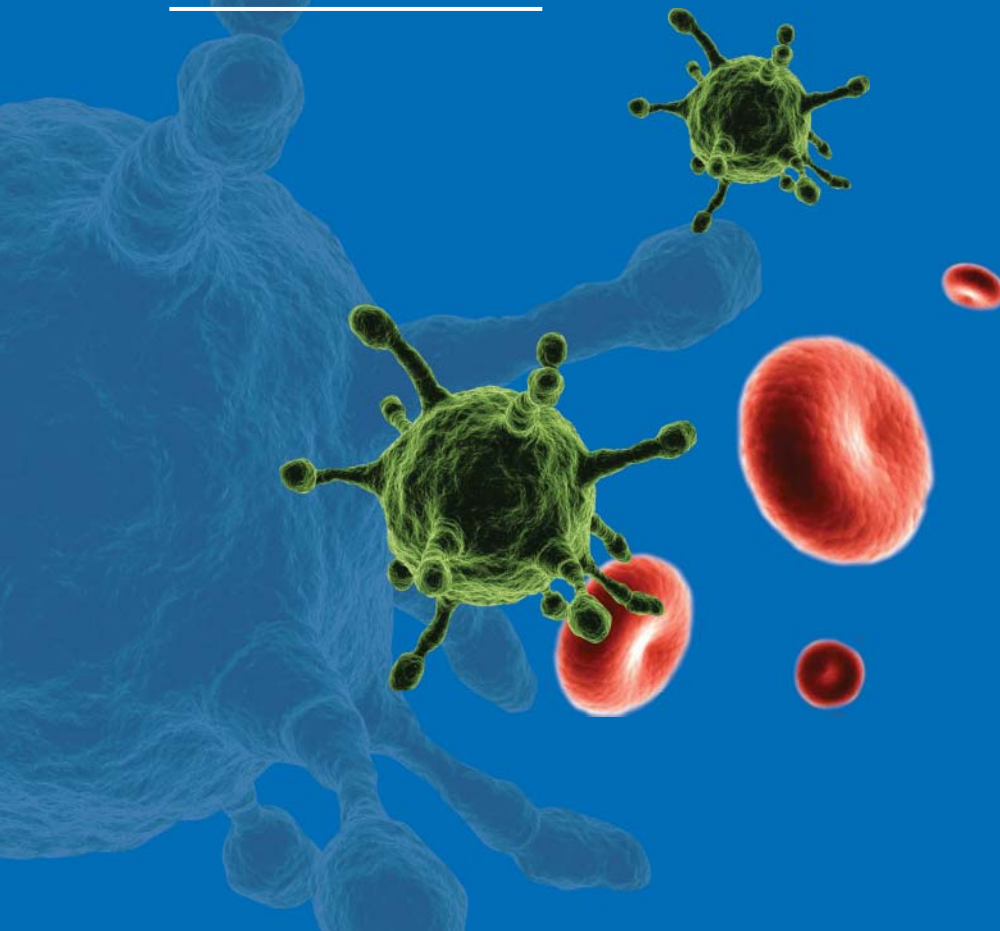




Government of
Sierra Leone

NATIONAL ACTION PLAN FOR HEALTH SECURITY (NAPHS)

2018-2022



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Sierra Leone, National Action Plan for Health Security, 2018 – 2022

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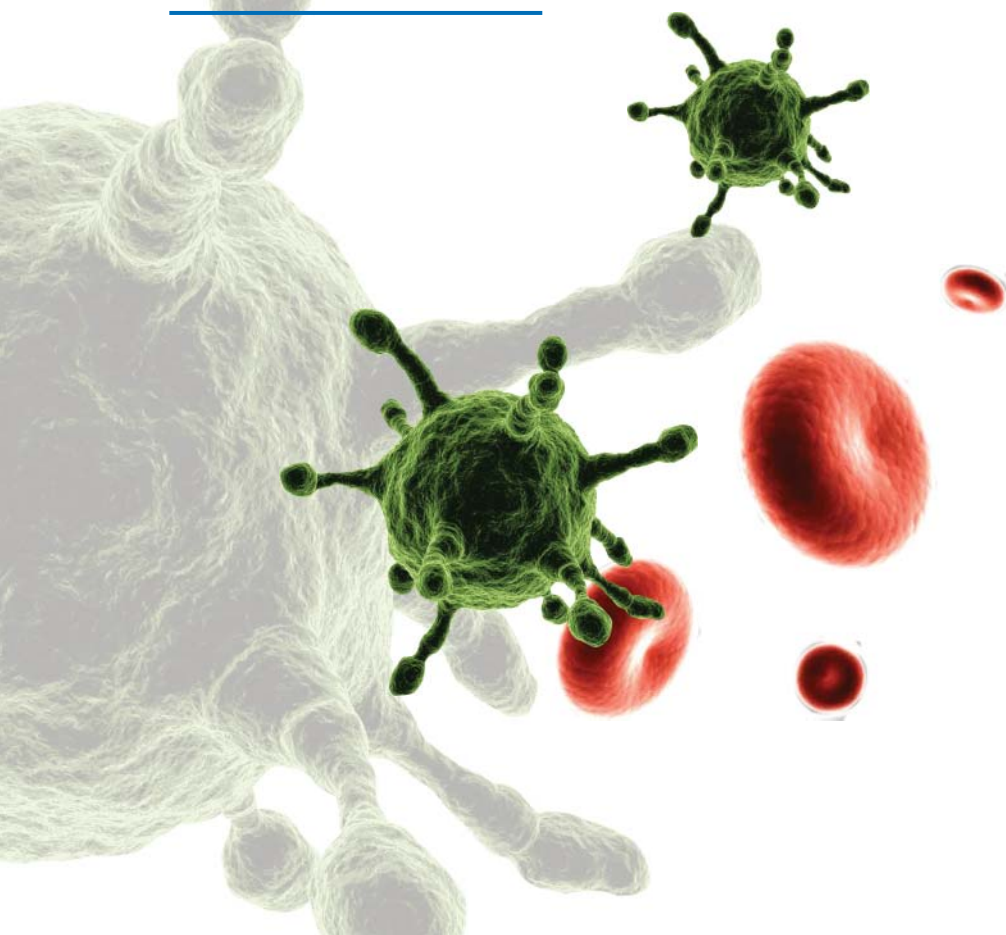
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Government of
Sierra Leone

NATIONAL ACTION PLAN FOR HEALTH SECURITY (NAPHS)

2018-2022





MAMIEN PIKIN



REPORTING FORM FOR ADVERSE EVENTS FOLLOWING IMMUNIZATION (AEFI)

Name: Kenneth O...

Address: ...

Phone: ...

Date of onset: ...

System Organ Class	Medicine	Manifestation	Severity	Duration

Foreword

Sierra Leone has experienced many health related emergencies spanning human, animal and environmental health for millennia. For example, after a decade of absence, cholera re-emerged in Sierra Leone 1994 – 1995 affecting more than 46,061 people and killing 1,465 people and again in 2012-2013 affecting 12 out of the then 13 districts in Sierra Leone and affecting 23,308 people with 301 documented deaths. Lassa fever is a viral hemorrhagic fever endemic in the country and that has continued to present a significant threat. The incidence of Lassa fever has been rising significantly in the last few years. By mid-2018, 20 cases of Lassa fever had been reported as compared to annual cumulative of 23 in 2017 and 33 in 2016.

The animal sector too has experienced numerous outbreaks that have caused devastation of animal stocks and resulted in losses in agricultural productivity and food security. Human populations continue to suffer health consequences of zoonosis. The death of 12 people from rabies between 1968 and 1972 necessitated a national campaign with vaccination of 4,700 dogs in 1974. More recently, the risk of rabies has once again come to the fore with well over 4,700 animal bites and 50 deaths reported in the last three years.

It is acknowledged that the environment plays an important role in human health. Environmental degradation with increasing population pressure are steadily playing a role in the transmission of diseases and other public health threats to humans. The 2014 – 2015 Ebola Virus Disease (EVD) outbreak that affected Sierra Leone and the West African Sub Region is likely to have originated from interactions between human populations and the tropical rain forest ecosystems. In Sierra Leone, a total of 14,124 people were affected, including 3,956 that died. The Ebola epidemic took a heavy toll on the already scarce health workforce, a total of 350 health care workers were affected with 221 deaths reported.

Following a review of the response to the West African EVD Epidemic, the World Health Assembly (WHA) in its recommendation WHA 69/21.5, States Parties were to adopt the Joint External Evaluation (JEE) and to develop National Action Plans for Health Security (NAPHS) within one year of the external evaluation. In line with this recommendation, Sierra Leone was the sixth country in the African region to undergo the Voluntary JEE in October 2016. The findings and recommendations from JEE have informed development of this National Action Plan for Health Security (2018-2022) through an all-inclusive multi-sectoral process.

This plan presents costing and resource mapping by technical areas, it is envisaged that the development partners will supplement domestic funding for the implementation to be a success. The plan will facilitate multi-sector engagement using a One Health approach and guide implementation of activities for progress towards attainment of International Health Regulations (IHR) 2005 core capacities required for enhancing Global Health Security.

Dr. Alpha T. Wurie

Cabinet Minister

Ministry of Health & Sanitation

Mr. Joseph J. Ndanema

Cabinet Minister

Ministry of Agriculture and
Forestry

Dr. Dennis Sandy

Cabinet Minister

Ministry of Lands, Country
Planning & the Environment

Acknowledgement

The published Sierra Leone Joint External Evaluation (JEE) report proposes actions that Sierra Leone needs to undertake to improve the country's capacity to prepare for, detect, and respond to adverse public health events. In order to guide the implementation of the actions proposed in the JEE report, the MoHS, MAF and EPA with support of partners developed this National Action Plan for Public Health Security (NAPHS). The NAPHS outlines what activities will be carried out in the medium term (2018-2022) in order for Sierra Leone to attain the desired capacities required for IHR & GHSA compliance. Currently, it is the renewed focus of the Ministry of Health and Sanitation in collaboration with other ministries, government agencies and One Health partner organizations as a means of accelerating achievement of national health security.

We wish to acknowledge the invaluable contribution of all actors who were involved in the formulation of this plan. We would like to express our gratitude to the Honorable Ministers of Health and Sanitation (MoHS) and Agriculture and Forestry (MAF) Dr. Alpha T. Wurie and Mr. Joseph J. Ndanema respectively and the Minister of Lands, Housing & Environment Dr. Dennis Sandy for their high-level support to the process of development of this plan. We would also like to thank the former Chief Medical Officer Dr. Brima Kargbo, the former Chief Agricultural Officer Mr. Ideara Sheriff and the former Chief Environmental Officer Mr. Edward P. Bendu together with the heads of directorates, programs, units and agencies and technical personnel for their contributions to the development of the NAPHS. This process would not be complete without the participation of other One Health stakeholders that include the Office of National Security (ONS), Njala University, Sierra Leone Civil Aviation Authority (SLCAA), Sierra Leone Agricultural Research Institute (SLARI) and the Republic of Sierra Leone Armed Forces (RSLAF). The involvement of these One Health players from the Government of Sierra Leone (GOSL) side is an assurance of the new approach to health security in the country.

The successful development of this plan was made possible by the unwavering support and leadership of Dr. Amara Jambai, who was then the Deputy Chief Medical Officer (Public Health) and now the Chief Medical Officer. We also appreciate the contribution of the late Dr. Foday Dfae who served as the Director of Disease Prevention and Control at the Ministry of Health & Sanitation.

We are particularly grateful to the WHO for the technical and financial support provided from all three levels (HQ, AFRO and the Country Office). Special thanks to Dr. Charles Njuguna, WHO Health Security and Emergency Coordinator for his technical guidance throughout the process. We are also grateful to the leadership of the following partner organizations for their contribution: FAO, US CDC, USAID, IOM, DFID, Public Health England, World Bank, China CDC and GIZ. Their unreserved commitment to the development of this plan as an assurance of the strength of partnership towards its implementation.



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Executive Summary

The Sierra Leone National Action Plan for Health Security (NAPHS) is based on the recommendations of the 2016 Joint External Evaluation (JEE). The JEE is a voluntary, collaborative and multi-sectoral process to evaluate country's capacity to prevent, detect and rapidly respond to public health risks occurring naturally or due to deliberate or accidental events. The JEE process helps countries identify the most critical gaps within their human and animal health systems, to prioritize opportunities for enhanced preparedness and response, and to engage with current and prospective partners and donors to effectively target resources. Sierra Leone was among first African nations to accept to undergo the JEE process which was conducted in between 31st Oct – 4th November.

Some of the key areas for improvement that were identified through the process of JEE included; the need for revision of public health laws and legislation, a budget line for IHR, accelerate the implementation of the One Health approach, development of a comprehensive multi-hazard National Public Health Emergency Preparedness and Response plan, strengthening surveillance at points of entry (PoEs), improve coordination and collaboration between human and animal health laboratory systems, Improve capacity (human resources, laboratory) for the detection and response to chemical and radiation hazards among several other key priorities.

Stakeholders, with broad representation, and using a one-health approach, reviewed the NAPHS so as to prioritize activities planned in the 2018-2022 implementation period. A resource mapping exercise was carried out, this allowed the country to have an overview on the available or potential resources to support building country capacities for health security. Implementation of this plan will enable the country to: prevent the likelihood and reduce the consequences of outbreaks and other public health hazards; build national capacities for early detection and effective response to public health emergencies and other events of public health concern; foster all-sector partnerships for effective prevention, detection and response to public health emergencies and other events of public health concern; establish a sustainable financing strategy for the attainment of national health security. Overall, this will enable the country to strengthen core capacities required under IHR 2005 leading to enhanced health security of the country and the sub region.

The overall cost of implementation of this plan is about \$291 million, the high-prioritized activities for implementation in year one and two will cost about \$ 50 million. It is envisaged that the health sector development partners will be enthusiastic to supplement domestic funding for the implementation to be a success. WHO will continue to coordinate a platform for donors and partners to share, inform, and collaborate in order to strengthen Sierra Leone IHR (2005) capacity and increase our contribution to global health security.

List of Abbreviations and Acronyms

AAR	After-Action Review
AEFI	Adverse effects following immunization
AFENET	African Field Epidemiology Network
AFP	Acute Flaccid Paralysis
A4P	Agenda for Prosperity
AMR	Antimicrobial Resistance
BPEHS	Basic Package of Essential Health Services
CAHW	Community Animal Health Worker
CBS	Community Based Surveillance
China CDC	Chinese Center for Disease Control and Prevention
US CDC	Centers for Disease Control and Prevention
CHC	Community Health Centre
CHP	Community Health Post
CHWs	Community Health Workers
CMO	Chief Medical Officer
CPHRL	Central Public Health Reference Laboratory
CSOs	Civil Society Organizations
DAO	District Agricultural Officer
DFID	Department for International Development (UK)
DHIS2	District Health Information System2
DHMT	District Health Management Teams
DHSE	Directorate of Health Security and Emergencies
DLVS	Directorate of Livestock and Veterinary Services
DMO	District Medical Officer
ECOWAS	Economic Community of West African States
e-IDSR	electronic Integrated Disease Surveillance and Response
EPA	Environmental Protection Agency
EVD	Ebola Virus Disease
FAO	Food and Agriculture Organization
FELTP	Field Epidemiology and Laboratory Training Programme
FETP	Field Epidemiology and Training Programme
GDP	Gross Domestic Product
GHSA	Global Health Security Agenda
HCAI	Health Care-Associated Infections
IPC	Infection Prevention and Control
JEE	Joint External Evaluation
GEF	Global Environmental Facility
GoSL	Government of Sierra Leone
GIZ	German Agency for International Cooperation
ICAP	International Center for AIDS Care and Treatment Programs
ICT	Information Communication and Technology
IDSR	Integrated Disease Surveillance and Response
IHR	International Health Regulations
IHR-NFP	International Health Regulations-National Focal Point
IOM	International Organization for Migration
LTWG	Laboratory Technical Working Group
MAF	Ministry of Agriculture and Forestry

MCHP	Maternal and Child Health Post
MDAs	Ministries Departments and Agencies
MTHE	Ministry of Technical and Higher Education
MIA	Ministry of Internal Affairs
MLF	Multilateral Fund
MOFED	Ministry of Finance and Economic Development
MoHS	Ministry of Health and Sanitation
MRU	Mano River Union
NAPHS	National Action Plan for Health Security
NMCC	National Multi-Agency Coordination Committee
NPHA	National Public Health Agency
NPHEMC	National Public Health Emergency Management Committee
OIE	World Organization of Animal Health
ONS	Office of National Security
NLSP	National Laboratory Strategic Plan
NPHEPR	National Public Health Emergency Preparedness and Response Plan
NSRPA	Nuclear Safety and Radiation Protection Agency
PHEs	Public Health Emergencies
PHEMC	Public Health Emergency Management Committee
PHE	Public Health England
PHEIC	Public Health Events of International Concern
PHNEOC	Public Health National Emergency Operation Centre
POCT	Point of Care Testing
PoEs	Points of Entry
POPs	Persistent Organic Pollutants
REDISSE	Regional Disease Surveillance Strengthening Enhancement
RSLAF	Republic of Sierra Leone Armed Forces
SDGs	Sustainable Development Goals
SLMTA	Strengthening Laboratory Management towards Accreditation
SLIPTA	Stepwise Laboratory Quality Improvement Process towards Accreditation
SOPs	Standard Operating Procedures
SPP	Strategic Planning Portal
SWAp	Sector Wide Approach
TBA	Traditional Birth Attendant
UHC	Universal health Coverage
UNEP	United Nations Environment Program
UNICEF	United Nations International Children's Emergency Fund
UNISDR	UN Office for Disaster Risk Reduction
VHF	Viral Hemorrhagic Fever
WB	World Bank
WHA	World Health Assembly
WHO	World Health Organization



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1 BACKGROUND

1.1 Country Profile

Sierra Leone is located on the west coast of Africa and covers an area of about 72,000 square kilometres (28, 000 square miles). It extends from latitude 7 degrees north to 10 degrees north, and from longitude 10 degrees west to 14 degrees west. The Republic of Guinea borders it on the north and northeast, and the Republic of Liberia borders it on the east and southeast. On the west and southwest, the Atlantic Ocean extends approximately 340 kilometres (211 miles)¹.

1.1.1 Administrative and Political Structure

Sierra Leone is administratively divided into five major regions: Northern Province, North Western Province, Southern Province, Eastern Province and the Western Area where the capital Freetown is located. The regions are further divided into sixteen districts, while the districts in turn are sub-divided into 190 chiefdoms and sections, governed by traditional Paramount Chiefs and Section Chiefs respectively².

Map of Sierra Leone



Figure 1: Map of Sierra Leone

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Politically, Sierra Leone is divided into 21 local councils that are further sub-divided into wards. An elected councillor through an ACT Supplement to the Sierra Leone Gazette Extraordinary Vol. CXXXV, No. 14 dated 1st March 2004 heads each ward.

1 Sierra Leone Demographic Health Survey 2013

2 <http://slconcordtimes.com/sierra-leone-now-has-190-chiefdoms-and-a-new-national-map/>

1.1.2 Socio-economic context Take this up to come after political situation

The Sierra Leonean economy is predominantly driven by agriculture, which accounts for about half of the real gross domestic product (GDP). However, the share of the GDP attributed to agriculture has been declining, from about 54% in 2009 to less than 53% in 2010 and 2011, and with a sharper decline from 47% in 2012 to 41% in 2013, mainly due to focus on the mining activities in the country during this period. Services second agriculture as a major percentage of GDP, at approximately 34 percent³.

The manufacturing sector, consisting mainly of import–substituting industries, accounts for only 2% of GDP. The mining sector accounted for less than 6% of GDP between 2001 and 2011 but increased to 12% of GDP in 2012 (SSL, 2012), due mainly to the discovery and mining of iron ore in 2011 in the Northern region. Coffee, cocoa, and fish are the major agricultural exports of the country⁴.

The performance of the Sierra Leonean economy has been declining since the post-independence era, with its greatest decline during the 10-year civil conflict. Since the end of the conflict in 2002, several measures have been put in place to improve the economy and the quality of life. These include the introduction of five-year development frameworks such as the Poverty Reduction Strategy Papers (PRSP), the Agenda for Change, and the Agenda for Prosperity.

The Agenda for Change saw improvement in the overall economy, with emphasis in energy, infrastructure, agriculture, and social services. It enabled the economy to grow at an annual average of 6% between 2007 and 2012. One of the lessons learned during the implementation of the Agenda for Change was that infrastructural development and social services were effective strategies to create jobs for youth, including the Cash for Work Programmes. In 2013, the Government of Sierra Leone launched the Agenda for Prosperity (A4P) to provide continuity by consolidating the gains made under the Agenda for Change. The goal was to transform Sierra Leone into a middle-income country by 2035⁵. The Ebola Virus Disease (EVD) outbreak of 2014 affected the economic performance of the country and reversed previous gains that had been made.

1.1.3 Demographic Profile

Sierra Leone has a total population of 7,092,113 people in 2017 as projected from the population census of 2015 with an annual population growth of 3.2 percent. The country has a rural population of 59% and urban population of 41%. The majority of the country's population are women (50.8%). There are about 15 distinct ethnic groups reflecting a rich cultural diversity⁶.

The climate in Sierra Leone is determined mainly by the seasonal movements of two air masses: the North-easterly Continental Tropical Winds (commonly called North-East Trade Winds) and the south westerly Maritime Tropical Winds (commonly called South-West Monsoon). The country experiences two main seasons: the dry season, between November and May, and the wet/rainy season, from May to November. The present distribution of vegetation in Sierra Leone has been influenced not only by factors of climate and soil but also by humans. At present, the following vegetation communities can be distinguished: forest, savannah, grassland, and swamp. The country has eight main river systems: the Great Scarcies, Little Scarcies, Rokel, Jong, Sewa, Wanjei, Moa, and Mano. The rivers typically flow from northeast to southwest, eventually reaching the Atlantic Ocean⁷.

3 Sierra Leone Demographic Health Survey 2013

4 Sierra Leone Demographic Health Survey 2013

5 Sierra Leone Demographic Health Survey 2013

6 https://www.statistics.sl/wp.../final-results_-2015_population_and_housing_census

7 Sierra Leone Demographic Health Survey 2013

Sierra Leone has a young population:40.9% are below 15years and 3.5% are above 65 years. The working age population (15-64 yrs.) represent 55.6% of the total population with a literacy rate of 51.4% for persons above 10 years of age⁸.

1.1.4 Situation Analysis-burden of PHEs in terms or morbidity and mortality

In June 1996, an epidemic of poisoning occurred in Sierra Leone which involved 49 persons and 14 deaths. The laboratory approach and investigation of the incident was described using a positive chemical ionization mass spectrometry and nuclear magnetic resonance spectroscopy, the toxicant was identified as parathion, a highly toxic organophosphorus pesticide. In conclusion, analysis of various items supported the epidemiologic hypothesis that bread was made from contaminated flour and that the flour became contaminated with parathion during a truck shipment⁹. Other disease burdens are cholera, Lassa fever, measles and now Ebola, which took the lives of many Sierra Leoneans. Sierra Leone still experiences the biggest burden of public health events in terms of morbidity and mortality. Over time, the country has also experienced an increased burden of non-communicable diseases, such as diabetes and cardiovascular conditions. Even though the country has established some institutions (Environmental Protection Agency and Nuclear Safety and Radiation Protection Agency) to detect and monitor the effects of chemicals and radio-nuclear hazards, the burden due to chemical and radio-nuclear hazards is not clearly known as the country lacks a clear detection, documentation and reporting system for these events¹⁰.

Lassa Fever Cases Reported Annually, Sierra Leone, 2007-2017 (n=782)

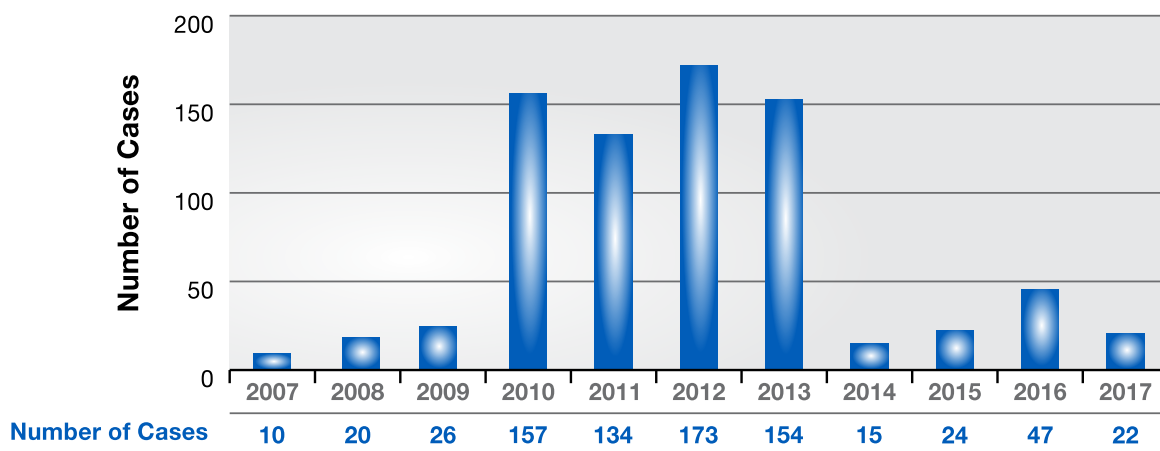


Figure 2: Lassa Fever Laboratory Confirmed Cases in Sierra Leone, 2007- 2017

Table 1: Cholera Epidemics in Sierra Leone, 1998 to 2013¹¹

Year	Cases	Deaths	CFR %	Remarks
1998	2096	57	2.7	Affected 3 districts: Freetown, Port Loko & Kambia
1999	863	5	0.6	Started in September
2004	513	42	8.2	Affected Western Area, Port Loko & Kambia
2006	2560	99	3.8	Affected Western Area (rural) Kambia, Tonkolili, Port Loko & Kailahun
2007	2219	84	3.79	Afected 11 out of 13 districts

8 https://www.statistics.sl/wp.../final-results_-2015_population_and_housing_census

9 <https://www.ncbi.nlm.nih.gov/labs/articles/2395340/>

10 Sierra Leone Demographic Health Survey 2013, WHO Country Cooperative Strategy 2017-2021

11 Directorate of disease prevention and control Ministry of Health and Sanitation

Year	Cases	Deaths	CFR %	Remarks
2008	62	1	1.6	Affected Western Area, Port Loko & Kambia
2012	22,971	299	1.3	Affected 12 out of 13 districts
2013	369	2	0.54	Affecting 12 out of 13 districts

Table 2: IDSR diseases/conditions/events reported in Sierra Leone, 2016 and 2017¹²

Year	2016			2017		
	Cases	Deaths	CFR (%)	Cases	Deaths	CFR (%)
Disease/Condition/Event						
Acute Flaccid Paralysis	57	0	0	75	1	1.3
Acute Jaundice Syndrome	26	2	7.7	32	1	3.1
Acute Viral Hemorrhagic Fever	79	25	31.6	84	23	27.4
Adverse Effect Following Immunization	125	0	0	88	0	0
Animal Bites	2,132	27	1.3	1,482	8	0.5
Suspected Anthrax	0	0	0	0	0	0
Suspected Buruli ulcer	0	0	0	2	0	0
Suspected Cholera	1	0	0	35	0	0
Suspected Chikungunya	0	0	0	0	0	0
Suspected Dengue Fever	0	0	0	3	0	0
Diarrhea with severe dehydration in Under Fives	26,152	106	0.4	9,679	108	1.1
Suspected Dracunculiasis	0	0	0	1	0	0
Bloody diarrhea	6,824	41	0.6	3,269	8	0.2
Suspected Measles	8,133	31	0.4	2,744	1	0
Severe malnutrition (MUAC < 11.5cm) in Under Fives	26,652	174	0.7	26,161	168	0.6
Suspected Malaria cases	2,732,006			2,937,010		
Malaria tested	2,699,157			2,923,401		
Malaria positive	1,622,948	2,512	0.2	1,649,644	2,257	0.1
Suspected Meningococcal Meningitis	68	10	14.7	44	8	18.2
Maternal Death		618			490	
Suspected Monkey pox	0	0	0	15	0	0
Neonatal Tetanus	36	13	36.1	43	12	27.9
Suspected Plague	0	0	0	0	0	0
Suspected Influenza due to new subtype	0	0	0	0	0	0
Severe Pneumonia	88,568	469	0.5	25,559	449	1.8
Suspected Small pox	0	0	0	0	0	0
Suspected Typhoid fever	75,097	317	0.4	81,598	53	0.1
Suspected Yellow fever	51	1	2	52	0	0

12 Directorate of Health Security and Emergencies, Ministry of Health and Sanitation

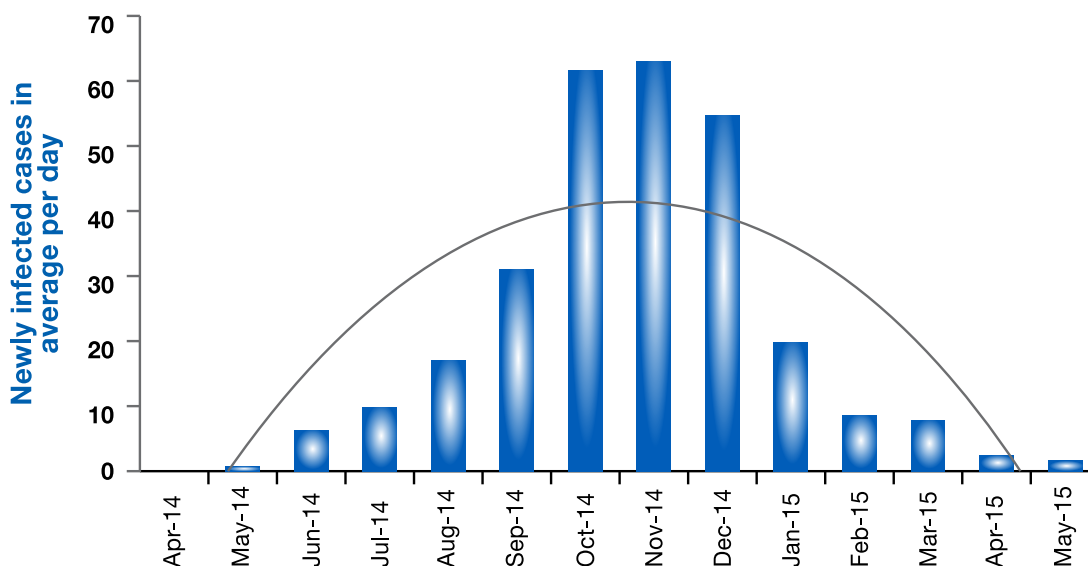


Figure 3: EVD outbreak in Sierra Leone, 2014 - 2016¹³

The overall life expectancy in Sierra Leone is 58.61 years. Infectious diseases are the leading cause of death and disease in Sierra Leone, of which malaria is the single biggest killer, accounting for 38% of all hospital admissions¹³. Tuberculosis is another significant public health problem, with an estimated three new infections per 1,000 each year. The national HIV prevalence rate is at 1.5%¹⁴.

Sierra Leone was severely hit by the most widespread Ebola virus disease epidemic in history. In total, 8,706 infections were recorded, of which 3,590 died between May 2014 and March 2016. The risk of epidemics and other public health concerns remains high with 4,000 survivors¹⁵. In 2015, the country was estimated to have the world's highest maternal mortality ratio, at 1,360 maternal deaths per 100,000 live births¹⁶. Child mortality is also very high, with over 103 of every 1000 children dying before the age of five years. Almost one third of under-five children suffered from stunting in 2014¹⁷.

1.1.5 Progress towards achievement of international and national targets in health indices

The GHSA was launched in 2014 with the aim to build country capacity to control infectious diseases through a multi-lateral and multi-sectoral approach. In early 2016, Sierra Leone became one of 50 partner countries to endorse the Global Health Security Agenda (GHSA). The Ministry of Health and Sanitation (MoHS) in collaboration with Ministry of Agriculture and Forestry, (MAF), Office of National Security (ONS), Civil Society Organizations (CSOs) and partners developed a 5-year GHSA roadmap in April 2016 following an assessment of the twelve technical areas. The 2016 JEE complemented this initiative and revealed challenges in the implementation of 19 IHR core capacities. Progress has been made to address some of these challenges by the launching of the one health platform at national and regional levels which is geared to enhance coordination of multi-sectorial response to health threats.

With support from WHO, the MoHS in 1999 established a surveillance unit that focused primarily on Acute Flaccid Paralysis (AFP), measles, yellow fever, and neonatal tetanus. In 2004, Sierra

13 <http://www.sciencedirect.com/science/article/pii/S1201971215001848>

14 Sierra Leone Demographic Health survey 2013

15 Sierra Leone National EVD SitRep

16 Geoba.se:Gazetter-Sierra Leone-2017-Statistics and Ranking

17 Geoba.se:Gazetter-Sierra Leone-2017-Statistics and Ranking

Leone adopted the Integrated Diseases Surveillance and Response (IDSR) strategy and adapted the technical guideline with the selection of 22 priority diseases. The country successfully rolled out IDSR in all government health facilities and some private and mission facilities also having representatives. The country has also rolled out the electronic integrated diseases surveillance and response (e-IDSR) into the District Health Information System (DHIS2) in all districts in 2016. In 2008, further revision of the IDSR guidelines was conducted to include the International Health Regulations (IHR) 2005. At that time, the list of priority diseases was updated to 37, with inclusion of non-communicable diseases as well as other emerging/re-emerging diseases such as dengue, trachoma, anthrax, and human influenza caused by a new sub-type. In 2015, the list of priority diseases was revised and updated from 37 to 47 diseases including Ebola. The majority of these diseases are reported on a weekly or monthly basis. Reporting completeness rate has steadily improved over the years from 74.5% in 2013 to 80% in 2014 and stands at 97% as of September 2017¹⁸. Eighty-one (81) officers, including veterinarians, at the national and district levels have been trained in frontline Field Epidemiology through the CDC FETP. There has also been good progress in reaching the suspected outbreak performance indicators; detection rate (90%), Notification within 24hrs (83%), Rapid response within 48hrs (90%) and lab results received within 7days (72%) as of September 2017¹⁹.

Table 3: Demographic and Health indicators, Sierra Leone

Demography and Population	Indicator	Data Source
Population (number)	7,092, 113	SL Population and Housing Census 2015
Population Under 5 years	1,255,304	SL Population and Housing Census 2015
Population Under 15 years	2,900,674	SL Population and Housing Census 2015
Population of Women of Childbearing Age	1,574,449	SL Population and Housing Census 2015
Population of expected pregnancy	312,053	SL Population and Housing Census 2015
Infant mortality rate (per 1000)	110	SL DHS 2013
Under-five mortality rate (per 1000)	175	SL DHS 2013
Maternal Mortality Ratio (per 100,000)	1,360	SL DHS 2013
Life Expectancy – Male (years)	55.99	Geoba.se:Gazetter-Sierra Leone-2017-Statistics and Ranking
Life Expectancy – Female (years)	61 .30	Geoba.se:Gazetter-Sierra Leone-2017-Statistics and Ranking
HIV Prevalence	1.5	SL DHS 2013
Total Fertility Rate	4.9	SL DHS 2013
Contraceptive Prevalence Rate	16.6	SL DHS 2013
Neonatal Deaths per 1000	42.5	SL DHS 2013
Proportion of fully Immunized Children	78.6	SL DHS 2013
Proportion % of deliveries conducted by skilled attendant	68.5	SL DHS 2013

18 IDSR weekly bulletin Directorate of disease prevention and control

19 WHO weekly Integrated disease surveillance response presentation

Demography and Population	Indicator	Data Source
Proportion % of women of reproductive age receiving family planning	20	SL DHS 2013
Proportion % of pregnant women attending 4 ANC visits	77	SL DHS 2013
Proportion % of infants under 6 months on exclusive breastfeeding	32	SL DHS 2013
Proportion % of new-born with low birth weight	7	SL DHS 2013
Proportion of under 5 who are underweight	16	SL DHS 2013

1.1.6 Health Service Organization

Sierra Leone’s health service delivery system is diverse; comprising of Government, religious missions, local and international NGOs and the private sector. There are also public, private for profit, private non-profit and traditional medicine practices. The private health facilities operate under the authority of individual owners and/or boards of directors, mainly in urban areas. The Traditional healers and Traditional Birth Attendants (TBAs) are known to provide a significant amount of healthcare services across the country. The Ministry of Health and Sanitation is responsible for overall policy direction and is organized into two main divisions at the central level: medical services and management services. At the district level, the same two-division approach is adopted; district health services and the district health management both under the leadership of District Medical Officer (DMO). Overall, the health service organization is based on the Primary Health Care concept. The public health delivery system comprises of three levels: (a) peripheral health units (Community Health Centre, Community Health Posts, and Maternal and Child Health Posts) for primary health care; (b) district hospitals for secondary care; and (c) regional/national hospitals for tertiary care²⁰.

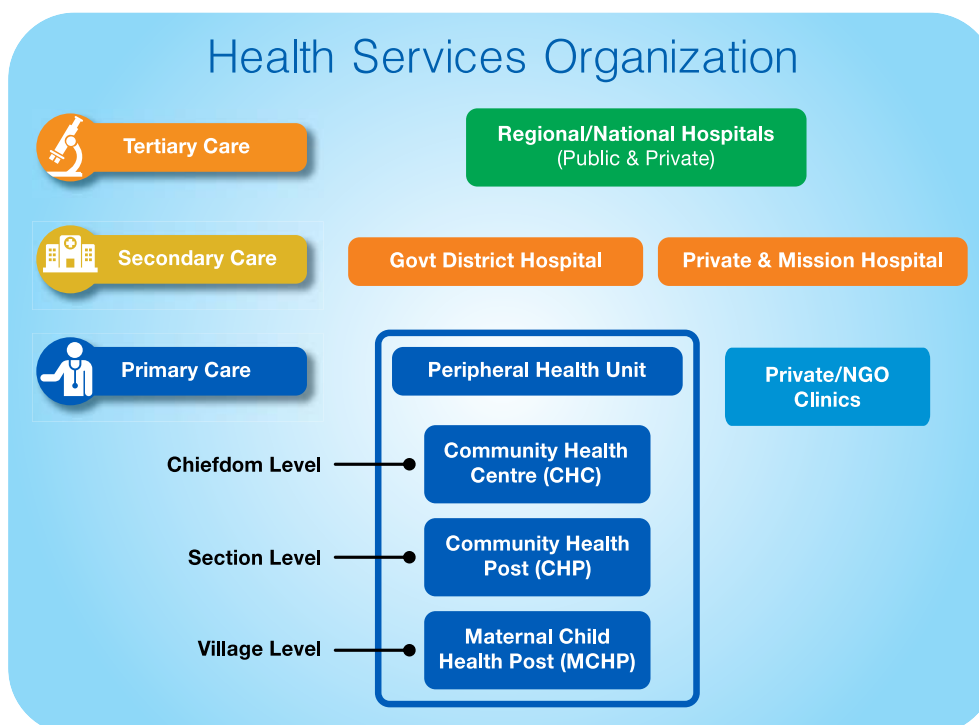


Figure 4: MoHS Health Care Services Organization²¹

20-21 Sierra Leone Primary Health Care Handbook Ministry of Health and Sanitation

Table 4: showing Health facility distribution

Category of Health Facility	Number in existence
Hospitals	58
CHC	231
CHP	341
MCHP	639
CLINIC	54
OTHER	5

1.1.7 Human Resource for Health

As of 2010, Sierra Leone had only two skilled providers per 10,000, ranking the country the fourth lowest out of 49 priority low and middle income countries for health worker-to-population ratios²². A survey of the payroll data and the HRIS database in 2015 found that the country had 275 doctors, 291 midwives, 1,394 nursing officers and state registered nurses and 2,815 state-enrolled community health nurses in the civil service. The health workforce suffered with the precipitated deaths of 221 health workers during the EVD outbreak in 2014 and 2015.

Sierra Leone therefore faces a chronic shortage of skilled human health resources. In order to meet the WHO minimum standard of 22.8 skilled health workers per 10,000 population, Sierra Leone requires approximately 14,000 more health workers²³.

1.1.8 Health Financing

Health care costs remain very high in Sierra Leone, resulting in poor utilization (on average 0.5 visits per person per year) of health services. Since the end of 2008, the 19 local councils (12 district councils, 5 city councils, the Freetown City Council and the Western Area Rural Council) are now responsible for managing health care delivery services in the country. Since 2005, tied grants amounting to about a quarter of the national health budget were transferred to the Local Councils for the District Health Management Team (DHMT). These grants cover activities such as vaccination campaigns, epidemic control, infrastructure improvements and expansion, and the operational expenses of the DHMT. The per capita total expenditure on health services is approximately \$95 USD. The biggest contribution (76%) to this expenditure is from individual service seekers who pay for the user fees (out of pocket expenditure) while 16% is from the government and 13% comes from donors⁵. Expenditure on health as a percentage of total government expenditure is 10%, which is still significantly below the 15% target of the Abuja Declaration. The government is heavily reliant on donors and partner organizations for support of its health programs with funds flowing through budget support or directly to the Ministry and implementing partners.²⁴

1.2 The International Health Regulations

From the last half of the nineteenth century, nations started negotiating measures to prevent disease spread within human settlements and across international borders. Despite the progress made, civilian and troop movements during World War I helped propagate crossborder epidemics, including the 1918 "Spanish flu" pandemic that killed 50100 million people worldwide. During World War II, Allied Forces successfully cooperated in addressing communicable diseases such as malaria, even as other infectious diseases such as typhus and tuberculosis resurged in Europe²⁵.

22 WHO. (2014). "Global Atlas of the Health Workforce " Retrieved February 11, 2015

23 WHO. (2014). "Global Atlas of the Health Workforce " Retrieved February 11, 2015

24 Government-of-Sierra-Leone 2010; WHO 2014, Sierra Leone Demographic Health Survey 2013

International Health Regulations (2005)

A legal instrument binding all UN member states to collaborate to prevent, protect against, control and respond to public health threats.

The infectious diseases landscape however continued to evolve, with more frequent emerging and re-emerging diseases and conditions like Ebola and HIV.²⁶ This led to the revision of the International Health Regulations IHR (1969) to IHR (2005), which went in effect in 2007.²⁷

The purpose and scope of the IHR are to prevent, protect against, control and provide a public health response to the international spread of disease and public health risks, to avoid interference with international traffic and trade. The potential hazards include infections, zoonotic diseases, chemical, radio-nuclear and food safety hazards.

1.2.1 IHR Core Capacities

The revised regulations obligate countries to establish and maintain core capacities for timely detection, confirmation, assessment and reporting of public health emergency of international concern (PHEIC). The regulations also confer new responsibilities and authority on WHO to guide coordination and implementation of international response to public health emergencies. The IHR (2005) capacity areas are:

1. Legislation and Financing
2. IHR coordination and National IHR Focal Point Functions
3. Zoonotic Events and Human-Animal Interface
4. Food safety
5. Laboratory
6. Surveillance
7. Human Resources
8. National Health Emergency Framework
9. Health Service Provision
10. Risk Communication
11. Points of Entry
12. Chemical Events
13. Radiation emergencies

However, there are several components of these capacities that should be addressed. The Global Health Security Agenda (GHSA) action plan for example addresses 11 areas which most of them are within these IHR capacities, whereas the Joint External Evaluation (JEE) of IHR considers 19 technical areas. Sierra Leone has conducted several assessments of the capacity to implement International Health Regulations (IHR 2005). To fulfil Article 54 of the IHR 2005, WHO and her partners supported the Joint External Evaluation (JEE) assessment of the 19 technical areas in November 2016. In addition, the GHSA assessment conducted in 2015 led to the five-year roadmap 2016 – 2020.

²⁵ Pizzi, Mario, *International Sanitary Regulations, World Health Organization, Amended 1956. 129 pp. Ill. Geneva, Switzerland, World Health Organization, 1957*

²⁶ *The International Health Regulations (2005): Surveillance and Response in an era of globalization, June 2011*

²⁷ *World Health Assembly, "Revision and Updating of the International Health Regulations," WHA Resolution 48.7*

The revised International Health Regulations (IHR) were adopted in 2005 and entered into force in 2007. Under the IHR, States Parties are obliged to develop and maintain minimum core capacities for surveillance and response; including at points of entry, in order to detect, assess, notify, and respond to any potential public health event of international concern. These capacities were to be developed by June 2012, with provision for two extensions up to June of 2016. In accordance with paragraph 1 of Article 54 of the IHR, countries must report on IHR implementation to the World Health Assembly (WHA) and the World Health Organization (WHO) Executive Board.

At the Sixty-eighth WHA in 2015, the IHR Review Committee on Second Extensions for Establishing National Public Health Capacities and on IHR (2005) Implementation²⁸ recommended “options to move from exclusive self-evaluation, to approaches that combine self-evaluation, peer review and voluntary external evaluations involving a combination of domestic and independent experts”. The WHO IHR Monitoring and Evaluation Framework was developed to address this recommendation. The Framework consists of four components; one mandatory, Annual Reporting; and three voluntary, exercises (SimEx), after-action reviews (AAR) and joint external evaluations (JEE).

Annual reporting, periodic JEEs and implementing after-action reviews and exercises, along with corresponding efforts for strengthening animal health and other sectors, are recommended as part of an ongoing capacity development, evaluation and monitoring process for IHR (2005) implementation. A common theme is that although evaluation of progress in implementation is an essential step to improving a country’s ability to protect the health of its people, it is not an end in itself; rather, it is the start of a process of continuous improvement and review. The JEE, therefore, is one step of this process and should include both broader and longer term planning and programming.

1.3 IHR JEE and other complementary assessments

1.3.1 Joint External Evaluations - JEE

The International Health Regulations, or IHR (2005), represent an agreement between 196 countries including all WHO Member States to work together for global health security. Through IHR, countries have agreed to build their capacities to detect, assess and report public health events. WHO plays the coordinating role in IHR and, together with its partners, helps countries to build capacities. IHR also includes specific measures at ports, airports and ground crossings to limit the spread of health risks to neighbouring countries, and to prevent unwarranted travel and trade restrictions so that traffic and trade disruption is kept to a minimum.

The JEE is a voluntary, collaborative, multi-sectoral process to assess country capacity to prevent, detect and rapidly respond to public health risks occurring naturally or due to deliberate or accidental events. The purpose of the external evaluation is to assess country-specific status, progress in achieving the targets under the IHR, and recommend priority actions to be taken across the technical areas being evaluated. External evaluations are regarded as an integral part of a continuous process of strengthening capacities for the implementation of the IHR. The JEE mission reports are the result of these evaluations.

In 2016, Sierra Leone conducted an internal self-assessment and later a full scale JEE the findings of which were the basis for the development of this NAPHS.

1.3.2 The Global Health Security Agenda (GHSA)

The Global Health Security Agenda (GHSA) was launched in February 2014 to advance a world safe and secure from infectious disease threats, to bring together nations from all over the world

28 http://www.who.int/ihr/B136_22Add1-en_IHR_RC_Second_extensions.pdf?ua=1

to make new, concrete commitments, and to elevate global health security as a national leaders-level priority. The G7 endorsed the GHSA in June 2014. GHSA acknowledges the essential need for a multilateral and multi-sectoral approach to strengthen both the global capacity and nations' capacity to prevent, detect, and respond to infectious diseases threats whether naturally occurring, deliberate, or accidental.

In partnership with U.S. government sister agencies, other nations, international organizations, and public and private stakeholders, CDC seeks to accelerate progress toward a world safe and secure from infectious disease threats and to promote global health security as an international security priority. This aims at preventing and reducing the likelihood of outbreaks, detect threats early to save lives and to respond rapidly and effectively using multi-sectorial, international coordination and communication. The U.S. works with partner countries on nine specific objectives outlined in the GHSA assessment tool to prevent, detect, and effectively respond to infectious disease threats.

Through a partnership of nearly 50 nations, international organizations, and non-governmental stakeholders, GHSA facilitates collaborative, capacity-building efforts to achieve specific and measurable targets, while accelerating achievement of the core capacities required by the World Health Organization's (WHO's) International Health Regulations (IHR), the World Organization of Animal Health's (OIE) Performance of Veterinary Services Pathway, and other relevant global health security frameworks.

The GHSA partnership has aided several countries to move faster towards attainment of capacities spelt out under IHR (2005) and has in addition to individual countries, advisory partners that include the WHO, FAO, OIE, Interpol, ECOWAS, the UN Office for Disaster Risk Reduction (UNISDR), and the European Union.

1.3.3 Risk profiling of public health threats

In September 2016, Sierra Leone conducted a risk profiling exercise, which was validated in June 2017 through an extensive consultative process. This exercise prioritised the risks for which Sierra Leone should be prepared, forming the basis for the development of preparedness and response systems. Results from the assessment of vulnerabilities, impact of the disaster and likelihood of the event happening, capacity to respond or mitigate indicated that Lassa fever (highest risk), followed by floods, wind storms, avian influenza and anthrax (high risk). Most of the other events in the high risk category were infectious diseases and few natural disasters²⁹.

1.3.4 Other assessments if relevant

Chemicals have both beneficial and negative effects on human, animal and ecosystem health. They are part of everyday life, being essential to the growth and sustainability of our communities. Heavy metals such as lead and mercury, persistent organic pollutants (POPs) and highly hazardous pesticides that are either controlled or banned in developed countries continue to be used in Africa with major environmental and health impacts. Today, chemicals are increasingly used to foster the prosperity of a range of economic sectors including health, agriculture, mining, education, research and many industrial processes. A great deal of work remains to be done, therefore, to ensure environmentally sound management of toxic chemicals while at the same time embracing the principles of sustainable development and improvement of the quality of life for humankind.³⁰

1.3.5 The Journey from IHR JEE to Country Planning

The development of the Sierra Leone National Action Plan for Health Security (NAPHS) began with the voluntary enrolment of Sierra Leone among the countries to undertake the JEE. Sierra

²⁹ Report on integrated risk profiling of public health threats in Sierra Leone, 2017

³⁰ Regional Chemical Use Assessment Report, 4th July, 2014

Leone was among the very first nations in Africa to accept to undergo the JEE.

In June 2016, sensitization and advocacy was carried out within government, among health sector stakeholders and beyond. The MoHS made great efforts to sensitize the other ministries on the need for transparency and mutual accountability in the international community as the main reason why an internal self-assessment alone was not adequate.

Between 10th – 14th September 2016, an internal self-assessment was conducted. This was done as a consultative process, with participation of key government sectors and ministries namely: Ministry of Health and Sanitation (MoHS), Ministry of Agriculture and Forestry (MAF), Environmental Protection Agency (EPA), Office of National Security (ONS), Mano River Union (MRU) etc. Several partners and donor agencies participated including WHO, USCDC, China CDC, IOM, UKAid, Public Health England (PHE) and Metabiota provided various forms of support. All the 19 technical areas were scored and the findings were shared and discussed.

Between 31st Oct – 4th November 2016 the JEE was conducted. The stakeholders were gathered once again and it was explained to them that the JEE was indeed a peer review of internal self-assessment conducted a little earlier. The JEE was skilfully conducted by the visiting team of experts. Consensus was achieved on status of implementation of various capacities and prevailing strengths and challenges were agreed upon and documented. Country scores per indicator established, with consensus, and recorded. Priority areas for improvement per technical area identified and record made.

The final Sierra Leone JEE report was published on 17th February 2017 after which the mobilization of stakeholders for post JEE national action planning commenced. The first coordination meetings for health security action planning took place in March 2017. Workshops were held to develop a draft 5 years National Action Plan for health security (NAPHS). Objectives were identified, strategies outlined, activities described and an M & E framework laid out. Later on, a secretariat retreated to finalize drafting and start costing the 5-years NAPHS.

After consolidating the costed plan and finalizing the narrative, the NAPHS underwent a process through which NAPHS activities were prioritized. The most important activities were scheduled for the first 2 years of the 2018-2022 implementation period. Resource mapping was also carried out and stakeholder meetings held to further highlight the unique value of the NAPHS as the formal, unifying document that outlines what activities and investments need to be carried out in the medium-term in order for Sierra Leone to attain the desired capacities required for effective prevention, detection and response to major public health emergencies.

The finalized NAPHS will now be launched, shared internally and externally, approved by Government (with inclusion in the next fiscal year), and further resource mobilization carried out.





2 VISION, MISSION,
OBJECTIVES, GUIDING
PRINCIPLES AND
CORE VALUES OF THE
ACTION PLAN

2.1 Vision

A country safe and secure from health and economic consequences of public health hazards.

2.2 Mission

A health system able to prevent, detect and respond to public health threats through all – sector collaboration.

2.3 General Objectives

The objectives that this plan will meet are to:

- Prevent the likelihood and reduce the consequences of outbreaks and other public health hazards.
- Build national capacities for early detection and effective response to public health emergencies and other events of public health concern.
- Foster all-sector partnerships for effective prevention, detection and response to public health emergencies and other events of public health concern.
- Establish a sustainable financing strategy for the attainment of national health security.

2.4 The Core values

A minimum set of principles have been identified to guide behaviour and establish the right environment for inter-sectoral engagement during the implementation of this plan. These are:

- **Strong national leadership:** The success in the implementation of the NAPHS requires a strong strategic leadership from the government. This will be at the core of coordination and streamlining activities by stakeholders with national policies and IHR 2005.
- **Mulita-sectoral collaboration:** The achievement of national and global health security objectives will require deliberate collaboration and cooperation among various stakeholder groups (government, civil society and private sector) and sectors (human health, animal health, environment, national security among others). Stakeholders will leverage knowledge, expertise, reach and resources, benefiting from their combined and varied strengths as they work toward the shared goal of producing better health outcomes.
- **Mutual respect:** Each and every stakeholder in NAPHS implementation is important and makes unique contributions. Any absence of a group or sector would impair achievement of the shared vision.
- **Transparency:** implementation of NAPHS will be done in an environment of mutual openness among all implementing partners to build trust and enhance collaboration towards achieving the shared vision.
- **Community involvement:** For improved outcomes for communities, implementers will seek the aspirations, concerns and values of communities and incorporate them into the decision-making processes.
- **Ethical vision:** All implementing stakeholders will subscribe to a shared vision. The vision will not only be in the interest of NAPHS goals but also to individual agencies as well.
- **Research:** The implementation of the NAPHS will be evidence-based and informed by known best practices and available data.



3 METHODOLOGY/ PROCESS FOR THE DEVELOPMENT OF THE ACTION PLAN

3.1 Review of JEE and other assessments recommendations

In accordance with the WHA recommendation WHA69/5.2³¹ for States Parties to develop National Action Plans within one year of the JEE, the MoHS started mobilizing other government agencies and partner organizations in March 2017 to set in motion plans for the development of the country's National Action Plan for Health Security (NAPHS). The JEE report, which was published in February 2017, identified gaps in capacity and a series of coordination meetings were held under the national One Health coordination platform to move forward in the process. During this preparatory phase:

- GoSL MDAs that are critical for the implementation of the IHR (2005) were identified and sensitized.
- GHSA in-country partners were mapped and advocacy conducted for support to the national action planning process.
- Resources for post-JEE planning were mobilized.
- Technical working groups were constituted and mandated to collate information for use during action planning.

