/HSS grant, we only had department, or program specific policies, guidelines and strategic plan documents. Unfortunately our first experience of the strategic plan development process did not include a JANS review, even though there is such a plan with the development of the next HSSDP that will be implemented during the 2017 – 2021 time period. A midterm review (MTR) was done in mid-2014 for the existing HSSDP. Recommendation for health systems strengthening that emanated from the MTR were taken into account in the development process of this proposal writing.

Weak internet connectivity and frequent power interruptions that made downloading reference materials from the web, sending mails and attaching documents were the main challenges faced during the whole process. There was also considerable difficulty in calling the Proposal Writing Team for progress review meetings because these professionals are always busy and occupied by competing priorities. Nevertheless, both challenges were alleviated through the hard work, commitment and dedication of the write up team.

3. Signatures

3a. Government endorsement

Signature of Government Endorsement

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

Minister of Health	Minister of Finance
H.E Amina Nurhussien	H.E Berhane Habtemariam
Signature:	Signature:
Amina Nurhussien Minister of Health	Berhane Habtemariam Minister
Date: 8/2/2016	Date: 08/02/2016

3b. Health Sector Coordinating Committee (HSCC) endorsement

Signatures: Health Sector Coordinating Committee Endorsement

We the members of the HSCC met on 05 February 2016 to review this proposal. At the meeting v endorsed this proposal on the basis of the supporting documentation which is attached. The minutes endorsing this proposal are attached to this application.

Members of the HSCC	Title/Organization	Name	Signature to indicate the attendance of the meeting where the proposal was endorsed	Signature to indicate the endorsement of the minutes where proposal was discussed
Chair	D.G; Policy , Planning and HRD Department	Dr. Andom Ogbamariam		
Secretary	Director, Policy and Planning Division	Tewelde Yohannes		
MoH Members	Director, HCSD Division	Dr. Goitom Mebrahtu		
	Director, Environmental Health Division	Dr. Zemui Alemu		
	Director, PMU	Dr. E Eyob Tecle		
	EPI Manager	Tedros Yehdego		
	Head of Planning	Tsegai Berhane		
	Head of M&E	Andebrhan Tewelde		
CSO Members	Director, NUEW	Yehdega Andehaimanot		
	D.G, NUEYS	Said Saleh		
	Director, Religious Affairs	Fitsum Gherezgiher		
	Chairman, BIDHO	Ghebrehiwet Ghirmay		
WHO	NPO/NPN	Semere Ghebregiorgis		
UNICEF	Health specialist	Yodit Hiruy		

Individual members of the HSCC may wish to send informal comments to: gavihss@gavi.org

4. Executive Summary

The main bottlenecks for achieving immunisation outcomes addressed within this proposal

Service Delivery challenges undermining achievement of desired health outcomes: the main bottleneck here is limited access to EPI/VPD and other priority health services, worse in HTR areas and HTR nomadic populations. Other contributing bottlenecks are: Low coverage by outreach services leading to inequity of access to services; weak health system management competences compromising quality of services at all levels; weak EPI Specific Support Supervision; and sub-standard healthcare service delivery environment in most health facilities.

Logistic & Supply Chain Management challenges compromising quality of EPI Service delivery: inadequate cold and dry storage capacity at the Central and Zoba EPI stores for the traditional and new vaccines and other essential EPI commodities. Other challenges worsening LSCM are; lack of appropriate and reliable transport causing poor distribution of vaccines and other EPI commodities; and sustaining good vaccine potency threatened by the weak MLM skills in quality stock management, high turnover of staff in HTR areas, insufficient EPI specific support supervision; existence of obsolete non-WHO pre-qualified cold-chain fridges/equipment, and Inadequate Biomedical Technical Capacity / Support for Cold Chain Management.

Health Information System bottlenecks: Weak capacity in quality data management resulting into poor data quality in all programs at all levels. Other contributing factors are: low frequency of independent DQA; HMIS not yet upgraded to DHS2 due to lack of funds; sluggish and frequently interrupted data transmission by internet from sub-national level to MOH HQs; non-relational databases that are not interoperable; and inaccuracy of EPI Denominators due to lack of up to date National Census Data.

Community Systems Support/Strengthening (CSS) challenges: There is no comprehensive community strategy to guide community level service delivery, and neither is there EPI Communication Strategy to drive community demand generation for and uptake of EPI and other priority health services. Other bottlenecks are: the current CHWs are not multi-skilled for integrated service delivery; and weak interface between health facilities and the community, worsened by rather poor IPC for effectively communicating key issues like AEFI, etc.

Human Resources for Health (HRH) bottlenecks: The main challenges noted are the existing curricula for training mid-level health professionals have not yet been reviewed to include up to date principles and practices of EPI; generally weak national research capacity to produce evidence for driving policy changes and health system innovations for better health system performance: and the Distance Education Centre of MOH is poorly equipped and not able to cope with the current distance education demands of health professionals in the country.

Leadership and Governance challenges: Generally weak coordination of health services and health actions between different programs, partners and the sub-national level; and weak planning functions at sub-national levels, connoting generally weak health systems management skills.

Objectives for addressing the identified bottlenecks and improving immunisation outcomes

Strategic Objective 1: Service Delivery: ***Enhance equitable access to quality EPI/VPD and other MNCH (Maternal, Neonatal & Child health services) services by the populace (with emphasis on all identified hard-to-reach populations countrywide) so as to increase uptake of EPI/VPD and other MNCH services by communities.*** The focus of this strategic objective is to improve access of all communities to EPI and other priority health services through sustainable outreach services. Five specific objectives and the following related outcomes will achieve Strategic Objective 1: ***increase in EPI coverage; improvement of access to EPI and other priority health services by all communities; increase in uptake of EPI services; improvement in quality of EPI services; improved***

patient safety in EPI and other health services; health professionals managing AEFI competently. **The budget for this objective is 3,067,569 USD**

Strategic Objective 2: LSCM/PSM: ***Strengthen the logistics and supply chain management system to improve the efficiency of distribution, storage and stock management of EPI/VPD and other essential medical commodities in the country.*** This strategic objective will address the logistics and supply chain management bottlenecks. All the four specific objectives of this strategic objective and the following related outcomes will enable achievement of strategic objective 2: ***sufficient cold and dry storage capacity for vaccines and EPI consumables at all levels; no stock out of vaccines and other EPI consumables at all levels; available potent vaccines at all levels; minimal wastage rate of vaccines and other essential medical commodities at all levels; improved access to potent vaccines & quality essential EPI & medical commodities; aavailability of responsive biomedical engineering support for EPI services; eefficiently functioning cold chain equipment.*** **The budget for this objective is: 1,756,088 USD**

Strategic Objective 3: HIS: Strengthen generation and utilization of strategic health information (HMIS, IDSR & M&E/Surveys) on EPI/VPD and other health services for responsive management at all levels of the country's health system. This strategic objective focuses on improving quality and utilization of data for management decision making. Four specific objectives and the following related outcomes will contribute to achieving strategic objective 3: ***efficient (faster and timely) transmission of data; availability of quality (accurate, complete & timely) EPI and other data at all levels; performance monitoring and management decisions are based on strong evidence; improved surveillance of VPD and other diseases; health professionals more competent in execution of M&E and IDSR functions.*** **The budget for this objective is: 2,333,889 USD**

Strategic Objective 4: CSS: Improve community demand and uptake of quality EPI/VPD and other priority health services so as to improve EPI and other health outcomes of the country. This strategic objective is dedicated to strengthening performance of level services through development of Community and Communication strategies. Five specific objectives and the following related outcomes will enable achievement of strategic objective 4: ***strong community participation and demand for EPI/VPD and other priority health services; improved social mobilization for EPI and other health actions; community level services being delivered by multi-skilled CHWs; improved integrated service delivery at community level; increase in access to EPI and other community level services; increase in uptake of EPI and other health services.*** **The budget for this objective is 1,587,738 USD**

Strategic Objective 5: HRH: Strengthen the HRD capacity of MOH so as to sustain production and retention of quality health professionals that can propel the performance of the country's health system at all levels. The main focus of this strategic objective is to ensure quality health professionals are produced in adequate numbers and their availability is sustained appropriately to meet the demands of the country's health system, including strengthening research through well-trained health professionals that can innovatively lead and create research processes at policy and operational levels. This will be achieved through two specific objectives and their related outcomes: ***New health professional graduates skilled in up to date principles and practices of EPI/VPD; availability of competent health professionals that can carry out quality research to guide policy and programmatic operations; easily accessible quality data / information for evidence based policy and management decision making in the health system.*** **The budget for this objective is: 938,749 USD**

Strategic Objective 6: Leadership & Governance: Strengthen the health system leadership and governance to improve synergy and harmony of program management for delivery of quality EPI/VPD and other priority health services at all levels countrywide. The focus of this strategic objective is to improve synergy and harmony of health programs in order to enable more effective and efficient planning and implementation EPI and other programs at policy, programmatic and operational levels. Through two specific objectives and the following related outcomes, the strategic objective will be achieved: s***trengthened coordination and alignment of health system plans at program and operational levels; improved effectiveness and efficiency of EPI and other health programs; efficient utilization of health system resources; health professionals delivering quality EPI and other health services.*** **The budget for this objective is: 395,433 USD**

Population to be covered by the interventions

Immunization linked beneficiaries: ***Children under five years of age:*** neonates, infants and children from

12-59 months will benefit from the all the vaccines targeting children under-five years of age; ***pubertal and adolescent girls below 15 years*** (girls from 8 – 15 years) will start receiving HPV in addition to TT; ***women in reproductive age (15-49 years)*** will receive TT as scheduled in ANC programs; ***uniformed personnel & all national forces*** will receive TT in addition to other vaccines deemed necessary; ***the entire population*** will benefit from TT based on exposure needs, e.g. dangerous injuries

Beneficiary Populations of other interventions: ***Vulnerable populations in HTR areas, and HTR nomadic populations*** will benefit from increased coverage by EPI and other programs in the context of integrated service delivery; ***the entire national population*** will benefit from improved management and quality of services at community, facility and higher levels; ***health training institutions and their students*** will benefit from support to training institutions; ***Health professionals and CSOs, including CHWs*** will benefit from various technical capacity building and service delivery environment improvement interventions; ***all health programs of MOH and partners*** will benefit from improved national research capacity, programmatic coordination and planning- and the impact will be beneficial to the entire populace nationwide; ***the international community*** will benefit from improved herd immunity and IDSR performance.

Implementation Arrangements, including Financial Management, Procurement and M&E Setting

Implementation of this Gavi HSS project will involve all key stakeholders in the health system.

Oversight: ***MOH HQs*** will provide overall oversight for implementation of the project at all levels, i.e. MOH Departments & PMU, Zoba, Sub-Zoba and Community levels. ***The Zoba health office*** (and its Zoba-PMU) in collaboration with their respective Sub-Zoba offices and MOH HQs will oversee operational implementation of activities.

Financial Management: The PMU provides oversight for this at both MOH HQs and Zoba level through its Zoba branch offices. Zobas report to the PMU which report to the Minister of Health and the responsible MOH Departments.

Procurement: All procurements adhere to the MOH procurement guidelines and Gavi procurement requirements, especially WHO-prequalification of goods including cold chain equipment. UNICEF is the main partner that procures vaccines, cold-chain equipment and other critical EPI/VPD commodities.

MOH Partners: WHO, UNICEF, JICA, UNFPA, UNDP, World Bank and EU are the main partners that provide collaborative technical / resource and advisory support to MOH. In the spirit of complementarity, all MOH partners are stakeholders in Gavi and other global interventions.

CSOs: National NGOs and FBOs will continue to provide community level health services as outlined in the CSO and earlier sections of this proposal.

M&E Framework for this Gavi HSS: The M&E functions for this grant are designed to be multi-level but conveniently falling within the M&E system of MOH. The M&E Unit will oversee the overall M&E arrangements / sub-system for this grant starting with monitoring, regular supervision, annual progress reviews and evaluation of the project- right from community level to MOH HQs. Partners, CSOs/FBOs will all be inherent stakeholders of the M&E arrangements and processes, including regular and quality reporting.

5. Acronyms

AEFI	Adverse Effects Following Immunization
BIDHO	People Living with HIV/AIDS

CHW	Community Health Worker
cMYP	Country Multi-Year Plan
CSO	Civil Society Organization
CSS	Community Systems Strengthening
DHMT	District Health Management Team
DKB	Debubawi Keyih Bahri (Southern Red Sea)
DQA	Data Quality Assessment
EOI	Expression of Interest
EPI	Extended Program of Immunisation
EVM	Effective Vaccine Management
FBO	Faith Based Organization
Gavi	Global Alliance for Vaccines & Immunization
GoE	Government of Eritrea
HC	Health Centre
HCSD	Health Care Service Division
HF	Health Facility
HFMC	Health Facility Management Committee
HIS	Health Information System
HMIS	Health Management Information System
HQ	Head Quarter
HRD	Human Resources Development
HS	Health Station
HSCC	Health Sector Coordinating Committee
HSS	Health System Strengthening
HSSDP	Health Sector Strategic Development Plan
H.E.	His/her Excellency
HW	Health Worker
ICC	Interagency Coordinating Committee
IDSR	Integrated Disease Surveillance and Response
IEC	Information, Education and Communication
IPC	Inter-Personal Communication
JANS	Joint Assessment of National Health Strategy
JAR	Joint Annual Review
JICA	Japanese International Corporation for Assistance
KHT	Kebabi Health Teams

LMIS	Logistics & Supply Chain Management information System
LSCM	Logistics & Supply Chain Management
M&E	Monitoring and Evaluation
MCH	Maternal and Child Health
MLHPs	Middle level health professionals
MLM	Middle Level Managers
MLM	Middle Level Managers
MOH	Ministry of Health
MTR	Mid-Term Review
NHA	National Health Accounts
NHP	National Health Policy
NSO	National Statistical Office
NUEW	National Union of Eritrean Women
NUEYS	National Union of Eritrean Youths & Students
PBF	Performance Based Funding
PF	Performance Framework
PHARMECOR	Pharmaceuticals and Medical Equipment Procurement Corporation
PHC	Primary Health Care
PMU	Project Management Unit
PQS	Pre-qualified Standards
PSM	Procurement & Supplies Management
QA	Quality Assurance
RBM	Results Based Management
RDQA	Routine Data Quality Assessment
SKB	Semenawi Keyih Bahri (Northern Red Sea)
SOS	Sustainable Outreach Services
TOR	Terms of Reference
UNDP	United Nations Development Program
UNFPA	United Nations Fund for Population Activities
UNICEF	United Nations Children Fund
UNIGME	UN-Interagency Group for the Estimation of Child Mortality
VPD	Vaccine Preventable Disease
WHO	World Health Organisation
ZHMT	Zoba Health Management Team

PART B: BACKGROUND INFORMATION

6. Description of the National Health Sector

ORGANISATION OF HEALTH DELIVERY SYSTEM AND THE REFERRAL NETWORK

The referral network is aligned with the three-tier health care delivery system. The Primary Level (186 Health Stations, 53 Health Centres and 13 Community Hospitals): the Sub-Zoba hospital is the first referral centre for the lower health facilities. The health facilities are distributed according to the politico-administrative structures. The Secondary Level (Zoba Regional Referral Hospitals): are the second level referral centres. *The* Tertiary Level- has the national referral hospitals- all based in Asmara, the capital city. The Referral System is backed by the referral policy, referral guidelines and protocols that guide the referral services to ensure continuum of care. Basic health services are delivered to the community by trained/equipped CHWs (under the leadership of the Kebabi Health Committee and integrated outreach service teams from the area health facilities. In Eritrea a community (called Kebabi or Village) is defined as a catchment area with an estimated average population of 500-2000 people.

Stewardship: Leadership and Governance of the health system

The health sector is led and steered by the MOH: it provides leadership and governance through policy stewardship/regulation, strategic planning, and coordination of health actions for improvement of health status of the population countrywide. The MOH collaborates closely with other line ministries that are important determinants of health outcomes as well.

MOH has built constructive partnerships in the health sector with key health partners to ensure the health system is strengthened for better performance in all aspects. These key and invaluable health/development partners are: the UN Family (WHO, UNICEF, UNFPA, UNDP, etc.), faith-based organisations (FBOs), national non-governmental organisations (NGOs), and professional associations.

Health System Resources

Workforce and Human Resources

The lowest level of conventional health services, health stations and health centers, are mainly staffed by associate nurses and headed by nurses. Community hospitals, second contact hospitals and zoba referral hospitals on the other hand are headed by doctors and staffed by GPs, nurses, associate nurses and a mix of various professionals and support staff. Community level health services are manned mainly by CHWs; outreach services by area health facilities, too, bring services closer to the community.

Procurement policy and Procurement Mechanisms*:* MOH has National procurement Guideline including Global Fund procurement Guidelines as contained in the Procurement Manual used for GF procurement practices. The procurement officers for Global Fund Grant at the same time they handle GAVI procurements. Most EPI commodities are procured by the country office of UNICEF. MOH has recently had a National Supply Chain Assessment to guide formulation of the National Logistics & Supply Chain Policy; the document is herein attached.

The EPI Supply Chain System & Tiers:

The National Level store: is the Central Vaccine Store (CVS) where vaccine is received directly from the vaccine manufacturer or from an international supplier such as UNICEF Supply Division. Typically vaccine is stored in large walk-in cold rooms and freezer rooms. In the Eritrea PR is Central Vaccine Store (CVS) at Orotta Hospital (MCH), in Asmara, receiving vaccine for country and distributing it to lower levels. This store has 2 walk-in cold rooms, 4 ILRs and 4 freezers for storing vaccines.

