DEPAN

RENCANA AKSI NASIONAL KETAHANAN KESEHATAN INDONESIA

2020 - 2024

NAPHS

NATIONAL ACTION PLAN FOR HEALTH SECURITY INDONESIA

2020 - 2024

COLLABORATION

FOREWORD BY THE SECRETARY GENERAL MINISTRY OF HEALTH

Document : National Action Plan For Health Security

International Health Regulations (IHR) 2005 represents anagreement of member states of the World Health Organization (WHO) to enhance their capacity toprevent, detect, and respond quickly to any potential public health threats that spread across countries based on national surveillance systems and legislation that have already existed in eachcountry.

The emerging and re-emerginginfectiousdiseasesas well as easier and faster mobilization of the population from one country to another may result in quicker spread of the disease epidemic which recognizes noboundaries. The threats can be in the form of biological, chemical and nuclear agents that have impacts not onlyon health,butal soon economy. Thus, the effort to deal with these threats requires a multi sectoral approach, both nationally and internationally.

IHR (2005) mandates each member country to have core capacities, including: the legislation and policies, coordination, surveillance, preparedness, response, risk communication, human resources and laboratories. Indonesia has fully implemented the IHR (2005) in 2014. Nevertheless, manyareas still need to beimproved. To evaluateand improve thecountry's capacity in implementing IHR (2005), in November 2017, Indonesia took the initiative to conduct the Joint External Evaluation (JEE) and has received further recommendations to enhance its capacity in implementing IHR (2005).

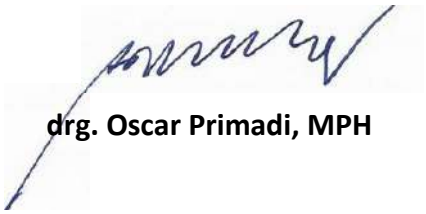
The JEE is a voluntary, collaborative, multisectoral coordination to assess country's core capacities to prevent, detect and respond quickly to public health threats. The JEE also helps countries in identifying critical and emergency issues in the health system to determine priorities in preparedness and response.

This National Action Plan for Health Security (NAPHS) was compiled as a recommendation of the JEE results,and representsan integral partofthe implementation of the Presidential Instruction Number 4 of 2019 concerning Capacity Enhancementin Preventing, Detecting and Responding to Outbreaks of Disease, Global Pandemic and Nuclear, Biological and Chemical Emergencies

The preparation for this National Action Plan for Health Security began in 2018, involving 22 Ministries/Institutions. This document contains guidelines for collaboration as well as synergistic programs and activities to becarried out by all related Ministries/Institutions to enhance national health resilience capacity. This document is also a living document and provides an important strategy for immediate implementation. It should serve asa reference for planning technical activities at the respective Ministries /Institutions, and for Governors, Mayors and Regents to draw up their Regional Action Plans in accordance with the Presidential Instruction Number 4 of 2019.

We would like to extend our highest gratitude and appreciation to all those who have participated and supported the completion of this National Action Plan for Health Security (NAPHS).

Secretary General
Ministry of Health



drg. Oscar Primadi, MPH

FOREWORD BY THE MINISTER OF HEALTH

Document: National Action Plan For HealthSecurity

Climate change has led to an increasedthreat of new-emerging and re-emerging diseases that may develop into pandemic, characterized by high risk of death and extremelyrapid spread of disease. Globalization, which has resulted in the increased human and animal mobility across countries and changes in human lifestyles,hasalso contributed to accelerating the spread of disease outbreaks that pose a threat to global health.

Since the outbreak of the Severe Acute Respiratory Syndrome (SARS) in the Asian region in 2003, global health threats have continued to show an increasing trend, among others, the outbreak of Avian Influenza (H5N1) in 2004. In May 2005, the 58thWorld Health Assembly (WHA) has agreed to the International Health Regulation (2005) to be enforced in all WHO memberstatesstartingJune 15, 2007. The IHR (2005) mandates countries to be able to detect the risk of public health emergencies, as well as assess, respond and inform events in the region to the community, both at the national and international levels.

The World Health Organizationhas developed theJoint External Evaluation (JEE) tool, an instrument to assist countries in strengthening their IHR (2005) implementation. Indonesia assessed its capacities with this instrument in 2017, and one of the recommendations is to develop the National Action Plan for Health Security (NAPHS). This NAPHS document was prepared by the Ministry of Health in collaboration with other 21 Ministries / Institutions involved during the JEE assessment.

With the enactment of Presidential Instruction number 4 of 2019 concerning Capacity Enhancement in Preventing, Detecting and Responding to Outbreaks of Disease, Global Pandemic and Nuclear, Biological and Chemical Emergencies, the Ministries and Institutionsinvolved, including Governors, Mayors and Regents, are expected to take necessary measures in a coordinated and integrated manner according to their respective duties, functions and authorities in the effort to enhance the country's capacity to prevent, detect and respond to epidemics, global pandemics, nuclear, biological and chemical emergencies, which can have national and global impacts.

We would like to extend our highest appreciation for the support of various take holders in the preparation of this document, and it is our hope that our efforts to work closely together in dealing with the global pandemic can come to fruition.

Minister of Health

Terawan Agus Putranto

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I. INTRODUCTION

In November 2017, the Government of Indonesia (GOI) voluntarily underwent Joint External Evaluation (JEE) conducted by WHO external team to assess the country's core capacities to prevent, detect and respond to public health threats under the International Health Regulations (IHR) (2005). The Indonesia National Action Plan for Health Security (NAPHS) 2020 – 2024 was developed in response to JEE results. GOI engaged all relevant ministries, agencies and institutions involved in JEE 2017 to develop the NAPHS.

The NAPHS used the logic model proposed by Indonesia to the Global Health Security Agenda (GHSA). GHSA is a forum established by a number of countries to support WHO in implementing IHR (2005). This logic model harmonizes various priority activities that are considered to provide major contribution to achieving indicators and level of capacities related to those indicators for the 19 Technical Areas (TAs) in JEE tools. In addition, NAPHS also accommodated JEE external team recommendations for each Technical Area.

At the same time, the World Bank is in the process of conducting the country's financing assessment for health security. A tool called the Health Security Financing Assessments Tool (HSFAT) is being field tested in Indonesia to calculate the budget for health security that had been allocated in the previous fiscal year. This information may be regarded as an indication of the supply side, while NAPHS denotes the demand side. Comparison between information produced by HSFAT and NAPHS will provide a gap analysis, whether a positive or negative one in carrying out activities related to health security.

The Presidential Instruction Number 4 of 2019 concerning "Improved Capacity in Preventing, Detecting, and Responding to Disease Outbreaks, Pandemic, and Nuclear, Biological, and Chemical Emergencies"was issued on June 17, 2019. This Presidential Instruction will be advocated among the relevant ministries, agencies and local governments to improve awareness and to be used as a reference in implementing health security.

Health security contributes not only to health development but also to national development. As part of the health development, strengthening of health system is indispensable for robust health security since these two entities interacts reciprocally. Besides, health security is an important component of national resilience. GOI will monitor and evaluate NAPHS implementation in accordance with the current practice adopted for the Annual Plan. Meanwhile Presidential Instruction Number 4 of 2019 necessitates each ministry/agency/institution to determine the appropriate indicators that are part of all indicators proposed in NAPHS.

It is worth noting that WHO HQ has established a web portal known as Strategic Partnership Portal (SPP). Member states that have undergone external evaluation on 19 Technical Areas are encouraged to upload their outcome. This will facilitate interested development partners to directly contact any country that they believeis worth assisting.

II. VISION, MISSION AND OBJECTIVES

A. VISION AND MISSION

Vision

Contribute actively to global efforts in preventing, detecting and responding to potential pandemics attributed to biological, chemical and radio-nuclear agents.

Missions

1. Strengthen national capacity in preventing, detecting and responding to public health emergency of international concern/PHEIC
2. Collaborate with international/UN agencies and civil society in dealing with PHEIC

B. OBJECTIVES

The objective of NAPHS 2020 – 2024 is to support the achievement of the above vision and to strengthen the implementation of the missions, by:

1. Advocating common understanding among all stakeholders in dealing with efforts to prevent, detect and respond to public health emergency
2. Developinga comprehensive National Action Plan for Health Security (NAPHS) document
3. Working closely with WHO, FAO, OIE, WB and GHSA

III. SITUATION ANALYSIS

A. SOCIO-ECONOMIC DEVELOPMENT

Indonesia is the largest archipelagic country in the world, located geographically between two continents (Asia and Australia) and two oceans (the Indian and the Pacific Ocean), with over 250 million population across an estimated total of 6,000 inhabited islands out of 17,504 islands. This diverse country is home to numerous ethnic, cultural and linguistic communities, with more than 700 local dialects. Despite being hit hard by economic and political crisis in 1998, Indonesia has emerged as an economically strong and politically stable nation.

Indonesia is a republic and in accordance with the 1945 Constitution, the government consisted of three governing bodies: the executive, judicial and legislative bodies. The Government of Indonesia is led by a President and Vice-President who are elected through general elections for a five-year term. The President is both the head of state and the head of government, and in carrying out his duties is assisted by a cabinet formed by the President. In June 2019, Joko Widodo (Jokowi) won his second term for presidency.

Indonesia, as the world's fourth most populous country, isreckoned as a rising power both in the Association of Southeast Asian Nations (ASEAN) and the world. The Government of Indonesia is putting a lot of effortinto becoming a high-income country by 2036, and determined to be ranked among the world's fifth largest Gross Domestic Product (GDP) in 2045.To achieve this target, Indonesia's GDP must grow by 5.7 percent per year and be out of the Middle-Income trap in 2036, and reach USD 23,199 GDP in 2045. In addition, Indonesia also plans to achieve the 10th rank in the Ease of Doing Business (EoDB) and puts special emphasis on economic growth that is evenly distributed throughout the decile of income, such that Indonesia's poverty rate in 2045 could be reduced to zero or 0.02 percent, with extreme poverty at zero by 2040[1].

B. HEALTH SITUATION

With the increasing connectivity and interdependence between countries nowadays, people, goods, services and transportation can be easily transported between countries. Nations around the world must be able to respond, control and prevent, and effectively address threats to public health[2]. Indonesia's political and social landscape has been undergoing several changes, such as the transition from authoritarianism to democracy and decentralized reform. This macro transition simultaneously influences the epidemiologic transition in which non-communicable diseases (NCDs) are becoming

[1]Head of the National Development Planning AgencyBambangBrodjonegoro presentation: *Visi Indonesia 2045*, KBRI Singapura, 10 November 2018

[2]Strengthening global health security by embedding the International Health Regulations requirements into national health system.Hans Kluge,1 Jose Maria Martín-Moreno,2 Nedret Emiroglu,3 Guenael Rodier,4Edward Kelley,5 Melitta Vujnovic,6 GovinPermanand, 2018

increasingly important, while infectious diseases remain an important part of the burden. Indonesia currently has a double burden of health problems: the unfinished agenda of infectious diseases and the emergence ofNCDs. Infectious diseases consist of new emerging and re-emerging diseases. Indonesia is one of the three countries with the highest prevalence of tuberculosis (TB) in the world. In addition, Indonesia has to overcomethe risk factors forNCDs, such as high blood pressure, high cholesterol and smoking asunhealthy life style. In 1990, 56% of the burden of the disease was caused by infectious diseases, 37% by NCDs and 7% by injuries. In 2015, there was an increasedincidence of high blood and cholesterol caused by unhealthy diets, an increase in overweight population, and tobacco use. As a result, the burden of NCDs increased to 66%, while infectious diseases declined to 27%[3]. The increasingly complex epidemiological pattern of diseases andvarious macro transitions pose major challenges for Indonesia's health development as a nation.

Indonesia's health status indicators have increased significantly in the past few decades. Life expectancy at birth, which is one of the key health indicators, has shown a significant improvement from 64.40 years in 1996 to 71.06 years in 2017. Total fertility decreased significantly from 5.61 in 1971 to 2.27 per womanin 2000 and remained at 2.4per woman in 2015[4]. The aging population of 65 years and over is expected to increase sharply from 2015 and projected to reach 10% of the population by 2030.

Infant and child mortality (IMR) have shown significant reductions. IMR was 68/1000 in 1991, 34/1000 in 2007 and 25.5/1000 in 2016. Under-five mortality rate has shown a steady decline from 97/1000 in 1991, to 44/1000 in 2007, and 27/1000 in 2015[5].

However, key challenges remain, especially with regard to maternal health andmalnutrition. Maternal Mortality Rate (MMR) is still high. In 2015, MMR was305/100,000 live births[6]. This number is still far from the MDG target of 102/100,000 live births by the end of 2015 and the SDG target of 70/100,000 live births by 2030. In addition, Indonesia has a high prevalence of stunted children. Basic Health Research 2018 noted that the national stunting prevalence had reached 30.8% for children under five and 29.9% for children under two years of age. The Indonesian government has committed itself to prevent childhood stunting and reduce under-two stunting to 28% by 2019.

Indonesia has been dealing with the rising occurrence of overweight and obesity in children and adults. Between 2007 and 2010, the prevalence of overweight increased from 12 to 14% in children under five and 19 to 22% in adults[7]. The "double burden of malnutrition" in the form of mal- and over-nutrition appears simultaneously in the same

[3]Institute of Health Metrics and Evaluation database (IHME) 2015
[4] Statistics Indonesia (BPS)
[5] Statistics Indonesia (BPS)
[6] Statistics Indonesia (BPS)
[7] Basic Health Research, 2010

community, whichresults ina significant increase in non-communicable diseases (NCDs) such as diabetes, stroke and heart diseases.

Indonesia has 34 provinces, 514 districts/cities, and 72,000 villages with 9,825 primary health center (*Puskesmas*), 55.517 auxiliary *Puskesmas*[8] and private primary health clinics. Public and private secondary/tertiary care facilities consist of 68 type A hospitals, 402 type B hospitals, 1,380 type C hospitals, 730 type D hospitals, 237 unclassified hospitals, and 582 specialty hospitals[9]. There are also 289,635 community-managed mother and child health (MCH) center and integrated health center (*Posyandu)*.

Indonesia has 0.45 physicians, 1.84 nurses and 1.73 midwives per 1,000 population[10].To improve healthcare worker distribution, the Government of Indonesia appoints contracted physicians and midwives, deploys healthcare worker teams to remote areas (*Nusantara Sehat Team*), performs cross-training and task shifting, and assigns internship for fresh graduates of physicians or healthcare specialists to more remote locations (4 months at *Puskesmas* and 8 months at public hospitals).

Although there has been a substantial increase in health expenditure at the national level, health spending as a proportion of gross domestic product (GDP) remains below the average among middle-to-low income countries. In 2009, government health expenditure amounted to IDR 2.7 trillion or 2.7% of government expenditure. This number increased to IDR 104 Trillion or 5% of government expenditure in 2017[11].

The findings of several assessments of the capacity of global response to health crises indicate the need for integration between healthcare system, strengthening activities and healthcare security efforts for prevention, warning and prompt response. A country's ability to detect, report and respond to health threats requires strong relationships between, for example, clinical laboratories and healthcare information systems and medical technology, and between the emergency personnel and training of public healthcare personnel. In addition, emergency responses to health threats heavily involve coordination, financing, incident management systems, public awareness and community involvement supported by strong government commitments and resources.

There is no special Budget Execution (Allotment) Document (DIPA) to accommodate the needs for HS resource,hence close collaboration among related stakeholders is mandatory from the planning, implementation and monitoring of HS programs.

[8] Ministry of Health, 2017
[9] Ministry of Health, April 2018, http://sirs.yankes.kemkes.go.id/rsonline/report/
[10] Ministry of Health, 2016
[11]Ministry of Finance ,2017

C. HEALTH SECURITY

In the last five decades, public health emergencies have been marked by the spread of infectious diseases and/or events caused by nuclear radiation, biological pollution, chemical contamination, bioterrorism and food that pose health hazards, and have the potential to spread across regions or countries. Various emerging infectious diseases have resulted in the Public Health Emergency of International Concern (PHEIC), including Ebola (2019 and 2014), Poliomyelitis (2018),Zika Virus Disease (2016), Influenza A (H1N1)(2009), Severe Acute Respiratory Syndrome (SARS)(2002-2003), as well as the Nuclear Blast in Hiroshima which resulted in the emergence of certain diseases.

Since 2005-2018, there have been 200 Avian Influenza (AI)cases with 168 deaths (CFR 84%) in Indonesia. Ever since the outbreak in 2005, Indonesia has carried out various efforts in preventing and controlling AI, including: strengthening surveillance, communication and collaboration amongst related sectors, and comprehensive pandemic influenza preparedness program (such as developing guidelines, contingency plan, and carrying out table top exercise and field simulations).

In 2018, Indonesia reported 1 case of cVDPV1 and 2 contacts of positive cases of cVDPV1 that occurred in Papua. As this case originated from Papua New Guinea (PNG), in addition to implementing sub-National Immunization Weekand increasing routine immunization, Indonesia also strengthens surveillance at ground crossing and develops a Memorandum of Understanding (MOU) between the Indonesian and PNG government.

MERS is one of the diseases that have the potential to cause public health emergencies in Indonesia. The cumulative number of suspected MERS cases in Indonesia from 2013 to the 30th week of 2019 are 553 cases (546 cases with negative laboratory results and 7 cases where thesample specimens could not be taken). Until now there has been no confirmedMERS case in Indonesia.

Zoonoses diseases have becomeboth a national and a global concern. There is an increased threat of new infectious diseases, most of which are from zoonotic diseases. Zoonotic prevention and control must be carried out by means of communication, collaboration and cross-sectoral coordination within the framework of "One Health" which wasadoptedglobally since 2011. Someembryonic activities based on One Health approach have been implemented in Indonesia since 1972 with various cooperations and joint degrees between Ministry of Health (MOH) and Ministry of Agriculture (MOA), followed by Presidential Regulations on National Commission of Bird Flu and Pandemic Preparedness in 2006 and Zoonoses Control in 2011. The development of One Health in Indonesia has improved and become more harmonious across sectors, especially between the MOH, MOA and the Ministry of Environment and Forestry (MOEF).