In October 2017, over 75 participants attended a multi-disciplinary and multi-sectoral workshop organized by the Sierra Leone MoHS to develop the country's NAPHS. These in-country experts were drawn from MoHS directorates and disease control programs, other government departments and agencies and partner organizations (WHO, IOM, FAO, US CDC, USAID, China CDC, Public Health England, DFID and GIZ).

A situation analysis of the country's IHR status was conducted to take stock of the current level of capacities for health security. A review of the JEE report, draft 2016 IHR 2-year work plan and the CDC-supported GHSA 5-year country roadmap was conducted in a participatory and inclusive process. This was complimented by discussion and review by the national experts in working groups drawing representation from IHR-relevant sectors. The JEE report recommendations were reviewed for relevance and to ensure existing weaknesses and gaps are addressed per thematic area.

3.2 Prioritisation of activities by technical area

Based on the result of the situation analysis, thematic working groups developed objectives and strategic actions that address the weaknesses and gaps in the country's health security across the 19 thematic areas. Responsible directorates, programs, agencies or authorities for implementation per strategic action were identified and relationships to existing plans, project or activities spelled out. This prioritization process with cross-sector consensus ensured making the best use of resources, ensuring that the greatest needs are addressed and that both the planning and resource allocation are rational and transparent.

Each strategic action was operationalised through development of low level activities with coherence to fully address the priority strategic actions, objectives and situation analysis recommendations. A logical framework for coordination and accountability among stakeholders was developed per activity with identification of level of responsibility, output indicators, implementation assumptions and implementation schedule. This will be essential for the monitoring and periodic review of implementation of the plan and inform necessary adjustments to the plan. The prioritization process will ensure that stakeholders are working towards common goals and expected outcomes.

31 http://apps.who.int/gb/ebwha/pdf_files/WHA69/A69_21-en.pdf

3.3 Linkage with other programmes/initiatives

In the process of developing the plan, a comprehensive review of the strategic actions was conducted to identify overlap with existing plans, programs and activities. While taking note of this overlap for synergy and integration, necessary adjustments in the plan were made for efficiency and to eliminate duplication.

The MoHS has ensured that proposed activities are linked with the draft National Health Sector Strategic Plan. This NAPHS is also linked with other on-going national strategies, programs and projects including the Health Sector All Hazard Emergency Preparedness and Response Plan, the REDISSE project, the One Health coordination framework, the 5-year GHSA roadmap, the Environment Protection Agency Strategic Plan 2017-2021 and the Sierra Leone Agenda for Prosperity. These linkages will enhance adequate and sustainable resource allocation, advocacy, monitoring, accountability and efficiency during implementation.

3.4 Sector Wide Approach

Preparedness for and management of health security threats requires a coordinated multisectoral approach as capacities for surveillance, identification of threats, laboratory confirmation, risk assessment, response and coordination of efforts may involve many sectors outside human health. The process of developing the NAPHS adopted a Sector Wide Approach (SWAp) with the government agencies working together with development partners. During the preparatory period leading to the JEE and to the development of the NAPHS, the MoHS took leadership and mapped all government agencies and partner organizations who play a role in implementing health security activities. This widened the scope of participation in conducting the JEE and in action planning.

The SWAp strategy has created an environment of dialogue on the status of implementation of IHR (2005), existing challenges and gaps, health sector priorities needs, mechanisms for inter-sectoral collaboration to address these and monitoring and evaluation. This is hoped to streamline government and partner support to the strengthening of the country's health security while aligning these to the priority needs. The stronger national leadership and ownership of the process will also strengthen partner coordination and countrywide implementation of the plan.



Figure 5: Benefits of the SWAp

3.5 Strategic partnership planning workshop scope and objectives

In line with the WHO Strategic Planning Portal (SPP) framework, Sierra Leone fully kept national and international partner organizations including UN agencies (WHO, FAO, OIE) informed of the preparations and progress during the development of the national action plan. This enabled international partners to support the preparatory activities and the planning workshop.

The MoHS also mobilised strategic partnership with other government ministries and agencies and in-country health partners whose cross-disciplinary expertise was critical to the successful preparation and action planning. This further embeds the One Health approach and integrated health security development in the planning process. The MoHS will take forward this partnership with all relevant stakeholders and existing frameworks (FAO, OIE, Global Health Security Agenda, World Bank and other development agencies) to support the plan for expedited IHR implementation with transparency and accountability in external investment, progress, and the delivery of action plan. Information from the monitoring and evaluation benchmarks will be openly shared including on the WHO SPP platform.



Figure 6: Strategic partnerships for health security – Sierra Leone



4 JEE FINDINGS AND COMPONENTS OF THE NATIONAL ACTION PLAN FOR HEALTH SECURITY

4.1 Planning matrix of priorities

No	Strategic Actions	Responsible Authority(s)	Related Existing plans/ Programs or Activities
Technical Area 1: National Legislation, Policy and Financing			
JEE Indicator 1.1.1: Legislation, laws, regulations, administrative requirements, policies or other government instruments in place for implementation of IHR.			JEE Score: 2
JEE recommendations	<ol style="list-style-type: none"> 1. Hasten the review of Public Health Ordinance and develop related policy guidelines 2. Review other laws touching on the implementation of the IHR and develop their policy guidelines 3. Assess the Environmental Protection Act and MAF* 		
Objective	To ensure adequate administrative and statutory provisions are available for implementation of IHR by December 2018		
1	Develop an inventory of the administrative and statutory provisions relevant to IHR 2005 in relevant Ministries, Departments and Agencies (MDAs)	IHR NFP	Public Health Ordinance, NPHA Strategic and Operational plans
2	Assess the existing administrative and statutory instruments in line with IHR 2005	IHR NFP	Public Health Ordinance, NPHA Strategic and Operational plans
3	Develop or review the administrative and statutory instruments to make them compliant with IHR 2005	IHR NFP	Public Health Ordinance, NPHA Strategic and Operational plans
JEE Indicator 1.1.2: Legislation, policies and administrative arrangements enable compliance with the IHR (2005)			JEE Score: 2
JEE recommendations	<ol style="list-style-type: none"> 1. Sensitize relevant stakeholders on these laws, policies and regulations 2. Improve, update or develop MOUs and other cross-border bilateral agreements to make them more comprehensive beyond EVD 3. Improve multi-sectoral collaboration 		
Objective	To adjust and align legislation, policies and administrative arrangements in compliance with IHR 2005 by end of 2018		
1	Sensitize relevant stakeholders (MDAs, Members of Parliament, Partners) on the aligned documents	IHR NFP/ NPHA	REDISSE project (Public Health Ordinance and Animal Disease Act)
2	Develop a mechanism for inter-sectoral collaboration	IHR NFP/ NPHA	One health, Disaster Management Committee, Public Health Emergency Management Committee
3	Mobilise resources including domestic financing and advocate for creation of IHR budget line	IHR NFP/ NPHA	NPHA Strategic and Operational plans
Technical Area 2: IHR Coordination, Communication and Advocacy			
JEE Indicator 1.2.1: A functional mechanism is established for the coordination and integration of relevant sectors in the implementation of IHR.			JEE Score: 2
JEE recommendations	<ol style="list-style-type: none"> 1. Set up a National IHR Focal Point/Unit within the NPHA (PHEOC) supported by SOPs 2. Commence regular meetings of the National IHR Focal Point with all line ministries and key agencies 3. Build technical capacity for the National IHR Focal Point function by training technical people on IHR implementation areas. 		
Objective	To strengthen IHR NFP for effective coordination, communication and advocacy		
1	Develop guidelines and Standard Operating Procedures (SOPs) for IHR NFP	IHR NFP	Public Health Ordinance, NPHA Strategic and Operational plans
2	Build the capacity of IHR NFP in areas of coordination, communication and advocacy	Heads, MDAs Heads, MDAs IHR NFP	None

No	Strategic Actions	Responsible Authority(s)	Related Existing plans/ Programs or Activities
3	Regular inter-sectoral coordination meetings	IHR NFP	REDISSE project (One health)
4	Logistics support for effective functioning of IHR NFP	IHR NFP	None
5	Monitor and evaluate the implementation of NAPHS	IHR NFP	None
Technical Area 3: Antimicrobial Resistance			
JEE Indicator 1.3.1: Antimicrobial resistance (AMR) detection system in place			JEE Score: 1
JEE recommendations	Integration of AMR in to a comprehensive National Health Laboratory Strategic Plan and the GHSA 5-year roadmap using the One Health approach		
Objective	To integrate AMR surveillance, prevention, and control into the NLSP and GHSA 5-year roadmap using One Health Approach		
1	Integration of AMR plan into the NLSP	Pharmacy Board, MoHS, MAF, EPA	AMR strategic plan, NLSP, Regional AMR framework, One Health Platform
2	In collaboration with training institutions and research facilities, build capacity for detection of AMR at central and regional level		
3	Improve the capacity of CPHRL to monitor quality of AMR detection		
4	Institute specimen management system		
5	Establish a specimen transportation and referral network from peripheral to regional and central		
JEE Indicator 1.3.2: Surveillance system for infections caused by AMR pathogens			JEE Score: 1
JEE recommendations	1. Create monitoring and evaluation framework to ensure routine assessment, data management, analysis and reporting of antimicrobial resistance 2. Ensure reporting of AMR is incorporated into MoHS pathogen reporting systems with plans and procedures for sharing reports for action and strategic planning		
Objective	Establish surveillance systems to identify and monitor AMR pathogens		
1	Develop a multi-sectoral national AMR surveillance system	Pharmacy Board, WHO, MoHS, CDC, LTWG, MAF, EPA	National AMR plan, Africa CDC Regional framework, WAHO work plan 2016-2020, One Health Platform
2	Build multi-sectoral capacity for AMR surveillance		
3	Include AMR as a core component of professional education, training, certification and development		
4	Raise awareness on AMR		
JEE Indicator 1.3.3: Healthcare associated infection (HCAI) prevention and control programs			JEE Score: 2
JEE recommendations	1. Develop an action plan to prevent and monitor incidence/prevalence of HAIs		
Objective	To strengthen facilities to conduct HCAI surveillance and prevention programs		
1	Review and update national HCAI plan	MoHS, MAF, Local Council, EPA	The national HCAI plan, National IPC Action Plan, MTHE, SLMDA, LRB, MoHS, MOF, EPA, One Health Platform
2	Assess burden of HCAI in selected facilities		
3	Support, monitor and evaluate infection prevention and control programs in collaboration with National IPC Unit and stakeholders		

No	Strategic Actions	Responsible Authority(s)	Related Existing plans/ Programs or Activities
4	Establish occupational health program for health workers	MoHS, MAF, Local Council, EPA	The national HCAI plan, National IPC Action Plan, MTHE, SLMDA, LRB, MoHS, MOF, EPA, One Health Platform
5	Strengthening National and community linkages/Partnership for IPC in human, animal, and agricultural sectors		
JEE Indicator 1.3.4: Stewardship Activities			JEE Score: 1
JEE recommendations	1. Conduct a survey on antibiotic use		
Objective	To establish antimicrobial resistant stewardship to promote appropriate use of antibiotics		
1	To review and update treatment guidelines to include appropriate antibiotic use	MoHS, Pharmacy board, DHMTs, MAF, EPA, District councils	Pharmacy board policy and guidelines, national testing algorithm, AMR plan, One Health Platform, National IPC Action Plan
2	To establish treatment and testing algorithm inclusive of antibiotic use		
3	Develop regulation for antibiotic use in animals, agriculture and fisheries		
4	Monitoring of prescription and consumption patterns in both human and animals		
5	Establish antimicrobial stewardship committees at health facilities level		
6	Monitor antimicrobial stewardship programmes		
7	Update the National Medicines Policy to include use of antimicrobial agents		
Technical Area 4: Zoonotic Disease			
JEE Indicator 1.4.1: Surveillance systems in place for priority zoonotic diseases/pathogens			JEE Score: 1
JEE recommendations	<ol style="list-style-type: none"> 1. Implement a One Health framework with joint planning, data and information sharing and joint response. 2. Strengthen surveillance for zoonoses with the development of country guidelines. 3. Develop and implement one health surveillance policy and framework 4. Strengthen animal health clinical and laboratory services. 		
Objective	Establish a Zoonotic surveillance systems for five or more zoonotic diseases/ pathogens of greatest public health concern by 2022		
1	Develop and implement a national Guidelines for zoonotic disease Surveillance	MAF, MoHS	CDC/USAID supported Prioritization workshop
2	Build laboratory capacity for zoonotic disease surveillance		FAO supporting rehabilitation TEKO Central lab
JEE Indicator 1.4.2: Animal Health or Veterinarian Workforce			JEE Score: 1
JEE recommendations	<ol style="list-style-type: none"> 1. Build capacity for animal health or veterinary public health including human resources and organizational structure. 2. Strengthen technical capacity for animal health including technical capacity development programmes. 		
Objective	Increase animal health workforce capacity at national level and in at least 80% district levels by 2022		
1	Strengthen technical capacity for animal health workforce	MAF, MoHS	REDISSE, FAO, FETP/CAHW/ PREDICT
2	Establish a sustained mechanism for the recruitment and deployment of animal health specialists into the Public Health sector		One Health platform

No	Strategic Actions	Responsible Authority(s)	Related Existing plans/ Programs or Activities
JEE Indicator 1.4.3: Mechanisms for responding to infectious zoonoses are established and functional			JEE Score: 1
JEE recommendations	1. Implement a One Health framework with joint planning, data and information sharing and joint response. 2. Establish a policy guideline for multi-sectorial response to zoonosis.		
Objective	Establish a multi-sectorial mechanism for coordinated response to outbreaks of zoonotic diseases by human, and animal sectors at national and district levels by 2022		
1	Operationalize the One Health Platform	MAF, MoHS	REDISSE/FAO/EPT2, One Health platform
2	Develop and implement a guideline for multi-sectorial response to zoonosis		REDISSE/FAO, WHO, USAID, P&R, One Health Secretariat
Technical Area 5: Food Safety			
JEE Indicator 1.5.1: Mechanisms for multi-sectorial collaboration are established to ensure rapid response to food safety emergencies and outbreaks of foodborne diseases			JEE Score: 2
JEE recommendations	1. Accelerate the Parliamentary ratification of the Food Safety bill and establish food safety standards. 2. Establish an interagency coordination platform for strong cooperation among all food safety stakeholders in the country to facilitate the implementation of the food safety programme. 3. Establish a National Food Safety Authority and sanitary court. 4. Develop and disseminate guidelines and training programmes for surveillance, response, diagnostic laboratory testing for food safety. 5. Develop national SOPs for importing and exporting food items 6. Finalize and disseminate the SOPs for the disposal of food items unfit for human consumption.		
Objective	To establish a food safety surveillance and response mechanisms with 50% reporting from identified reporting sites.		
1	Ratify the food and feed safety act	DEHS/MoHS and NFNP	
2	Establish a food safety surveillance and response system		
3	Strengthen capacity for response to food safety incidents		
Technical Area 6: Biosafety and Biosecurity			
JEE Indicator 1.6.1: Whole-of-government biosafety and biosecurity system is in place for human, animal, and agriculture facilities			JEE Score: 1
JEE recommendations	1. Establish and enact legislation and regulations on biosafety and biosecurity		
Objective	Establish and enact legislation and regulations on biosafety and biosecurity. Establish regulatory framework for laboratory practice in line with the national laboratory strategy		
1	Develop comprehensive national policy and guidelines on biosafety and biosecurity	MoHS	GHSA EPT-2 Program, ONS policy, NLSP, National IPC policy and guidelines
2	Establish biohazard waste management protocol including decommissioning protocol for all biological agents and equipment.	MoHS	
3	Review and update the National Laboratory Strategic plan 2016-2020 to include Biosecurity	MoHS	
4	Designate biosafety and biosecurity officers in all human, animal and environmental laboratories	MoHS, MAF, EPA	

No	Strategic Actions	Responsible Authority(s)	Related Existing plans/ Programs or Activities
5	Develop national protocols and procedures for the transportation/shipment of biologically hazardous materials	MoHS, MAF	GHSA EPT-2 Program, ONS policy, NLSP, National IPC policy and guidelines
JEE Indicator 1.6.2: Biosafety and biosecurity training and practices			JEE Score: 2
JEE recommendations	Establish and enact legislation and regulations on biosafety and biosecurity		
Objective	1. To develop human resource capacity to address biosafety and biosecurity issues nationwide. 2. To create new and upgrade existing infrastructure to meet standard biosafety and biosecurity practices.		
1	Train designated biosafety and biosecurity officers	ONS, MoHS, MAF	GHSA EPT-2 Program, ONS policy, NLSP, National IPC policy and guidelines
2	Conduct bio-risk assessment in laboratories and health care facilities		
3	Create linkages between human and animal health labs and establish collaboration on bio-risk management		
4	Create new and/or upgrade existing infrastructure based on bio-risk assessment results		
Technical Area 7: Immunization			
JEE Indicator 1.7.1: Vaccine coverage (measles) as part of national program			JEE Score: 3
JEE recommendations	1. Devise strategies for accessing hard to reach areas and urban children to achieve the 'reach every child' target. Track the implementation of cMYP (2017-2021)		
Objective	To achieve and sustain at least 95% coverage of measles second dose coverage per year		
1	Strengthen RED/REC strategy in all districts through training of health staff and community engagement	EPI Manager	cMYP (2017 - 2021)
2	Develop RED/REC plan in every health facility	EPI Manager	cMYP (2017 - 2021)
3	Conduct regular performance review of implementation of REC strategy	EPI Manager	cMYP (2017 - 2021)
4	Strengthen AEFI monitoring, reporting and investigation	EPI Manager	cMYP (2017 - 2021)
JEE Indicator 1.7.2: National vaccine access and delivery			JEE Score: 3
JEE recommendations	1. Conduct refresher training of District Health Management Teams (DHMTs) on the District Vaccination Data Management Tool. 2. Track implementation of all recommendations of the 2016 cold chain assessment		
Objective	To strengthen the capacity of DHMTs for improved vaccine access and delivery		
1	Build the capacity of DHMTs on DVDMT	EPI Manager	cMYP (2017 - 2021)
2	Improve the availability and functionality of cold chain		
3	Monitor and Evaluate EPI activities		
4	Improve immunization through outreach services		

No	Strategic Actions	Responsible Authority(s)	Related Existing plans/ Programs or Activities
Technical Area 8: National Laboratory System			
JEE Indicator D.1.1: Laboratory testing for detection of priority diseases			JEE Score: 1 JEE Score: 4
JEE recommendations	1. Establish functional Bacteriological section at the CPHRL		
Objective	To expand lab capacity at the national reference lab to be able to conduct 6 of 10 WHO core tests		
1	Build bacteriological culture testing capacity (Human, animal, environmental health)	MoHS, MAF	GHSA, EPT2 program . Sierra Leone - China bilateral , National Strategic plan , CDC GHSA, Global Fund HSS , One Health Concept
2	Identify priority Zoonotic diseases (Animal health)		
3	Establish testing capability for food safety		
4	Strengthen basic Microbiology (virology, parasitology and bacteriology) testing at district level		
JEE Indicator D.1.2: Specimen referral and transport system			JEE Score: 1 JEE Score: 3
JEE recommendations	1. Finalize and implement draft sample transportation SOPs and policy		
Objective	To institute an effective system for collection, packaging and transport of biological specimens		
1	Establish a comprehensive integrated National policy, guidelines and SOPs on specimen management for human, animal, food and environmental samples	MoHS, MAF	National Lab Strategic plan, REDISSE PLAN, GHSA, PEPFAR
2	Establish a network of specimen transportation at all levels - national and international		
JEE Indicator D.1.3: Effective modern point of care and laboratory based diagnostics			JEE Score: 1 JEE Score: 2
JEE recommendations	1. Establish the regulation for the use of POCT in the country, establish a mechanism for the regulation of POCT laboratory testing, include private laboratories		
Objective	To develop or acquire technologies to optimize POCT at all levels (human and animal health)		
1	Develop an integrated syndromic and laboratory-based POCT algorithm	MoHS, MAF	BPEHS, National laboratory testing algorithm
2	Institute a POCT system and accompanying stock management system		
3	Establish public /private partnership on laboratory commodities supplies		
JEE Indicator D.1.4: Laboratory Quality System			JEE Score: 1 JEE Score: 2
JEE recommendations	1. Complete SLMTA process as part of the quality improvement system		
Objective	Institute a national quality assurance system for human, animal, environment and food safety. To ensure the inclusion and functionality of a National Laboratory Regulatory Board.		
1	Ratify the National Laboratory Regulatory Body	MoHS, MAF	Allied Health Professionals Regulatory Act, SLMTA/ SLIPTA document
2	Establish a National EQA program to address human and animal health at CPHRL		

No	Strategic Actions	Responsible Authority(s)	Related Existing plans/ Programs or Activities
3	Establish sustainable capacity building for NQMS		
4	Establish an integrated One Health Laboratory committee		
Technical Area 9: Real Time Surveillance			
JEE Indicator D.2.1: Indicator and event based surveillance systems			JEE Score: 4
JEE recommendations	1. Finalize roll out of CBS and strengthen event-based surveillance systems. 2. Strengthen animal health surveillance at all level 3. Strengthen private sector involvement in surveillance		
Objective	1. Sustain the existing human surveillance systems 2. Strengthen animal health surveillance systems. 3. Integrate animal and human health surveillance systems		
1	Strengthen event-based surveillance system in context of One Health	MoHS, MAF	Community Based Surveillance (CBS), WHO
2	Build capacity for surveillance among human and animal health workers in both public and private sectors		One Health Platform
JEE Indicator D.2.2: Interoperable, interconnected, electronic real-time reporting system			JEE Score: 2
JEE recommendations	1. Finalize and deploy the electronic surveillance reporting platform that will be integrated and interoperable with other systems		
Objective	Develop, integrate and maintain an interoperable, interconnected, electronic real-time reporting system, for public health and/or veterinary surveillance systems at all levels by 2022		
1	Establish an electronic zoonotic disease surveillance reporting platform	MoHS, MAF	REDISSE, Metabiota-PREDICT
2	Implement eIDSR at health facility level countrywide	MoHS	WHO/IDSR, REDISSE, CDC/eHealth Africa, FOCUS 1000, University of Oslo, HISP
3	Integrate the IDSR electronic reporting platform with zoonotic surveillance electronic platform and identified sectors to make it interoperable	MoHS, MAF	FAO, WHO/IDSR, REDISSE, Metabiota-PREDICT
JEE Indicator D.2.3: Integration and analysis of surveillance data			JEE Score: 4
JEE recommendations	1. Increase capacity for data analysis, interpretation and application at all levels		
Objective	Strengthen capacity for data analysis at all levels by 2022		
1	Build capacity for data analysis among human and animal health workers	MoHS, MAF	WHO, FAO, REDISSE, FETP
2	Improve ICT to support data analysis for surveillance at all levels		
JEE Indicator D.2.4: Syndromic surveillance systems			JEE Score: 4
JEE recommendations	1. Increase capacity for a resilient syndromic surveillance system to include animal and environmental health		
Objective	Enhance the performance of the syndromic surveillance system and expertise by 2022		
1	Strengthen capacity for syndromic surveillance among human, animal and environmental health workers at all levels	MoHS, MAF	WHO, FAO, REDISSE, FETP

No	Strategic Actions	Responsible Authority(s)	Related Existing plans/ Programs or Activities
2	Operationalize the mechanism for collaboration and coordination between human and animal health sector in the context of One Health		
Technical Area 10: Reporting			
JEE Indicator D.3.1: System for efficient reporting to WHO, FAO and OIE			JEE Score: 3
JEE recommendations	1. Designate and train all ministry and sector focal point personnel so as to constitute a National IHR Focal Point team. 2. Further training for National IHR Focal Point and OIE focal point personnel and other ministry and sector representatives. 3. Develop legislation and policies for reporting 4. Develop regional multilateral and bilateral arrangements for information sharing.		
Objective	By 2022, strengthen capacity to identify any potential PHEIC and report within 24 hours to WHO, FAO and OIE.		
1	Operationalize the National IHR Focal point	MoHS, MAF	WHO, FAO/OIE, One Health, REDISSE, Metabiota-PREDICT
2	Build technical capacity among the National IHR Focal Point team.		
3	Develop a system of simulation exercise for reporting to WHO, FAO and OIE		
4	Develop a legal framework for information sharing with neighbouring countries		
JEE Indicator D.3.2: Reporting network and protocols in country			JEE Score: 2
JEE recommendations	1. Develop guidelines and SOPs for reporting 2. Develop a national multi-sectoral arrangement for information sharing within the One Health context		
Objective	Develop and establish protocols, processes, regulations and legislation governing reporting to be implemented by 2020.		
1	Develop and implement national guidelines and SOPs for notification of PHEIC events and mechanisms for sharing information between key sectors	MoHS, MAF	WHO, FAO/OIE, One Health, REDISSE
2	Strengthen the reporting capacity for priority zoonotic diseases		
Technical Area 11: Workforce Development			
JEE Indicator D.4.1: Human resources are available to implement IHR core capacity requirements			JEE Score: 2
JEE recommendations	1. Develop minimum standards for animal and human health staffing levels that include (among others) social scientists and revisit HRH strategies for their inclusion. 2. Work on retention strategies for animal health staff. 3. Fast track the recruitment process into vacant posts.		
Objective	Establish a Multidisciplinary Public Health HR capacity at National and District levels by 2022		
1	Strengthen the Public Health HR capacity for IHR compliance	MoHS, MAF, MTHE, CDC, CHAI, CO-MAHS, Njala University	FETP/CDC

No	Strategic Actions	Responsible Authority(s)	Related Existing plans/ Programs or Activities
JEE Indicator D.4.2: Field Epidemiology Training Program or other applied epidemiology training program in place			JEE Score: 3
JEE recommendations	1. Develop plans for the sustainability of the basic field epidemiology and laboratory training programme (FELTP) that includes veterinarian and laboratory staff and for advanced training in the western African Region to expand developed capacities.		
Objective	Establish three levels of FETP/FETPV/FELTP (Basic, Intermediate and Advanced) in Sierra Leone or through an agreement with another country by 2022		
1	Increase national workforce of epidemiologists	MoHS, MAF	FETP, CDC
2	Establish a mechanism of complete ownership of FETP by the MoHS		
JEE Indicator D.4.3: Workforce Strategy			JEE Score: 1 JEE Score: 2
JEE recommendations	1. Develop a workforce strategy for public health taking One Health approach		
Objective	Adapt the national healthcare workforce strategy to include public health professionals in accordance with the One Health approach by 2022		
1	Develop and implement a public health HRH strategy to include speciality areas in line with One Health approach*	MoHS, MAF, MOF	PHE supporting NPHA (under development) , eHealth Africa, CHAI
Technical Area 12: Preparedness			
JEE Indicator R.1.1: Multi-hazard national public health emergency preparedness and response plan is developed and implemented			JEE Score: 1
JEE recommendations	1. Develop and implement multi-hazard a NPHEPR plan that includes a costing element, Develop a stockpiling emergency plan and establish mechanisms for accessing funds for emergencies and supplies		
Objective	To have an all hazards plan for the health sector that is 'one health compliant' by 2018 2. To have a system by 2018 for stockpiling of supplies and a mechanism for faster access of resources during emergencies.		
1	Develop a one-health compliant all hazards plan	Director DHSE & DVS	All hazards plan completed, plus individual plans for cholera, floods disaster, EVD and Zika.
2	Establish a system for stockpiling of supplies and accessing resources during emergencies.	Incident Manager EOC & Director Central Medical Stores	
JEE Indicator R.1.2: Priority public health risks and resources are mapped and utilized			JEE Score: 1
JEE recommendations	1. Conduct risk and resources mapping of all priority public health risks.		
Objective	To have a comprehensive vulnerability and risk assessment with resource mapping and mobilization for identified hazards by 2019		
1	Establish a comprehensive risk and resource mapping of priority public health hazards	Incident Manager EOC	Risk profiling done, cholera, EVD, Zika and flooding.

No	Strategic Actions	Responsible Authority(s)	Related Existing plans/ Programs or Activities
Technical Area 13: Emergency Response Operations			
JEE Indicator R.2.1: In addition to activities for developed capacity, there is a dedicated EOC staff that have received training and can activate a response within two hours.			JEE Score: 4
JEE recommendations	1. Increased training and retention of surge capacity staff in emergency response operations competencies 2. Government ownership as demonstrated by dedicated budgetary support to ensure sustainable funding and authority to the national EOC to mobilize resources required for response		
Objective	To have a Surge capacity staff available and prepared to respond at the various levels by 2018 2. Raise the proportion of EOC operations budget supported through core government funding to 50%		
1	Capacity building for surge personnel	IOC Incident Manager	REDISSE
2	Develop a costed strategic plan for EoC		
JEE Indicator R.2.2: Emergency Operations Centre Operating Procedures and Plan			JEE Score: 3
JEE recommendations	1. Finalize key SOPs for EOC functions 2. Support capacity development in human and animal health epidemiology		
Objective	Put in place SOPs for EOC emergency operation functions by 2018, 2. To have epidemiology capacity in both animal and human health by 2018		
1	Strengthen procedures and plans for EOC emergency operation functions	IOC Incident Manager	PHE, WHO, CDC
2	Build epidemiology capacity of human and animal health personnel	MoHS, MAF, FETP	PHE, FETP, CDC
JEE Indicator R.2.3: Emergency Operations Program			JEE Score: 4
JEE recommendations	1. Develop curriculum and institutionalized EOC and simulation training programmes.		
Objective	Strengthen EOC Emergency response operations by 2018		
1	Develop a curriculum for training of EOC staff to respond to PHE	IOC Incident Manager	
JEE Indicator R.2.4: Develop a comprehensive epidemic preparedness and response plan with related case management guidelines for epidemic prone diseases			JEE Score: 2
JEE recommendations	1. Develop a comprehensive epidemic preparedness and response plan with related case management guidelines for epidemic prone diseases		
Objective	Establish a national outbreak preparedness and case management guidelines for epidemic prone diseases by 2018		
1	Develop national outbreak preparedness and case management guidelines for epidemic prone diseases	IOC Incident Manager	WHO, Clinicians training in surveillance
Technical Area 14: Linking Public Health and Security Authorities			
JEE Indicator R.3.1: Public Health and Security Authorities, (e.g. Law Enforcement, Border Control, Customs) are linked during a suspect or confirmed biological event			JEE Score: 4
JEE recommendations	Create a formal agreement to give guidance and improve coordination and collaboration between public health and security authorities.2 Formalize agreement between security and health at PoEs.		
Objective	To establish an MoU to govern joint planning and response to public health emergencies by public health and security authorities by 2018		
1	Build up a system to improve on coordination and collaboration between public health and security authorities at PoEs		

No	Strategic Actions	Responsible Authority(s)	Related Existing plans/ Programs or Activities
Technical Area 15: Medical Countermeasures and Personnel Deployment			
JEE Indicator R.4.1: System is in place for sending and receiving medical countermeasures during a public health emergency			JEE Score: 2
JEE recommendations	<ol style="list-style-type: none"> 1. Enter agreements with medical countermeasures manufacturers and distributors to accommodate accelerated procurement of medical countermeasures during public health emergencies 2. Expand stocks of medical countermeasures (for example, vaccines, antibiotics, infection control supplies and rapid diagnostic tests) to cover all-hazard emergency contingencies, including zoonotic infections. 3. Enter agreements with medical countermeasure manufacturers and distributors to accommodate accelerated procurement of medical countermeasures during public health emergencies. 4. Improve access to veterinary countermeasures by leveraging existing supranational partnerships, for example, OIE Canine Rabies Vaccine Bank. 5. Develop a distribution matrix for veterinary countermeasures for utilization at both national and regional levels. 		
Objective	A one-health compliant strategic national stockpile of medical commodities for use in public health emergencies is established in Sierra LEONE BY 2020		
1	Support the development of MOUs with manufacturers and suppliers of medical countermeasures for public health emergencies	MoHS, MAF	
2	Reach an agreement with Manufacturers and distributors for Expedited procurement of medical countermeasures during public health emergencies		
3	Establish regulations for vetting donations of medical supplies to align with pharmacy board requirement		
JEE Indicator R.4.2: System is in place for sending and receiving health personnel during a public health emergency			JEE Score: 1
JEE recommendations	1. Develop or update plans for sending and receiving health personnel during a public health emergency		
Objective	Establish a system for sending and receiving health personnel during a public health emergency		
1	Empower health professionals' regulatory bodies to issue temporary licences and perform background checks on foreign professionals and volunteers.	MoHS, MAF	
2	Maintain data base of trained health personnel who are willing to be deployed externally	MoHS, MAF, Professional bodies	
Technical Area 2: Risk Communication			
JEE Indicator R.5.1: Risk Communication Systems (plans, mechanisms, etc.)			JEE Score: 3
JEE recommendations	1. Finalize the draft EOC communications strategic plan.2 Develop a training plan to meet the capacity gaps in risk communication		
Objective	To complete EOC communications strategic plan by 2018. 2 .To develop a training plan by 2018 that will guide capacity building activities in risk communication.		
1	Finalize the EOC communications strategic plan.	EOC Communications Lead	Draft EOC communications strategic plan
2	Build human capacity in risk communication		

No	Strategic Actions	Responsible Authority(s)	Related Existing plans/ Programs or Activities
JEE Indicator R.5.2: Internal and Partner Communication and Coordination			JEE Score: 4
JEE recommendations	1. Establish a formal mechanism to coordinate communication with the private sector during an emergency.		
Objective	To have a formal mechanism in place by 2018 to coordinate communication with the private sector during an emergency		
1	Strengthen formal mechanism to coordinate communication with the private sector during an emergency	EOC Management, EOC Communications Lead, ONS	
2	Sustain regular communications with partners	EOC Management	
JEE Indicator R.5.3: Public Communication			JEE Score: 3
JEE recommendations	1. Sustain feedback loops between district teams and communities within localities		
Objective	To have risk communications focal persons in each district by 2018 (health sector) that will serve as communication link between the district and the community		
1	Capacity building for risk communication in the district	MoHS, MAF, EPA	Draft EOC communications strategic plan
2	Community engagement meetings		
3	Media engagements for risk communications		
4	Develop messaging and materials for risk communication		
JEE Indicator R.5.4: Communication Engagement with Affected Communities			JEE Score: 2
JEE recommendations	1. Allocate a dedicated budget line in MoHS and MAF for addressing communications response		
Objective	To establish a dedicated budget line by 2018 for addressing risk communications re-sponse in MoHS & MAF		
1	Create a dedicated budget line for addressing risk communications response in MoHS & MAF	MoHS, MAF	
JEE Indicator R.5.5: Dynamic Listening and Rumour Management			JEE Score: 3
JEE recommendations	1. Methods for effective monitoring of messages used to disprove rumours or correct information should be put in place.		
Objective	To enhance MoHS capacity to disapprove rumour during public health emergencies		
1	Establish methods to give sound, accurate and timely information to prevent and counter rumours	MoHS, MAF	
Technical Area 17: Points of Entry			
JEE Indicator PoE.1: Routine capacities are established at PoE			JEE Score: 2
JEE recommendations	1. Develop policy, SOPs, guidelines, plans and tools for port health		
2.	Conduct capacity assessments at major border crossings and establish PoEs for their designation		

No	Strategic Actions	Responsible Authority(s)	Related Existing plans/ Programs or Activities
3.	Strengthen the infrastructure and capacity for routine services at PoEs		
Objective	To sustain 24 hours routine port health services in four (4) PoEs by 2022		
1	Develop/review Policy for Port health services	MoHS – DEHS, MAF	REDISSE, AU-IBAH
2	Develop Strategic plan for Port Health Services		
3	Develop framework, SOPs, guidelines and tools for border health		
4	Strengthen infrastructure for routine services at PoEs	MoHS - DEHS	WHO, IOM, MANO River Union
5	Build technical capacity for port health services	MoHS - DEHS	
6	Cross boarder engagement for information sharing, joint outbreak response and planning	MoHS - DEHS	
JEE Indicator PoE.2: Effective Public Health Response at Points of Entry			JEE Score: 1
JEE recommenda-tions	1. Finalize/develop public health emergency preparedness plans for PoEs. 2. Strengthen capacity for responding to public health emergencies at PoEs		
Objective	To develop, implement and test ECPs at 4 PoEs by 2022		
1	Develop a national public health ER plan for public health emergencies at PoEs	MoHS - DEHS	IOM, REDISSE, WHO, CDC
2	Strengthen capacity for responding to public health emergencies at PoEs	MoHS - DEHS	
Technical Area 18: Chemical Events			
JEE Indicator CE.1: Mechanisms are established and functioning for detecting and responding to chemical events or emergencies			JEE Score: 2
JEE recommenda-tions	1. Develop comprehensive guidelines or manuals on surveillance, assessment and management of chemical events to support the implementation of the strategic plan for chemical safety. 2. Establish a coordination mechanism nationally and at regional and district levels for the detection and response to chemical events and emergencies, to include a public health plan for chemical incidents and emergencies. 3. Advocate for an increase in the number of human resources to meet the needs of chemical safety. 4. Establish a national environmental quality laboratory system 5. Establish a poisons center		
Objective	To establish a national chemical surveillance and response system in real time reporting at 50% by 2022		
1	Adequately equip the Chemicals department to monitor chemicals in air, water, waste water, soil, sediments, human and Plant specimen and products for purposes of compliance promotion, research, and enforcement by 2021	EPA - SL	Review and Update of the National Implementation Plan of the Stockholm Convention; National Action Plan for the Artisanal and Small Scale Gold mining; Strategic action Plan (2017-2021) of the Environment Protection Agency (EPA)
2	Promote programmes to develop chemicals-management instruments (national profiles, national implementation plans, national emergency preparedness and response plans).	EPA - SL	
3	Promote chemical exchange information through enhanced networking	EPA - SL	
4	Develop Risk assessment and management framework for pollution and chemicals.	EPA - SL	
5	Develop communication framework for pollution and chemicals management	EPA - SL	

No	Strategic Actions	Responsible Authority(s)	Related Existing plans/ Programs or Activities
6	Increase knowledge of Coastal communities on pollution identification and management control.	EPA - SL	
JEE Indicator CE.2: Enabling environment is in place for management of chemical events			JEE Score: 2
JEE recommenda-tions	1. Develop a strategic plan for chemical safety 2. Expand on MOU with relevant environmental stakeholders/laboratories 3. Develop an emergency response plan		
Objective	To develop, legal instruments for effective implementation and enforcement of chemical events to support integrated national environment and health surveillance systems by 2022.		
1	Enact Draft National chemicals Management Act 2017	EPA – SL	Draft Chemicals management act, EPA-SL amended act of 2008, Environmental Impact assessment fee regulations
2	Enact Draft regulations for the management of toxic and hazardous substance	EPA – SL	Draft toxic and hazardous substance regulations
3	Develop a comprehensive waste management policy, regulations, plan and guidelines to include emerging waste streams like electronic, chemical wastes and nano-technologies.	EPA – SL	Draft Integrated waste management Policy and Strategy, EPA-SL amended act of 2008
4	Develop/adopt chemical standards in air, water, waste water, sediment/sludge, plant and human specimen, soil, exhaust fumes and products	EPA – SL	Gazetted adopted chemical standards for waste water effluent and air;
5	Develop and enact a National chemical standards regulations for all media	EPA – SL	Research report on common air pollutants from vehicular traffic
6	Enactment of Vehicle maintenance regulation	EPA – SL	
7	Enactment of electronic waste management regulation	EPA – SL	Draft Electronic waste management Policy;
8	Enactment of food waste management regulation	EPA – SL	Public Order Act, 1960
9	Enactment of health care waste management regulation	EPA – SL	Draft Integrated Waste management Policy
Technical Area 19: Radiation Emergencies			
JEE Indicator RE.1: Mechanisms are established and functioning for detecting and responding to radiological and nuclear emergencies			JEE Score: 2
JEE recommenda-tions	1. Strengthen surveillance for radiological hazards. 2. Improve laboratory capacity for the detection and response to all radiological and nuclear emergencies. 3. Allocate special budget to meet demand in the event of a radiological emergency. 4. Establish national radiological emergency centers 5. Conduct simulation exercises on the appropriate response on radiological emergencies. 6. Strengthen radiation protection on foods and other consumables. 7. Strengthen radiation protection on the use of non-ionising equipment.		
Objective	To strengthen surveillance and response to nuclear and radiological hazards with 50% routine reporting from identified nuclear and radiological hazard sites by 2022		
1	Adequately equipped to monitor radiation (Ionising and non-ionising) in air, water, soil, sediments, human and Plant specimen and products for purposes of compliance promotion, research, and enforcement by 2021	NSRPA	

No	Strategic Actions	Responsible Authority(s)	Related Existing plans/ Programs or Activities
2	Promote programmes to develop radiation-management instruments (national profiles, national implementation plans, national emergency preparedness and response plans).	NSRPA	
3	Promote radiation information exchange through enhanced networking	NSRPA	
4	Develop Risk assessment and management framework for Radiation management	NSRPA	
5	Develop communication framework for radiation management	NSRPA, EPA – SL	
JEE Indicator RE.2: Enabling environment is in place for management of Radiation emergencies			JEE Score: 2
JEE recommendations	<ol style="list-style-type: none"> 1. Advocate for continued human resources capacity to meet the needs for nuclear and radiation safety. 2. Incorporate responding to chemical and radiological emergencies in the draft public health incident and emergency response plan. 3. Enhance collaboration and communication with the public and other MDAs 4. Review of the existing national radiation protection act 		
Objective	To develop, implement and test a national radiation emergency response plan by 2022.		
1	Review Radiation Protection Act	NSRPA	
2	Enact Draft regulations for the management of radiation substances	EPA – SL, NSRPA	Draft toxic and hazardous substance regulations
3	Develop a comprehensive Radioactive waste management policy, regulations, plan and guidelines		
4	Develop/adopt radiation standards in air, water, sediment/sludge, plant and human specimen, soil, and products		
5	Develop and enact a National radiation standards regulations for all media		
6	Enactment of radiation equipment maintenance regulation		
7	Enactment of radiation waste management regulation		
8	Support Radiation management organizational structures and facilities		

4.2 Costing of activities and summary of cost categorisation by JEE thematic areas

The Government of Sierra Leone with the support of partners involved in the JEE process convened a workshop to review and cost the draft NAPHS. This workshop that was held on 7th – 10th November 2017 brought together key government agencies and stakeholders as well as IHR and costing experts from WHO Regional Office and the Headquarters.

The NAPHS contained the realistic activities required to attain the desired objectives as outlined in the recommendations of the JEE process. Further work was then done to identify quantities of goods/services that would be required, estimate the prices and adjust the proposed activities based on costing results.

The activities considered for costing were deemed as realistic, measurable and are expected to exert impact and efficiency to corresponding objective(s). The activities outlined in the NAPHS are those that will allow the country to demonstrate progress from lower to higher scores as per the JEE tool criteria and to maintain the capacities in areas where it has showed good performance (demonstrated capacities). The activities under all technical areas include other sectors (agriculture, livestock, environment, forestry, marine, etc.) to ensure a 'One Health' approach to health system strengthening during NAPHS implementation. The activities follow a sequential or phased approach (year 1, 2, 3-5) for the plan operationalisation and the hope is that the best available data will be used to monitor and evaluate implementation of the NAPHS.

The outcome of the costing exercise is provided here below;

Table 5: Summary of estimated costs of implementing the NAPHS

Thematic area	Total (Leones)	Total (US\$)
Prevent	666,051,723,940	89,402,916
Detect	1,159,177,075,500	155,594,238
Respond	78,883,540,500	10,588,395
Other IHR hazards & points of entry	264,808,587,930	35,544,777
Grand total	2,168,920,927,870	291,130,326

The 5-year cost estimate developed during the planning exercise for implementing the Sierra Leone NAPHS is approximately US\$ 291 million. This high cost may be partly explained by the fact, according to the various assessments carried out, lots of activities have to be implemented for the country to improve its IHR compliance. is due to the fact that there is currently no animal vaccination programme in the country.

4.3 Cost breakdown by JEE thematic area over years

The implementation of the NAPHS covers the period 2018-2022. The costs of implementation are heavier on the first year of the implementation period with the costs almost evenly distributed over the rest of the 4 years.



Table 6: Costs of NAPHS activities by year of implementation

Thematic Area	2018	2019	2020	2021	2022	TOTAL	USD
Prevent	56,256,776,138	56,182,444,338	46,879,879,138	46,816,280,138	56,597,865,138	262,733,244,890	35,266,207
Detect	348,633,434,465	301,937,855,965	310,286,208,040	282,604,417,040	305,869,215,040	1,548,586,130,550	207,863,910
Respond	31,247,654,500	14,041,873,000	18,275,492,667	13,616,199,667	15,611,744,667	92,792,964,501	12,455,431
Other IHR Hazard and POEs	115,594,595,077	100,238,243,077	31,362,706,877	10,318,833,950	7,294,208,950	264,808,587,930	35,544,777
TOTAL (Leones)	551,732,460,179	472,400,416,379	406,804,286,721	353,355,730,795	385,373,033,795	2,168,920,927,870	291,130,326
Total in USD	74,058,048	63,409,452	54,604,602	47,430,299	51,727,924	291,130,326	

4.4 Cost breakdown by technical area over years

Virtually all the technical areas have their costs of implementation of the NAPHS spread over the whole 5 years. The costs are skewed towards the earlier portion of the implementation period. This is subject to change after the broad based stakeholders meeting to prioritize the activities has been held.

Table 7: cost of NAPHS activities by year of implementation

Technical Area	2018	2019	2020	2021	2022	TOTAL	USD
National Legislation, Policy and Financing	932,038,000	637,938,000	-	-	-	1,569,976,000	210,735
IHR Coordination, Communication and Advocacy	8,619,065,000	1,518,485,000	1,518,485,000	1,756,050,000	2,039,985,000	15,452,070,000	2,074,103
Antimicrobial Resistance	18,329,707,000	22,665,266,200	20,565,409,000	19,869,850,000	20,007,905,000	101,438,137,200	13,615,857
Zoonotic Disease	20,845,540,138	15,586,729,138	17,053,729,138	18,520,729,138	29,865,089,138	101,871,816,690	13,674,069
Food Safety	2,478,914,000	11,162,701,000	3,379,641,000	2,877,266,000	829,346,000	20,727,868,000	2,782,264
Biosafety and Biosecurity	5,051,512,000	4,611,325,000	4,362,615,000	3,792,385,000	3,855,540,000	21,673,377,000	2,909,178
Immunization	105,089,901,965	65,968,882,965	82,779,663,040	66,700,368,040	82,779,663,040	403,318,479,050	54,136,709
National Laboratory System	15,832,022,500	28,016,551,000	18,473,235,000	12,459,813,000	14,056,242,000	88,092,863,500	11,824,545
Real Time Surveillance	226,975,881,000	207,774,682,000	208,855,570,000	203,265,492,000	208,855,570,000	1,055,727,195,000	141,708,348

Technical Area	2018	2019	2020	2021	2022	TOTAL	USD
Reporting	735,629,000	177,740,000	177,740,000	178,744,000	177,740,000	1,447,593,000	194,308
Workforce Development	3,060,394,000	2,724,740,000	2,708,096,667	2,708,096,667	2,708,096,667	13,909,424,001	1,867,037
Preparedness	2,186,790,000	1,265,480,000	1,265,480,000	1,265,480,000	1,265,480,000	7,248,710,000	972,981
Emergency Response Operations	19,633,632,500	7,159,208,000	7,146,708,000	7,146,708,000	5,486,420,000	46,572,676,500	6,251,366
Linking Public Health and Security Authorities	614,330,000	590,060,000	491,760,000	491,760,000	491,760,000	2,679,670,000	359,687
Medical Countermeasures and Personnel Deployment	67,920,000	384,775,000	713,040,000	67,920,000	67,920,000	1,301,575,000	174,708
Risk Communication	5,684,588,000	1,917,610,000	5,950,408,000	1,936,235,000	5,592,068,000	21,080,909,000	2,829,652
Points of Entry	8,978,513,000	13,764,430,000	10,727,715,000	6,565,715,000	6,241,715,000	46,278,088,000	6,211,824
Chemical Events	89,742,232,000	71,979,143,000	13,582,172,000	2,769,530,000	68,905,000	178,141,982,000	23,911,675
Radiation emergencies	16,873,850,077	14,494,670,077	7,052,819,877	983,588,950	983,588,950	40,388,517,930	5,421,278
TOTAL (Leones)	551,732,460,179	472,400,416,379	406,804,286,721	353,355,730,795	385,373,033,795	2,168,920,927,870	291,130,326
Total in USD	74,058,048	63,409,452	54,604,602	47,430,299	51,727,924	291,130,326	



4.5 Prioritization of Activities

The following six-prioritization criteria were used; each was given a weighted score

Table 8: prioritization criteria used

Prioritization criteria	Scoring aggregated approach
1. Low-hanging fruit	1
2. Highest Priority	3
3. Known advocate	1
4. Activity Timing	2
5. Resources Needed	1
6. Existing or Potential Funding	2
Total	10

The first 107 Activities with 10-7 point scores technical area were considered as high priority

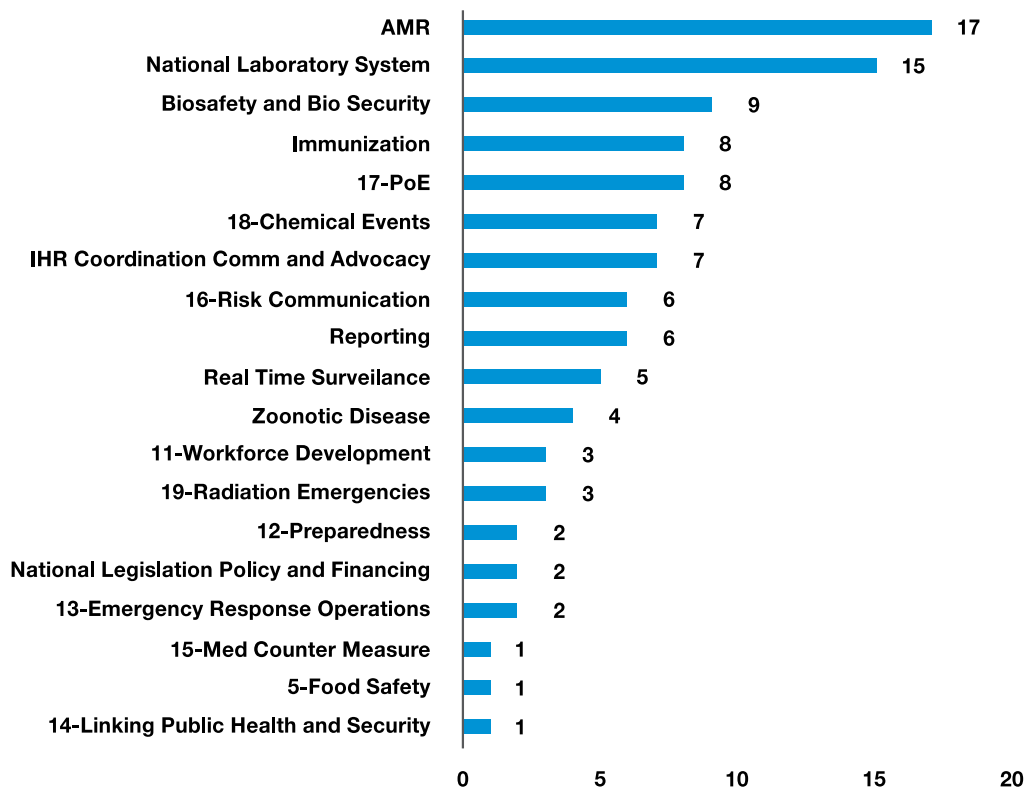


Figure 7: High priority activities by technical area

Budget for the first 107 high priority activities with scores 7-10

Figure 8: Cost of high-prioritized activities by technical area

Table 9: Priority Activities Vs Resource Mapping

Technical Areas	Sum of Dollar equivalent	Existing and Potential Donors and Partners
Biosafety and Biosecurity	818,312	Canada, US - CDC, USAID
Emergency response Operations	672,663	DFID, Italy, Netherlands, Switzerland, UK AID, USAID
Risk Communications	125,246	GIZ, USAID, Breakthrough Action
Preparedness	116,576	DRD, Italy, Switzerland, UK AID, USAID
Reporting	66,683	USAID
Workforce Development	59,191	UK AID, US-CDC, USAID, World Bank
Real Time Surveillance	24,601,790	AfDB, China CDC, DFID, MPTF, US-CDC, USAID, World Bank
Immunization	12,789,086	European Commission, GAVI, Rotary International, US-CDC
AMR	2,460,250	US-CDC, USAID
Chemical Events	1,552,831	European Commission, GEF (Global Environment Facility), MLF (Multi-Lateral Fund)
PoE	1,505,392	CDC, DFID, GIZ, Italy, MBTF, MPTF, MRU, USAID
Zoonotic Disease	1,500,735	USAID
National Laboratory System	1,477,743	Canada Aid, China CDC, Chinese Government, DFID, Dod DTRA, European Union, Global Fund, JICA, UK AID, UNICEF, US-CDC, USAID, World Bank
IHR Coordination, Communication & Advocacy	1,063,554	WHO, CDC, USAID, DFID)

Table 10: Priority Area with the least identified resources

Technical Area	Sum of Dollar Equivalent
Linking Public Health and Security	624,971
Food Safety	440,569
Radiation Emergencies	332,995
National Legislation, policy and Financing	92,897
Medical Counter Measures	17,270

4.6 Sierra Leone Health Security NAPHS financial sustainability

- Value-based investment may take time to realise and careful financial management is needed year to year.
- Estimating the certainty that domestic or donor resources are sustainable each investment year will allow the country to manage and mitigate the risk.
- Long-term progress against the IHR requirements are more likely to be met using long-term financial planning methods.
- The resource mapping exercise should be reiterated on a smaller scale and with a degree of regularity to ensure appropriate adjustments are made.

4.7 Summary of cost analysis

The 5-year cost estimate developed during the planning exercise for implementing the Sierra Leone NAPHS is approximately **US\$ 291 million**. The costs of implementation are heavier on the first year of the implementation period with the costs almost evenly distributed over the rest of the 4 years. The costs are slightly skewed towards the earlier portion of the implementation period.

4.8 Financing of National Action Plan (Domestic, SPP and further donor engagements)

MoHS and MAFF will use the NAPHS as an advocacy tool to mobilize resources for both domestic and external sources. The Government of Sierra Leone, through the Ministry of Finance and economic development, will play a lead role of improving domestic revenues. An increase in government revenue will indirectly impact the capacity of the government to finance health services. It is anticipated that a new Health Financing strategy is able to collate and develop a rigorous sector-wide budget, resource map, and processes to better manage the flow of funds. For additional funding resources, MoHS and MAF will advocacy for more budget allocations to their respective ministries. MoHS will approach donors and other development partners for additional funding of the NAPHS. MoHS and MAF will approach donors and development partners for additional funding for this plan.