The Sub-National (SN) / The Zoba Level*:* where vaccine is received from the primary store, stored for an agreed period, and then distributed to lower levels stores or to health facilities. These stores may have a cold room and/or a number of vaccine refrigerators and freezers. Sub-national level in Eritrea is represented by 6 Zobas. Four of them have cold rooms of $10M^3$ gross capacities installed and are functional now.

The Lowest Delivery (LD)/ The Sub-Zoba Level): store where vaccine is received, either from the primary store or from a sub-national store. From this point it is distributed directly to service delivery points. The lowest delivery level does not normally provide any immunization services. The lowest distribution level in Eritrea

represented by the Sub-Zoba level. There are 58 Sub-Zobas.

Service Delivery Points (SD): such as health centres and health posts, where vaccine is stored for a short time before delivery to the target population – usually in a single refrigerator, but also, on a very short-term basis, in vaccine cold boxes or vaccine carriers. Each service delivery point may distribute vaccine to other service delivery points. Currently, the MOH is operating 28 hospitals, 56 health centres, and 193 health stations. There are 280 static EPI service points, and 450 outreach sites out of identified 750.

Vaccine Storage and Distribution Practices, MOH EPI Program. With the exception of two stores at service delivery level, EVM 2012 assessment showed that cold and dry storage capacities were only sufficient for the traditional vaccines and their associated consumables but not for new vaccines to be introduced. The same applies to the buildings and cold chain equipment. The majority of EPI workers had good knowledge and understanding of basic vaccine management.

Post Procurement Performance Evaluation System: Quality control for drugs, mosquito bed nets and other items is carried out during the process of procurement and before delivery to end users. Occasionally, during the process of implementation site visits are done to check the efficacy and safety of procured items. Quarterly site supervision is also done by the engineering unit of the MoH to inspect progress of implementation of civil works.

Logistics & Supply Chain Management information System (LMIS): Though all logistics and supply chain records are well kept and secured, there is no LMIS in place yet. The National Logistics & Supply Chain policy in offing will most likely mandate mainstreaming of the current supplies' info into a LMIS.

Health Information Systems, including Disease Surveillance

There are different routine health information systems within and outside the Ministry of Health operating on both paper-based tools and computerized databases. The M&E uses a combination of data collection methods and sources to ensure strategic information flow. Health facilities report both the HMIS data and the programme specific information (which is not captured by HMIS) to the Zoba level. The Zobas then report the data and information to the HMIS, and MOH Programmes, for more analysis, dissemination and use. Programmes are required to provide feedback to the Zobas and the health facilities, in order to bring about programme improvement.

The Integrated Disease Surveillance and Response (IDSR) is a routine surveillance system with a specialized function of tracking epidemiological occurrences at early stages. IDSR provides weekly, monthly and quarterly reports in 21 diseases and related cases. Zoba IDSR officers enter weekly data into the IDSR database and report the cases monthly in electronic format to the national IDSR database. The data from the national IDSR are transmitted to the WHO headquarters (Geneva) on weekly, monthly and quarterly bases to be consolidated in an international database. In addition to tracking epidemics, these data are also utilized for triangulation to verify data reliability transmitted by HMIS. Data from population/community surveys and research studies are reported through the Programmes, or directly to the M&E unit.

The HMIS conducts regular data quality assessment. Similarly the M&E unit also conducts an independent data quality and data audit annually. It randomly selects some indicators from the M&E framework and tracks the data for the indicator up-to health facility level. The M&E data quality assessment is an independent data audit and verification as opposed to the HMIS data quality assessment which is more of an in-house and self-assessment exercises. Both of these subsystems however complement each other and serve as checks and balances with respect to the quality and accuracy of data flow across the service delivery ladder.

The EPI coverage survey is done at least every 2-3 years while the EPI programmatic reports is done on annual basis as part of the APR (annual progress report) which has to be submitted to GAVI and copied to the MoH, Minster's office.

Health Financing

In principle MOH sees health insurance or efficient pre-payment scheme as favourable, fair and sustainable means of health financing in the country. Considering the desire to improve the quality of care in health facilities for a population with an increasing burden of non-communicable diseases, there is need to transform the financing framework that has been in existence (from independence two decades ago) with the aim of reducing the economic risks borne by individuals and households while concurrently generating other resources for the attainment of the sectors' strategic objective, HSSDP 2012-2016).

7. National Health Sector Plan (NHSP) and relationship with cMYP

The National Health Policy, 2010 adheres to the guiding principles of health system functionality and health service delivery in the country. The HSSDP, 2012-16, on the other hand, gives strategic directions for programmatic implementation of health services countrywide. Key partners in executing the objectives of the HSSDP are: the UN Family (WHO, UNICEF, UNDP and UNFPA); CSOs and FBOs (as outlined earlier); and the core Community.

The NHP, 2010 as well as the HSSDP 2012- 16: mission as regards to child health is the reduction of morbidity and mortality of neonates, infants and children under-five by addressing the main problem diseases such as acute respiratory infection, malaria, diarrhoea, vaccine preventable diseases, and malnutrition, (the NHP, 2010; pg. 17).

HSSDP Focus of EPI: Increase immunization coverage by improving access and utilization of EPI services nationwide through effectively addressing problems affecting the various system components of the national EPI program (HSSDP 2012-16; pgs 24-27).

All the child health issues guided by the NHP and detailed in the HSSDP are incorporated in the current cMYP (2012- 2016) which are updated on a yearly basis. Thus the objectives, implementation strategies and targets to be met in the existing cMYP are consistent with our 2012 – 2016 HSSDP. The forthcoming cMYP formulation will also concur with the development of the next HSSDP (2017-2021), which will also capture the guiding principles and contents of this GAVI HSS grant proposal to ensure complementarities and harmonization. Issues related to equity and access to immunization will be prioritized and captured in the next HSSDP and cMYP which will also be in alignment with the current GAVI HSS grant during implementation.

Specific Objectives of Child Health in the HSSDP, 2012-2016:

1. Achieve >90% valid Penta3 coverage at National, with at least 80% coverage in every district.
2. Maintain the level of Polio free, Measles and MNT elimination status with >90% valid coverage of all antigens.
3. 100% of Zobas (Districts) and 95% of Health facilities with adequate number of functional cold chain equipment and have spare parts.
4. 100% of Surveillance reports expected, timely arrived from the districts and meets completeness criteria.
5. 90% of the health facilities will have at least two EPI trained health workers on safe vaccine administration and Cold chain management.
6. 85% of caretakers / mothers of children <1yr understand the importance of vaccines & when to return back for next immunization session. Procure sufficient amount of vaccines & injection safety materials to vaccinate 85% of the target children <1yr.

Strategies

1. Capacity building of EPI focal persons on vaccine and cold chain managements
2. Promote REC/RED approaches strategy in hard to reach and low performing Sub-Zobas
3. Strengthen EPI target disease surveillance at all levels
4. Procurement of adequate Vaccines and other EPI logistics
5. Promote community awareness on vaccination.

JANS has not been done for the HSSDP 2012 – 2016. However, a comprehensive MTR for the HSSDP was carried out in Nov. 2014 taking into consideration the spirit and concepts of JANS. The findings and recommendations of the HSSDP MTR were fed into the development of this proposal. Preparations for the next HSSDP (2017-2021) has already started with the situation analysis component completed. This means the draft HSSDP 2017-2021 will be completed by the end of 2016. Before implementation of the plan the final draft will be subjected to JANS review in the first quarter of 2017. Implementation proper will start in early 2017 and be aligned with the current GAVI HSS grant.

MTR HSSDP 2012-16, Nov. 2014 Findings

Summary of key findings and condensed short term and long term recommendations can be found on **pages xiii – xvi of the MTR HSSDP, Nov. 2014.** NB***: This document is herein attached.***

Though both the short-term and long-term recommendations have implications for this Gavi proposal and for sustainability of EPI programs (taking into serious regard management capacity for the new vaccines), the long term recommendations are for due consideration for inclusion in the HSSDP subsequent to the current one. The following are highlighted:

- ***Service Delivery:*** strengthen MNCH services with emphasis on: addressing the three delays; improving EmONC; and increasing equitable access to EPI/VPD services;
- ***Systems Approach:*** develop a Strategic Health Systems Investment Plan that highlights all the six health system building blocks but with emphasis on: evidence based pro-health policies; fair and sustainable health financing strategy; sustainability of Gavi EPI, HSS and other HSS investments; institutionalizing QA/CQI strategies system wide/in all programs; sound base of strategic information in all programs; revamped HRH/HRD strategies; rational medical equipment deployment and maintenance; among others;
- ***Planning & Coordination:*** effective coordination of programmatic and operational interventions; wider stakeholder participation, including strengthening CSO participation; develop the PPPH strategy that adapts to the socio-cultural and socio-economic aspirations of the Eritrean populace;
- ***Health Financing:*** Develop fair and sustainable health financing strategy for the country building on the health cost-recovery contributions in practice; expand the Financial Information System to be commensurate with WHO standards; explore mechanisms of strengthening MOH stewardship of health care financing.

How MOH and Partners are addressing the challenges / bottlenecks identified:

MOH and partners are working closely to address the bottlenecks and recommendations identified in the HSSDP MTR. (Nov. 2014)- as follows in the table below;

MOH and Partners collaboration in addressing the challenges / bottlenecks identified by the MTR HSSDP, Nov. 2014

MOH Partner	Type of support in addressing the bottlenecks identified by the HSSDP MTR, Nov. 2014
WHO CO, Eritrea	• Sourcing of technical support for key health systems/services activities • Funding EPI program activities, especially the RED/REC strategy • Supporting establishment of Sub-Zoba/District health offices • Participation in technical fora of MOH: meetings, retreats, brainstorming sessions on strategies for addressing key health issues identified • Supporting MOH to attend regional WHO meetings on crucial health issues that affect the country's health system performance • Provides support in identifying WHO pre-qualified items for procurement
UNICEF	• Supports MOH in MNCH programs • Supports MOH in EPI program procurements • Supports EPI program planning, for Vaccines, cMYPs JARs, EVM Assessments and other EPI Surveys
JICA	• Funding the five-year ***EPI Cold Chain Equipment and Materials Support Project*** which mainly focuses on the procurement of cold rooms, solar and electrical refrigerators. • The project will also replace non-WHO pre-qualified and obsolete cold chain equipment • Filling up gaps at service level if possible
UNFPA	• Support MOH in maternal and reproductive health
Gavi Secretariat	• Provides support for traditional and new vaccines, • Provides support for HSS through the Gavi HSS program • Provides support for JANs • Provides needs-based support in EPI and HSS

	• Provides technical advisory services and supervision to the country in EPI and HSS
GFATM	• Supports MOH in HIV, TB and Malaria programs
CSOs	• Contribute by participating in HIV, RH, and other health programs
The Core Community	• Provide management oversight in health facility based service delivery • Provide CHWs for community level service delivery • Are import source of health financing though through user fees

8. Monitoring and Evaluation Plan for the National Health Plan

The Integrated Monitoring and Evaluation Framework (2012-2016) has four strategic objectives: harmonize the mechanisms through which data and information is collected, analysed, verified, and transformed into useful information, to promote evidence based planning and management decisions; institutionalize the use of data for evidence based decision-making; ensure the availability of appropriate human resources, partnerships and planning necessary to support data collection and data use for improving and sustaining M&E system performance; and provide up to date data and information on the performance of the health sector with emphasis on the programmes covered in this document. A copy of the national M&E Framework is attached with this proposal.

The EPI data is routinely collected using uniform data collection tools (tally sheet, summary sheet) at service delivery level and is reported through the HMIS system from district to national level. At national and sub national level aggregated data is analysed for planning and decision making purposes. EPI indicators are captured from the HMIS system at national level.

In order to capture disaggregated data (sex, age, wealth quintiles...etc) EPI coverage survey is conducted every three years, EPHS every five years, and there are plans to conduct equity assessment survey in 2016.

Summary of how the National M&E Plan is implemented in practice

The national integrated monitoring and evaluation framework is for monitoring and assessing the health sector strategic plan, and it is strongly linked with program specific M&E plans. The M&E Framework primarily facilitates the generation and availability of strategic information for effective management of the seven major programs of MOH: HIV/AIDS, Malaria, TB, Child Health/EPI, Reproductive health, Nutrition and Health Systems Strengthening. The frame work also facilitates tracking and assessment of performance towards the attainment of the set HSSDP goals, strategic objectives, outcomes and outputs as detailed on pages 17-39. Pages 37-39 are dedicated to ***Health Systems Strengthening Results Framework 2012-2016***, while pages 40-48 are dedicated to ***National Integrated Monitoring & Evaluation Action Plan (NIMEAP) 2012-2016***. To allot specific responsibilities, it dedicates pages 49-53 to ***Institutional Arrangements for M&E Coordination, Management and Implementation***.

The MOH M&E Unit is the overseer of M&E functions and actions in the health sector in collaboration with all other MOH programs in order to ensure effective M&E of implementation of the HSSDP.

Roles of Development Partners in the implementation and financing of the national M&E Plan

Development partners provide support to MOH in various aspect of the national M&E: UNAIDS provided technical and financial support in the development of this M&E framework, while WHO, UNICEF, other UN family organizations and other organizations, like JICA among others, also provide technical and financial support in implementation of the national integrated M&E Framework-especially when MOH is severely resource constrained.

Joint Annual Health Sector Review (JAR)

The most recent JAR of the cMYP 2012-2016 was done in May 2015. Gavi provided both technical and financial support to this JAR. MOH also carries annual Health Sector Reviews- drawing both the national and sub-national officials in the review process. This facilitates realistic review of program performance at both national and sub-national levels.

DQAs (data quality Audits and Assessments)

Data quality assessment is carried out at apparently three levels:

- HMIS Data Quality self-assessment is carried periodically by the HMIS Division (using its own data auditing tool of in-house data quality assessment), with reports shared amongst the MOH departments.
- Evaluations/Reviews and special surveys/assessments (e.g. MTRs, end of term reviews, JARs, EVMs, etc.) also examine quality of data of the programs under review.

The M&E Unit annually caries an independent Data Quality Audit using an assessment tool (the "Routine Data Quality Assessment Tool- RDQA tool". This acts as the data QA tool of the M&E Unit. The annual M&E data quality assessment meetings are also carried out by the MOH M&E Unit to ensure adherence to MOH/WHO data quality standards.

9. Alignment with existing results based financing (RBF) programmes (where relevant)

The country uses line item budgeting system and results based financing is not yet in place, even though there are plans in future.

Part C: Application details

10. Health System Bottlenecks to Achieving Immunisation Outcomes

I. Service Delivery Challenges undermining achievement of desired health outcomes

Limited Access to EPI/VPD and other priority health services, worse in hard to reach areas and populations: Challenging areas with consistently limited access to EPI services as well as limited access to other priority health services are: Southern Red Sea (SRS), Gash Barka (G/Barka), Northern Red Sea (NRS) and Debub. Valid immunization coverage is below the target of 90% in SRS, G/Barka and NRS for all antigens, while the remaining three regions had coverage of 90% and above. Generally, up to 40% of the population does not have a health facility within 5 Kms. radius of their residences (HSSDP, 2012). Details in access can be found in the following sources: **EPI Coverage Survey Eritrea, 2013 (pgs. 13, 20-24 & 31-42); HSSDP MTR, 2014 (pgs. 5-6) and HSSDP 2012-2016 (pgs. 22-28, 20, 24).**

Low coverage by outreach services undermining access to EPI/VPD and priority health services, especially in hard-to-reach areas. The current EPI program covers only 60% (450) of the identified 750 sites. Four of the six Zobas have HTR areas and HTR nomadic populations. The underlying bottlenecks constraining EPI service delivery are lack of means of transport for delivery of outreach services to the HTR areas and populations, as well as lack of financial resources for paying outreach team allowances and also for meeting running costs of the outreach vehicles. More challenging is access of outreach teams to rugged mountainous terrains in the highlands. Further details on outreach services can be found in the following sources: **EPI Coverage Survey Eritrea, 2013 (pgs. 29, 30); JAR cMYP12, May 2015 (pgs. 2, 12, 19, 20, 21); HSSDP MTR, 2014 (pg. 6); HSSDP 2012-2016 (pgs. 26-27); & EVM, 2012 (pg. 19).**

Sub-optimal community demand generation for & uptake of EPI services: The draft EPI Communication Strategy needs to be finalized and implemented in order to drive community demand generation for & uptake of EPI services at all levels of the health system. Lack of functional communication strategy also continues to impair effective community mobilization and participation in related health actions. **Refs: JAR cMYP Eritrea, May 2015 (pgs. 2, 4, 19-21); EPI Coverage Survey Eritrea, 2013 (pgs. 31); HSSDP 2012-2016 (pgs. 36-37).**

Significant skills deficits in health system management competences undermining health system performance, especially at sub-national levels: Main areas of management competences are in health planning and budgeting, basic PSM skills, supportive supervision and program coordination. The MLM professionals, in particular, lack such skills- yet they are the ones in-charge of planning, coordinating and overseeing operational implementation of most health projects/programs at Zoba and Sub-Zoba levels. For more details refer to: **MTR HSSDP, 2014 (13, 24); Rapid HSS Gap Analysis, Eritrea, 2014 (3); EVM, 2012 (6, 28-32, 36, 38-39, 41-44, 53, 55, 57, 59)**

EPI Specific Supportive Supervision is weak in the context of Sustainable Outreach Services: Lack of means of transport and related fuel not only constraints out outreach service delivery but also hampers regular support supervisory visits. This further widens and perpetuates gaps in coverage and inequity of access of EPI/VPD and other priority health services- as highlighted in the following sources: **JAR cMYP Eritrea, 2015 (2; 9; 15); MTR HSSDP, 2014 (12, 24); Rapid HSS Gap Analysis, Eritrea, 2014 (3, 8); EPI Coverage Survey Eritrea, 2013 (30).**

Some health facilities have inappropriate healthcare waste management and poor lighting, even in critical areas: inappropriate for EPI & other service delivery

Apart from the national referral and the six Zoba Referral hospitals that have incinerators, all the Sub-Zoba /Community hospitals, all the health centres and health stations do not have incinerators. These Sub-Zoba health facilities use pit/open-air burning method for healthcare waste management- quite hazardous to environmental health and intermittent electric power supply. Hence it is important for MOH to equip the deserving (selected) health facilities with appropriate / recommended incinerators and photovoltaic solar gadgets. Details can be found in: **JAR cMYP Eritrea, 2015 (pgs. 4, 18); MTR HSSDP, 2014 (pgs. 13, 19-20).**

Concerns on equity of access to EPI and other priority services

The statement in JAR May 2015, 'The life style of the nomadic population at the coastal districts, high dropout rate between BCG – Measles, limited community empowerment, inequitable access to health services' is just a glimpse of inequity of access to EPI/VPD and other priority health services. However, it is worth noting that there is no gender related inequity in the country especially as related to EPI services.