HISTORY OF IHR IMPLEMENTATION IN INDONESIA

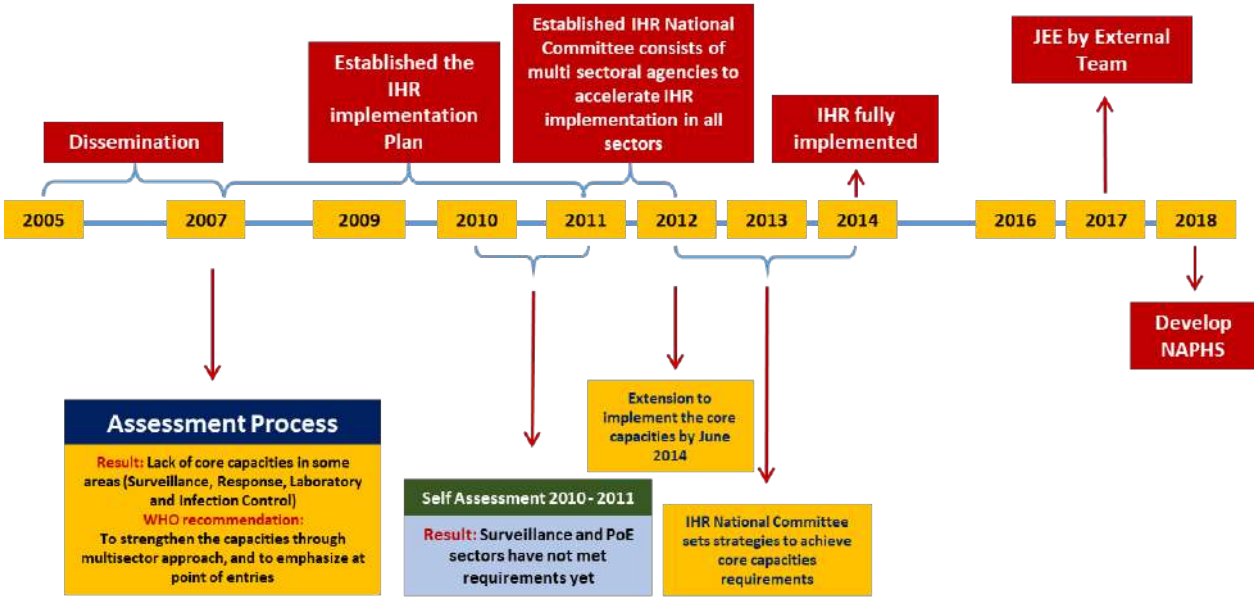
The International Health Regulations(IHR) (2005), agreed upon by 196 WHO member countries including Indonesia, was intended to be a reference for international cooperation to achieve global health security. IHR (2005) aims to prevent, protect, control and respond to public health threats through increased surveillance, as well as reporting and information-sharing between nations. At present, IHR (2005) is an instrument that unites 196 WHO member countries. Nonetheless, compliance with the implementation of IHR (2005) at the global level remains to bechallengingand needs to be improved.

IHR (2005) requires resources at designated airports, ports, and ground crossings or 'Points of Entry' (PoEs) which are able to respond to Public Health Emergency of International Concerns (PHEICs) at any time, limit the spread of public health risks at the international level, and prevent unnecessary restrictions of travel and trades. However, there is more and more evidence showing that effort for controlling the spread of PHEICs at ports and ground crossings are becoming less effective and less efficient. Containment at source by implementing real-time surveillance and strengthening health system hasproven to be more effective. Screening of incoming travelers is less important than screening of outgoing travelers.

Indonesia started implementing IHR (2005) in 2007 and conducted self-assessment on its eight core capacities. The first assessment in 2007 showed that Indonesia lacked capacities and resources in Surveillance, Response, Laboratory and Infection Control, hence it needed to strengthen the capacities through multi sectoral approach, and to emphasize the importance at point of entries (PoE). In 2009, Indonesia developed the IHR strategic plan and conducted self-assessment in 2010 and 2011, whose results showed that surveillance and PoE had not met the requirements yet. To emphasizeIndonesia's commitment to accelerate core capacities fulfillment, a National Committee representing multi sectoral agencies was established in 2011.

In 2012, Indonesia conducted a self-assessment using WHO tools 2010-2012 and the result showed that capacities in surveillance, response, preparedness, coordination and point of entry were not optimal. Finally, in 2014, Indonesia conducted the last self-assessment using WHO tools 2013 and the result was encouraging. The result showed that Indonesia had an optimal and functioning IHR implementation in all eight core capacities.

IHR (2005) IN INDONESIA



THE JOINT EXTERNAL EVALUATION

The JointExternal Evaluation (JEE) - IHR (2005) is intended to assess the country's ability to prevent, detect, and respond quickly to public health threats independently, regardless of whether the threats occur naturally, intentionally, or accidentally. The JEE reviewed the country's preparedness and response-readiness in facing PHEICs for 19 Technical Areas and the extent of multisectoral coordination and collaboration. The JEE tools comprise4 aspects: Prevent, Detect, Respond and Others (PoE, Chemical Events and Radiation Emergencies). Each Technical Area is associated with a target statement, one or more indicators, and a rank-ordered scoring system for each indicator. To facilitate a fair comparison between countries, the assessments are conducted using a standard template provided in the JEE tool.

For the implementation of JEE, the Indonesian Ministry of Health has issued a Ministerial Decree No. HK.02.02/MENKES/273/2016 appointing the coordinators for each category of Prevent, Detect, Respond and Others as well as the responsible focal points for each technical area within the MOH to implement this internal and external evaluation in collaboration and coordination with other related ministries. The Government of Indonesia invited the Joint External Evaluation (JEE) team on November 20-24, 2017. The reports from the JEE assessments are made publicly available. Countries undergoing an assessment are urged to develop a National Action Plan for Health Security (NAPHS) for strengthening IHR (2005) core capacities based on the findings of the assessment.

JEE Result[12]

The JEE process is of particular importance to a nation facing such a complex array of challenges and provide an opportunity for Indonesia to identify strengths, address challenges and demonstrate further leadership. Indonesia's geographically disparate territory imposes a requirement for high level national coordination and monitoring to ensure progress in national core capacities under the IHR (2005). This was demonstrated through the findings of Indonesia's JEE self-assessment exercise and confirmed by the work of the JEE expert team and its Indonesian colleagues during the evaluation week.

Belowis a summary of the JEE scores for the Republic of Indonesia:

TECHNICAL AREAS	INDICATORS	SCORE
PREVENT		
National legislation, policy and financing	P.1.1 Legislation, laws, regulations, administrative requirements, policies or other government instruments in place are sufficient for implementation of IHR (2005)	3
	P.1.2 The State can demonstrate that it has adjusted and aligned its domestic legislation, policies and administrative arrangements to enable compliance with IHR (2005)	3
IHR coordination, communication and advocacy	P.2.1 A functional mechanism is established for the coordination and integration of relevant sectors in the implementation of IHR	3
Antimicrobial resistance	P.3.1 Antimicrobial resistance detection	2
	P.3.2 Surveillance of infections caused by antimicrobial-resistant pathogens	2
	P.3.3 Health care-associated infection (HCAI) prevention and control programs	3
	P.3.4 Antimicrobial stewardship activities	3
Zoonotic diseases	P.4.1 Surveillance systems are in place for priority zoonotic diseases/pathogens	3
	P.4.2 Veterinary or animal health workforce	3
	P.4.3 Mechanisms for responding to infectious and potential zoonotic diseases are established and functional	2
Food safety	P.5.1 Mechanisms for multisectoral collaboration are established to ensure rapid response to food safety emergencies and outbreaks of foodborne diseases	3
Biosafety and biosecurity	P.6.1 Whole-of-government biosafety and biosecurity system is in place for human, animal and agriculture facilities	3

[12]Joint external evaluation of the Republic of Indonesia report, November 20-24, 2017

TECHNICAL AREAS	INDICATORS	SCORE
	P.6.2 Biosafety and biosecurity training and practices	3
Immunization	P.7.1 Vaccine coverage (measles) as part of national programme	4
	P.7.2 National vaccine access and delivery	4
DETECT		
National laboratory system	D.1.1 Laboratory testing for detection of priority diseases	4
	D.1.2 Specimen referral and transport system	4
	D.1.3 Effective modern point-of-care and laboratory-based diagnostics	3
	D.1.4 Laboratory quality system	3
Real-time surveillance	D.2.1 Indicator- and event-based surveillance systems	3
	D.2.2 Interoperable, interconnected, electronic real-time reporting system	3
	D.2.3 Integration and analysis of surveillance data	2
	D.2.4 Syndromic surveillance systems	4
Reporting	D.3.1 System for efficient reporting to FAO, OIE and WHO	3
	D.3.2 Reporting network and protocols in country	3
Workforce development	D.4.1 Human resources available to implement IHR core capacity requirements	3
	D.4.2 FETP[13] or other applied epidemiology training programme in place	4
	D.4.3 Workforce strategy	3
RESPONSE		
Preparedness	R.1.1 National multi-hazard public health emergency preparedness and response plan is developed and implemented	3
	R.1.2 Priority public health risks and resources are mapped and utilized	2
Emergency response operations	R.2.1 Capacity to activate emergency operations	3
	R.2.2 EOC operating procedures and plans	2
	R.2.3 Emergency operations programme	3
	R.2.4 Case management procedures implemented for IHR relevant hazards.	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	4
Medical countermeasures	R.4.1 System in place for sending and receiving medical countermeasures during a public health emergency	4

[13]FETP: Field epidemiology training programme

TECHNICAL AREAS	INDICATORS	SCORE
and personnel deployment	R.4.2 System in place for sending and receiving health personnel during a public health emergency	4
Risk communication	R.5.1 Risk communication systems (plans, mechanisms, etc.)	3
	R.5.2 Internal and partner communication and coordination	3
	R.5.3 Public communication	4
	R.5.4 Communication engagement with affected communities	4
	R.5.5 Dynamic listening and rumour management	4
OTHER IHR HAZARDS AND POE		
Points of entry	PoE.1 Routine capacities established at points of entry	4
	PoE.2 Effective public health response at points of entry	4
Chemical events	CE.1 Mechanisms established and functioning for detecting and responding to chemical events or emergencies	2
	CE.2 Enabling environment in place for management of chemical events	3
Radiation emergencies	RE.1 Mechanisms established and functioning for detecting and responding to radiological and nuclear emergencies	3
	RE.2 Enabling environment in place for management of radiation emergencies	3

Indonesia JEE Final Result

Final Score: 63%

INDICATOR	STATUS
0	RED (<40%)
34	YELLOW (40-70%)
14	GREEN (>70%)

JEE Recommendations

Three overarching recommendations emerged from the evaluation week, which are intended to address challenges affecting Indonesia's capacities in a number of technical areas, as follows:

1. Develop and implement a fully integrated, multisectoral National Action Plan for IHR implementation, facilitated by a legal decree at the highest level.
2. Establish a mechanism to coordinate the IHR and global health security work of all relevant ministries, agencies and institutions.
3. Evaluate and improve decision making structures and delegation of authority and responsibility to act, not only between the national and sub-national levels, but also at the national level.

IV. POLICY AND STRATEGY

A. LEGAL FRAMEWORK

In strengthening health security, the Minister of Health has issued Ministerial Decree no. Hk.02.02 / Menkes / 273/2016 on“the Global Health Resilience Working Group in the Ministry of Health”to coordinate various aspects from detect, prevent, and respond in the health sector.

Presidential Instruction Number 4 of 2019 concerning “Improved Capacity in Preventing, Detecting, and Responding to Disease Outbreaks, Pandemic, and Nuclear, Biological, and Chemical Emergencies” came into force on June 17, 2019. This Presidential Instruction mandates the duties and responsibilities of each relevant ministry / institution in the technical and management aspects for the prevention and control of public health emergencies, outbreaks and epidemic. Various laws and regulations refer to Law No. 4 of 1984 on“Communicable Diseases Epidemic”for the prevention and control of outbreaks / epidemic. The Law No. 4/ 1984 is currently under revision to adjust to the development of national and global situations. In addition, Law No. 6/ 2018 on“Health Quarantine” has just been issued, which regulates various aspects of health quarantine and covers aspects of detect, prevent, and respond from various diseases and health problems related to biological, chemical and nuclear agents that have the potential to cause public health emergencies.

B. STRATEGY FOR NAPHS IMPLEMENTATION

Implementation strategyfor NAPHS are:

1. To mobilize road shows to advocate NAPHS among related ministries/bodies/agencies
2. To work closely with the World Bank (WB) team in finalizing the HSFAT/Health Security Financing Assessment Tool and its implementation
3. To strengthen the role of local governments in the implementation of IHR and NAPHS
4. To monitor and evaluate NAPHS regularly

V. NAPHS DEVELOPMENT AND IMPLEMENTATION

A. NAPHS DEVELOPMENT PROCESS

In accordance with the recommendations of the IHR Committee at the 68th WHA, evaluation of progress and capacity building of IHR (2005) should begin with exclusive self-evaluation, followed by approaches that combine self-evaluation, peer assessment and voluntary external evaluation involving a combination of domestic and independent experts. Indonesia has implemented Joint External Evaluation (JEE) in November 2017 using the same approach.

NAPHS Methodology

1. Engage stakeholders' commitment and participation in implementing activities and achieving higher core capacity level in 19 TAs to meet IHR (2005) capacities by facilitating legal decree from the Coordinating Ministry and regular meetings
2. Use Indonesia's Logic Model to plan the NAPHS. Indonesia's logic model harmonized key milestones planned in GHSA Action Package Roadmap with Indicators described in JEE tool for each Technical Area, while statement for Level of Capacity for each indicator in JEE tools is used for short, medium and long term in GHSA Outcomes.

Indonesia's Logic Model

The WHO General Guidelines to develop NAPHS have been used in the process together with the Logic Model that Indonesia has proposed to GHSA Steering Committee which harmonizes GHSA template and JEE tool. WHO guideline on developing NAPHS can be modified to accommodate the use of Indonesia's proposed logic model.

As the Indicators and level of capabilities in the JEE tools is standard, this harmonization will easily and quickly allow national and international partners/donors/agencies to understand the current and target level of capabilities, activities planned, and opportunities to fund certain activities in Indonesia for Health Security initiatives. (see example of Indonesia's Logic Model below)

Indonesia has conducted many initiatives to implement IHR (2005), therefore the development of NAPHS were focused on priority activities only. Moreover, the priority activities were harmonized with existing national work plan. This harmonization ensures that the priority activities are implemented. Gaps were identified by comparing the existing activities with JEE recommendations and capacity level, while source of funding was identified for filling the gaps.

To facilitate the development of NAPHS, Ministry of Health of Indonesia has continued its efforts to actively engage all relevant ministries, agencies and institutions which were involved during the JEE process in November 2017 and hence same technical working groups for respective 19 TAs have worked on the development of the National Action

Plan for Health Security by translating priorities identified during the JEE and other assessments into actionable activities using the planning matrix provided by WHO.

World Bank has initiated the development of Health Security Financing Assessments Tool (HSFAT) in 2016. HSFAT will assess the expenditure related to health security. Hence, it expresses the supply of funds from all ministries, partners/ donors, agencies and institutions for health security in the last one year. Meanwhile, NAPHS measures the needs or demand for executing national health security. Matching the supplies and demands for health security will provide an estimate of the gaps in financing. Unfortunately, there are some delays in conducting the assessment through surveys using the said tools.

After priority activities were determined, calculation of the costing using Indonesia's standard cost - based on Ministry of Finance Regulation – are done for each technical area. Several activities were organized to submit these costing into WHO Costing Tools, as follows:

1. **Planning and costing workshop, Jakarta, 24 – 27 July 2018**

The Ministry of Health convened a multi-sector workshop to review the NAPHS draft by all sectors involved. It allowed technical activities proposed by each relevant TA within the MOH to be introduced to relevant sectors through this multi sectoral workshop to explore additional valued inputs and activities from other sectors and experts. As a result of the workshop, 12 out of 19 TAs completed drafting activities and costing them using WHO costing tool.

2. **NAPHS finalization meeting, Jakarta, 25-26 October 2018**

The finalization meeting with multi sectoral participation including partners ensures the mapping out of all planned and budgeted activities for all 19 TAs for health security and IHR implementation. This meeting yielded an overview of fund allocation and priority action plan for five years. The result is shown in Annex 1 and Annex 2 as illustration on NAPHS priority activities development and budgeting.

3. **Technical Meeting for Finalization of NAPHS Document Indonesia , Jakarta, 16-17 July 2019**

In this meeting, all 19 TAs update their priority action plan that has been developed in 2018 and finalize them in the form of logic model.