Improving predictability of donor funding and harmonization of donor funds with national priorities and mechanisms are among the issues that need to be addressed. A sector wide approach for better coordination and harmonization among the development partners themselves and between development partners can be done through the Strategic Partnership Portal (SPP). The SPP is an online tool that allows donors and partners to see all funding coming into a particular country and how it is distributed, as well as other relevant information collected from national

authorities and stakeholders. The SPP will help to align donor contributions to Sierra Leone's real health security needs and gaps. The SPP assists NAPHS implementation through enhanced donor/country coordination & interagency coordination. MoHS has an investment framework for all available funding and the Integrated Health Projects Administrative Unit (IHPAU) provides fiduciary oversight of donor supported projects. In addition, the capacity of MoHS will be strengthened and collaborations with the Ministry of Finance will be improved to monitor donor aid for health. The implementing MDAs will strengthen budget execution and demonstrate results from funding already provided to show return on investment thereby enhancing transparency and performance and reduce duplication and inefficiencies.

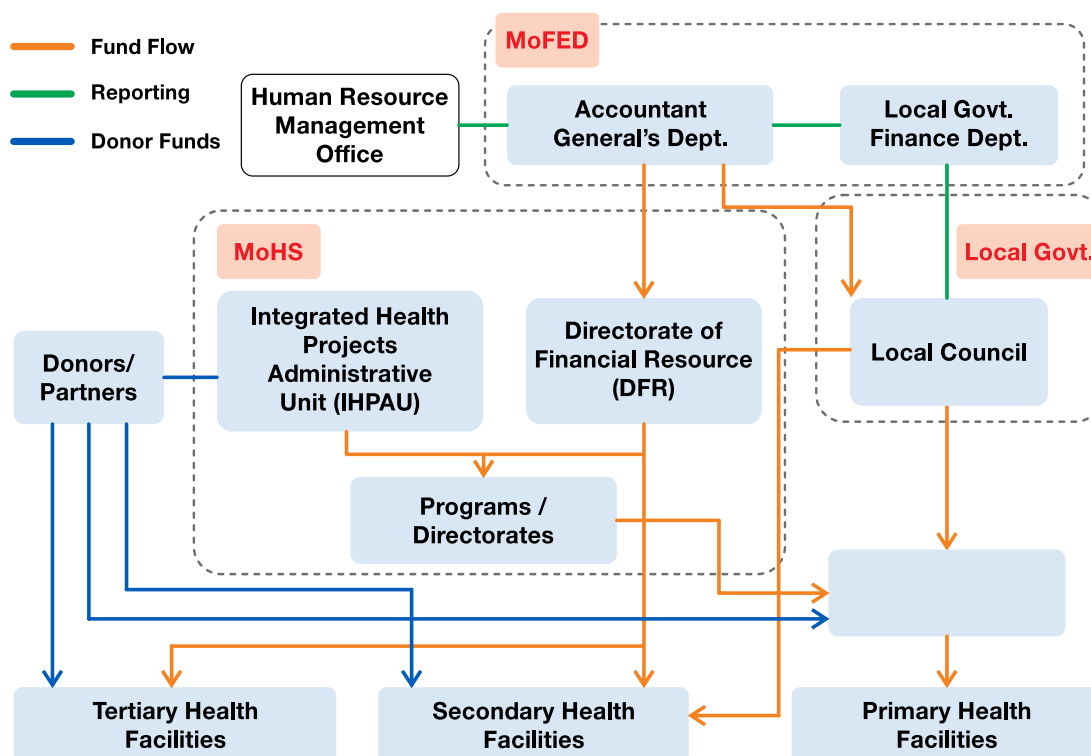


Figure 9: Institutional Relationship for health funding

4.9 Risk appraisal, assumptions and management

The vision and mission of the NAPHS as well as the objective and strategic action stated under the different technical areas of the plan will be achieved if the following assumptions are shown to be a political, financial and operational reality by the GoSL and its partners:

- **Politics:** the political class must ensure that health remains one of the GoSL's top priorities, and redouble their efforts to provide a secure political environment where health remains – consistently – a focused priority.
- **Governance:** the MoHS must continue to make improvements to its structure and function in order to more effectively deliver on its mandate.
- **Finances - GoSL:** the budgetary allocation for health within GoSL must increase each year, over the next five years, and the GoSL must meet their Abuja declaration commitment of 15% of GDP spent on the health sector.
- **Finances – Health development partners:** GoSL commitments will not be sufficient to execute this plan; development partners must maintain – and in some cases increase – their commitments to the sector. More support needs to be channeled through Government budgets, in order to increase sustainability and system strengthening.

- **Financial Accountability and Transparency:** all finances for health – held by both GoSL and development partners – must be managed with regards to the efficiency, effectiveness and value for money at every stage of the budgeting and expenditure and reporting process.
- **Legal Frameworks:** the statutory framework by which the health sector is governed must continue to be expanded, revised and improved.

Table 11: Risk appraisal and management

Description of Risk	Likelihood of Occurrence	Level of Severity	Risk rank /level	Management Plan /strategy
Financial constraints	Medium	High	1	<ul style="list-style-type: none"> • Advocate for increased domestic funding to MoHS, MAF, through parliament. • Mobilize additional funding from donors and partners • Improve coordination of implementation of donor funded programs and projects
Inadequate multi-sectorial collaboration and coordination	Low	Medium	2	<ul style="list-style-type: none"> • Effective stakeholder engagements. • Sustain a multi-sectorial approach in implementation and M&E for the NAPHS.
Delays in developing the enabling legislations	Medium	Medium		<ul style="list-style-type: none"> • Sensitization and advocacy engagements the respective Govt institutions.
Unforeseen delays in implementation of activities	High	Low		<ul style="list-style-type: none"> • Develop coordination mechanism for implementation.
Human resources constraints	Medium	Low		<ul style="list-style-type: none"> • Health Sector Reforms
Procurements and logistics constraints	Medium	Medium		<ul style="list-style-type: none"> • Develop coordination mechanism for implementation

4.10 Platform for National Action Plan

4.10.1 Linkage with existing plans

Sierra Leone already has a One Health platform that involves collaborative efforts of multiple disciplines working locally, nationally, and globally to attain optimal health for people, animals, plants and our environment. This platform was developed based on the following global strategies and policy frameworks: WHO International Health Regulations (IHR-2005), Global Health Security Agenda (GHSA), OIE (World Organization for Animal Health), National Public Health Emergency Management Committee (NPHEMC). Implementation of the NAPHS will utilize the existing coordination mechanisms with multi sectoral collaboration with the different stakeholders to avoid duplication of resources, while enhancing synergisms with the existing plans, programs and ongoing activities to maximize health gains. The ongoing World Bank Regional Disease Surveillance Strengthening Enhancement (REDISSE) is one of the projects that will have synergic effects to the implementation of NAPHS. Others include: Sierra Leone National health sector strategic plan 2017 to 2021 and the National Health Sector Recovery Plan (2015 – 2020),

4.10.2 Interplay between relevant sectors

The Government of Sierra Leone will make deliberate efforts to collaborate with various stakeholder groups: government sectors, UN agencies, international organizations, partners, civil society, and private sector (e.g., health, environment, economy) to jointly achieve the desired purpose of the NAPHS implementation. By engaging multiple sectors, partners can leverage knowledge, expertise, reach, and resources, benefiting from their combined and varied strengths as they work toward the shared goal of securing Sierra Leone's Public Health security health capacity. The public health problems of the NAPHS are complex, and in many cases, a single health issue may be influenced by interrelated social, environmental, and economic factors that can best be addressed with a holistic, multi-sectoral approach.

By leveraging the strengths and varied approaches of partners, effective multi-sectoral coordination will eliminate implementation barriers, facilitate scale-up, and increase the impact that one sector or partner might have had alone. Coordination across government ministries, for example, is essential for identifying intersections among the sectors and opportunities for collaborative planning. Successful, multi-sectoral collaboration is dependent on political, economic, and social factors and requires buy-in and commitment from all parties working together.

Other enablers

Political stability: Barely two decades ago, Sierra Leone was embroiled in a conflict of unimaginable proportions. But Sierra Leone chose peace and worked its way out of conflict with the assistance of the international community. Since the end of the brutal civil war in 2002, Sierra Leone has made tremendous progress towards political stability and economic growth. The country has been on a path of reconciliation, reconstruction, and stabilization. Sierra Leone has moved from conflict to stability, holding three presidential and general elections between 2002 and 2012, including a change in government in one instance. Sierra Leone is a place where Governments are voted in and out of power peacefully, based on the citizens' assessment of their capacity to set and deliver a transformative development agenda. This level of political stability provides a conducive environment for the implementation of the NAPHS.

Political commitment: the Government of Sierra Leone and the development partners are committed to the realization of health sector goals as articulated in the National health sector strategic plan 2017 – 2021. The Health Sector Recovery Plan 2015-2020, of which the President's Recovery Priorities were key components, has served to focus attention, resources, and investments on the most pressing issues facing the health sector. Health remains a priority sector and there is increased and sustained funding from the Ministry of Finance and Economic development and development partners for most programs in this sector.

Transitioning back into the Agenda for Prosperity plan: it is crucial to underscore that the Agenda for Prosperity (A4P) remains the defining strategy for the overall development of Sierra Leone, despite the EVD setback, and is the main national anchor for dealing with the medium to long-term challenges posed by the disease and other health threats. Government views health as a key driver to achieving social economic development as envisaged in A4P. The A4P provides a frame work for policy reforms in key service sectors, health inclusive and advocates for more resource allocation, innovations and investments in these sectors. A4P calls for efficiencies in resource allocation, effective implementation, greater transparency and accountability and as well ensuring value for money. Therefore the implementation of the NAPHS will anchor and leverage from reforms and resources especially in the health and agriculture sectors within the wider development context of the A4P.

Macroeconomic stability and sustainable economic growth: Sierra Leone has made significant progress in maintaining macroeconomic stability. Sierra Leone's economy proved resilient in the face of two major shocks in 2014/15: the Ebola epidemic and collapse of iron ore prices. Indeed the economy recovered from the after effects of the Ebola epidemic, growing by 4.3% in 2016

from -21.1% the year before³². This economic growth has been fuelled by new investments in mining, agriculture, and fisheries and austerity measures in the 2017. The recovery underway, according to International Monetary Fund projections, is expected to remain sustainable over the medium term. This will ensure additional domestic funding for health programs.

Multispectral, multidisciplinary collaboration: The Government of Sierra Leone has a platform and mechanisms for donors, international organizations, intergovernmental organizations, UN agencies and other development partners to contribute to national development. As recent events have shown, public health security is a complex, costly, and information intense undertaking that requires strong national and multi-sectoral leadership, infrastructure, cross-border collaboration, capacity to identify problems rapidly and design real-time evidence-based solutions, well-trained and well-equipped workforces, well-functioning laboratories and service-delivery systems, capacity to sustain interventions, and ability to respond to unexpected events. These can only be achieved through comprehensive, multispectral, collaborative strategies. The National Action Plan for Health Security as a reflection of solidarity and commitment by all stakeholders to strengthen Sierra Leone's collective resolve and capacity to respond to potential international health emergencies and other public health risks.

Human resource capital: Health workers are a crucial pillar in a well-functioning resilient health system. The importance of strong human resource system for health was demonstrated during the recent Ebola Virus Disease (EVD) outbreak from 2014 to 2015. The recently developed HRH Policy 2017-2021 provides a clear vision for the health workforce over the next five years. Its principles, values, goal and objectives are geared towards strengthening the health workforce to provide high-quality, equitable, and accessible health services to all Sierra Leoneans. The corresponding HRH Strategy 2017-2021 was developed in tandem to guide the implementation of this policy, to ensure that its objectives are achieved through feasible and cost-effective interventions. The Ministry of Health and Sanitation in collaboration with development partners has already made substantial progress in this area over the past year, including (i) cleaning the payroll of inactive workers, (ii) operationalizing a comprehensive human resources information system; (iii) developing a training programme for Clinical Assistants – a mid-level cadre that will support the public health sector with clinical services in areas where doctors are limited, and (iv) developing a programme through which specialist medical doctors will be trained in country (v) field epidemiology training program that increases capacities of public health professional. The Ministry has also made headway in developing a comprehensive community health worker policy and strategy to enhance the health workforce's ability to cover the hard-to-reach populations. The Ministry of Agriculture and Forestry has a program that supports training of veterinary doctors who are acutely scarce in Sierra Leone.

4.11 Contribution to Health System Strengthening and UHC2030

Implementation of the NAPHS will make significant investments in the different health systems blocks; Leadership and governance, Service delivery, Human resources for health, Health financing, Medical products and health technologies, Health information systems and research, Health security and emergencies, Community engagement and health promotion there by contributing to building a robust, resilient and responsive health system for Sierra Leone. These plans form the foundation for better health security, preventing deaths, tackling diseases, strengthening the health system and improving the health and well-being of the population. An effective health care system will contribute to attainment of Universal Health Coverage (UHC) by ensuring that people have access to the health care they need without suffering financial hardship. It also helps drive better health and development outcomes. This approach is key to ending extreme poverty and increasing equity and shared prosperity. It is also an essential part of the Sustainable Development Goals (SDGs): SDG 3 includes a target to "achieve universal health coverage (UHC), including financial risk protection, access to quality essential health care

32 <https://www.afdb.org/en/countries/west-africa/sierra-leone/sierra-leone-economic-outlook/>

services, and access to safe, effective, quality, and affordable essential medicines and vaccines for all." SDG 1, with the goal to end poverty in all its forms everywhere, is also in peril without UHC, as hundreds of millions of people are impoverished by healthcare costs every year.







5 DELIVERY OF THE ACTION PLAN

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The NAPHS will be rolled out through a five-year period (2018-2022). The activities covered in the NAPHS span different ministries and different sectors of the economy and also between national, sub-national and local community levels. Implementation activities will involve active collaborations and adoption of roles and responsibilities by various players. Successful delivery of the action plan will also require leadership and coordination by key entities plus stewardship and control by those that will be responsible for creating the desired outputs under each strategic activity.

5.1 Roles and responsibilities of key stakeholders

Various stakeholders will be active for the duration of the implementation of the NAPHS. The roles will vary from providing leadership to carrying out the activities themselves. Some stakeholders will be depended upon to provide support either technical, financial or the intangibles such as community support. Overall, the NAPHS requires all the actors to work concurrently so that the targets are met across the board while monitoring progress towards the achievement of goals set. The roles and responsibilities of the various entities that will be involved in the implementation include the following:

5.1.1 Office of the President

The Office of the President will be depended upon to provide the high level leadership and political commitment needed in ensuring that ministries and state agencies meet their obligations in the NAPHS. The Office of the President is also the authority that maintains the legal mandate to declare a public health emergency or disaster and to direct national emergency response for disasters and major large scale public health emergencies. The Office of the President will also support the endorsement for high level agreements and MoUs related to NAPHS implementation. The Office of the President will maintain responsibility to coordinate of government ministries with responsibilities in the NAPHS implementation.

5.1.2 Parliament

The health committee in the Parliament of Sierra Leone will be critical to support aspects of the NAPHS related to internal resource mobilization, allocation and legislation. Key responsibilities will include 1) review of out dated laws, such as the public health ordinance, 2) enactment of new legislation as necessitated by NAPHS and 3) approving the national health budget with considerations for resources and policies needed to meet the aspirations set out in the NAPHS. It will be useful from the outset for health committee members to have the awareness on NAPHS so as to better defend the health budget, with particular attention to the creation of new budget lines to fund management of public health emergencies.

5.1.3 Line ministries

Ministry of Health & Sanitation

As the centrally mandated ministry in development of health security, the Ministry of Health and Sanitation shall have overall stewardship and management of the implementation, monitoring and evaluation of the NAPHS. The MoHS shall take the leadership role in the coordination of key stakeholders and activities for NAPHS purposes. The MoHS shall also lead strategic planning for the delivery of the NAPHS action plan, including regularly undertaking performance reviews of the implementation of the plan. The MoHS shall mobilize resources for implementation, monitoring and evaluation of the human health component of the NAPHS. Inter-sectoral collaboration is vital for successful implementation of NAPHS, responsibility for initiation and leadership of this collaboration shall rest primarily with MoHS. The health ministry shall also bear the responsibility of providing guidance and sponsorship for development of policies, regulation and laws necessary for successful NAPHS implementation as well as making requisite investment in human resources, infrastructure, equipment, etc. necessary for successful NAPHS implementation. The MoHS shall also keep track of the fulfilment of international obligations and reporting requirements of NAPHS and IHR by Sierra Leone.

Ministry of Agriculture and Forestry

MAF will co-chair with the MoHS the NAPHS initiatives that are synergistic with One Health Platform themes. MAF will exercise stewardship and management of implementation of the animal health centred objectives in the NAPHS. MAF shall mobilize resources for implementation, monitoring and evaluation of the animal health component of the NAPHS. Inter-sectoral collaboration is vital for successful implementation of NAPHS. MAF will also take responsibility for investments in human resources, infrastructure, equipment, etc. necessary for attainment of animal health centred objectives in the NAPHS. MAF shall be responsible for tracking fulfilment by Sierra Leone of international obligations and reporting requirements in related to animal health and public health emergency management. MAF also bears the responsibility of ensuring that cross border movement of livestock is managed in a manner that protects the health security of Sierra Leone.

Ministry of Finance

MoF will be responsible for the mobilization of in-country resources for implementation of the NAPHS including auditing and monitoring the efficiency and utilization of resources raised for NAPHS implementation. MoF will also assess the impact of funding sourced for NAPHS implementation to ensure the objectives are met with a specific target to attain value for money.

Ministry of Internal Affairs

MIA shall facilitate formalization of a system to improve coordination and collaboration between public health and security authorities, including emergency response coordination between appropriate authorities. MIA shall also support routine public health services and interventions at Points of Entry and support MoHS and MAF in the efforts to enhance bio-security.

Ministry of Local Government and Rural Development

The Ministry of Local Government and Rural Development shall engage in facilitating functional community engagements for the implementation of NAPHS activities at villages, towns, chiefdoms, districts and regional level.

Ministry of Technical and Higher Education

MTHE shall update curricula for training of health care workers, to include aspects covered under NAPHS such as disease surveillance, emergency management and risk reduction. MTHE shall also implement a sustainable strategy to increase the workforce of veterinarians in Sierra Leone.

Ministry of Information and Communications

The Ministry of Information and Communications will facilitate public-private partnerships that aid MoHS in risk communications while assisting the health sector to secure positive publicity on the NAPHS initiatives. Where need arises, the communications ministry shall assist the health sector in rumor surveillance and mitigating mass misinformation through various platforms (e.g. social media).

Ministry of Marine Resources

The Ministry of Marine Resources shall lead in efforts to improve on disaster risk reduction in water transport and fishing.

Ministry of Social Welfare, Gender and Children's Affairs

The Ministry of Social Welfare, Gender and Children's Affairs shall support the MoHS by reinforcing policy on childhood immunization to ensure that children enrolling for school are required by

ministerial regulation to be fully immunized. During the implementation of the NAPHS, the social welfare ministry will partner with health sector in community disaster risk and vulnerability assessments. The Ministry of Social Welfare, Gender and Children's Affairs shall also be key in safeguarding the welfare of frontline health workers and surge staff during response to large scale health emergencies, including compensation for loss, injury, disability or death.

Ministry of Foreign Affairs

The Ministry of Foreign Affairs shall help broker agreements to facilitate meaningful cross border collaboration for health security and also support Sierra Leone in regional cooperation for advancement of health security within Mano river basin, ECOWAS, AU and globally.

5.1.4 Others

Office of National Security - ONS

As the national mandated authority for disaster management, the ONS oversees development of disaster risk reduction and disaster management in all ministries and sectors of the economy as set out in the Hyogo protocol and the Sendai framework. ONS should also work with the MoHS to establish clear communication and coordination lines with the Public Health National Emergency Operations Center and the 117 Alerts System Line.

Military and Ministry of Defence

Support emergency response for disaster level public health emergencies. Capacity building in various public sector institutions in emergency preparedness i.e. table top exercises, simulations and drills.

Paramount chiefs & Councillors

As the local leaders recognized by law, they facilitate community entry for implementation of activities. Some of the activities planned under NAPHS e.g. risk and vulnerability assessments, will involve community level participation. Paramount chiefs and councillors are key stakeholders for local level community engagement, formation and implementation of health related by-laws, and other health related activities improving health at the community level.

Pharmacy Regulatory Board

As the established regulatory body for all pharmaceuticals and cosmetics importation and consumption in Sierra Leone, the board shall review existing regulations with a view to advancing the agenda set out in the NAPHS on anti-microbial resistance. The board shall also support studies and other scientific inquiry into AMR and promote the rational use of antimicrobials. The donations and imports of medical commodities that are received during emergency response operations need to be scrutinized and approved by the pharmacy regulatory board to maintain standards in quality and integrity of medical commodities consumed in Sierra Leone.

Sierra Leone Standards bureau

As the mandated authority responsible for protection of standards, the bureau shall watch over the quality of food items, laboratory supplies and equipment etc. that enter the country.

Environment Protection Agency – EPA

The EPA formulates national environmental policies, is in charge of coordination of all environmental management programs, enforcement and compliance to legislative proposals, standards and guidelines on the environment in accordance with the environmental protection act of Sierra Leone. The EPA ensures the integration of environmental concerns in overall national planning

by developing modalities and maintaining linkages or partnerships with relevant government ministries, departments and agencies. The EPA also leads in creation of policy and legislation for regulation of environment management. Control of pollution and chemicals management within the mandate of EPA are integral to the implementation of NAPHS where the EPA is tasked with establishing functional mechanisms for detecting and responding to chemical events or emergencies and creating an enabling environment for management of chemical events.

Medical & Dental Council and Nurses Board

These are the statutory entities mandated to license health workers. During response to large scale health emergencies there is overwhelming need for surge staff, the majority of those urgently required are health workers. It is vital that the council and board has authority to issue temporary licences to foreign based volunteers and responders. They should also be facilitated to carry out background checks and verification on doctors and nurses that are deployed during emergencies. The board should also be active in managing violations of staff conduct and instituting disciplinary measures.

Ministry of Transport and Aviation

As the ultimate regulatory authority for air, land and sea transport the ministry will support the MoHS and stakeholders in attaining the objectives set out in the NAPHS especially in regard to food importation, transportation of goods/chemicals, movements of humans and animals during critical times such as an outbreak. The Sierra Leone civil aviation authority, the Sierra Leone maritime administration and the Sierra Leone Ports Authority have roles to play in the implementation of the NAPHS.

WHO, OIE, FAO, other UN Agencies, CDC, National and International Agencies

These non-state entities have capacity to bring about development in various areas that they partner with the government. The international agencies will be on standby to provide technical support for development, implementation, monitoring and evaluation of the NAPHS. They will also support the country's efforts to raise funds for the action plan.

Academic Institutions

Think tanks and academic institutions are important in accelerating the growth of new knowledge and in leading scientific and operational research. In the implementation of the NAPHS, some surveys will need to be carried out either as baseline studies, mid-term evaluations or for end of implementation documentations. Academic institutions can be very useful in designing and conducting evaluations due to their expertise and neutrality. They will also be a source of technical expertise to guide implementation of NAPHS.

Civil Society

Civil society organizations play an important role in enhancing transparency and good governance by contributing to increased public debate on issues surrounding the formulation and implementation of public sector plans as well as in supporting greater transparency. There is a vibrant civil society in Sierra Leone and their critique will be invaluable as we expend resources in NAPHS implementation.

The Media

The media plays a role in creating and shaping of public opinion. It has the duty to inform, to educate and to entertain the community. The media in Sierra Leone should act as watchdog, to protect public interest against malpractice, create public awareness and give platforms to citizens to give feedback on how NAPHS implementation is affecting their lives. In the implementation

of the NAPHS, the media will be key to highlighting the various initiatives to secure the health of citizens. The media is also directly involved in the implementation of several activities under risk communications.

5.2 Coordination mechanisms and framework for delivery of action plan

The implementation of the NAPHS will be delivered through the various fora with a strong country ownership, commitment and political will. In addition, a continuous engagement of stakeholders, collaboration and support from partners will further ensure the actualization of NAPHS. The coordination mechanisms and framework for delivery of the national action plan for health security 2018-2022 is designed to further strengthen existing coordinating structures such as inter-ministerial council and one-health coordinating committees. The figure 8 highlights the inter-relationships in coordinating structures at the national level.

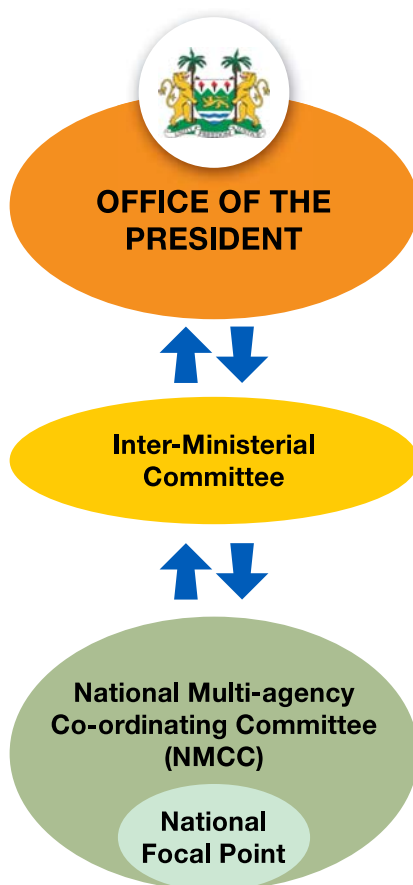


Figure 10: shows the national coordination framework for delivery of the national action plan

Inter-Ministerial Committee for implementation of NAPHS

The Inter-Ministerial Committee is the highest decision-making body responsible for policy formulation and coordination oversight and decision-making. The Committee will present to cabinet and the Presidency and secure high-level strategic decisions as and when necessary - on issues of NAPHS, IHR, including emergencies and public health threats.

The membership of the Inter-Ministerial Committee will include Ministers and Heads of government agencies as outlined below:

1. Minister of Health and Sanitation (MoHS),
2. Minister of Agriculture and Forestry (MAF),
3. Executive Chairperson - Environment Protection Agency (EPA)
4. National Security Coordinator - Office of National Security (ONS)
5. Minister of Internal Affairs (MIA)
6. Minister of Technical and Higher Education (MTHE)
7. Minister of Local Government and Rural Development
8. The Minister, Ministry of Mines and Mineral Resources
9. Minister of Transport and Communication
10. Minister of Finance
11. Minister of Trade – standards for food substances
12. Minister of Tourism and Culture

5.2.1 National Multi-Agency Coordination Committee for the implementation of NAPHS

The National Multi-Agency Coordination Committee (NMCC) will work with the recently established One Health coordinating structures. However, the One Health coordinating committees should be expanded to include more key stakeholders involved in the implementation of the NAPHS. The NMCC is divided into the two sub-structures namely:

1. **NAPHS Coordination committee / One health coordination committee**

This committee will provide overall leadership and policy guidance on all issues related to NAPHS and IHR. This committee will be co-chaired by the Chief Medical Officer and the Chief Agricultural Officer. Other composition of the committee will include senior technical officers from MoHS, MAF, ONS, Environment Protection Agency (EPA), Ministry of Finance, RSLAF, Training/research institutions, Partners (Senior Representatives). See page 69 for more details.

2. **NAPHS Technical committee / One health technical committee**

This committee will provide leadership to the technical working groups in the implementation of the NAPHS and IHR. The composition is senior Directors from respective MDAs, partners and Academic/Research Institutions. See page 70 for more details.

Both committees will work closely with the IHR National Focal Point (NFP) to plan and monitor the implementation of the NAPHS in Sierra Leone. The role of the NMCC is to develop and oversee the implementation of NAPHS. The NMCC through the IHR NFP reports or updates the Inter-Ministerial Committee.

The functions of the NMCC are to:

- Develop a national strategic plan that take into accounts all recommendations of the JEE, all IHR core capacities, and/or any health security events every 4-5 years.
- Review and update the plan annually with the guidance of the NFP and relevant partners.
- Support, monitor, supervise, coordinate, and evaluate the operations of IHR NFP.

- Engage the parliament and relevant stakeholders on the legislation, policies and administrative arrangements to enable compliance with the IHR (2005) with the guidance of the NFP and relevant partners.
- Mobilize resources including domestic financing for the implementation of the NAPHS and monitor the use of the resources for any health security event with the IHR (2005) with the guidance of the NFP and relevant partners.

IHR National Focal Point

The Sierra Leone International Health Regulations National Focal Point (IHR NFP) was established in 2009 within the Ministry of Health and Sanitation (MoHS). However, NFP existed as a person³³ rather than a national centre³⁴. Hence, it was not fully operational.

According to the International Health Regulations (2005) (IHR (2005)), National IHR Focal Point is defined as “the national centre, designated by each State Party which shall be accessible at all times for communications with WHO IHR Contact Points under these Regulations”.³⁵ Therefore, for NFP to be fully operational, IHR NFP should exist as a national centre with appointees from relevant MDAs.

IHR NFP will led day-to-day IHR-relevant event assessment, reporting and coordination efforts on public health events, including emerging/re-emerging diseases, such as Viral haemorrhagic fever outbreaks and other communicable disease outbreaks, contaminated medical products, and vaccine preventable diseases, among others. The work of the IHR NFP will contribute to global health security policy development and recognition that communicating the evidence-based possibility of a major public health event is critical to protecting Sierra Leone and global populations from future public health threats.

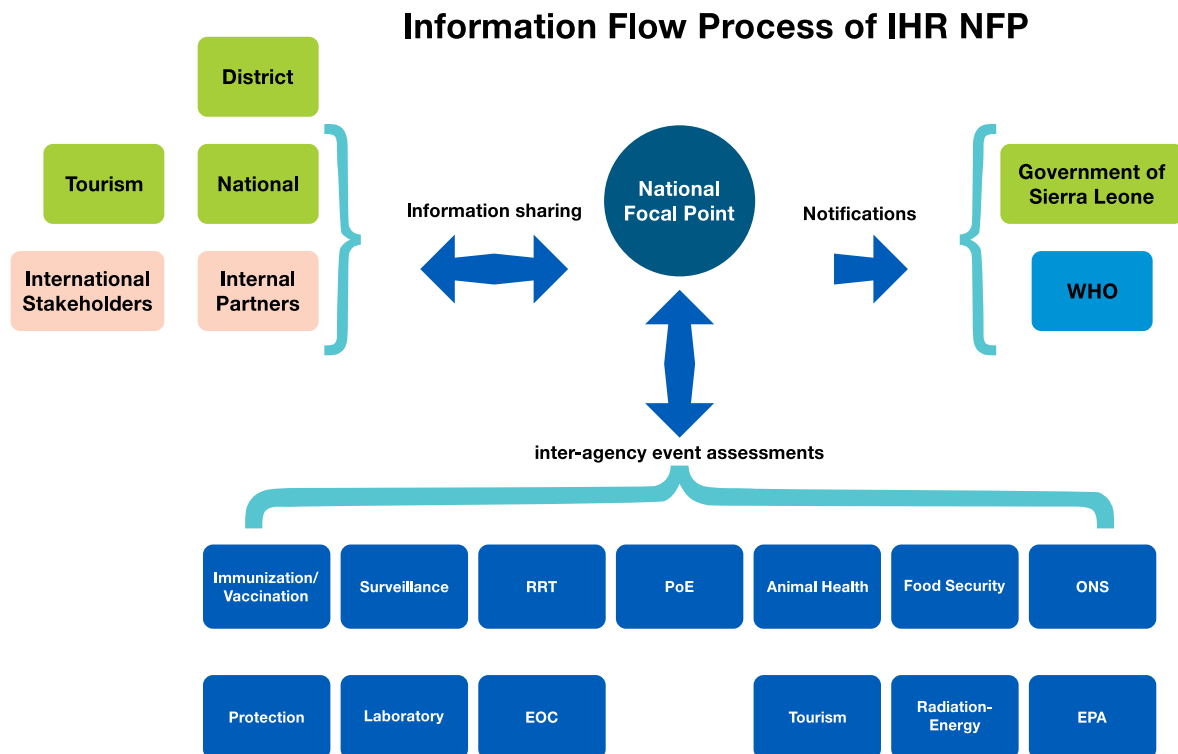


Figure 11: shows the information flow process through the IHR National Focal Point

33 Government of Sierra Leone, Ministry of Health and Sanitation. International Health Regulations 2005. Plan of Action 2016 – 2018 (Draft)

34 WHO document on NATIONAL IHR FOCAL POINT GUIDE accessed on 24 Oct 2017 <http://www.who.int/ihr/English2.pdf>

NFP Structure and functions³⁵

IHR NFP is a national centre with appointees from relevant MDAs. In addition, there are technical and support staff.

The IHR NFP is responsible for the day-to-day operations and management of procedures for communication and coordination. IHR NFP technical staff operate under a 24/7/365 duty schedule to ensure continual monitoring of and timely response to domestic and international public health events.

The IHR NFP oversees all core IHR NFP activities, such as:

- Notifying potential public health emergency of international concern (PHEIC) to the WHO.
- Receiving, triaging and directing IHR-related communications to ministries, departments and agencies and other internal partners and stakeholders.
- Preparing and disseminating official IHR-related messages to relevant domestic and international stakeholders.
- Coordinating and facilitating communications and information sharing between Sierra Leone MDAs, the WHO and other countries' NFPs in order to facilitate efficient public health communications and information sharing.

IHR NFP specific responsibilities include:

- Overseeing and coordinating inter-agency assessment of events that may constitute potential PHEICs.
- Collaborating with relevant technical agencies to perform public health risk assessment using Annex 2 of the IHR³⁶.
- Identifying and resolving government policy issues related to international public health reporting.
- Overseeing domestic IHR obligations and coordinating IHR-relevant policies, positions, and process implementation efforts.
- Coordinating the monitoring and evaluation of IHR core capacities, and annually reporting on the status of IHR core capacities to WHO.
- Advising interagency leadership and technical staff on IHR-relevant policy.
- Coordinating IHR-relevant efforts with international partners, organizations, and the Sierra Leone government.
- Leading efforts on bilateral policy exchanges with foreign NFPs.

The IHR NFP will liaise with the office of the Chief Medical Officer, Ministry of Health and Sanitation for authorization of messages for all official communications to WHO on behalf of the Government of Sierra Leone in compliance with the IHR. Such messages include notifications of public health events and status reports.

35 The U.S. International Health Regulations National Focal Point accessed on 24 Oct 2017 <https://www.phe.gov/about/OPP/dihs/Pages/ihr-nfp.aspx>

36 WHO guidance for the use of Annex 2 of the International Health Regulations (2005). http://www.who.int/ihr/publications/annex_2_guidance/en/

IHR NFP should have a National Operations Center (NOC) for 24 hours a day/7 days a week/365 days a year monitoring, situational awareness and communication capabilities for the IHR NFP. The NOC allows the NFP to receive and transmit communications as needed. The NOC serves a vital role in receiving and routing communications properly during a public health emergency, as well as maintaining general, public health situational awareness.

5.2.2 District level implementation of NAPHS

The district health management teams (DHMT) are pivotal in implementation of various national health policies and strategies, and the implementation of NAPHS will leverage on the existing coordinating structures at the district level including: the Public Health Emergency Management Committee (PHEMC) which is under the leadership of the DMO; the District Disaster Management Committee which requires strong participation of the DMO as a member; and the District One-Health Coordination Committee which DMO chairs and DAO co-chairs.

The DMO will oversee, and be responsible for coordinating and updating relevant MDAs and other stakeholders through existing fora. The DMO will ensure strong collaboration, effective information sharing and coordination with relevant MDAs in the districts. In addition, the district structures will share information regularly and report on the implementation of NAPHS with national structures.

5.2.3 Alignment of internal stakeholders

The internal partners and stakeholders refer to all implementing partners, academic institutions, civil society organizations, community stakeholders, etc. The role of internal partners and stakeholders is to:

- Engage in the process of developing, supporting, and implementing the NAPHS.
- Jointly participate in the monitoring and evaluation of the NAPHS under the guidance of IHR NFP.
- Receive and shares IHR-related information and directing communications from IHR NFP.
- Support the resource mobilization process, utilization and accountability in line with other relevant documents.



Figure 12: shows the linkage of WHO-Strategic Partnership Portal-SPP

5.2.4 Alignment of external stakeholders

The external stakeholders refer to donor partners, bilateral agencies, UN agencies, international NGOs and others. The role of external partners and stakeholders is to:

- Participate in the Joint External Evaluation.
- Participate in the NMCC.
- Engage in the process of developing, supporting, and implementing the NAPHS.
- Support the resource mobilization process on the behalf the government of Sierra Leone.
- Liaise with IHR NFP in monitoring and evaluation of the NAPHS.
- Receive and shares IHR-related information and communications from IHR NFP.

5.3 Monitoring and evaluation of the Plan

5.3.1 Aim

Guidance for strengthening monitoring, evaluation and review (M&E) of National Action Plan for Health Security (NAPHS will also outline the key attributes and characteristics of activities. It includes a comprehensive framework that addresses indicator selection, related data sources, and analysis and synthesis practices, including quality assessment, performance reviews, communication, and utilization.

5.3.2 Background

This document provides details on the M&E plan for NAPHS from 2018-2022. Monitoring and evaluation is an essential component for the successful implementation of any program. Monitoring and Evaluation system refers to all indicators, tools and processes that will be used to measure if a program has been implemented according to the plan (monitoring) and is having the desired result (evaluation).

The primary aim of the plan is to serve as a strong and harmonized M&E component of the NAPHS, covering all major thematic areas for the health security. The plan serves as the mechanism for districts and national reporting, aligning partners at districts and national levels around a common approach to country support, and reporting requirements. The plan should reduce duplication of efforts, focus on results monitoring, and result in better accountability and harmonization of M&E systems.

5.3.3 Objectives

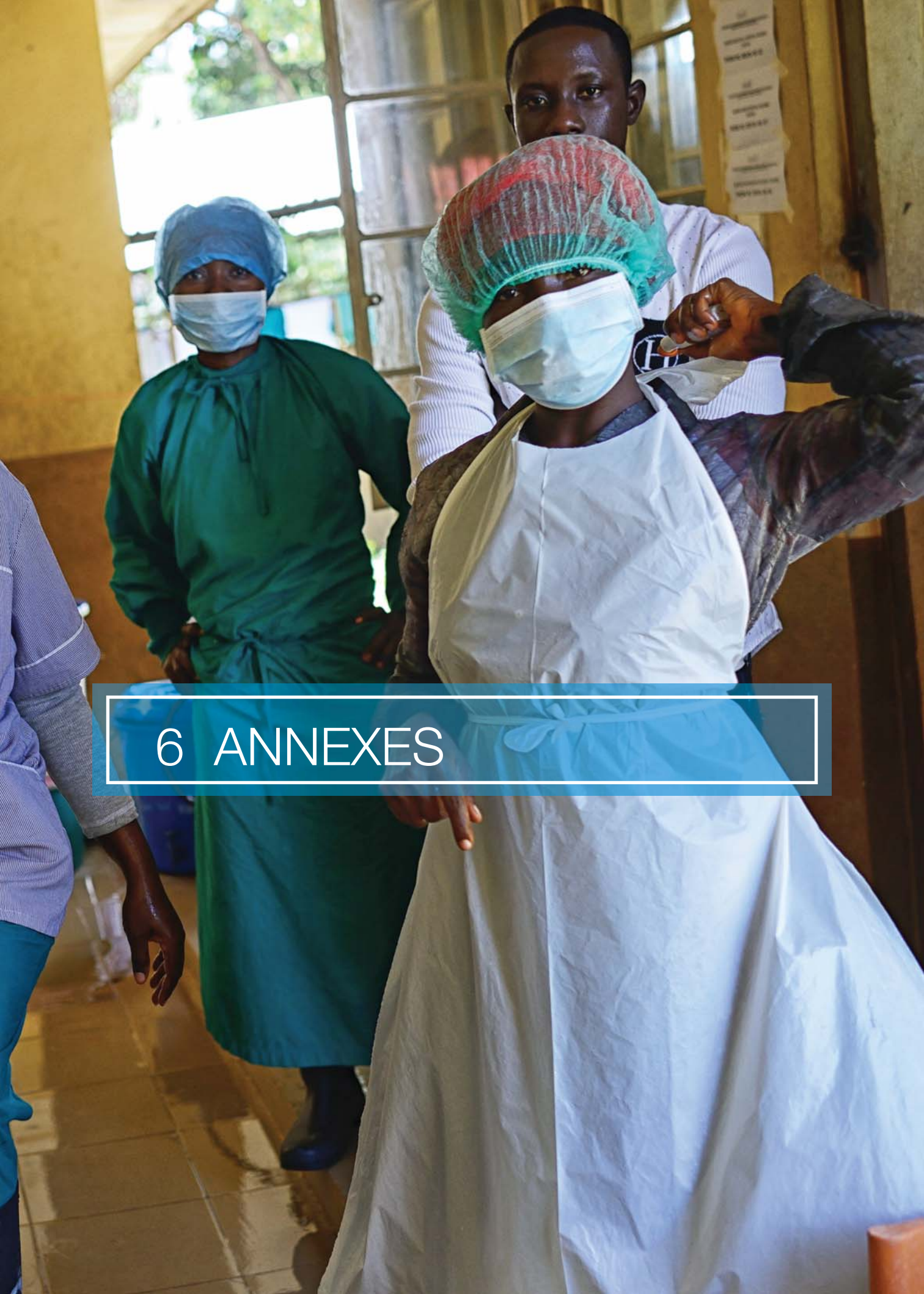
- To build upon and strengthen existing country M&E mechanisms from 2018-2022.
- To establish a sound M&E system and build on inclusive policy dialogue and regular evidence-based assessments that inform progress and performance reviews and that result in remedial action and mutual accountability among all stakeholders.
- To provide the basis for resource allocation, policy-making and effective management of programs.

Table 12: Attributes and Characteristics

KEY ATTRIBUTES	CHARACTERISTICS
I. National health strategy as the basis for information and accountability	
<p>1. The national health strategy specifies a sound monitoring, evaluation and review component.</p>	<p>1.1 Monitoring, evaluation and review addresses the goals and objectives of the national health strategy and is based on a sound situation analysis.</p> <p>1.2 Disease and programme-specific monitoring, evaluation and review are aligned with that of the national health strategy.</p> <p>1.3 The monitoring, evaluation and review plan is costed and funded with full partner alignment and support.</p> <p>1.4 Monitoring, evaluation and review is regularly assessed.</p>
II. Institutional capacity	
<p>2. Roles, responsibilities and coordination mechanisms for monitoring, evaluation and review are clearly defined.</p>	<p>2.1 There is an effective country-led coordination mechanism for monitoring, evaluation and review.</p> <p>2.2 Key institutions and stakeholders have clear roles and responsibilities.</p>
<p>3. Capacity strengthening in monitoring, evaluation and review is addressed.</p>	<p>3.1 Capacity strengthening requirements are identified and addressed.</p>
III. Monitoring and Evaluation	
<p>4. There is a comprehensive framework that guides the monitoring, evaluation and review work, including core indicators and targets.</p>	<p>4.1 There is a balanced and parsimonious set of core indicators with well-defined baselines and targets.</p> <p>4.2 Disease- and programme-specific indicators are aligned.</p> <p>4.3 Integrated with the national health information system strategy.</p>
<p>5. The monitoring, evaluation and review component specifies data sources, identifies and addresses data gaps, and defines responsibilities for data collection and information flow.</p>	<p>5.1 Data sources are specified in a comprehensive and integrated manner.</p> <p>5.2 Critical data gaps are identified and addressed.</p> <p>5.3 Responsibilities for data collection and management are specified.</p>
<p>6. Data analysis and synthesis work is specified, and data quality issues are anticipated and addressed.</p>	<p>6.1 Data analysis and synthesis work is specified.</p> <p>6.2 There are regular assessments of progress and performance, including systematic analyses of contextual and qualitative information.</p> <p>6.3 Specific processes for data quality assessment and adjustment are in place and are transparent.</p>

KEY ATTRIBUTES	CHARACTERISTICS
7. Data dissemination and communication are effective and regular.	7.1 Analytical outputs as the basis for national and global reporting are defined and produced. 7.2 Appropriate decision-support tools and approaches are used. 7.3 Data, methods and analyses are publicly available.
8. Prospective evaluation is planned and implemented.	8.1 Prospective evaluation is planned and linked to monitoring, evaluation and review of national health strategies.
IV. County mechanism for review and action	
9. There is a system of joint periodic progress and performance reviews.	9.1 A regular and transparent system of reviews with broad involvement of key stakeholders is in place. 9.2 There are systematic linkages between health sector reviews, disease and programme-specific reviews, and global reporting.
10. There are processes by which related corrective measures can be taken and translated into action.	10.1 Results from reviews are incorporated into decision-making, including resource allocation and financial disbursement. 10.2 Multi-stakeholder mechanisms are specified to provide routine feedback to subnational stakeholders.





6 ANNEXES

6.1 Matrix for detailed roles and responsibilities

No	Task	The Presidency	Parliament	MoHS	IHR NFP	Min. of Foreign Affairs	MAF	EPA - SL	Radiation Board	ONS and RSLAF	MoLG & RD ³⁷	Ministry of finance	Min of Inf. And Comm	Other GOSL MDAs	WHO	FAO	USAID	US - CDC	China CDC	IOM	Public Health England	Other partner Org.	
		Government Agency/Directorate/Program											Partner Organizations										
	High level coordination of MDAs	█																					
	Declaration of public health emergency	█																					
	Managing national disasters								█														
	Legislation (enactment of laws)		█																				
	Enforcing laws and health requirements									█													
	Overall implementation stewardship			█																			
	Implementation co-stewardship						█																
	Inter-sectoral coordination			█																			
	Collaboration in the NAPHS implementation																						
	Attend coordination and review meetings	█																					
	Overall M & E stewardship																						
	M & E																						
	Reporting of progress of implementation																						
	Membership to IHR NFP																						
	IHR NFP coordination & communication																						
	Resource mobilization																						
	Financial resource allocation																						
	Accountability and audit management																						
	Facilitating Community engagement																						

	The Presidency	Parliament	MoHS	IHR NFP	Min. of Foreign Affairs	MAF	EPA - SL	Radiation Board	ONS and RSLAF	MoLG & RD ³⁷	Ministry of finance	Min of Inf. And Comm	Other GOSL MDAs	WHO	FAO	USAID	US - CDC	China CDC	IOM	Public Health England	Other partner Org.		
Public health risk communication																							
Facilitating inter-State collaboration																							
Supporting development of policies/guidelines																							
Technical and logistical support																							

6.2 Terms of Reference of National GHSA/IHR/One Health Coordinating Committee

The committee will operate within existing coordination structure mirroring the National One Health Coordination platform chaired by the Chief Medical Officer with the Chief Agricultural Officer and the EPA Director being co-chairs.

6.2.1 Membership of the committee:

The committee will have the following membership:

- Chief Medical Officer, MoHS: Chairperson
- Chief Agriculture Officer, MAF: Alternate Chairperson 1
- Head of Environment Protection Agency: Alternate Chairperson 2
- IHR National Focal Point, MoHS
- Head of Radiation Protection Agency
- Directors, MoHS: DHSE, DEHS, DHLS, DPPI
- Directorate of Veterinary services and OIE focal point, MAF

37 Ministry of Local Government and Rural Development

- Head, Department of Wild Life, MAF
- Program heads, MoHS: EPI Program, surveillance program
- Office of National Security (ONS)
- Ministry of Internal Affairs (MIA)
- Ministry of Technical and Higher Education (MTHE)
- Ministry of Local Government and Rural development
- Parliamentary Committee on Health & Social services
- City Mayor
- SLE Police
- SLE Military
- Ministry of Water Resources
- Sierra Leone Civil Aviation Authority
- Sierra Leone Airport Authorities
- Sierra Leone Standards Bureau
- Sierra Leone Agricultural Research Institute
- Local Authorities National Representative
- Representative of the Paramount Chiefs
- Civil Society Organization Representative
- United Nations Agencies – WHO, UNICEF, UNDP, FAO, WFP, IOM
- Health development Partners: US – CDC, Dfid, USAID, China-CDC, PHE, IRC among others

6.2.2 Roles and responsibilities of the committee

This committee will be responsible for the coordination of implementation of GHSA, IHR and One Health in Sierra Leone. Its roles and responsibilities include:

- i. Ensuring that the IHR/GHSA/One Health priorities are identified and national plans developed.
- ii. Providing guidance in the formation and operationalization of technical working groups to address the national priorities.
- iii. Coordinating the interrelationship of the different working groups and agencies.
- iv. Providing guidance and direction to the technical Committees
- v. Reviewing the overall country epidemiological situation
- vi. Advising the Minister of Health and the Presidency on the need to declare public health emergencies.
- vii. Providing overall direction to government agencies and partner organizations on resource application to address national priorities.
- viii. Monitoring the overall progress of implementation of the NAPHS.
- ix. Advocating for, and mobilizing resources for national health security.
- x. Report to the Inter-Ministerial Committee on One Health
- xi. Ensure resources are made available for district work on IHR/GHSA and One health

Basic Inputs



PREVENT													
General Objective: To prevent and reduce the likelihood of outbreaks and other public health hazards and events defined by IHR (2005).													
TECHNICAL AREA													
1.1 National Legislation, Policy and Financing													
1.1.1 Legislation, laws, regulations, administrative requirements, policies or other government instruments in place for implementation of IHR.													
JEE Indicator	JEE Scores 2												
JEE recommendations	1. Hasten the review of the Public Health Ordinance and develop related policy guidelines 2. Review other laws touching on the implementation of the IHR and develop their policy guidelines 3. Assess the Environmental Protection Act and MAF (Draft Animal Disease Act)												
Objective	To ensure adequate statutory and administrative provisions for the implementation of IHR by December 2018												
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Target	Unit Cost	2018	2019	2020	2021	2022
1	Develop an inventory of the administrative and statutory provisions relevant to IHR 2005 in relevant Ministries, Departments and Agencies (MDAs)	IHR NFP	Public Health Ordinance, NPHA Strategic and Operational plans	Develop and print data collection forms (1000 copies) National Consultant 1 week	National	Data collection tools available	1000	2 940 000	1				
				Workshop 25 participants 2 days printing 1000 copies				39 850 000	1				
				Orientation for enumerators (25 pax X 2 days)	National	Enumerators trained	25	1 500 000	1				
				Conduct record review in relevant (10) MDAs - Office of National Security - Agriculture and Forestry - National Revenue Authority/ Customs - Trade (Standards Bureau)	National	1. Record review conducted 2. List of available statutory provisions	10	39 550 000	1				
					National			29 100 000	1				

To ensure adequate statutory and administrative provisions for the implementation of IHR by December 2018										Year of implementation								
Objective	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Target	Unit Cost										
No				<ul style="list-style-type: none"> - Internal Affairs - Finance - Fisheries - Social Welfare - Environmental Protection Agency - Health and Sanitation 	National	<ol style="list-style-type: none"> 1. Record review conducted 2. List of available statutory provisions 	10	29 100 000	1									
				Data compilation and analysis meeting (10 pax X 3 days);	National	Data compiled and analyzed	1	26 720 000	1									
				Debriefing meeting (40 pax X 1 day)	National	Meeting conducted	1	12 080 000	1									
2	Assess the existing administrative and statutory instruments in line with IHR 2005	IHR NFP	Public Health Ordinance, NPHA Strategic and Operational plans	Workshop of relevant stakeholders (50 pax X 5 days);	National	1. Workshop report	1	66 850 000	1									
3	Develop or review the administrative and statutory instruments to make them compliant with IHR 2005	IHR NFP	Public Health Ordinance, NPHA Strategic and Operational plans	Recruit an International consultant (60days)	National	Consultant recruited	1	279 888 000	1									
				Workshop of relevant stakeholders (50 pax X 5 days: 3 workshops);	National	Workshop conducted	1	358 050 000	1									
JEE Indicator										1.1.2 Legislation, policies and administrative arrangements enable compliance with the IHR (2005)								
JEE recommendations										1. Sensitize relevant stakeholders on these laws, policies and regulations								
										2. Improve, update or develop MOUs and other cross-border bilateral agreements to make them more comprehensive beyond EVD								
										3. Improve multisectoral collaboration								
										JEE Scores 2								
To adjust and align legislation, policies and administrative arrangements in compliance with IHR 2005 by end of 2018										Year of implementation								
Objective	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Target	Unit Cost										
No	Sensitize relevant stakeholders (MDAs, Parliamentarians, Partners etc) on the aligned documents	IHR NFP/NPHA	REDISSE project (Public Health Ordinance and Animal Disease Act)	Sensitization meeting with MDAs and ONS (50 pax X 1 day)	National	Meeting conducted	1	27 350 000	1									

Objective		To adjust and align legislation, policies and administrative arrangements in compliance with IHR 2005 by end of 2018					Year of implementation						
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Target	Unit Cost	2018	2019	2020	2021	2022
				Sensitization meeting with Parliamentarians and Legal department (40 pax X 1 day)	National	Meeting conducted	1	12 080 000	1				
				Sensitization meeting with Partners (40 pax X 1 day)	National	Meeting conducted	1	36 080 000	1				
TECHNICAL AREA													
1.2 IHR Coordination, Communication and Advocacy													
JEE Indicator													
1.2.1 A functional mechanism is established for the coordination and integration of relevant sectors in the implementation of IHR.													
JEE recommendations													
1. Set up a National IHR Focal Point/unit within the NPHA (PHEOC) supported by SOPs													
2. Commence regular meetings of the National IHR Focal Point with all line ministries and key agencies													
3. Build technical capacity for the National IHR Focal Point function by training technical people on IHR implementation areas.													
4. Improve multisectoral collaboration													
JEE Scores 2													
Objective		To strengthen IHR NFP for effective coordination, communication and advocacy for IHR implementation					Year of implementation						
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Target	Unit Cost	2018	2019	2020	2021	2022
1	Develop guidelines and Standard Operating Procedures (SOPs) for IHR NFP	IHR NFP	Public Health Ordinance, NPHA Strategic and Operational plans	Draft NFP guidelines and SOPs (30Pax* 3days) Validate NFP guidelines and SOPs (60Pax*1 day) Print and Disseminate 500 copies NFP guidelines and 500 copies SOPs	National National National	NFP guidelines and SOPs available NFP guidelines and SOPs validated NFP guidelines, SOPs printed and distributed	2 2 1000	55 865 000 16 820 000 500 000	1 1 1				
2	Build the capacity of IHR NFP in areas of coordination, communication and advocacy	Heads, MDAs	None	Appoint IHR NFP from relevant MDAs	National	No of IHR NFP appointed	10	-	1	1	1	1	1
		Heads, MDAs	None	Annual Review of IHR NFP appointees from relevant MDAs	National	Report of annual review available	10	40 730 000	1	1	1	1	1
		IHR NFP	None	Orientation for appointed IHR NFP (30 pax X 3 days)	National	Report of orientation	10	48 080 000	1			1	
		IHR NFP	None	Orientation of Media on IHR core capacities and implementation (40 pax X 1 days)	National	Report of orientation	10	33 035 000	1			1	