Lowest access to EPI/VPD and other priority services is found in the lowest and second lowest socio-economic quintiles, putting at risk children of mothers and or families in remote/rural and HTR areas, HTR (mostly nomadic) populations as well as children in households with young mothers below 24 years and aged mothers 35 years and above. The region with some inequities and that deserve remedial approaches are: Zoba SRS, NRS, Debub and G/Barka. Details can be accessed in the following resources: **EPHS, 2010 (pgs. 197-201); EPI Coverage Survey Eritrea, 2013 (pgs. 19, 20-24, 29, 31-42); JAR cMYP Eritrea, 2015 (pgs. 4-5, 15); MTR HSSDP, 2014 (24).**

II. Logistic & Supply Chain Management (LSCM)/ PSM Challenges afflicting EPI Service delivery

Limited cold storage capacity at the Central EPI Store, in Zoba/Regional Vaccine Stores, in Sub-Zoba/District Stores and in health facilities to accommodate the traditional and new vaccines; dry storage capacities are inadequate too. The introduction of new vaccines in the country in addition to the traditional vaccines has depleted the original cold storage capacity. JAR cMYP, May 2015 shows the following

cold storage capacity gaps: so there is need for two additional walk-in cold rooms of $30M^3$; need for 150 Solar Direct Drive (SDD) fridges for vaccine storage over the next five years to replace the obsolete non-WHO prequalified fridges. Dry storage gaps: Central level- need for 20 x 25 M^2 dry store; Zoba level- need for 10 x $15M^2$ in Zoba G/Barka and 10 x $15M^2$ in Dubarba. The dry store of 8 x $20M^2$ in Zoba NRS needs renovation. Details can be found in: **EVM, 2012 (pgs. 22-23, 27-28, 30-34, 36, 45-49, 55-56, 59-60); JAR cMYP Eritrea, 2015 (pgs. 2, 9, 17, 20); MTR HSSDP, 2014 (pg. 17).**

Inadequate dry storage capacity at the Central EPI Store and Zoba Vaccine Stores

Dry storage gaps have emerged due to corresponding increase in the quantity of EPI consumables to that of vaccines- so much that in the Central EPI Cold Room store, dry consumables are stacked and squeezed in cold room store corridors and in spaces adjacent to the walk-in cold rooms. The Central level- needs one 20 x $25M^2$ dry store; Zoba level- need for one 10 x 15 M^2 in Zoba G/Barka and one 10 x 15 M^2 in Barentu. The dry store of 8 x $20M^2$ in Zoba NRS needs renovation.

Details challenges on cold and dry storage can be found in: **EVM, 2012 (pgs. 22-23, 27-28, 30-34, 36, 45-49, 55-56, 59-60); JAR cMYP Eritrea, 2015 (pgs. 2, 9, 17, 20); MTR HSSDP, 2014 (pg. 17).**

Challenges in distribution of vaccine, other cold-chain dependent medicines/commodities and dry EPI commodities: The EPI program does not have its own transport. Even for transportation of vaccines right from the airport to the sub-national levels, it depends on the non-refrigerated / non-medical commodity-adapted vehicles from the MOH pool. However there is a need for availability of refrigerated trucks specifically assigned for the EPI program to deliver vaccines from national to sub-national levels and also non refrigerated vehicles assigned to the bio-medical engineering division to carry out preventive maintenance for the cold chain system. For details, please refer to the following sources: **EVM, 2012 (pgs. 24, 26-27, 30-31, 39-40, 51-52, 57, 61); JAR cMYP Eritrea, 2015 (pgs. 9, 15, 16, 20); HSSDP MTR, 2014 (pg. 17); Rapid HSS Gap Analysis, Eritrea, 2014 (pg. 8).**

The quality of vaccine potency monitoring is sub-optimal, reflecting generalized challenges in the quality of management of EPI and other medical commodity stocks, especially sub-national levels: The EVM 2012 assessment and the JAR, May 2015 reveal that the quality of vaccine temperature monitoring is suboptimal and is the weakest link in the cold chain system- more so at sub-national level. It is therefore implicit that there are skill deficits not only in vaccine management but also general medical commodity stock management. This calls for interventions for improvement, including frequent refresher training of MLM and other health professionals at all levels of the health system with a lot more emphasis on the sub-national level. Details on this can be accessed in**: EVM, 2012 (pgs. 29-32, 36, 41-44, 53, 55, 57-59, 62); JAR cMYP Eritrea, May 2015 (pgs. 14, 20, 21); HSSDP MTR Nov. 2014 (17, 26) , Eritrea EOI.**

Continued MLM weaknesses in forecasting and quantification of EPI and other Medical commodities, compounded by high turnover of staff in HTR areas: This calls for improved skills in quantification and forecasting of stocks of essentials. Most MLM and other health professionals lack these skills- leading to the observed threats to vaccine and medicine potency, high wastage rates and stock outs, especially at sub-national levels- as presented above. High turnover of staff in HTR areas continuously depletes the EPI competence pools at sub-national levels. Multi-pronged feasible approaches are needed to address such skill deficits since the underlying causes may be system wide. Details on this can be found in: **EVM, 2012 (pgs. 24, 26-31, 38-42, 49-52, 56-57, 58, 61); JAR cMYP Eritrea, 2015 (pgs. 13, 16-17, 20); MTR HSSDP, 2014 (pgs. 17, 24); Rapid HSS Gap Analysis, Eritrea, 2014 (5, 7); Rapid HRH Assessment, 2014 (pgs. 30, 33).**

Inadequate Biomedical Technical Capacity / Support for Cold Chain Management: The need for increasing the capacity of biomedical engineering support in the cold chain system is necessitated by two salient factors: the scheduled and unscheduled calls for biomedical engineering support countrywide and the compelling need to maintain the impressive EPI performance by ensuring biomedical engineering technical drawbacks are not a significant factor in achieving good EPI program performance. Currently there is no scheduled biomedical engineering technical support to the EPI

cold chain system countrywide due to lack of skilled biomedical engineering technicians. Details on this are available in: **EVM, 2012 (pgs. 36-37, 48-49, 56,60); JAR cMYP Eritrea, May 2015 (pgs. 2, 9, 16-17, 20); MTR HSSDP, 2014 (pgs. 17, 18).**

The Requested and Implied need to increase Cold Chain Supportive Supervision: One of the key recommendations of EVM 2012 and JAR cMYP 2015 is a call for stronger support supervision in the EPI program, including the cold chain system. The EPI program has unique operational demands and deserves to have one EPI-dedicated vehicle for regular support supervision and response to emergency calls related to VPD outbreaks, cold chain extraordinary operational demands and or trouble shooting. Please refer to the following sources for details: **EVM, 2012 (pgs. 64-73); JAR cMYP Eritrea, May 2015 (pgs. 14-16, 19-21)**

III. Health Information System (HMIS, IDSR & M&E)

Weak data management capacity / widespread data management skills deficits at all levels resulting into poor data quality: The challenge now is to find mechanisms of instilling passion in data management personnel at all levels. The following literatures give the prevalence of poor data quality in health system programs: **MTR HSSDP, 2014 (pgs.16, 25-27, 27-28, 30); EVM, 2012 (pgs. 53, 58); JAR cMYP Eritrea, May 2015 (pgs. 15, 20-21); HSSDP, 2012-2016 (pgs. 60-62)**

A rapid health system assessment of the country in Feb. 2014 found that 'at all levels there is lack of capacity to produce, analyse and interpret data/ to inform policy and operations. This is further compounded by the high attrition rate (of about 18%) that continues to deplete professionals with quality data management system- all undermining the strategic projections of HSSDP 2012-2016. How EPI and other programmatic operational qualities are hampered by this challenge can be found in the following sources: **JAR cMYP Eritrea, May 2015 (9); MTR HSSDP, 2014 (pgs. 2, 24-27, 28-29, 30); Rapid HSS Gap Analysis, Eritrea, 2014 (pgs. 5-6).**

Very low frequency of DQA (Data Quality Audit) and Routine Surveys for EPI/VPD Surveillance and HSSDP Performance Monitoring due Resource Constraints in M&E Unit

The M&E unit has planned to improve data quality as well as support MOH programs health system wide as follows: EPI specific routine studies (Annual cMYP JARs; two EPI Coverage surveys in the next five years; EVM Assessment; GAVI HSS MTR & End Term Evaluation)- in addition to Health Facility Assessment that includes EPI variables and annual independent M&E unit-led DQA from health facility to national level and annual M&E Systems Strengthening Assessment need to be conducted. These activities will considerably address the current bottlenecks hindering the M&E unit in contributing remedial efforts towards improvement of data quality and quantity of routine surveys in programs. The specific needs for M&E functions are variously expressed in the following sources: **EVM, 2012 (pgs. 65-73); JAR cMYP Eritrea, May 2015 (pgs. 9, 16, 17, 20, 22); MTR HSSDP, 2014 (pgs. 26-27); HSSDP 2012-2016 (pgs. 60-62).**

Resource bottlenecks in upgrading HMIS to DHIS 2, and in data transmission from sub national level to MOH HQs : MOH in collaboration with Oslo University is upgrading the current HMIS to the internet / web based DHIS 2. There is, however, a resource shortfall for purchasing and installing the required ADSL data transfer software. HMIS and M&E staff will then be trained on the use of the software. This is likely to improve data transmission from sub national level to national level. The current internet connectivity is sluggish, frequently interrupted and inconvenient for timely data transmission from the regional HMIS offices to MOH HQs. There is need to secure high speed internet connectivity for faster and uninterrupted data transmission between the regions and MOH HMIS database. This needs budgetary backing from this grant. Challenges are well stated in **MTR HSSDP, 2014 (pgs. 26-27).**

The databases in the health system are not integrated & not interoperable: Rapid HSS Gap Analysis In Feb. 2014 found out that there are many programmatic databases but they function as standalone units: they are not interoperable. These are the HMIS, HRD, disease specific databases, PHARMECOR database, and others. There is need to change these databases into relational databases so that

they are interoperable. Please refer to the following sources for details: **Rapid HSS Gap Analysis, Eritrea, 2014 (pg. 5); MTR HSSDP, 2014 (pg.27).**

IV. Community Systems Support/Strengthening (CSS)

There is no comprehensive community strategy for the country: This is a policy document that is socio-culturally well aligned and that guides community level health service planning, organization, coordination and delivery. Formulation of this document is long overdue- since CHWs are very crucial in various approaches employed in task shifting in addition to being a bridge linking communities to health facility based services thereby ensuring continuum of care. The following references can be accessed: **JAR cMYP Eritrea, May 2015 (pgs. 2, 20, 22); MTR HSSDP, 2014 (pg. 16).**

Current CHWs are mono/parallel trained for specific health programs rather than being multi-skilled for integrated service delivery. The current CHWs are trained for delivery of program specific services like malaria, TB, Nutrition, etc. This narrows the scope of their usefulness to the current approach of integrated health service delivery. Therefore, CHWs need to be multi-skilled so as to be more efficient. More details on: **MTR HSSDP, 2014 (pgs. 6, 16); JAR cMYP Eritrea, 2015 (pg. 9)**

The EPI Communication Strategy has not yet been implemented to drive community demand generation for and uptake of EPI and other priority health services. The consequences of having no EPI Communication Strategy are not favourable to both the demand and supply sides of health services. Communities participate better in health services when adequately mobilized: this is one of purposes of both the Communication Strategy and the Community Strategy. Therefore, implementation of the Communication Strategy should be made a priority. Backing references are: **JAR cMYP Eritrea, May 2015 (pgs. 20, 22); MTR HSSDP, 2014 (pg. 11); Rapid HSS Gap Analysis, Eritrea, 2014 (pg. 8); EPI Coverage Survey Eritrea, 2013 (pg. 30); JAR cMYP Eritrea, May 2015 (2; 15; 17)**

Communities are not well informed on Adverse Effects Following Immunization (AEFI) in the context of good IPC and patient safety in EPI services and other healthcare services.

Communities can only be well informed if health workers are equally wee-trained in good communication skills (including IPC) that are compatible with the socio-cultural setting of the community. This will be possible once the patient policy is in place and the EPI communication strategy is operational. Please refer to the following texts for details: **JAR cMYP Eritrea, May 2015 (pg. 16); Draft EPI communication Strategy; Draft Patient Safety Policy; HSSDP 2012-2016 (pgs. 34-37).**

Health facility-Community interface is weak: there are no community dialogues & Sub-Zoba health forums in many Sub-Zobas. Weak interface between health facilities, health professionals, and the community erodes community confidence in the health services offered and community ownership of the health facility too; communities will have no room for expressing their expectations. Moreover, health facilities are one of the key sources of obtaining information on health- as mentioned in the EPI Coverage Survey report. It will be worth exploring various ways of strengthening health facility-community interface- especially adapting community dialogues and health forums to suit the socio-cultural settings of the country. Please see the following references for details: **JAR cMYP Eritrea, May 2015 (pgs. 2, 16); EPI Coverage Survey Eritrea, 2013 (pg. 30); Rapid HSS Gap Analysis, Eritrea, 2014 (8).**

V. HRH: Human Resources for Health

Coupled HRH bottlenecks weakening health system performance:

- ***Significant HRH gap in most health professional areas; overall gap of 40.4% for critical health professionals (sourced from HRHIS database) and High workload in most health facilities due to HRH shortages/the high turnover and need to improve HW retention & motivation***

The HRH gap may be currently higher due to observed overall health worker attrition of nearly 18% (17.9% for all cadres): 0.6 for Drs & 4.1% for nurses. The increasingly high workload, low salaries, unpredictable incentives and lack of hardship allowances in HTR areas / populations may be

contributing to the high attrition reported in the MTR HSSDP, 2012-2016. Details can also be found in: **JAR cMYP Eritrea, May 2015 (pgs. 13, 17); MTR HSSDP, 2014 (pg. 24); Rapid HSS Gap Analysis, Eritrea, 2014 (pg. 5); Rapid HRH Assessment, 2014 (pgs. 14, 30, 32, 33)**

Rate of production of health professionals does not match the current health system demands

Nearly, 400 health professionals are produced annually from training institutions in-country but this is undermined by the high attrition rate of nearly 18%: MTR HSSDP, 2014 (pgs. 16, 24).

The existing curricula for training mid-level health professionals have not yet been reviewed to include up to date principles and practices of EPI. *Hence* there is an urgent need to review the training curricula of all health training institutions and update them to incorporate the current principles and practices of EPI/VPD. The curricula update should not be limited to nurse training institutions but also medical schools producing doctors. Please refer to more details in: **JAR cMYP Eritrea, May 2015 (pg. 22)**

Weak national research capacity: inadequate operational researches being carried out in the entire health system, including monitoring the performance of HRH

Strengthening the research culture in the country has been constrained by a number of factors:

- ***Very few health professionals well trained and grounded in research skills at masters and doctoral levels***
- ***Lack of resources for training such professionals in reputable universities / research institutions***
- ***Lack of research funding for generic and operational researches in the country***

Although MOH has a research agenda, this cannot be aptly implemented without professionals with quality research competence. Whenever the country needs to conduct quality research (e.g. evaluations and surveys) external technical support is usually sought through the development partners. To reverse this trend, this country knows the profiles of the health professionals fit for training in research skills by reputable universities. Most of these carefully selected professionals, once trained, will return to the country and become mentors in research for young professionals in the country. This will strengthen evidence based decision making and will boost sustainability of research competence and culture. Details on these are accessible in: **MTR HSSDP, 2014 (pg. 21; 28-29); Rapid HSS Gap Analysis, Eritrea, 2014 (pgs. 4, 5); Rapid HRH Assessment, 2014 (23, 30, 33).**

The Distance Education Centre of MOH is poorly equipped, and not able to cope with the current distance education demands of health professionals in the country

The Distance Education Centre is the lifeline for an array of health professionals: professionals carrying out research; distance learning students learning online; lecturers and tutors; and practicing professionals who wish to use search engines to access needed information. However, the centre is currently not well equipped. Equipping this centre is worthwhile as it also contributes to retention of health workers in the health system. References for details: **Rapid HRH Assessment, 2014 (pgs. 16-17, 30, 33); MTR HSSDP, 2014 (pgs. 16, 28-29)**

VI. Leadership and Governance

There are still a number of key policy gaps that weaken the specific policy and structural mandate base in the health system: The specific structural gaps are: No Community Health Unit/Division; No QA Unit/Division in MOH to provide QA oversight; the current QA unit under the Nursing Division is rather limited in scope- not of national scope & mandate. Its capacity cannot effectively manage international accreditation demands in line with WHO recommended standards.