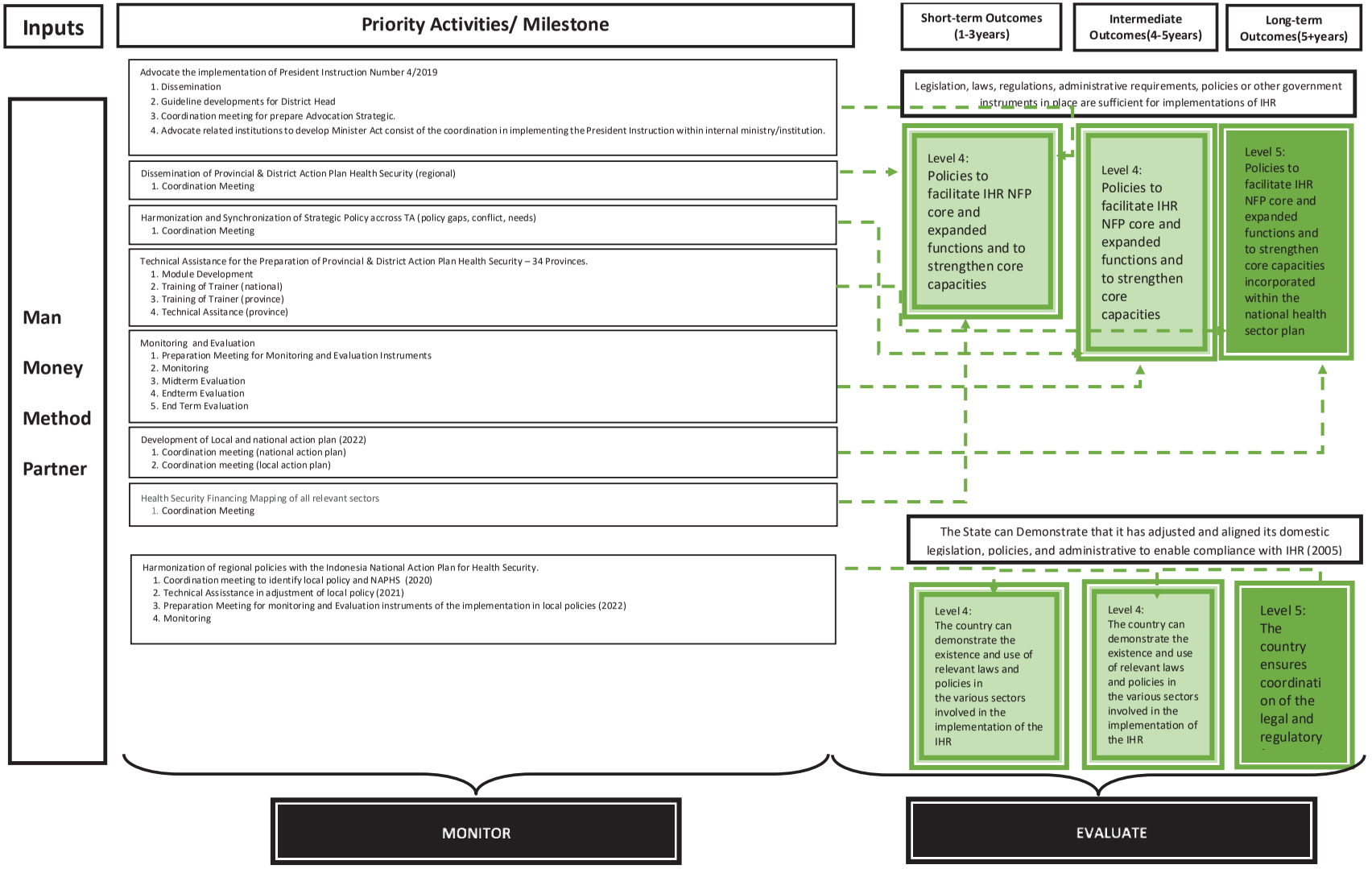
B. NAPHS 2020 – 2024

Indonesia has responded comprehensively on JEE overarching recommendations, as follow:

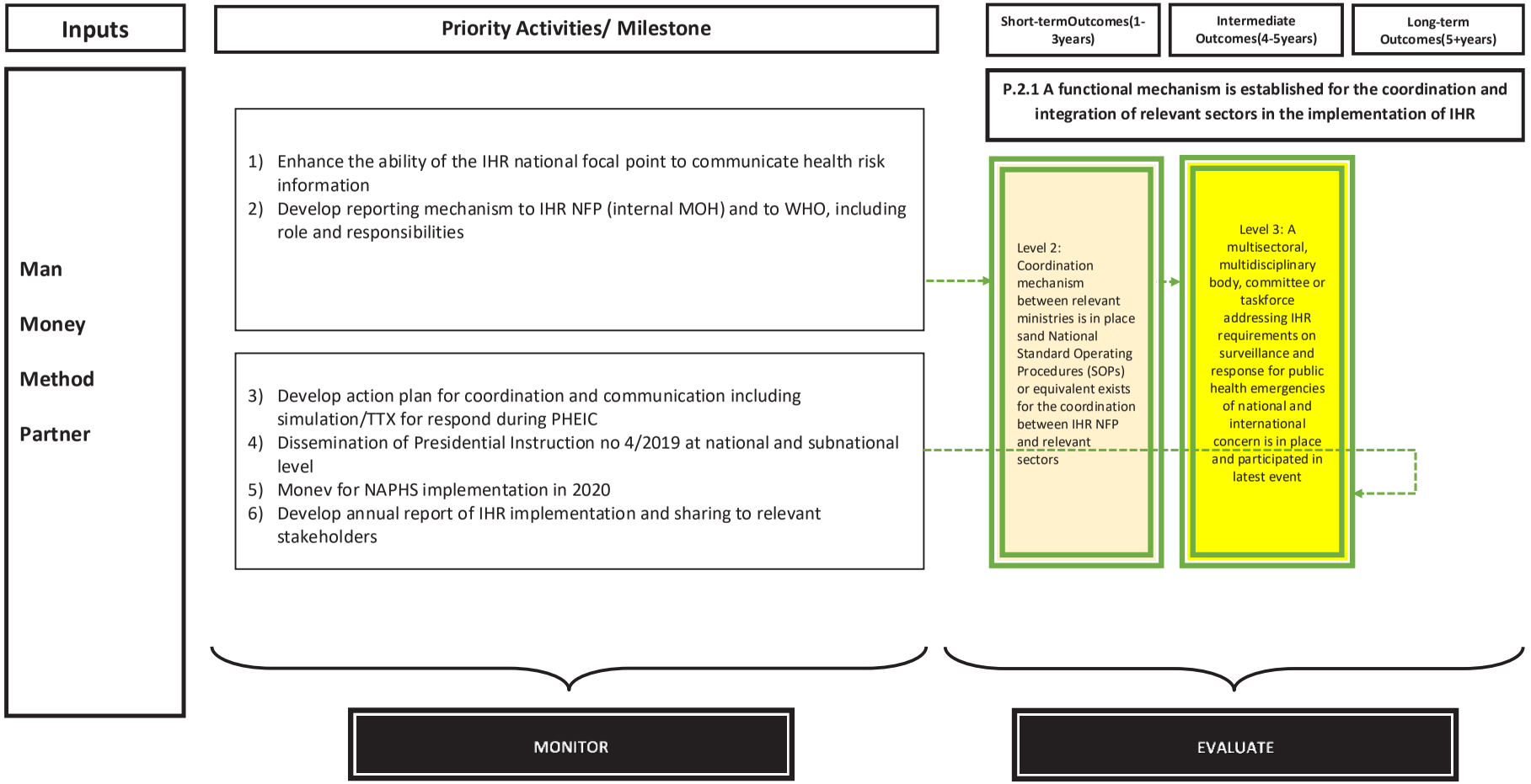
	JEE Recommendation	Activity
1	Develop and implement a fully integrated, multisectoral National Action Plan for IHR implementation, facilitated by a legal decree at the highest level.	NAPHS developed and finalized in December 2018
2	Establish a mechanism to coordinate the IHR and global health security work of all relevant ministries, agencies and institutions.	Presidential Instruction Number 4 of 2019concerning "Improved Capacity in Preventing, Detecting, and Responding to Disease Outbreaks, Pandemic, and Nuclear, Biological, and Chemical Emergencies"
3	Evaluate and improve decision making structures and delegation of authority and responsibility to act, not only between the national and sub-national levels, but also at the national level.	

All 19 TAs also plan priority activities in each indicator to achieve higher level of capacity as shown in the logic model below:

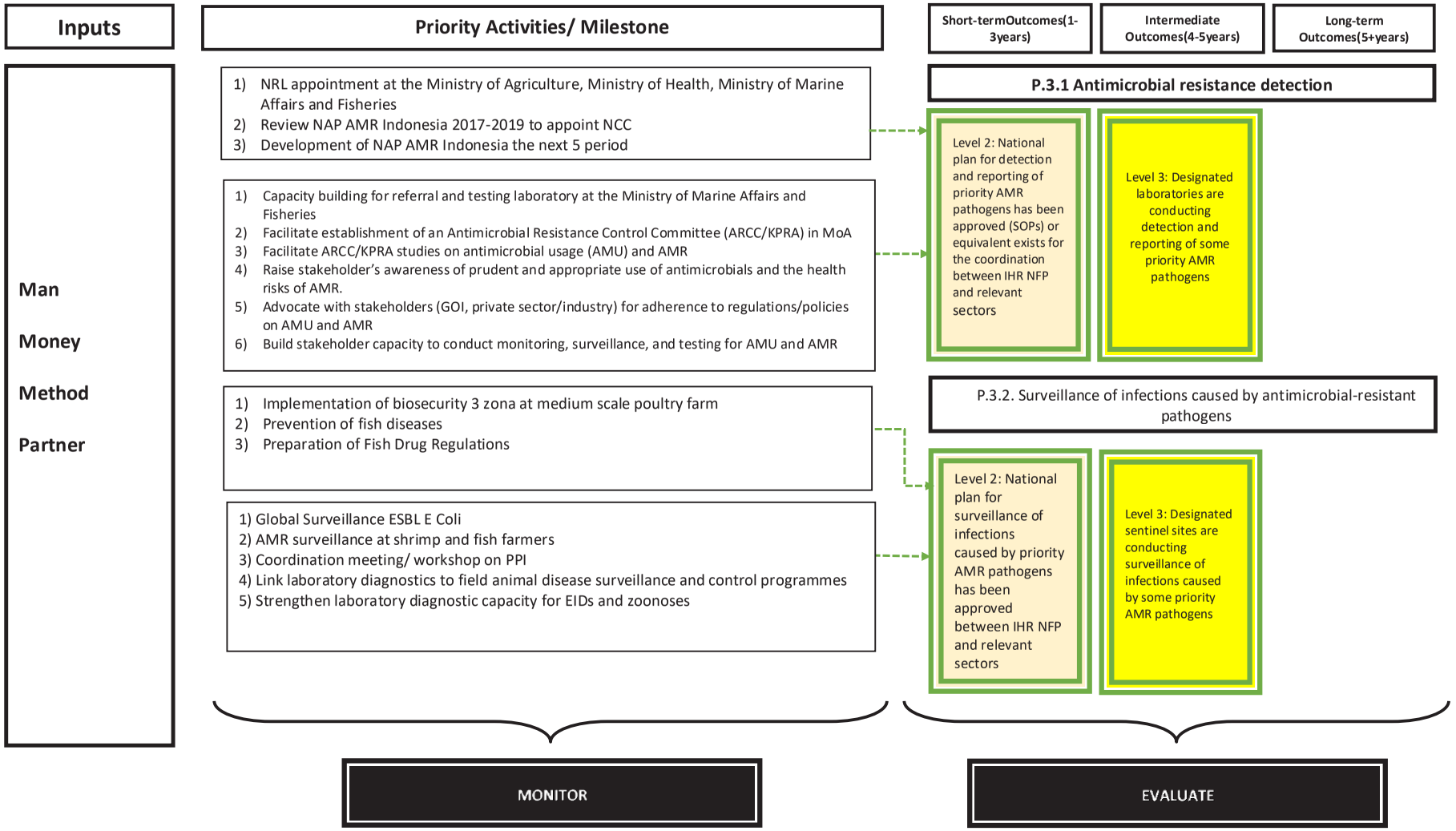
TA NATIONAL LEGISLATION, POLICY AND FINANCING



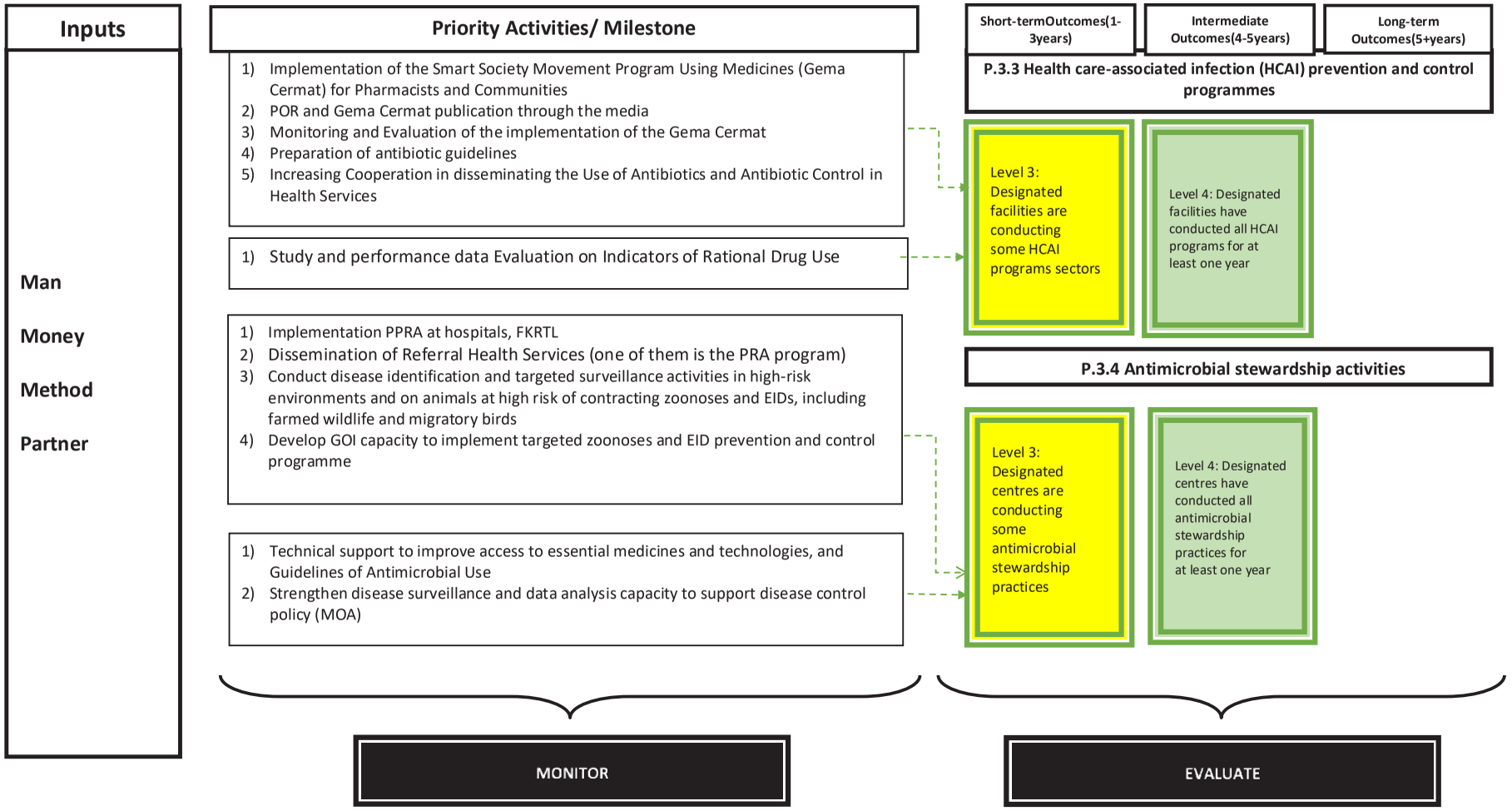
TA IHR COORDINATION, COMMUNICATION AND ADVOCACY



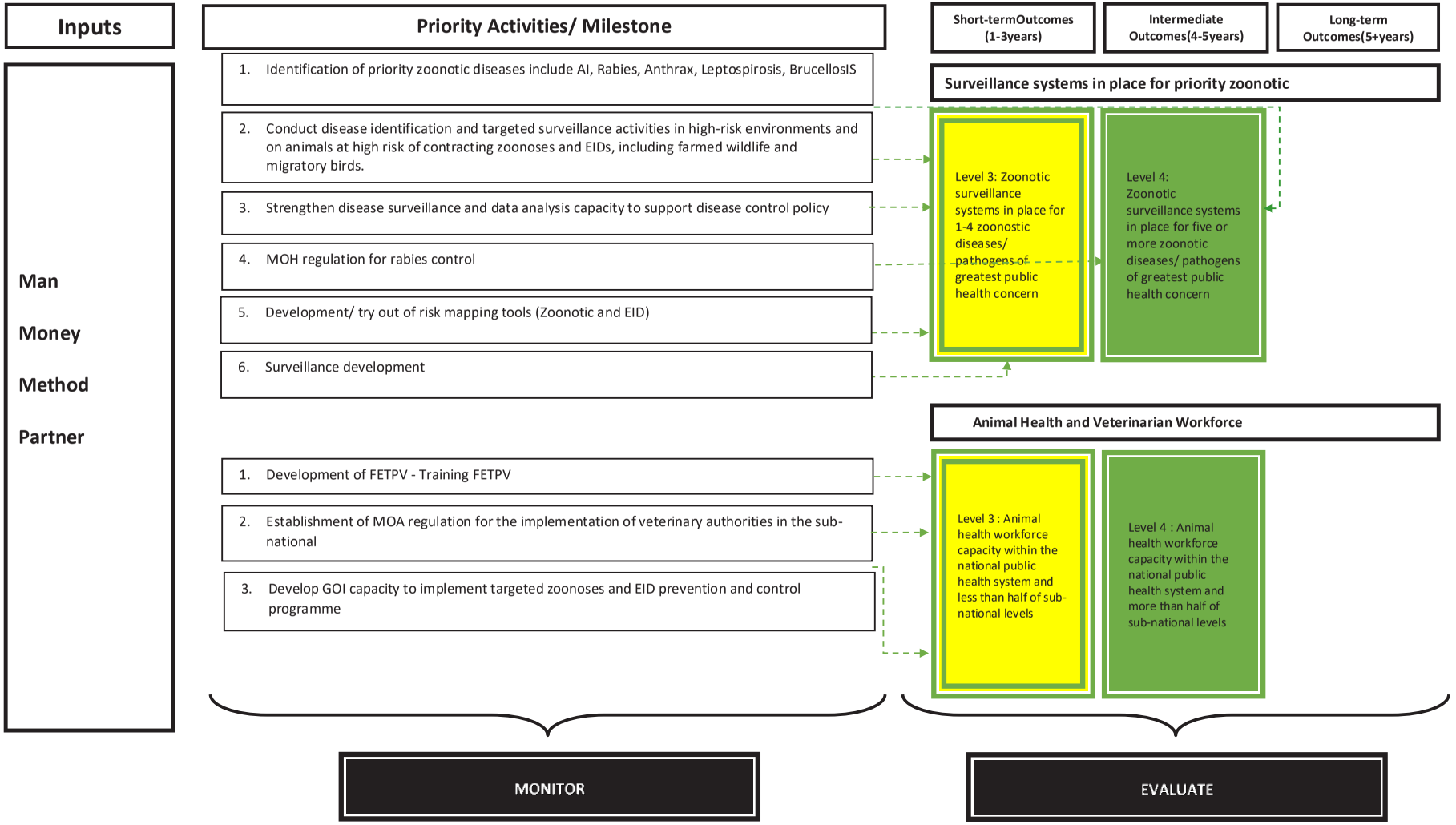
TA ANTIMICROBIAL RESISTANCE (AMR) (1)