Objective		To strengthen IHR NFP for effective coordination, communication and advocacy for IHR implementation					Year of implementation										
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Target	Unit Cost	2018	2019	2020	2021	2022				
3	Regular intersectoral coordination meetings	IHR NFP	REDISSE project (One health)	Quarterly national level coordination meeting (quarterly + 10 adhoc annually, 40 pax X 1 day) District level coordination meeting (quarterly X 25 pax X 1 day X 16 districts)	National District	Minutes of the meeting No of district with coordination report	70 320	325 500 000 635 200 000	1	1	1	1	1				
4	Logistics support for effective functioning of IHR NFP	IHR NFP	None	Procure 15 Desktops	National	No of desktop procured	15	55 875 000	1				1				
				Procure 15 Laptops	National	No of Laptop procured	15	55 875 000					1				
				Procure 12 Coloured Printer (Scanner)	National	No of Printers procured	12	44 700 000					1				
				Internet server (USD 20,000*2)	National	Internet server available	2	298 000 000					1				
				Connect to Fiber optic for Internet access (USD 10,000*2 servers)		Internet subscription done	2	147 000 000					1	1	1	1	
				Dongles for internet/ Modems (USD 100*15)	National	No of Dongles/ modems Provided	15	11 025 000					1	1	1	1	
				Modems subscription (dongles) (USD 75*15modems **12months *5years)	National	Subscription done	15	99 225 000					1	1	1	1	
				Maintenance cost for Computers (Two contracts)	National	Contractual agreement	2	14 900 000					1	1	1	1	
				1 Generator (75 KVA) (USD 50,000)	National	Generator available	1	367 500 000					1				
				Housing and Installation of generators	National	Housing constructed	1	22 350 000					1				
Maintenance of Generators Quarterly maintenance for 1 generator for 5 years (20 services * USD 500 per quarter)	National	Generator in good working order	20	14 700 000					1	1	1	1	1				

Objective	To strengthen IHR NFP for effective coordination, communication and advocacy for IHR implementation								Year of implementation				
	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Target	Unit Cost	2018	2019	2020	2021	2022
No				Fuel for Generators (20 litres*365 days* 5 years) Two 4WD Vehicles	National	Litres of Fuel available No Vehicles procured	36500 2	43 800 000 5 880 000 000	1	1	1	1	1
4	Logistics support for effective functioning of IHR NFP	IHR NFP	None	Maintenance of Vehicles Quarterly servicing for 2 vehicles for 5 years (USD 1500*4quarters* 5years* 2 vehicles) Fuel for Vehicles 50 litres for 2 cars (100l) (200 litres/ months * 12 months * 5years* 2 vehicles)	National	Litres of Fuel available	2	88 200 000 28 800 000	1	1	1	1	1
5	Monitor and evaluate the implementation of NAPHS	IHR NFP	None	Conduct annual review of IHR core capacities in line with JEE Carry out IHR/JEE in 2022	National	Annual IHR Country report available JEE mission report	5 1	69 405 000 521 500 000	1	1	1	1	1
6	Develop and sustain a mechanism for intersectoral collaboration	IHR NFP/NPHA	One health, Disaster Management Committee, Public Health Emergency Management Committee, NPHA	Three consultative meetings (50 pax X 1 day X 3 meetings)	National	RM strategy report available	1	47 880 000	1				
7	Mobilise resources including domestic financing and advocate for creation of IHR budget line	IHR NFP/NPHA	NHPA Strategic and Operational plans	Develop Resource mobilization strategies (30 pax X 3 days) Resource mobilization meeting with Ministry of Finance and Parliamentarians (50 pax X 1 day):	National	Resource mobilization with ministry report available Resource mobilization with ministry report available	1 1	34 820 000 34 820 000	1				

TECHNICAL AREA														
1.3 Antimicrobial Resistance														
JEE Indicator														
1.3.1 Antimicrobial resistance (AMR) detection system in place														
Integration of AMR into a comprehensive National Health Laboratory Strategic Plan and the GHSA 5-year roadmap using the One Health approach														
JEE Scores 1 and 1														
Objective														
To integrate AMR surveillance, prevention, and control into the NLSP and GHSA 5-year roadmap using One Health Approach														
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Target	Unit Cost	Year of implementation					
7	Mobilise resources including domestic financing and advocate for creation of IHR budget line	IHR NFP/NPHA	NHPA Strategic and Operational plans	Resource mobilization meeting with Partners (50 pax X 1 day)	National	Resource mobilization with partners report available	1	34 820 000	2018	2019	2020	2021	2022	
1	Integration of AMR plan into the NLSP	Pharmacy Board, MoHS, MAF, EPA	AMR strategic plan, NLSP Regional AMR framework, One Health Platform	Convene consultative meeting to review the NLSP, existing policies and guidelines to incorporate AMR (32+8+10+10) participants, 3 days, Freetown) Conduct workshop to develop the AMR policies (5 days, 30 people, Bo) Consultant international Workshop to develop One Health AMR Laboratory strategic plan (5 days, 30 people, Port Loko) Conduct a meeting to validate the comprehensive NLSP (60 participants, 1day, Freetown) Print and disseminate the NLSP to stakeholders (400 copies)	Sub- National Sub- National National	Number of people at meeting; meeting notes; guidelines/ policies updated to include AMR AMR policies developed workshop conducted; number of people in attendance from MoHS, MAF, EPA; strategic plan developed Number of people at meeting; meeting notes; plan validated comprehensive NLSP printed and disseminated	48 people in attendance (i.e., 80%); guidelines updated to include AMR 24 people (i.e., 80%); policies developed 24 people (i.e., 80%); One Health AMR Lab strategic plan developed 48 people; comprehensive NLSP with AMR validated 320 copies (i.e., 80%) printed/disseminated	95 100 000 113 110 000 52 773 000 113 110 000 44 980 000 6 000 000	1 1 1 1 1 1	2018	2019	2020	2021	2022

Objective		To integrate AMR surveillance, prevention, and control into the NLSP and GHSA 5-year roadmap using One Health Approach							Year of implementation						
		Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Target	Unit Cost	2018	2019	2020	2021	2022	
2	In collaboration with training institutions and research facilities, build capacity for detection of AMR at central and regional level	Pharmacy Board, MOHS, MAF, EPA	AMR strategic plan, NLSP, Regional AMR framework, One Health Platform	Meeting to develop training plan in collaboration with the tertiary institutions (12 participants, 3 days, Freetown)	National	number of people at meeting; meeting notes; training plan developed	10 people; training plan developed	21 804 000		1					
				Develop curriculum and training materials (course content) and generate list of equipment, consumables and reagents (12 participants, 5 days, Freetown)	National	curriculum and training materials developed; list of equipment, consumables and reagents available	curriculum and training materials developed; list of equipment, consumables and reagents available	36 244 000	1	1					
3	Improve the capacity of CPHRL to monitor quality of AMR detection			Engage consultants/ faculty members to deliver modules and practical sessions (3 consultants, 9 months)	National	number of consultants/faculty hired	3 consultants for 9 months	1 248 471 000		1	1	1	1	1	
				Conduct intensive trainings for 32 participants, 4 x 3 weeks	National	number of intensive trainings conducted; number of participants; length of trainings	4 trainings conducted (each 3 weeks) for 26 participants	1 271 136 000	1	1	1	1	1	1	
				Printing of trianing materials (100 copies)	National	number of training materials printed	materials printed for all participants	1 500 000	1	1	1	1	1	1	1
				Procurement of equipment, reagents and consumables	National	Amount of equipment, reagents, and consumables procured	all essential equipment, reagents, and consumables procured	279 375 000	1	1	1	1	1	1	1
3				Administrative cost to training institutions (10% of AMR laboratory budget)	National	10% of AMR budget to support admin costs of training institutions	8% of AMR budget to support admin costs of training institutions	93 125 000	1	1	1	1	1	1	
				Engage consultant to deliver bench training	National	consultant hired to deliver training	consultant hired to deliver training	52 773 000	1	1	1	1	1	1	1

Objective		To integrate AMR surveillance, prevention, and control into the NISP and GHSA 5-year roadmap using One Health Approach							Year of implementation					
		Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Target	Unit Cost	2018	2019	2020	2021	2022
4	Institute specimen management system			Review, update and print SOPs (100 copies)	National	SOPs reviewed, updated, and printed	80 copies of SOPs reviewed, updated, and printed	84 760 000	1	1				
				Procurement of specimen collection kits	National	Number of specimen collection kits procured to monitor quality of AMR detection	specimen collection kits procured to monitor quality of AMR detection	74 500 000	1	1	1	1	1	1
5	Establish a specimen transportation and referral network from peripheral to regional and central			Meetings to develop plan to integrate AMR specimen management into the national specimen referral system (3 meetings, 60 participants, 3 days each, Western Rural)	National	number of meetings held; number of participants; AMR specimen management integrated into national specimen referral system	48 people attend 3 meetings; AMR specimen management integrated into national specimen referral system	363 060 000	1					
				Conduct a consultative meeting to design a hub and spoke system for specimen referral (2 consultants, 2 days, for 20 stakeholders, Western Rural)	National	number of stakeholders that attend meeting; hub and spoke system for specimen referral developed; number of consultants participating in meeting	16 stakeholders attend meeting; hub and spoke system for specimen referral developed; 2 consultants participate in meeting	36 200 000	1	1				
5				consultant international				98 196 000	1					
				consultant national				11 760 000	1					
5				Fuel to support transportation of specimen (150 litres per week, x 16 districts)				4 162 080 000	1	1	1	1	1	1
				Meeting to develop referral guidelines, algorithms and forms (3 days, 20 participants, Freetown)	National	number of participants in meeting; referral guidelines, algorithms and forms developed	16 participants in meeting; referral guidelines, algorithms and forms developed	47 940 000.00	1	1	1	1	1	1

Objective		To integrate AMR surveillance, prevention, and control into the NISP and GHSA 5-year roadmap using One Health Approach					Year of implementation						
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Target	Unit Cost	2018	2019	2020	2021	2022
	Establish a specimen transportation and referral network from peripheral to regional and central			Meeting to validate tools (1 day, 60 participants, Freetown) Printing of tools (1000 forms per district, 2000 guidelines and algorithms)	National	number of participants in validation meeting; tools validated	60 participants in validation meeting; tools validated	56 420 000		1			
					National	Number of tools printed	tools printed (800 forms and 1600 guidelines)	488 000 000		1			
JEE Indicator													
1.3.2 Surveillance system for infections caused by AMR pathogens													
1. Establish a monitoring and evaluation framework to ensure routine assessment, data management, analysis and reporting of antimicrobial resistance 2. Ensure reporting of AMR is incorporated into MoHS pathogen reporting systems with plans and procedures for sharing reports for action and strategic planning													
JEE Scores 1													
Objective		Establish an AMR surveillance system					Year of implementation						
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Target	Unit Cost	2018	2019	2020	2021	2022
1	Develop a multi-sectoral national AMR surveillance system	Pharmacy Board, WHO, MoHS, CDC, LTWG, MAF, EPA	National AMR plan, Africa CDC Regional framework, WAHO workplan 2016-2020, One Health Platform	Establish a multisectoral AMR Technical Working Group to include local and regional expertise (steering committee meeting to develop TOR, quarterly meetings) 2 days, 30 people, Freetown Consultative multi-sectoral (human, animal, environmental health experts) meeting to assess data needs and develop collection tools and reporting system for AMR selected pathogens (30 stakeholders, 3 days)	National	number of participants attending multisectoral AMR Technical Working Group meetings; TOR developed	24 people attend multisectoral AMR Technical Working Group meeting; TOR developed	201 840 000	1				
					National	number of participants attending multisectoral meeting; data needs identified, reporting system for AMR selected pathogens developed	24 participants attend multisectoral meeting from human, animal, and environ health; data needs identified, collection tools and reporting system for AMR selected pathogens developed	68 010 000		1			

Objective		Establish an AMR surveillance system						Year of implementation						
		Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Target	Unit Cost	2018	2019	2020	2021	2022
1	Develop a multi-sectoral national AMR surveillance system			Conduct operational survey to identify AMR priority pathogens and designate laboratories for AMR surveillance (20 researchers, 15 days, 2 workshops, review board, field costs)	Sub-national	operational survey to identify AMR priority pathogens conducted; laboratories for AMR surveillance designated; number of workshops and participants	operational survey to identify AMR priority pathogens conducted; laboratories for AMR surveillance designated	181 875 000			1			1
									Procure assorted equipment, reagents, supplies and consumables for AMR lab surveillance	National	Amount of equipment, reagents, supplies and consumables for AMR lab surveillance procured	All essential equipment, reagents, supplies and consumables for AMR lab surveillance procured	1 117 500 000	
2	Build multi-sectoral capacity for AMR surveillance	Pharmacy Board, WHO, MoHS, CDC, LTWG, MAF, EPA	National AMR plan, Africa CDC Regional framework, WAHO workplan 2016-2020, One Health Platform	Multi-sectoral stakeholder meeting to identify AMR training needs; incorporate AMR into in-service curriculum (30 persons, 3 days)	National	number of participants in meeting; AMR training needs identified; AMR incorporated into in-service curriculum	AMR training needs identified; 24 people in meeting (from human, animal and environ health); AMR incorporated into in-service curriculum	68 010 000					1	
				Conduct workshop to develop in - service AMR training modules (5 days, 30 people)	National	workshop conducted; number of people in attendance; AMR training modules developed	24 people attend; AMR training modules developed	103 110 000		1				
				Conduct Training of Trainers for AMR Surveillance (40 participants, 2 trainers per district; 3 days)	National	TOT conducted; number of participants	16 districts received TOT for AMR surveillance (2 participants per district)	90 654 000		1				
				Train laboratory personnel, clinicians, animal and environmental health workers on AMR surveillance (5 days, 30 people x 16 districts)	Sub-national	number of personnel trained (from lab, human, animal, and environ health) on AMR priority pathogen surveillance	16 districts trained (300 people) from lab, human health, animal and environ health on AMR priority pathogens	1 009 760 000		1	1	1	1	1

Objective		Establish an AMR surveillance system						Year of implementation					
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Target	Unit Cost	2018	2019	2020	2021	2022
3	include AMR as a core component of professional education, training, certification and development	Pharmacy Board, WHO, MoHS, CDC, LTWG, MAF, EPA	National AMR plan, Africa CDC Regional framework, WAHO workplan 2016-2020, One Health Platform	Review and update the existing pre-service education curricula in human, animal, environ health, and food safety to incorporate AMR surveillance (40 people, 5 days, Freetown) Validate the updated pre-service education curricula in human, animal, environhealth, and food safety to incorporate AMR surveillance (100 people, 2 days, Freetown) Print and disseminate the new education curricula in human, animal, environ health, and food safety (1500 copies) Orientate lecturers in tertiary institutions on the newly developed curriculum (60 lecturers, x 2 days , Western Area)	National	number of people attending meeting; all relevant sectors in attendance; curricula reviewed/updated/ disseminated	32 people attend meeting; all relevant sectors in attendance; curricula reviewed/ updated/ disseminated	72 480 000	1		1	1	1
4	Raise awareness on AMR			Update IPC training Curricula to include AMR (Workshop 30 people 5 days Freetown) Conduct health education campaigns, sensitization meetings (4 teams x 4 persons, Monthly, x 16 districts) Radio talk shows on AMR (monthly, x 4 radio stations)	National and Sub-national	number of people attending meeting; IPC curricula updated to include AMR Number of health education campaigns, sensitization meetings, radio talk shows on AMR conducted	24 people attend meeting; IPC curricula updated to include AMR	101 110 000	1	1	1	1	1

Objective		Establish an AMR surveillance system						Year of implementation					
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Target	Unit Cost	2018	2019	2020	2021	2022
		Pharmacy Board, WHO, MoHS, CDC, LTWG, MAF, EPA	National AMR plan, Africa CDC Regional framework, WAHO workplan 2016-2020, One Health Platform	Printing of IEC materials (2000 copies each) Celebrate Antibiotic awareness week (2 days stakeholder meeting to discuss operational research results, national celebration/event)	National	number of AMR IEC materials printed number of participants in stakeholder meeting	1600 AMR IEC materials printed antibiotic awareness week activities implemented	70 000 000 110 250 000	1	1	1	1	1
JEE Indicator													
1.3.3. Healthcare associated infection (HCAI) prevention and control programs													
JEE recommendations													
Develop an action plan to prevent and monitor incidence/prevalence of HAIs													
Objective													
To strengthen HCAI surveillance and prevention programs													
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Target	Unit Cost	2018	2019	2020	2021	2022
1	Review and update national HCAI plan			Convene stakeholder workshop to review and update HCAI plan (3 days, 40 participants, Freetown) Print and disseminate the HCAI plan (500 copies)	National	workshop conducted: number of participants; HCAI plan reviewed/ updated HCAI plan printed and disseminated	workshop conducted: 32 participants; HCAI plan reviewed/ updated 40 copies of HCAI plan printed/ disseminated	80 880 000 2 500 000	1				
2	Establish surveillance system of HCAI in 25 government hospitals	MoHS, MAF, Local Council, EPA	The national HCAI plan, National IPC Action Plan, MTHE, SLMDA, LRB, MoHS, MOF, EPA, One Health Platform	Workshop to develop HCAI surveillance tools (30 people, 3 days, Freetown) Workshop to validate HCAI surveillance tools and plan (50 participants, 3 days) Regional training of HCWs in HAI surveillance definition, methods and tools (30 participants per region x 5 regions x 3 days)	National	workshop conducted; number of participants; HCAI surveillance tools developed	24 participants; HCAI surveillance tools developed	66 570 000 93 750 000 515 550 000		1			1

Objective		To strengthen HCAI surveillance and prevention programs							Year of implementation					
		Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Target	Unit Cost	2018	2019	2020	2021	2022
3	Support, monitor and evaluate infection prevention and control programs in collaboration with National IPC Unit and stakeholders	MoHS, MAF, Local Council, EPA	The national HCAI plan, National IPC Action Plan, MTHE, SLMDA, LRB, MoHS, MOF, EPA, One Health Platform	Refresher training in the second and fourth year (30 participants x 5 regions x 3 days)				340 050 000		1			1	
				Develop a reporting system for HCAI surveillance and incorporate into DHIS-2 (consultant, 14 days)	National	consultant hired; HCAI surveillance database developed and incorporated into DHIS2	consultant hired; HCAI surveillance database developed and incorporated into DHIS2	70 942 200		1				
				Conduct surveillance in selected facilities targeting human, animal, environment twice a year (10 people, 30 days each survey)	National	surveillance conducted in select facilities twice per year	surveillance conducted in select facilities once per year	400 500 000		1	1	1	1	
4	Establish occupational health program for health workers	MoHS, MAF, Local Council, EPA	The national HCAI plan, National IPC Action Plan, MTHE, SLMDA, LRB, MoHS, MOF, EPA, One Health Platform	Conduct quarterly IPC assessments in selected facilities to monitor compliance (2 people per district, for 16 districts, field costs)	National and Sub-national	quarterly IPC assessments in selected facilities in all districts conducted	quarterly IPC assessments in selected facilities in 16 districts conducted	3 808 000 000	1	1	1	1	1	1
				Procure PPEs, soap, sanitizers, etc	National	Amount of PPEs, soap, sanitizer and other IPC supplies procured	All essential PPEs, soap, sanitizer and other IPC supplies procured	149 000 000		1	1	1	1	1
				Celebrate Hand Hygiene Day every 5th May and Global Hand Washing Day 15th October (Refreshments, etc)	National and Sub-national	HH day celebrated annually	HH day celebrated annually	110 250 000		1	1	1	1	1
4	Establish occupational health program for health workers	MoHS, MAF, Local Council, EPA	The national HCAI plan, National IPC Action Plan, MTHE, SLMDA, LRB, MoHS, MOF, EPA, One Health Platform	Refurbish and equip isolation facilities at selected health facilities per district (assorted equipment)	National and Sub-national	Number of isolation facilities refurbished and equipped	Isolation facilities refurbished and equipped in 16 districts	560 000 000	1	1	1	1	1	
				Conduct workshop to develop guidelines on health workers' safety (e.g. HBV, HIV, TB, Rabies, accidents, injury, ergonomic) = 30 people, 5 days	National	workshop conducted; number of participants; guidelines on HW safety developed	workshop conducted; 24 participants; guidelines on HW safety developed	103 110 000		1	1	1	1	1

Objective		To strengthen HCAI surveillance and prevention programs						Year of implementation					
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Target	Unit Cost	2018	2019	2020	2021	2022
5	Strengthening National and Partnership for IPC in human, animal, and agricultural sectors	MoHS, MAF, Local Council, EPA	The national HCAI plan, National IPC Action Plan, MTHE, SLMDA, LRB, MoHS, MOF, EPA, One Health Platform	Conduct in-service and refresher training of health workers on occupational health and safety and PEP guidelines (30 people per district, x 16 districts, 3 days) Procure PEP medicines, vaccines Engage the communities on implementation of personal hygiene and environmental sanitation (sensitization of communities on basic IPC WASH practices)	National and Sub-national	In-service and refresher training of health workers on occupational health and safety and PEP guidelines conducted: 200 participants (at least 12 districts) Amount of PEP medicines and vaccines procured Number of communities sensitized on basic IPC WASH practices	627 360 000 298 000 000 147 000 000	1	1	1	1	1	1
JEE Indicator		1.3.4 Stewardship Activities						JEE Scores 1					
JEE recommendations		Conduct surveys on antibiotic use at national, district and community level											
Objective		To establish Antimicrobial stewardship programs to promote appropriate use of antibiotics						Year of implementation					
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Target	Unit Cost	2018	2019	2020	2021	2022
	To review and update treatment guidelines to include appropriate antibiotic use	MoHS, Pharmacy board, DHMTs, MAF, EPA, District councils		Convene national workshop to generate updated guidelines (50 participants, 2 days) Validation of updated guidelines(100 participants)	National	Bi-annual stakeholder meetings to disseminate HCAI surveillance findings held; number of participants		63 900 000 68 700 000	1			1	

Objective		To establish Antimicrobial stewardship programs to promote appropriate use of antibiotics							Year of implementation					
		Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Target	Unit Cost	2018	2019	2020	2021	2022
1					Printing and dissemination of updated guidelines (1,200 copies) Training of HCWs on the use of the updated guidelines in 16 districts (30 participants x 16 districts 1 day each, yearly)	Sub - National	number of participants: treatment guidelines updated to include appropriate antibiotic use	24 participants; treatment guidelines updated to include appropriate antibiotic use	30 000 000	1	1	1	1	1
2	To establish treatment and testing algorithm inclusive of antibiotic use	MoHS, Pharmacy board, DHMTs, MAF, EPA, District councils		Workshop to develop treatment and testing algorithm (30 participants, 5 days, Makeni) Disseminate treatment guidelines to	Sub - National	number of participants: treatment and testing algorithm developed	24 participants; treatment and testing algorithm developed	103 110 000	1					
3	Develop regulation for antibiotic use in animals, agriculture and fisheries		Pharmacy board policy ad guidelines, national testing algorithm, AMR plan, One Health Platform, National IPC Action Plan	Convene workshop to develop policy and guidelines for antibiotic use, develop policy and regulations for antimicrobial stewardships in health facilities and drugs outlet (30 participants, 5 days, Kenema)	Sub - National	number of participants: policy and guidelines for antibiotic use developed; policy and regulations for AMS in health facilities and drug outlets developed	24 participants; policy and guidelines for antibiotic use developed; policy and regulations for AMS in health facilities and drug outlets developed	103 110 000		1				
4	Monitor prescription and consumption patterns in both human and animals	oversight		Convene workshop to review surveys , develop monitoring tools and plan supervisory visits. Joint event, with 3 groups for a) Humans and b) Animals and c) environment. Conduct training for antimicrobial stewardship at health facilities (30 participants, Makeni)	Sub - National	number of participants: monitoring tools developed; training on AMS conducted at HF's	24 participants; monitoring tools developed; training on AMS conducted at HF's in all districts	86 550 000		1				
								68 010 000		1				

Objective		To establish Antimicrobial stewardship programs to promote appropriate use of antibiotics							Year of implementation								
		Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Target	Unit Cost	2018	2019	2020	2021	2022			
No			visits		integrated supervisory visits to centres 6 people (animal, human, environment) , 5d x 16 districts, yearly							340 000 000	1	1	1	1	1
5	Establish antimicrobial stewardship committees at health facilities level				Conduct 2 in-service sensitizations on antimicrobial stewardship at Central, district and CHC level (50 participants, 3 days)	National	number of participants; in-service sensitization on AMS conducted at district and central levels	36 participants; in-service sensitization on AMS conducted at district and central levels	86 550 000	1							
					Conduct 2 days workshop to train district AMS teams	Sub - National	number of participants; district AMS teams trained	participants from 12 districts attend workshop; district AMS teams trained	50 460 000	1							
6	Monitor antimicrobial stewardship programmes				Conduct biannual prevalence survey on antibiotic use at 25 government hospitals (20 participants, 5 days)	National and sub- national	biannual prevalence survey on antibiotic use conducted at 25 government hospitals; number of participants	biannual prevalence survey on antibiotic use conducted at 20 government hospitals	109 000 000	1	1	1	1	1	1		
					Establish and operationalize medicines and therapeutic Committees and other related committees. (20 Participants)	National and sub national	Medicines and therapeutic Committees established and operationalized; number of participants	Medicines and therapeutic Committees established and operationalized; 16 participants	375 040 000	1				1			
					Convene consultative meeting to review the national drugs act (30 participants, 3 days, Western Rural)	National	consultative meeting convened to review the national drugs act; number of participants	consultative meeting convened to review the national drugs act; 30 participants	68 010 000		1						
7	Update the National Medicines Policy to include use of antimicrobial agents				Workshop to update the National Medicines Policy to include AMR (5 days, 30 people, Western Rural)	National	Workshop to update the National Medicines Policy to include AMR conducted; number of participants	Workshop to update the National Medicines Policy to include AMR; 30 participants	103 110 000	1					1		

Objective		To establish Antimicrobial stewardship programs to promote appropriate use of antibiotics					Year of implementation						
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Target	Unit Cost	2018	2019	2020	2021	2022
	Update the National Medicines Policy to include use of antimicrobial agents			Conduct a meeting to validate the reviewed policy (60 participants, 1 day, Freetown) Print and disseminate the updated National Medicines Policy to stakeholders (400 copies) District level sensitization meetings (16 meetings, 30 participants each, 1 day, 2 nights)	National National National and sub-national	policy validated: number of participants Number of copies of updated National Medicines Policy printed/disseminated District level sensitization meetings held: number of districts: number of participants	60 participants; policy validated 320 copies of updated National Medicines Policy printed/disseminated District level sensitization meetings held: 16 districts reached; 30 participants per district	60 820 000 4 000 000 526 560 000	1	1			
TECHNICAL AREA													
Zoonotic Disease													
JEE Indicator													
1.4.1 Surveillance systems in place for priority zoonotic diseases/pathogens													
1. Implement a One Health framework with joint planning, data and information sharing and joint response. 2. Strengthen surveillance for zoonoses with the development of country guidelines. 3. Develop and implement one health surveillance policy and framework 4. Strengthen animal health clinical and laboratory services.													
JEE Scores 1													
Objective													
Establish a Zoonotic surveillance systems for five or more zoonotic diseases/ pathogens of greatest public health concern by 2022													
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Target	Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022
1	Develop and implement national Guidelines for zoonotic disease Surveillance	MAF, MOHS	Zoonotic disease prioritization workshop with key national and international stakeholders for 4 days for 50 people. Hire an international Consultant for guidelines development for 6 months	Freetown Based in Freetown	Report of workshop Validated guidelines for zoonotic disease surveillance	50 persons One International Consultant for 6 months	Selection of prioritized zoonotic diseases and participants- This activity will take place next week 15th to 18th Nov 2017 Funding	109 200 000 824 964 000	1				

Objective		Establish a Zoonotic surveillance systems for five or more zoonotic diseases/ pathogens of greatest public health concern by 2022							Year of implementation					
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Target	Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022	
	Develop and implement national Guidelines for zoonotic disease Surveillance	MAF, MOHS	Draft guidelines development/ adaptation workshop with 50 stakeholders for 5 days	Makemi/Bo	Report of workshop	50 persons	Funding and resource persons	131 850 000						
			Guidelines validation workshop with 50 subject Matter Experts/Stakeholders (SMEs) for 5days	National	Report of workshop 50 persons		Funding	131 850 000	1					
			Training materials development workshop for 40 SMEs for 4 days	National	Report of workshop	40 SMEs	Resource persons	122 480 000	1					
			Training of Trainers workshop for 75 national and district facilitators for 4 days	National	Report of workshop	75 nationals	Funding	179 600 000	1					
			District cascade trainings for 2,000 PHU staff, Wildlife Assistants and Livestock Assistants for 5 days in each district	All districts	Report of cascade training conducted	2000PHU, Wildlife and livestock assitant	Funding	3 274 000 000	1	1	1	1	1	1
			Printing and distribution of 4500 zoonotic surveillance tools at all levels	National and Districts levels	Availability of zoonotic tools at all levels	2000 trainees	Funding	112 500 000						
			District monthly supportive supervision to high risk areas (cattle market, health facilities, abattoirs)	District	Monthly supportive supervision report of Surveillance system at all levels	960 supportive supervisory visits	Logistics	6 620 690	0.2	0.2	0.2	0.2	0.2	0.2

Objective		Establish a Zoonotic surveillance systems for five or more zoonotic diseases/ pathogens of greatest public health concern by 2022					Year of implementation						
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Target	Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022
2	Develop and implement national Guidelines for zoonotic disease Surveillance	MAF, MOHS	National quarterly supportive supervision to districts and selected sites	National	Regular quarterly supportive supervision report of Surveillance system at all levels	240 supportive supervisory visits	Logistics	48 500 000	12	12	12	12	12
			Production of a Monthly Prioritized Diseases bulletin	National	Availability of Monthly Prioritized Disease bulletin produced	1,200 Bulletins	Logistics (Computer, internet, printers, photocopiers etc) and trained personnel	14 400 000	1	1	1	1	1
2	Build laboratory capacity for zoonotic disease surveillance	MAF, MOHS	Recruitment of 30 Laboratory personnel	National	Availability of staff	30 staff	Equipment and reagents	360 000 000	0.2	0.4	0.6	0.8	1
			Training of 30 Laboratory staff (Bio-safety, biosecurity, quality management)	National	Training report	30 staff	Funding	423 440 000	1	1	1	1	1
2	Build laboratory capacity for zoonotic disease surveillance	MAF, MOHS	Trainers and training materials (consultant)					574 476 000					
			Provide lab equipments, reagents and other supplies for detection/ confirmation of prioritized zoonotic diseases	National	Availability of lab equipments, reagents and other supplies	30 staff	Logistics (Computer, internet, printers, photocopiers, transport, sample collection tools and reagents) and trained personnel	2 940 000 000	1	1	1	1	1
2	Build laboratory capacity for zoonotic disease surveillance	MAF, MOHS	Recruitment of 10 Laboratory personnel per regional lab (total of 30)	National	Availability of staff	30 staff	Equipment and reagents	360 000 000	0.2	0.4	0.6	0.8	1
			Training of 30 Laboratory staff (Bio-safety, biosecurity, quality management)	National	Training report	30 staff	Funding	423 440 000	1	1	1	1	1

Objective		Establish a Zoonotic surveillance systems for five or more zoonotic diseases/ pathogens of greatest public health concern by 2022							Year of implementation				
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Target	Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022
			Provide lab equipments, reagents and other supplies for detection/ confirmation of prioritized zoonotic diseases	National	Availability of lab equipments, reagents and other supplies	30 staff	Logistics (Computer, internet, printers, photocopiers, transport, sample collection tools and reagents) and trained personnel	2 940 000 000	1	1	1	1	1
			Construct 3 laboratories	Regional				6 615 000 000	0.2	0.4	0.6	0.8	1
	Construct 3 regional animal health laboratories in kenema, bor, freetown		3 labs are equipped recruit 10 laboratory personnel per regional lab (30 persons)					8 820 000 000					1
			Train lab staff biosafety and bio security and quality management					720 000 000					1
								337 360 000					1
JEE Indicator		1.4.2 Animal Health or Veterinarian Workforce											
JEE recommendations		1. Build capacity for animal health or veterinary public health including human resources and organizational structure. 2. Strengthen technical capacity for animal health including technical capacity development programmes.											
Objective		Increase animal health workforce capacity at national level and in atleast 80 percent of the districts by 2022							JEE Scores 1				
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Target	Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022
			Develop training material					279 888 000	1				
			Training					75 840 000	1				
1	Strengthen technical capacity for animal health workforce	MAF, MOHS	Train and deploy Para Vets in at least 13 districts Training of 3,000 CAHWs in all districts	National	Para vets trained and deployed Report of training conducted	132 Para vets 3,000 CAHWs	Availability of Funds Availability of Funds	187 440 000 982 200 000	1	1	1	1	1

Objective		Increase animal health workforce capacity at national level and in at least 80 percent of the districts by 2022							Year of implementation				
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Target	Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022
	Strengthen technical capacity for animal health workforce Strengthen technical capacity for animal health workforce	MAF, MOHS	Hire a consultant to develop pre-service curriculum for Vets training in country for 3 months Curriculum development workshop for 40 SMEs for 5 days Training of at least 4 Vets in FETPV 2 year regional program in another west african country	National National National	Consultant hired and curriculum developed Workshop held for curriculum development Training conducted and certificate issued	1 Consultant 40 SMEs 4 Vets	Availability of Funds Availability of Funds Availability of Funds	5 880 000 72 480 000 298 000 000	1	1	1	1	1
2	Establish a sustained mechanism for the recruitment and deployment of animal health specialists into the Public Health sector	MAF, MOHS	In service specialized animal health workforce skills training Workshop to review and update recruitment and progression scheme for animal health workforce (50 people for 4days) Recruitments of animal health workforce (50) Workshop to validate recruitment and progression scheme for animal health workforce (30 people for 3days)	National, Districts National National	Specialized animal health workforce presence in communities Report of workshop conducted Report of workshop conducted	700 Animal Health workers @ national and district level 50 persons 30 persons	Availability of Funds and personnels Availability of funds, resource person Availability of funds	471 180 000 126 400 000 600 000 000 46 410 000	1	1	1	1	1

1.4.3 Mechanisms for responding to infectious zoonoses are established and functional													
JEE Indicator		Implement a One Health framework with joint planning, data and information sharing and joint response. Establish a policy guideline for multisectorial response to zoonosis.								JEE Scores 1			
Objective		Establish a multi-sectorial mechanism for coordinated response to outbreaks of zoonotic diseases by human, and animal sectors at national and district levels by 2022								Year of implementation			
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Target	Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022
1	Operationalize the One Health Platform	MAF, MOHS	<p>Launching of One Health platform (OHP) in all districts-30 stakeholders for one day per district-transport and refreshment (30 X 16 =480)</p> <p>Facilitate quarterly OHP coordination meetings in all districts</p> <p>Facilitate National quarterly OHP coordination meetings -50 people for 2 days</p> <p>Workshop to draft develop OH strategic plan (50 People for 5days)</p> <p>Secretariat meeting to finalize the draft OH strategic plan (15 people for 3 days)</p> <p>Workshop to validate develop OH strategic plan (30 People for 3 days)</p> <p>Workshop to validate OH strategic plan (40 People for 3days)</p> <p>Workshop to develop the guidelines (50 people for 5days)</p>	<p>All districts</p> <p>all districts</p> <p>national</p> <p>National</p> <p>Makeni</p> <p>National</p> <p>national</p> <p>National</p>	<p>One Health Platform launched in all districts</p> <p>Report of quarterly OHP coordination meetings facilitated</p> <p>Report of quarterly OHP coordination meetings facilitated</p> <p>Report of workshop conducted</p> <p>Report of workshop conducted</p> <p>Report of workshop conducted</p> <p>Report of workshop conducted</p> <p>Report of workshop conducted</p> <p>Consultant</p>	<p>16 districts</p> <p>64 meetings</p> <p>4 Meetings</p> <p>50 persons</p> <p>15 persons</p> <p>30 persons</p> <p>40 Persons</p> <p>50 persons</p>	<p>Availability of funds</p> <p>Availability of funds</p> <p>Availability of funds</p> <p>Availability of funds</p> <p>Availability of funds</p> <p>Availability of funds</p> <p>Availability of funds, Resource Persons</p>	<p>174 560 000</p> <p>163 345 000</p> <p>75 500 000</p> <p>151 850 000</p> <p>23 505 000</p> <p>46 410 000</p> <p>52 080 000</p> <p>131 850 000</p> <p>98 196 000</p>	1	1	1	1	1
2	Develop and implement a guideline for multisectorial response to zoonosis	MAF, MOHS											

Objective		Establish a multi-sectorial mechanism for coordinated response to outbreaks of zoonotic diseases by human, and animal sectors at national and district levels by 2022							Year of implementation				
		Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Target	Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021
2	Develop and implement a guideline for multisectorial response to zoonosis	MAF, MOHS	Workshop to validate the guidelines (40 people for 3days)	National	Report of workshop conducted	40 Persons	Availability of funds, Resource Persons	52 080 000	1				
			Refresher training for Multi-sectorial RRTs at national level (30 people for 5days)		Report of refresher training conducted	30 Persons	Availability of funds	53 110 000	1				
			Refresher training for Multi-sectorial RRTs at district level (4days for 30 people/district)	All districts	Report of refresher training conducted	480 persons from 16 districts	Availability of funds	878 720 000	1				
			Conduct simulation exercises to test readlines at national and district levels (DSA and other travel cost needed)	National, Districts	Report of simulation exercises	2 Simulations per year for 32 persons	Availability of funds	73 568 000	1				
			After Action Review and dissemination of response to zoonotic emergencies with all stakeholders (Workshop of 50 persons for 2 days)	National	National After action review report	50 persons	Availability of funds	63 900 000	1	1	1	1	1

Technical Area		1.5 Food Safety							
JEE Indicator	1.5.1 Mechanisms for multisectoral collaboration are established to ensure rapid response to food safety emergencies and outbreaks of foodborne diseases								
JEE recommendations	1. Accelerate the Parliamentary ratification of the Food Safety bill and establish food safety standards.								
Objective	To strengthen food safety systems by 2022.								
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s)	Related existing plan/ framework / Programme or on going activities	Detailed activities	Where is the action to be implemented (National or sub-national)	Output indicators	Targets	Estimated cost (Local currency)	Year of implementation
2	Ratify the food and feed safety bill	DEHS/MOHS and NFNP/MAF/ MFMR		Consultative meeting with stakeholders (4 regional meetings of 100Pax*2 days residential) 75 Outside cars per district =45 cars 585 per car 30 transport allowance 100K Sensitization and advocacy meeting with health committee of parliament (Zero cost) Dissemination: Print tools (20,000 brochures/ bulletins) Dissemination: Television appearances (10 appearances per year for 4 years) Air time at 3Mio per hour Dissemination: Radio discussion programmes conducted (36 total appearances per year for 5 years)	National and sub national	Number of regional Meeting conducted Meeting for sensitization and ratification Number of dissemination tools, number of television and radio programmes Number of dissemination tools, number of television and radio programmes Number of dissemination tools, number of television and radio programmes	4 consultative meeting 1 meeting 20,000 prints 40 TV appearances 180 radio appearances	540 800 000 - 40 000 000 30 000 000 36 000 000	2018 2018 2018 2019 2019 2020 2021 2022
	Establish a food safety surveillance system	DEHS/MoHS and NFNP	IDSR - DHSE	Consultative meeting with stakeholders (50 Pax 1 day non residential) 30 outside cars per district, 15 districts no transport	National and sub-national	Number of meetings	1 meeting	41 250 000	2018

Objective	To strengthen food safety systems by 2022.							Year of implementation					
	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s)	Related existing plan/ framework / Programme or on going activities	Detailed activities	Where is the action to be implemented (National or sub-national)	Output indicators	Targets	Estimated cost (Local currency)	2018	2019	2020	2021	2022
No				Hire 1 national and 1 international consultant to facilitate devt of TGs, tools and SOPS (60 days) National Consultant Hold 4 regional meetings for development of TGs and reporting tools (60Pax*3days*4 regions residential. 5 cars 45 transport allowance venue 3M Workshops to review draft food surveillance guidelines (60 Pax*3 days*2 workshops) 30 outside transport allowance no car Workshops to validate draft food surveillance guidelines (60 Pax*1 day) 30 outside no car Train for trainer 5 per district, total 80 trainer per training 2 participants, 4 training 19 outside no car Train technical people on food safety surveillance (30 Pax*3 days*20 trainings) 5 coming from outside	National and sub-national	Contract documents	2 signed contracts	279 888 000	1	1			
					National and sub-national			35 280 000	1				
					National and sub-national	Number of meetings	4 meetings	484 080 000	1	1			
		DEHS/MOHS and NFNP	IDSR - DHSE		National	Number of meetings	2 meetings	190 440 000		1			
					National	Number of meetings	1 meetings	46 220 000		1			
								220 708 000		1			
					National and sub-national	Number trained	600 People trained	397 100 000		1	1		

Objective		To strengthen food safety systems by 2022.							Year of implementation						
		Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s)	Related existing plan/ framework / Programme or on going activities	Detailed activities	Where is the action to be implemented (National or sub-national)	Output indicators	Targets	Estimated cost (Local currency)	2018	2019	2020	2021	2022	
No					<p>Hold quarterly multi-sectoral food safety coordination meetings (30Pax*1day*20 quarters in 5 years) 15 outside no cars</p> <p>Meeting to develop a reporting structure and processes for food safety surveillance (40Pax*3 days*2 meetings) 32 outside no cars</p> <p>Train Food safety reporting personnel (30Pax*3 days*2 trainings) 15 outside no car</p> <p>Develop training manuals (45Pax*3 days*3 meetings) 30 outside 15 cars</p> <p>Conduct routine quarterly support supervision for food safety (8Pax*6 days*20 quarters) Supervisory visit 4 times per year for 5 years each team 2 people</p> <p>Procure 20 internet dongles @1mio initial 500k every months x 5 years 500k every months x 5 years</p>	<p>National and sub-national</p> <p>National</p> <p>National</p> <p>National</p> <p>National and sub-national</p> <p>National and sub-national</p>	<p>Number of meeting held to establish a coordination platform</p> <p>Number of: 1. Meeting, surveillance and reports 2. commencement of reporting for every activity</p> <p>Number of trainings</p> <p>Number of facilitators and participants. Availability of manuals</p> <p>No of visits</p> <p>No of dongles</p>	<p>20 meetings</p> <p>2 Meetings</p> <p>2 trainings</p> <p>45 participants/3 meetings per year</p> <p>20 visits</p>	<p>102 440 000</p> <p>173 920 000</p> <p>124 770 000</p> <p>281 970 000</p> <p>59 600 000</p> <p>20 000 000</p> <p>6 000</p>	1	1	1	1	1	1

Objective		To strengthen food safety systems by 2022.							Year of implementation					
		Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s)	Related existing plan/ framework / Programme or on going activities	Detailed activities	Where is the action to be implemented (National or sub-national)	Output indicators	Targets	Estimated cost (Local currency)	2018	2019	2020	2021	2022
No					Procure 20 laptops for food safety reporting @ 1200USD Conduct inspection for food safety at sites of concern 10 times quarterly (5Pax*5days per quarter*20 quarters) 4 x a year 1car Hold quarterly national food safety surveillance and response review meetings (50Pax* 2days*20quarters) 30 outside 15 cars no transport	National and sub-national	No of laptops No of visits Number of meetings	20 200 inspections 20 meetings	176 400 000 54 500 000 296 700 000	1	1	1	1	1
3	Strengthen capacity for response to food safety incidents	DEHS/MOHS and NFNP	IDSR - DHSE	Review and update the SOPs for the disposal of food items unit for human consumption (60Pax*3 days*3 meetings) 30 outside 15 cars 15 transport allowance Validate the SOPs for the disposal of food items unfit for human consumption (60Pax*1 day*1 meetings) 30 outside 15 cars 15 transport allowance Train 200 staff on the SOPs for the disposal of food items unit for human consumption (200Pax*3 days residential) per training 25 5 outside 2 cars	National	Number of review meeting and reports 2. Validation of the SOPs No of meetings Number of staff to be trained (12 per district)	1 Draft SoPs 1 meeting 200 participants	307 485 000 53 495 000 206 880 000	1	1			1	

Objective		To strengthen food safety systems by 2022.						Year of implementation					
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s)	Related existing plan/ framework / Programme or on going activities	Detailed activities	Where is the action to be implemented (National or sub-national)	Output indicators	Targets	Estimated cost (Local currency)	2018	2019	2020	2021	2022
	Strengthen capacity for response to food safety incidents	DEHS/MOHS and NFNP		<p>Capacity building for food safety supervisors (16 Pax *3months) international</p> <p>Assessment of slaughter houses a reporting on structure and materials for food safety systems (50Pax*3 days *5 meetings)</p> <p>Provide basic facilities (water and toilet facilities) for health service delivery systems (22 facilities)</p> <p>Mapping and assessment of fish and meat markets (50 markets, 50 pax*2days)/year/5years</p> <p>Mapping and assessment of all fishing companies, fish landing sites/ jetties and ice factories (40 companies, 80 pax*2days/year/ 5years</p> <p>Laboratory sampling of water and ice meant for fish processing (sampling collection quarterly*20 quarters), 20 facilities (20fac x*20quart) 400/5years</p> <p>Training of zonal inspectors/ food safety focal persons (22pax*3days).</p> <p>Motivation/incentives for zonal inspectors (1000x*22 x 5years) (Le1,320,000)</p>	<p>National and sub-national</p> <p>National and sub-national</p> <p>National and sub-national</p> <p>National and sub-national</p> <p>National and sub-national</p> <p>National and sub-national</p> <p>National</p> <p>National</p>	<p>Number of staff to be trained (16 per district)</p> <p>Number of assessment report (1per year)</p> <p>Number of facilities 22</p> <p>2 meetings</p> <p>Number of mapping assessment report for 40 companies</p> <p>Lab result and report availability</p> <p>Number of training report</p> <p>Number of staff motivation</p>	<p>16 staff/food safety inspectors</p> <p>1 per year</p> <p>Reporting</p> <p>2 meetings</p> <p>80 inspectors</p> <p>400 test</p> <p>1 meeting</p> <p>22 staff allowances</p>	<p>1 811 040 000</p> <p>409 250 000</p> <p>4 917 000 000</p> <p>182 500 000</p> <p>146 000 000</p> <p>45 625 000</p> <p>27 474 000</p> <p>40 975 000</p>	1	1	1	1	1

Objective		To strengthen food safety systems by 2022.						Year of implementation						
		Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s)	Related existing plan/ framework / Programme or on going activities	Detailed activities	Where is the action to be implemented (National or sub-national)	Output indicators	Targets	Estimated cost (Local currency)	2018	2019	2020	2021	2022
No	Strengthen capacity for response to food safety incidents	DEHS/MOHS and NFNP		<p>Procurement of inspection kits/ equipment</p> <p>Sensitize public on food items unfit for human consumption (25 TV sessions) @3M per session</p> <p>Sensitize public on food items unfit for human consumption (50 radio adverts) @ 1m per advert</p> <p>Advocate for the revitalization of 5 regional sanitary courts</p> <p>5 meeting</p> <p>15 participants</p> <p>5 outside</p> <p>2 cars</p> <p>Orienteate 50 judicial officers on food safety issues (50Pax*2 days)</p> <p>15 outside</p> <p>15 cars</p>	<p>National and sub-national</p> <p>National and sub-national</p> <p>National and sub-national</p> <p>National and sub-national</p> <p>National and sub-national</p>	<p></p> <p>Number of TV sessions</p> <p>No of radio sessions</p> <p>1. Number of sanitary courts revived 2. Meeting held and reports</p> <p>Number of judiciary officials to be oriented</p>	<p></p> <p>25</p> <p>50</p> <p>5</p> <p>50 judicial officers/ 1 meeting</p>	<p>93 125 000</p> <p>75 000 000</p> <p>50 000 000</p> <p>13 525 000</p> <p>55 275 000</p>	1	1	1	1	1	1

Technical Area		1.6 Biosafety and Biosecurity										
JEE Indicator		1.6.1 Whole-of-government biosafety and biosecurity system is in place for human, animal, and agriculture facilities										
JEE recommendations		Establish and enact OneHealth legislation and regulations on biosafety and biosecurity.								JEE Scores 1		
Objective		Establish and enact OneHealth legislation and regulations on biosafety and biosecurity.										
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Estimated cost (Local currency)	2018	2019	2020	2021	2022
1	Desktop review and upgrade of existing legislation to include Biosafety and Biosecurity	ONS, MoHS, MAF, District councils, EPA, Ministry of Trade and Industry, Ministry of Labour, NPHA	GHSA, Public Health Ordinance, ONS Policy, Animal Health Strategic Plan	Meetings to identify, review and update existing legislation (4 meetings, 30 participants, Makeni/Bo/Western Area) need link to legislation Hire a legal consultant to facilitate the legislation through parliament and lead the desktop review (6 months) Set up a working group to present and advocate for biosafety and biosecurity legislation at parliament level submit request through the legal mechanism no cost related	National	Meeting reports, updated legislation	441 840 000	1	1	1		
2	Develop One-Health comprehensive national policy and guidelines on biosafety and biosecurity	ONS, MoHS, MAF, District councils, EPA, Ministry of Trade and Industry, Ministry of Labour, NPHA	GHSA EPT-2 Program, ONS policy, NLLSP, National IPC policy and guidelines	Convene a working group consisting of stakeholders and experts to start drafting policy and guidelines (30 participants, 1 day, Makeni/Bo/Western Area, 3 meetings: e.g. kick-off, offline work, reconvention) Conduct meetings to review above biosafety and biosecurity policy and guidelines (50 participants, 3 days, Makeni/Bo/Western Area) two meetings, in year 1 Workshop Meeting to validate biosafety and biosecurity policy and guidelines (60 participants, 1 day, Makeni/Bo/Western Area) Launching - implementation meeting for ONEHealth key stakeholders (60 participants, 1 day, Makeni/Bo/Western Area) 4x F follow-up meeting to review adherence and any other issues relating to policies. (60 participants, 1 day, Makeni/Bo/Western Area)	National	Meeting report: stakeholders and experts identified Meeting report, draft policy and guidelines Meeting report: policy and guidelines validated	124 560 000 281 700 000 65 770 000	1				
							263 080 000		1	1	1	1

Objective		Establish and enact OneHealth legislation and regulations on biosafety and biosecurity.					Year of implementation					
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed description for costing (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Estimated cost (Local currency)	2018	2019	2020	2021	2022
3	Establish national OneHealth biosafety committee including chair			Printing and dissemination of new (and revised) policy and guidelines (1000 copies) Determine TORs and governance- coordination structure (one meeting 25 participants, 2 days, Makeni/Bo/Western Area) Conduct orientation meeting (30 participants , x 1 day, Makeni/Bo/Western Area)	National	Printed policy and guidelines	50 000 000	1		1		1
				Stakeholders meetings to review and update the national integrated waste management policy and strategies (30 participants, 3 days, Makeni/Bo/Western Area) Consolidation meetings (30 participants, 1 day, Makeni/Bo/Western Area)	National	Meeting reports; national integrated waste management policy and strategies reviewed and updated	74 860 000	1	1			
4	Establish integrated waste management protocol including decommissioning protocol for all biological agents and equipments.		GHSA EPT-2 Program, ONS policy, NLSIP, National IPC policy and guidelines	Meeting to validate the national integrated waste management policy and strategies (60 participants, 1 day, Makeni/Bo/Western Area) Launching - implementation meeting for ONeHealth key stakeholders (60 participants, 1 day, Makeni/Bo/Western Area)	National	Meeting report; national integrated waste management policy and strategies validated	64 270 000		1			
5	Review and update the National Laboratory Strategic plan 2016-2020 to include Biosafety and to integrate Biosafety for animal and environmental health laboratories			Printing and dissemination of national integrated waste management policy and strategies policy and guidelines (100 copies) Stakeholders workshop to review and update the national laboratory strategic plan (50 participants, 5 days, Makeni/Bo/Western Area)	National	Printed policy and guidelines; dissemination of policy/guidelines Updated draft plan	2 500 000 159 700 000		1			1

Objective							Year of implementation					
Establish and enact OneHealth legislation and regulations on biosafety and biosecurity.							2018	2019	2020	2021	2022	
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed description for costing (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Estimated cost (Local currency)					
6	Develop and review national protocols and procedures for the transportation/ shipment of biologically hazardous materials		GHSA EPT-2 Program, ONS policy, NLLSP, National IPC policy and guidelines	Meeting to validate the biosecurity aspect of the national laboratory strategic plan (60 participants, 1 day, Makeni/Bo/Western Area); two meetings in first year. Printing and dissemination of national laboratory strategic plan (100 copies) OneHealth working group consisting of key stakeholders, to review protocols (20 people, 2 days, two meetings, Makeni/Bo/Western Area) Training of laboratory staff to package samples to UN regulations (25 participants, 3 days, Makeni/Bo/Western Area) Adopt national legislation in support of this objective no cost related link to legislation	National National National	Meeting report, validated plan Printed plan; plan disseminated Reviewed protocols per year national protocols and procedures for the transportation/ shipment of biologically hazardous materials developed	64 270 000 5 000 000 33 165 000 63 070 000 -	1	1	1		
JEE Indicator							JEE Scores 2					
JEE recommendations												
Objective							To develop infrastructure and human resource capacity to address biosafety and biosecurity issues nationwide.					
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed description for costing (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Estimated cost (Local currency)	2018	2019	2020	2021	2022
1	Appoint and train onehealth biosafety and biosecurity officers in all human, animal and environmental laboratories	ONS, MoHS, MAF, District councils, EPA, Ministry of Trade and Industry, Ministry of Labour, National biobank committee, NPHA	GHSA EPT-2 Program, ONS policy, NLLSP, National IPC policy and guidelines, National Health and Safety policy	Meeting to develop TORs for both human, animal and environmental biosafety and biosecurity officers (in selected facilities)	National and sub - national		126195000	1				