Anecdotal evidence from senior MOH officials and observation in MOH attest to these gaps. Key literatures for details are; **MTR HSSDP, 2014 (pgs. 11-12, 19-23); HSSDP 2012-2016 (pgs. 27-38).**

There are coupled coordination bottlenecks at policy, programmatic and operational levels of the health system. This affects proper alignment of health actions between different ministries, agencies and

sub-national programs, e.g. EPI and other program plans/planning are not well aligned to the current national HSSDP. This has resulted in weak coordination and planning functions between the centre and sub-national levels. Please refer to the sources for details: **JAR cMYP Eritrea, May 2015 (pgs. 20, 22); MTR HSSDP, 2014 (pgs. 22, 23-25); Rapid HSS Gap Analysis, Eritrea, 2014 (pg. 3); Rapid HRH Assessment, 2014 (pgs. 30, 32).**

VII.Health Financing

Although internal financial disbursement (in-country) is efficient, delays in GAVI Secretariat in disbursement in effect delays program/project implementation by MOH and partners.

This is noted to be beyond the control of the HSCC/country. The country will abide by the expedient mechanisms Gavi Secretariat designs. Please see**: JAR cMYP Eritrea, May 2015 (pgs. 2, 9, 18).**

Weak capacity in health financing and fiscal/financial management

The country to date lacks the following: Functional financial information systems; national health accounts (NHA); financial tracking system; and Public expenditure reviews. The country could benefit from capacity building through training and/or hiring relevant expertise to mentor MOH officials at national and sub-national level. This will not only improve the accuracy and timeliness of financial management and reporting but also ensure sustainability of the imparted skills and competence gained. Please refer for details to: **Rapid HSS Gap Analysis, Eritrea, 2014 (pgs. 7-8). JAR cMYP Eritrea, May 2015 (pgs. 13-14, 17, 20, 22); MTR HSSDP, 2014 (pgs. 23, 24).**

11. Health system's priority bottlenecks to be targeted through Gavi HSS support

Service Delivery Challenges undermining achievement of desired health outcomes

1. Concerns on equity of access to EPI and other priority services- addressed an integral part of most bottlenecks
2. Sub-optimal community demand generation for & uptake of EPI services: need for implementation of the EPI Communication Strategy
3. Significant skills deficits in health system management competences undermining health system performance, especially at sub-national levels
4. EPI Specific Supportive Supervision is weak in the context of Sustainable Outreach Services:
5. Inappropriate healthcare waste management and poor lighting in some health facilities
6. Quality of health services- addressed as an integral part of most bottlenecks

Logistic & Supply Chain Management (LSCM)/ PSM Challenges afflicting EPI Service delivery

1. Inadequate cold storage capacity in Zoba/Regional Vaccine Stores, in Sub-Zoba/District Stores and in health facilities to accommodate the traditional and new vaccines.
2. Inadequate dry storage capacity at the Central EPI Store and Zoba Vaccine Stores
3. Challenges in distribution of vaccines, other cold-chain dependent medicines/commodities and dry EPI commodities
4. The quality of vaccine potency monitoring is sub-optimal, reflecting generalized challenges in the quality of management of EPI and other medical commodity stocks, especially sub-national levels
5. Continued MLM weaknesses in forecasting and quantification of EPI and other Medical commodities, compounded by high turnover of staff in HTR areas:
6. Inadequate Biomedical Technical Capacity / Support for Cold Chain Management
7. Insufficient EPI/Cold Chain Supportive Supervision
8. Inadequate EPI guidelines and reporting tools.

Health Information System (HMIS, IDSR & M&E)

1. Weak data management capacity / widespread data management skills deficits at all levels resulting into poor data quality
2. Very low frequency of DQA (Data Quality Audit) and Routine Surveys for EPI/VPD Surveillance and HSSDP Performance Monitoring due Resource Constraints in M&E Unit
3. Resource bottlenecks in upgrading HMIS to DHIS 2, and in data transmission from sub national level to MOH HQs.
4. The databases in the health system are not integrated & not interoperable

Community Systems Support/Strengthening (CSS)

1. There is no comprehensive community strategy for the country
2. Current CHWs are mono/parallel trained for specific health programs rather than being multi-skilled for integrated service delivery
3. The EPI Communication Strategy has not yet been implemented to drive community demand generation for and uptake of EPI and other priority health services
4. Communities are not well informed on Adverse Effects Following Immunization (AEFI) in the context of good IPC and patient safety in EPI services and other healthcare services.
5. Health facility-Community interface is weak: there are no community dialogues & Sub-Zoba health forums in many Sub-Zobas

HRH: Human Resources for Health

1. The existing curricula for training mid-level health professionals have not yet been reviewed to include up to date principles and practices of EPI
2. Weak national research capacity: inadequate operational researches being carried out in the entire health system, including monitoring the performance of HRH
3. The Distance Education Centre of MOH is poorly equipped, and not able to cope with the current distance education demands of health professionals in the country

Leadership and Governance

1. Weak coordination of health services/health actions between different ministries and agencies/partners and sub-national level
2. Weak coordination and planning functions at sub-national levels- implying weak health system management skills

12. Objectives of the NHSP and application

Objectives of the Proposal

The overall Goal of Eritrea's 2015 GAVI HSS Proposal: *is to strengthen the health system in order to improve equitable access of communities to quality EPI and other priority health services for better immunization outcomes by 2021*

There are six strategic objectives and a number of specific objectives which have been designed to address the bottlenecks/gaps identified in each health system building block. These objectives emanate from analysis of the health systems bottlenecks and lessons learned from the previous GAVI HSS grant. The lessons learned from the previous GAVI HSS grant, inter alia, included (a) the need to enhance the MoH human and institutional capacity; (b) the need for clearly demonstrable alignment of selected intervention with the immunization outcomes; (c) the need for GAVI/HSS to include in its forthcoming round of financing a sound exit strategy that would ensure the sustainability of gains so far achieved (d) the need for timely disbursement of funds from GAVI HQs in order to maintain momentum of implementation pace of activities. More details of lessons learned are attached as GAVI HSS end project evaluation document.

Strategic Objective 1: Service Delivery:

Enhance equitable access to quality[1] EPI/VPD and other MNCH (Maternal, Neonatal & Child health services) services by the populace (with emphasis on all identified hard-to-reach populations countrywide) so as to increase uptake of EPI/VPD and other MNCH services by communities

Specific Objective 1.1: Activities under this objective will strengthen the capacity of health workers through the REC&RED strategy while providing allowances and transport for improved outreach services to communities, with emphasis on all identified hard-to-reach populations in the country.

Specific Objective 1.2: Activities under this objective will strengthen EPI focused support supervision; while transport will be available, the EPI checklist will be reviewed and allowances will be provided.

Specific Objective 1.3: Activities under this objective will improve health service delivery environment thereby improving patient safety in EPI and other health services. Health professionals will be inducted in management of the bundling system for vaccine and injection safety materials, and four incinerators will be procured and installed in selected health facilities for appropriate healthcare waste management. The introduction of new vaccines has an implication across all the components of the health systems. This includes excessive use of AD syringes and used vials that demand proper disposition.

Specific Objective 1.4: Activities under this objective will improve AEFI surveillance and will address misconceptions on immunization in communities. A set of MLM will be trained to train more health workers on AEFI surveillance, reporting and case management, and also patient safety in EPI and other health services. Communities in catchment areas will also be sensitized accordingly.

Specific Objective 1.5: Activities under this objective will improve neonatal survival by using immunization-linked tracking of every new-born in each village within the first week of the neonatal period. Associate Nurses and CHWs will be trained to track every new-born in each Kebabi to assess their immunization and health status for prompt action.

Strategic Objective 2: LSCM/PSM:

Strengthen the logistics and supply chain management system to improve the efficiency of distribution, storage and stock management of EPI/VPD and other essential medical commodities in the country

Specific Objective 2..1: Activities under this objective will improve the cold and dry storage capacity for vaccines and other essential medical commodities will be expanded at national, Zoba, Sub-Zoba and health facility levels to adequately accommodate the traditional and new vaccines.

Specific Objective 2.2: Activities This objective will improve the efficiency of distribution of vaccines/EPI commodities and other essential medical commodities at national and sub-national levels.

Specific Objective 2.3: Through this objective the quality of management of vaccines as well as other essential medical supplies will improve for assured potency.

Specific Objective 2.4: Through this objective the EPI Cold Chain Maintenance Workshop at MOH HQs will be strengthened for provision of responsive biomedical engineering support across the country.

Strategic Objective 3: HIS:

Strengthen generation and utilization of strategic health information (HMIS, IDSR & M&E/Surveys) on EPI/VPD and other health services for responsive management at all levels of the country's

[1] Quality EPI/VPD & other MNCH services: means provision of responsive, client/patient centred and accessible services in a safe service delivery environment at any level of the health system.

health system

Specific Objective 3.1: Activities under this objective will improve the existing system for data transmission from Zoba level to the HMIS division in MOH HQs.

Specific Objective 3.2: This objective will improve M&E and HMIS staff capacity especially in quality data management and data use for management decision making.

Specific Objective 3*.3:* This objective will strengthen the EPI/VPD surveillance through building the capacity of health professionals/workers for increased vigilance for vaccine preventable disease occurrence at community level as well as health facility level detection- including improved responsiveness to outbreak tendencies. EPI/IDSR support supervision will also be strengthened.

Specific Objective 3.4: Activities under this objective will ensure the DQA (Data Quality Audit) functions of the MOH M&E Unit is strengthened so as to improve EPI/VPD data quality and quality of routine surveys for EPI/VPD surveillance

Strategic Objective 4: CSS:

Improve community demand and uptake of quality EPI/VPD and other priority health services so as to improve EPI and other health outcomes of the country

Specific Objective 4.1: Through this objective The Community Strategy will be formulated to improve community level health service delivery which is already a crucial health system component in this country; it will guide and ensure community level health services are integrated.

Specific Objective 4.2: The focus of this objective is operationalization of the EPI communication strategy that has never been implemented for improvement of community mobilization, participation and demand generation for EPI and other priority health service. Capacity of health workers of all cadres will be built for productive social mobilization.

Specific Objective 4.3: *Activities under* this objective will ensure that CHWs are trained to be multi-skilled for better performance in integrated service delivery at community level.

Specific Objective 4.4: Through this objective, the number of CHWs will be increased to meet the community level service demands adequately. **.**

Specific Objective 4.5: This objective focuses on strengthening the interface between health facilities and communities through courteous IPC, community dialogues & health forums.

Strategic Objective 5: HRH/HRD:

Strengthen the HRD capacity of MOH so as to sustain production and retention of quality health professionals that can propel the performance of the country's health system at all levels

Specific Objective 5.1: Through this objective the existing curricula for pre-service & in-service training of mid-level health professionals will be reviewed to include up to date principles and practices of immunization and VPD. Hospital based preceptor, mentors of pre-service trainees and interns, will also be updated on the current principles and practices in immunization and VPD. This will improve the EPI knowledge of health workers that will be supplied to the health market.

Specific Objective 5.2: This objective will address one of the critical health system weaknesses of the country's health system, very weak research capacity, including operational researches. The country needs well-trained and well-established health professionals that can steer the country's health system performance through needs-based creative and innovate research processes at policy and operational levels. This will ensure availability of competent health professionals that can carry out quality research to guide policy and programmatic operations and improve capacity to do quality formative and operational researches in the country's health system by skilled national researchers.

Strategic Objective 6: Leadership & Governance:

Strengthen the health system leadership and governance to improve synergy and harmony of program management for delivery of quality EPI/VPD and other priority health services at all levels countrywide

Specific Objective 6.1: This objective will s*trengthen coordination and alignment of health system plans at program and operational levels* so that the various MOH programs as well as partner health programs are well synchronized throughout operational and strategic periods.

Specific Objective 6.2: Though this specific objective capacity of senior health managers will be built in quality health services management and quality assurance. These senior managers will then mentor MLM in quality health services delivery and principles and practice of quality assurance.

13. Description of Activities	
Objective / Activity	Explanation of link to improving immunisation outcomes
Strategic Objective 1- Service Delivery: Enhance equitable access to quality EPI/VPD and other priority health services by communities (with emphasis on all identified hard-to-reach populations countrywide) so as to increase their uptake of EPI/VPD and other priority health services	
Specific Objective 1.1: Strengthen outreach services for improvement of equitable access of communities to quality EPI/VPD and other priority health services, with emphasis on all identified hard-to-reach populations in the country	
Activity 1.1: Train 40 MLM healthcare providers annually in maternal and child health care using the RED/REC strategy to improve access, utilization and equity for vulnerable population group.	The MLMs trained in RED/REC strategy will emphasize the significance of EPI and good herd immunity to the community & the country. They will be mentors to other health workers, and they will steer health facilities to improve both static & outreach EPI services, hence access to EPI services and improvement in coverage & immunization outcomes.
Activity 1.2: Provide regular outreach services (to 750 from the current 450 outreach sites by 2021) and implement sustainable outreach services (SOS) by mapping seasonal movement of the nomadic population.	Outreach services will be incremental up to 750 sites in 5 years. This will improve coverage of HTR areas & populations, and will increase access to EPI services and & immunization outcomes.
Specific Objective 1.2: Strengthen EPI/VPD focused Supportive supervision / mentorship towards improving EPI/VPD service delivery quality and uptake of EPI services (especially regarding new vaccines, EVM, etc.)	
Activity 1.9: Conduct regular EPI/VPD focused supportive supervision /mentorship	EPI FSS will provide regular supervision to health facilities, will mentor HWs and will identify EPI problems that need remedy. This activity will therefore improve quality, uptake and outcome of EPI services.
Activity 1.10: Procure 5 all-weather vehicles for EPI focused support supervision, one for each Zoba	These vehicles will be predominantly used for EPI FSS and outreach services. This will improve effectiveness of EPI FSS & outreaches, thereby improving EPI service quality, coverage, access & outcomes.
Specific Objective 1.3: Improve health facility service delivery environment, including proper healthcare waste management	
Activity 1.13: Procure four incinerators for the four Sub-Zoba/Community hospitals	The four Incinerators will be built in strategically located health facilities to improve healthcare waste management; currently pit & open air burning or burying is used even for EPI & other healthcare sharps, etc.
Activity 1.14: Induct health facilities in management of the bundling system for vaccine and injection safety materials from national to Sub-Zoba levels	The bundling system for vaccine and injection safety is an approach that will improve EPI & other healthcare inputs wastage rate reduction, patient safety and thus overall programmatic efficiency.
Specific Objective 1.4: Improve the surveillance of Adverse Events Following immunization (AEFI) at all levels of the health system in the context of ensuring patient safety in EPI service delivery and other healthcare settings	
Activity 1.16: Revise/finalize the Draft Patient Safety Policy to include patient safety in EPI service delivery and significance of AEFI surveillance	The initial draft Patient Safety Policy did not cover patient safety in EPI services. Revision of this draft will incorporate patient safety concerns and approaches in EPI services- hence improving EPI service uptake.
Activity 1.21: Conduct TOT workshop of five days for 40 EPI focal persons and health facility managers in patient safety, AEFI surveillance, reporting and case management	The TOT workshop will train a pool of trainers in patient safety, AEFI surveillance, reporting and case management. These trainers will train more HWs; thus improving HWs' knowledge on patient safety and in the community, resulting into better EPI service uptake & outcomes