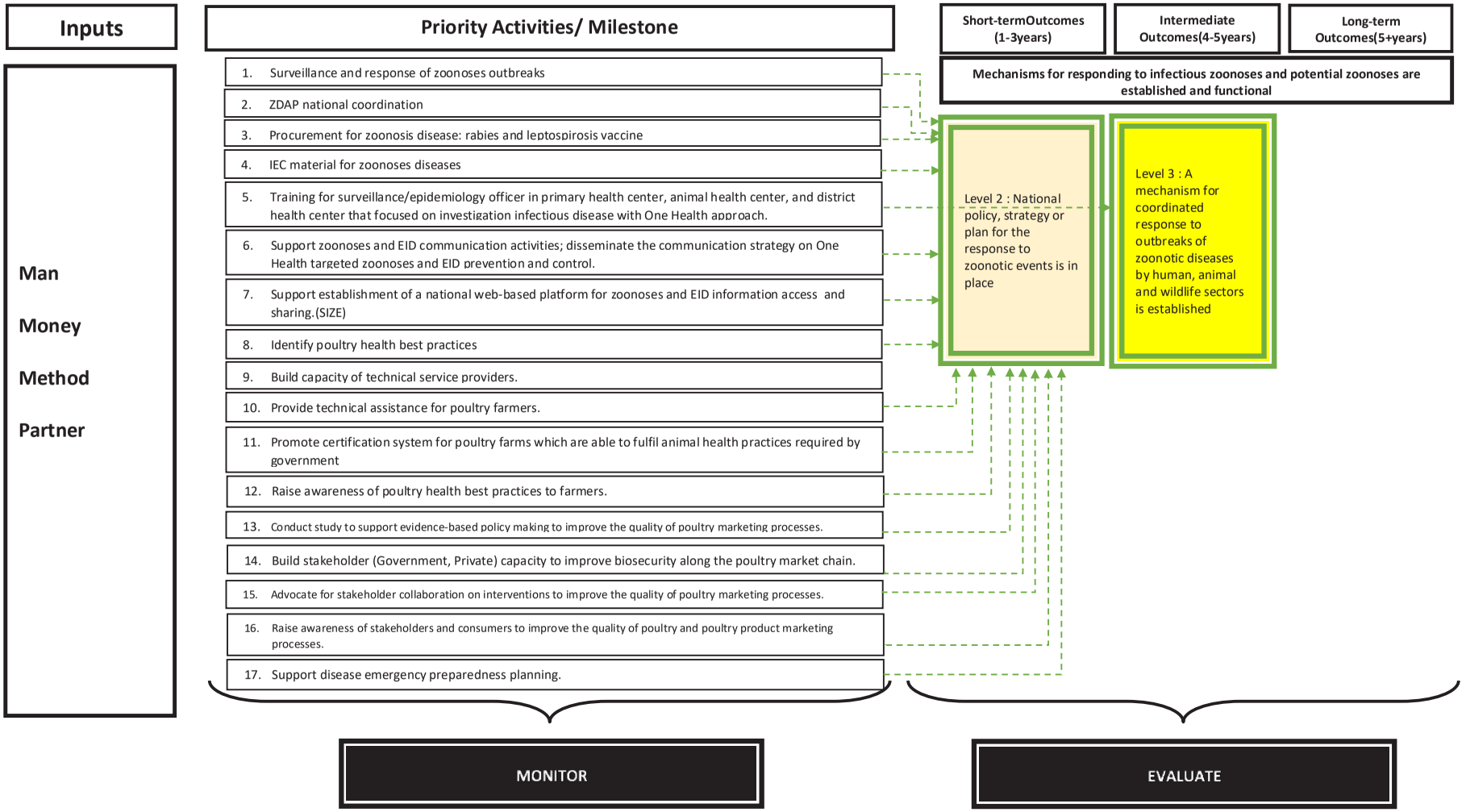
TA ANTIMICROBIAL RESISTANCE (AMR) (2)



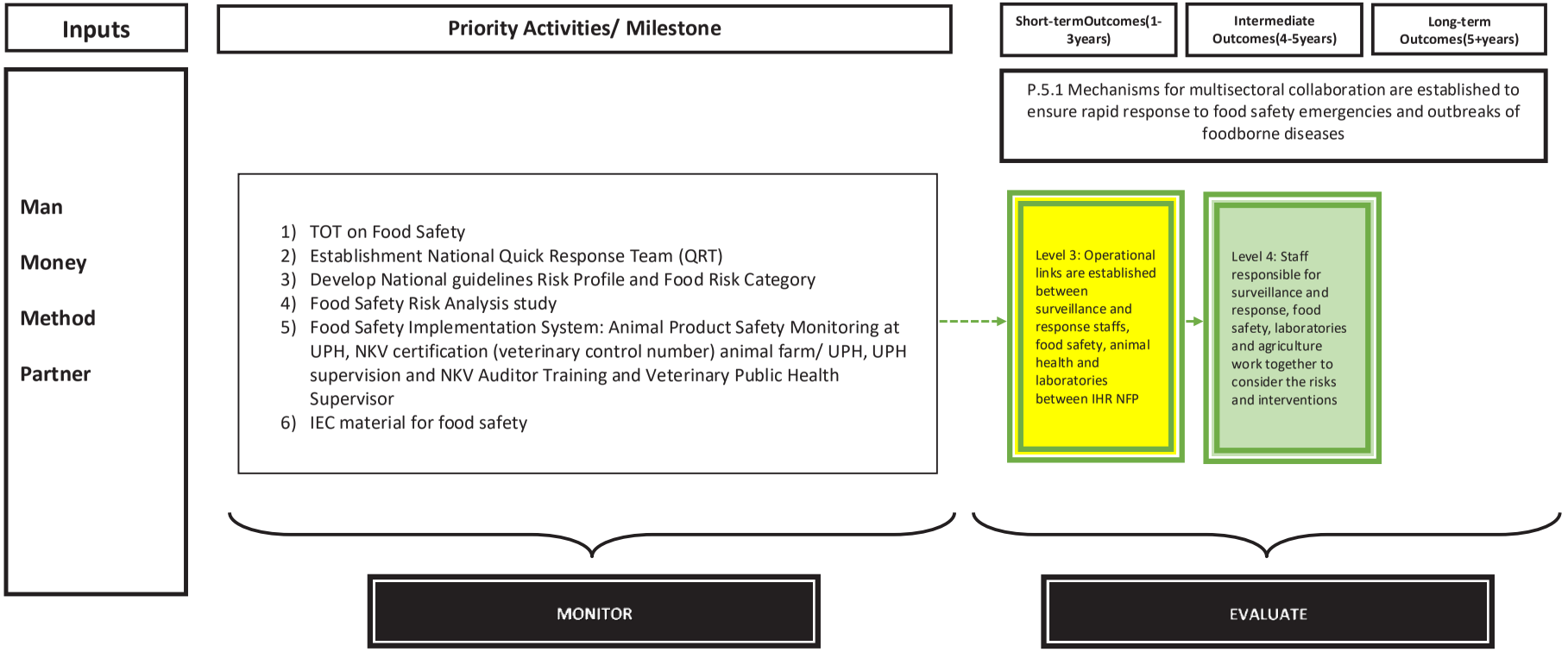
TA ZOONOTIC DISEASE (1)



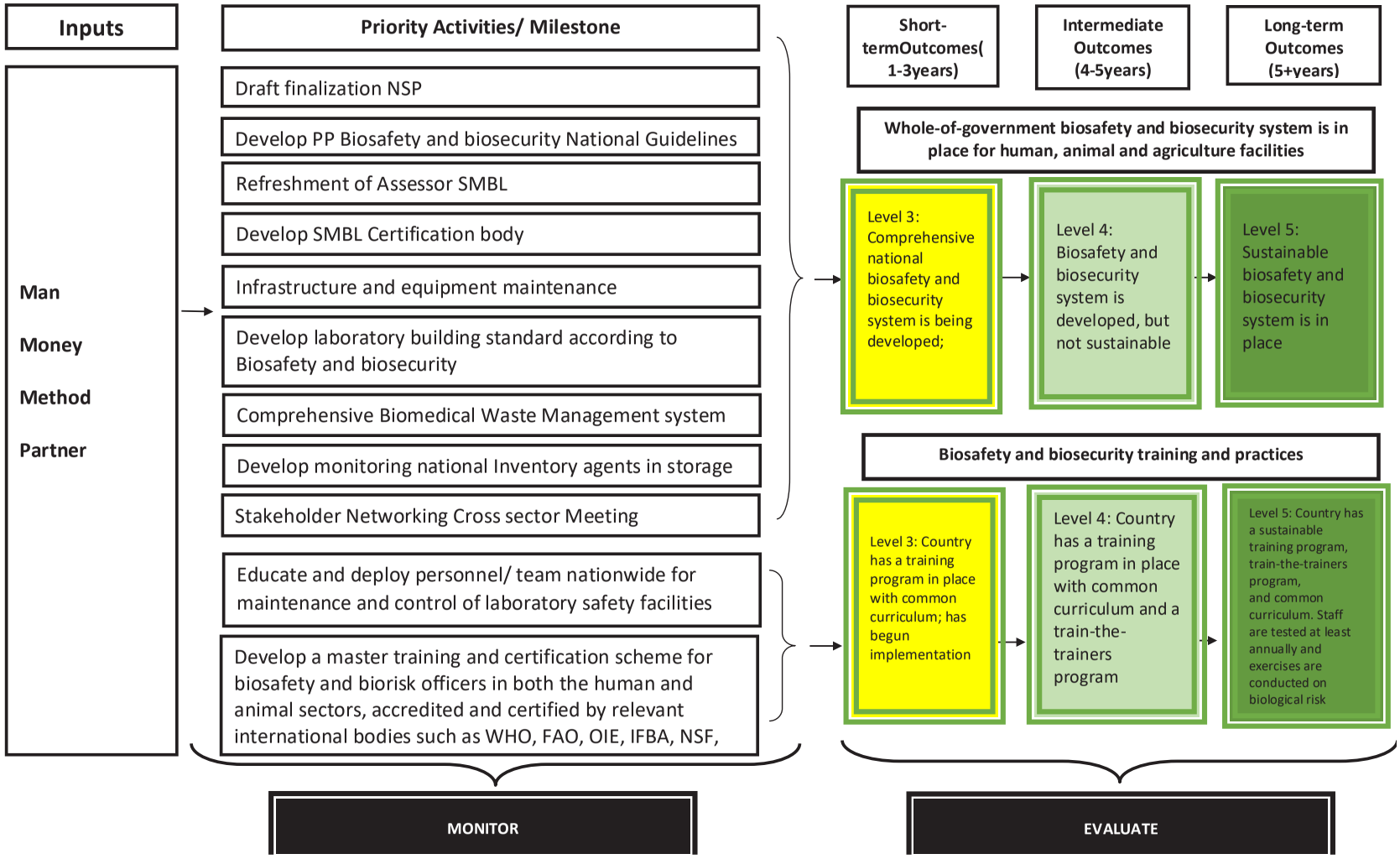
TA ZOONOTIC DISEASE (2)