Objective		To develop infrastructure and human resource capacity to address biosafety and biosecurity issues nationwide.					Year of implementation					
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed description of activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Estimated cost (Local currency)	2018	2019	2020	2021	2022
2	Appoint and train onehealth biosafety and biosecurity officers in all human, animal and environmental laboratories	ONS, MoHS, MAF, District councils, EPA, Ministry of Trade and Industry, Ministry of Labour, National biobank committee, NPHA	GSHA EPT-2 Program, ONS policy, NLSF, National IPC policy and guidelines; National Health and Safety policy	1 International Consultant to develop training materials and conduct training 2 months	National and sub-national		189 042 000	1				
				2 months								
2	Build OneHealth technical capacity for biosafety and biosecurity (at relevant laboratory sites)	ONS, MoHS, MAF, District councils, EPA, Ministry of Trade and Industry, Ministry of Labour, National biobank committee, NPHA	GSHA EPT-2 Program, ONS policy, NLSF, National IPC policy and guidelines; National Health and Safety policy	1 national consultant 2 months			23 520 000	1				
				Workshop to review and validate the training materials 60 participants 2 days 45 from away cars 10			92 470 000	1				
2	Build OneHealth technical capacity for biosafety and biosecurity (at relevant laboratory sites)	ONS, MoHS, MAF, District councils, EPA, Ministry of Trade and Industry, Ministry of Labour, National biobank committee, NPHA	GSHA EPT-2 Program, ONS policy, NLSF, National IPC policy and guidelines; National Health and Safety policy	Training the Trainer 30 participants 5 days 25 10			109 960 000	1				
				training of above two weeks 120 trainee per training 30 participants 4 times 25 away 10			1 073 640 000	1	1	1	1	1
2	Build OneHealth technical capacity for biosafety and biosecurity (at relevant laboratory sites)	ONS, MoHS, MAF, District councils, EPA, Ministry of Trade and Industry, Ministry of Labour, National biobank committee, NPHA	GSHA EPT-2 Program, ONS policy, NLSF, National IPC policy and guidelines; National Health and Safety policy	To conduct training needs assessment (10 participants, 3 days)	National and sub-national		41 045 000					
				Workshop to develop training plan and content on biosafety/biosecurity (30 participants 5 days, Makeni/Bo/Western Area)	Sub - national	TORs developed and process to designate Biosafety and Biosecurity officers at district and central laboratories established	97 535 000		1	1	1	
3	Conduct biorisk assessment of laboratories and health care facilities/inventories and implement any suggested upgrades	ONS, MoHS, MAF, District councils, EPA, Ministry of Trade and Industry, Ministry of Labour, National biobank committee, NPHA	GSHA EPT-2 Program, ONS policy, NLSF, National IPC policy and guidelines; National Health and Safety policy	Conduct training of master trainers on biosafety/biosecurity (30 from districts, 4 from central, Makeni/Bo/Western Area)	National		107 035 000					
				Conduct training of designated Biosafety and Biosecurity (20, Makeni/Bo/Western Area)	Sub - national	Training needs assessment completed	77 665 000	1				
3	Conduct biorisk assessment of laboratories and health care facilities/inventories and implement any suggested upgrades	ONS, MoHS, MAF, District councils, EPA, Ministry of Trade and Industry, Ministry of Labour, National biobank committee, NPHA	GSHA EPT-2 Program, ONS policy, NLSF, National IPC policy and guidelines; National Health and Safety policy	To convene meetings to develop biosafety and biorisk assessment tools and laboratory biorisk assessment plan (30 participants, 3 days, Makeni/Bo/Western Area)	National	training of master trainers on biosafety/biosecurity conducted in how many districts	65 235 000		1			

Objective		To develop infrastructure and human resource capacity to address biosafety and biosecurity issues nationwide.					Year of implementation					
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Estimated cost (Local currency)	2018	2019	2020	2021	2022
				<p>Conduct biosafety quarterly assessment of all labs (3 participants per district, 10 days) and produce final report 16 team</p> <p>Conduct biosafety and biorisk quarterly assessment for the national public health reference lab, animal lab and other institutional labs that handle and store agent pathogens (2 participants per team, 5 days) and produce final report</p> <p>Upgrade existing infrastructure based on recommendations from biosafety and biorisk assessment results Procurement 20 Biosafety Cabinet Class II@ 1560 200 Fire Extinguish@ 200 200 Fire Blanket@ 50 200 Fire Alarm @20</p> <p>Monitor implementation of recommendations from the biosafety/ biorisk assessments no additional cost related</p> <p>Map and yearly update pathogen storage facilities and their locations Procurement 45 Storage reffridgeration (+2 to 8C) @ USD 500 45 Freezer for storage (-20) @ USD 1000 20 Freezer for storage (-80)@ USD 2500 20 GPS (for laboratory mapping) @ 500</p> <p>Meeting to map existing animal health labs (30 participants, 1 day. Makeni/Bo/Western Area) 2 times per year</p> <p>Meetings to draft SOPs and guidelines for collaboration between animal, human and environmental health labs (30 participants, 5 days. Makeni/Bo/Western Area)</p>	National and sub national	Assessment completed to ensure standardized approached among all labs	1 360 000 000	1	1	1	1	1
	<p>Conduct biorisk assessment of laboratories and health care facilities/ inventories and implement any suggested upgrades</p>	<p>ONS, MoHS, MAF, District councils, EPA, Ministry of Trade and Industry, Ministry of Labour, National biobank committee, NPHA</p> <p>GHSA EPT-2 Program, ONS policy, NLSIP, National IPC policy and guidelines; National Health and Safety policy</p>		<p>327 500 000</p>	National	<p> biorisk assessment tools and laboratory biorisk assessment plan developed</p> <p>Number of labs biorisk assessment conducted in</p>	327 500 000	1	1	1	1	1
				<p>Map and yearly update pathogen storage facilities and their locations Procurement 45 Storage reffridgeration (+2 to 8C) @ USD 500 45 Freezer for storage (-20) @ USD 1000 20 Freezer for storage (-80)@ USD 2500 20 GPS (for laboratory mapping) @ 500</p> <p>Meeting to map existing animal health labs (30 participants, 1 day. Makeni/Bo/Western Area) 2 times per year</p> <p>Meetings to draft SOPs and guidelines for collaboration between animal, human and environmental health labs (30 participants, 5 days. Makeni/Bo/Western Area)</p>	National and sub national	Inventory of all stored pathogens	298 000 000	1	1	1	1	1
4	<p>Create linkages between human, animal and environmental health labs and establish collaboration on biorisk management</p>			<p>Meeting to map existing animal health labs (30 participants, 1 day. Makeni/Bo/Western Area) 2 times per year</p> <p>Meetings to draft SOPs and guidelines for collaboration between animal, human and environmental health labs (30 participants, 5 days. Makeni/Bo/Western Area)</p>	National		73 670 000	1	1	1	1	1
				<p>Meetings to draft SOPs and guidelines for collaboration between animal, human and environmental health labs (30 participants, 5 days. Makeni/Bo/Western Area)</p>	Sub - national	Infrastructure upgraded	109 960 000	1			1	

Objective		To develop infrastructure and human resource capacity to address biosafety and biosecurity issues nationwide.						Year of implementation				
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed description for costing (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Estimated cost (Local currency)	2018	2019	2020	2021	2022
	Create linkages between human, animal and environmental health labs and establish collaboration on biorisk management	ONS, MoHS, MAF, District councils, EPA, Ministry of Trade and Industry, Ministry of Labour, National biobank committee, NPHA	GHS EPT-2 Program, ONS policy, NLSIP, National IPC policy and guidelines: National Health and Safety policy	Meeting to validate SOPs and guidelines for collaboration between animal, human and environmental health labs (60 participants, Makeni/Bor/Western Area) Meeting to sensitize stakeholders and personnel on guidelines (30 participants) Printing of SOPs and guidelines (100 copies)@100pages Training of lab personnel on applicability of SOPs (55 participants, 3 days, Makeni/Bor/Western Area)	National National National National	meeting report; existing animal health labs mapped meeting report; SOPs and guide-lines developed SOPs and guide-lines validated; meeting report meeting report; number of stake-holders sensitized Number of SOPs/ guidelines printed number of lab personnel trained on applying SOPs	93 470 000 57 810 000 5 000 000 119 335 000	1	1	1	1	1
Technical Area												
1.7 Immunization												
JEE Indicator												
1.7.1 Vaccine Coverage												
Devise strategies for accessing hard to reach areas and urban children to achieve the 'reach every child' target. Track the implementation of cMYP (2017-2021)							JEE Scores 3					
Objective												
To achieve and sustain at least 95% coverage of measles second dose coverage per year												
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed description for costing (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Estimated cost (Local currency)	2018	2019	2020	2021	2022
	Strengthen RED/ REC strategy in all districts through training of health staff and community engagement	EPI MANAGER	cMYP (2017 - 2021)	Workshop to develop training materials 30 participants 10 outside 2 cars 5 days	National		74 780 000	1		1		1

Objective	To achieve and sustain at least 95% coverage of measles second dose coverage per year						Year of implementation					
	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Estimated cost (Local currency)	2018	2019	2020	2021	2022
No				Print and distribute of training materials 2500 copies @10 pages Refresher TOT for National Facilitators on the RED/REC strategy (32 pxs X 5 days every 2 years) Refresher TOT for DHMTs on the RED/REC strategy (4 pxs X 5 days X 16 districts every 2 years) Cascade training for health facilities on the RED/REC strategy (2 pxs X 5 days X 1500 health facilities every 2 years) total 3100 trainee and facilitators 62 trainings of 50 participants National Supervisors to support district cascade training (32 pxs X 7 days) Advocacy meeting with Paramount Chiefs, Ward councillors, District Councils and MTHE (192 plus1 each chiefdoms + 69 wards + 21 councils + 20 from MTHE) for 1 day X 5 regions estimated at 100 participants each region Community engagement with chiefdom and ward stakeholders, religious leaders and youths (50 pax X (192 chiefdoms in other districts + 30 zones in Western Area) Organize workshop for development of IEC materials (30 pax X 2 days) Field testing of developed IEC materials (1 day) 4 people per team, 5 team 1 day Print and distribute IEC materials (1 electronic print banner per HF X 20 copies per HF X 1500 HFs) @500	National National District District Regional Chiefdom/Wards National National National	12 500 000 54 984 000 227 015 000 5 123 370 000 204 400 000 387 750 000 2 851 200 000 34 060 000 12 125 000 15 000 000 000	1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1	
	Strengthen RED/ REC strategy in all districts through training of health staff and community engagement	EPI MANAGER	cMYP (2017 - 2021)	REC/microplanning workshop (5 pxs X 2 days X 1500 HF's yearly) Consolidation of HF's plans at district level (4 pxs X 5 days X 16 districts)	Health facility District	21 645 000 000 493 568 000	1 1	1 1	1 1	1 1	1 1	1 1

Objective		To achieve and sustain at least 95% coverage of measles second dose coverage per year							Year of implementation				
		Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Estimated cost (Local currency)	2018	2019	2020	2021	2022
No	Develop RED/REC plan in every health facility	EPI MANAGER	cMYP (2017 - 2021)	National Supervisors to support district level consolidation process (32 pxs (2 per district) X 7 days)	District		204 400 000	1	1	1	1	1	
				Consolidation of district plans at national level Workshop 70 participants 2 days 64 outside 14 cars	National		123 170 000	1	1	1	1	1	
No	Conduct regular performance review of implementation of REC strategy	EPI MANAGER	cMYP (2017 - 2021)	Printing of RED tools and provision of stationery 5 copies per health facilities 1500 @500	National		3 750 000	1	1	1	1	1	
				Quarterly district performance review meeting (1 pxs X 2 days X 1500 HF's) 100 participants per meeting	District		3 891 200 000	1	1	1	1	1	
No	Strengthen AEFI monitoring, reporting and investigation	EPI MANAGER	cMYP (2017 - 2021)	Quarterly national performance review meeting (3 pxs X 2 days X 16 Districts) + 10 National EPI staffs	National		100 375 000						
				Refresher TOT for National Facilitators on Immunization in Practice (4 pxs X 5 days X 16 districts every 2 years)	National		224 990 000	1	1	1	1	1	
No	Strengthen AEFI monitoring, reporting and investigation	EPI MANAGER	cMYP (2017 - 2021)	Refresher TOT for DHMTs on Immunization in Practice (4 pxs X 5 days X 16 districts every 2 years)	National		202 568 000	1	1	1	1	1	
				Cascade training for health facilities on Immunization in Practice (2 pxs X 3 days X 1500 health facilities every 2 years)	District		7 036 200 000	1	1	1	1	1	
No	Strengthen AEFI monitoring, reporting and investigation	EPI MANAGER	cMYP (2017 - 2021)	National Supervisors to support district level training (20 pxs X 7 days)	District		84 875 000.00	1	1	1	1	1	
				Sensitization meeting at community level (50 pax X 1 day X 1500 HF's)	Community		22 275 000 000	1	1	1	1	1	
No	Strengthen AEFI monitoring, reporting and investigation	EPI MANAGER	cMYP (2017 - 2021)	Community mobilization using CHWs/ town criers (2 CHWs X 1500 HF's)	Health facility		210 000 000	1	1	1	1	1	
				Sensitization meeting at district level (200 pxs X 1 days X 16 districts)	District		448 000 000	1	1	1	1	1	
No	Strengthen AEFI monitoring, reporting and investigation	EPI MANAGER	cMYP (2017 - 2021)	Radio Discussions (4 slots per district per month) @1mo	District		4 000 000	1	1	1	1	1	

Objective		To achieve and sustain at least 95% coverage of measles second dose coverage per year					Year of implementation					
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Estimated cost (Local currency)	2018	2019	2020	2021	2022
	Strengthen AEFI monitoring, reporting and investigation	EPI MANAGER	cMYP (2017 - 2021)	Develop IEC materials (30 pax X 2 days) Field testing of developed IEC materials (1 day) Monthly district-to-health facility supportive supervision (4 pax per districts X 5 days X 16 districts) Quarterly National-to-District-to-health facility supportive supervision (4 pax per districts X 5 days X 16 districts) Review existing training curricula to include AEFI monitoring and reporting (4 technical meetings x 30 pax X 4 days)	National National District National National		34 060 000 48 500 000 2 328 000 000 194 000 000 78 960 000	1	1	1	1	1
JEE Indicator												
1.7.2. National Vaccine												
JEE recommendations												
Conduct refresher training of District Health Management Teams (DHMTs) on the District Vaccination Data Management Tool. Track implementation of all recommendations of the 2016 cold chain assessment												
Objective		To strengthen the capacity of DHMTs for improved vaccine access and delivery					Year of implementation					
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Estimated cost (Local currency)	2018	2019	2020	2021	2022
	Build the capacity of DHMTs on DVDMT	EPI MANAGER	cMYP (2017 - 2021)	Orientation of National EPI Staff on DVDMT (15 pax X 2 days every 2 years) Training of DHMTs on DVDMT (6 pax X 3 days X 16 districts every 2 years) Quarterly Data Quality Audit (16 pax X 5 days X 16 districts)	National National District National		28 330 000 115 830 000 297 328 000 20 386 925	1	1	1	1	1
	Improve the availability and functionality of cold chain	EPI MANAGER	cMYP (2017 - 2021)	Procure additional Cold Chain Equipment for human and animal health (CCE) - 7 freezers (ice-pack refrigerators) in the first 2 years Procure additional Cold Chain Equipment (CCE) - 7 refrigerators (SDD) per district per year; (one active CCE per HF) Procure additional Cold Chain Equipment (CCE) - 2 vaccine carriers per facility +1 per district for animal health	National District All level		164 674 800 25 219 740	1	1	1	1	1

Objective		To strengthen the capacity of DHMTs for improved vaccine access and delivery					Year of implementation					
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Estimated cost (Local currency)	2018	2019	2020	2021	2022
	Improve the availability and functionality of cold chain	EPI MANAGER	cMYP (2017 - 2021)	<p>Procurement of Antrax vaccine 100000 doses (50doses per vial) 2000 vial@10 per vial</p> <p>Multi dosage Syringe (Hauptner revolver 30ml)@USD 120 for 200 unit repair kit 200 unit @USD 4 Glass Barrel 200 @ USD 4</p> <p>Procurement of anti rabies vaccine for animal and human per year 300,000 USD 20 per vial of 10 Doses for animal Multi dosage Syringe (Hauptner revolver 30ml)@USD 120 for 200 unit repair kit 200 unit @USD 4 Glass Barrel 200 @ USD 4</p> <p>Procurement of 150 semi automatic multi dose syringes 30 ml with 500 pkts of 10pce hypodermic needles 21 G spear parts</p> <p>Procure additional Cold Chain Equipment (CCE) -550 cold boxes</p> <p>Installation of CCE refrigerators</p> <p>Decommissioning of obsolete equipment once replaced no cost related</p> <p>Quarterly maintenance cost of CCE @500k</p> <p>Refresher training for solar technicians (1 pax X 3 days X 16 districts)</p> <p>Refresher training for cold room officers (1 pax X 3 days X 16 districts)</p> <p>Procure 2 two for vaccine distribution vehicles</p> <p>Procure pickup Land Cruiser vehicles (16 vehicles)</p> <p>Procure motorcycles (16 motorcycles)</p>	All level		5 924 800	1	1	1	1	1
				<p>184 378 000</p>	All level		184 378 000	1	1	1	1	1
				<p>223 500 000</p>	All level		223 500 000	1	1	1	1	1
				<p>129 972 700</p>	All level		129 972 700	1	1	1	1	1
				<p>47 700 000</p>	All level		47 700 000	1	1	1	1	1
				<p>-</p>	All level		-	1	1	1	1	1
				<p>3 000 000 000</p>	District		3 000 000 000	1	1	1	1	1
				<p>50 980 000</p>	National		50 980 000	1		1		1
				<p>50 980 000</p>	National		50 980 000	1		1		1
				<p>670 500 000</p>	National		670 500 000	1				
				<p>5 364 000 000</p>	District		5 364 000 000	1				
				<p>596 000 000</p>	District		596 000 000	1				

Objective		To strengthen the capacity of DHMTs for improved vaccine access and delivery						Year of implementation				
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Estimated cost (Local currency)	2018	2019	2020	2021	2022
				Quarterly maintenance cost of vehicles@ 1Mfo Quarterly maintenance cost of motorcycles@ 200k Monthly Fuel for Vaccine distribution (80 litres per day for 7 days of distribution per district) Printing of EPI tools 1500 HF 2 sets each estimated at 100k per set Tally book @ 100 pages 2 Immunization registers Summary form AEFI form under 5 years cards TT Cards Conduct EPI vaccine coverage survey (every 3 years) 3 people per district for 16 districts 7 days Recruit international consultant for EPI vaccine coverage survey 1 month Cold chain assessment (every 3 years) 2 people per district for 16 districts 5 days Recruit international consultant for Cold chain assessment 1 month Review and update for EPI cMYP in 2021 (20 pax x 5 days) - Write up Review and update for EPI cMYP in 2021 (10 pax x 5 days) - costing HF's conduct weekly outreach services (Transportation + Allowance @36k) 56k 2 people per facility 1500HF 1 day every week Procure rain gears for HF staff for Outreach services per HF 3 staffs 1500HF 10 people DHMT @Boots 20k Coat 25K	All level District All level National National National National National National National National National National Health facility All level		64 000 000 12 800 000 698 880 000 300 000 000 238 000 000 98 196 000 146 000 000 98 196 000 85 740 000 85 740 000 8 736 000 000 209 700 000	1	1	1	1	1
	Monitoring and Evaluation of EPI activities	EPI MANAGER	cMYP (2017 - 2021)					1			1	
	Improve immunization through outreach services										1	1

Technical Area		National Laboratory System					JEE Scores 4				
JEE Indicator		D 1.1 Laboratory testing for detection of priority diseases					JEE Scores 1				
JEE recommendations		Establish functional Bacteriological section at the human, animal and environmental National and Regional Reference Labs									
Objective		To expand lab capacity at the national reference lab to be able to conduct 6 of 10 WHO core tests					Year of implementation				
No	Summary of Planned Activities at National Level (Strategic actions)	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Estimated cost (Local currency)	2018	2019	2020	2021	2022	
1	Improve supply chain management	Implement supply and inventory management system (software, computers and internet) Procurement Hire 1 international consultant to implement supply and inventory management system and train technicians, 3 months, yearly Hire 1 National consultant to implement supply and inventory management system and train technicians, 3 months, yearly Implement supply and inventory management course, 15 people, 5 days, biannually	National and sub national National National and sub national	Number of labs with functional inventory management systems Consultant Number of technicians trained	29 800 000 279 888 000 35 280 000 135 620 000	1	1	1	1	1	
2	Improve communication for timely reporting of laboratory results	Establish and maintain CUG services at 7 human labs, 2 animal labs, 1 environmental labs for reporting/sharing of results each lab procurement 10 phones @400k Monthly Service Provider @50k Establish and maintain internet services at 7 human labs, 2 animal labs, 1 environmental labs Procure internet service @ USD 1,150 Procure modem @ 445and router @230 for 10 labs @675	National National and sub national	Establishment of a results communication network	46 000 000 1 014 300 000 49 612 500	1	1	1	1	1	
3	Provide sustainable power supply to laboratories	Procure solar panels, invertors and batteries for 6 national labs including human (CPHRL, Kenema, Bo and Makeni), animal and environmental health labs Procure for 10 labs 10 per lab @ USD 3K Hire consultant to establish and sustain solar power at laboratories, 3 months, yearly Maintenance of solar panels and invertors, yearly @USD 300	National National and sub national National and sub national		2 205 000 000 35 280 000 220 500 000	1				1	
4	Provide mentorship to human, animal and environmental laboratory personnel	Supportive supervisory visits to regional animal, human and environmental labs, 3 people, 3 human health labs, 2 animal health labs, 1 environmental health lab, quarterly. Training workshop for EGA and PT panels (30 participants, 5 days, CPHRL)	Sub national National	Number of workshop participants for EGA AND PT	42 500 000 110 460 000	1	1	1	1	1	

Objective		To expand lab capacity at the national reference lab to be able to conduct 6 of 10 WHO core tests						Year of implementation				
		Summary of Planned Activities at National Level (Strategic actions)	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Estimated cost (Local currency)	2018	2019	2020	2021	2022	
5	Improve the capacity for bacteriological testing culture and ASTs for Human health	Procure equipment, reagents and other laboratory supplies, including solar panels Procure and implement service and maintenance contracts for all equipment in laboratories @ 10% from above Implement bacteriology national and international training courses at national level for Cultures, ASTs and stock archiving (25 people, 10 days, yearly) Implement bacteriology national and international training courses at national level for molecular biology testing (15 people, 6 weeks, yearly) Procure and implement EOA services and PT panels to monitor quality for routine and AMR test packages, 4 panels, 7 labs, quarterly Procure equipment, reagents and other laboratory supplies, including solar panels Procure and implement service and maintenance contracts for all equipment in laboratories	National	"Number of equipment, reagent and supplies procured Document review of stockouts" Number of service and equipment contracts implemented Number of technicians trained Number of technicians trained Number of EOA and PT panels procure	149 000 000	1	1	1	1	1		
						74 500 000	1	1	1	1		
						171 400 000	1	1	1	1		
						484 025 000	1	1	1	1		
						149 000 000	1	1	1	1		
6	Improve the capacity for viral testing for Human health	Training for laboratory personnel in molecular techniques, 30 people, 6 weeks, biannually Training for laboratory personnel in serology techniques, 12 people, 2 weeks, biannually Procure and implement EOA services and PT panels to monitor quality, 8 panels, 5 labs, quarterly	National	Number of trained personnel Number of trained personnel EOA results	1 623 920 000	1		1		1		
						93 125 000	1	1	1	1		
						148 394 000	1		1			
						149 000 000	1	1	1	1		
7	Improve the capacity for parasitic testing for Human health	Procure equipment, reagents and other laboratory supplies, including solar panels Procure and implement service and maintenance contracts for all equipment in laboratories Training for laboratory personnel on microscopy, 30 people, 10 days, twice yearly Procure and implement EOA services and PT panels to monitor quality, 8 panels, 7 labs, quarterly	National and sub-national	Number of trained personnel Number of trained personnel	223 500 000	1	1	1	1	1		
						93 125 000	1	1	1	1		
						195 785 000	1	1	1	1		
8	Build the diagnostic capacity for animal health laboratories to test for priority diseases	Procure equipment, reagents and other laboratory supplies for a high level veterinary reference laboratory in Western Area, including solar panels	National and sub-national	Number of trained personnel	149 000 000	1	1	1	1	1		
						223 500 000	1	1	1	1		

Objective		To expand lab capacity at the national reference lab to be able to conduct 6 of 10 WHO core tests					Year of implementation				
No	Summary of Planned Activities at National Level (Strategic actions)	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Estimated cost (Local currency)	2018	2019	2020	2021	2022	
8	Build the diagnostic capacity for animal health laboratories to test for priority diseases	Procure equipment, reagents and other laboratory supplies for 16 districts for all laboratory iters			149 000 000	1	1	1	1	1	
		Procure and implement service and maintenance contracts for all equipment in laboratories			74 500 000	1	1	1	1	1	
		Training for laboratory personnel in bacteriology and DST techniques, 25 people, 6 weeks, annually			704 275 000	1	1	1	1	1	
		Training for laboratory personnel in molecular techniques, 4 people, 6 weeks, annually	National and sub national		298 733 000	1	1	1	1	1	
		Training for laboratory personnel in serology techniques, 5 people, 6 weeks, annually	National and sub national		320 370 000	1	1	1	1	1	
		Training for laboratory personnel in parasitology techniques, 20 people, 4 weeks, annually	National and sub national		271 165 000	1	1	1	1	1	
		Training for laboratory personnel in pathology techniques, 5 people, 14 weeks, annually	National and sub national		496 495 000	1	1	1	1	1	
		Procure and implement EOA services and PT panels to monitor quality, 6 panels, 3 labs, every 3 months Panel @ USD 2k	National and sub national		1 058 400 000	1	1	1	1	1	
9	Identify priority Zoonotic diseases (Animal health)	Convene consultative meetings using historical data, literature analysis and experts to synthesize zoonotic situation in the country and identify priority diseases (25 participants, 3 days, Makeni)	National	No of consultative meetings	62 400 000	1					
		Meeting to review and update priority zoonotic diseases policy to align with the One health policy (30 participants , 3 days Makeni)	Sub - national	Number of meeting participants for policy review	72 435 000		1				
10	Build the testing capacity for environmental health laboratories to test for water and food safety	Procure equipment, reagents and other laboratory supplies for a high level environmental reference laboratory in Western Area (Lakka), including solar panels	National	Number of food safy lab establish and equiped	558 750 000		1	1			
		Procure reagents and supplies for water and food safety lab	National	Reagents and supplies for 1 food safety lab	149 000 000		1	1	1	1	
		Procure and implement service and maintenance contracts for all equipment in laboratories	National and sub national		74 500 000						
		Convene meetings to advocate for ratification of water food safety policy, guidelines and implementation plan for food safety in line with S. Leone Standards Bureau policy (30 participants, 1 day, Freetown)	National	Number of meetings for ratification of food safety policy.	35 410 000		1	1			
		Engage national/international consultants (3) to develop training manual, and general algorithm for water and food testing. Hiring of 1 international consultant	National	Hiring 1 national and 1 international consultant	279 888 000			1			

Objective		To expand lab capacity at the national reference lab to be able to conduct 6 of 10 WHO core tests					Year of implementation				
No	Summary of Planned Activities at National Level (Strategic actions)	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Estimated cost (Local currency)	2018	2019	2020	2021	2022	
10	Build the testing capacity for environmental health laboratories to test for water and food safety	Engage national/international consultants (3) to develop training manual, and general algorithm for water and food testing. Hiring of 1 national consultant Engage consultants to provide diversified mentorship sessions (1 international consultants, 9 months) Engage consultants to provide diversified mentorship sessions (1 National consultants, 9 months) Training personnel for food sample collection (10 participants, 5 days, Njalar/Makenti/Freetown) Training for laboratory personnel in molecular techniques, 5 people, 6 weeks, annually Procure and implement EOA services and PT panels to monitor quality, 4 panels, 2 lab, annually @USD2k	National National and sub-national National and sub-national	Meetings to engage consultants Number of trainings for personnel	35 280 000 824 964 000 105 840 000 52 040 000 307 070 000 117 600 000		1	1	1	1	
JEE Indicator		D 1.2 Specimen referral and transport system									
JEE recommendations		Finalize and implement draft sample transportation SOPs and policy									
Objective		To institute an effective system for collection, packaging and transport of biological specimens					Year of implementation				
No	Summary of Planned Activities at National Level (Strategic actions)	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Estimated cost (Local currency)	2018	2019	2020	2021	2022	
1	Establish a comprehensive integrated National policy, guidelines and SOPs on specimen management for human, animal, food and environmental samples	Workshops to develop an integrated policy and plan (guidelines and Operational SOPs) on specimen management for human, animal, food and environmental samples- 3 workshops, 40 participants, 5 days each, Makenti/Freetown)	National/sub national	Number of workshops to develop integrated policy - workshop reports; policy and plan (guidelines and SOPs)	380 205 000	1	1	1			
2	Establish a network of specimen transportation at all levels - national and international	Conduct a workshop to develop a protocol for a national specimen referral network (25 participants, 3 days, Freetown) Meetings to develop and review the plan for specimen management [2 meetings a year] (25 participants, 3 days, Freetown)	National National	Number of participants; protocol for a national specimen referral network; workshop report Number of meetings to develop and review plan	61 900 000 123 800 000		1				
2	Establish a network of specimen transportation at all levels - national and international	Workshop to develop the training curriculum for all involved in specimen management: (Drivers/bike riders, support staff, security personnel, nurses, doctors, lab technicians). (12 participants, 2 days, Freetown)	National	Workshop report; draft training curriculum	28 439 000			1			

Objective		To institute an effective system for collection, packaging and transport of biological specimens					Year of implementation				
No	Summary of Planned Activities at National Level (Strategic actions)	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Estimated cost (Local currency)	2018	2019	2020	2021	2022	
2	Establish a network of specimen transportation at all levels - national and international	Conduct a training workshop for all personnel involved in national specimen referral (400 participants - cross cutting - see above; 3 days, Freetown/regional capitals)	National/ Sub national	Number of personnel to be trained on specimen referral	954 300 000		1				
		Procurement of specimen collection and transportation supplies for human, animal and environmental specimens logistics for specimen transport 10 Cool box @200 Triple package	national	Meeting notes from advocacy events	149 000 000	1	1	1	1	1	
3	Establish a tracking system for specimen referral and transportation	2 supportive supervisions per district per year for 5 years (2 persons per district; 32 visits per year)	National/ Sub national	Number of supportive supervisions annually for 5 yrs	584 000 000	1	1	1	1	1	
		Procure 16 vehicles and 20 bikes for delivery of EQA and PT panels, for human, animal and environmental laboratories	National	Number of vehicle and Bikes procured	5 690 000 000		1				
JEE Indicator	D 1.3 Effective modern point of care and laboratory based diagnostics	Courier services/Fuel for transportation of samples Per week @120lit*3 trip 360 lit 52 weeks 121,680,000 per district			1 946 880 000	1	1	1	1	1	
		External Shipment of samples 3 per week@ USD 2000 per week			764 400 000	1	1	1	1	1	
JEE recommendations	Establish the regulation for the use of POCT in the country, establish a mechanism for the regulation of POCT laboratory testing, include private laboratories	Procuring ipads for tracking specimen referral and transportation			149 000 000		1				
		Training of national and district specimen focal persons, 35 people, 4 days, annually			102 930 000		1				
Objective		To develop or acquire technologies to optimize POCT at all levels (human and animal health)					JEE Scores 2				
Objective		To develop or acquire technologies to optimize POCT at all levels (human and animal health)					JEE Scores 1				
No	Summary of Planned Activities at National Level (Strategic actions)	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Estimated cost (Local currency)	Year of implementation					
1	Develop an integrated syndromic and laboratory-based POCT algorithm	Workshop to map out all laboratories performing POCT (20 participants, 1 day, Freetown)	National	Number of workshop to map out all laboratories performing POCT	24 895 000						
		Workshop to develop syndromic algorithms (20 participants, 5 days, Western Rural)	National	Number of workshop to develop algorithm	76 495 000			1			
		Print and distribute testing algorithms (up to 10 syndromes X 200 copies)	National	Number of testing algorithms printed	50 000 000		1				

Objective		To develop or acquire technologies to optimize POCT at all levels (human and animal health)					Year of implementation				
No	Summary of Planned Activities at National Level (Strategic actions)	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Estimated cost (Local currency)	2018	2019	2020	2021	2022	
1	Develop an integrated syndromic and laboratory-based POCT algorithm	Workshop to train facility personnel on the application of algorithms by districts: Doctors, nurses, DMOs, pharmacists, CHOs, lab technicians (20 participants, 2 days, at district level, 5 facilitators per district) Conduct workshop to develop Laboratory based testing algorithms (see above, row 47) (12 participants, 4 days, Freetown)	Sub - national	Number of participants trained on the application of algorithm	38 965 000		1	1			
2	Establish sustainable commodities supplies system	Validation workshop for both syndromic and lab testing algorithms (30 participants, 3 days, Freetown) Workshop to develop vendor list and post market verification protocol (20 participants, 2 days, Freetown)	National	Workshop report; draft lab testing algorithm Workshop report; validated syndromic and lab testing algorithms	45 039 000 72 435 000			1			
JEE Indicator		D.1.4 Laboratory Quality System					JEE Scores 2				
JEE recommendations		Complete SLMITA process as part of the quality improvement system					JEE Scores 1				
Objective		Institute a national quality assurance system for human, animal, environment and food safety. To ensure the inclusion and functionality of a National Laboratory Regulatory Board.									
No	Summary of Planned Activities at National Level (Strategic actions)	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Estimated cost (Local currency)	2018	2019	2020	2021	2022	
1	Ratification of National Laboratory Regulatory Body	Workshop to identify members and develop TOR for National Laboratory Regulatory Body (30 participants, 3 days, Freetown, once every 2 years) Lobby and advocate for ratification of NLRB (35 copies)	National	Members identified; workshop report; TOR	72 435 000		1				
2	Establish a National EOA program to address human, animal and environmental health at reference laboratories	Construct a national EOA unit at CPHRL	National	Ratified NLRB	875 000		1	1			
		Procure equipment, reagents, and supplies	National	Number of NEQA units established	596 000 000		1	1			
		Identify and train personnel for NEQA (10 personnel, 3 months)	National	Generation of personnel list for NEQA	7 450 000 000						
		Hire consultants (1 international, x 6 months)	National		551 990 000		1	1			
		Hire consultants 2 national x 6 months	National		552 426 000						
		Identify and assess capacity of all existing laboratories - public and private (25 human, 2 animal, 1 environmental) (3 person per 6 team, x 5 days)	national and Sub - national	capacity assessment of all labs	141 120 000						
					63 750 000	1	1				

Objective		To ensure the inclusion and functionality of a National Laboratory Regulatory Board.					Year of implementation					
No	Summary of Planned Activities at National Level (Strategic actions)	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Estimated cost (Local currency)	2018	2019	2020	2021	2022		
2	Establish a National EQA program to address human, animal and environmental health at reference laboratories	Accreditation of labs for specific capacity (3 team of 4 x 5 days) x 3 labs Conduct hands-on workshops for NEQA personnel (1 workshop per year for 5 years; 5 personnel; 2 days; CPHRL)	national and Sub-national	Accreditation based on assessment results Report on workshop; attendance of personnel for NEQA at CPHRL	36 375 000	1	1	1	1	1		
3	Establish sustainable capacity building for NQMS	Conduct training program on QMS (55 participants, 5 days, Bo) Conduct 3 SLMTA trainings for lab personnel across all districts and at CPHRL, per year for 5 years (20 participants per training, 5 days Freetown/Bo/Kenema/Makeni) Develop and review curriculum for in-service and pre-service QMS training (25 participants, 3 meetings.x 5 days) biannually, Makeni Hire consultants 1 international to conduct long-term in-service trainings on QMS (2 months every year for 5 years) Hire consultants 1 national to conduct long-term in-service trainings on QMS (2 months every year for 5 years) Supportive supervision quarterly in district, regional, and selected lower level labs for QMS (3 persons per 4 teams .x 7 days)	National national and Sub-national national national and Sub-national	Delivery of training and competency assessment Delivery of training and competency assessment Curriculum, workshop report Number of trainees; number of trainings	172 460 000 76 495 000 277 050 000 189 042 000 23 520 000			1	1	1	1	1
4	Establish an integrated One Health Laboratory committee	Select multidisciplinary committee members, develop and review terms of reference for OneHealth lab committee (2 meetings, 30 participants, x 3 days) Develop and implement plans for One Health laboratory, 30 people, 5 days, biannually	National National	Number of SS visits per year TOR Implementation plans	59 500 000 143 870 000 107 035 000	1	1	1	1	1		

Technical Area		Detect 2 Real Time Surveillance											
JEE Indicator	D.2.1 Indicator and event based surveillance systems												
JEE recommendations	1. Finalize roll out of CBS and strengthen event-based surveillance systems. 2. Strengthen animal health surveillance at all level 3. Strengthen private sector involvement in surveillance												
Objective	To expand lab capacity at the national reference lab to be able to conduct 6 of 10 WHO core tests												
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed description for (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022
	Strengthen Community-based surveillance system in context of OneHealth	MOHS, MAF	Community Based Surveillance (CBS), WHO	1. Conduct CBS TOTs for health facility staff in the remaining 5 districts (500 persons for 3 days) 2. Conduct CHWs training on CBS in 5 remaining districts (5,000 CHWs for 2 days) 3. Printing and distribution of CBS materials (500 training flip charts, 13,000 case-based reporting forms, 13,000 weekly summary reporting forms) 4. Provision of sustainable incentives for CHWs (Le 100,000 per month for 13,000 CHWs) 5. National quarterly CBS supportive supervision in all districts (national team of 3 people visiting one district in a quarter)	Kenema, Bo, Tonkolili, Western Urban, Western Rural and TBD districts Kenema, Bo, Tonkolili, Western Urban, Western Rural and TBD districts National	Number of persons trained as TOTs Number of CHWs trained Number of CBS materials printed and distributed to district levels Number of CHWs receiving incentives	500 persons Availability of funds 5,000 persons Availability of funds 500 training flip charts, 13,000 case-based reporting forms, 13,000 weekly summary reporting forms Availability of funds 13,000 CHWs Availability of funds (incentives and programs to be harmonized with Directorate of Primary Health Care) 64 trips per year Availability of funds and logistics (will be combined with IDSR supervision)	433 500 000 4 335 000 000 13 820 000 000 156 000 000 000 408 000 000	1	1	1	1	1

Objective		To expand lab capacity at the national reference lab to be able to conduct 6 of 10 WHO core tests							Year of implementation				
		Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021
No	Strengthen Community-based surveillance system in context of OneHealth	MOHS, MAF	Community Based Surveillance (CBS), WHO	<p>6. District quarterly CBS supportive supervision in all districts (District team of 4 people visiting the health facilities in a quarter)</p> <p>7. National workshop to review CBS implementation and performance (50 persons for 3 days twice a year)</p> <p>8. Train 117 staff to direct CBS alerts to health facility as an early warning system (30 persons for 2 days)</p>	Health facilities	Number of health facilities visited	64 trips per year Availability of funds and logistics (will be combined with IDSR supervision)	2 328 000 000	1	1	1	1	1
	Establish Event-based surveillance system in context of OneHealth	MOHS		<p>1. Workshop to adapt event based surveillance (informal source of information) guidelines (50 persons for 4 days)</p> <p>2. Workshop to develop an event based surveillance training package (40 persons for 5 days)</p> <p>3. Print and disseminate event based surveillance guidelines and training materials (1 500 copies of guidelines, 100 facilitator manual, 1 500 participant manual)</p>	National	Guideline adaptation	50 persons Availability of funds	130 400 000	1				
					All districts	Number of 117 staff trained	30 persons Logistics (CUG, phones etc)	186 640 000	1				
					National	Event based surveillance training package	40 persons Availability of funds	135 980 000	1				
					All districts	Event based surveillance guidelines and training materials	1,500 copies of guidelines, 100 facilitator manual, 1,500 participant manual Availability of funds	66 200 000	1				

Objective		To expand lab capacity at the national reference lab to be able to conduct 6 of 10 WHO core tests						Year of implementation						
		Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022
No	Establish Event-based surveillance system in context of OneHealth	MOHS		4. TOIs on EBS including early warning systems for national and DHMIT staff (100 persons for 3 days) 5. Training of health workers on event based surveillance including early warning systems at all levels (1,500 persons for 2 days)	National	Number people trained as TOIs	100 people trained as TOIs Availability of funds	225 300 000	1		1			1
				1. Identify and train human and animal private and public sector health personnel on surveillance guidelines and reporting tools (1,700 persons for 3 days) 2. Quarterly supportive supervision with real time feedback to One Health Secretariat for monitoring and problem solving (Team of 4 persons for 2 days per districts) 3. Joint national MOHS/MAF data quality assessment (DOA) conducted in all districts in selected health facilities twice a year (Team of 4 persons for 2 days per district)	National and all districts	Number of people trained	1,500 Health Workers Availability of funds	873 000 000	1		1			1
	Build capacity for surveillance among human and animal health workers in both public and private sectors	MOHS, MAF, One Health Secretariat	One Health platform		National and all districts	Number of site visited	1700 Persons Availability of funds, identification of private sector health personnel	1 526 260 000	1		1			1
					National and all districts	Number of health facilities visited for DOA	64 trips/yr x 5 yrs Availability of funds,logistics	310 400 000	1	1	1	1	1	1
					National and all districts	Number of health facilities visited for DOA	32trips/yr x5yrs Availability of funds,logistics	2 483 200 000	1	1	1	1	1	1

Objective		To expand lab capacity at the national reference lab to be able to conduct 6 of 10 WHO core tests							Year of implementation				
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022
	Build capacity for surveillance among human and animal health workers in both public and private sectors	MOHS, MAF, One Health Secretariat	One Health platform	4. Joint district MOHS/MAF quarterly data quality assessment (DOA) conducted at district level by DHMT (team of 4 district staff for 8 days per district in a quarter)	All districts	Number of health facilities visited for DOA	64 trips/yr x 5yrs Availability of funds, logistics	19 865 600 000	1	1	1	1	1
				Workshop to adapt the WHO AFRO 3rd edition IDSR guidelines, training materials and reporting tools (50 persons for 5 days)	National	Adapted WHO AFRO 3rd edition IDSR guidelines, training materials and reporting tools	50 persons Availability of funds, logistics	155 850 000	1				
				Committee to finalize adaptation of WHO AFRO 3rd edition IDSR guidelines, training materials and reporting tools (20 persons for 3 days)	Makani	Finalized draft WHO AFRO 3rd edition IDSR guidelines, training materials and reporting tools	20 persons Availability of funds, logistics	34 040 000	1				
	Adapt and implement the WHO AFRO 3rd edition IDSR strategy			Workshop to validate the WHO AFRO 3rd edition IDSR guidelines, training materials and reporting tools (50 persons for 3 days)	National	Validated WHO AFRO 3rd edition IDSR guidelines, training materials and reporting tools	50 persons Availability of funds, logistics	112 650 000	1				
				TOTs on the 3rd edition of IDSR strategy (100 persons for 5 days)	National	Number of people trained as TOT	100 persons Availability of funds, logistics	361 700 000	1				
				Cascade training on the 3rd edition of IDSR strategy (1,700 persons for 3 days)	All districts	1700 human and animal health facility staff trained	1,500 persons Availability of funds, logistics	1 630 980 000	1	1			
				National IDSR quarterly support supervision to districts (team of 3 national staff for 2 days per district in a quarter)	All districts	Number of districts and facilities supervised	64 trips/yr x 5yrs Availability of funds, logistics	272 000 000	1	1	1	1	1

To expand lab capacity at the national reference lab to be able to conduct 6 of 10 WHO core tests										Year of implementation				
Objective	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022	
No	Adapt and implement the WHO AFRO 3rd edition IDSR strategy			District IDSR quarterly support supervision to health facilities (team of 4 district staff for 8 days per district in a quarter) Conduct IDSR DOA in districts and health facilities twice a year (team of 2 national staff for 2 days per district) National Quarterly Disease Surveillance Review Meeting (70 people for 2 days)	All health facilities All districts National/ Freetown	Number of facilities supervised Number of health facilities visited for DOA National Quarterly Disease Surveillance Review Meeting	64 trips/yr x 5yrs Availability of funds,logistics 32 trips/year x 5 years Availability of funds,logistics 70 people/ quarter x 5 years Availability of funds,logistics	1 241 600 000 116 800 000 104 600 000	1	1	1	1	1	
JEE Indicator										JEE Scores 2				
JEE recommendations														
Objective										Year of implementation				
Develop, integrate and maintain an interoperable, interconnected, electronic real-time reporting system, for public health and/or veterinary surveillance systems at all levels by 2022														
No	Establish an electronic zoonotic disease surveillance reporting platform	MAF, MOHS	REDISEE, PREDICT	Workshop to develop SOP and user requirements for zoonotic disease surveillance electronic platform (DHIS2) and tool (40ppt x 2 days) Hire an international consultancy to develop/adapt software on electronic zoonotic surveillance in line with the SOP and User Requirements	National Freetown	SOP and user requirements for zoonotic disease surveillance electronic platform (DHIS2) and tool developed Software on electronic zoonotic surveillance in line with the SOP and User Requirements developed and tested	40 Persons Availability of funds and resource persons International Consultant Availability of funds	54 330 000 597 849 000	1					

Objective	Develop, integrate and maintain an interoperable, interconnected, electronic real-time reporting system, for public health and/or veterinary surveillance systems at all levels by 2022								Year of implementation							
	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed description for (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022			
Establish an electronic zoonotic disease surveillance reporting platform	MAF, MOHS	REDISEE, PREDICT	Mobile devices procured for 190 chiefdoms and 16 district Head quarter town	Freetown	Number of mobile devices procured	206 mobiles devices Availability of funds	335 250 000	1								
				Freetown	Number of Computers purchased	18 Computers purchased Availability of funds	126 650 000	1								
				Districts	Number of Modems procured % of mobile devices connected	16 Modems purchased 190 devices connected Availability of funds	149 000 000	1								
				2 Districts	Number of livestock extension officers trained	30 persons Availability of funds	46 660 000	1								
				2 Districts	Pilot evaluation Workshop	40 persons Availability of funds	50 480 000	1								
				2 districts	Number of chiefdoms supervised	All chiefdoms of the pilot districts Availability of funds	87 200 000	1	1	1	1	1	1	1		
				National	Number of personnel trained in electronic zoonotic reporting	170 personnel trained in electronic zoonotic reporting Availability of funds	313 250 000	1								
				14 Districts	Number of sites supervised	56 trips per months for 3 months Availability of funds	102 200 000	1	1	1	1	1	1	1	1	
							Monthly support supervision visits from districts to chiefdoms (team of 2 persons per district for 4 days)									

Objective		Develop, integrate and maintain an interoperable, interconnected, electronic real-time reporting system, for public health and/or veterinary surveillance systems at all levels by 2022											
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed description for (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and potential challenges	Estimated cost (Local currency)	Year of implementation				
									2018	2019	2020	2021	2022
	Establish an electronic zoonotic disease surveillance reporting platform	MAF, MOHS	REDISEE, PREDICT	Annual electronic Zoonotic disease system review meeting (30 persons for 2 days) Quarterly meeting of zoonotic disease electronic surveillance technical working group (20 persons for 2 days)	Freetown District	Annual electronic Zoonotic disease system review meeting Quarterly meeting of zoonotic disease electronic surveillance technical working group	30 persons Availability of funds 20 persons Availability of funds	46 660 000 36 540 000	1	1	1	1	1
	Implement eIDSR at health facility level countrywide	MOHS, MAF	WHO/IDSR, REDISEE, CDC/ eHealth Africa, FOCUS 1000, University of Oslo, HISP	Procurement of 1300 mobile devices for remaining PHUs Procurement of internet subscription for 16 district modems Procurement of data for PHU devices e-IDSR setup in procured devices Training of district trainers and supervisors on mobile application (2 persons per district for 2 days) Training of health facility staff in the use of mobile device (1,300 persons for 2 days) Supportive supervision Review meeting once a year (50 persons for 2 days)	District District District District District District	Number of mobile devices procured Number of districts connected to internet Number of PHUs connected to internet Number of devices with eIDSR set up Number of persons trained Number of persons trained Number of sites visited Review meeting held	1300 mobile devices Availability of funds Monthly subscription for 16 modems Availability of funds Monthly data subscription for 1,300 devices Availability of funds 1,300 devices Availability of funds 32 persons Availability of funds 1,300 persons Availability of funds 80 trips per month Availability of funds 50 persons Availability of funds	1 937 000 000 193 700 000 625 800 000 730 100 000 60 024 000 2 030 784 000 438 000 000.00 79 500 000	1	1	1	1	1

Objective	Develop, integrate and maintain an interoperable, interconnected, electronic real-time reporting system, for public health and/or veterinary surveillance systems at all levels by 2022							Year of implementation					
	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(ies) for Implementation including budget line holder	Related existing plan/ framework / Programme or ongoing activities	Detailed description for (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022
Implement eIDSR at health facility level countrywide	MOHS, MAF	WHO/IDSR, REDISSE, CDC/ eHealth Africa, FOCUS 1000, University of Oslo, HISP	Develop/maintain comprehensive case based reporting eIDSR tool for use at district and facility level Workshop to validate case based tool (30 persons for 2 days) Training of 3 districts on CBR (20 persons for 2 days) Supportive supervision for pilot districts (2 visits per month for 1 day) 3 pilot districts for 4 months CBR Pilot evaluation (10 people for 3 days) Training of remaining 13 districts DHM/Is on CBR (39 persons for 2 days) Nationwide deployment of case based application at facility level nation wide Training for all HF 1300 2 pers p hr 6 training of 26 pers for each distrc 6 trainings Supportive supervision for 13 districts on CBR (2 times a month for 3 months)	National National District District District District District	Comprehensive case based reporting eIDSR tool for use at facility level for human surveillance and district level for animal surveillance developed Case-based tool validated Number of people trained Number of sites visited 10 persons Number of persons trained Cased based eIDSR DHIS2 application deployed at facility level nation wide Number of sites visited	2000 Health Workers/facilities Availability of funding,logistics,trained personnel Availability of funds 20 persons Availability of funds Availability of funds 39 persons Availability of funds 16 districts Availability of funding,logistics,trained personnel 32 trips a month for all districts	370 734 000 40 360 000 79 020 000 43 650 000 36 070 000 24 898 000 2 853 312 000 567 450 000	1 1 1 1 1 1 1 1					1 1 1 1 1 1 1 1

Develop, integrate and maintain an interoperable, interconnected, electronic real-time reporting system, for public health and/or veterinary surveillance systems at all levels by 2022										Year of implementation				
Objective	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed description for (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022	
No	Integrate the IDSR electronic reporting platform with zoonotic surveillance electronic platform and identified sectors to make it interoperable	MOHS, MAF	FAO, WHO/IDSR, REDISSE, PREDICT	Stakeholder workshop to establish DHIS2/ SET interoperability requirements for IDSR and zoonotic disease reporting platform (40 people for 2 days) Monthly technical working group meetings on human-animal electronic reporting systems (20 people for one day)	National	Report on Stakeholders workshop for 15 persons and interoperable platform	16 districts Availability of funds	63 080 000	1					
JEE Indicator										JEE Scores 4				
JEE recommendations										JEE Scores 4				
Objective										Year of implementation				
Strengthen capacity for data analysis, interpretation and application at all levels										Year of implementation				
Increase capacity for data analysis at all levels by 2022										Year of implementation				
Objective	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed description for (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022	
No	Build capacity for data analysis among human and animal health workers	MOHS, MAF	WHO, FAO, REDISSE, FETP	Refresher trainings of district and major health facilities staff, surveillance staff, M&E staff and animal health worker staff 2700 staff 6 training per district for 28 persons 2 days	District	Refresher training of district and major health facilities staff conducted	10 trainings/5yrs Availability of funds	4 332 672 000	1	1	1	1	1	
	Improve ICT to support data analysis for surveillance at all levels	MOHS, MAF	WHO, FAO, REDISSE, FETP	Provision of ICT equipment to DHMTs, major health facilities and PHUs	District	ICT equipment provided to DHMTs and major health facilities	16 Districts, 1300 Facilities Availability of funds, logistics	521 500 000	1					

Technical Area		Detect 3 Reporting						
JEE Indicator	D.3.1 System for efficient reporting to WHO, FAO and OIE							
JEE recommendations	1. Designate and train National IHR Focal Point and OIE focal point personnel so as to constitute a National IHR Focal Point team. 2. Develop legislation and policies for reporting (refer technical area IHR Legislation, Policy and Financing) 3. Develop regional multilateral and bilateral arrangements for information sharing.							
Objective		By 2022, strengthen capacity to identify any potential PHEIC and report within 24 hours to WHO, FAO and OIE.					JEE Scores 3	
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Comments or Potential challenges	Estimated cost (Local currency)	Year of implementation
	Operationalize the National IHR Focal point	MOHS, MAF	WHO, FAO/OIE, One Health, REDISSE, PREDICT	Consultative meetings to identify relevant government institutions/ individuals for national IHR/OIE focal point membership (30 people for one day-2 away no vehicle) Procure furnished 3 room office space for national IHR/OIE Focal point membership (Yearly space rentage, 2 desktops, 2 laptops, Internet facilities, stationery etc.) Hold quarterly meetings of national National IHR Focal Point and OIE Focal Point (30 persons for one day-2 away no vehicle)	National	Identification of persons	12 870 000	2018
	Build technical capacity among the National IHR Focal Point and OIE teams.	MOHS, MAF	WHO, FAO/OIE, One Health, REDISSE	Train National IHR focal point team on IHR/OIE reporting (20ppl x 3 days - 2 away no vehicle) Print and distribute IHR materials to the IHR and OIE focal team (40 copies of IHR (2005) second edition, 40 copies of OIE guide) (may be reprinted after 2 years)	National	Availability of funds	41 740 000	2018
	Develop a system of simulation exercise for reporting to WHO, FAO and OIE	MOHS, MAF	WHO, FAO/OIE, One Health, REDISSE	Organize simulation exercise every six months on IHR/OIE reporting (20ppl x 2 days-6 persons away of which 4 with vehicle) Compile and share lessons learnt, best practices and challenges (One day meeting of 40 persons-10 persons away with vehicle)	National	Availability of funds	27 140 000	2018
	Develop a legal framework for information sharing with neighboring countries	MOHS, MAF	WHO, FAO/OIE, One Health, REDISSE	Stakeholder meeting to develop and agree upon legal framework for Sierra Leone (40ppl x 2 days - 7 away with vehicles)	National	Availability of funds	28 560 000	2018
						Availability of funds	37 495 000	2018
								2019
								2020
								2021
								2022

D.3.2 Reporting network and protocols in country													
JEE Indicator	1. Develop guidelines and SOPs for reporting 2. Develop a national multisectoral arrangements for information sharing within the One Health context												
JEE recommendations	Develop and establish protocols, processes, regulations and legislation governing reporting to be implemented by 2020.												
Objective	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Comments or Potential challenges	Estimated cost (Local currency)	Year of implementation					
No								2018	2019	2020	2021	2022	
	Develop and implement national guidelines and SOPs for notification of PHEIC events and mechanisms for sharing information between key sectors	MOHS/MAF	WHO, FAO/OIE, One Health, REDISSE	Stakeholder workshop to develop national guidelines and SOPs for sharing information between key sectors (50 ppl x 5 days- 20 away of which, 14 with vehicle)	National	Availability of funds	120 640 000	1					
	Strengthen the reporting capacity for priority zoonotic diseases	MOHS/MAF	WHO, FAO/OIE, One Health, REDISSE	Train National IHR focal point team on IHR reporting (20ppl x 3 days-2 away without vehicle) Annual refresher trainings of National IHR focal point team for IHR reporting (20 ppl x 3 days-2 away without vehicle))	National	Availability of funds	120 640 000	1					
					National	Availability of funds		1	1	1	1	1	
Technical Area													
JEE Indicator	D.4.1 Human resources are available to implement IHR core capacity requirements												
JEE recommendations	Develop minimum standards for animal and human health staffing levels that include (among others) social scientists and revisit HRH strategies for their inclusion.												
Objective	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and potential challenges	Estimated cost (Local currency)	Year of implementation				
No									2018	2019	2020	2021	2022
	Strengthen the Public Health HR capacity for IHR compliance	MOHS, MAF, MITHE, CDC, CHAI, COMAHS, Njala University	FETP/CDC	Hire international consultant to conduct multidisciplinary Public Health HR needs assessment for 2 months	National	Consultant hired to conduct multidisciplinary Public Health HR needs assessment	1 consultant Availability of funds;access to information	189 042 000	1				