Specific Objective 1.5: ***Improve neonatal survival through immunization linked community level tracking of newborns (ILCTN) in the neonatal period***	
Activity 1.24: Develop a comprehensive operational protocol for the immunization linked community level tracking of new-borns (ILCTN)	This activity is directly linked to activity 1.5.2 which will focus on carrying out a prospective action research to concurrently improve neonatal survival, coverage, access & uptake of EPI services- hence improvement in EPI outcomes and reduction of IMR, to which high neonatal mortality is a big contributing factor.
Activity 1.25: Train Associate Nurses and CHWs to track every new born in each Kebabi / community to assess their immunization and health status for prompt action, including referral to a health facility	As largely explained above. Further, the allowances given to the Associate nurses & CHWs will be a boost in the morale of those HWs thereby increasing their retention in service delivery; this therefore creates a beneficial package for EPI and other health services.
Strategic Objective 2- PSM/LSCM: Strengthen the logistics and supply chain management system to improve the efficiency of distribution, storage and stock management of EPI/VPD and other essential medical commodities in the country	
Specific Objective 2.1: ***Expand the storage capacity for vaccines and other essential medical commodities at national, Zoba, Sub-Zoba and health facility levels to adequately accommodate the traditional and new vaccines***	
Activity 2.1: Upgrade the cold chain vaccine storage capacity at central level by purchasing two additional walk-in Cold Rooms, each of 30 M3	This activity will ensure adequate cold storage capacity for the traditional and new vaccines supported by Gavi. This will prevent vaccine wastage due to storage space limitations, and also stock-outs of vaccines identified at sub-national level by the EVM 2012.
Activity 2.2/3: Construct three dry stores for EPI dry commodities: one at central level; two at subnational levels.	This activity will ensure adequate dry storage capacity for EPI program consumables at both national and operational levels.
Specific Objective 2.2: ***Improve the efficiency of distribution of vaccines/EPI commodities and other essential medical commodities at national and sub-national levels***	
Activity 2.5: Procure two medium-sized refrigerated trucks for delivery of vaccines and cold-chain depended medicines to sub-national level	The two refrigerated vehicles will ease distribution of vaccines & other cold-chain depended medical commodities to all the six Zobas and their respective Sub-Zobas. Vaccine potency will be assured and no vaccine stock-outs will be experienced again
Activity 2.6: Procure one medium-sized all weather (non-refrigerated) truck for delivery of EPI dry equipment and consumables	The non-refrigerated truck will ease distribution and ensure adequate stock of dry EPI and other dry medical commodities- which are essential complementary consumables of immunization.
Specific Objective 2.3: ***Improve the quality of management of vaccines and other essential medical supplies at all levels of the health system***	
Activity 2.11: Train 40 middle level health managers (MLM) in efficient management of vaccines/EPI commodities and other essential medical supplies	This activity will equip MLMs with skills of good EPI and other medical commodity stock management, thereby ensuring good quantification, forecasting and minimal wastage of EPI & other medical commodities.
Activity 2.12: Procure 106 Solar Direct Drive (SDD) fridges for vaccine storage over the next five years to replace the obsolete non-WHO prequalified fridges	Through this activity the obsolete and inefficient fridges will be replaced by the more efficient SDD fridges which are durable and need hardly any post procurement maintenance costs.
Specific Objective 2.4: ***Strengthen the EPI Cold Chain Maintenance Workshop at MOH HQs for efficient maintenance of cold chain and other critical equipment while ensuring responsive biomedical engineering support whenever needed in any part of the country***	
Activity 2.19: Train 24 Biomedical Technicians in basic maintenance of the cold chain and other critical medical equipment	Currently there are five trained biomedical technicians in the entire country, and they are overstretched. The additional 24 will ensure readily available biomedical support to EPI in all the six Zobas.
Activity 2.21: Procure one multi-purpose all weather vehicle for scheduled/ routine maintenance visits and rapid deployment of biomedical technicians to handle cold chain trouble-shootings countrywide	One of the weak areas of Eritrea's EPI program is lack of scheduled maintenance of the cold chain equipment. This activity will ensure there are well-planned maintenance schedules for all the six Zobas throughout the year, in addition to the capability of rapid deployment of biomedical technicians to handle cold chain trouble-shootings / emergencies countrywide.
Strategic Objective 3- HIS: Strengthen generation and utilization of strategic information (HMIS, IDSR & M&E/Surveys) on EPI/VPD and other health services for responsive management at all levels of the country's health system	
Specific Objective 3.1: ***Update the existing data transmission system from Zoba to MOH HQs***	
Activity 3.1: Procure seven units of ADSL data transfer software for six Zoba health offices and MOH HQ	The ADSL software will increase the speed of HMIS data transfer from Zobas to MOH HQs. Monitoring of EPI and other health programs will

	improve, allowing for timely decisions & interventions when needed.
Activity 3.3: Conduct a five day workshop for Indicator rationalization and revision of related indicator reference sheets for 30 people	Through this activity, EPI indicators will be incorporated as part of the routine M&E set of monitored health system indicators.
***Specific Objective 3.2:* Build the capacity of M&E and HMIS staff in M&E skills with emphasis on quality data management and data use for decision making**	
Activity 3.13: Build the capacity of 6 M&E, EPI & HMIS program staff through a short term (2-4 weeks) in Eastern & Southern Africa region	These M&E officials are statistics graduates with no formal M&E training. Two of the six officials will be from the EPI program. Once trained in M&E, they will become trainers of other health professionals in M&E- for better M&E of EPI and other programs at all levels. This is also cognisant of the fact that this kind of training is not available in country and therefore sending people abroad who can train others upon their return back home makes sense. It also creates good opportunity for sharing experience with other countries.
Activity 3.16: Conduct two ten-day TOT data analysis trainings in the first two years for 20 HMIS & M&E officers in the following Statistical Software Packages for quality data management: Epi Info, SPSS, STATA, CSpro & Advanced Excel	The TOT will build a core team of trainers in data analysis. These will then train other health professionals in data analysis using the specific statistical packages: Epi Info, SPSS, STATA, CSpro and or Advanced Excel. This will improve reporting and data utilization for decision making in EPI and other health programs.
***Specific Objective 3.3:* Strengthen the EPI/VPD surveillance system at all levels of the health system countrywide**	
Activity 3.20: Conduct EPI, IDSR, HMIS & M&E integrated supportive supervision at national and sub national levels.	Integrated support supervisions will provide opportunities for identifying strengths and weaknesses of EPI, IDSR, HMIS & M&E- thus allowing for making timely management decisions & interventions.
Activity 3.23: Conduct seven-day IDSR modular training for 600 participants per year.	This modular training will improve the skills of IDSR staff in better surveillance of EPI and other identified diseases
***Specific Objective 3.4:* Strengthen the DQA (Data Quality Audit) functions of the M&E Unit in order to improve EPI/VPD data quality and quality of routine surveys for EPI/VPD surveillance**	
Activity 3.25: Conduct annual independent DQA from health facility level to national level	This activity will ensure EPI and other program data quality is well controlled- hence program monitoring quality will be improved. This will enable timely identification of issues in EPI and other health programs for timely remedial actions.
Activity 3.26-31: Conduct a set of Gavi recommended EPI surveys as scheduled	These routine surveys will inform policy and programs in timely manner for improvement of performance of programs & improvement of EPI and other health outcomes.
Strategic Objective 4- CSS: Improve community demand and uptake of quality EPI/VPD and other priority health services so as to improve EPI and other health outcomes of the country	
***Specific Objective 4.1:* Develop a comprehensive community level health service delivery strategy (The Community Strategy) to give clear policy directions for effective community level service management: directing, planning, organization, execution and coordination of the services**	
Activity 4.1: Develop *The Community Strategy*	The Community Strategy is a policy document that guides management of community level health service delivery, including EPI health services: package of services; workforce typology; partnerships, coordination, and M&E.
Activity 4.4: Sensitize communities and other stakeholders on the Community Strategy and the operational guidelines for CHWs	Sensitization of communities on the Community Strategy will enable them to know what demand and supply roles and responsibilities they have, as well as knowing who other stakeholders are in provision of community level services.
Specific Objective 4.2: Operationalize the EPI / VPD Communication Strategy	
Activity 4.5: Conduct formative / Baseline research to guide development of health promotional materials	This is the basis of developing quality social mobilization and education materials on EPI and other health programs.
Activity 4.6: Conduct integrated social mobilization activities for routine EPI/new vaccine and other priority health service campaigns	This activity will ensure communities are reached equitably by social mobilization activities for improvement of EPI and other health services. .
Specific Objective 4.3: Diversify the skills of CHWs to make them multi-skilled for effective delivery of integrated priority health services, including EPI/VPD services	

Activity 4.7: Assess availability, competence, distribution and the effectiveness of CHWs	This is a cross-sectional baseline study to understand the status of CHWs and how they are equipped for integrated service delivery.
Activity 4.9: Train CHWs to be multi-skilled for effective delivery of integrated priority health services	The current cohort of CHWs is trained to serve one program at any one time. This activity will make them multi-skilled for delivery of EPI and other services in the context of integrated service delivery.
***Specific Objective 4.4:* Increase the number of CHWs to meet the Sub-Zoba demands for adequate community based workforce**	
Activity 4.13: Train 900 more multi-skilled CHWs to meet the required number of CHWs in each Sub-Zoba	The current number of CHWs is estimated to be 800. This activity will ensure 900 more are trained to make a total of 2,000 CHWs.
Activity 4.16: Carryout regular support supervision of CHWs (by Sub-Zoba, Zoba & MOH HQ officials)	CHWs are often not supervised formerly. This activity will establish regular supervision of CHWs by MOH HQs, Zobas & Sub-Zobas.
***Specific Objective 4.5:* Strengthen the interface between health facilities communities through courteous IPC, community dialogues & Sub-Zoba health forums**	
Activity 4.17: Develop/adapt guidelines for community dialogues & health forums	The guidelines will be based on the Community and Communication Strategies so that the dialogues & health forums are well conducted.
Activity 4.18: Run 30 health forums in selected Sub-Zobas	Health forums are held once in a year to review performance of the health sector in that year.
Strategic Objective 5- HRH: Strengthen the HRD capacity of MOH so as to sustain production and retention of quality health professionals that can propel the performance of the country's health system at all levels	
Specific Objective 5.1: Review the existing curricula for pre-service & in-service training of mid-level health professionals to include up to date practices in EPI/VPD	
Activity 5.1: Evaluate the basic curricula for training mid-level health professionals and EPI Triaging Modules at service level	The current curriculum for training nurses & midwives, and the curriculum for EPI Triaging Modules will both be updated to include latest EPI principles and practices.
Activity 5.4: Conduct Preceptors workshop for 60 preceptors every two years to orient them on the latest EPI principles and practices for better mentoring of mid-level students	Preceptors are clinical mentors who mentor nursing & midwifery students during practical attachments in wards, ANCs, EPI/Child health clinics and domiciliary practices. This mentorship translates the theoretical knowledge of the students from the classroom into practice.
Specific Objective 5.2: Strengthen the research capacity of the country by providing support to the Continuous Professional Capacity Development (Distance Education) program	
Activity 5.10: Train health professionals (8 Masters & 4 Doctoral level) to acquire quality research skills from reputed universities so as to become mentors for quality research in the country	Eritrea's health system has very weak research capacity, including capacity to conduct quality operational researches. The country heavily relies on expatriate researchers hired mainly by WHO. To reverse this unsustainable trend, the research capacity of the country needs to be built and sustained in-country. This is consistent with the national policy of the government which gives top priority to human resources development at all levels. It also takes into account the post 2015 transformation agenda (sustainable development gaol) which cannot be realized without human development and which also the government commits itself for its implementation in partnership with relevant development partners including GAVI.
Activity 5.19 -23: Equip the MOH Distance Education Centre with appropriate technologies & teaching materials that facilitate distance learning	The distance education centre is the lifeline and reference centre for in-pre-service, in-service students, lecturers and researchers. Currently, the centre is poorly equipped and needs new equipment.
Strategic Objective 6- Leadership & Governance: Strengthen the health system leadership and governance to improve synergy and harmony of program management for delivery of quality EPI/VPD and other priority health services at all levels countrywide	
Specific Objective 6.1: Strengthen coordination and alignment of health system plans at program and operational levels	
Activity 6.1: Conduct a planning and coordination retreat for 40 senior health managers and MLM annually in planning throughout grant period	While the retreat will impact hands-on skills to MLMs for better planning, budgeting and coordination, the mentorship skills of senior managers will be honed for better mentoring of MLMs at all levels, with emphasis on sub-national planning, budgeting, coordination and other management areas. This will improve performance of not only EPI but other health programs as well.
Activity 6.2: Create Health Partners' Coordination Forum (HPCF) for program managers for regular coordination and harmonization of programs ***(every four months- April, August & December)*** at HQ level	Currently there is no specific forum that brings national program officers of MOH and partners together for regular coordination and harmonization of programs. This activity will ensure a forum is established for scheduled regular (thrice a year) meeting of health

	system program managers (EPI program inclusive) in the country.
Specific Objective 6.2: Strengthen the capacity of senior health managers in continuous quality improvement in Health Services Management and Quality Assurance for quality health service delivery at all levels of the health system	
Activity 6.6: Conduct a five-day training retreat for MOH Program Managers, Hospital Managers and Senior Lab Managers in health services management with emphasis on continuous quality improvement (CQI)	This retreat will emphasize continuous quality improvement (CQI) in the entire health system. The retreat will give opportunity for consultant led reflections on experiences and strategies for CQI in the country's health system. The EPI program will benefit from this greatly in line with the recommendations of EVM, JARs & MTR HSSDP.
Activity 6.7: Conduct a five-day retreat on implementation strategies for instituting the principles and practice of QA (including Accreditation of health facilities) for HQ and hospital managers on health services management	Quality Assurance has not yet been streamlined in the country's health system. This consultant-led activity will give an opportunity for the significance of QA to be appreciated, and for QA to be mainstreamed in the country's health system. This will improve performance and outcomes of most health programs, including EPI

14. Results Chain

STRATEGIC OBJECTIVE 1- Service Delivery: Enhance equitable access to quality EPI/VPD and other priority health services by communities (with emphasis on all identified hard-to-reach populations countrywide) so as to increase their uptake of EPI/VPD and other priority health service

Specific Objective 1.1: *Strengthen outreach services for improvement of equitable access of communities to quality EPI/VPD and other priority health services, with emphasis on all identified hard-to-reach populations in the country*	**Intermediate Results:**
	• *Outreach services improved countrywide*
	  • *# of Outreach services carried out*
		Immunization Outcomes:
		• *Improvement in geographic equity of DTP3 coverage*
		  • *Percentage of districts with ≥80% DTP3 coverage*
		• *Improvement in equitable immunisation coverage across socio-economic levels*
		  • *Difference in DTP3 coverage between lowest and highest wealth quintile*

Specific Objective1.2: *Strengthen EPI/VPD focused Supportive supervision / mentorship towards improving EPI/VPD service delivery quality and uptake of EPI services (especially regarding new vaccines, EVM, etc.)*	• *Improved quality of EPI focused support supervision countrywide* • *# of EPI focused supportive supervision conducted*	
Specific Objective 1.3: *: Improve health facility service delivery environment, including proper healthcare waste management*	• *Improved healthcare waste management in health facilities.* • *# of health facility staff trained in healthcare waste management including management of the bundling system for vaccine and injection safety materials*	
Specific Objective 1.4*: Improve the surveillance of Adverse Events Following immunization (AEFI) at all levels of the health system in the context of ensuring patient safety in EPI service delivery and other healthcare settings*	• *Competent management of VPD/AEFI events at facility level* • *# of health facility staff trained in patient safety, AEFI surveillance, reporting and case management*	
Specific Objective 1.5*: Improve neonatal survival through immunization linked community level tracking of newborns (ILCTN) in the neonatal period*	• *Improved neonatal survival*	
Strategic Objective 2- PSM/LSCM: Strengthen the logistics and supply chain management system to improve the efficiency of distribution, storage and stock management of EPI/VPD and other essential medical commodities in the country		

Specific Objective 2.1: *Expand the storage capacity for vaccines and other essential medical commodities at Zoba, Sub-Zoba and health facility levels to adequately accommodate the traditional and new vaccines*	**Outputs / Intermediate Results:**
	• *Adequate cold and dry storage capacity for vaccines and EPI consumables*
	  • *% of health facilities with adequate storage capacity of vaccines*
		Immunization Outcomes:
		• *Increase in DTP3 coverage*
		  • *Percentage of surviving infants receiving 3 doses of DTP containing vaccine*
		• *Reduction in immunization drop-out*

Specific Objective 2.2: *Improve the efficiency of distribution of vaccines/EPI commodities and other essential medical commodities at national and sub-national levels*	• *Timely delivery of vaccines and other essential EPI commodities* • *% of health facilities reporting timely delivery of vaccine orders* • *No stock outs of vaccines and other EPI essential commodities at all times at all levels*	

	• *% of health facilities with stock-out of vaccines*		*rate* • *Percentage point drop out between DTP1 and DTP3 coverage*
Specific Objective 2.3: *: Improve the quality of management of vaccines and other essential medical supplies at all levels of the health system*	→	• *Availability of vaccines of assured potency at all levels* • *Minimal wastage rate of vaccines and other essential medical commodities at all levels*	
Specific Objective 2.4: *Strengthen the EPI Cold Chain Maintenance Workshop at MOH HQs for efficient maintenance of cold chain and other critical equipment while ensuring responsive biomedical engineering support whenever needed in any part of the country*	→	• *Availability of responsive biomedical engineering support for EPI services*	
Strategic Objective 3- HIS: Strengthen generation and utilization of strategic information (HMIS, IDSR & M&E/Surveys) on EPI/VPD and other health services for responsive management these services at all levels of the country's health system			
Specific Objective 3.1: *Update the existing data transmission system from Zoba to MOH HQs*	→	**Intermediate Results:** • *Efficient (faster and timely) transmission of EPI and other HMIS data*	**Immunization Outcomes:** • *Reduction in immunization Drop-out rate* • *Percentage point drop out between DTP1 and DTP3 coverage* • *Improvement in equitable immunisation coverage across socio-economic levels* *Difference in DTP3 coverage between lowest and highest wealth quintile*
Specific Objective 3.2: *Build the capacity of M&E and HMIS staff in M&E skills with emphasis on quality data management and data use for decision making*	→	• *Availability of quality (accurate, complete & timely) EPI and other data at all levels;* • *% of Sub zobas submitting complete, accurate and timely HMIS/EPI/VPD data to MOH HQs*	
Specific Objective 3.3: *Strengthen the EPI/VPD surveillance system at all levels of the health system countrywide*	→	• *Health professionals more competent in execution of IDSR functions* • *Improved surveillance of VPD and other diseases*	
Specific Objective 3.4: *Strengthen the DQA (Data Quality Audit) functions of the M&E Unit in order to improve EPI/VPD data quality and quality of routine surveys for EPI/VPD surveillance*	→	• *Health professionals more competent in execution of M&E functions* • *# of HMIS & M&E officers trained in quality data management*	
Strategic Objective 4- CSS: Improve community demand and uptake of quality EPI/VPD and other priority health services so as to improve EPI and other health outcomes of the country			
Specific Objective 4.1: *Develop a comprehensive community level health service delivery strategy (The Community Strategy) to give clear policy directions for effective community level service management: directing, planning, organization, execution and*	→	**Intermediate Results:** • *EPI/VPD service delivery guided by specific MOH policies on community level health services* • *Community Strategy in place and functional*	**Immunization Outcomes:** • *Increase in the proportion of fully immunised*

	coordination of the services	• *Strong community participation, demand for and uptake of EPI/VPD and other priority health services*
		  • *% of Sub-Zobas with communities sensitized on community participation*
			children
			  • *Percent of children aged 12-23 months who receive all vaccinations in a country's routine immunisation schedule*
			• *Improvement in measles coverage countrywide*
			  • *Percent of surviving infants receiving first dose of measles containing vaccine*