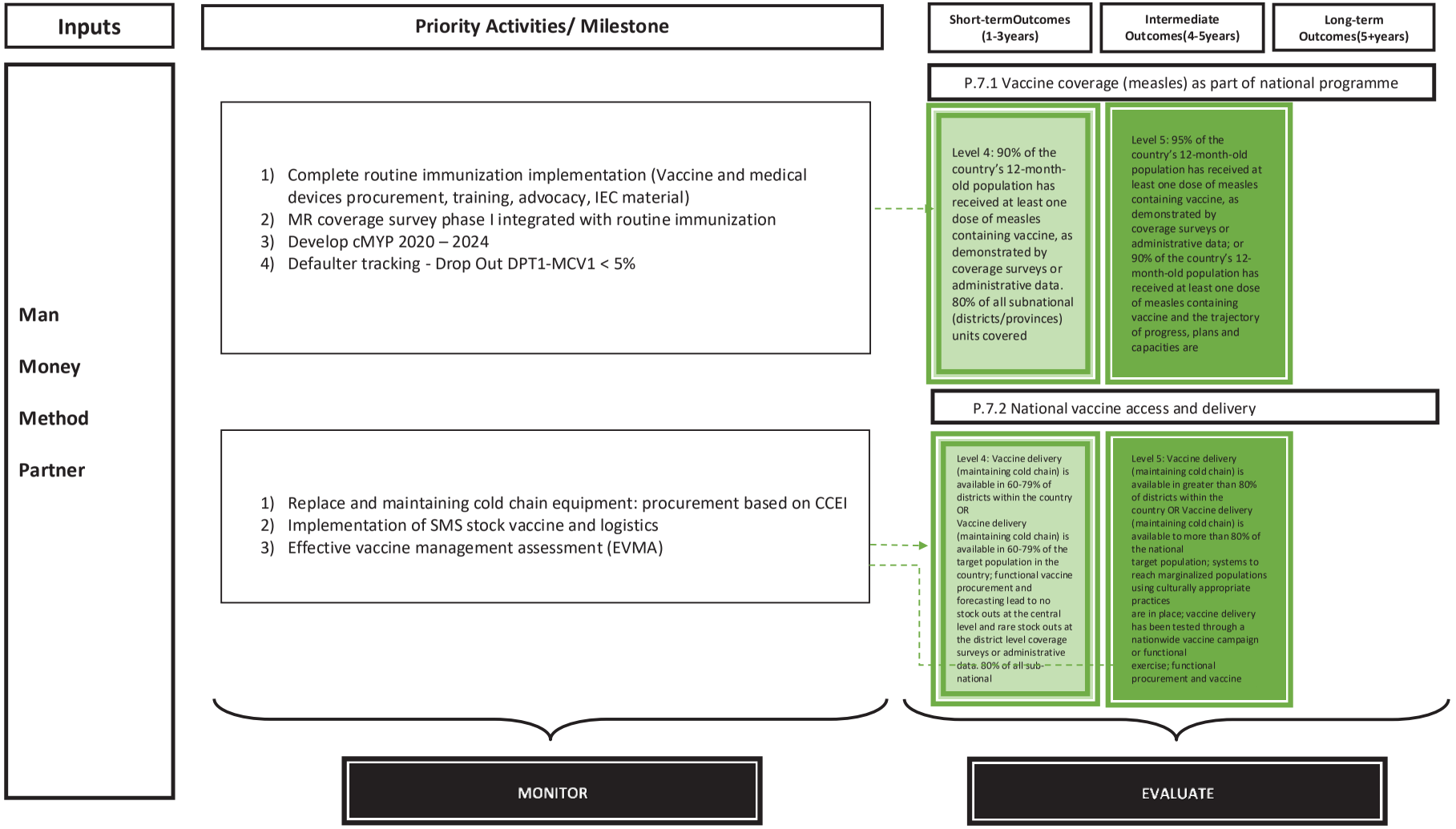
TA FOOD SAFETY



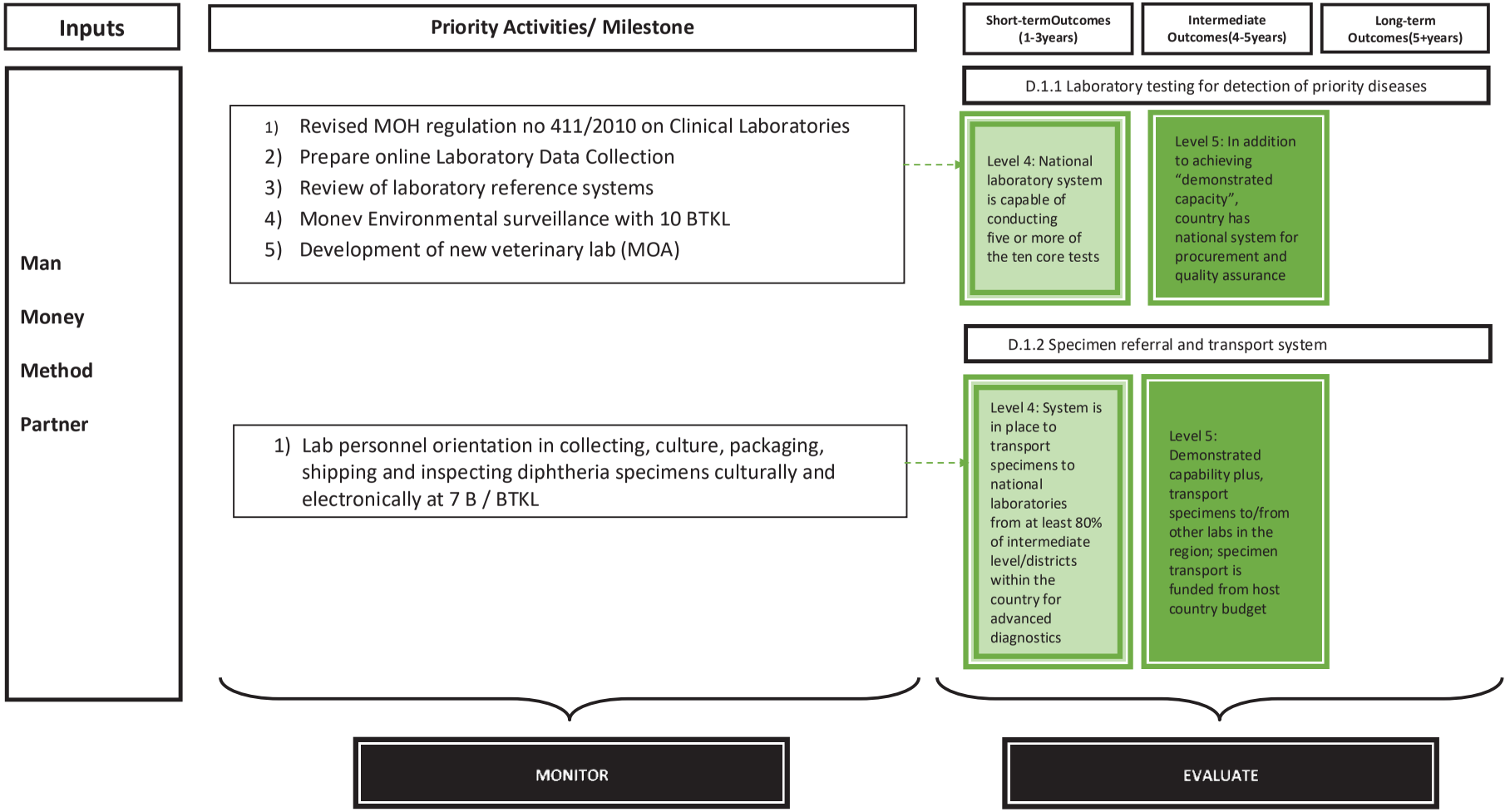
TA BIOSAFETY AND BIOSECURITY



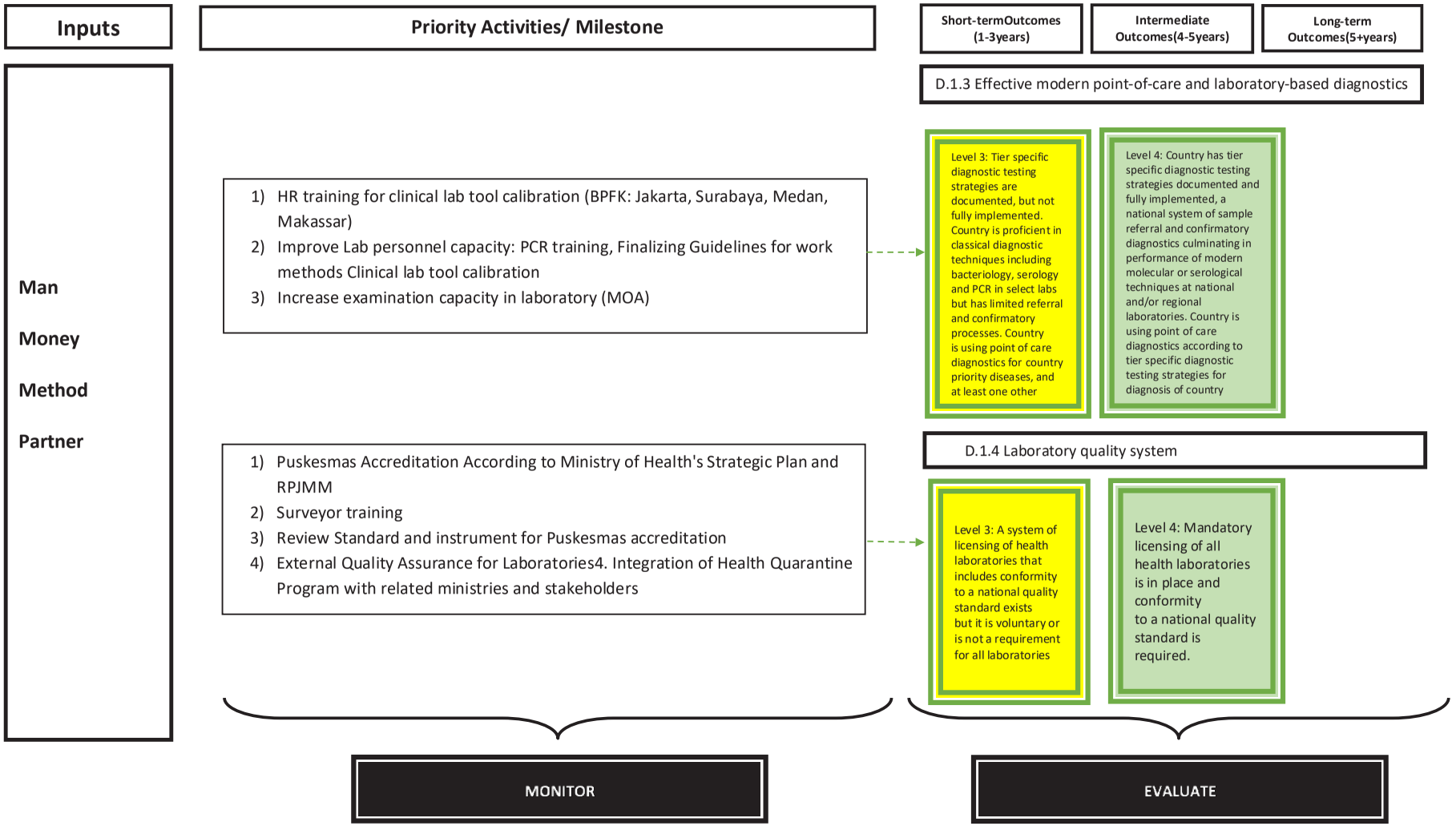
TA IMMUNIZATION



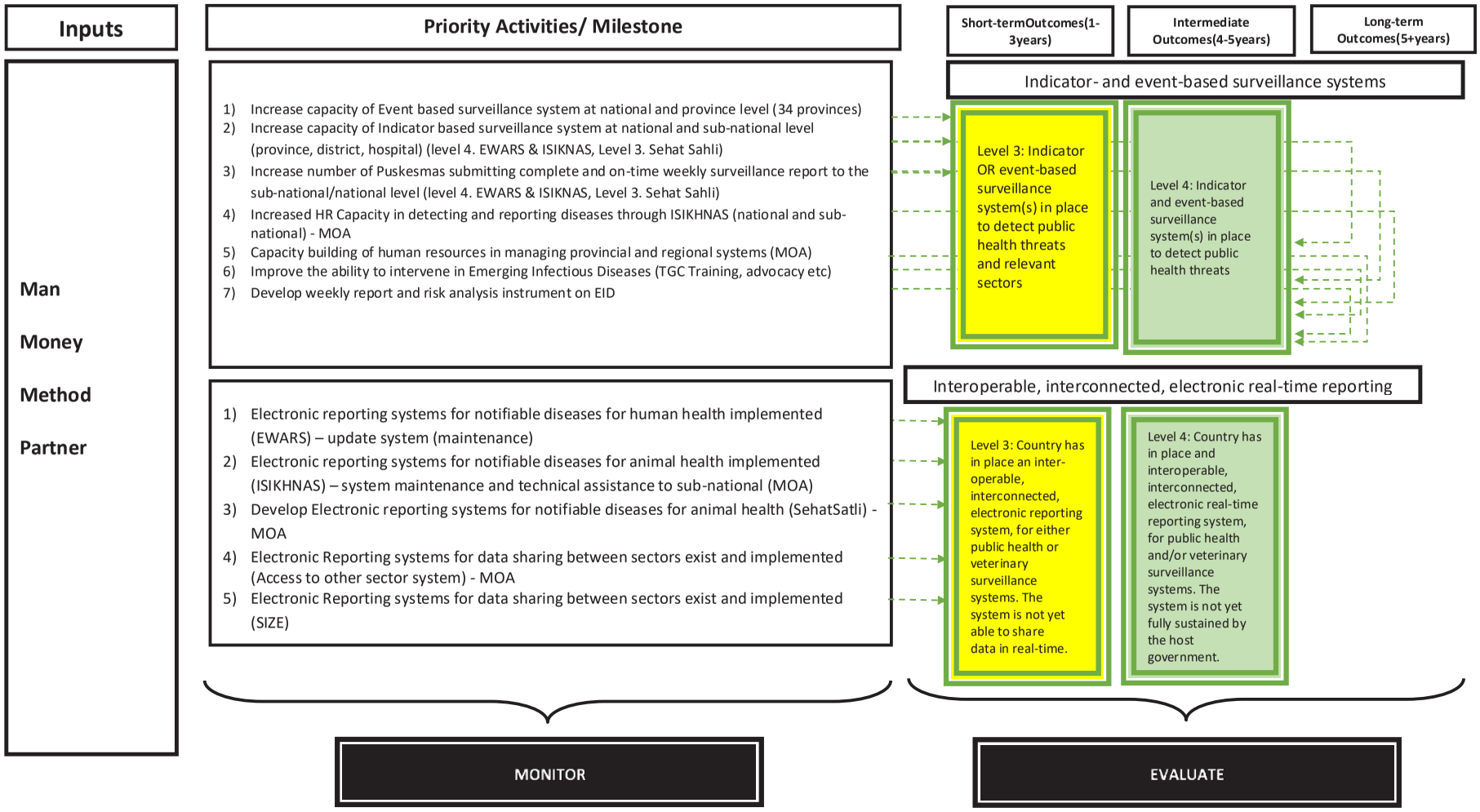
TA NATIONAL LABORATORY SYSTEM (1)



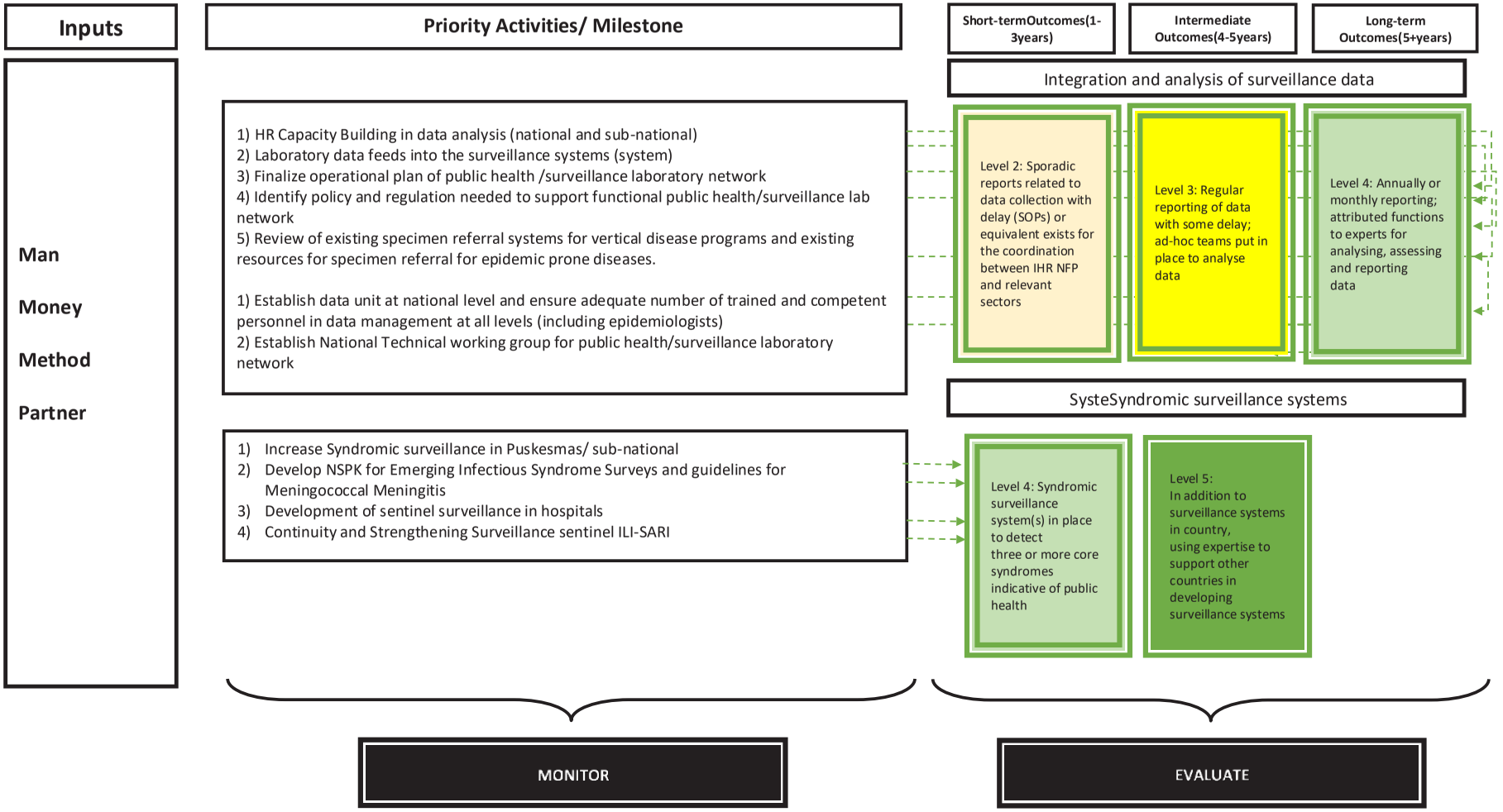
TA NATIONAL LABORATORY SYSTEM (2)



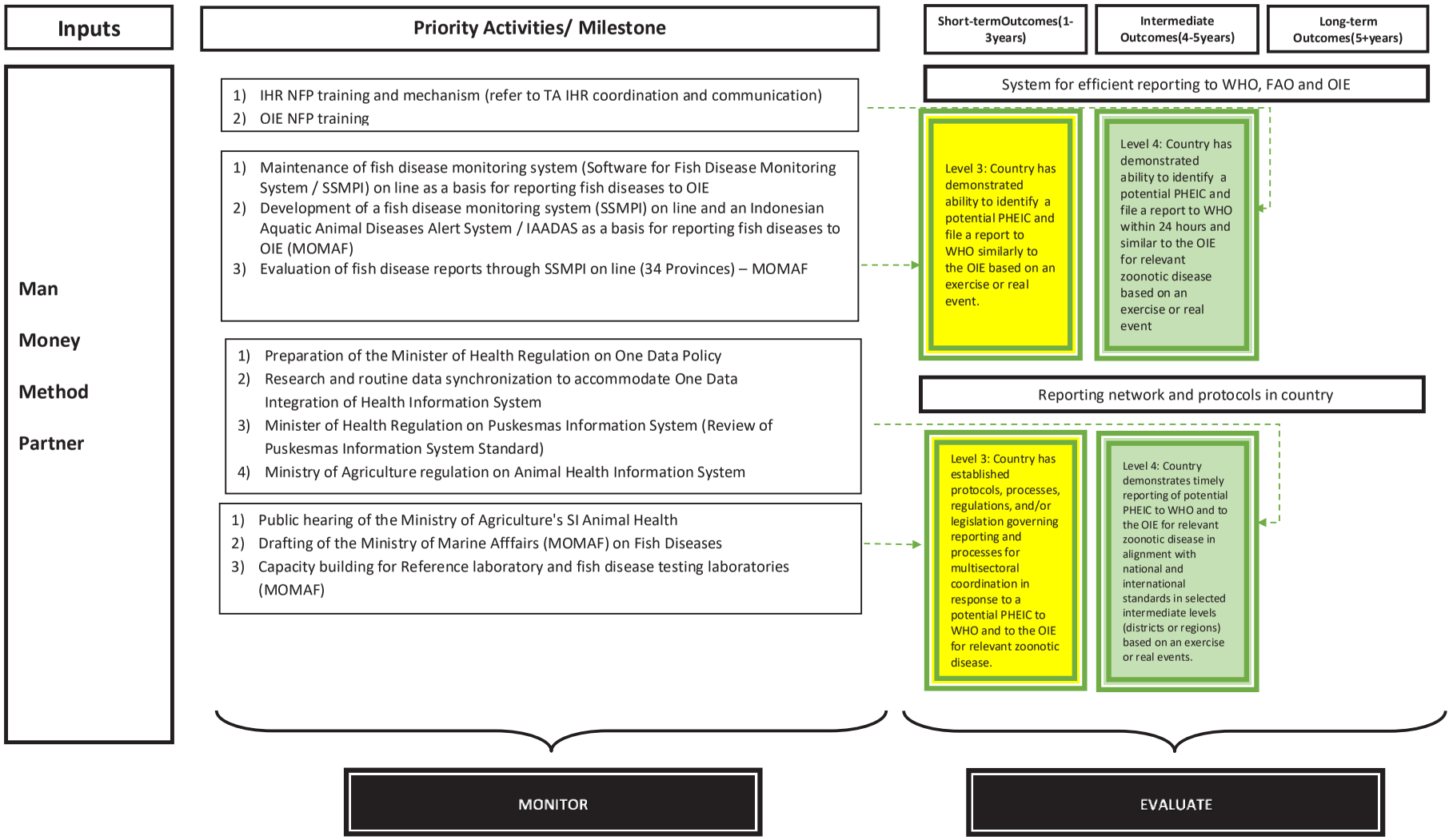
TA REAL TIME SURVEILLANCE (1)