Objective		Establish a Multidisciplinary Public Health HR capacity at National and District levels by 2022							Year of implementation					
		Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022
No	Strengthen the Public Health HR capacity for IHR compliance	MOHS, MAF, MITHE, CDC, CHAI, COMAHS, Njala University	FETP/CDC	<p>Workshop to validate needs assessment document (20ppi x 3days), Outside 12 cars</p> <p>Develop and implement additional trainings as per the needs assessment results THIS IS THUS UNKNOWN NJOW</p> <p>Workshop to update the scheme of service based on the needs assessment (15ppi x 3days) NO ONE OUTSIDE</p> <p>Hire public health staff based on the needs assessment LATER SAME</p> <p>Establish a multidisciplinary public health workforce steering committee that meets twice a year (40 persons for one day twice a year) OUTSIDE 10 cars</p> <p>Workshop to adapt/ integrate FETP curriculum into COMAHS and Njala University public health curriculums (10ppi x 3 days) 3 outside 3 TA</p> <p>Workshop to validate integrated FETP curriculum into COMAHS/Njala public health curriculums (20ppi x 2 days) 6 outside 6TA</p>	National	Report of Workshop held	40 persons X 3days Availability of funds	44 820 000	1					
					National	Training report	100 persons for 3 days Availability of funds		1					
					National	Report of Workshop held	40 persons X 3days Bureaucratic procedures and funding		1					
					National	Availability of multidisciplinary public health staff	National & all districts Availability of funds		1	1	1	1	1	
					National	Meeting report	40 persons for one day Bureaucratic procedures and funding	25 290 000	1	1	1	1	1	
					National	Report of Workshop held	40 persons X 3days Delay in integration of curriculum into University public health system	25 290 000			1	1	1	
					National	Report of Workshop held	40 persons X 2days Availability of funds	25 200 000			1	1	1	

D.4.2 Field Epidemiology Training Program or other applied epidemiology training program in place														
JEE Indicator		Develop plans for the sustainability of the basic field epidemiology and laboratory training programme (FELTP) that includes veterinarian and laboratory staff and for advanced training in the western African Region to expand developed capacities.								JEE Scores 3				
Objective		Establish three levels of FETP/FETPV/FELTP (Basic, Intermediate and Advanced) in Sierra Leone or through an agreement with another country by 2022								Year of implementation				
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022	
	Increase national workforce of epidemiologists	MOHS/MAF	FETP, CDC facilitating	<p>Train and graduate 8 cohorts of 20 multidisciplinary GoSL personnel each in Frontline FETP 20 persons 8*3 trainings 7 dazs 14 outside 14 travel all plus costs for field work field investigations-< per training 10 days of field work. TA = 50000 * 2 * 20* 8 Per diem = 5 days for all 20*8 * 5 300.000 VENUE FOR HALF. 4 out of 8 I WILL RECEIVE THE BUDGET FOR THIS</p> <p>Train and graduate 4 cohorts of 20 multidisciplinary GoSL personnel each in Intermediate FETP 16 persons 4 training 12 outside 12 TA</p> <p>Enroll and train 8 multidisciplinary GoSL personnel in Advanced FETP in a regional program</p> <p>Establish agreement for Advanced FETP training with regional governments 8 pers travelling abroad for 5 days 8 flights plus per diem 100 usd per day both to nigeria and ghana thus 2 times</p>	National	Training conducted	160 persons Availability of funds	655 600 000	1	1	1	1	1	1
					National	Training conducted	48 persons Availability of funds	633 250 000	1	1	1	1	1	
					National	Enrollment and training done	8 persons Availability of funds	109 266 667			1	1	1	
					National	Agreement for Advanced FETP training with regional governments established	2 countries (Nigeria & Ghana) Bureaucratic procedures	176 400 000		1				

Objective		Establish three levels of FETP/FETPV/FELTP (Basic, Intermediate and Advanced) in Sierra Leone or through an agreement with another country by 2022					Year of implementation						
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022
	Establish a mechanism of complete ownership of FETP by the MOHS	MOHS/MAF	FETP, CDC facilitating	MOHS and MAF to advocate to relevant authorities (e.g. Ministry of Finance, Parliament), to include FETP in the country budget no cost Inclusion of GoSL staff as FETP mentors including facilitation of workshops. (10 mentors @ 70% LOE and 20 mentors @ 20% LOE 2 FETP program manager at 100%) salaries from Charles. 125 days of field support per year for 100% FTE. Average TA is 40 days.	National	FETP included in MoHS budget GoSL staff included as FETP mentors	MoHS support FETP trainings Bureaucratic procedures 25 persons Availability of funds and trained personells	- 1 162 200 000	1	1	1	1	1
	Develop and implement a public health HRH strategy to include speciality areas in line with One Health approach*	MOHS/MAF/ MOFED	PHE supporting NPHA (under development) , eHealth Africa, CHAI	Assign/recruit GoSL staff to be administrators of FETP 3 administrators for 100% FTE admin ass = 1 mon and eval officer = 1 and logistician = 1 Hire an international consultant (two months) to develop public health HRH strategy to include speciality areas in accordance with One Health approach	National	GoSL staff recruited as FETP administrators Consultant hired	5 administrative staff Availability of funds, Bureaucratic procedures 1 consultant Availability of funds, Govt. moritorium on recruitment	72 000 000 189 042 000	1	1	1	1	1
				Workshop to draft a public health HRH strategy (25 ppl x 3 days) outside 10 10 TA	National	Report of workshop	40 persons Availability of funds, Govt. moritorium on recruitment	44 575 000	1				

Establish three levels of FETP/FETPV/FELTP (Basic, Intermediate and Advanced) in Sierra Leone or through an agreement with another country by 2022										Year of implementation				
Objective	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022	
No	Develop and implement a public health HRH strategy to include speciality areas in line with One Health approach*	MOHS/MAF/MOFED	PHE supporting NPHA (under development), eHealth Africa, CHAI	Workshop to validate drafted public health HRH strategy (25 ppl x 2 days) outside TO and 10TA Establish mechanism for monitoring and tracking implementation of the workforce strategy (identification of coordinator/focal person) NO COST	National	Report of workshop	30 persons Availability of funds, Govt. moratorium on recruitment	44 575 000	1					
Respond 1 Preparedness														
Technical Area														
JEE Indicator														
R. 1.1 Multi-hazard national public health emergency preparedness and response plan is developed and implemented														
JEE recommendations														
1. Develop and implement multi-hazard NPHEPR plan that includes a costing element, 2. Develop a stockpiling emergency plan and establish mechanisms for accessing funds for emergencies and supplies														
JEE Scores 1														
Objective														
To have an all hazards plan and a system for stockpiling of supply mechanism to foster assess to resources during emergencies that is one health compliant by 2018.														
Year of implementation														
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022	
1	Develop a one-health compliant all hazards plan	Director of DHSE & DVS	All hazards plan completed, plus individual plans for cholera, floods disaster, EVD and Zika.	Stakeholder mapping and engagement/ orientation -workshop (60 pax* 1 day * 1 session) "Situation analysis in regard to potential hazards and country capabilities (Literature reviews) (20 pax* 3days"	National	Stakeholders Oriented	1 workshop of 60 stakeholders	44 980 000	1					
					National	Potential hazards and country capabilities for public health emergencies identified and documented	Literature reviewed and validated	43 620 000	1					
					National & Regional	Potential hazards and country capabilities for public health emergencies identified and documented	4 regions	121 250 000	1					

Objective	To have an all hazards plan and a system for stockpiling of supply mechanism to foster assess to resources during emergencies that is one health compliant by 2018.							Year of implementation					
	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022
2	Develop a one-health compliant all hazards plan	Director of DHSE & DVS	All hazards plan completed, plus individual plans for cholera, floods disaster, EVD and Zika.	Situation analysis in regard to potential hazards and country capabilities -workshop for situation analysis feedback (60 pax * 1 day * 1 times)	National & Regional	Potential hazards and country capabilities for public health emergencies identified and documented	1 workshop of 60 stakeholders	44 980 000	1				
				Establish a technical working group to develop ToRs for drafting an all hazards plan Meeting for TWG (10 pax * 3 days * 1 meeting)	National	ToRs for TWG to draft an all hazards plan	1 TOR	6 970 000	1				
				Draft the document through a consultative process including costing of the plan -enlist services of subject matter expert (1 pax Consultancy fees x 3months)	National	subject matter expert available	1 consultant for three months	35 280 000	1				
				Conduct three workshops for document development (30pax * 3 workshops * 3 days)	National	Draft all hazards plan ready	3 workshops	165 150 000	1				
				Validation workshop (30 pax for 1 day)			1 workshop of 30 stakeholders	24 990 000	1				
				Printing the document (500 copies)	National	Finalized and published all hazards plan, 500 copies of all hazards plan	500 copies of all hazards plan	7 500 000	1				
				Ceremony to launch the all hazards plan (50pax * 1day)	National	Attendance list	1 seminar reaching 50 stakeholders	28 930 000	1				
				Develop a list for supplies required for stockpiling workshop (20 pax * 1 day)	National	List of commodities for stockpiling	1 List of commodities for stockpiling	13 340 000	1				
	Establish a system for stockpiling of supplies and accessing resources during emergencies.	Incident Manager EOC & Director Central Medical Stores											

Objective		To have an all hazards plan and a system for stockpiling of supply mechanism to foster assess to resources during emergencies that is one health compliant by 2018.							Year of implementation					
		Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed description for (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022
No					Provide contingency fund to Procure and stockpile supplies for use in public health emergencies	National	Supply available in ware houses	a national stockpile of commodities for preparedness	-	1				
					Develop SOP & tools for Quarterly stock checks of stockpiled items workshop (20pax * 2days)	National	Draft SOP and Tools for stock check available	1 Draft SOPs and 3 Tools for stock check available	23 440 000	1				
3	Establish a system for stockpiling of supplies and accessing resources during emergencies.	Incident Manager EOC & Director Central Medical Stores		Consultant National workshop to validate and adapt SOP & tools for Quarterly stock checks of stockpiled items (20pax * 1 day)	National	Finalized SOPs and Tools for stock check available	1 workshop of 20 stakeholders	13 340 000	1					
				Advocate for the establishment of an emergency response fund for the health sector easily accessed during emergencies meeting with Parliamentary Oversight Committee on Health (20 pax * half day)	National	attendance list	1 Advocacy meeting	8 940 000	1					
3	Promotion of lessons learnt from emergency outbreaks/ events			Conduct half yearly simulation exercises (100 pax * 2 days * 2 times 1 national and per district 1	National and subnational	Half yearly simulation exercises conducted	2 simulation exercises	1 265 480 000	1	1	1	1	1	
				Conduct after action review (80 * 1 * 2 times)	National	After action review report	2 after action reviews	129 520 000						

R.1.2 Priority public health risks and resources are mapped and utilized												
JEE Indicator	Conduct risk and resources mapping of all priority public health risks.											
JEE recommendations	To have a comprehensive vulnerability and risk assessment with resource mapping and mobilization for identified hazards by 2019											
Objective	Responsible authority(s) for implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and potential challenges	Estimated cost (Local currency)	JEE Scores 1				
No								2018	2019	2020	2021	2022
Establish a comprehensive risk and resource mapping of priority public health hazards	Incident Manager EOC	Risk profiling done cholera, EVD, Zika and flooding.	Stakeholder mapping and engagement Meeting with key stakeholders (30 pax * 1 day) Workshop to comprehensively list, categorize and prioritize potential hazards that Sierra Leone faces (50 pax * 1 day) Conduct risk profiling and mapping of potential hazards nationally and regionally visitation of sites etc. (80 pax * 3 days * 5 regions) Map resources and identify resource gaps for response to each hazard (visitation of sites etc. (80pax * 3 days * 5 regions) Validation, production and active dissemination of the public health risks and resources mapping document one day seminar (50 pax * 1 day) Print and disseminate document Mobilize resources to address the identified resources gap	National National National & Regional National & Regional National & Regional	Attendance list List of potential hazards available Risk & Potential hazards identified Mapped resources identified dissemination seminar attendance list	30 Stakeholders oriented 1 workshop of 30 stakeholders risk mapping in 4 regions resource mapping in 4 regions 50 stakeholders	24 990 000 43 010 000 132 360 000 132 360 000 28 930 000 10 000 000	1				

Technical Area		Respond 2 Emergency Response Operations											
JEE Indicator		R.2.1 Capacity to Activate Emergency Operations											
JEE recommendations		1. Increased training and retention of surge capacity staff in emergency response operations competencies 2. Government ownership as demonstrated by dedicated budgetary support to ensure sustainable funding and authority to the national EOC to mobilize resources required for response											
Objective		To have a Surge capacity staff available and increase the proportion of EOC operations budget for preparedness and response at various levels supported through core government funding to 50% by 2018.											
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets	Estimated cost (Local currency)	2018	2019	2020	2021	2022
1	Capacity building for surge personnel	Incident Manager EOC	REDISSE, in part	<p>Create and Maintain a database of surge staff</p> <p>Training of trainers workshop for surge personnel on emergency response operation competencies (TOT) (10 pax per district * 3days * 16 districts)</p> <p>Cascade Training of surge personnel on emergency response operation competencies (100 pax per district * 2 days * 16 districts)</p> <p>Support Surge personnel with allowances during emergency operations (100 pax * 2 events per year * 14 days)</p> <p>Develop and Produce training Materials (Memory sticks - 160, booklets - 1800, Visual aides - 1800, Assorted stationeries) Consultant 5 days</p>	National	Data base for Surge staff available		226 780 000	1				
					National	160 Master trainers trained	160	622 480 000	1				
					Sub National	1600 Surge personnel trained	1600	1 779 200 000	1				
					National and Subnational	Logistics support available for surge staff		522 900 000	1				
					National	Training materials produced		30 061 500	1				

R.2.2 Emergency Operations Centre Operating Procedures and Plan														
JEE Indicator		Finalize key SOPs for EOC functions 2. Support capacity development in human and animal health epidemiology								JEE Scores 3				
JEE recommendations**		Put in place SOPs for EOC emergency operation functions by 2018, 2. To have epidemiology capacity in both animal and human health by 2018								Year of implementation				
Objective	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets	Estimated cost (Local currency)	2018	2019	2020	2021	2022	
1	Strengthen procedures and plans for EOC emergency operation functions	Incident Manager EOC	PHE, WHO, CDC	Review EOC SOPs to align with one health initiative (20 pax * 3 days) Print 60 Copies of SOPs aligned with one health Workshop for consolidation of the Emergency Operation Centre SOPs (20 pax * 2 days) Validation of SOPs (20 pax * 1 day) Printing and dissemination of Finalized copies of SOPs (1000 copies) Conduct Simulation exercises (1 quarterly * 4 x 100 pax) Develop SOPs to formalize information sharing between animal and human health (20 pax * 4 days)	National National National National National National and Sub National	SOPs aligned and review 60 copies of assorted SOPs printed SOPs Consolidated SoPs validated 1000 finalized SOPs printed Four simulation Exercises conducted SOPs available	60 20 1000 4 simulation exercises 20 Participants, SOPs	34 040 000 1 200 000 23 940 000 13 840 000 20 000 000 974 900 000 46 565 000	1 1 1 1 1 1 1					
2	Build epidemiology capacity of human and animal health personnel	Secretariat Lead One Health	FEETP now has vet officers	Training of Human and Animal health staff on basic epidemiology . No cost, already captured in Workforce development Training of Rapid Response Teams on One health approach (12 pax * 17 * 5 days * 1)	National, National and Sub National	personnel trained 204 personnel trained	Refer to Workforce development 204	- 1 053 048 000	1 1 1 1					

Objective		Put in place SOPs for EoC emergency operation functions by 2018, 2. To have epidemiology capacity in both animal and human health by 2018						Year of implementation						
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets	Estimated cost (Local currency)	2018	2019	2020	2021	2022	
	Build epidemiology capacity of human and animal health personnel	Secretariat Lead One Health	FETP now has vet officers	Conduct joint outbreak investigations with Animal and human health teams (Launch allowance for 5 pax * 16 districts * 3 suspected outbreaks per quarter * 4) Conduct after action review (80 * 1 * 1 times)	National and Sub National	192 suspected Outbreaks investigations conducted.	192 investigations	2 275 200 000	1	1	1	1	1	
JEE Indicator														
R.2.3 Emergency Operations Program														
JEE recommendations**														
**Develop curriculum and institutionalized EOC and simulation training programmes.														
Objective														
Strengthen EOC Emergency response operations by 2018														
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets	Estimated cost (Local currency)	2018	2019	2020	2021	2022	
		Develop a curriculum for training of EOC staff to respond to PHE	Incident Manager EOC	Curriculum development (hiring of 1 consultant * 3 months) workshop for adaption and validation of the curriculum (20 participants * 1 day) Printing of finalized curriculum (100 copies) Training of EOC staff on simulation exercise (1 training quarterly for 1 day * 4 * 170 district staff) Trained staff develop scenarios and carryout table top / simulation exercises (40 pax * 1 day * 2 times a year)	National National National and Sub National National and Sub National	Consultant hired, Draft curriculum available Validated Curriculum available 100 printed copies available Four Simulation trainings conducted	 20 participants 100 copies 170 staff per Quarter Two table top exercises conducted.	279 888 000 16 265 000 2 500 000 607 240 000 64 960 000	1 1 1 1 1					

JEE recommendations**										JEE Scores 4					
Strengthen EOC Emergency response operations by 2018										Year of implementation					
Objective	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets	Estimated cost (Local currency)			2018	2019	2020	2021	2022
No		Develop a curriculum for training of EOC staff to respond to PHE	Incident Manager EOC	Procure 20 motor-bikes for national and districts EOC operations Fuel running costs for 10 vehicles (20 * 480 L * 4) Fuel costs for 20 motorbikes (20 * 180 L * 4) Vehicle maintenance (20 * 1.000.000 * 12) Motorbike maintenance	National and Sub National	20 motor-bikes procured	20 motor-bikes	882 000 000		1					
								230 400 000		1	1	1	1	1	1
								86 400 000		1	1	1	1	1	1
								240 000 000		1	1	1	1	1	1
								72 000 000		1	1	1	1	1	1
JEE Indicator										JEE Scores 4					
R.2.4 Case management procedures are implemented for IHR relevant hazards										Year of implementation					
Objective	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets	Estimated cost (Local currency)			2018	2019	2020	2021	2022
No	Develop national case management guidelines for priority diseases	Incident Manager EOC	clinicians trainings for surveillance	Workshops for development of case management guidelines for priority diseases and events (workshops * 30 pax * 2 days) Adaptation and finalization of case management guidelines for epidemic prone diseases (30 participants * 1 day) Printing and dissemination of the case management guidelines (7 different guidelines * 500 copies)	National	attendance list	3 workshops 30 participants	124 860 000		1					
								15 810 000		1					
								87 500 000		1					

Objective		To establish case management guidelines for priority diseases (Cholera, Ebola, Lassa Fever, Yellow fever, Measles) and events (flooding & Chemical spills) by 2018						Year of implementation					
		Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed description for (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets	Estimated cost (Local currency)	2018	2019	2020	2021
No				<p>Training of trainers on case management guidelines on priority diseases and events (5 pax * 17 * 3 days)</p> <p>Cascading training for Multisectoral personnel on case management guidelines for priority diseases and events (120 pax * 16 * 2 days yearly)</p>	National and subnational	Report of training available	85 personnel	196 930 000	1				
			<p>workshops for development of SOPs for the management and transport of potentially infected persons at PoEs (40 pax * 2 days)</p>	National	Workshop report available	40 personnel	31 580 000	1					
	Develop SOPs for the management and transport of potentially infected persons	Incident Manager EOC		<p>Adaption and validation of SOPs for the management and transport of potentially infected patients at PoEs (40 pax * 2 days)</p> <p>Printing and dissemination of SOPs for the management and transport of potentially infected patients at PoEs (1* 500 copies)</p>	National	SOPs adapted and validated	40 personnel	30 515 000	1				
					National	Copies Printed and disseminated	500 copies	12 500 000		1			

Respond 3 Linking Public Health and Security Authorities												
R.3.1 Public Health and Security Authorities, (e.g. Law Enforcement, Border Control, Customs) are linked during a suspect or confirmed biological event												
To strengthen coordination, collaboration and joint planning between public health and security authorities in response to emergencies by 2022												
To have an all hazards plan and a system for stockpiling of supply mechanism to foster assess to resources during emergencies that is one health compliant by 2018.												
JEE Indicator	JEE Scores 4											
JEE recommendations	Year of implementation											
Objective												
Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities for (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022
Build capacity for coordination and collaboration between human health, animal health and collaboration between public health and security authorities at PoEs			Consultative meeting and appointment of point of contacts from Human Health, Animal Health and security authorities (60 pax * 1 day)	National	Consultative meeting held and appointment of contact point	List of contact point Competing priorities and Funding	40 260 000	1				
			Workshop for Memorandum of Understanding development (MOU) and guidelines between public health and security authorities (40 pax * 3 days * 1 session)	National	Draft MOU and guidelines developed	1 MOU and 1 guidelines Competing priorities and Funding	47 805 000	1				
			meeting for adaptation and validation of MOU and guidelines (40 pax * 2 day)	Sub National	Validated MOU and guidelines available	1 validated MOU and Guidelines Competing priorities and Funding	34 005 000	1				
			Printing of finalized MOU and guidelines (500 copies * 2)	National	copies of MOU printed	500 copies Funding	500 000	1				
			Conduct joint training programme on MOU and guidelines for Human Health, Animal Health and security authorities (60 pax * 3days * 1 times)	National	Report on training available.	60 participants Funding	98 300 000		1			
			Quarterly review meeting to discuss issues and events of joint concern between public health and security authority (60pax * 2days)	National	Reports of quarterly review meeting available	4 Reports Funding	491 760 000	1	1	1	1	1

Technical Area		Respond 4 Medical Countermeasures and Personnel Deployment											
JEE Indicator		R.4.1 System is in place for sending and receiving medical countermeasures during a public health emergency											
JEE recommendations		JEE Scores 2											
Objective		A one-health compliant strategic national stockpiling system of medical commodities for use in public health emergencies is established in Sierra Leone by 2020											
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022
	Support the development of MOUs with manufacturers and suppliers of medical countermeasures for public health emergencies	CMO		Enlist the services of a legal consultant to draw up MOUs (1pax * 1 month) Workshop for adaptation and validation of MOUs (40 pax * 2days) Printing and dissemination of MOUs (500 copies) one day symposium with suppliers of medical commodities (30 pax * 1 day)	National	MOU developed	1 Draft MOU Breach of Contract by MoHS or manufacturers	98 196 000		1	1		
	Establish regulations for vetting donations of medical supplies to align with pharmacy board requirement	CMO		Meeting of technical working group to develop regulations for vetting donations (10 pax * 3 days * 3 meetings) Publish the regulations in print media (newspaper advertisements 3 times * 2 daillies)	National	regulations for vetting donations. attendance list Newspaper adverts	10 participants, relugation Competing priorities 6 newspaper adverts Funding gaps	62 010 000		1			

A one-health compliant strategic national stockpiling system of medical commodities for use in public health emergencies is established in Sierra Leone by 2020									
Objective	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed description for (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and potential challenges	Estimated cost (Local currency)	Year of implementation
No				National and Regional simulation exercise to practice deployment and receipt of medical countermeasures (25 pax * 4 days * 1)	National	simulation exercises conducted	1 simulation exercise per year Funding gaps	67 920 000	2018 1 2019 1 2020 1 2021 1 2022 1
	Develop or update plans to direct the procurement, distribution and utilization of medical and veterinary Countermeasures .	CMO and CAO		workshop to develop a plan that directs procurement, distribution and utilization of medical countermeasures (40 pax * 3 days)	National	Workshop conducted and reports available	1 workshop Funding gaps	62 320 000	1
				Workshop to Review and validation of plan (20 pax * 2 days)	National	Plan validated and reports available	1 plan Funding gaps	36 465 000	1
				Printing and dissemination of the plan (100 copies)	National	plan printed and validated	100 copies of plan Funding gaps	1 500 000	1
JEE Indicator	R.4.2 System is in place for sending and receiving health personnel during a public health emergency								
JEE recommendations	Develop or update plans for sending and receiving health personnel during a public health emergency								
Objective	Establish a system for sending and receiving health and veterinary personnel during a public health emergency								
No	Empower health professionals' regulatory bodies to issue temporary licences and perform background checks on foreign professionals and volunteers.	CMO	None	workshop to prepare contents for a Bill to enact subsidiary legislation on licensing of medical, public health and veterinary personnel to cover temporary licensing (30 pax * 2 days) workshop to develop policies on the hiring of foreign professionals and volunteers for emergency response activities (40 pax * 3 days * 2 times)	National	Revised Health Workers Licensing regulations	30 Participants delays in AG office and parliament	56 650 000	2018 1 2019 1 2020 2021 2022
								R 124 640 000	1

Establish a system for sending and receiving health and veterinary personnel during a public health emergency										Year of implementation			
Objective	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022
No	Maintain data base of trained health and veterinary personnel who are willing to be deployed externally	HRMO (Health)		Create and Maintain a database of personnel that can be deployed externally	National	Database of personnel that can be deployed externally	1 database frequently changing contacts of personnel	35 280 000	1				
	Develop a national deployment plan for response workers (Health and Veterinary) during public health emergencies			Hire an international consultant for drafting the deployment plan for public health emergencies (1 consultant * 4 months) Workshop on review and validation of the national deployment plan (30 pax * 2 days) Printing of the deployment plan (200 copies)	National	consultant hired	1 consultant Funding	370 734 000		1			
					National	Validated deployment plan	1 validated plan Funding	41 620 000			1		
					National	printed copies of deployment plan	200 copies Funding	5 000 000		1			
Respond 5 Risk Communication													
JEE Indicator	R.5.1 Risk Communication Systems (plans, mechanisms, etc.)												
JEE recommendations	1. Finalize the draft EOC communications strategic plan. 2. Develop a training plan to meet the capacity gaps in risk communication												
Objective	To finalize EOC communications strategic plan, review Media and Communications SOPs and strengthen capacity of Risk Communicators												
Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets	Estimated cost (Local currency)	2018	2019	2020	2021	2022	
Finalize the EOC communications strategic plan.	EOC Communications Lead	Media and Communication SOP is available	Workshop for expert to review existing Media and Communications SOPs (40 multisectorial participants*2days*3) 30 away 5 cars	National	Availability of Revised SOP	120 Participants	196 515 000	1		1		1	
	EOC Communications Lead	Draft PHEOC communications strategic plan,	experts workshop to validate the Plan (40 participants*2 day) 30 away 5 cars	National	Plan validated	40 Participants	65 505 000	1					

Objective		To finalize EOC communications strategic plan, review Media and Communications SOPs and strengthen capacity of Risk Communicators							Year of implementation				
		Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities for (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets	Estimated cost (Local currency)	2018	2019	2020	2021
No	Finalize the EOC communications strategic plan.	EOC Communications Lead	Validated PHEOC communications strategic plan	Launch and dissemination of the approved PHEOC communications strategic plan(100 participants*1 day) 80 away 16 cars	National	Report	100 Participants	110 460 000	1				
			Monitoring of the Risk Comms plan	External evaluation of the effectiveness of the Risk Comms Plan *Recruit evaluation team *3 months	National	Evaluation Report	5	312 900 000		1			
			Review evaluation report	Workshop for expert to review findings of the evaluation and determine next steps *40 participants *2days 16 away	National	report	40 Participants	45 440 000		1			
No	Build human capacity in risk communication	EOC Communications Lead	Draft PHEOC communications strategic plan	meeting to identify and develop cross-sectoral training needs and draft training plan for risk communications (30 pax*1 day meeting x 5) 16 away	National	Plan developed	30 participants	132 950 000	1	1	1	1	1
				Workshop to develop and validate training materials (30 pax*4 days meeting*5) 20 away	National	Plan developed and validated	30 participants	394 800 000	1	1	1	1	1
				Refresher training of personnel on risks communication reflecting the one health approach, including simulation exercise (40 pax * 5 days * 2) 20 away	National	Personnel trained	40 participants	104 480 000		1			

To finalize EOC communications strategic plan, review Media and Communications SOPs and strengthen capacity of Risk Communicators									
Objective	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed description for (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets	Estimated cost (Local currency)	Year of implementation
No	Build human capacity in risk communication	EOC Communications Lead	Draft PHEOC communications strategic plan	Training of 30 journalists for responsible reporting on public health risks & One Health, including representatives from main regional outlets & site visit (4 days); certificates; printing of materials; award for best health reporting (?) (30pax*4days* 4 locations)-(1 consultant media trainer fees* 30 days) 60 away 4 cars	National and Sub-National	Reporters trained; media monitoring	124 journalists	1 820 800 000	2018 1 2020 1 2021 1 2022
JEE Indicator R.5.2 Internal and Partner Communication and Coordination JEE recommendations Establish a formal mechanism to coordinate communication with the private sector during an emergency. JEE Scores 4 Objective To develop formal mechanism to coordinate communication with the private sector and other stakeholders during an emergency									
1	Develop formal mechanism to coordinate communication with the private sector during an emergency	EOC Management, EOC Communications Lead, ONS	None	Workshop for validation and adaptation of the MOU (40 pax * 1 day * 4 locations) Workshop to review MOU (25 pax * 2 days * 4 locations)	National and sub- national	MOU and SOP developed; number of private sector actors engaged	25 participants	158 840 000	2018 1 2020 1 2021 1 2022

Objective		To develop formal mechanism to coordinate communication with the private sector and other stakeholders during an emergency						Year of implementation				
Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets	Estimated cost (Local currency)	2018	2019	2020	2021	2022
2 Sustain regular communications with partners	EOC Communications Lead		Production and dissemination of MOU (1000 copies) Quarterly newsletter is produced and disseminated (printing of 150 newsletters x 4 quarters)	National	Copies printed and received	100 copies	30 000 000	1		1		1
	EOC Management		Quarterly coordination meetings held involving health, agriculture, ONS, EPA, environmental partners etc (30pax*12 meetings)	National	Quarterly newsletter produced and disseminated	600 newsletters	3 000 000	1	1	1	1	1
2 Sustain regular communications with partners	EOC Management, ONS	Draft EOC communications strategic plan	Simulation exercise is held involving the private sector actors	National and sub- national	Regular simulation exercises; private sector participation	4 meetings per year	484 320 000	1	1	1	1	1
	EOC Communications Lead, district focal persons		Database of contacts of institutions and individuals key to public communications during management of public health emergencies is sustained and updated	National	Frequency of updates to contact lists	4 updates annually	67 050 000	1	1	1	1	1
JEE Indicator		R.5.3 Public Communication										
JEE recommendations		Sustain feedback loops between district teams and communities within localities										
Objective		To have risk communications focal persons in each district by 2018 (health sector) that will serve as communication link between the district and the community										
Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets	Estimated cost (Local currency)	2018	2019	2020	2021	2022
Capacity building for risk communication in the districts	EOC Communications Lead	Draft EOC communications strategic plan	workshop to develop ToRs for district focal persons (20pax*1 day)	National	ToRs developed	20 participants	24 620 000	1				
			Training/ refresher training of focal persons on risk communication (35 pax * 5 days * 2 locations)	National	Focal persons trained	75 focal persons	249 990 000	1		1		

Objective		To have risk communications focal persons in each district by 2018 (health sector) that will serve as communication link between the district and the community							Year of implementation				
		Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed description for (input activities for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets	Estimated cost (Local currency)	2018	2019	2020	2021
No	Capacity building for risk communication in the districts	EOC Communications Lead	Draft EOC communications strategic plan	Provision of mobile phones with CUG @20k per month connectivity for exchange of information between relevant stakeholders (75)	National	Mobile with CUGs provided	75 mobile phones	18 000 000	1	1	1	1	1
		District focal persons	Draft EOC communications strategic plan, risk matrixes	Workshop to develop district specific risk comms plans and messaging, (15 pax * 3 days*16 districts)	sub-National	Comms plan in place	240 participants	510 000 000	1		1		
No	Community engagement meetings	EOC Communications Lead, district focal persons, social mob	Draft EOC communications strategic plan	Transport and subsistence for twice monthly community engagement meetings by risk communications focal persons (60 pax * 2 * 12 months)	sub-National	community engagement meetings held	1440 community engagement meetings	57 600 000	1	1	1	1	1
		EOC Communications Lead, district focal persons	Draft EOC communications strategic plan	Quarterly media briefings nationally and districts (40 journalists national level, 20 in the districts) - transport refund: airtime for coordination; printing costs (100 journalists *1 day)	National, sub-National	Number of media briefings	340 journalists per year	106 950 000	1	1	1	1	1

Objective		To have risk communications focal persons in each district by 2018 (health sector) that will serve as communication link between the district and the community						Year of implementation					
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed description for (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets	Estimated cost (Local currency)	2018	2019	2020	2021	2022
	Develop messaging and materials for risk communication	EOC Communications Lead, MAF	Draft EOC communications strategic plan, risk matrix	Public relations: TV programs, radio discussions (National 2 TV programs per month @ 3Mio x 12 months, 5 Radio discussions @ 1Mio per month x 12 months and 1 regional TV programs per @ 3Mio 5 regions and 4 Radio programs @ 1 Mio per 16 districts) + (120 radio programs)	National, regional/ districts	Media engagement sessions	216 TV programs, 828 radio programs for year	331 000 000	1	1	1	1	1
				Develop inventory of risk communication materials national wide	National and sub-national	Inventory data base in place		14 900 000	1	1	1	1	1
				Review existing materials half yearly	National and sub-national	Risk comm materials developed	30 participants	56 650 000	1				
JEE Indicator R.5.4 Communication Engagement with Affected Communities													
JEE recommendations		Allocate a dedicated budget line in with MOHS and MAF for addressing risk communications response											
Objective		To establish a dedicated budget line by 2018 for addressing risk communications response in MoHS & MAF											
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed description for (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets	Estimated cost (Local currency)	2018	2019	2020	2021	2022
	Create a dedicated budget line for addressing risk communications response in MoHS & MAF	Financial directors (MOHS & MAF)		Advocacy and management meetings to establish budget line for risk communication (30 pax * 2 days)	National	Budget line created	30 participants	41 620 000	1	1	1	1	1
	Local level engagement	DEOC, MAF, ONS		Local level engagement using existing community structures to facilitate feedback mechanisms (30 pax * 16 districts * 4 yearly)	District	Reports	64 Meeting	160 940 000	1	1	1	1	1

JEE Indicator														
R.5.5 Dynamic Listening and Rumour Management														
*** Methods for effective monitoring of messages used to disprove rumours or correct information should be put in place.														
Objective														
To enhance MoHS capacity to disapprove rumour during public health emergencies														
JEE Scores 3														
Year of implementation														
2018														
2019														
2020														
2021														
2022														
No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets	Estimated cost (Local currency)	2018	2019				
			EOC Communications Lead	Media monitoring: Buy local news papers(10 news papers * 293 days + Subscription for DSTV * 12 months + Dongle Subscription * 3 modems * 12 months) + (Dongle Subscription * 16 modems for districts * 12 months	National	Media mpnitored	2930 newspapers, 12 DSTV subscriptions, 228 internet dongle subscriptions for year	111 750 000	1					
			EOC Communications Lead, district focal persons	Whatsapp groups established with district colleagues to share information, messages, materials and report rumours	National, district	Number of relevant participants/posts in Whatsapp groups	all risk communications staff in whatsapp group	-	1					
	Establish methods to give sound , accurate and timely information to prevent and counter rumours		EOC Communications Lead, district focal persons	117 marketing and promotion including radio discussions (nationally and in the districts); 1 jingles; 5000 posters, 18 Bill boards (10 jingle slots per month* 2 radio stations*12 months *16 districts)	National, district	Number of radio discussions; airtime	2 Jingles, A3 2000 posters , 18 Bill Boards, 384 jingles	223 500 000						
			EOC Communications Lead	Annual hosting and maintenance of Website	National	Functioning website; usership	1 website	18 625 000		1	1	1		
			EOC Communications Lead, MAF	Ensure timely updates on social media (Whatsapp and facebook) to counter rumours and share public health information	National	Frequency of social media posts		14 900 000						
			EOC Communications Lead	Nation wide media survey (2 Teams of 3 staff for 14 days)	National, district		2 participants	59 500 000	1					

Technical Area		PoE.1 Points of Entry					JEE Scores 2					
JEE Indicator		JEE Scores 1										
JEE recommendations		JEE Scores 1										
Objective		Detailed activities (input description for costing)										
Detailed activities (input description for costing)		Year of implementation										
Summary of Planned Activities at National Level (Strategic actions)		Year of implementation										
No	Summary of Planned Activities at National Level (Strategic actions)	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitor Targets and potential challenges Monitoring and Evaluation)	Targets	Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022
		<ol style="list-style-type: none"> Develop policy, SOPs, guidelines and plans for port health. Conduct capacity assessments at major border crossings and establish PoEs for their designation Establish or strengthen routine inspection programmes at PoEs with 24 hour appropriate services. Finalize the national aviation public health emergency preparedness plan 										
	Develop/review Policy for Port health services	Assess existing Policies, plans, frameworks, guidelines (45*2 days*1 time)	National	Meeting report	1 meeting report	Knowledge of existing policies	64 990 000	1				
		Draft policy for port health services (20*3*1 meeting)	National	Meeting report	1 draft Port health policy	Commitment issues.	62 810 000	1				
		Meetings to advocate for cabinet approval (zero cost, 2 meetings)	National	Number of advocacy meeting held	2 Advocacy meetings	Cabinet priorities	-	1				
		Sensitize stakeholders on policy (50Pax*1 day*3 meetings)	National	number of people sensitized	150		132 750 000	1				
		Awareness through electronic media (40 Radio@ 1mio and 10 TV @ 3Mio total 50 sessions) for 5 Years	National	Number media adverts	50 Adverts		70 000 000	1	1	1	1	1
		Awareness through print media (5 sessions)	National	Number of media appearances	5 media appearances		14 900 000	1				
		Hire 1 international consultants for three (3) months	National	Number of consultants hired	2 contracts signed	Time frame of engagement	279 888 000	1				
		Hire 1 national consultants for three (3) months					35 280 000	1				
		Stakeholders Consultation meetings to develop and review SP (80*3 days*4 meetings with 3 of them residential)	National	Meeting report	4 meeting reports and draft plans	Funding	737 940 000	1				
		Validation Workshop (80*1 day*1 meeting)	National	1. National SP 2. Meeting reports	1 strategic plan	Funding	136 405 000	1	1			
	Sensitize personnel on the SP (50*2days*4 sessions, 3 of them residential)	National	Number of people sensitized	200 people sensitized	Funding	66 900 000	1					
	Hold annual M & E meetings (60 Pax*3 days*5 years)	National	Meeting reports	5	Funding	88 445 000	1	1	1	1	1	

Objective	Detailed activities (input description for costing)						Year of implementation					
	Summary of Planned Activities at National Level (Strategic actions)	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitor Targets and potential challenges Monitoring and Evaluation)	Targets	Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022
No	Develop framework, SOPs, guidelines and tools for border health	Workshop to develop draft framework, SOPs, guidelines and tools for border health (50Px*3days*3 meetings all residential)	National	Meeting reports	3		271 425 000	1				
		Validate framework, SOPs, guidelines and reporting tools for border health (50Px*1day*1 meeting)	National	Meeting report	1		44 250 000	1				
		Sensitize personnel working at PoEs on framework, SOPs, guidelines and reporting tools (50Px*2days*3 meetings, 2 of them residential)	National Sub-national	Meeting reports	3		270 915 000	1	1			
		Conduct assessment of existing infrastructure (8Pax*6 days*1 time)	Sub-national	Assessment report	1		29 100 000	1				
		Prepare and disseminate report with recommendations on infrastructure needs at PoEs	National	Assessment report	1		150 000	1				
		Meeting to mobilize resources to address infrastructure gaps (60Pax*1day*1time)	National	Meeting report	1	Partner interest	16 820 000	1				
		Build /rehabilitate infrastructure for the 9 major POEs (20.000.000 each)	Sub-national	Number of PoEs build/rehabilitated	9	Funding	335 250 000	1	1	1	1	
		Build animal holding facilities in 3 PoEs	Sub-national	Number of animal holding facilities	3	Funding	37 250 000	1	1	1	1	
		Procure furniture for 9 major POEs	Sub-national	Number of PoEs furnished	9	Funding	67 050 000	1	1	1	1	
		Procure equipment for 9 major POES	Sub-national	Number of PoEs furnished	9	Funding	119 200 000	1	1	1	1	
	Establish three (3) holding facilities at FNA, Gbalamuya and Jendema	Sub-national	Number of holding facilities established	3	Funding	117 750 000	1	1	1	1		
	Procure 10 vehicles for PoEs	National	Number of motor vehicles procured	10	Funding, Maintenance	3 114 100 000	1	1				
	Procure 20 motorcycles for PoEs	National	Number of motorcycles procured	20	Funding, Maintenance	320 350 000	1	1				

Objective	Detailed activities (input description for costing)						Year of implementation							
	Summary of Planned Activities at National Level (Strategic actions)	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitor Targets and potential challenges Monitoring and Evaluation)	Targets	Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022		
No	Strengthen infrastructure for routine services at PoEs	Supply cold chain system to 4 PoEs (4 fridges)	Sub-national	Number of PoEs equipped with cold chain facilities	4	funding / maintenance	18 625 000	1						
		Supply yellow fever vaccines to 5 PoEs (Through out the five years)	Sub-national	Number of PoEs stocked with yellow fever vaccine	5		-	1						
		Procure 2 computers each of 6 PoEs	National	Number of computers procured	12			89 400 000	1					
		Procure 1 printer for each of 6 PoEs	National	Number of printers procured	6			14 900 000	1					
		Procure PoE equipments						149 000 000	1					
		Establish Closed User Group for PoE personnel (200 users) to facilitate reporting and communication	National and sub-national	Number of personnel on CUG	200			44 775 000	1					
		Recruit and deploy 27 port health staff for the 9 major POES (3 per PoE)	National	Number of port health staff recruited and deployed	27		1. Public service recruitment freeze 2. Funding	324 000 000	1	1	1			
		Conduct training for 60 POE staff every year (60Pax*3days*5years)	National	Number of personnel trained	300			141 420 000	1	1	1	1	1	1
		Conduct exchange visits with other POEs outside Sierra Leone to learn best practices (2 Pax yearly*5years)	National and sub-national	Number of personnel visiting	10			36 750 000	1	1	1	1	1	1
		Build technical capacity for port health services	Sub-national	Number of PoEs supervised	45			174 600 000	1	1	1	1	1	1
Cross boarder engagement for information sharing, joint out break response and planning	Meetings to review implementation of border health activities quarterly (60Pax *3days*4quarters*5years)	National	Number of review meetings held	20			473 280 000	1	1	1	1	1		
	Train 20 para veterinary officers for 3 months each.	National	Number of review meetings held	20	Funding	1 514 050 000	1	1	1	1	1	1		
	Hold regional cross-board meetings within MRU countries to develop structure for cross-border collaboration in health (75Pax*5 days*3 meetings).	National	Number of regional cross- border meeting held	3		1. MRU member states will prioritize this activity. 2. Language differences	189 775 000	1	1					

Objective	Detailed activities (input, description for costing)							Year of implementation				
	Summary of Planned Activities at National Level (Strategic actions)	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitor Targets and potential challenges Monitoring and Evaluation)	Targets	Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022
No		Meeting to develop an MOU for cross boarder engagement with MRU countries (75Pax*5 days*1 meeting)	National	"1. MOU developed 2. Meeting report"	1 MOU developed	Cooperation by member states	95 275 000	1	1			
		Hold annual regional cross board meetings within MRU countries. (75Pax*3 days*4 meetings)	National	Number of Meeting held	4	Cooperation by member states	374 100 000	1	1	1	1	
		Conduct a health service availability inventory and capacity assessment between cross boarder districts in MRU countries. (12Pax*12days)	Sub-national	Assessment of health service availability in MRU countries	1 assessment report	Cooperation by member states	90 300 000	1	1			
		Adapt/revise MOU between the seven boarder districts with their counterparts in Guinea and Liberia (30Pax*2 days meetings per district for 7 districts)	Sub-national	Number of districts with revised MOUs	7	Cooperation by member states	269 360 000	1				
		Develop Framework for cross-border collaboration (60*5days*2 meetings)	National	"1. Meeting report 2. Draft framework"	1 draft framework		352 950 000	1				
		Validate framework for cross-border collaboration (60Pax1 day*1 meeting)	National	"1. Meeting report 2. Finalised framework"	1 framework		60 920 000	1				
		Hold cross boarder surveillance coordination meetings in 7 districts quarterly (20Pax*2 days*28 meetings*5 years)	Sub-national	Number of quarterly meetings held	140 meetings		932 820 000	1	1	1	1	
		Train cross boarder collaboration committees on SOP, Tools, framework etc. (40Pax*4days*5 trainings)	Sub-national	Number of persons trained	200		325 050 000	1				

JEE Indicator		PoE.2					JEE Scores 1					
JEE recommendations												
Objective												
No	Summary of Planned Activities at National Level (Strategic actions)	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitor Targets and potential challenges Monitoring and Evaluation)	Targets	Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022
	Develop a national public health Emergency Contingency Plan (PHECP) for emergencies at PoEs	Meeting of stakeholders to establish status of existing plans and the need for new plans. (75Pax*3days)	National	Meeting report	1 meeting report	Knowledge of existing plans	149 850 000	1				
		Meetings for the drafting and reviewing the national PoEs PHECP (75Pax*5days*3 meetings)	National	1. Meeting reports 2. Draft national PHECP	1 draft national POE PHECP		571 845 000	1	1			
		Meeting to validate the national PoEs PHECP (75Pax*1day)	National	1. Meeting reports 2. Final national PHECP	1 final national PoEs PHECP		63 875 000		1			
		"Validate the Freetown International Air Port public health emergency response plan (75Pax*2 days) possibility to join with above (validate the national PoEs PHECP)"	National	1. Meeting report 2. Final plan	1 final plan		95 350 000	1	1			
		Dessiminate the national PoEs PHECP (30Pax*2 days*5 meetings)	National and sub-national	Number of people sensitized	150		170 300 000	1	1			
		Develop draft PoEs specific public health emergency response plans for 4 PoEs (40Pax*5days*2 meetings*4 PoEs)	Sub-national	1. Meeting reports 2. Draft plans	4 draft plans		253 470 000	1	1			
		Validate draft PoEs specific public health emergency response plans for 4 PoEs (40Pax*1days*4 PoEs)	Sub-national	1. Meeting reports 2. PoE finalised plans	4 PoEs finalised plans		129 920 000	1	1			
		Sensitize stakeholders on the PoE specific public health emergency response plans (100 Pax*1 day*4 districts)	Sub-national	1. Meeting reports 2. Number of people sensitized	400 people sensitised		257 200 000	1	1			
		Develop SOPs for POEs public health emergency response plan (40Pax*3 days*1 meetings)	Sub-national	1. Number Meeting 2. Developed SOPs	1 SOPs developed		86 960 000	1	1			

Objective		Year of implementation					
Summary of Planned Activities at National Level (Strategic actions)	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitor Targets and potential challenges Monitoring and Evaluation)	Targets	Comments or Potential challenges	Estimated cost (Local currency)	
No	Strengthen capacity for responding to public health emergencies at PoEs	Sensitize PoE staff (including other govt sectors) on public health emergency response plan/SOP (40Pax*2 days*5 meetings) Train personnel working at PoE and clinical staff from selected health facilities on EPR (50 Pax*3days*5 meetings) Conduct one simulation exercise biannually (80Pax*3 days*10 SIMEX)	Number of sensitized personnel Number of personnel train on EPR Number of simulation exercises conducted	200 250 10		315 400 000 463 150 000 1 296 600 000	
Technical Area							
Other IHR & PoE Chemical Events							
JEE Indicator							
CE.1 Mechanisms are established and functioning for detecting and responding to chemical events or emergencies							
<p>1. Develop comprehensive guidelines or manuals on surveillance, assessment and management of chemical events to support the implementation of the strategic plan for chemical safety.</p> <p>2. Establish a coordination mechanism nationally and at regional and district levels for the detection and response to chemical events and emergencies, to include a public health plan for chemical incidents and emergencies.</p> <p>3. Advocate for an increase in the number of human resources to meet the needs of chemical safety.</p> <p>4. Establish a national environmental quality laboratory system</p> <p>5. Establish poisons center</p>							
JEE Scores 2							
Objective		To establish a national chemical surveillance and response system in real time reporting at 50% by 2022					
Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and Comments or Potential challenges	Estimated cost (Local currency)
No	EPA-SL	Review and Update of the National Implementation Plan of the Stockholm Convention	Procure 2 equipped Mobile chemical monitoring laboratories (Caravan trail).	National/Sub-national	# of mobile chemical laboratories	funds, Political stability, maintenance and repairs	8 085 000 000
		<p>Strengthen the capacity to monitor chemicals in air, water, waste water, soil, sediments, human and Plant specimen and products for purposes of compliance of promotion, research, and enforcement by 2021</p>					
		<p>2018 1</p> <p>2019 1</p> <p>2020 1</p> <p>2021 1</p> <p>2022 1</p>					

Objective		To establish a national chemical surveillance and response system in real time reporting at 50% by 2022								Year of implementation				
		Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022
No	Strengthen the capacity to monitor chemicals in air, water, waste water, soil, sediments, human and plant specimen and products for purposes of compliance promotion, research, and enforcement by 2021	EPA-SL	Minamata Initial Assessment and National Action Plan for the Artisanal and Small Scale Gold mining Minamata Initial Assessment and National Action Plan for the Artisanal and Small Scale Gold mining Minamata Initial Assessment and National Action Plan for the Artisanal and Small Scale Gold mining Training and Awareness raising programs on sound management of Waste Stocking taking exercise of Obsolete pesticides and associated wastes Strategic action Plan (2017-2021) of the Environment Protection Agency (EPA)	Procure 5 hand held portable laboratory field test kits for chemicals in the regions Reagents /Other Consumables Procure 100 complete Personal Protective Equipments (PPEs) Procure 5 motorbikes for monitoring of Chemicals in remote environment Procure and install 15 stationary specialized air monitoring stations for toxic chemicals (POPs, Halogens, Heavy metals, VOCs, Sulphides, GHG etc)	Sub-national Sub-national Sub-national National National National	# of hand held portable laboratory # of Reagents /other consumables # of PPEs procure # of motorbikes # of specialized monitoring stations # of specialized monitoring stations	5 funds, Political stability, maintenance and repairs 6000 funds, Political stability, maintenance and repairs 100 funds, Political stability, maintenance and repairs 5 funds, 15 funds, 15 funds,	147 000 000 22 050 000 3 725 000 000 447 000 000 1 764 000 000 2 205 000 000 5 587 500 000 294 000 000	1					1 1 1 1 1 1 1 1

Objective	To establish a national chemical surveillance and response system in real time reporting at 50% by 2022							Year of implementation						
	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022	
No	Strengthen the capacity to monitor chemicals in air, water, waste water, soil, sediments, human and plant specimen and products for purposes of compliance of promotion, research, and enforcement by 2021	EPA-SL		Procure 5 portable equipment for realtime monitoring of toxic chemicals in Water	National	# of portable equipment	5 funds,	294 000 000	1	1				
				Procure 5 portable equipment for realtime monitoring of toxic chemicals in Soil	National	# of portable equipment	5 funds,	294 000 000	1	1				
				Procure 5 portable equipment for realtime monitoring of toxic chemicals in Sediments	National	# of portable equipment	5 funds,	294 000 000	1	1				
				Procure 5 portable equipment for realtime monitoring of toxic chemicals in Products	National	# of portable equipment	5 funds,	294 000 000	1	1				
				Procure 5 portable equipment for realtime monitoring of toxic chemicals in human specimens	National	# of portable equipment	5 funds,	294 000 000	1	1				
				Procure 5 portable equipment for realtime monitoring of toxic chemicals in plant specimens	National	# of portable equipment	5 funds,	294 000 000	1	1				
				Training of laboratory personnel on the use of specialized testing kits as listed above (25X 3daysX 3 training)	National	Training Report	25 funds,	59 550 000	1	1				
				Training of laboratory personnel on the maintenance of specialized testing kits as listed above (25*3 days:3 trainings)	National	Training Report	25 funds,	178 650 000	1	1				

Objective	To establish a national chemical surveillance and response system in real time reporting at 50% by 2022										Year of implementation				
	No	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022	
		Strengthen the capacity to monitor chemicals in air, water, waste water, soil, sediments, human and Plant specimen and products for purposes of compliance promotion, research, and enforcement by 2021	EPA-SL		Procure and install 5 chemical monitoring database	National	# of database	5 funds,	1 676 250 000	1	1				
						Procure 5000 pieces of specialized noise masks	National	# of nose mask	5000 funds,	558 750 000	1	1			
						Procure 5000 specialized aprons for chemical emergency response	National	# of apron	5000 funds,	558 750 000	1	1			
						Procure 1000 specialized safety shoes for chemical emergency response	National	# of safety shoes	1000 funds,	55 875 000	1	1			
						Procure 1000 of specialized googles for chemical emergency response	National	# of gloves	1000 funds,	31 662 500	1	1			
						Procure 1000 of specialized googles for chemical emergency response	National	# of googles	1000 funds,	39 112 500	1	1			
						Procure 100 of specialized wash chambers for chemical emergency response	National	# of wash chambers	100 funds,	1 676 250 000	1	1			
						ISO 17025 accreditation programs for Chemical laboratory Assessment meeting	National	# of accreditation licences	1 funds,	558 750 000	1	1			
						ISO 17025 accreditation programs for Chemical laboratory Corrective Measures	National	# of accreditation licences	funds,	633 250 000	1	1			
						ISO 17025 accreditation programs for Chemical laboratory Re-Assessment and certification	National	# of accreditation licences	1 funds,	558 750 000	1	1	1	1	

Objective		To establish a national chemical surveillance and response system in real time reporting at 50% by 2022							Year of implementation				
		Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021
No	Promote programmes to develop chemicals-management instruments (national profiles, national implementation plans, national emergency preparedness and response plans).	EPA	Review and Update of the National Implementation Plan of the Stockholm Convention	<p>Training of legal professionals on Chemical prosecutions (40 Pxs* 2days* 5 years)</p> <p>Train laboratory staff on legal implications of sampling, analysis and reporting (25* 2days*5yrs)</p> <p>Hiring of 1 International and 1 national consultants. To conduct consultancy on (1) national profile of Chemicals, (2) develop implementation plans and (3)emergency preparedness and response plans on Chemicals</p>	National	Training Report	5 funds,	50 480 000	1	1			
				<p>1 National Workshop to launch the program (100pxs*1day)</p> <p>2 Stakeholder engagements (Consultations, presentation of draft) at 5 regions. (10 meetings*60pxs*3days*5regions)</p> <p>1 national validation meeting (1meeting*100pxs*2days)</p>	National	workshop report	1 funds,	122 500 000	1	1			
			National consultant 3 - 4 months	<p>2 Stakeholder engagements (Consultations, presentation of draft) at 5 regions. (10 meetings*60pxs*3days*5regions)</p> <p>1 national validation meeting (1meeting*100pxs*2days)</p>	National/Sub-national	Meeting reports	10 funds,	1 203 200 000	1	1			
			Stocking taking exercise of Obsolete pesticides and associated wastes	<p>1 national validation meeting (1meeting*100pxs*2days)</p>	National	meeting report	1 funds,	122 500 000	1	1			
			Strategic action Plan (2017-2021) of the Environment Protection Agency (EPA)	<p>Training of stakeholders in selected district and Chiefdom levels (20 trainings*50pxs*1)</p>	National/Sub-national	Training Reports	20 funds,	53 950 000	1	1			