	Specific Objective 4.2: *Operationalize the EPI / VPD Communication Strategy*	• *Strong community participation, demand for and uptake of EPI/VPD and other priority health services* • *Improved use of high impact media for social mobilization and sensitization for EPI and other health actions.*	
	Specific Objective 4.3: *Diversify the skills of CHWs to make them multi-skilled for effective delivery of integrated priority health services, including EPI/VPD services*	• *Community level services being delivered by multi-skilled CHWs; improved integrated service delivery at community level* • *% of CHWs who have been trained to be multi-skilled*	
	Specific Objective 4.4: *: Increase the number of CHWs to meet the Sub-Zoba demands for adequate community based workforce*	• *Increase in access to EPI and community level services;* • *CHWs delivering quality health services at community level*	
	Specific Objective 4.5*: Strengthen the interface between health facilities communities through courteous IPC, community dialogues & Sub-Zoba health forums*	• *Stronger health facility and community interface / collaboration*	
Strategic Objective 5- HRH: Strengthen the HRD capacity of MOH so as to sustain production and retention of quality health professionals that can propel the performance of the country's health system at all levels			

	Specific Objective 5.1: *Review the existing curricula for pre-service & in-service training of mid-level health professionals to include up to date principles and practices of EPI/VPD*	Intermediate Results:
		• *Newly qualified health professionals adequately skilled in up to date principles and practices of immunization and VPD*
		  • *# of mid-level health training institutions using curricula that has incorporated up to date principles and practices of EPI/VPD EPI/VPD*
			Immunization Outcomes:
			• *Improvement in measles coverage countrywide*
			  • *Percent of surviving infants receiving first dose of measles containing vaccine*
			• *Reduction in immunization Drop-out rate*
			  • *Percentage point drop out between*

	Specific Objective 5.2: *Strengthen the research capacity of the country by providing support to the Continuous Professional Capacity Development (Distance Education) program*	Intermediate Results: • *In country research capacity enhanced* • *# of quality operational research reports produced during the grant period*	

			DTP1 and DTP3 coverage
Strategic Objective 6- Leadership & Governance: Strengthen the health system leadership and governance to improve synergy and harmony of program management for delivery of quality EPI/VPD and other priority health services at all levels countrywide			

Specific Objective 6.1: ***Strengthen coordination and alignment of health system plans at program and operational levels***	→	**Intermediate Results:**
		• ***Improved effectiveness of EPI and other health programs***
		  • ***% of Sub-Zobas with quality annual operational plans***
			→ **Immunization Outcomes:**
			• ***Improvement in equity of immunisation coverage***
			  • ***Difference in DTP3 coverage between lowest and highest wealth quintile***
			• ***Increase in geographic equity of DTP3 coverage Percent of districts with ≥80% DTP3 coverage***

Specific Objective 6.2: ***Strengthen the capacity of senior health managers in continuous quality improvement in Health Services Management and Quality Assurance for quality health service delivery at all levels of the health system***	→	• ***Health professionals delivering quality health services, including quality EPI services;*** • ***# of senior health program managers trained in the principles and practice of QA***	

Impact statement:

This GAVI HSS grant will contribute to sustained improvement in newborn and child health status in the entire country by 2020 through the HSS investments that have been designed to increase equity of access/coverage and quality of EPI and other priority health services.

Impact Indicators:

1. Reduction in under five mortality rate from 50 per 1,000 live births in 2014 (UNIGME) to 26 per 1,000 live births by 2020
2. Reduction in infant mortality rate from 42 per 1,000 live births in 2010 (EPHS) to 20 per 1,000 live births by 2020
3. Reduction in maternal mortality ratio from 380 per 100,000 live births in 2014 (World Health Statistics) to 356 per 100,000 live births by 2020

Key Assumptions for successful implementation of the Gavi HSS 2016 Proposal

1. Proposed key policies formulated and promulgated by MOH, especially the Community Strategy, EPI/VPD Communication Strategy
2. Proposed policy changes accepted and carried out by MOH, especially instituting comprehensive financial information system; establishing Community Based Health Information System (CBHIS)
3. Timely disbursement and availability of funds on national budget and planning cycles
4. Timely disbursement of funds by Gavi Secretariat
5. Efficient management and disbursement of funds
6. Availability and high retention of health workers/professionals
7. Proposed technical supports provided by experienced health professionals with a good professional track record.
8. Proposed technical support provided by experienced health professionals with a good professional track record

15. Monitoring and Evaluation (M&E)

An efficient monitoring and evaluation system is the key to the success of any program, as it helps in implementing activities as planned through timely identification of gaps and corresponding remedial action.

Monitoring of the Gavi HSS Grant

Stewardship of the M&E of the Gavi HSS Grant: The M&E Unit of MOH will be the main custodian of the M&E of this Gavi HSS grant, in collaboration with the EPI programme, the Directorate of Policy & Planning as well as the PMU. The M&E plan for Gavi HSS will be strongly linked to the national M&E plan so as not to require another structure to implement M&E activities of the grant; this is an efficiency measure taken by the M&E unit of MOH.

The health sector M&E plan already includes indicators to track performance of the EPI programme. Most of the indicators for this Gavi HSS are also included in the national M&E framework as well as in the following MOH documents. We would like to acknowledge that sex disaggregated data is not possible to collect routinely at service level for each antigen, since it can compromise the data quality. However sex disaggregated equity data for DPT 3 coverage can be obtained from EPHS and EPI coverage surveys which is conducted every five and three years respectively.

Health Sector Strategic Development Plans: the current HSSDP 2012–2016 (pgs: 38; 58-63, 78); and the subsequent HSSDP 2017-2021.

The cMYPs: the current cMYP 2012–2016 and the subsequent cMYP 2017-2021. Eritrea's cMYP is aligned to the HSSDP. Hence, the current cMYP will be used for monitoring the first year of Gavi HSS implementation while the subsequent cMYP will be designed to capture most of the indicators of this Gavi HSS.

The Integrated Disease Surveillance and Reporting (IDSR): The indicators tracked by IDSR also feed into the M&E frameworks of both cMYP and HSSDP.

The MOH PMU: Provides grant management and project implementation support to the Gavi HSS grant. It tracks resource inputs and procurement processes planned for the Gavi HSS grant. The annual PMU reports provide basis for tracking financial resources and accountability at both national and sub-national levels. All these are crucial to M&E of the Gavi HSS project performance.

Other M&E Actions planned for the Gavi HSS grant period also contribute to monitoring of this Gavi HSS grant:

- These include strengthening EPI focused supportive supervision; strengthening quality data management at all levels; routine supervision of community level health services by MOH; strengthening research capacity; and strengthening programmatic planning and coordination);
- Periodic Gavi HSS performance reviews: Annual, Mid-term and End of Term reviews;
- Annual cMYP reviews
- Periodic HSSDP performance Reviews also capture performance of cMYP and Gavi HSS
- Routine data quality controls (the M&E DQA and HMIS self-assessment) also track data quality performance
- Annual EPI and Policy & Planning programmatic reports also feed into the M&E of the Gavi HSS
- Sub-national participatory activities by communities (community dialogues, health facility management committee meetings, etc.)

Sources of data for M&E of the Gavi HSS Grant

The following data sources will be used for the M&E of the Gavi HSS grant:

- HMIS: The existing national health information system (HMIS) will be the main source of data for reporting on the performance of the grant;
- Periodic Gavi HSS Reviews: Annual, mid-term and end of term review reports
- Annual joint cMYP Reviews (JARs)
- Periodic HSSDP Reviews: Annual, mid-term and end of term review reports
- Planned Surveys: EVM, EPI KAPB, EPI coverage, EPHS; DQAs
- Annual M&E Data Quality Assessment meetings (of M&E, HMIS & IDSR)
- MOH Operational Research Reports (EPI, health systems, HRD; etc.)

Further, a special review of EPI outcomes will be tracked on annual basis. All M&E reviews will entail carrying out geographical and sex disaggregation to understand distribution of high and low immunization coverage across the country; this will be done by rigorous analysis of routine HMIS, IDSR and survey data. However, wealth quintile disaggregation will be only captured by big population based surveys, e.g. the next EPHS (planned to be carried by the Office of Statistics; date not yet stated). The planned and budgeted surveys will provide non-routine data particularly to complement and corroborate data gathered through the routine reporting systems, and will help in demonstrating results of this Gavi HSS support. Protocols for all surveys and surveillance will conform to international standards.

The M&E systems strengthening activities to be funded through this proposal

As explained earlier in this proposal, the following constitute priority strategic information bottlenecks to address: poor data quality due to weak capacity for quality data management; weak support supervision and mentorship in implementation and M&E of programs; nationally weak research skills; and sub-optimal programmatic and planning coordination. In this regard, the following M&E strengthening activities (at all levels of the health system) have been planned for implementation through this Gavi HSS grant:

- **Strengthening generation and utilization of strategic health information (HMIS, IDSR & M&E/Surveys):** Details on the related activities are furnished in Strategic Objective three of this proposal
- **Strengthening Support Supervision:** Support supervision strengthens monitoring and hence quality of implementation. Specific activities on this are found in: specific objective 2 of Strategic Objective 1 and specific objective 4.4 of Strategic Objective 4.
- **Strengthening Research Capacity:** There are very few competent health professionals that can carry out quality research to guide policy and programmatic operations in the country's health system. This Gavi HSS grant will be partly utilized to build the research capacity of senior and mid-level health professionals from reputable universities. The trained health professionals will then become in-country research mentors. Details are in Strategic Objective 5.
- **Strengthening coordination and alignment of health system planning and implementation at program and operational levels.** Details of these are in Strategic Objective 6.
- **Periodic Evaluations and Reviews:** these will be conducted as planned in Strategic Objective 3 of this proposal, in addition to that of the pertinent cMYP and HSSDP.
- **Instituting community based health information system:** Through this grant CBHMIS will be instituted. This will provide real time data to sub-national health offices and MOH HQs for relevant actions.
- **Planned Surveys:** EVM, EPI KAPB, EPI coverage, EPHS; DQAs- as detailed in Strategic Objective 4.
- **Annual M&E Data Quality Assessment meetings** (of M&E, HMIS & IDSR) - as detailed in Strategic

Objective 4.

Pleases note that the total budget strictly allocated for M&E purposes is 8% of the total grant budget. This amount is consistent with Gavi a guideline that allows the range of 5 to 10% to be allocated for M&E purposes.

HSS grant evaluation

Review of planed activities is a concern that needs to be introduced and implemented on regular basis so as to detect need for remedial actions timely for achieving the results planned / projected in the Gavi HSS proposal. The following evaluations of the Gavi HSS grant will be undertaken:

- Mid-Term Review: will be carried in the mid-period of implementation (at two and half years) by an independent organization / consultant.
- End of term evaluation will be carried out in the last quarter of the implementation period by an independent organization / consultant.

Intermediate results indicators related to each objective of the grant

These will be used for tracking the overall progress of the grant implementation. Please refer to *attachment which* presents the key intermediate and outcome indicators that will be tracked by the MOH M&E unit for this GAVI HSS grant.

16. PBF Data verification option

Choose which data verification option to be used for calculating the performance payments.

Data verification option	Select ONE
Use of country administrative data	☐
Use of WHO/ UNICEF estimates	√
Use of surveys	☐

PART D: WORKPLAN, BUDGET AND GAP ANALYSIS

17. Detailed work plan, budget narrative and gap analysis

As explained in the relevant sections of the application document, CSOs and other relevant partners were crucial parts of the proposal development process and will equally play pivotal role in the implementation of the grant. Who these individual CSOs are and what their specific roles were has also been already elaborated. But for purposes of avoiding budget fragmentation, and in order to carryout very focused interventions that can yield tangible and measurable end results, the Ministry of Health endorsed by the Ministry of Finance has intentionally decided to be the sole and primary recipient of grant funds. Hence the budget analysis for the CSOs and development partners will be depicted as blank.

In the gap analysis component of the budget template the total resources component related to each objective is consistent with the HSSDP 2012 – 2016 budget. While this serves as important reference for resources estimation it is not forward looking. Future sector requirements could only be calculated with the development of the next sector strategic plan for 2017 – 2021, the process of which has just started.

In the same section of the budget gap analysis the secured total funding is an aggregate of governments' and partners contribution. While the government share is clearly known (about 60%

of total) information with regards to individual disaggregated partners share is not readily available, as a result of which the budget gap analysis may not have been as comprehensive as we would like it to be. This is also attributable to the fact there is no National Health Accounts yet in place in the country.

While preparing the budget and costing the various activities the following assumptions, which are also the norm in the country's planning culture, have been consistently taken into considerations:

- That external consultancy fee was calculated as $ 400 a day, while the local consultancy fee was calculated as $ 200 a day
- That air travel expenses for external consultants vary from $ 2000 -3000 (round trip) depending from which country they are coming and considering that travel is difficult and often expensive to and from Eritrea
- One episode local training duration was consistently made not to exceed five days and the number of trainees not to exceed 50.
- Delivery and installation of cold chain equipment and solar gadgets to end users is calculated as part of the procurement cost. While maintenance of cold chain and related equipment is the responsibility of the government. But strengthening the Bio-Medical Equipment Division (responsible for maintenance and installation) has been part of this proposal.
- Daily subsistence allowance (DSA) both for trainees and trainers was calculated at $ 45 a day, as is also the norm in the country. This means that there are no preferential payment modalities to trainers as compared to the trainees.
- All units' costs are consistent with the latest price quotations from the PMU (that manages Gavi's finances) and PHRMECOR, which is the procurement agency of the government for all medical products. These include cost of all whether vehicle, non refrigerated truck and refrigerated truck, calculated as $35,000, $40,000, & $50,000, respectively based on information from the PMU. Once vehicles are procured cost of their delivery to end users is covered by the government. Amount of fuel requirement per vehicle is calculated as per the Ministry of Finance's millage estimation and cost per litter calculated as per market price. Similarly, prices for dry sealed solar battery, and direct drive fridges are calculated as $ 500 and $ 4,000 respectively using information obtained from UNICEF country office.
- Inflation rate has been taken into account while working the budget template (estimated to be at 15-20% annually) but because of the existence of a controlled economy in the country the exchange rate is constantly maintained at 15 ERN per dollar.
- Annual Program management cost and M&E costs are calculated as 5% and 8% respectively of the total budget.
- Annual financial audit fee estimated at 2000 USD is also included in the budget calculations.
- Maintenance cost for vehicles are included in the budget calculations. However, other maintenance costs for health care technologies that are not included in the budget is taken care of by the preventive maintenance routine works of the Biomedical Engineering Unit of the MoH, financed as part of Government recurrent budget.,
- Hall rental and car rental are estimated at USD 166.67 and 233.33 respectively.
- Budget for internet connectivity for year three and five are included here. This is in complementarily to Global Fund support in the other years. We acknowledge cost for internet services, unlike in other countries is expensive in Eritrea. Despite this however because of the low band width, the connectivity is sluggish and poor. The importance of good internet access, for on line distance education, on line applications and downloading, communication with multiple development partner including GAVI, and submitting timely reports cannot be overemphasized.
- As explained earlier in this document, GAVI HSS budget is to be used in complementarily to other partners support to the health systems. These partners, inter alia, and whose role have already been explained include, WHO, UNICEF, JICA and the Global Fund.

- When involving community health workers in implementing various activities and training occasions $8 per day is provided as an incentive. This amount is consistent with Ministry of Finance's policies and is widely applicable across the country.
- For efficiency and economics of scale purposes it would have been preferable to procure all vehicles at one time and during the first year of grant implementation. But this would also mean almost all of that year's budget will be consumed for these procurements and no other activity will be carried out during the same year. Hence the rational for spreading these procurements over the years.

Description of technical Assistance

The following table clearly describes what technical assistance will be required during the grant implementation period and how these will improve the immunization program as well as the wider health systems. Further details on the importance of these technical assistances are given as an annex.