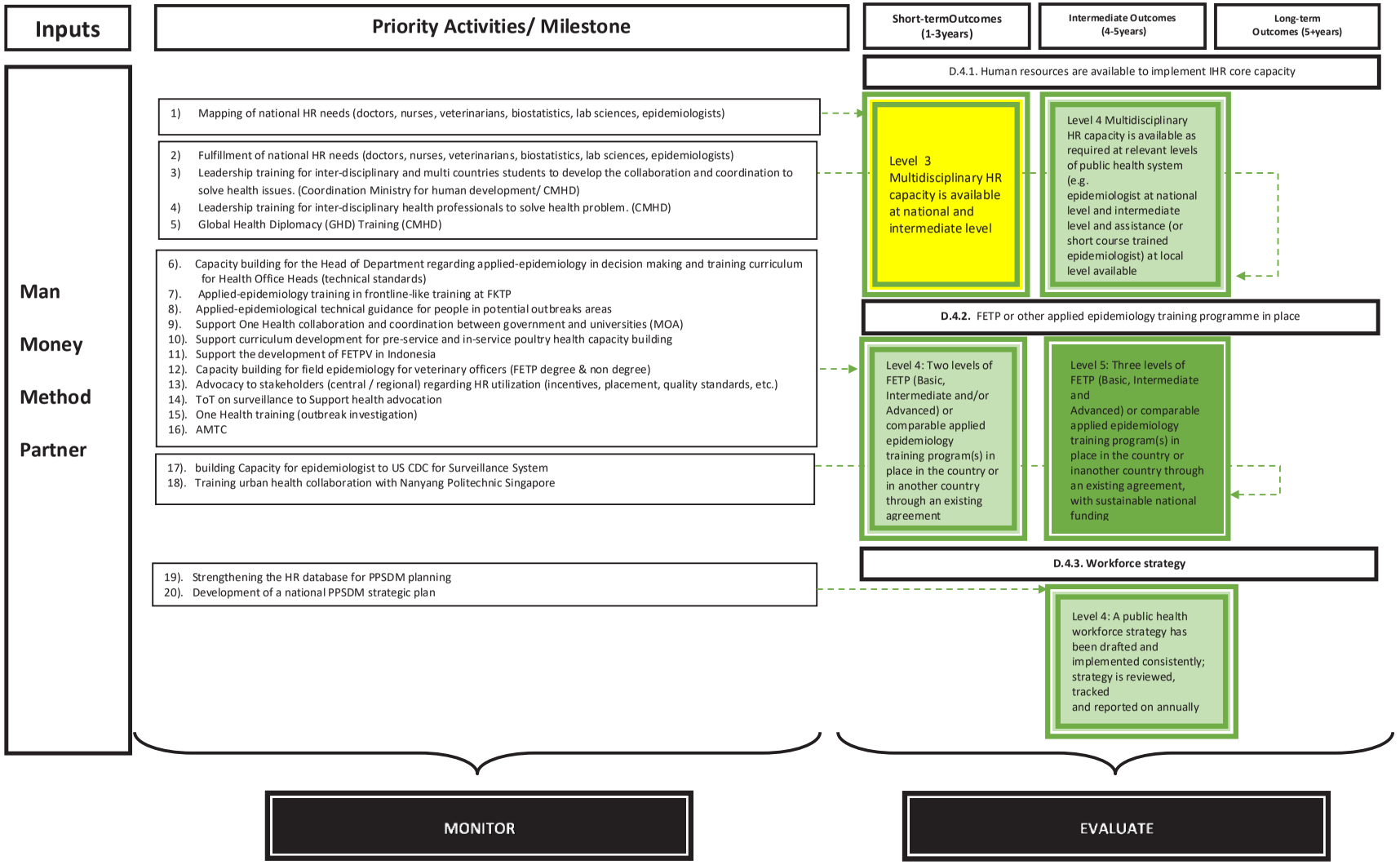
TA REAL TIME SURVEILLANCE (2)



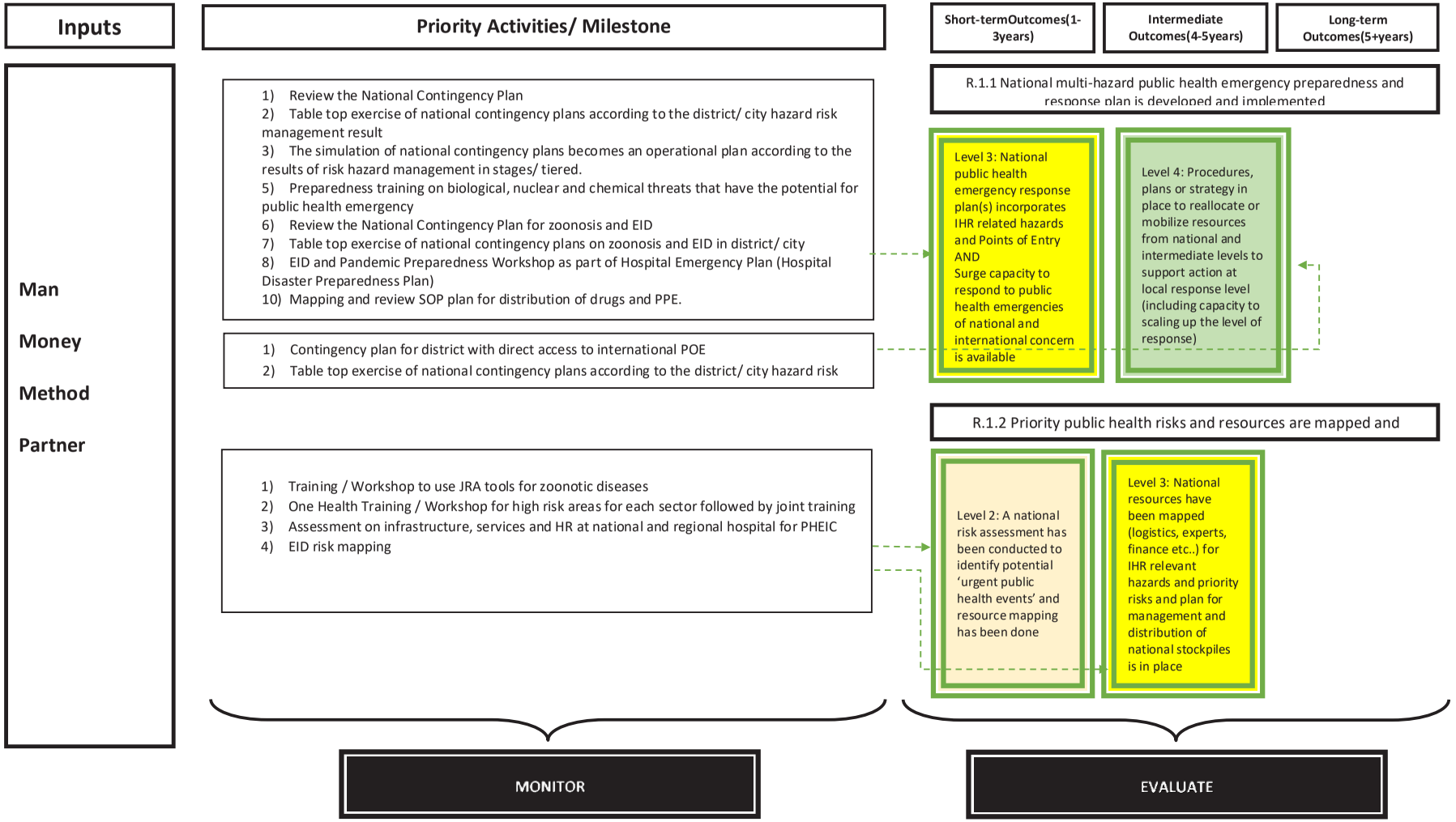
TA REPORTING



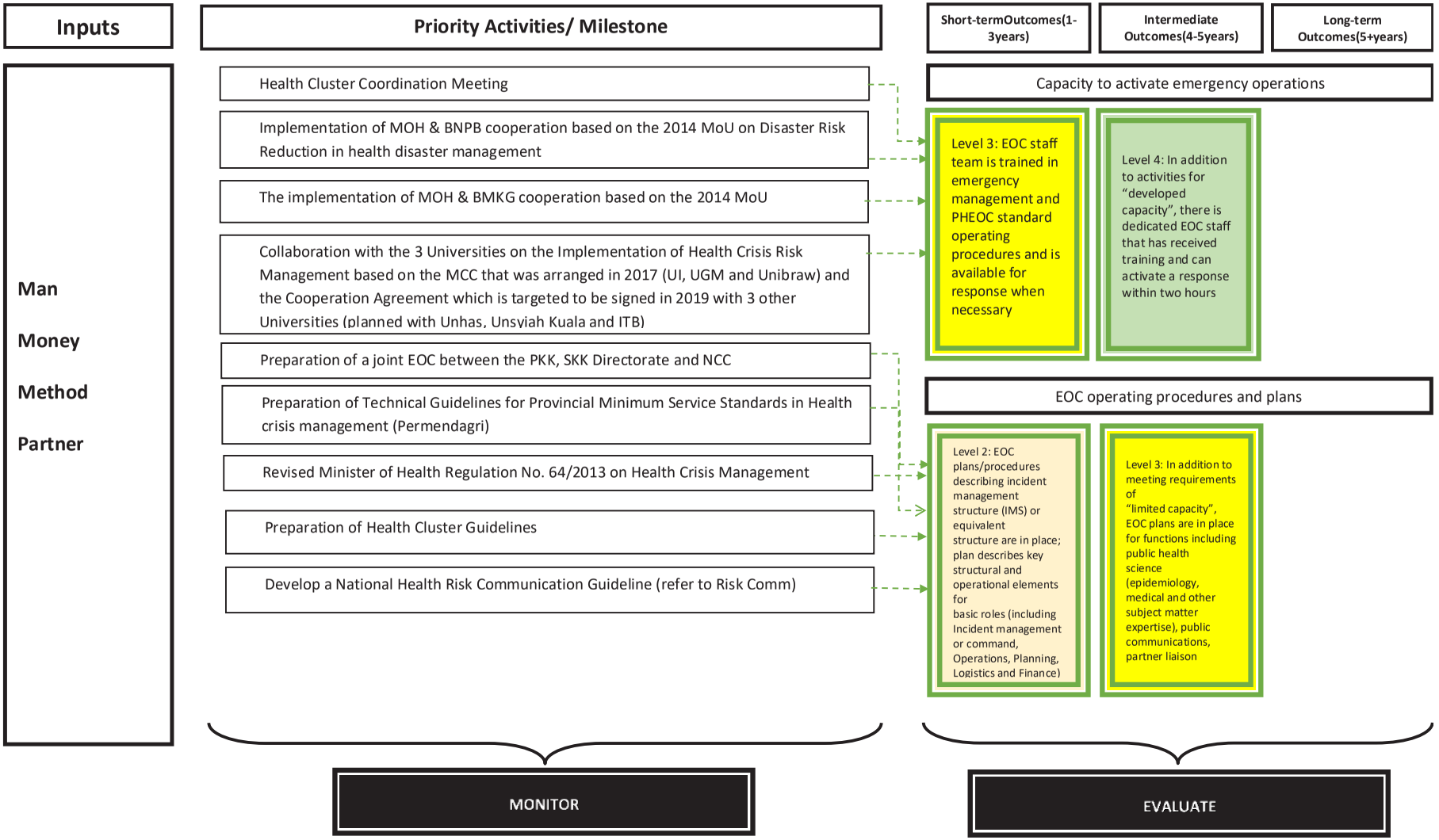
TA WORKFORCE DEVELOPMENT



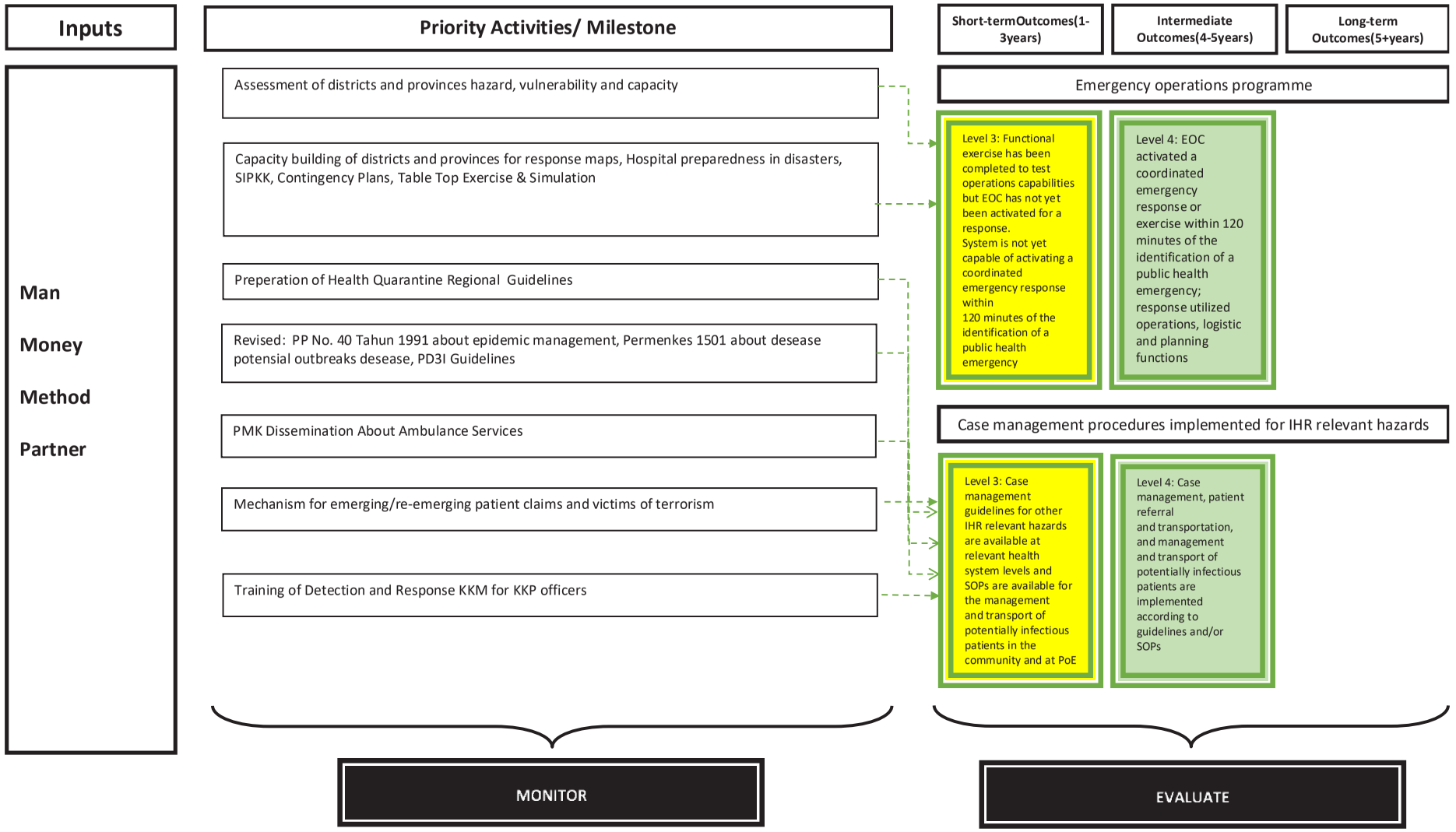
TA PREPAREDNESS



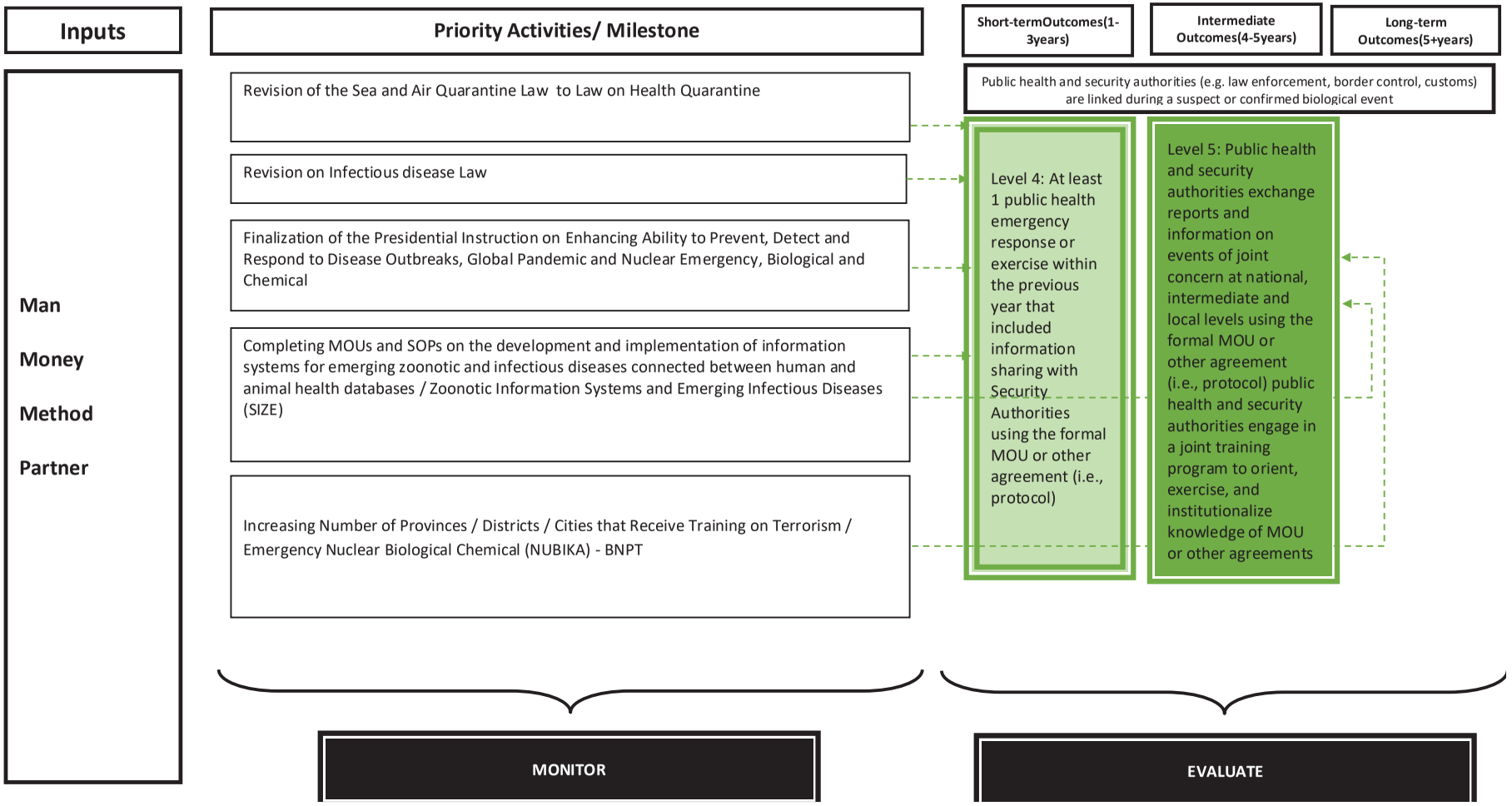
TA EMERGENCY RESPONSE OPERATIONS (1)