Objective	To establish a national chemical surveillance and response system in real time reporting at 50% by 2022							Year of implementation						
	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022	
No	Promote chemical exchange information through enhanced networking	EPA	Chemical and Environmental quality excel files exists	1 Simulation annually for emergency preparedness and response plans. Procurement of a server for Chemical Information Exchange Support chemical Information Exchange networking of key stakeholders (MAF, EPA, MTI, MoHS, NRA, NSRPA, ONS) -- Software for communicating date/ information) Training of stakeholders on computerised chemical data sharing and compliance rating of chemicals within the lifecycle. (10 trainings*2days*30pxs) Develop a comprehensive reporting tools to assist industry to provide simplified chemicals information to Government and individual users. Workshop , consultant validation meeting Workshop 30 pers 2 days Validation meeting 60 pers 1 day Support quarterly national meetings TWG on Chemicals management for a period of 3yrs. (16meetings*20pxs*1day)	National/Sub-national National National/Sub-national National/Sub-national National National	Simulation report # of server # of networking Training Reports # Tools Meeting reports	5 funds, 1 funds, 1 funds, 10 funds, 1 funds, 16 funds,	745 000 000 167 625 000 37 250 000 515 100 000 98 196 000 60 235 000 65 720 000 455 840 000	1	1	1	1	1	1

Objective	To establish a national chemical surveillance and response system in real time reporting at 50% by 2022							Year of implementation								
	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022			
Develop Risk assessment and management framework for pollution and chemicals.	EPA			Hiring of 1 International and 1 national consultants	National	# of consultants	2 funds,	325 311 000	1	1	1					
				National consultant 3 - 4 months					41 160 000	1	1	1				
				2 Stakeholder engagements (Consultations, presentation of draft) in 5 regions. (2*60pxs*3days*5)	National/Sub-national	meeting reports	10 funds,	128 020 000	1	1	1	1				
				1 validation meetings (1*80pxs*1day)	National	Meeting report	1 funds,	76 985 000	1	1	1	1				
				Training of Technical Staff on framework implementation. (3days*40pxs*5regions* 10meetings)	National	Training Reports	10 funds,	467 900 000	1	1	1	1				
				Chemical Incidence Surveillance guideline developed and Validated.	National/Sub-national	# of Guidelines	10 funds,	1 203 200 000	1	1	1	1				
				2 Stakeholder engagements (Consultations, presentation of draft) in 5 regions. (2*60pxs*3days*5)												
				Consultant int 60							279 888 000	1	1	1		
				Pollution Incidence Surveillance guideline developed and validated.	National/Sub-national	# of Guidelines	f10 funds,	1 304 450 000	1	1	1	1				
				2 Stakeholder engagements (Consultations, presentation of draft) in 5 regions. (2*60pxs*3days*5)												

Objective	To establish a national chemical surveillance and response system in real time reporting at 50% by 2022							Year of implementation					
	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022
No			Radio discussions and awareness programs on Mercury Waste management and POPs	Hiring of 1 International and 1 national consultants	National	# of consultants	2 funds,	279 888 000	1	1	1		
				National consultant 3 - 4 months				35 280 000	1	1	1		
				2 Stakeholder engagements (Consultations, presentation of draft) at 5 regions. (2* 60pxs*3days*5)	National	meeting reports	10 funds,	1 017 450 000	1	1	1		
	Develop communication framework for pollution and chemicals management	EPA		1 validation meetings (1*80pxs*1day)	National	meeting report	1 funds,	65 720 000	1	1	1		
			Environmental committees exists in local communities	Training of Technical Staff on framework implementation in selected districts and chiefdoms. (2days* 20meetings*40pxs*5regions)	National	Training Report	20 funds,	1 455 600 000	1	1	1		
				Communication guideline developed and validated. 2 Stakeholder engagements (Consultations, presentation of draft) in 5 regions. (2* 60pxs*3days*5)	National	# of Guidelines	10 funds,	1 304 450 000	1	1	1		
	Increase knowledge of Coastal communities on pollution identification and management control. The entire coastline of Sierra Leone	EPA	Coastal Vulnerability assessment study	30 stakeholder workshops on pollution identification and management control for coastline communities in Sierra Leone. (30workshop*50pxs*2days)	National/Sub-national	# of Meeting reports	30 funds,	2 298 000 000	1	1	1		

JEE Indicator		CE.2 Enabling		JEE Scores 2									
JEE recommendations		Develop a strategic plan for chemical safety											
Objective		To develop, legal instruments for effective implementation and enforcement of chemical events to support integrated national environment and health surveillance systems by 2022.											
Summary of Planned Activities at National Level (Strategic actions)		Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022
No			Draft Chemicals management act	1 Pre-legislation meeting with Parliamentarians (1meeting*150 Pxs* 1day)	National	Meeting reports	Target 1 funds,	239 650 000	1				
			EPA-SL amended act of 2008	Disseminate through 10 workshops/community engagements (10workshops*60pxs*1day)	National	# of reports	Target 10 funds,	730 450 000	1				
			Environmental Impact assessment fee regulations	20hrs television discussions program on chemicals	National/ Sub-national	Recorded discussions	Target 20 funds,	14 900 000	1				
	Enact Draft National Chemicals Management Act 2017	EPA	A party to the Stockholm Convention, Basel Convention, Minamata Convention, SAICM, Vienna, Marpol and OPCW. Libreville declaration of 2010.	20 radio discussions program on chemicals	National/ Sub-national	Recorded discussions	Target 20 funds,	14 900 000	1				
				Development of 1 Jingles	National	copy of jingle	Target 1 funds,	40 975 000	1				
				1000 flyers	National/Sub-national	copy of flyer	1000 funds,	365 050 000	1				
				300 public announcement slots on radio	National/Sub-national	receipts	300 funds,	104 300 000	1				
				20 publications on the print media	National/Sub-national	receipts	Target 20 funds,	14 900 000	1				
	Enact Draft regulations for the management of toxic and hazardous substance	EPA	Draft toxic and hazardous substance regulations	1 Pre-legislation meeting with Parliamentarians. 150pxs*-1days*1workshop)	National	meeting report	150 funds,	74 500 000	1				

Objective	To develop, legal instruments for effective implementation and enforcement of chemical events to support integrated national environment and health surveillance systems by 2022.										to support integrated national environment and health				
	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed description for (input activities for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022		
Enact Draft regulations for the management of toxic and hazardous substance	EPA		Disseminate through 20 workshops/community engagements (20workshops*60pxs*1day)	National/Sub-national	# of reports	Target 20 funds,	-	1							
			20hrs television discussions	National/Sub-national	Recorded discussions	Target 20 funds,	14 900 000	1							
			20 radio discussions	National/Sub-national	copy of jingle, flyer	20 funds,	14 900 000	1							
			Development of 1 Jingles	National	receipts	Target 1 funds,	40 975 000	1							
			1000 flyers	National	receipts	1000 funds,	365 050 000	1							
			300 public announcement slots on radio	National/Sub-national	receipts	300 funds,	104 300 000	1							
			20 publications on the print media	National/Sub-national	receipts, print out	Target 20 funds,	14 900 000	1							
			1 international and 1 local Consultant	National	# of consultants	Target 2 funds,	189 042 000	1							
			national consultant 40 days				23 520 000	1							
			EPA-SL amended act of 2008		# of Meeting reports	Target 10 funds,	1 721 600 000	1							
Develop a comprehensive waste management policy/regulations, plan and guidelines to include emerging waste streams like electronic, chemical wastes and nanotechnologies.	EPA		5 meetings for presentation of drafts (5regions*80pxs*3days)	National/Sub-national	# of Meeting reports	Target 5 funds,	658 300 000	1							
			1 validation meetings (1*100pxs*1day)	National	meeting reports	Target 1 funds,	102 900 000	1							
				National	meeting report	funds,	239 650 000	1	1						
			Disseminate through 20 workshops/community engagements (20 workshops*60pxs*1day)	National/Sub-national	# of reports	Target 20 funds,	730 450 000	1							
			20hrs television discussions	National/Sub-national	Recorded discussions	Target 20 funds,	14 900 000	1							

Objective	To develop, legal instruments for effective implementation and enforcement of chemical events to support integrated national environment and health surveillance systems by 2022.							to support integrated national environment and health							
	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022		
Develop a comprehensive waste management policy,regulations, plan and guidelines to include emerging waste streams like electronic, chemical wastes and nano-technologies.	EPA		20 radio discussions	copy of jingle, flyer	Target 20 funds,	14 900 000	1								
			Development of 1 Jingles	receipts	Target 1 funds,	40 975 000	1								
			1000 flyers	receipts	1000 funds,	365 050 000	1								
			300 public announcement slots on radio	receipts	300 funds,	104 300 000	1								
			20 publications on the print media	print	Target 20 funds,	14 900 000	1								
			Training (16 districts* 3days*80pxs)	Training Report	Target 16 funds,	2 106 560 000	1								
			Construct 5 Chemical/hazardous waste containment centers	# of centers	Target 5 funds,	838 125 000	1	1	1	1	1				
			Procure Equipment for the 5 Chemical/hazardous waste containment centers (Required PPEs, Storage Containers, lids, Cleaning detergents,	# of Procure	funds,	1 862 500 000	1	1	1	1	1				
			Workshop of air TWG to establish national air chemical standards (20pxs*3days)	workshop report	Target 1 funds,	54 290 000	1	1	1	1	1				
			Gazatted adopted chemical standards for waste water effluent and air	workshop report	Target 1 funds,	54 290 000	1	1	1	1	1				
Develop/adopt chemical standards in air, water, waste water, sediment/ sludge, plant and human specimen, soil, exhaust fumes and products	EPA	National technical committees for air, water, soil and noise exists	Workshop of water TWG to establish national water chemical standards (20pxs*3days)	workshop report	Target 1 funds,	54 290 000	1	1	1	1	1	1			
			Workshop of waste water TWG to establish national waste water chemical standards. (20pxs*3days)	workshop report	Target 1 funds,	54 290 000	1	1	1	1	1	1			

Objective		To develop, legal instruments for effective implementation and enforcement of chemical events to support integrated national environment and health surveillance systems by 2022.										to support integrated national environment and health				
		Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed description for (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022		
No					Workshop of human specimen TWG to establish national human specimen chemical standards. (20pxs*3days)	National	workshop report	Target 1 funds,	54 290 000	1	1					
					Workshop of plant specimen TWG to establish national human plant chemical standards. (20pxs*3days)	National	workshop report	Target 1 funds,	54 290 000	1	1					
					Workshop of sediment/sludge TWG to establish national sediment/sludge chemical standards. (20pxs*3days)	National	workshop report	Target 1 funds,	54 290 000	1	1					
		EPA			Workshop of soil TWG to establish national soil chemical standards. (20pxs*3days)	National	workshop report	Target 1 funds,	54 290 000	1	1					
					Workshop of exhaust fumes TWG to establish national exhaust fumes chemical standards. (20pxs*3days)	National	workshop report	Target 1 funds,	54 290 000	1	1					
					Support gazettement and printing	National	print	Target 1 funds,	37 250 000	1	1					
					Workshop of product TWG to establish national products chemical standards	National	workshop report	Target 1 funds,	54 290 000	1	1					
		EPA	Research report on common air pollutants from vehicular traffic		Hiring 1 international and 1 local legal draft consultants	National	# of consultants	Target 2 funds,	279 888 000	1	1					
	Develop and enact a National chemical standards regulations for all media				National consultant 3 months				35 280 000	1	1					

Objective	To develop, legal instruments for effective implementation and enforcement of chemical events to support integrated national environment and health surveillance systems by 2022.										Year of implementation				
	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed description for (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022		
Develop and enact a National chemical standards regulations for all media	EPA			2 stakeholder meetings (Consultations, presentation of draft). (2meetings*80pxs*3days)	National	# of Meeting reports	Target 2 funds,	167 310 000	1	1					
				1 validation meetings (1*80pxs*1day)	National	meeting report	Target 1 funds,	69 660 000	1	1					
				Pre-legislation meeting with Parliamentarians. 150pxs*2days*1workshop)	National	# of Meeting reports	Target 1 funds,	239 650 000	1	1					
				Disseminate through 20 workshops/community engagements (20workshops*60pxs*1day)	National/Sub-national	meeting reports	Target 20 funds,	730 450 000	1	1					
				20hrs television discussions and 20 radio discussions	National/Sub-national	Recorded discussions	Target 20 funds,	14 900 000	1	1					
				Development of 1 Jingles	National	copy of jingle, flyer	Target 1 funds,	14 900 000	1	1					
				1000 flyers	National	copy of flyer	1000 funds,	40 975 000	1	1					
				300 public announcement slots on radio	National/Sub-national	receipts	Target 300 funds,	365 050 000	1	1					
				20 publications on the print media	National/Sub-national	receipts	Target 20 funds	104 300 000	1	1					
				Garage regulations and 1 local legal draft committee meetings	National	# of consultants	Target 2 funds,	279 888 000	1	1					
Enactment of Vehicle maintenance regulation	EPA			National consultant 3 months			Target 1	35 280 000	1						
				2 stakeholder meetings (Consultations, presentation of draft). (2meetings*80pxs*3days)	National	# of Meeting reports	Target 2 funds,	283 570 000	1						
				1 validation meetings (1*80pxs*1day)	National	# of Meeting reports	Target 1 funds,	98 960 000	1						

Objective	To develop, legal instruments for effective implementation and enforcement of chemical events to support integrated national environment and health surveillance systems by 2022.										Year of implementation				
	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed description for (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022		
Enactment of Vehicle maintenance regulation	EPA			Pre-legislation meeting with Parliamentarians. 150pxs*2days*1workshop	National	# of Meeting reports	Target 1 funds,	239 650 000	1						
				Disseminate through 20 workshops/community engagements (20workshops*60pxs*1day)	National/Sub-national	meeting reports	Target 20 funds,	730 450 000	1						
				20hrs television discussions	National/Sub-national	Recorded discussions	Target 20 funds,	14 900 000	1						
				20 radio discussions	National/Sub-national	Recorded discussions	Target 20 funds,	14 900 000	1						
				Development of 1 Jingles	National	copy of jingle, flyer	Target 1 funds,	40 975 000	1						
				1000 flyers	National	copy of flyer	1000 funds,	365 050 000	1						
				300 public announcement slots on radio	National/Sub-national	receipts	300 funds,	104 300 000	1						
				20 publications on the print media	National/Sub-national	receipts	Target 20 funds,	279 888 000	1						
				Draft Electronic waste management Policy		Hiring 1 international and 1 local legal draft consultants	National	# of consultants	Target 2 funds,	279 888 000	1				
				Enactment of electronic waste management regulation	EPA	EPA-SL amended act of 2008	National consultant 3 months				35 280 000				
2 stakeholder meetings (Consultations, presentation of draft). (2meetings*80pxs*3days)	National	# of Meeting reports	Target 1 funds,				283 570 000	1							
1 validation meetings (1*80pxs*1day)		# of Meeting reports	Target 1 funds,				98 960 000	1							
			Pre-legislation meeting with Parliamentarians. 150pxs*2days*1workshop	National	# of Meeting reports	Target 20 funds,	239 650 000	1							

Objective	To develop, legal instruments for effective implementation and enforcement of chemical events to support integrated national environment and health surveillance systems by 2022.										Year of implementation				
	Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed description for (input activities for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022		
Enactment of electronic waste management regulation	EPA			Disseminate through 20 workshops/community engagements (20workshops*60pxs*1day)	National	meeting reports	Target 20 funds,	730 450 000	1						
				20hrs television discussions	National/Sub-national	Recorded discussions	Target 20 funds,	14 900 000	1						
				20 radio discussions	National/Sub-national	Recorded discussions	Target 20 funds,	14 900 000	1						
				Development of 1 Jingles	National	copy of jingle, flyer	Target 1 funds,	40 975 000	1						
				1000 flyers	National	copy of flyer	1000 funds,	365 050 000	1						
				300 public announcement slots on radio	National/Sub-national	receipts	300 funds,	104 300 000	1						
				20 publications on the print media	National	receipts	Target 20 funds,	279 888 000	1						
				Hiring 1 international and 1 local legal draft consultants	National	# of consultants	Target 2 funds,	279 888 000	1	1					
				2 stakeholder meetings (Consultations, presentation of draft) (2meetings*80pxs*3days)	National	# of Meeting reports	Target 2 funds,	35 280 000	1	1					
				1 validation meetings (1*80pxs*1day)	National	# of Meeting reports	Target 1 funds,	283 570 000	1	1					
Enactment of food waste management regulation	EPA			Pre-legislation meeting with Parliamentarians. 150pxs*2days*1workshop)	National	# of Meeting reports	Target 1 funds,	98 960 000	1	1					
				Disseminate through 10 workshops/community engagements (10workshops*60pxs*1day)	National	meeting reports	Target 10 funds,	239 650 000	1	1					
				20hrs television discussions	National/Sub-national	Recorded discussions	Target 20 funds,	730 450 000	1	1					

Objective		To develop, legal instruments for effective implementation and enforcement of chemical events to support integrated national environment and health surveillance systems by 2022.										to support integrated national environment and health				Year of implementation			
		Summary of Planned Activities at National Level (Strategic actions)	Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed description for (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022					
Enactment of food waste management regulation	EPA		20 radio discussions	National/Sub-national	Recorded discussions	Target 20 funds,	14 900 000	1	1										
			Development of 1 Jingles	National	copy of jingle, flyer	Target 20 funds,	14 900 000	1	1										
			1000 flyers			Target 1 funds,	40 975 000	1	1										
			300 public announcement slots on radio	National/Sub-national	receipts	300 funds,	365 050 000	1	1										
			20 publications on the print media	National/Sub-national	receipts	Target 20 funds,	104 300 000	1	1										
			Hiring 1 international and 1 local legal draft consultants	National	# of consultants	Target 2 funds,	279 888 000	1	1										
			2 stakeholder meetings (Consultations, presentation of draft) (2meetings*80px*3days)	National	# of Meeting reports	Target 2 funds,	35 280 000	1	1										
			1 validation meetings (1*80px*1day)	National	# of Meeting reports	Target 1 funds,	283 570 000	1	1										
			Pre-legislation meeting with Parliamentarians. 150px*2days*1workshop)	National	# of Meeting reports	Target 1 funds,	98 960 000	1	1										
			Disseminate through 20 workshops/community engagements (2workshops*60pxs*1day)	National	meeting reports	Target 20 funds,	239 650 000	1	1										
Enactment of health care waste management regulation	EPA		20hrs television discussions	National/Sub-national	Recorded discussions	Target 20 funds,	730 450 000	1	1										
			20 radio discussions	National/Sub-national	Recorded discussions	Target 20 funds,	14 900 000	1	1										
			Development of 1 Jingles	National	copy of jingle	Target 1 funds,	14 900 000	1	1										

Objective		To develop, legal instruments for effective implementation and enforcement of chemical events to support integrated national environment and health surveillance systems by 2022.							Year of implementation				
Summary of Planned Activities at National Level (Strategic actions)		Responsible authority(s) for Implementation including budget line holder	Related existing plan/ framework / Programme or on going activities	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitoring and Evaluation)	Targets and Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022
No	Enactment of health care waste management regulation	EPA		1000 flyers 300 public announcement slots on radio 20 publications on the print media Support Chemical management organizational structures and facilities	National National National National	copy of flyer receipts receipts # of vehicles	1000 funds, 300 funds, Target 20 funds, Target 2 funds,	40 975 000 365 050 000 104 300 000 705 600 000	1	1			
Technical Area													
JEE Indicator													
RE.1													
1. Advocate for an increase in the number of human resources to meet the needs for radiation safety. 2. Improve laboratory capacity for the detection and response to all radiological and nuclear emergencies. 3. Incorporate responding to chemical and radiological emergencies in the draft public health incident and emergency response plan. 4. Allocate sufficient budget to meet demand in the event of a radiation emergency. 5. Conduct simulation exercises on the appropriate response to radiation emergencies.													
JEE Scores 2													
Objective		Detailed activities (input description for costing)							Year of implementation				
Summary of Planned Activities at National Level (Strategic actions)		Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output Indicators (Monitor Targets and potential challenges Monitoring and Evaluation)	Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022		
No		Procure 3 portable water monitoring equipment Procure 3 portable equipment for realtime monitoring of radiation in Soil and sediment Procure 3 portable equipment for realtime monitoring of radiation in Products	National National National	# of specialized water monitoring stations procure # of portable real time monitoring equipment for radiation in soil procure # of portable real time monitoring equipment for radiation in product procure	Targets funds, funds, funds,	217 193 8 334 900 8 820 000	1	1	1				

Objective	Detailed activities (input description for costing)						Year of implementation						
	Summary of Planned Activities at National Level (Strategic actions)	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitor Targets and potential challenges Monitoring and Evaluation)	Targets	Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022	
No		Procure 1000 TLD (thermoluminescence Dosimeter badges) portable equipment for realtime monitoring of radiation in human specimens ASK IAEA VIENNA Procure 3 TLD readers HALSHAW 2. Training of scientific and technician personnel 2 people for 3 months abroad 2 Training of 2 technician personnel on the maintenance and repairs of specialized radiation equipment . 2people trained for 3 months ABROAD Procurement of 5 laptop for radiation data input and processing Procure and install a regulatory authority information system (RAIS) software the new version Training meetings for legal professionals on radiation prosecutions 2 trainings ABROAD 1 MONTH Hiring of 3 international and 3 national consultants for 2 months 3 national consultants 1 Workshop to launch the radiation program (100participants*1) 2 Stakeholder engagements (Consultations, presentation of draft, validation) at 5 regions. (2*60participants*3days*5)	National National National National National National National National National	# of portable real time monitoring equipment for radiation in human specimen procure # TLD readers # of training for scientific and technician # of training technicians on maintenance and repair of specialised testing kits # of laptops procure for radiation data input # of regulatory authority information system # Training meeting held for legal professionals on radiation prosecution # of international and national consultants hired number of workshop held to launch radiation program 1. number of stakeholder engagement meeting to draft radiation response plan	1000 3 2 2 5 1 2 3 international and 3 national consultants hired 1 workshop held to launched radiation program 1. 2 stakeholder engagement meeting to draft radiation response plan for 5 regions	funds, funds, funds, funds, funds, funds, funds, funds, funds, funds, funds,	1 241 666 667 74 500 000 226 380 000 226 380 000 86 916 667 745 000 000 85 260 000 189 042 000 23 520 000 54 000 000 692 700 000	1	1	1	1	1	1
	Promote programmes to develop radiation-management instruments (national profiles, national implementation plans, national emergency preparedness and response plans).	1 validation meetings (1*80participants*1day)	National	validate radiation response plan	radiation response plan validated	funds,	50 060 000	1	1	1			

Objective	Detailed activities (input description for costing)						Year of implementation					
	Summary of Planned Activities at National Level (Strategic actions)	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitor Targets and potential challenges Monitoring and Evaluation)	Targets	Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022
No	Promote programmes to develop radiation-management instruments (national profiles, national implementation plans, national emergency preparedness and response plans).	Training of stakeholders on response plan (1*80participants*1 1 Simulation annually for emergency preparedness and response plans. Meeting 80 p 1 daz	National National	number of stakeholder Training on response plan number of emergency response Simulation exercise	1 stakeholder training on response plan 1 emergency response Simulation exercise conducted	funds, funds,	50 060 000 50 060 000	1 1	1 1	1 1	1 1	1 1
		Procurement of a server for Radiation Information Exchange	National	# of server	1	funds,	45 000 000	1				
		Support Radiation networking of key stakeholders (MAF, EPA, Trade, MoHS, NRA, NSRPA, ONS) Hire 1 staff to do this	National	# of networking meetings	3	funds,	186 250 000	1				
	Promote radiation information exchange through enhanced networking	Training of stakeholders on computerised radiation data sharing and compliance rating. (1*3days*30pxs) Develop reporting tools to assist industry to provide simplified radiation information to Government and individual users. Consultant national + consultant national	National National	number of training for stakeholder on computerised radiation # of meeting held to develop reporting tools to assist in simplified radiation information	1 training for stakeholder on computerised radiation 3 meeting held to develop reporting tools to assist in simplified radiation information	funds, funds,	32 885 000 52 773 000	1 1	1 1	1 1		
		National consultant for 10 dazs					5 880 000	1	1	1		
		Support quarterly national meetings TWG on radiation management for a period of 3yrs. (12meetings*20pxs)	National	# of national quarterly TWG meeting on radiation management held	12 TWG meetings on radiation management held	funds,	181 200 000	1	1	1	1	1
		Hiring of 1 international and 1 national consultants for 2 months	National	# of international and national consultants hire to develop risk assessment framework	1 international and 1 national consultant hired	funds,	189 042 000	1	1	1		
	Develop Risk assessment and management framework for Radiation management	National consultant for 10 dazs 2 Stakeholder engagements (Consultations, presentation of draft, validation) at 5 regions. (2*60pxs 3days*5)		1.number of stake holder meetings held to develop radiation risk assessment framework 2. draft Risk assessment framework	2 stake holder meetings held to develop radiation risk assessment framework 2. radiation risk assessment framework drafted	funds,	23 520 000 895 200 000	1 1	1 1			

Objective		Detailed activities (input, description for costing)						Year of implementation				
No	Summary of Planned Activities at National Level (Strategic actions)	Detailed activities (input, description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitor Targets and potential challenges Monitoring and Evaluation)	Targets	Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022
	Develop Risk assessment and management framework for Radiation management	1 validation meetings (1*80pxs*1day)	National	validate radiation risk assessment framework	radiation risk assessment framework validated	funds,	64 710 000	1	1	1		
		Training of Technical Staff on framework implementation. (1*40pxs*5regions)	National	number of training for technical staff on framework implementation	1 training meeting held in each regions for 5 regions	funds,	570 900 000	1	1	1		
	Develop communication framework for radiation management	Radiation Incidence Surveillance guideline developed interna cons	National	Guideline develop	guideline developed	funds,	189 042 000	1	1			
		Hiring of 1 international and 1 national consultants for 2 months	National	# of international and national consultants hire to develop radiation communication framework	1 international and 1 national consultants hire to develop radiation communication framework	funds,	23 520 000	1	1			
	Develop communication framework for radiation management	2 Stakeholder engagements (Consultations, presentation of draft, validation) at 5 regions. (2*60pxs*3days*5)	National	# of stakeholder engagement meeting to develop communication framework	2 stakeholder meeting held and report available	funds,	1 097 700 000	1	1			
		1 validation meetings (1*80pxs*1day)	National	validate communication framework	communication framework validated	funds,	50 060 000	1	1			
		Training of Technical Staff on framework implementation. (1*40pxs*5regions)	National	Training of technical staff on communication framework implementation	1 training meeting held in each regions for 5 regions	funds,	570 900 000	1	1			

JEE Indicator		RE.2										
JEE recommendations												
Objective												
No	Summary of Planned Activities at National Level (Strategic actions)	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitor Targets and potential challenges Monitoring and Evaluation)	Targets	Comments or Potential challenges	Estimated cost (Local currency)	2018	2019	2020	2021	2022
		1 Pre-legislation meeting with Parliamentarians	National	Meeting reports	1 meeting parliamentarians	funds,	17 640 000	1				
		Disseminate through 10 workshops/ community engagements (10workshops*60px*1day)	National	# of workshop conducted	10 work shop conducted	funds,	461 200 000	1				
		20hrs television discussions	National	number of Recorded discussions	20hrs recorded discussion	funds,	31 662 500	1				
	Review Radiation Protection Act	20 radio discussions	National	Recorded discussions	20 hour radio discussions	funds,	31 662 500	1				
		Development of 1 Jingles	National	copy of jingle	1 jingle developed	funds,	14 900 000	1				
		1000 flyers	National	copy of flyer	1000 flyers printed	funds,	182 525 000	1				
		300 public announcement slots on radio	National	number of public announcement slots on the radio	300 public announcement slots hired on the radio	funds,	100 575 000	1				
		20 publications on the print media	National	number of publication on print media	20 publication printed	funds,	29 800 000	1				
		1 Pre-legislation meeting with Parliamentarians	National	meeting report on pre legislation with parliamentarians	meeting on pre legislation with parliamentarians held	funds,	17 640 000	1				
		Disseminate through 10 workshops/ community engagements (10workshops*60px*1day)	National	# of workshop conducted to disseminate regulation	10 work shop conducted	funds,	461 200 000	1				
		20hrs television discussions	National	number of television discussions recorded	20hrs television discussion recorded	funds,	31 662 500	1				
		20 radio discussions	National	number of radio discussions heard	20 radio discussions heard	funds,	31 662 500	1				
		Development of 1 Jingles	National	receipts for developing jingles	jingles available	funds,	14 900 000	1				
		1000 flyers	National	number of flyer develop	1000 flyers printed	funds,	182 525 000	1				
	Enact Draft regulations for the management of radiation substances	300 public announcement slots on radio	National	number of public announcement slots on the radio	300 announcement hired over the radio	funds,	100 575 000	1				

Objective		Year of implementation					
		2018	2019	2020	2021	2022	
No	Summary of Planned Activities at National Level (Strategic actions)	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output indicators (Monitor Targets and potential challenges Monitoring and Evaluation)	Targets	Comments or Potential challenges	Estimated cost (Local currency)
	Develop/adopt radiation standards in air, water, sediment/sludge, plant and human specimen, soil, and products	Construct and equip 5 radiation waste containment centers	National	# of radiation waste containment centers constructed	5 radiation waste containers constructed	funds,	2 500 000
		Workshop of air TWG to establish national air radiation standards (20pxs*3days) plus int consultant	National	# of workshops to develop air radiation standards	1	funds,	40 515 000
		International consultant 10 days					52 773 000
		Workshop of water TWG to establish national water radiation standards (20pxs*3days)	National	# of workshops to develop water radiation standards	1	funds,	40 515 000
		Workshop of human specimen TWG to establish national human specimen radiation standards. (20pxs*3days)	National	# of workshops to establish human specimen radiation standards	1	funds,	40 515 000
		Workshop of plant specimen TWG to establish national plant radiation standards. (20pxs*3days)	National	workshop report	1	funds,	40 515 000
		Workshop of sediment/sludge TWG to establish national sediment/sludge radiation standards. (20pxs*3days)	National	workshop report	1	funds,	40 515 000
		Workshop of soil TWG to establish national soil radiation standards. (20pxs*3days)	National	workshop report	1	funds,	40 515 000
		Workshop of product TWG to establish national products radiation standards	National	workshop report	1	funds,	40 515 000
		Hiring 1 international and 1 local legal draft consultants 10 days	National	# of consultants	2 consultants hired one international and one local	funds,	52 773 000
	national cons 2 weeks					5 880 000	
	Develop and enact a National radiation standards regulations for all media	2 stakeholder meetings (Consultations, presentation of draft, validation of draft). (2meetings*80pxs*3days)	National	# of Meeting reports	2 preparatory meetings to validate the national Radiation standards	funds,	201 720 000
		1 validation meetings (1*80pxs*1day)	National	meeting report	1 validation meeting	funds,	50 060 000

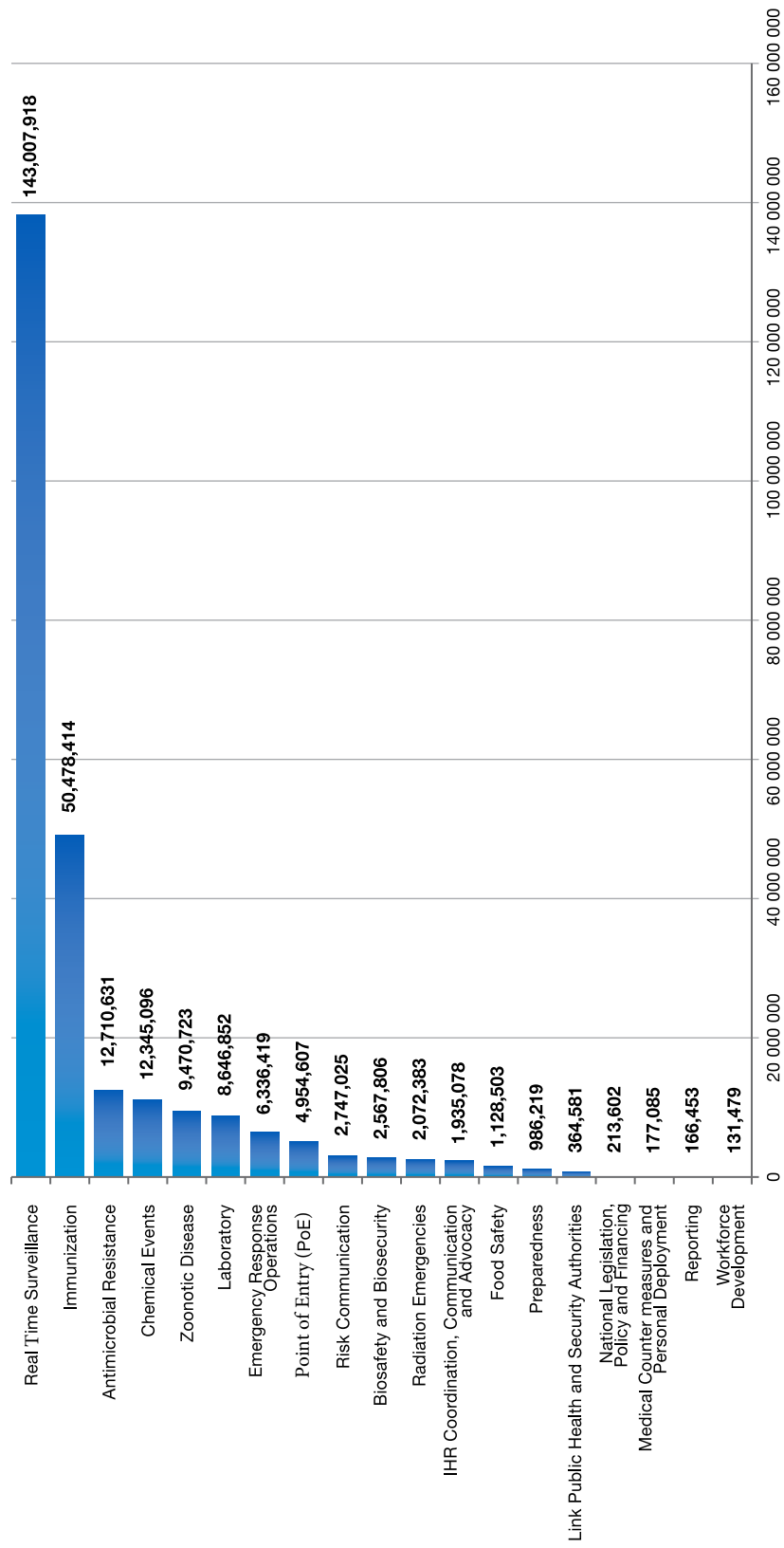
Objective		Year of implementation									
		2018	2019	2020	2021	2022					
<p>Summary of Planned Activities at National Level (Strategic actions)</p> <p>No</p>	<p>Detailed activities (input description for costing)</p> <p>Pre-legislation meeting with Parliamentarians</p> <p>Disseminate through 10 workshops/ community engagements (10workshops*60pxs*1day)</p> <p>20hrs television discussions and 20 radio discussions</p> <p>Development of 1 Jingles</p> <p>1000 flyers</p> <p>300 public announcement slots on radio</p> <p>20 publications on the print media</p> <p>Hiring 1 international and 1 local legal draft consultants for 3 months</p> <p>national cons 2 weeks</p> <p>2 stakeholder meetings (Consultations, presentation of draft, validation of draft). (2meetings*80pxs*3days)</p> <p>1 validation meetings (1*80pxs*1day)</p> <p>Pre-legislation meeting with Parliamentarians</p> <p>Disseminate through 10 workshops/ community engagements (10workshops*60pxs*1day)</p> <p>20hrs television discussions and 20 radio discussions</p> <p>Development of 1 Jingles</p> <p>1000 flyers</p>	<p>Where is the action to be implemented (National or sub-national)</p> <p>National</p> <p>National</p> <p>National</p> <p>National</p> <p>National</p> <p>National</p> <p>National</p> <p>National</p> <p>National</p> <p>National</p> <p>National</p> <p>National</p> <p>National</p>	<p>Output Indicators (Monitor Targets and potential challenges Monitoring and Evaluation)</p> <p># of prelegislation meeting with parliamentarians</p> <p># of workshop / community engagements</p> <p># of TV and radio Recorded hours of discussions</p> <p>copy of jingle, flyer</p> <p># of flyer</p> <p># of public announcement slots on radio</p> <p># of publications in the print media</p> <p># of consultants</p> <p># of Meeting reports</p> <p># of Meeting reports</p> <p># of Meeting reports</p> <p>meeting reports</p> <p># of TV and radio Recorded hours of discussions</p> <p>copy of jingle, flyer</p> <p># of flyers</p>	<p>Targets</p> <p>2 meetings</p> <p>10 engagemnt workshops</p> <p>20 TV and 20 Radio hour discussions</p> <p>1 jingle developed</p> <p>1000 flyers printed</p> <p>300 announcement hired over the radio</p> <p>20 publications in the print media</p> <p>2 consultants hired one internationa and one local</p> <p>2 preparatory meetings to validate the national Radiation standards</p> <p>1 validation meeting</p> <p>10 engagemnt workshops</p> <p>20 TV and 20 Radio hour discussions</p> <p>1 jingle developed</p> <p>1000 flyers printed</p>	<p>Comments or Potential challenges</p> <p>funds,</p> <p>funds,</p> <p>funds,</p> <p>funds,</p> <p>funds,</p> <p>funds,</p> <p>funds,</p> <p>funds,</p> <p>funds,</p> <p>funds,</p> <p>funds,</p> <p>funds,</p> <p>funds,</p> <p>funds,</p>	<p>Estimated cost (Local currency)</p> <p>17 640 000</p> <p>461 200 000</p> <p>31 662 500</p> <p>31 662 500</p> <p>14 900 000</p> <p>182 525 000</p> <p>100 575 000</p> <p>279 888 000</p> <p>35 280 000</p> <p>100 860 000</p> <p>50 060 000</p> <p>17 640 000</p> <p>461 200 000</p> <p>31 662 500</p> <p>31 662 500</p> <p>14 900 000</p>	1	1	1	1	1
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Objective		Year of implementation									
		2018	2019	2020	2021	2022					
Summary of Planned Activities at National Level (Strategic actions)	Detailed activities (input description for costing)	Where is the action to be implemented (National or sub-national)	Output Indicators (Monitor Targets and potential challenges Monitoring and Evaluation)	Targets	Comments or Potential challenges	Estimated cost (Local currency)	1	1	1		
							300 public announcement slots on radio	# of public announcement slots on radio	300 announcement hired over the radio	funds,	182 525 000
							20 publications on the print media	# of publications in the print media	20 publications in the print media	funds,	100 575 000
							Hiring 1 international and 1 local legal draft consultants 5 days	# of consultants	2 consultants hired one international and one local	funds,	30 061 500
							national cons 5 days				2 940 000
							2 stakeholder meetings (Consultations, presentation of draft, validation of draft). (2meetings*80pxs*3days)	# of Meeting reports	2 preparatory meetings to validate the national Radiation standards	funds,	100 860 000
							1 validation meetings (1*80pxs*1day)	# of Meeting reports	1 validation meeting	funds,	50 060 000
							Pre-legislation meeting with Parliamentarians	# of Meeting reports	2 meetings	funds,	17 640 000
							Disseminate through 10 workshops/ community engagements (10workshops*60pxs*1day)	meeting reports	10 engagement workshops	funds,	461 200 000
							20 radio discussions	# of radio discussions	20 radio discussions	funds,	31 662 500
							20hrs television discussions	# of hours of TV discussions	20 TV hour discussions		31 662 500
							Development of 1 Jingles	copy of jingle, flyer	1 jingle developed	funds,	14 900 000
							1000 flyers	# of flyers	1000 flyers printed	funds,	182 525 000
							300 public announcement slots on radio	# of public announcement slots on radio	300 announcement hired over the radio	funds,	100 575 000
							20 publications on the print media	# of publications in the print media	20 publications in the print media	funds,	8 000
Procure 2 vehicles for sample collection and management structures	# of vehicles procured	2 vehicles procured	funds,	676 200 000							
Support Radiation management organizational structures and facilities											

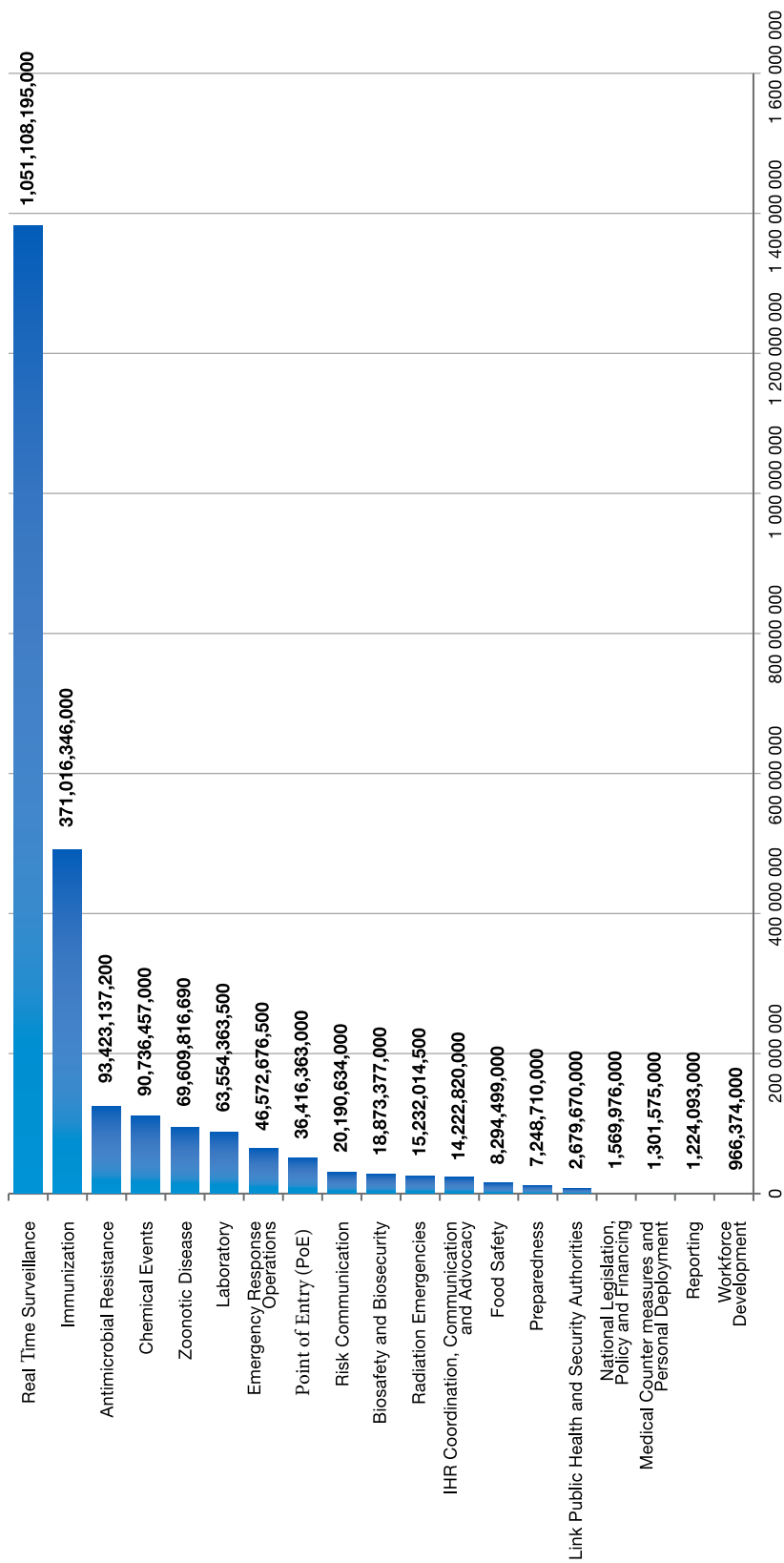
NATIONAL ACTION PLAN FOR HEALTH SECURITY (NAPHS) COSTING, SIERRA LEONE

	Technical Area	2018	2019	2020	2021	2022	TOTAL	USD
1	National Legislation, Policy and Financing	932 038 000	637 938 000	-	-	-	1 569 976 000	210 735
2	IHR Coordination, Communication and Advocacy	8 619 065 000	1 518 485 000	1 518 485 000	1 756 050 000	2 039 985 000	15 452 070 000	2 074 103
3	Antimicrobial Resistance	18 329 707 000	22 665 266 200	20 565 409 000	19 869 850 000	20 007 905 000	101 438 137 200	13 615 857
4	Zoonotic Disease	20 845 540 138	15 586 729 138	17 053 729 138	18 520 729 138	29 865 089 138	101 871 816 690	13 674 069
5	Food Safety	2 478 914 000	11 162 701 000	3 379 641 000	2 877 266 000	829 346 000	20 727 868 000	2 782 264
6	Biosafety and Biosecurity	5 051 512 000	4 611 325 000	4 362 615 000	3 792 385 000	3 855 540 000	21 673 377 000	2 909 178
7	Immunization	105 089 901 965	65 968 882 965	82 779 663 040	66 700 368 040	82 779 663 040	403 318 479 050	54 136 709
8	National Laboratory System	15 832 022 500	28 016 551 000	18 473 235 000	12 459 813 000	14 056 242 000	88 092 863 500	11 824 545
9	Real Time Surveillance	226 975 881 000	207 774 682 000	208 855 570 000	203 265 492 000	208 855 570 000	1 055 727 195 000	141 708 348
10	Reporting	735 629 000	177 740 000	177 740 000	178 744 000	177 740 000	1 447 593 000	194 308
11	Workforce Development	3 060 394 000	2 724 740 000	2 708 096 667	2 708 096 667	2 708 096 667	13 909 424 001	1 867 037
12	Preparedness	2 186 790 000	1 265 480 000	1 265 480 000	1 265 480 000	1 265 480 000	7 248 710 000	972 981
13	Emergency Response Operations	19 633 632 500	7 159 208 000	7 146 708 000	7 146 708 000	5 486 420 000	46 572 676 500	6 251 366
14	Linking Public Health and Security Authorities	614 330 000	590 060 000	491 760 000	491 760 000	491 760 000	2 679 670 000	359 687
15	Medical Countermeasures and Personnel Deployment	67 920 000	384 775 000	713 040 000	67 920 000	67 920 000	1 301 575 000	174 708
16	Risk Communication	5 684 588 000	1 917 610 000	5 950 408 000	1 936 235 000	5 592 068 000	21 080 909 000	2 829 652
17	Points of Entry	8 978 513 000	13 764 430 000	10 727 715 000	6 565 715 000	6 241 715 000	46 278 088 000	6 211 824
18	Chemical Events	89 742 232 000	71 979 143 000	13 582 172 000	2 769 530 000	68 905 000	178 141 982 000	23 911 675
19	Radiation emergencies	16 873 850 077	14 494 670 077	7 052 819 877	983 588 950	983 588 950	40 388 517 930	5 421 278
	TOTAL (Leones)	551 732 460 179	472 400 416 379	406 804 286 721	353 355 730 795	385 373 033 795	2 168 920 927 870	291 130 326
	Total in USD	74 058 048	63 409 452	54 604 602	47 430 299	51 727 924	291 130 326	

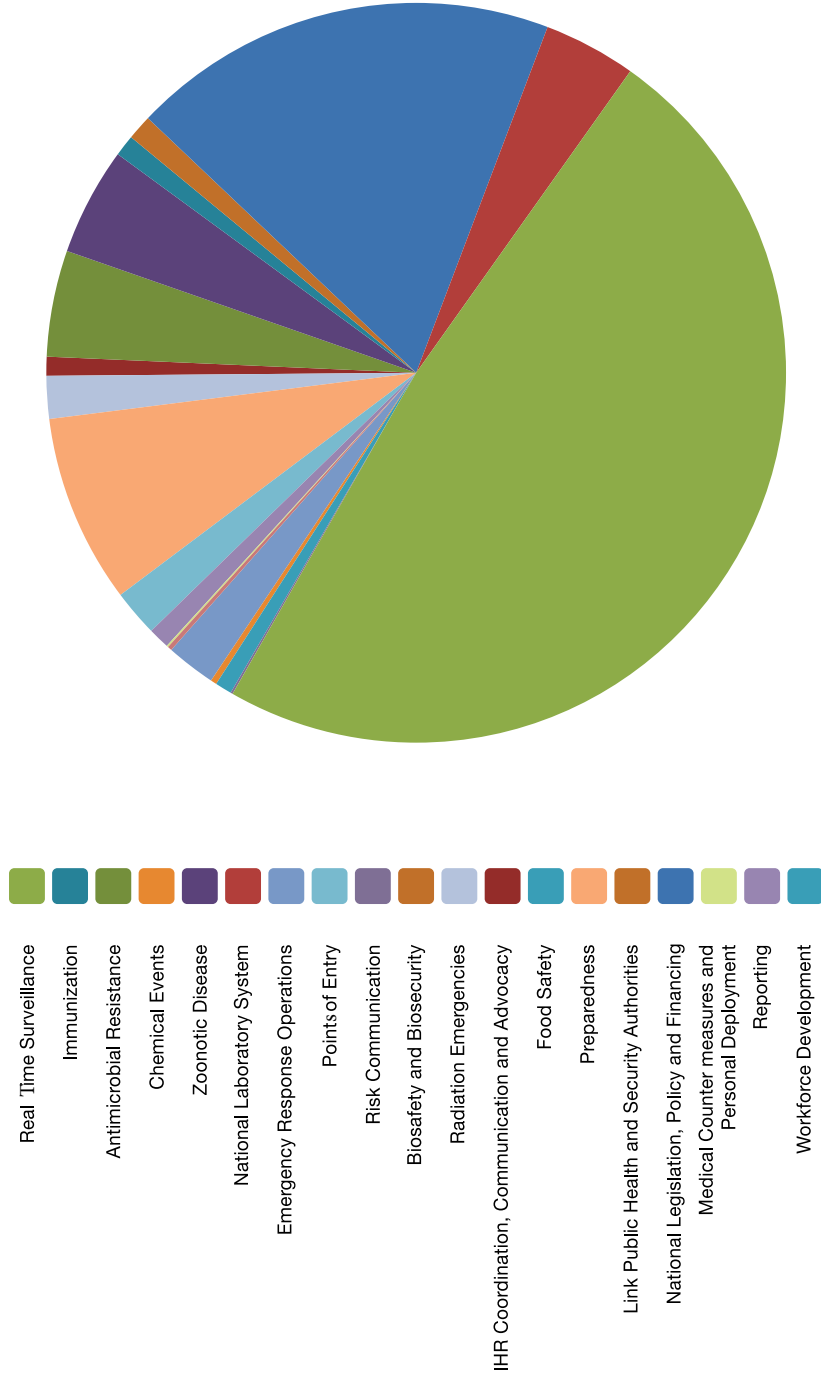
NAPHS Costing by technical Area In USD



NAPHS Costing by technical Area In Leones



Total costs over 5 Years SSL



Prioritization of Activities

Group	Technical Area	Objective	Summary Activity	Total score	Associated Costed of priority activities	Associated Costed of priority activities
1	IHR Coordination Communication and Advocacy	To strengthen IHR NFP for effective coordination, communication and advocacy for IHR implementation	Develop guidelines and Standard Operating Procedures (SOPs) for IHR NFP	9	SLL 73 185 000.00	\$9 529.30
1	IHR Coordination Communication and Advocacy	To strengthen IHR NFP for effective coordination, communication and advocacy for IHR implementation	Build the capacity of IHR NFP in areas of coordination, communication and advocacy	9	SLL 210 655 000.00	\$27 429.04
1	IHR Coordination Communication and Advocacy	To strengthen IHR NFP for effective coordination, communication and advocacy for IHR implementation	Develop and sustain a mechanism for intersectoral collaboration	10	SLL 140 460 000.00	\$18 289.06
	IHR Coordination Communication and Advocacy	To strengthen IHR NFP for effective coordination, communication and advocacy for IHR implementation	Regular intersectoral coordination meetings	10	SLL 1 921 400 000.00	\$250 182.29
	IHR Coordination Communication and Advocacy	To strengthen IHR NFP for effective coordination, communication and advocacy for IHR implementation	Logistics support for effective functioning of IHR NFP	10	SLL 4 794 300 000.00	\$624 257.81
1	National Legislation, Policy and Financing	To ensure adequate statutory and administrative provisions for the implementation of IHR by December 2018	Develop or review the administrative and statutory instruments to make them compliant with IHR 2005	7	SLL 538 800 000.00	\$70 156.25
	National Legislation, Policy and Financing	To adjust and align legislation, policies and administrative arrangements in compliance with IHR 2005 by end of 2018	Sensitize relevant stakeholders (MDAs, Parliamentarians, Partners etc) on the aligned documents	7	SLL 75 510.00	\$9.83
1	Immunization	To achieve and sustain at least 95% coverage of measles second dose coverage per year	Strengthen RED/REC strategy in all districts through training of health staff and community engagement	9	SLL 23 982 184 000.00	\$3 122 680.21
1	Immunization	To achieve and sustain at least 95% coverage of measles second dose coverage per year	Develop RED/REC plan in every health facility	9	SLL 22 469 888 000.00	\$2 925 766.67
2	Immunization	To achieve and sustain at least 95% coverage of measles second dose coverage per year	Conduct regular performance review of implementation of REC strategy	9	SLL 3 991 575 000.00	\$519 736.33
2	Immunization	To achieve and sustain at least 95% coverage of measles second dose coverage per year	Strengthen AEFI monitoring, reporting and investigation	9	SLL 33 269 528 000.00	\$4 331 969.79
2	Immunization	To strengthen the capacity of DHMTs for improved vaccine access and delivery	Monitoring and Evaluation of EPI activities	9	SLL 751 872 000.00	\$97 900.00
1	Immunization	To strengthen the capacity of DHMTs for improved vaccine access and delivery	Improve immunization through outreach services	9	SLL 8 945 700 000.00	\$1 164 804.69
2	AMR	To integrate AMR surveillance, prevention, and control into the NLSP and GHSA 5-year roadmap using One Health Approach	Integration of AMR plan into the NLSP	9	SLL 467 400 000.00	\$60 859.38