Activity #	How it improves the health systems	How it improves the immunization program
Activity 1.16: Local consultant to revise / finalize the Draft Patient Safety Policy to include patient safety in EPI service delivery and the significance of AEFI surveillance	Putting patient safety at centre of any service delivery including EPI program benefits both the immunization program and the wider health system	Explaining patient safety in EPI as well as AEF will help mitigate misconceptions about immunizations; this will improve uptake of EPI services. Besides, it will help ensure health professionals remain vigilant on AEFI and its management
Activity 1.17: Local consultant to help develop guidelines and reporting tools for AEFI surveillance	Development AEFI surveillance guidelines and reporting tools will strengthen the M&E system of MOH	This TA will improve AEFI surveillance at all levels, hence ensuring appropriate management of AEFI events. This improves confidence in EPI/VPD services
Activity 1.24: International consultant to help develop a comprehensive operational protocol for the immunization linked community level tracking of new-borns (ILCTN)	This is an innovative approach that helps create a low-cost but thorough immunization-linked tracking system at community level. This can be replicated for other MNCH and disease specific programs.	This immunization-linked tracking system at community level ensures uptake of EPI services is increased, late coming for EPI services is reduced, neonatal health is well monitored and timely health actions can be taken whenever needed.
Activity 1.26: Local consultant to help carry out a prospective action research to understand the operational performance of the ILCTN- giving quarterly performance reports	This is EPI program-led activity. It will improve both uptake and coverage of the EPI program. Helps to strengthen the immunization program	This activity is EPI program-led. It will improve both uptake and coverage of the EPI program. If well executed, all children born in health facilities and at home will be covered by EPI program.
Activity 3.16: Local consultant to help Conduct two 5-day TOT data analysis trainings in the first two years for 25 HMIS, M&E and EPI data manager officers in the following Statistical Software Packages for quality data management: Epi Info, SPSS, STATA, CSpro & Advanced Excel	This activity will help strengthen one of the six health systems pillars i.e. the HIS. It will equip M&E and HMIS staff with advanced data analysis skills based on commonly used statistical packages.	The quality of EPI data analysis, interpretation and summarization will improve. Reporting quality is also expected to improve.
Activity 3.31: International consultant to help conduct end Term Evaluation Gavi HSS in 2021	This activity will help MOH and partners to learn lessons from existing grant and use that performance improvement in future	Key lessons learnt from this grant will guide how best to improve or sustain immunization outcomes in future
Activity 4.1 International consultant to: (i)guide development of the Community Strategy, (ii) review and update the existing operational guidelines for CHWs in line with The Community Strategy	The community strategy will be the Policy document that will guide community level health system investments and interventions. This will strengthen the lowest appendage of the health system which is also the most crucial level for cohesive community interface	The community strategy is envisaged to enhance community mobilization, demand for and uptake of EPI and other services.
Activity 4.7: Local consultant to help assess availability, competence,	This TA will help understanding of the current capacity and performance of	This TA will therefore facilitate design of better community level service delivery package, hence

distribution and the effectiveness of CHWs	CHWs in the health system. It will be on this that a better community level health services package will be designed.	better delivery of EPI and other services
Activity 4.8 International consultant to help design a training package for making CHWs multi-skilled for delivery of integrated priority health services	This technical support will contribute to design of a quality package for making the CHWs multi-skilled and capable for integrated service delivery approach	This TA will ensure EPI services are capably delivered by CHWs that are multi-skilled.
Activity 5.1: Local consultant to help evaluate the basic curricula for training mid-level health professionals and EPI training Modules at service level	This activity will ensure the pre-service training curricula as well as the in-service training curricula incorporate the current principles and practices of EPI/VPDs	This activity will improve the skills and competence levels of health newly qualified and existing health professionals.
Activity 5.5: Local consultant review the Procedure Manual for mid-level nurse training	Availability of updated Procedure Manual for training mid-level health professionals contributes to improving the effectiveness of practical training and general quality of health professionals	Availability of updated Procedure Manual for training mid-level health professionals ensures quality of health professionals, skilled in EPI and other health services are produced as work force
Activity 5.12: Local consultant to help conduct a hands-on training in research methodology with emphasis on operational research for 120 senior managers and MLM at national and Zoba levels twice in the grant period	This TA will contribute to strengthening the weak research capacity in the entire health system.	Quality operational researches in EPI and other programs will be possible, moreover at lower cost.
Activity 6.5: International consultant to help conduct JANS in 2017 for the next HSSDP 2017-2022	This TA will assess the current HSSDP, register lessons learnt and furnish recommendations for strategic directions of the next HSSDP.	Key lessons learnt from this JANS will guide how best to improve or sustain immunization outcomes through the next HSSDP and cMYP
Activity 6.6 International consultant to help conduct a five-day training annually for 30 MOH Program Managers, Hospital Managers and Senior Lab Managers in health services management	This designed to strengthen heath systems management capacity as part of wider health systems strengthening	This TA will also highlight key strategies for improving programmatic performance, including that of EPI program.
Activity 6 .7 International consultant to help conduct a five day training in the principles and practice of QA (including Accreditation of health facilities) for HQ and hospital managers on health services management	This designed to strengthen Quality Assurance system in the entire health system	This activity will improve the quality of EPI service delivery as well as of other priority health services .

Taking into account the time required for WHO pre review, the IRCs recommendations and Gavi's Board Decision and the time it takes for start of money flow to country consistent with the FMAs recommendations, we have planned for grant implementation to start in January 2017 and to end in December 2021. The summary for each of the five years, total of which does not exceed the country budget ceiling is presented below:

Year	2017	2018	2019	2020	2021	Total
Budget in $	2,399,909	1,919,689.5	1,919,999	1,919,873.1	1,919,994.3	10,079,464.9

18. Sustainability

Policy environment that favours MNCH program success and sustainability: The National Health Policy of the state of Eritrea considers maternal and child health as the number one priority. This policy direction entails that child and maternal health should be safeguarded and their wellbeing ensured. Putting the policy into action therefore commendable successes have been scored over the past few years in this area, as the attainment of MDGs four and five strongly demonstrates this fact. However, none of these successes could be attained or maintained without a firm resolve to strengthen the health system through sustained health system investments..

Strategic Partnerships: MOH is focusing on this resolve additionally by close collaboration with health partners that include WHO, UNICEF, Gavi Alliance, GFATM, UNFPA, UNDP, amongst others. The government knows that external support will not last forever. In the spirit of self-reliance, GOE is already fulfilling its co-financing obligations to Gavi and GFATM investments. The government's projection is to eventually wean itself off from the external support regarding social service investments for the populace.

Sustainability focused health system investments: Strategic objective four of this proposal intends to institute a strong community participation in health actions countrywide. The community strategy, multi-skilling of the CHWs for integrated service delivery, immunization-linked community based tracking of all new-born children, and reaching HTR areas and HTR populations all aim at sustaining the EPI program in the long run. This objective, once well implemented, will give the EPI program a strong community base, which is a proven strategy for long term sustainability. Similarly objective five aims at sustaining production and retention of quality health professionals, including production of quality researchers that can propel the performance of the country's health system, including the EPI program at all levels. Hence, successful implementations of the objectives of this proposal will contribute to the sustainability of immunization services beyond the five-year grant period.

Good financial management practices and inherent integrity: Fraud, theft and misappropriation of funds that endanger program success are virtually unheard of in Eritrea. This culture of good financial management and value for money, contribute to sustainability of the so far achieved high immunization and other health system outcomes- despite the very limited resources the country has at its disposal at present. This culture of achievement of success with efficient use of limited resources has become replicable and hence a culture in the health system.

Fair and sustainable health financing in offing: The NHP, 2010 and the HSSDP 2012-16 both express the imperative for fair and sustainable health financing that will protect the citizenry from catastrophic health expenditures. The MTR HSSDP, 2014 too indicated need for fair and sustainable health financing. Health insurance or suitable forms of pre-payment schemes have been mooted. This notion is expected to be one of the strategic issues that will be captured by the next HSSDP, 2017-2021.

Promising economic outlook may anchor sustainability of health system investments: In the economic sector, notable improvement in the economic outlook / performance of the country, especially with promising mining industry, may lead to improvements national income. This will in turn help the country to increase its expenditure on health as percentage of GDP- with a high likelihood of improving welfare of civil servants possibility. This may create the needed stability and sustainability of the nation's health workforce.

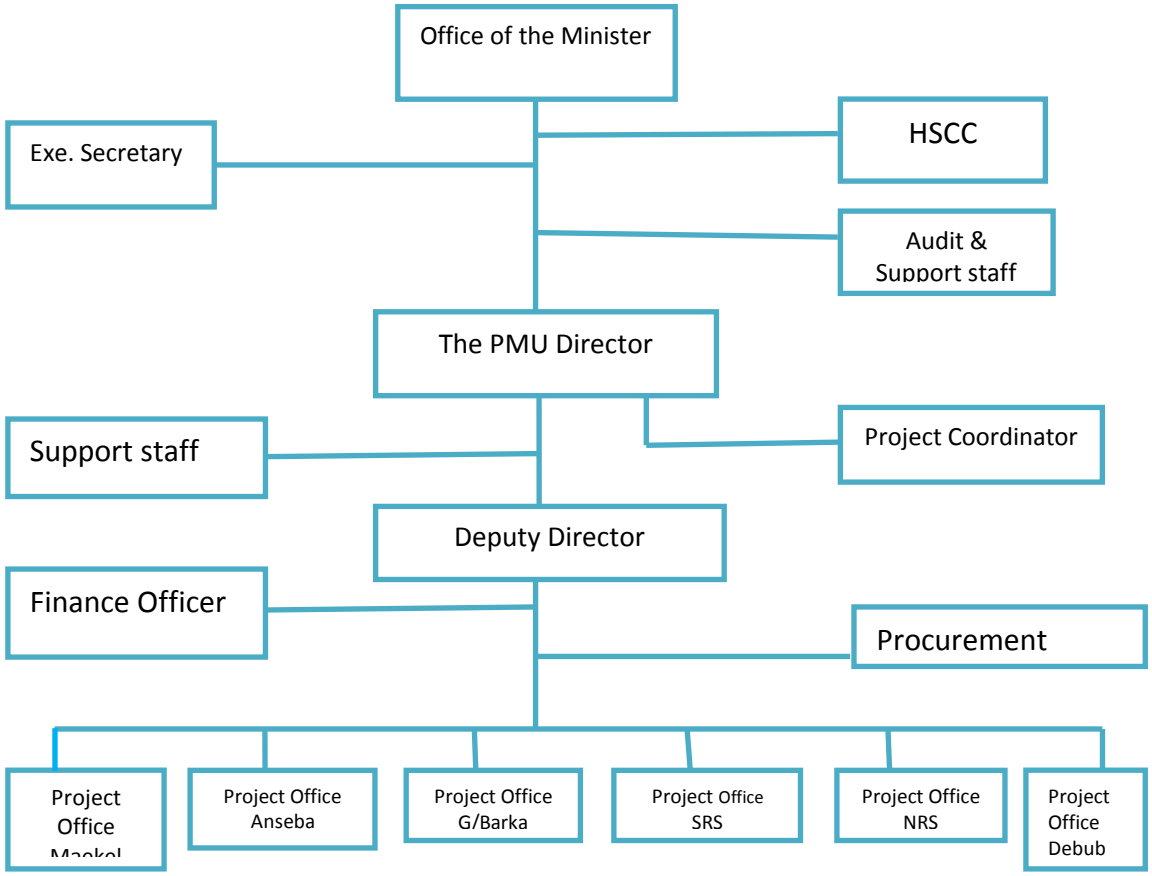
All development partners' contribution to the national budget is reflected and documented as external funding, in the books and records of the Ministry of Health and Ministry of National Development. This entails that the government is prepared to take over once donor's support seizes. Additionally recurrent costs, attached with development projects and grants, such as staff salary, vehicle maintenances, and incentives are always covered by the government.

PART E: IMPLEMENTATION ARRANGEMENTS AND RISK MITIGATION

19. Implementation arrangements

The HSCC provides stewardship, overall guidance, coordination of implementation and validation periodic evaluation results. But the ultimate implementers of the planned activities are the program managers both at HQs and Zoba levels. Development partners including WHO and UNICEF will be involved during implementation monitoring at field level, periodic review meetings, reporting, preparation & consolidation of Joint Appraisal Reports , mid- term review (MTR) exercises and end of project evaluation. Other partners such as the NUEW, NUEYS, BIDHO Association, and Faith based organizations will also be part of the implementation processes by mobilizing the targeted communities to be beneficiaries of this grant. Coordination mechanisms and implementation activities will be carried out by the HSS focal persons and EPI managers at national and sub-national levels.

The financial management of the grant is the responsibility of the project management unit (PMU) of the Ministry of Health. It is a well-structured and adequately staffed body who have braches in all Zobas of the country. The organizational structure of the PMU looks as follows:



The PMU has a wealth of experience in financial management of the World Bank supported HAMSET project, and the Global Fund Supported programs to fight TB, HIV and Malaria. Financial management of the current GAVI HSS grant is also taken care of by the PMU, upon approval of last FMA mission. In short the PMU is the best organization with the requisite experience and organizational structure to manage this grant as well.

Financial Management

The PMU has the responsibility of ensuring that all grant funds are prudently managed, used solely for the programme purposes and consistent with the terms of its agreement with GAVI. It will endeavour to

achieve the financial management objectives as outlined in the main project document.

The Zoba project officers are required to familiarize themselves with their roles and responsibilities as pertains to financial management as outlined in the project document. They should also stick to the outlined steps for financial reporting and management of funds to ensure smooth undertaking of the project. All financial reports should be accompanied by the requisite programmatic reports.

The Minister approves the utilization of grant funds to the implementers, and the PMU in turn releases funds to implementing entities. The progress report and utilization of funds is submitted to GAVI on a yearly basis. Moreover, external auditing is also conducted regularly.

Procurement

The procurement of goods, work and services is consistent with the Global Fund grant procurement guidelines as outlined in the Standard Terms and Conditions of the Grant Agreement and by the existing procurement policies and guidelines used by the Ministry of Health. These kinds of procurement items will be carried out by the PMU. The PMU is adequately staffed with procurement officers and finance managers with over ten years of experience in handling procurements related to Global Fund Grants, World Bank Financed Projects and previous Gavi HSS grant.

All procurement of pharmaceutical items, medical equipment and supplies, health products and commodities funded by GAVI is carried out by PHARMECOR - the selected Procurement Agent for the Ministry of Health.

All in all the MoH will ensure that the procurement of cold chain equipment confirms with the WHO pre-qualified standards. It worth noting that the PMU has prior experience in the procurement of vaccine storage solar and electrical refrigerators, using the references of WHO PQS catalogue list.

Reporting

The reporting on the programmatic and financial performance of the grant is made using approved templates and guidelines. All implementers are required to adhere to the set deadlines for submission of the various reports. In the event that there is variance between planned budget and expenditure, the PMU and the GAVI HSS provide reasons for variance to GAVI in the annual progress reports (APRs)

20. Involvement of Civil Society Organisations (CSOs)

The main CSOs in the country that have endorsed this proposal and that have been part of its development include the National Union of Eritrean Women (NUEW), National Union of Eritrean Youth and Students (NUEYS), Faith Based Organizations coordinated by the Religious Affairs Office and BIDHO association (for people living with HIV/AIDS). A higher level decision was made for the country to use the entire grant for focused intervention in health system bottlenecks for improving immunization outcomes. This entails that the CSOs are not sub-recipients of this grant. However, they will be part of the implementation arrangements using **their existing resources** and in collaboration with communities and other local actors as elaborated in the following table.

CSO/FBO/CBO	Roles	Accountable to
ZHMT(Zoba Health Management Team)	Management (planning, budgeting and coordination of health services in the entire zoba)	The Zoba Local Government and MoH HQs.
Zoba Regional	Management and advisory oversight of	The Zoba Local Government,

Hospital Management Committee	health services in the Zoba Referral Hospital	MoH HQs and the Community
Sub-Zoba HMT(Sub-Zoba Health Management Team)	Management (planning, budgeting and coordination of health services in the entire sub-zoba)	The Sub-Zoba Local Government , ZHMT, MoH HQs and the communities
Community Hosp. Management Committee	Management and advisory oversight of health services in the Community/Sub-Zoba Hospital	The Sub-Zoba Local Government , Sub Zoba HMT, ZHMT, MoH HQs and the communities
Health Center Management Committee	Management and advisory oversight of health services in the Health Center	The Sub-Zoba Local Government , Sub Zoba HMT, ZHMT, MoH HQs and the communities
Health Station Management Committee	Management and advisory oversight of health services in the Health Station	The Sub-Zoba Local Government , Sub Zoba HMT, ZHMT, MoH HQs and the communities
NUEW	Mobilizing the general population and women in particular to improve their health seeking behaviour and to support health facilities in cash and in kind	The National HQs, as well as the local government officials at sub-national levels
NUEYS	Mobilizing youth and students to use school health services to participate in BCC clubs and health related campaigns	The National HQs, as well as the local government officials at sub-national levels
Office of religious affairs	Coordinates all FBOs to mobilize their followers to actively participate in all health related matters from planning to implementation and evaluation of community health services	All FBOs organizations are accountable to the Religious Affairs at HQs level and the Zoba Administrations in the case of sub national levels
BIDHO/PLWAs	They cooperate with the MoH in leading and organizing their members to be beneficiaries of services delivered by the country. They are also signatories of any forum where CSOs participate	The BIDHO organization is accountable to the MoH, Control of Communicable Diseases Division