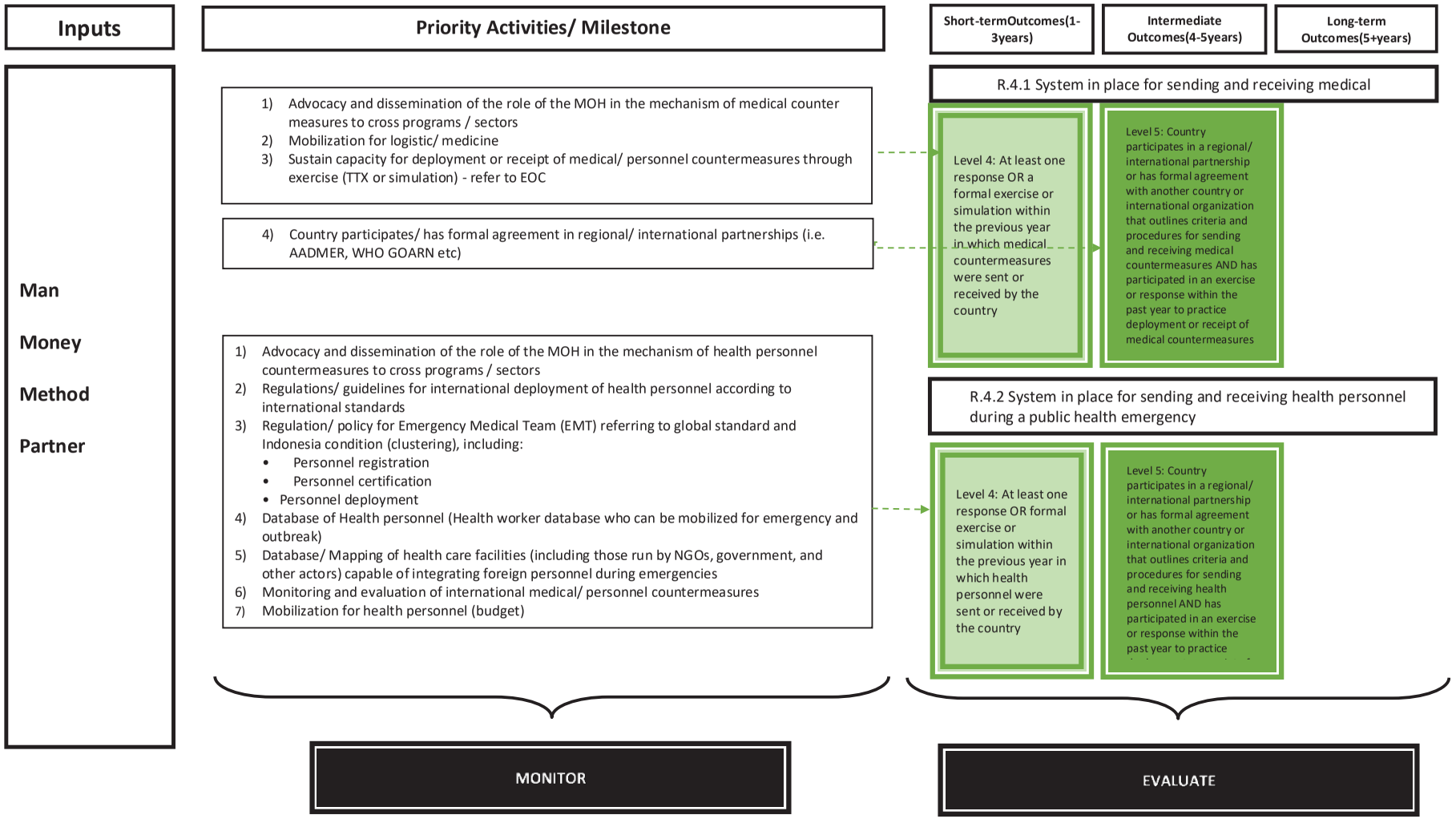
TA EMERGENCY RESPONSE OPERATIONS (2)



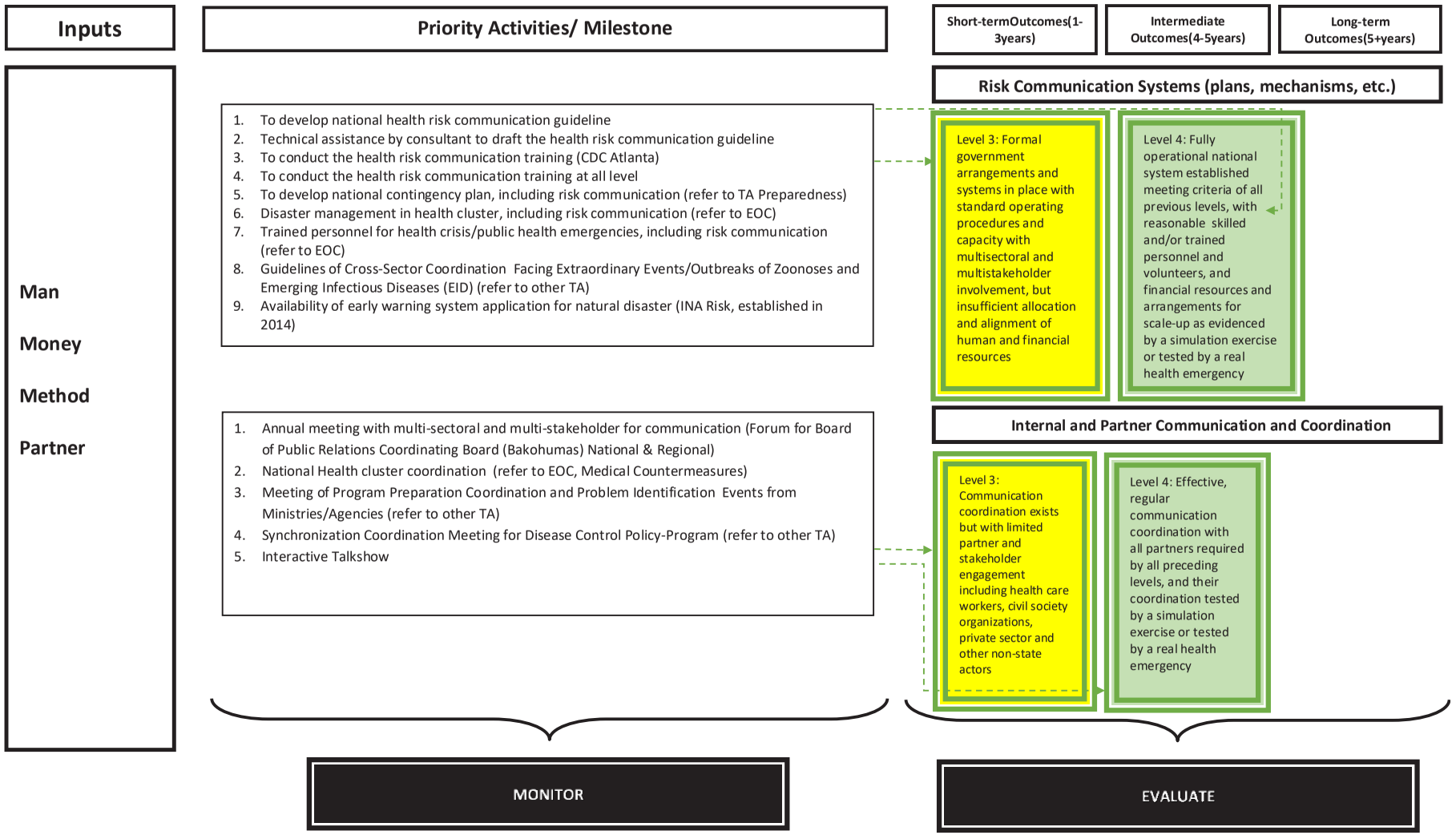
TA LINKING PUBLIC HEALTH AND SECURITY AUTHORITIES



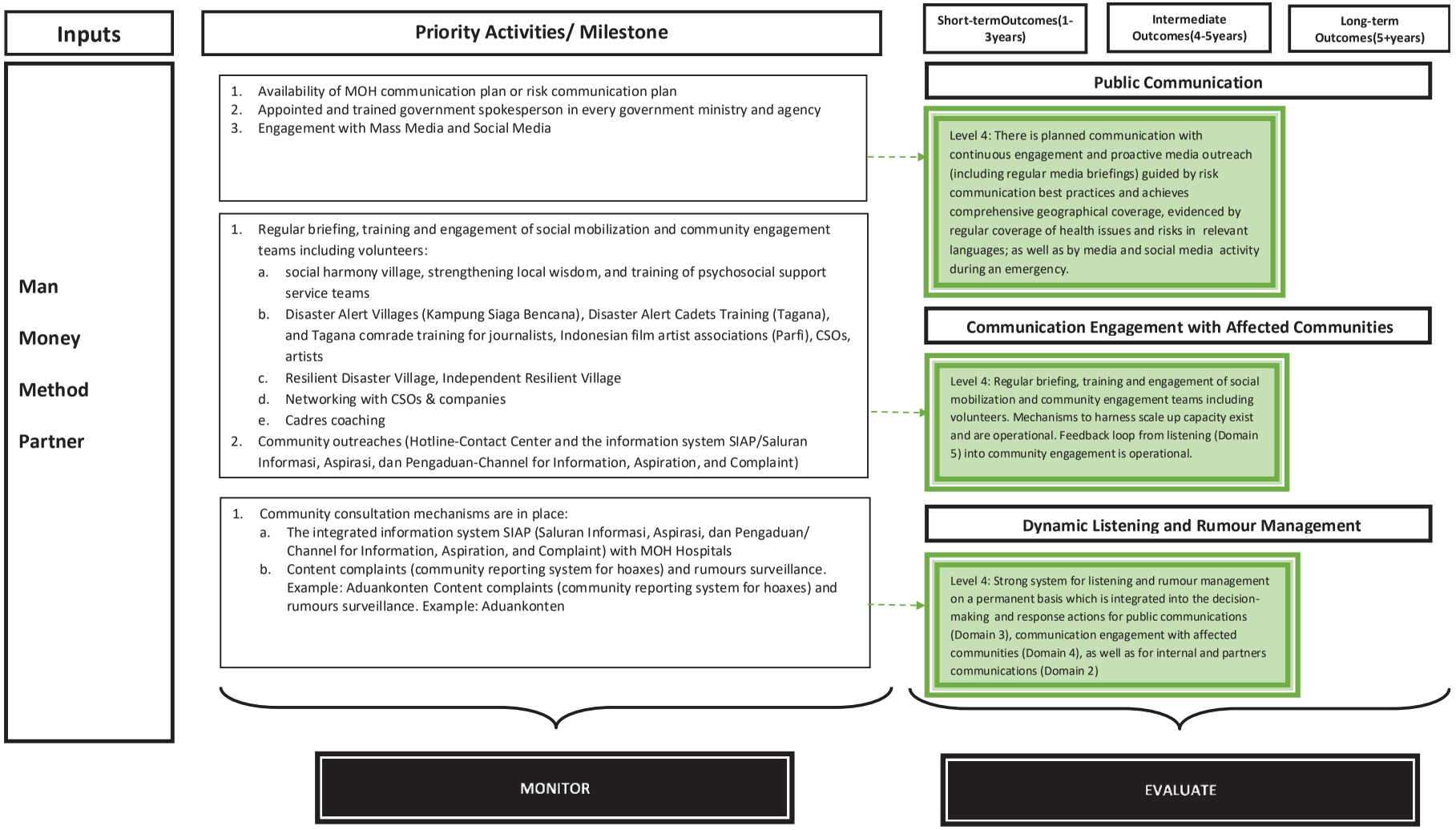
TA MEDICAL COUNTERMEASURES AND PERSONNEL DEPLOYMENT



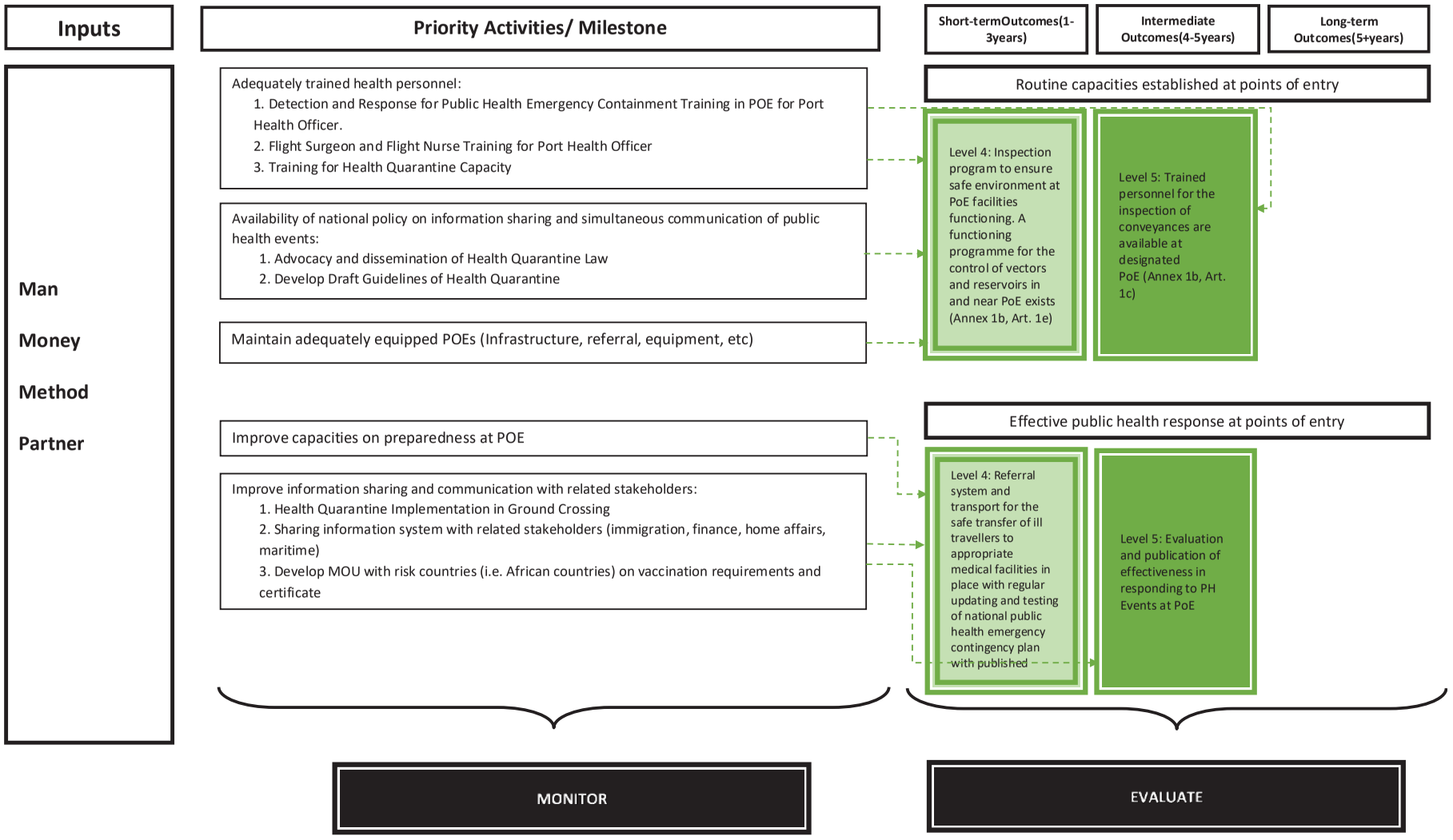
TA RISK COMMUNICATION (1)