Group	Technical Area	Objective	Summary Activity	Total score	Associated Costed of priority activities	Associated Costed of priority activities
2	AMR	To strengthen HCAI surveillance and prevention programs	Review and update national HCAI plan	9	SLL 85 880 000.00	\$11 182.29
2	AMR	To strengthen HCAI surveillance and prevention programs	Establish surveillance system of HCAI in 25 government hospitals	9	SLL 1 487 362 200.00	\$193 666.95
2	AMR	To strengthen HCAI surveillance and prevention programs	Support, monitor and evaluate infection prevention and control programs in collaboration with National IPC Unit and stakeholders	9	SLL 4 677 250 000.00	\$609 016.93
2	AMR	To strengthen HCAI surveillance and prevention programs	Establish occupational health program for health workers	9	SLL 2 056 400 000.00	\$267 760.42
2	AMR	To strengthen HCAI surveillance and prevention programs	Strengthening National and community linkages/Partnership for IPC in human, animal, and agricultural sectors	9	SLL 374 000 000.00	\$48 697.92
2	AMR	To establish Antimicrobial stewardship programs to promote appropriate use of antibiotics	To review and update treatment guidelines to include appropriate antibiotic use	9	SLL 407 560 000.00	\$53 067.71
2	AMR	To establish Antimicrobial stewardship programs to promote appropriate use of antibiotics	To establish treatment and testing algorithm inclusive of antibiotic use	9	SLL 103 110 000.00	\$13 425.78
2	AMR	To establish Antimicrobial stewardship programs to promote appropriate use of antibiotics	Develop regulation for antibiotic use in animals, agriculture and fisheries	9	SLL 103 110 000.00	\$13 425.78
2	AMR	To establish Antimicrobial stewardship programs to promote appropriate use of antibiotics	Monitor prescription and consumption patterns in both human and animals	9	SLL 494 560 000.00	\$64 395.83
2	AMR	To establish Antimicrobial stewardship programs to promote appropriate use of antibiotics	Establish antimicrobial stewardship committees at health facilities level	9	SLL 137 010 000.00	\$17 839.84
2	AMR	To establish Antimicrobial stewardship programs to promote appropriate use of antibiotics	Update the National Medicines Policy to include use of antimicrobial agents	9	SLL 762 500 000.00	\$99 283.85
2	AMR	To integrate AMR surveillance, prevention, and control into the NLSP and GHSA 5-year roadmap using One Health Approach	In collaboration with training institutions and research facilities, build capacity for detection of AMR at central and regional level (H)	9	SLL 2 579 155 000.00	\$335 827.47
2	AMR	To integrate AMR surveillance, prevention, and control into the NLSP and GHSA 5-year roadmap using One Health Approach	In collaboration with training institutions and research facilities, build capacity for detection of AMR at central and regional level (A-E)	8	SLL 3 290 272 000.00	\$428 420.83
2	AMR	Establish an AMR surveillance system	Develop a multi-sectoral national AMR surveillance system (H)	8	SLL 1 387 350 000.00	\$180 644.53
2	AMR	Establish an AMR surveillance system	Develop a multi-sectoral national AMR surveillance system (A-E)	7	SLL 670 765 392.00	\$87 339.24
2	Biosafety and BioSecurity	Establish and enact OneHealth legislation and regulations on biosafety and biosecurity	Establish integrated waste management protocol including decommissioning protocol for all biological agents and equipments.	9	SLL 243 235 000.00	\$31 671.22

Group	Technical Area	Objective	Summary Activity	Total score	Associated Costed of priority activities	Associated Costed of priority activities
2	Biosafety and BioSecurity	To develop infrastructure and human resource capacity to address biosafety and biosecurity issues nationwide.	Appoint and train onehealth biosafety and biosecurity officers in all human, animal and environmental laboratories	9	SLL 1 614 827 000.00	\$210 263.93
2	Biosafety and BioSecurity	To develop infrastructure and human resource capacity to address biosafety and biosecurity issues nationwide.	Build OneHealth technical capacity for biosafety and biosecurity (at relevant laboratory sites)	9	SLL 323 280 000.00	\$42 093.75
2	Biosafety and BioSecurity	To develop infrastructure and human resource capacity to address biosafety and biosecurity issues nationwide.	Appoint and train onehealth biosafety and biosecurity officers in all human, animal and environmental laboratories	8	SLL 1 614 827 000.00	\$210 263.93
2	Biosafety and BioSecurity	To develop infrastructure and human resource capacity to address biosafety and biosecurity issues nationwide.	Build OneHealth technical capacity for biosafety and biosecurity (at relevant laboratory sites)	8	SLL 323 280 000.00	\$42 093.75
2	Biosafety and BioSecurity	To develop infrastructure and human resource capacity to address biosafety and biosecurity issues nationwide.	Conduct biorisk assessment of laboratories and health care facilities/ inventories and implement any suggested upgrades	8	SLL 1 461 735 000.00	\$190 330.08
2	Biosafety and BioSecurity	Establish and enact OneHealth legislation and regulations on biosafety and biosecurity.	Establish national OneHealth biosafety committee including chair	7	SLL 84 510 000.00	\$11 003.91
2	Biosafety and BioSecurity	To develop infrastructure and human resource capacity to address biosafety and biosecurity issues nationwide.	Create linkages between human, animal and environmental health labs and establish collaboration on biorisk management	7	SLL 459 245 000.00	\$59 797.53
2	National Laboratory System	Laboratory testing for detection of priority diseases	Build the testing capacity for environmental health laboratories to test for water and food safety	9	SLL 1 640 492 000.00	\$213 605.73
2	National Laboratory System	Laboratory testing for detection of priority diseases	Improve the capacity for bacteriological testing culture and ASTs for Human health	9	SLL 655 425 000.00	\$85 341.80
2	National Laboratory System	Specimen referral and transport system	Establish a network of specimen transportation at all levels - national and international (H)	9	SLL 3 699 319 000.00	\$481 682.16
2	National Laboratory System	Specimen referral and transport system	Establish a tracking system for specimen referral and transportation (H)	9	SLL 102 930 000.00	\$13 402.34
2	National Laboratory System	Effective modern point of care and laboratory based diagnostics	Establish sustainable commodities supplies system (A)	9	SLL 37 795 000.00	\$4 921.22
2	National Laboratory System	Specimen referral and transport system	Establish a network of specimen transportation at all levels - national and international (A-E)	8	SLL 3 699 319 000.00	\$481 682.16
2	National Laboratory System	Specimen referral and transport system	Establish a tracking system for specimen referral and transportation (A-E)	8	SLL 102 930 000.00	\$13 402.34
2	National Laboratory System	Effective modern point of care and laboratory based diagnostics	Establish sustainable commodities supplies system (H)	8	SLL 37 795 000.00	\$4 921.22
2	National Laboratory System	Effective modern point of care and laboratory based diagnostics	Establish sustainable commodities supplies system E	8	SLL 0.00	\$0.00

Group	Technical Area	Objective	Summary Activity	Total score	Associated Costed of priority activities	Associated Costed of priority activities
2	National Laboratory System	Laboratory testing for detection of priority diseases	Improve supply chain management	8	SLL 450 788 000.00	\$58 696.35
2	National Laboratory System	Laboratory testing for detection of priority diseases	Provide mentorship to human, animal and environmental laboratory personnel (A-E)	8	SLL 152 960 000.00	\$19 916.67
2	National Laboratory System	Laboratory testing for detection of priority diseases	Improve communication for timely reporting of laboratory results. (H)	7	SLL 46 000 000.00	\$5 989.58
2	National Laboratory System	Laboratory testing for detection of priority diseases	Provide sustainable power supply to laboratories	7	SLL 35 280 000.00	\$4 593.75
2	National Laboratory System	Specimen referral and transport system	Establish a comprehensive integrated National policy, guidelines and SOPs on specimen management for human, animal, food and environmental samples (H)	7	SLL 380 205 000.00	\$49 505.86
3	Workforce Development	will be added later	Increase national workforce of epidemiologists	10	SLL 176 400 000.00	\$22 968.75
3	Real Time surveillance	Enhance the performance of the syndromic surveillance system and expertise by 2022	Establish mechanism for collaboration and coordination between human and animal health sector in the context of One Health	10	SLL 264 240 000.00	\$34 406.25
3	Reporting	By 2022, strengthen capacity to identify any potential PHEIC and report within 24 hours to WHO, FAO and OIE.	Develop a system of simulation exercise for reporting to WHO, FAO and OIE	10	SLL 55 700 000.00	\$7 252.60
3	Zoonotic Disease	Establish a multi-sectorial mechanism for coordinated response to outbreaks of zoonotic diseases by human, and animal sectors at national and district levels by 2022	Operationalize the One Health Platform	10	SLL 687 250 000.00	\$89 485.68
3	Zoonotic Disease	Establish a multi-sectorial mechanism for coordinated response to outbreaks of zoonotic diseases by human, and animal sectors at national and district levels by 2023	Develop and implement a guideline for multisectorial response to zoonosis	10	SLL 1 287 524 000.00	\$167 646.35
3	Workforce Development	will be added later	Establish a mechanism of complete ownership of FETP by the MOHS	9	SLL 5 811 000 000.00	\$756 640.63
3	Workforce Development	will be added later	Develop and implement a public health HRH strategy to include speciality areas in line with One Health approach	9	SLL 278 192 000.00	\$36 222.92
3	Real Time surveillance	Sustain the existing human surveillance systems and integrate animal and human health surveillance systems	Strengthen Community-based surveillance system in context of OneHealth	9	SLL 177 721 040 000.00	\$23 140 760.42
3	Real Time surveillance	Develop, integrate and maintain an interoperable, interconnected, electronic real-time reporting system, for public health and/or veterinary surveillance systems at all levels by 2022	Implement eIDSR at health facility level nationwide	9	SLL 6 623 802 000.00	\$862 474.22

Group	Technical Area	Objective	Summary Activity	Total score	Associated Costed of priority activities	Associated Costed of priority activities
3	Real Time surveillance	Develop, integrate and maintain an interoperable, interconnected, electronic real-time reporting system, for public health and/or veterinary surveillance systems at all levels by 2024	Build capacity for data analysis among human and animal health workers	7	SLL 4 332 672 000.00	\$564 150.00
3	Real Time surveillance	Strengthen capacity for data analysis at all levels by 2022	Improve ICT to support data analysis for surveillance at all levels	7	SLL 521 500 000.00	\$67 903.65
3	Reporting	Develop and establish protocols, processes, regulations and legislation governing reporting to be implemented by 2020.	"Strengthen the reporting capacity for priority zoonotic diseases"	7	SLL 48 000 000.00	\$6 250.00
3	Reporting	By 2022, strengthen capacity to identify any potential PHEIC and report within 24 hours to WHO, FAO and OIE.	Build technical capacity among the National IHR Focal Point and OIE teams.	8	SLL 42 744 000.00	\$5 565.63
3	Reporting	By 2022, strengthen capacity to identify any potential PHEIC and report within 24 hours to WHO, FAO and OIE.	Develop a legal framework for information sharing with neighboring countries	7	SLL 37 495 000.00	\$4 882.16
3	Reporting	Develop and establish protocols, processes, regulations and legislation governing reporting to be implemented by 2020.	Develop and implement national guidelines and SOPs for notification of PHEIC events and mechanisms for sharing information between key sectors	7	SLL 241 280 000.00	\$31 416.67
3	Reporting	By 2022, strengthen capacity to identify any potential PHEIC and report within 24 hours to WHO, FAO and OIE.	Operationalize the National IHR Focal point	7	SLL 134 910 000.00	\$17 566.41
3	Zoonotic Disease	Increase animal health workforce capacity at national level and in atleast 80 percent of the districts by 2022	Strengthen technical capacity for animal health workforce	9	SLL 4 594 908 000.00	\$598 295.31
3	Zoonotic Disease	Establish a Zoonotic surveillance systems for five or more zoonotic diseases/ pathogens of greatest public health concern by 2022	Develop and implement national Guidelines for zoonotic disease Surveillance	9	SLL 4 955 964 689.66	\$645 307.90
4	Preparedness	To have an all hazards plan and a system for stockpiling of supply mechanism to foster assess to resources during emergencies that is one health compliant by 2018.	Develop a one-health compliant all hazards plan	10	SLL 523 650 000.00	\$68 183.59
4	Preparedness	To have a comprehensive vulnerability and risk assessment with resource mapping and mobilization for identified hazards by 2019	Establish a comprehensive risk and resource mapping of priority public health hazards	10	SLL 371 650 000.00	\$48 391.93
4	Emergency Response Operations	To have a Surge capacity staff available and increase the proportion of EOC operations budget for preparedness and response at various levels supported through core government funding to 50% by 2018.	Develop a costed strategic plan for EOC that should be review and tested annually.	10	SLL 163 430 000.00	\$21 279.95

Group	Technical Area	Objective	Summary Activity	Total score	Associated Costed of priority activities	Associated Costed of priority activities
4	Emergency Response Operations	To have a Surge capacity staff available and increase the proportion of EOC operations budget for preparedness and response at various levels supported through core government funding to 50% by 2018.	Capacity building for surge personnel	9	SLL 5 002 621 500.00	\$651 383.01
4	Linking Public Health & Security	To strengthen coordination, collaboration and joint planning between public health and security authorities in response to emergencies by 2022	Build capacity for coordination and collaboration between human health, animal health and collaboration between public health and security authorities at PoEs	8	SLL 712 630 000.00	\$92 790.36
4	Med Counter Measure	A one-health compliant strategic national stockpiling system of medical commodities for use in public health emergencies is established in Sierra Leone by 2020	Establish regulations for vetting donations of medical supplies to align with pharmacy board requirements	7	SLL 132 630 000.00	\$17 269.53
4	Risk Communication	To establish a dedicated budget line by 2018 for addressing risk communications response in MoHS & MAF	Finalize the EOC communications strategic plan.	7	SLL 472 480.00	\$61.52
4	Risk Communication	To develop formal mechanism to coordinate communication with the private sector and other stakeholders during an emergency	Sustain regular communications with partners	7	SLL 287 320 000.00	\$37 411.46
4	Risk Communication	To have risk communications focal persons in each district by 2018 (health sector) that will serve as communication link between the district and the community	Develop messaging and materials for risk communication	7	SLL 56 650 000.00	\$7 376.30
4	Risk Communication	To establish a dedicated budget line by 2018 for addressing risk communications response in MoHS & MAF	Create a dedicated budget line for addressing risk communications response in MoHS & MAF	9	SLL 41 620 000.00	\$5 419.27
4	16-Risk Communication	To establish a dedicated budget line by 2018 for addressing risk communications response in MoHS & MAF	Build human capacity in risk communication	8	SLL 5 433 810 000.00	\$707 527.34
4	16-Risk Communication	To have risk communications focal persons in each district by 2018 (health sector) that will serve as communication link between the district and the community	Capacity building for risk communication in the districts	8	SLL 1 312 610 000.00	\$170 912.76
5	PoE	To sustain 24 hours routine port health services in four (4) PoEs by 2022	Develop Strategic plan for Port Health	8	SLL 1 344 858 000.00	\$175 111.72
5	PoE	To sustain 24 hours routine port health services in four (4) PoEs by 2023	Develop framework, SOPs, guidelines and tools for border health	7	SLL 586 590 000.00	\$76 378.91
5	PoE	To sustain 24 hours routine port health services in four (4) PoEs by 2024	Cross border engagement for information sharing, joint outbreak response and planning	7	SLL 2 690 550 000.00	\$350 332.03
5	PoE	To develop, implement and test ECPs at 4 PoEs by 2022	Develop a national public health Emergency Contingency Plan (PHECP) for emergencies at PoEs	8	SLL 2 395 035 166.00	\$311 853.54

Group	Technical Area	Objective	Summary Activity	Total score	Associated Costed of priority activities	Associated Costed of priority activities
5	PoE	To sustain 24 hours routine port health services in four (4) PoEs by 2026	Strengthen infrastructure for routine services at PoEs	8	SLL 90 845 000.00	\$11 828.78
5	PoE	To sustain 24 hours routine port health services in four (4) PoEs by 2027	Build technical capacity for port health services	8	SLL 2 664 100 000.00	\$346 888.02
5	PoE	To sustain 24 hours routine port health services in four (4) PoEs by 2028	Strengthen capacity for responding to public health emergencies at PoEs	7	SLL 2 075 150 000.00	\$270 201.82
5	PoE	To sustain 24 hours routine port health services in four (4) PoEs by 2026	Develop/review Policy for Port health services	7	SLL 330 550 000.00	\$43 040.36
5	Chemical Events	To establish a national chemical surveillance and response system in real time reporting at 50% by 2022	Promote programmes to develop chemicals-management instruments (national profiles, national implementation plans, national emergency preparedness and response plans).	7	SLL 1 868 621 000.00	\$243 310.03
5	Chemical Events	To establish a national chemical surveillance and response system in real time reporting at 50% by 2023	Develop communication framework for pollution and chemicals management	8	SLL 4 158 388 000.00	\$541 456.77
5	Chemical Events	To develop, legal instruments for effective implementation and enforcement of chemical events to support integrated national environment and health surveillance systems by 2022.	Enact Draft National chemicals Management Act 2017	7	SLL 970 100 000.00	\$126 315.10
5	Chemical Events	To develop, legal instruments for effective implementation and enforcement of chemical events to support integrated national environment and health surveillance systems by 2022.	Enact Draft regulations for the management of toxic and hazardous substance	7	SLL 970 100 000.00	\$126 315.10
5	Chemical Events	To develop, legal instruments for effective implementation and enforcement of chemical events to support integrated national environment and health surveillance systems by 2022.	Develop/adopt chemical standards in air, water, waste water, sediment/sludge, plant and human specimen, soil, exhaust fumes and products	8	SLL 488 610 000.00	\$63 621.09
5	Chemical Events	To develop, legal instruments for effective implementation and enforcement of chemical events to support integrated national environment and health surveillance systems by 2022.	Develop and enact a National chemical standards regulations for all environmental media	8	SLL 1 522 238 000.00	\$198 208.07
5	Chemical Events	To develop, legal instruments for effective implementation and enforcement of chemical events to support integrated national environment and health surveillance systems by 2022.	Enactment of electronic waste management regulation	8	SLL 1 947 686 000.00	\$253 604.95

Group	Technical Area	Objective	Summary Activity	Total score	Associated Costed of priority activities	Associated Costed of priority activities
5	Radiation Emergencies	To strengthen surveillance and response to nuclear and radiological hazards with 50% routine reporting from identified nuclear and radiological hazard sites by 2022	Develop communication framework for radiation management	7	SLL 1 742 180 000.00	\$226 846.35
5	Radiation Emergencies	To develop, implement and test a national radiation emergency response plan by 2022.	Review Radiation Protection Act	7	SLL 478 840 000.00	\$62 348.96
5	Radiation Emergencies	To develop, implement and test a national radiation emergency response plan by 2022.	Develop/adopt radiation standards in air, water, sediment/sludge, plant and human specimen, soil, and products	7	SLL 336 378 000.00	\$43 799.22
5	Food Safety	To establish a food safety surveillance and response system with 50% reporting from identified reporting sites.	Strengthen capacity for response to food safety incidents	7	SLL 3 383 571 000.00	\$440 569.14
Total					SLL 389 237 589 937.66	\$50 681 977.86

High Prioritized Activities

Item	Amount (Le)	Amount (USD)
Medical Countermeasures and Personnel	132 630 000	17 270
National Legislation, poclcy and Financing	538 875 510	70 166
Reporting	560 129 000	72 933
Linking Public Health and Security	712 630 000	92 790
Pereparedness	895 300 000	116 576
Radiation Emergencies	2 557 398 000	332 995
Food Safety	3 383 571 000	440 569
Emergency Response Operations	5 166 051 500	672 663
Boisafety and Biosecurity	6 124 939 000	797 518
Workforce development	6 265 592 000	815 832
Risk Communication	7 132 482 480	928 709
IHR Coordination	7 140 000 000	929 688
Laboratory	11 041 238 000	1 437 661
Zoonotic Diseases	11 525 646 690	1 500 735
Chemical Events	11 925 743 000	1 552 831
Points of Entry (PoE)	12 177 678 166	1 585 635
Antimicrobial Resistance	19 083 684 592	2 484 855
Immunization	93 410 747 000	12 162 858
Real Time Surveillance	189 463 254 000	24 669 695
Total	389 237 589 938	50 681 978

Resource Mapping | STRATEGIC PARTNERSHIP COORDINATION

Donor Funding IHR Sierra Leoneoritized Activities

Donor Name	Project Name	IHR Core Capacity Supported	Status	Activity Description	Date	Channel of Funding	Specify if Other Agencies	Amount	Region Receiving Support
AfDB	Strengthening West Africa's Public Health Systems Response to the Ebola Crisis	Real Time Surveillance	Completed	Strengthening IDSR and IHR, eIDSR, CBS and logistics support for surveillance and response	2016-2017	Through WHO	MOHS	\$ 1 156 200	National
AIDCO	WHO		Completed						All districts
Bill & Melinda Gates	WHO ATM	HIV, TB and Malaria	Completed	Implementation of preventive strategies on Malaria, HIV and TB	2014-2016	Through WHO		\$	All districts
Canada		Biosafety and Biosecurity	Completed	Development of policies, guidelines, training of biosafety officers	2016-2018	Through WHO			National
Canada Aid	WHO	Laboratory	Completed	Support building Laboratory capacity	2016-2018	Through WHO			All districts
US - CDC	CDC Ring Vaccine	Immunization	On Going	Ring vaccination for Ebola vaccine	2018-2020	Through WHO		\$ 500 000	All districts
US - CDC	CDC Ring Vaccine	Immunization	On Going	Ring vaccination for Ebola vaccine	2018-2020	Through WHO		\$ 500 000	All districts
US - CDC	HBMM	Points of Entry (PoEs)	On Going	Coordinating disease surveillance and response	2015-2018	Other Agencies	IOM	£ 1 000	Kambia
US - CDC	HBMM	Points of Entry (PoEs)	On Going	Coordinating disease surveillance and response	2015-2018	Other Agencies	IOM	£ 1 000	Koinadugu
US - CDC	HBMM	Points of Entry (PoEs)	On Going	Coordinating disease surveillance and response	2015-2018	Other Agencies	IOM	£ 1 000	Pujehun
US - CDC	HBMM	Points of Entry (PoEs)	On Going	Coordinating disease surveillance and response	2015-2018	Other Agencies	IOM	£ 1 000	Kailahun
US - CDC	HBMM	Points of Entry (PoEs)	Planned	Capacity Building	2014-2018	Other Agencies	IOM	Le 1 000 000	Port Loko
US - CDC	GHSA	Real Time Surveillance	On Going	IDSR, eIDSR, case-based disease surveillance, CHAMPS, cross-border surveillance	2015-2019	Other Agencies	WHO, eHealth Africa, IOM, focus 1000, World hope International, HISP	\$	National
US - CDC	GHSA	Real Time Surveillance	On Going	Sierra Leone Ebola Database (SLED)	2016-2019	Other Agencies	eHealth Africa, Concern	\$	National

Donor Name	Project Name	IHR Core Capacity Supported	Status	Activity Description	Date	Channel of Funding	Specify if Other Agencies	Amount	Region Receiving Support
US - CDC	GHSA	Workforce Development	On Going	FETP Frontline, Intermediate & Advanced, CHO Management & Leadership training, IPC Certification Course;	2015-2019	Other Agencies	eHealth Africa, AFENET, ICAP, EMORY,	\$ 1 000 000	National
China CDC		Laboratory	On Going	Human sample	2017-2020				National
China CDC		Real Time Surveillance	On Going	Diarrhea and fever surveillance	2017-2020				National
Chinese Government	National Laboratory System support	Laboratory	On Going	Building lab (RSLAF P4) - building will be complete end of June, then will staff and continue to offer support in staffing over next couple years until hand over completely to SL					
Chinese Government	National Laboratory System support	Laboratory	On Going	Building lab (RSLAF P4) - building will be complete end of June, then will staff and continue to offer support in staffing over next couple years until hand over completely to SL					
DFID	IDSR and IHR Implementation	Real Time Surveillance	Completed	Indicator based surveillance, Sentinel Surveillance and IHR	2016-2017	Through WHO	MOHS	\$ 1 034 800	National
DFID	IDSR and IHR Implementation	IHR	Completed	Indicator based surveillance, Sentinel Surveillance and IHR	2016-2017	Through WHO	MOHS	\$ 1 034 800	National
DFID	Resilient Zero	Laboratory	Completed	Lab modernization capacity building - Ebola Dx	2016-2017	Other Agencies	PHE	£	National
DFID	WHO - DFID	Preparedness	On Going	Support for RRTs to conduct field investigations, refresher courses for the RRTs; M&E of preparedness at district levels; Support compilation, validation, printing and dissemination of the all-hazard plan; Simulation exercises	2018-2020	Through WHO		\$ 300 000	All districts
DFID	WHO - DFID	Emergency Response Operations	On Going	Support for RRTs to conduct field investigations, refresher courses for the RRTs; M&E of preparedness at district levels; Support compilation, validation, printing and dissemination of the all-hazard plan; Simulation exercises	2018-2020	Through WHO		\$ 300 000	All districts

Donor Name	Project Name	IHR Core Capacity Supported	Status	Activity Description	Date	Channel of Funding	Specify if Other Agencies	Amount	Region Receiving Support
DFID	Resilient Zero	Emergency Response Operations	Completed	EPRR training	2016-2017	Other Agencies	PHE	£	National
DFID	HBMM	Points of Entry (PoEs)	On Going	Cross border coordination	2014-2018	Other Agencies	IOM	\$ 4 000	Forecariah
DFID	HBMM	Points of Entry (PoEs)	On Going	Cross border coordination	2014-2018	Other Agencies	IOM	\$ 4 000	Kambia
USAID	HBMM	Points of Entry (PoEs)	On Going	Cross border coordination	2014-2018	Other Agencies	IOM	\$ 4 000	Kambia
USAID	HBMM	Points of Entry (PoEs)	On Going	Cross border coordination	2014-2018	Other Agencies	IOM	\$ 4 000	Forecariah
CDC	HBMM	Points of Entry (PoEs)	On Going	Cross border coordination	2014-2018	Other Agencies	IOM	\$ 4 000	Kambia
CDC	HBMM	Points of Entry (PoEs)	On Going	Cross border coordination	2014-2018	Other Agencies	IOM	\$ 4 000	Forecariah
DFID	HHBM	Points of Entry (PoEs)	Completed	Breaking cross border disease transmission	2014-2015	Other Agencies	IOM	£ 5 000	Kambia
DFID	HHBM	Points of Entry (PoEs)	Completed	Breaking cross border disease transmission	2014-2015	Other Agencies	IOM	£ 5 000	Tonkolili
DFID	HHBM	Points of Entry (PoEs)	Completed	Breaking cross border disease transmission	2014-2015	Other Agencies	IOM	£ 5 000	Pujehun
DFID	HHBM	Points of Entry (PoEs)	Completed	Breaking cross border disease transmission	2014-2015	Other Agencies	IOM	£ 5 000	kailahun
DFID	HHBM	Points of Entry (PoEs)	Completed	Breaking cross border disease transmission	2014-2015	Other Agencies	IOM	£ 5 000	Port Loko
DFID	HHBM	Points of Entry (PoEs)	Completed	Breaking cross border disease transmission	2014-2015	Other Agencies	IOM	£ 5 000	Kono
DFID	HHBM	Points of Entry (PoEs)	Completed	Breaking cross border disease transmission	2014-2015	Other Agencies	IOM	£ 5 000	WR
DFID	HHBM	Points of Entry (PoEs)	Completed	Breaking cross border disease transmission	2014-2015	Other Agencies	IOM	£ 5 000	WU
USAID	HHBM	Points of Entry (PoEs)	Completed	Breaking cross border disease transmission	2014-2015	Other Agencies	IOM	£ 5 000	Kambia
USAID	HHBM	Points of Entry (PoEs)	Completed	Breaking cross border disease transmission	2014-2015	Other Agencies	IOM	£ 5 000	Tonkolili
USAID	HHBM	Points of Entry (PoEs)	Completed	Breaking cross border disease transmission	2014-2015	Other Agencies	IOM	£ 5 000	Pujehun

Donor Name	Project Name	IHR Core Capacity Supported	Status	Activity Description	Date	Channel of Funding	Specify if Other Agencies	Amount	Region Receiving Support
USAID	HHBM	Points of Entry (PoEs)	Completed	Breaking cross border disease transmission	2014-2015	Other Agencies	IOM	£ 5 000	kailahun
USAID	HHBM	Points of Entry (PoEs)	Completed	Breaking cross border disease transmission	2014-2015	Other Agencies	IOM	£ 5 000	Port Loko
USAID	HHBM	Points of Entry (PoEs)	Completed	Breaking cross border disease transmission	2014-2015	Other Agencies	IOM	£ 5 000	Kono
USAID	HHBM	Points of Entry (PoEs)	Completed	Breaking cross border disease transmission	2014-2015	Other Agencies	IOM	£ 5 000	WR
USAID	HHBM	Points of Entry (PoEs)	Completed	Breaking cross border disease transmission	2014-2015	Other Agencies	IOM	£ 5 000	WU
CDC	HHBM	Points of Entry (PoEs)	Completed	Breaking cross border disease transmission	2014-2015	Other Agencies	IOM	£ 5 000	Kambia
CDC	HHBM	Points of Entry (PoEs)	Completed	Breaking cross border disease transmission	2014-2015	Other Agencies	IOM	£ 5 000	Tonkolili
CDC	HHBM	Points of Entry (PoEs)	Completed	Breaking cross border disease transmission	2014-2015	Other Agencies	IOM	£ 5 000	Pujehun
CDC	HHBM	Points of Entry (PoEs)	Completed	Breaking cross border disease transmission	2014-2015	Other Agencies	IOM	£ 5 000	kailahun
CDC	HHBM	Points of Entry (PoEs)	Completed	Breaking cross border disease transmission	2014-2015	Other Agencies	IOM	£ 5 000	Port Loko
CDC	HHBM	Points of Entry (PoEs)	Completed	Breaking cross border disease transmission	2014-2015	Other Agencies	IOM	£ 5 000	Kono
CDC	HHBM	Points of Entry (PoEs)	Completed	Breaking cross border disease transmission	2014-2015	Other Agencies	IOM	£ 5 000	WR
CDC	HHBM	Points of Entry (PoEs)	Completed	Breaking cross border disease transmission	2014-2015	Other Agencies	IOM	£ 5 000	WU
DoD DTRA		Laboratory	On Going	procurements of reagents and consumables	2015	Direct Bilateral			National
DoD DTRA		Laboratory	Planned	Lab rehabilitation	2018	Direct Bilateral			National
European Commission	Environmental Governance and Mainstreaming Project	Chemical Events	Completed	Training and procurement of field monitoring Equipment	2014-2016	Direct Bilateral			National
European Commission	WHO - EU	Immunization	On Going	Immunization, health system strengthening					All districts
European Commission	WHO - EU	Health system strengthening	On Going	Immunization, health system strengthening					All districts
European Union	Operational Project for Environment	Laboratory	Completed		2016-2017	Direct Bilateral	EPA	\$	Western Area

Donor Name	Project Name	IHR Core Capacity Supported	Status	Activity Description	Date	Channel of Funding	Specify if Other Agencies	Amount	Region Receiving Support
GAVI	WHO	Immunization	On Going	Support to implementation of routine immunization	2018-2023	Other Agencies	WHO, UNICEF, and bilateral arrangements with MoHS		All districts
GCF (Green Climate Fund)									
GEF (Global Environment Facility)	Capacity strengthened for the implementation of the stockholm convention	Chemical Events	On Going	Chemical legislations; Pesticide inventory	2014-2018	Other Agencies	UNEP	\$ 70 000	National
GEF (Global Environment Facility)	Minimata Initial Assessment and Artisanal Gold mining	Chemical Events	On Going	NAP for Mercury in products and the Artisanal and Small scale Gold mining Communities	2017-2020	Other Agencies	UNEP	\$ 700 000	National
GEF (Global Environment Facility)	Capacity strengthened for the implementation of the stockholm convention	Chemical Events	On Going	Awareness raising;	2014-2017	Other Agencies	UNEP	\$ 30 000	WU
GEF (Global Environment Facility)	Capacity strengthened for the implementation of the stockholm convention	Chemical Events	On Going	Awareness raising;	2014-2017	Other Agencies	UNEP	\$ 30 000	Kambia
GEF (Global Environment Facility)	Capacity strengthened for the implementation of the stockholm convention	Chemical Events	On Going	Awareness raising;	2014-2017	Other Agencies	UNEP	\$ 30 000	Pujehun
GEF (Global Environment Facility)	Capacity strengthened for the implementation of the stockholm convention	Chemical Events	On Going	Awareness raising;	2014-2017	Other Agencies	UNEP	\$ 30 000	Bo
GEF (Global Environment Facility)	Capacity strengthened for the implementation of the stockholm convention	Chemical Events	On Going	Awareness raising;	2014-2017	Other Agencies	UNEP	\$ 30 000	Tonkolili
GEF (Global Environment Facility)	Capacity strengthened for the implementation of the stockholm convention	Chemical Events	On Going	Awareness raising;	2014-2017	Other Agencies	UNEP	\$ 30 000	kono
GEF (Global Environment Facility)	Capacity strengthened for the implementation of the stockholm convention	Chemical Events	On Going	Awareness raising;	2014-2017	Other Agencies	UNEP	\$ 30 000	koinadugu
GEF (Global Environment Facility)	Review and Update of the National Implementation Plan for the Stockholm Convention	Chemical Events	On Going	National Action Plan for Persistent Organic Pollutants	2015-2018	Other Agencies	UNEP	\$ 152 000	National
GIZ		Points of Entry (PoEs)	On Going			Other Agencies	GIZ		Kambia
GIZ		Points of Entry (PoEs)	On Going			Other Agencies	GIZ		Kallahun

Donor Name	Project Name	IHR Core Capacity Supported	Status	Activity Description	Date	Channel of Funding	Specify if Other Agencies	Amount	Region Receiving Support
GIZ		Risk Communication	On Going	Supporting ICT innovation to support risk communication at the EOC	2018-2020	Other Agencies	Through WAHO to an implementing partner (Sensi Tech Innovation Hub)		
GIZ		Risk Communication	On Going	Supporting ICT innovation to support risk communication at the EOC	2018-2020	Other Agencies	Through WAHO to an implementing partner (Sensi Tech Innovation Hub)		
Global Fund		Laboratory	On Going	Malaria, TB, and HIV	2015	Direct Bilateral	MOHS (NAS, NMCP, NTP)		National
Global Fund		Laboratory	On Going	HIV EID viral load	2015	Other Agencies	ASLM		National
Netherlands	WHO	Emergency Response Operations	Completed	EVD Laboratory capacity	2016-2017	Through WHO		\$	All districts
H6+ RWMCH Trust Fund	WHO	Child health	On Going	Child health					All districts
Italy		Preparedness	On Going	Strengthening national framework for management and coordination for PHE using the all-hazard approach; Risk assessments for relevant PHEs conducted and information disseminated	2018-2018	Through WHO		\$ 100 000	All districts
Italy		Emergency Response Operations	On Going	Strengthening national framework for management and coordination for PHE using the all-hazard approach; Risk assessments for relevant PHEs conducted and information disseminated	2018-2018	Through WHO		\$ 100 000	All districts
Italy	Strengthening IHR implementation in Sierra Leone	IHR	On Going	IHR Core Capacity Strengthening, Indicator based surveillance, cross border surveillance	2017-2018	Through WHO	MOHS	\$ 276 700	
Italy	Preparedness, Surveillance and response to public health emergencies strengthened at POEs including International Borders	Points of Entry (PoEs)	On Going	Strengthened coordination and implementation of IHR 2005 at POEs	2016-2018	Through WHO		\$ 49 000	Kambia
Italy	Preparedness, Surveillance and response to public health emergencies strengthened at POEs including International Borders	Points of Entry (PoEs)	On Going	Strengthened coordination and implementation of IHR 2005 at POEs	2016-2018	Through WHO		\$ 49 000	Koinadugu

Donor Name	Project Name	IHR Core Capacity Supported	Status	Activity Description	Date	Channel of Funding	Specify if Other Agencies	Amount	Region Receiving Support
Italy	Preparedness, Surveillance and response to public health emergencies strengthened at POEs including International Borders	Points of Entry (PoEs)	On Going	Strengthened coordination and implementation of IHR 2005 at POEs	2016-2018	Through WHO		\$ 49 000	Pujehun
Italy	Preparedness, Surveillance and response to public health emergencies strengthened at POEs including International Borders	Points of Entry (PoEs)	On Going	Strengthened coordination and implementation of IHR 2005 at POEs	2016-2018	Through WHO		\$ 49 000	kallahun
Italy	Preparedness, Surveillance and response to public health emergencies strengthened at POEs including International Borders	Points of Entry (PoEs)	On Going	Strengthened coordination and implementation of IHR 2005 at POEs	2016-2018	Through WHO		\$ 49 000	Bombail
Italy	Preparedness, Surveillance and response to public health emergencies strengthened at POEs including International Borders	Points of Entry (PoEs)	On Going	Strengthened coordination and implementation of IHR 2005 at POEs	2016-2018	Through WHO		\$ 49 000	Kono
Italy	Preparedness, Surveillance and response to public health emergencies strengthened at POEs including International Borders	Points of Entry (PoEs)	On Going	Strengthened coordination and implementation of IHR 2005 at POEs	2016-2018	Through WHO		\$ 49 000	Kenema
JICA		Laboratory	Completed	training and capacity building	2016-2017	Direct Bilateral	MOHS		National
Luxembourg Development Cooperation	WHO	EVD Response	Completed						All districts
MPTF	Preparedness, Surveillance and response to public health emergencies strengthened at POEs including International Borders	Points of Entry (PoEs)	On Going	"1. Strengthened coordination and implementation of IHR 2005 at POEs 2. Support monitoring and evaluation of surveillance and response capacities at PoEs"	2016-2018	Through WHO		\$ 121 400	Kambia
MPTF	Preparedness, Surveillance and response to public health emergencies strengthened at POEs including International Borders	Points of Entry (PoEs)	On Going	"1. Strengthened coordination and implementation of IHR 2005 at POEs 2. Support monitoring and evaluation of surveillance and response capacities at PoEs"	2016-2018	Through WHO		\$ 121 400	Koinadugu
MPTF	Preparedness, Surveillance and response to public health emergencies strengthened at POEs including International Borders	Points of Entry (PoEs)	On Going	"1. Strengthened coordination and implementation of IHR 2005 at POEs 2. Support monitoring and evaluation of surveillance and response capacities at PoEs"	2016-2018	Through WHO		\$ 121 400	Pujehun

Donor Name	Project Name	IHR Core Capacity Supported	Status	Activity Description	Date	Channel of Funding	Specify if Other Agencies	Amount	Region Receiving Support
MPTF	Preparedness, Surveillance and response to public health emergencies strengthened at POEs including International Borders	Point of Entries (PoEs)	On Going	*1. Strengthened coordination and implementation of IHR 2005 at POEs 2. Support monitoring and evaluation of surveillance and response capacities at PoEs"	2016-2018	Through WHO		\$ 121 400	kailahun
MPTF	Preparedness, Surveillance and response to public health emergencies strengthened at POEs including International Borders	Point of Entries (PoEs)	On Going	*1. Strengthened coordination and implementation of IHR 2005 at POEs 2. Support monitoring and evaluation of surveillance and response capacities at PoEs"	2016-2018	Through WHO		\$ 121 400	Bombali
MPTF	Preparedness, Surveillance and response to public health emergencies strengthened at POEs including International Borders	Point of Entries (PoEs)	On Going	*1. Strengthened coordination and implementation of IHR 2005 at POEs 2. Support monitoring and evaluation of surveillance and response capacities at PoEs"	2016-2018	Through WHO		\$ 121 400	Kono
MPTF	Preparedness, Surveillance and response to public health emergencies strengthened at POEs including International Borders	Point of Entries (PoEs)	On Going	*1. Strengthened coordination and implementation of IHR 2005 at POEs 2. Support monitoring and evaluation of surveillance and response capacities at PoEs"	2016-2018	Through WHO		\$ 121 400	Kenema
MDF (UNDP Multi-Donor Trust Fund)	WHO	EVD Response	Completed	EVD Survivors	2016-2017	Other Agencies	WHO, UNAIDS	\$ 560 000	All districts
MLF (Multi-Lateral Fund)	Institutional strengthening for the implementation of the Montreal Protocol	Chemical Events	On Going	Procurement of Ozone depleting Substance monitoring Devices	2014-2021	Other Agencies	UNEP		National
MPTF	Strengthening coordination, advocacy and capacity for the implementation of NAPHS	Point of Entries (PoEs)	Planned	Training of multi-sectorial team in IHR 2005 (including POE)	2018-2018	Through WHO		\$ 18 900	Kambia
MPTF	Strengthening coordination, advocacy and capacity for the implementation of NAPHS	Point of Entries (PoEs)	Planned	Training of multi-sectorial team in IHR 2005 (including POE)	2018-2018	Through WHO		\$ 18 900	Koinadugu
MPTF	Strengthening coordination, advocacy and capacity for the implementation of NAPHS	Point of Entries (PoEs)	Planned	Training of multi-sectorial team in IHR 2005 (including POE)	2018-2018	Through WHO		\$ 18 900	Pujehun
MPTF	Strengthening coordination, advocacy and capacity for the implementation of NAPHS	Point of Entries (PoEs)	Planned	Training of multi-sectorial team in IHR 2005 (including POE)	2018-2018	Through WHO		\$ 18 900	Kambia

Donor Name	Project Name	IHR Core Capacity Supported	Status	Activity Description	Date	Channel of Funding	Specify if Other Agencies	Amount	Region Receiving Support
MPTF	Strengthening coordination, advocacy and capacity for the implementation of NAPHS	Point of Entries (PoEs)	Planned	Training of multi-sectorial team in IHR 2005 (including POE)	2018-2018	Through WHO		\$ 18 900	Koinadugu
MPTF	Strengthening coordination, advocacy and capacity for the implementation of NAPHS	Point of Entries (PoEs)	Planned	Training of multi-sectorial team in IHR 2005 (including POE)	2018-2018	Through WHO		\$ 18 900	Pujehun
MPTF	Strengthening coordination, advocacy and capacity for the implementation of NAPHS	Point of Entries (PoEs)	Planned	Training of multi-sectorial team in IHR 2005 (including POE)	2018-2018	Through WHO		\$ 18 900	kailahun
MPTF	Strengthening coordination, advocacy and capacity for the implementation of NAPHS	Point of Entries (PoEs)	Planned	Training of multi-sectorial team in IHR 2005 (including POE)	2018-2018	Through WHO		\$ 18 900	Port Loko
MPTF	Strengthening coordination, advocacy and capacity for the implementation of NAPHS	Point of Entries (PoEs)	Planned	Training of multi-sectorial team in IHR 2005 (including POE)	2018-2018	Through WHO		\$ 18 900	Bombali
MPTF	Strengthening coordination, advocacy and capacity for the implementation of NAPHS	Point of Entries (PoEs)	Planned	Training of multi-sectorial team in IHR 2005 (including POE)	2018-2018	Through WHO		\$ 18 900	Kono
MPTF	Strengthening coordination, advocacy and capacity for the implementation of NAPHS	Point of Entries (PoEs)	Planned	Training of multi-sectorial team in IHR 2005 (including POE)	2018-2018	Through WHO		\$ 18 900	WU
MPTF	Strengthening coordination, advocacy and capacity for the implementation of NAPHS	Point of Entries (PoEs)	Planned	Training of multi-sectorial team in IHR 2005 (including POE)	2018-2018	Through WHO		\$ 18 900	Kenema
MPTF	IDSR	Real Time Surveillance	On Going	Indicator based surveillance, cross border surveillance, event based surveillance, community based surveillance.	2017-2018	Through WHO	MOHS	\$ 951 910	
MRU		Point of Entries (PoEs)	On Going						koinadugu
National Philanthropic Trust			Completed			Through WHO			All districts
Netherlands			Completed						
Nippon Foundation									
Norad		EVD Response	Completed			Through WHO			All districts
Rotary International	WHO	Immunization	Completed						All districts

Donor Name	Project Name	IHR Core Capacity Supported	Status	Activity Description	Date	Channel of Funding	Specify if Other Agencies	Amount	Region Receiving Support
Switzerland		Preparedness	On Going	Conduct periodic risk assessments for PHEs; Facilitate production of situation reports and other information products on ongoing events; Develop technical capacity for assessments, verification and documentation of events and risks at all levels	2018-2018	Through WHO		\$ 81 250	All districts
Switzerland		Emergency Response Operations	On Going	Conduct periodic risk assessments for PHEs; Facilitate production of situation reports and other information products on ongoing events; Develop technical capacity for assessments, verification and documentation of events and risks at all levels	2018-2018	Through WHO		\$ 81 250	All districts
UK AID	IHR strengthening	Laboratory	On Going	Capacity building and technical support	2018	Direct Bilateral	PHE		National
UK AID		Preparedness	On Going	Support for RRTs to conduct field investigations, refresher courses for the RRTs; M&E of preparedness at district levels; Support compilation, validation, printing and dissemination of the all-hazard plan; Simulation exercises	2018-2020	Through WHO		\$ 300 000	All districts
UK AID		Emergency Response Operations	On Going	Support for RRTs to conduct field investigations, refresher courses for the RRTs; M&E of preparedness at district levels; Support compilation, validation, printing and dissemination of the all-hazard plan; Simulation exercises	2018-2020	Through WHO		\$ 300 000	All districts
UK AID	IHR strengthening	Emergency Response Operations	Planned	EPRR training	2018	Direct Bilateral	PHE		National
UK AID	IHR strengthening	Workforce Development	Planned	Supporting workforce development of NPHA	2018	Direct Bilateral	PHE		National
UNFIP	WHO		Completed						All districts
UNICEF		Laboratory	On Going	Procurement of reagents and consumables		Direct Bilateral	MOHS		National

Donor Name	Project Name	IHR Core Capacity Supported	Status	Activity Description	Date	Channel of Funding	Specify if Other Agencies	Amount	Region Receiving Support
USAID		AMR	On Going	Animal lab activity training	2017	Other Agencies	FAO		National
USAID		Biosafety and Biosecurity	On Going	animal sector capacity building	2017	Other Agencies	FAO		National
USAID		Laboratory	On Going	Building capacity of the animal labs	2017-2018	Other Agencies	FAO	\$	Central veterinary lab Teko
USAID	One Health	Real Time Surveillance	On Going						National
USAID	Strengthening One Health Implementation	Zoonotic Diseases	On Going	Coordination of surveillance preparedness and response, build capacity of one health staff, facilitate joint investigation between MAF and MOHS	2017-2018	Through WHO	MOHS	\$ 660 000	National
USAID	PREDICT	Zoonotic Diseases	On Going						National
USAID	One Health	Coordination	On Going	Strengthening coordination of surveillance, preparedness and response at national and district level; Build capacity of ON personnel at all levels; Build capacity of multi-disciplinary RRTS (incl. surveillance officers in HH and AH)	2018-2020	Through WHO		\$ 750 000	All districts
USAID	One Health	Communication and Advocacy	On Going	Strengthening coordination of surveillance, preparedness and response at national and district level; Build capacity of ON personnel at all levels; Build capacity of multi-disciplinary RRTS (incl. surveillance officers in HH and AH)	2018-2020	Through WHO		\$ 750 000	All districts
USAID	One Health	Real Time Surveillance	On Going	Strengthening coordination of surveillance, preparedness and response at national and district level; Build capacity of ON personnel at all levels; Build capacity of multi-disciplinary RRTS (incl. surveillance officers in HH and AH)	2018-2020	Through WHO		\$ 750 000	All districts

Donor Name	Project Name	IHR Core Capacity Supported	Status	Activity Description	Date	Channel of Funding	Specify if Other Agencies	Amount	Region Receiving Support
USAID	One Health	Zoonotic Diseases	On Going	Strengthening coordination of surveillance, preparedness and response at national and district level; Build capacity of ON personnel at all levels; Build capacity of multi-disciplinary RRTS (incl. surveillance officers in HH and AH)	2018-2020	Through WHO		\$ 750 000	All districts
USAID	One Health	Reporting	On Going	Strengthening coordination of surveillance, preparedness and response at national and district level; Build capacity of ON personnel at all levels; Build capacity of multi-disciplinary RRTS (incl. surveillance officers in HH and AH)	2018-2020	Through WHO		\$ 750 000	All districts
USAID	One Health	Preparedness	On Going	Strengthening coordination of surveillance, preparedness and response at national and district level; Build capacity of ON personnel at all levels; Build capacity of multi-disciplinary RRTS (incl. surveillance officers in HH and AH)	2018-2020	Through WHO		\$ 750 000	All districts
USAID	One Health	Emergency Response Operations	On Going	Strengthening coordination of surveillance, preparedness and response at national and district level; Build capacity of ON personnel at all levels; Build capacity of multi-disciplinary RRTS (incl. surveillance officers in HH and AH)	2018-2020	Through WHO		\$ 750 000	All districts
USAID	One Health	Points of Entry (PoEs)	On Going	Strengthening coordination of surveillance, preparedness and response at national and district level; Build capacity of ON personnel at all levels; Build capacity of multi-disciplinary RRTS (incl. surveillance officers in HH and AH)	2018-020	Through WHO		\$ 750 000	All districts
USAID	Breakthrough ACTION	Risk Communication	On Going		2018-2020	Other Agencies	Global program	\$ 3 000 000	Bombali
USAID	Breakthrough ACTION	Risk Communication	On Going		2018-2020	Other Agencies	Global program	\$ 3 000 000	Bombali

Donor Name	Project Name	IHR Core Capacity Supported	Status	Activity Description	Date	Channel of Funding	Specify if Other Agencies	Amount	Region Receiving Support
USAID	PREDICT 2 (through GHSA)	Zoonotic Diseases	On Going	PREDICT 2 (through GHSA)					
USAID	PREDICT 2 (through GHSA)	Workforce Development	On Going	PREDICT 2 (through GHSA)					
USAID	PREDICT 2 (through GHSA)	Laboratory	On Going	PREDICT 2 (through GHSA)					
USAID	PREDICT 2 (through GHSA)	Biosafety and Biosecurity	On Going	PREDICT 2 (through GHSA)					
USAID	FAO (through GHSA)	Zoonotic Diseases	On Going						
USAID	FAO (through GHSA)	Workforce Development	On Going						
USAID	FAO (through GHSA)	Laboratory	On Going						
USAID	FAO (through GHSA)	Biosafety and Biosecurity	On Going						
USAID	IFRC (through GHSA)								
USAID	Preparedness & Response (P&R) (through GHSA)	Preparedness	On Going						
USAID	Preparedness & Response (P&R) (through GHSA)	Emergency Response Operations	On Going						
USAID	IFRC (through GHSA)								
US - CDC		AMR	On Going	Support GHSA and IHR implementation	2016-2019	Through WHO		\$	National
US - CDC		AMR	On Going	Support GHSA and IHR implementation	2017-2019	Other Agencies	APHL	\$	National
US - CDC		Biosafety and Biosecurity	On Going	Support GHSA and IHR implementation	2014-2019	Through WHO		\$	National
US - CDC		Biosafety and Biosecurity	On Going	Support GHSA and IHR implementation	2015-2019	Other Agencies	APHL	\$	National
US - CDC		Biosafety and Biosecurity	On Going	Support GHSA and IHR implementation	2018-2019	Direct Bilateral		\$	National
US - CDC		Laboratory	On Going	Support GHSA and IHR implementation	2014-2019	Through WHO		\$	National
US - CDC		Laboratory	On Going	Support GHSA and IHR implementation	2015-2019	Other Agencies	APHL	\$	National
US - CDC		Laboratory	On Going	Support GHSA and IHR implementation	2018-2019	Direct Bilateral		\$	National

Donor Name	Project Name	IHR Core Capacity Supported	Status	Activity Description	Date	Channel of Funding	Specify if Other Agencies	Amount	Region Receiving Support
US - CDC	CHAMPS	Laboratory	On Going						
US - CDC	Cooperative Agreement	Real Time Surveillance	On Going	Indicator based surveillance, eIDSR	2015-2019	Through WHO	MOHS	\$ 952 202	National
WHO	Pandemic Influenza Preparedness (PIP)	Real Time Surveillance	Completed	Sentinel Surveillance	2016-2017	Direct Bilateral	MOHS	\$ 1 38 000	National
World Bank	REDISSE	Laboratory	On Going	Procurement of supplies/ reagents; capacity building	2017-2022	Direct Bilateral	MOHS		National
World Bank	REDISSE	Real Time Surveillance	On Going	eIDSR, community based surveillance, maternal death surveillance and response, animal surveillance, cross border surveillance, risk based surveillance, 117	2018-2019	Direct Bilateral	MOHS, eHealth Africa	\$ 5 744 670	National
World Bank	REDISSE	Workforce Development	Planned	FETP Advanced, training for district medical teams and districts livestock officers, human resources for health strategy	2018-2021	Direct Bilateral	MOHS	\$ 5 744 670	National

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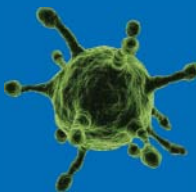
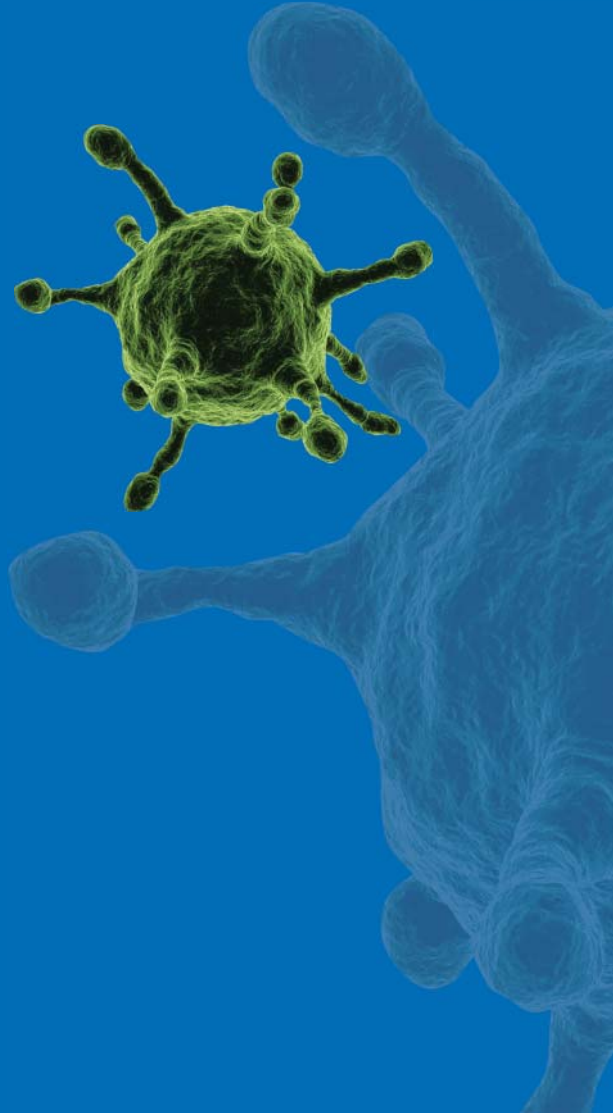
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