21. Risks and Mitigation Measures

Description of risk	*PROBABILITY (high, medium, low)*	*IMPACT (high, medium, low)*	*Mitigation Measures*
***Strategic Objective 1:* Enhance equitable access to quality EPI/VPD and other priority health services by communities (with emphasis on all identified hard-to-reach populations countrywide) so as to increase their uptake of EPI/VPD and other priority health services**			
Institutional Risks: • *High attrition rate of staff in the peripheral areas*	• Medium	• Medium	• Provide attractive incentive and motivational schemes and create conducive work environment *(well-equipped and well-lit health facilities, availability of running water, and regular supportive supervision from higher levels of the health system)*
Fiduciary Risks: • *Delays in production of financial reports by implementing units* • *Probability of loss of fiduciary documents:* (advanced financial management system is not in place & work is done manually especially at sub-national levels**)**	• Low • low	• Medium • low	• Provision of financial management training &regular supportive supervision • Installation of software-based advanced financial management system and training staff in the new financial management system
Operational Risks: • *Difficulties in accessing nomadic communities that change locations frequently* • *In accessibility to some geographic areas due to lack of suitable means of transport for accessing such areas* • *Hard to trace immunization defaulters & latecomers* • *Bottlenecks* in community sensitization / mobilization on immunization	• Medium • Low • Low	• Medium • Low • Low	• GPS mapping of population movements & establishing mobile vaccination teams • Planned use of camels and donkeys/ mules as means of transport for accessing mountainous and rugged terrains and transporting vaccines and other essential EPI commodities • Actively manage immunization defaulting & late coming: ○ Recruit more CHWs to trace immunization defaulters or latecomers ○ Implement the Immunization-linked community level tracking of new-born (ILCTN) ○ Ensure implementation of sustainable outreaches as planned • Create good collaborative work with community leaders *(Kebabi leaders, religious leaders and local government officials)*
Programmatic and Performance Risks: • *Low motivation and non-attractive incentives for staff which undermines their performance*	• low	• Low	• Advocate and liaise with relevant authorities to improve the existing allowances • Devise creative in-service motivation packages for health workers
Other Risks:	-	-	
Overall Risk Rating for Strategic Objective 1	***Relatively***	***Relatively***	

	Low	***Low***	
Objective 2: **Strengthen the logistics and supply chain management system to improve the efficiency of distribution, storage and stock management of EPI/VPD and other essential medical commodities in the country**			
Institutional Risks: • *No refrigerated and non-refrigerated vehicles for transportation/distribution of vaccines and other essential EPI commodities from national to sub-national levels* • *Delay in timely construction of cold and dry storage spaces for vaccines and other EPI essentials at national and sub-national levels*	• *Medium* • *Medium*	• *Medium* • *Medium*	• Procure two medium-sized refrigerated trucks and one medium non-refrigerated truck for transportation/distribution of vaccines and other essential EPI commodities from national to sub-national levels • MOH/ PMU will expedite the procurement process for construction of the cold and dry stores, while UNICEF will enhance the timely purchase of the additional cold stores as planned
Fiduciary Risks: • *Delays in release of funds by Gavi may threaten timely procurement of vaccines and other EPI commodities* • *Shortage of skilled financial staff that adversely affects the timely utilization and production of timely reports*	• Medium • Medium	• Medium • Medium	• Request Gavi to expedite release of funds to facilitate timely procurement of vaccines and other EPI commodities • Introduction of advanced financial soft ware that can help in the generation of timely and reliable reports and concomitant training of health workers for use of such soft ware
Operational Risks: • *Lack of skills for efficient management of vaccines and other EPI commodity stocks may lead to high stock wastage rates and stock-outs*	• *Low*	• *Low*	• Adequate number of middle level health managers will be trained in efficient management of vaccines/EPI commodities and other essential medical supplies
Programmatic and Performance Risks: • *Improper monitoring of vaccines at storage and in transportation can compromise vaccine potency* • *Biomedical support base is still weak in the country*	• Low • Low	• Medium • Low	• Training of health professionals in efficient management of vaccines and observing scheduled temperature monitoring strictly will avert compromise of vaccine potency at all levels countrywide • Biomedical engineering technicians will be trained in addition to refurbishment of the EPI Biomedical Engineering workshop at MOH HQs. These interventions will boost scheduled maintenance of cold chain equipment and biomedical engineering responsiveness to cold-chain trouble shootings whenever & wherever they occur.
Other Risks:	-	-	
Overall Risk Rating for Strategic Objective 2	***Low***	***Low***	
Objective 3: **Strengthen generation and utilization of strategic health information (HMIS, IDSR & M&E/Surveys) on EPI/VPD and other health services for responsive management of these services at all levels of the country's health system**			

Institutional Risks:			
• *Lack of quality data in EPI, IDSR and other programs*	• Medium	• Medium	• Effective capacity building in M&E and HMIS staff in quality data management , independent DQA, data quality self-assessment and use of data for management decision making will improve and institute quality data management competence and vigilance at all levels of the health system
• *Poor transmission of data from Zoba level to National level*	• Medium	• Medium	• ADSL software and bigger band-with of internet will be procured and installed for faster HMIS and other data transmission from Zoba level to national levels
Fiduciary Risks:			
• *Delays in transferring allocated funds from MIOH/PMU to Zoba Health Offices*	• Medium	• Medium	• Develop good follow up system on the availability of funds in the PMU financial template and make timely requests for funds • Build the capacity of Zoba and Sub-Zoba Health Offices in good financial management
Operational Risks:			
• *Health professionals inadequate in quality data management and utilization*	• *Medium*	• *Medium*	• Effective capacity building in M&E skills and mentorship will improve and institute quality data management competence at all levels of the health system
Programmatic and Performance Risks:			
• *Shortage of health professionals with competence in quality data management and utilization, including provision of feedback on quality of data and information from sub-national levels*	• *Low*	• *Low*	• Effective capacity building in M&E skills and regular supportive supervision / mentorship will improve and institute quality data management competence at all levels of the health system
Other Risks:			
Overall Risk Rating for Strategic Objective 3	***Medium***	***Medium***	
Strategic objective 4: Improve community demand and uptake of quality EPI/VPD and other priority health services so as to improve EPI and other health outcomes of the country			
Institutional Risks:			
• *No definite policy on community level service provision in form of Community Strategy*	• Low	• Low	• The planned formulation of community strategy based on regional models (especially the Community Strategy of MOH Kenya) and operational practice of the strategy (especially in Rwanda) will equip MOH Eritrea with adequate skills to formulate and put into practice a Community Strategy that befits Eritrea.
• *No EPI communication strategy on ground for community mobilization and generation of demand for EPI and other priority health services*	• Low	• Low	• Once the Communication strategy is implemented as planned, good community mobilization and demand generation for EPI and other priority services will be enhanced.
• High attrition or trained community health workers	• Medium	• Medium	• Introduce an incentive package and enhance to motivate the CHWs.

Fiduciary Risks: • *Delays in disbursement of funds may delay implementation of planned activities, and may be reflected as low absorption capacity*	• Low	• Low	• Based on past experiences with PMU, this bottleneck is either unlikely or minimal. • Nevertheless, close follow up and monitoring mechanisms will be developed
Operational Risks: • *No Unit in MOH to handle community level health service delivery* • *No community Based Health Information System in place* • *Supervision and monitoring of performance of CHWs and community level health services has not been a priority*	• Low • Medium	• Low • Medium	• MOH hopes to establish a community level services unit / desk during the first half of the grant period • *CBHIS will be established through this grant to complete continuum of health information flow from the community to MOH HQs.* • Performance of CHWs and community level health services will be supervised regularly by MOH, Zoba and Sub-Zoba officials; this will be institutionalized starting from this grant period
Programmatic and Performance Risks: • *Community health workers not multi-skilled but skilled along vertical programs* • *Misconception and myths associated with the immunization program entrenched in some communities*	• Low	• Low	• One of the key activities of this grant is to train the CHWs to be multi-skilled for delivery of integrated health services to the community • KAPB survey on immunization and VPDs will be conducted to understand and lay strategies for dispelling misconception on immunization/VPDs at community level
Other Risks:			
Overall Risk Rating for Strategic Objective 4	***Low***	***Low***	
Strategic objective 5: **Strengthen the HRD capacity of MOH so as to sustain production and retention of quality health professionals that can propel the performance of the country's health system at all levels including the EPI program**			
Institutional Risks: • *Increase in attrition rate of staff in the peripheral areas*	• Medium	• Medium	• Increase in the annual number of health assistants upgrading to nurses, and improving motivation and incentive packages for new and existing health professionals may reduce the current attrition rate. • Improvement in the economic outlook / performance of the country- especially with promising mining industry may lead to improvements in civil service remuneration and likely retention of more health professionals
Fiduciary Risks: • *Low morale due to low remuneration of civil servants including health workers*	• Medium	• Medium	• Improving staff motivation and incentive packages and regular support supervision / mentorship will partly contribute to restoration of health worker confidence • Improvement in the economic outlook / performance of the country- especially with promising mining industry may lead to improvements in civil service remuneration and likely retention of more health professionals
Operational risks:			

• *Lack of clarity in career progression and poorly functioning Distance Education Centre erode the confidence of health workers*	• Medium	• Medium	• Strengthening the distance learning centre and providing good career guidance and opportunities for career progression will restore confidence of health professionals
Programmatic and Performance Risks: • *Lack of opportunities for career progression and poorly functioning Distance Education Centre erode the confidence of health workers*	• Medium	• Medium	• Strengthening the distance learning centre and providing good career guidance and opportunities for career progression will restore confidence of health professionals
Other Risks:			
Overall Risk Rating for Strategic Objective 5	***Medium***	***Medium***	
Strategic objective 6: **Strengthen the health system leadership and governance to improve synergy and harmony of program management for delivery of quality EPI/VPD and other priority health services at all levels countrywide**			
Institutional Risks: • *Low technical capacity, including research capacity of staff*	• Medium	• Medium	• The technical and strategic management capacity of MOH and the entire health system will improve on strengthening the technical, including the research capacity of the health professionals
Fiduciary Risks: • *Delay of submission of financial reports by implementing bodies*	• Low	• Low	• Provision of financial management training and regular supportive supervision will improve fiduciary performance of the health system
Operational Risks: • *Low research and M&E capacity greatly impeding MOH and the country from making evidence based decisions to improve program performance*	• Medium	• Medium	• Provision of training to improve the M&E and research capacity of MOH will improve both evidence based decisions making and program performance in the health system
Programmatic and Performance Risks: • *Probability of delays of release of funds to the country from GAVI and delay of provision of Annual Progress Reports by country to GAVI*	• Low	• Low	• Request Gavi to expedite release of funds to facilitate timely procurement of vaccines and other EPI commodities • Improvement of management skills at all levels of the health system, especially at programmatic level should improve timely accountability and reporting to Gavi by MOH.
Other Risks:			
Overall Risk Rating for Strategic Objective 6	***Relatively Low***	***Relatively Low***	

22. Financial management and procurement arrangements

Among the key challenges that prevail in the financial management system in the country are the shortage of skilled finance staff and cashiers at all levels. Once money is released for implementation, expenditure reports need to be produced and sent to HQs on time. But there are persistent delays and this need to be corrected. Providing in service training, supportive supervision and introducing some sort of motivational scheme may be helpful.

In addition there is no established software system that could serve as reference for use by all staff. A major gap that can be observed in the financial management system is also the unavailability of a system to track all health expenditure. The plan is to introduce a national health accounts, and to develop the required expertise to manage such software. This will definitely require training core staff who could in turn train others to roll out the program form the HQs to more peripheral facilities across the country. Technical assistance in the form of a financial management, budgeting and costing consultant is therefore essential.

Most of the problems cited above are related to the finance division of the MoH. With regards to the PMU, the accounting software in use serves to record all financial transactions at HQs and zonal offices. The zonal offices are required to submit all original supporting documents along with the financial report to the central PMU office, where they are verified against the approved budgets and supporting documents before being recorded in the accounting system by the program account. It can be concluded therefore that the financial management system is so far working effectively for the PMU even though there is room for improvement especially the need to upgrade the existing software.

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).	
Name and contact information of Focal Point at the Finance Department of the recipient organisation.	The Project Management Unit (PMU) is the focal point on behalf of the MoH (which is the recipient organization) of GAVI funds and is mandated to manage the existing GAVI/HSS funds on behalf of the Ministry of Health. As such it will continue to operate as the contact information focal point representing the Ministry of Health.
Does the recipient organisation have experience with Gavi, World Bank, WHO, UNICEF, GFATM or other Development Partners (e.g. receipt of previous grants)?	Yes, it handles and manages funds GAVI, GFTAM UNFPA, WHO, UNICEF and other partners
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).	World Bank – HAMSET I & II of total amount of $ 40 million as soft loan and $ 24 million of grant money during the years of 1997 - 2010, GFATM money in support of TB, Malaria, HIV/AIDS and HSS for around 12 since 2003 and on-going to date. Concluded grants amounts to approximately $ 150,000,000 while currently under implementation grants amounts to $ 70,000,000 and GAVI/HSS grant funds of $ 2.700,000 over the past five years. The periodic audit reports, the midterm and final term evaluations, the diagnostic review of the Global Fund grants to the State of Eritrea conducted by the Office of the Inspector General (OIG) that was conducted on 16 April to 4 May 2012 all demonstrated the existence of substantial evidence of appreciable financial performances of the PMU. As such there is no major financial management and procurement issues identified worth reporting so far.

Oversight, Planning and Budgeting	
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 HSSC will be the responsible organ for the country oversight of the program and it also plays an advisory role to the Minister of Health on any issues related to the project. The members are already indicated in this document. The committee meets every quarter to monitor the GAVI/HSS project implementation and to take appropriate remedial actions
Who will be responsible for the annual planning and budgeting in relation to Gavi HSS?	The Policy & Planning Division (through the GAVI HSS focal person), the PMU, The Administration and Finance Division of the Ministry of Health, and the respective responsible sections in the Ministry are jointly responsible for the annual planning, implementation and M&E' budgeting of GAVI/HSS project. But the overall coordination and lead responsibility of follow up of implementation and preparation of reports is assumed by the GAVI HSS focal person, who is also the director of policy and planning division.
What is the planning & budgeting process and who has the responsibility to approve Gavi HSS annual work plan and budget?	The annual work-plan adheres to the overall project work plan and budget template. Request for implementation comes from the various MoH implementers to the PMU. Then the PMU upon approval from the Minister releases the money.
Will the Gavi HSS programme be reflected in the budget of the Ministry of Health submitted every year to the Parliament for approval?	Yes, as indicated above on # 6 it is submitted along with other MOH program budgets to the Ministry of Finance for the Government's approval.
Budget Execution (incl. treasury management and funds flow)	
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 GAVI/HSS has a hard currency account operating in the National bank of Eritrea and a local currency account operating in the Commercial bank of Eritrea for the Head Quarters and six bank accounts in the six zones i.e. One bank account in each zone.
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?	Yes, Gavi transferred funds are directly transferred from Geneva to the National Bank of Eritrea in the account opened for the Ministry of Health' Project Management Unit
Would this bank account hold only Gavi funds or also funds from other sources (government and/or donors- "pooled account")?	The bank account opened and operating for local and hard currency are solely for GAVI/HSS funds
Within the HSS programme, are funds planned to be transferred from central to decentralised levels (provinces, districts etc.)? **If YES**, please describe how fund transfers will be executed and controlled.	Yes, GAVI/HSS funds are transferred directly from PMU HQ bank account to each zone's GAVI specific bank accounts and in each zone the signatories are Zonal Medical Director, PMU zonal project officer and Administration and Finance head of the Zonal Health department
Procurement	
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)	National procurement Guidelines including Global fund procurement Guidelines as contained in the Procurement Manual used for GF procurement practices is available with us.
Are all or certain items planned to be procured through the systems of Gavi's in-country partners	None

(UNICEF, WHO)?	
What is the staffing arrangement of the organisation in procurement?	We have procurement officers for Global Fund Grant and at the same time they handle GAVI procurements.
Are there procedures in place for physical inspection and quality control of goods, works, or services delivered?	Yes, we conduct quality control for drugs, mosquito bed nets, and other staff during the process of procurement and before delivery to end users. Occasionally, during the process of implementation we do on site visits to check the efficacy and safety of procured items. Quarterly site supervision is also done by the engineering unit of the MoH to inspect progress of implementation of civil works.
Is there a functioning complaint mechanism? Please provide a brief description.	Yes, suppliers can submit complaints to the tender committee at the Ministry of Health and PHARMECOR or directly to the Minister of Health or Global Fund. There is also suppliers performance system at PHARMECOR
Are efficient contractual dispute resolution procedures in place? Please provide a brief description.	Yes, suppliers can submit complaints to the tender committee at the Ministry of Health and PHARMECOR or directly to the Minister of Health or Global Fund. There is also suppliers performance system at PHARMECOR
Accounting and financial reporting (incl. fixed asset management)	
What is the staffing arrangement of the organisation in accounting, and reporting?	We have a project coordinator and finance officer for GAVI/HSS
What accounting system is used or will be used for the Gavi HSS Programme? (i.e. Is it a specific accounting software or a manual accounting system?)	Yes, we have accounting software (FINPRO TOMPRO) in place which we also use for GFTAM funds
How often does the implementing entity produce interim financial reports and to whom are those submitted?	Financial reports are produced quarterly, and submitted to MOH Minister's office, Policy and Planning Office, Ministry of Finance (MoF) and Ministry of National Development.
Internal control and internal audit	
Does the recipient organisation have a Financial Management or Operating Manual that describes the internal control system and Financial Management operational procedures?	Yes ,the Financial Management Manual /FMM/ that we have developed for GFTAM is also being used for GAVI/HSS purposes
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.	Yes, we have internal audit
Is there a functioning Audit Committee to follow up on the implementation of internal audit recommendations?	No, there is no established audit committee but the HSSC is doing the work.
External audit	
Are the annual financial statements planned to be audited by a private external audit firm or a Government audit institution?	Yes financial statements are annually audited by private external audit firm, which is authorized by General Audit Service.
Who is responsible for the implementation of	The HSSC and the PMU are responsible for implementation of audit

audit recommendations?	recommendations.