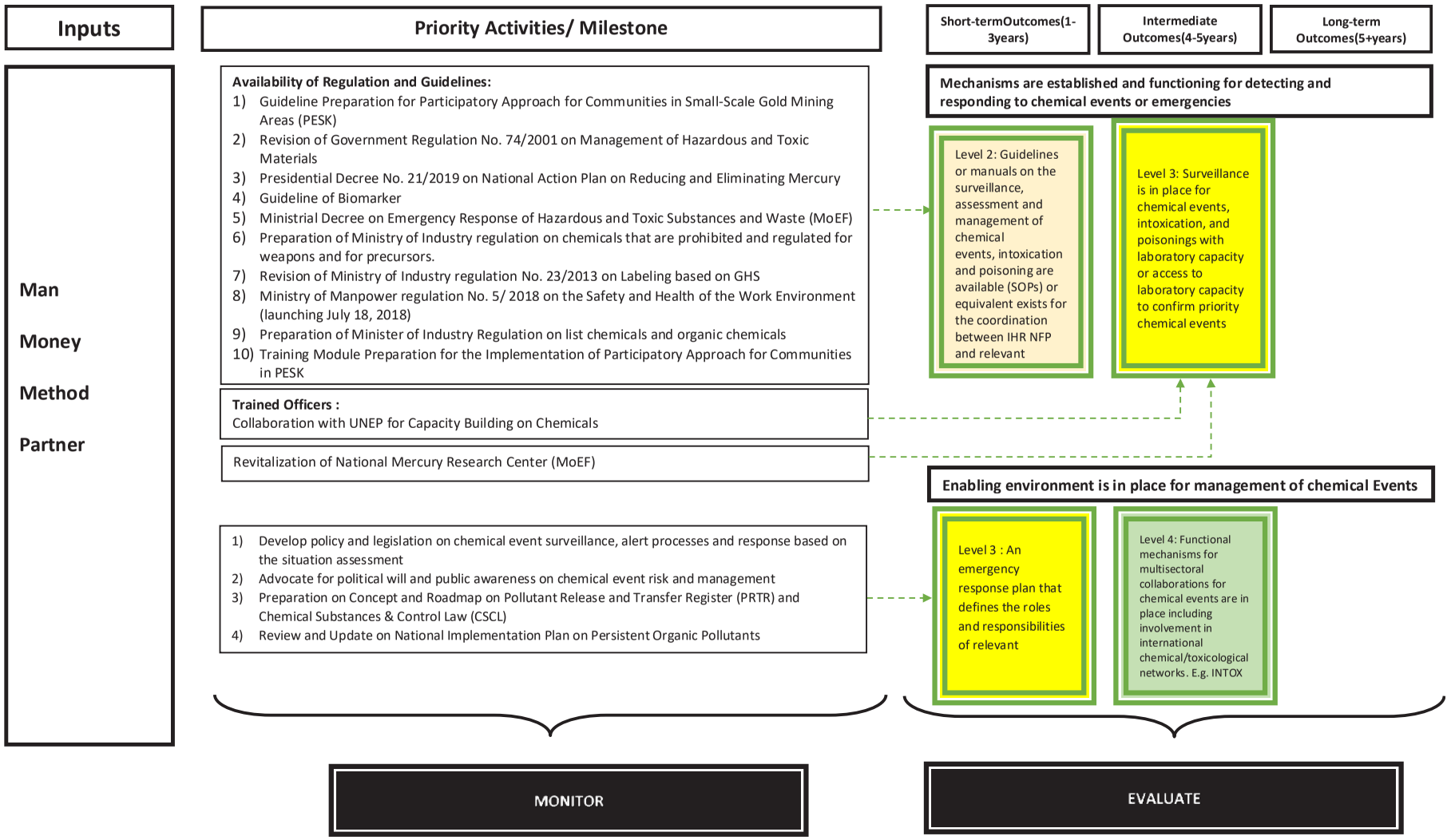
TA RISK COMMUNICATION (2)



TA POINTS OF ENTRY

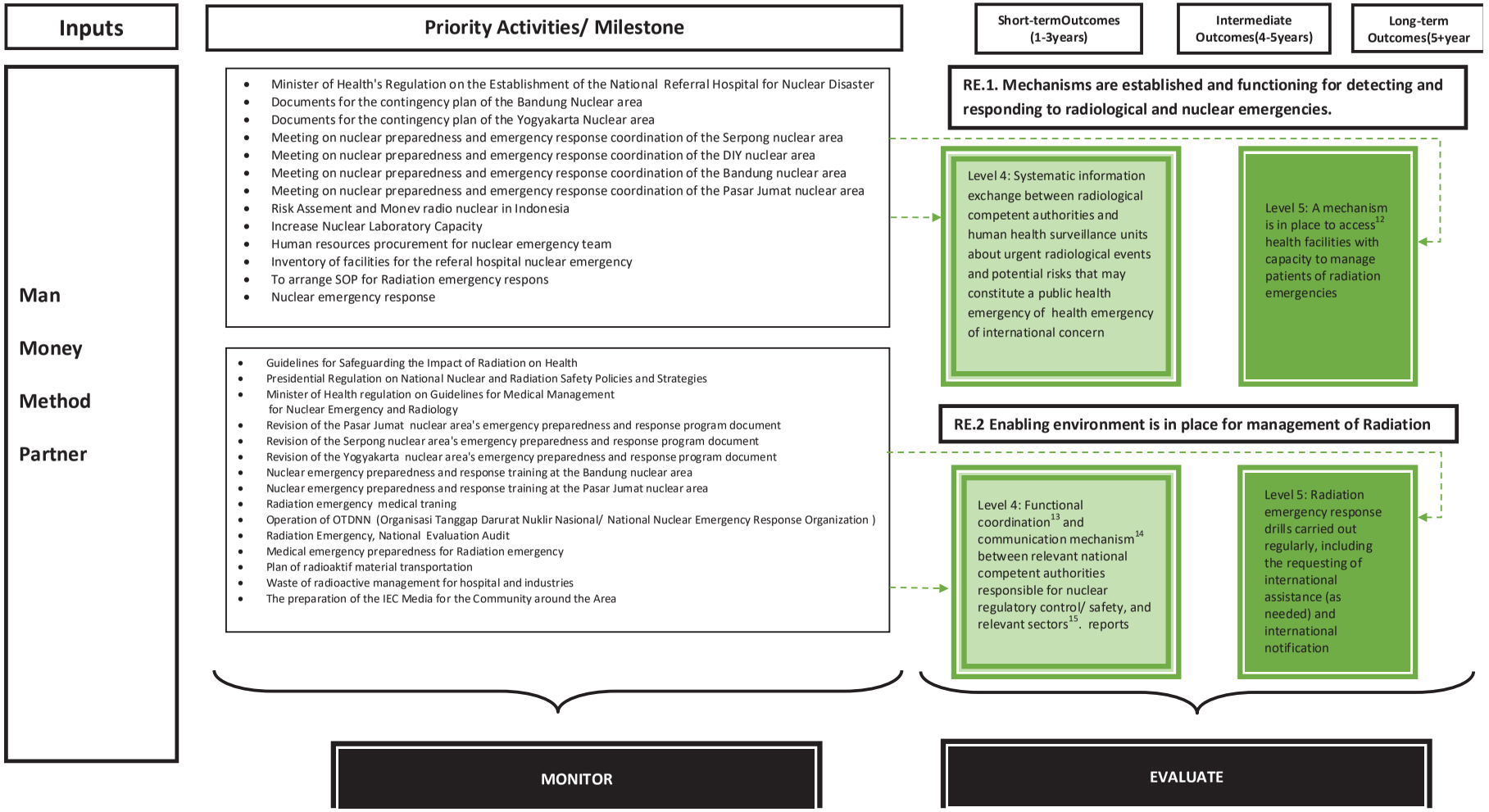


TA CHEMICAL EVENTS



TA RADIATION EMERGENCIES

WORKING DRAFT COUNTRY –LEVEL LOGIC MODEL



C. MONITORING AND EVALUATION

Each Ministry/ Agency/ Institution will conduct their own monitoring and evaluation on NAPHS implementation based on area: Prevent, Detect and Respond as described in Presidential Instruction Number 4 of 2019. Every year 19 TAs will also conduct self-assessment on its IHR core capacities using WHO tools. Local Government can use Minimum Service Standards monitoring tools to monitor activities that have the highest efficiency in health security.

In addition, Secretariat of the Cabinet will also monitor and evaluate Presidential Instruction Number 4 of 2019 implementation based on reports from: 1) Coordinating Ministry for Human Development and Cultural Affairs on public health emergency and/ or natural disaster and 2) Coordinating Ministry for Political, Legal and Security Affairs on public health emergency and/ or natural disaster that have security aspect. The results of these monitoring and evaluation activities will be reported directly to the President.

VI. CONCLUSION

This NAPHS document is very important. Relevantministries/ agencies/ institutions are expected to improve the capacity to prevent, detect and respond to outbreaks, pandemic and public health emergency that require coordination across ministries/ agencies/ institutions. It is expected that this NAPHS document can serve as guidelines in the planning, implementation and monitoring and evaluation of the relevantministries/ agencies/ institutions for health security.

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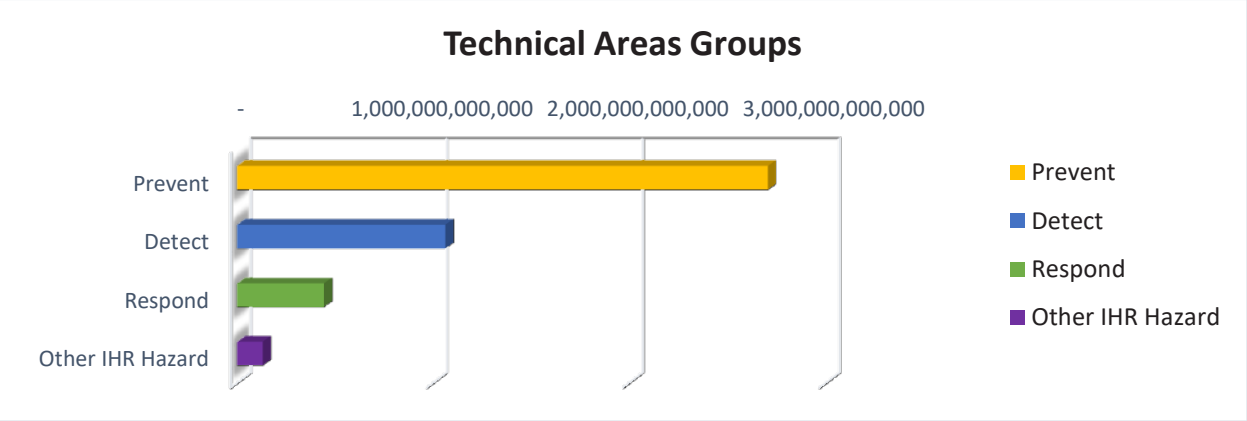
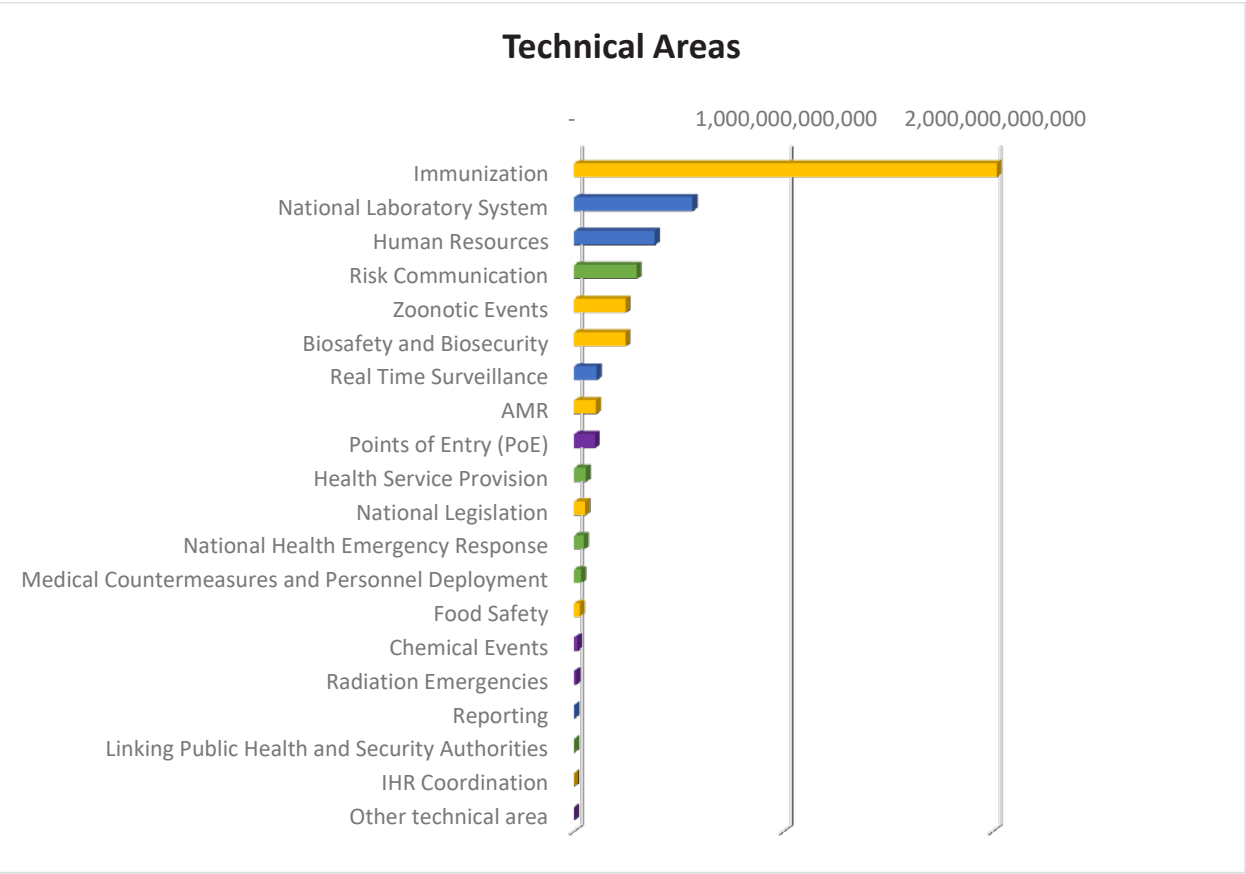
6. Australia Indonesia Partnership for Health System Strengthening: Health financing and Universal Health Coverage: a compilation of policy notes, 2015
7. Keynote Speech at International Conference “Working together for Health Security” Chiang Mai. 10-12 April 2012WORKING TOGETHER for HEALTH SECURITYAGENDA for the NEXT DECADE, DrSamleePlianbangchang, Regional Director WHO South-East Asia Region

ANNEXES

ANNEX 1 :ALLOCATION OF FUNDS (IDR)*



Overall, in 5 Years period (2018 – 2022), of the estimated USD 308,462,389 for the implementation of the National Action Plan for the Health Security, Indonesia will allocate 95.2% (IDR 261,046,352/274,134,122) for the implementation of all the programs.



The graphic above indicate that Indonesia allocate a considerable amount of fund for immunization as a preventive effort in health security.

*) This fund allocation is an exercise for NAPHS budget 2018 - 2022

ANNEX 2: EXERCISE OF PRIORITY ACTION PLAN BY TECHNICAL AREA (2018 – 2022)

TA NATIONAL LEGISLATION, POLICY AND FINANCING

Targets: States Parties should have an adequate legal framework to support and enable the implementation of all of their obligations and rights to comply with and implement the IHR (2005). In some States Parties, implementation of the IHR (2005) may require new or modified legislation. Even where new or revised legislation may not be specifically required under the State Party's legal system, States may still choose to revise some legislation, regulations or other instruments in order to facilitate theirimplementation and maintenance in a more efficient, effective or beneficial manner. State parties should ensure provision of adequate funding for IHR implementationthrough national budget or other mechanism.

JEE Recommendations:

- Consider an accord across Coordinating Ministries to formalize coordination between focal points, and include all relevant IHR stakeholders.
- Conduct a policy analysis to identify and evaluate the need for new policies; review existing policies for gaps and potential conflicts; and harmonize and develop strategies for policy implementation across line ministries and administrative levels.
- Working with key line ministries and stakeholders, develop and implement an advocacy plan for laws and regulations on global health security under the IHR (2005)
- Document and publish administrative arrangements and policies from various sectors, in order to encourage cross sectoral collaboration.

ACTIVITIES AND TIMELINE

PRIORITY ACTIVITIES	MINISTRY	UNIT	2018	2019	2020	2021	2022
Indicator P.1.1 Legislation, laws, regulations, administrative requirements, policies or other government instruments in place are sufficient for implementation of IHR (2005) → 2017 Capacity level 3							
• Advocate the implementation of Presidential Instructionconcerning Improved Capacity in Preventing, Detecting, and Responding to Disease Outbreaks, Pandemic, and Nuclear, Biological, and Chemical Emergencies	Cabinet Secretariat, PMK, POLHUKAM, MOH	PADK	x	x			
• Dissemination of Provincial & District Action Plan Health Security – regional	PMK (Coordination Ministry of Human Development and Culture)	PADK			x		
• Harmonization and Synchronization of Strategic Policies across TA (policy gaps, policy conflicts, policy needs)	POLHUKAM (Coordination Ministry of Political, Legal and Security Affairs)	PADK		x	x	x	x
• Technical assistance for the preparation of Provincial & District Action Plan Health Security – 34 Provinces	MOH	PADK			x		
• Monitoring and Evaluation	MOH	PADK				x	
• Development of national and local action plan (2022)	MOH	PADK					x
• Health Security Financing Mapping of all relevant sectors	MOH	PADK					
Indicator P.1.2 The State can demonstrate that it has adjusted and aligned its domestic legislation, policies and administrative arrangements to enable compliance with IHR (2005) → 2017 Capacity level 3							
• Harmonization of Regional Policies with the Indonesian National Action Plan for Health Security	PMK, POLHUKAM, MOH	PADK			x	x	x

TA IHR COORDINATION, COMMUNICATION AND ADVOCACY

Targets: The effective implementation of the IHR (2005) requires multisectoral/multidisciplinary approaches through national partnerships for effective alert and response systems. Coordination of nationwide resources, including the sustainable functioning of a National IHR Focal Point (NFP), which is a national center for IHR (2005) communications, is a key requisite for IHR (2005)implementation. The NFP should be accessible at all times to communicate with the WHO IHR Regional Contact Points and with all relevant sectors and other stakeholders in the country. States Parties should provide WHO with contact details of NFPs, continuously update and annually confirm them.

JEE Recommendations:

- Increase and intensify communication and close coordination among stakeholders (national, provincial, and at city level) to address the strengthening and maintenance of IHR core capacities, and the relevant necessary actions
- Increase the number of training opportunities for provincial and national officials to support communication of cases/events between all three levels
- Enhance the ability of the IHR national focal point to communicate health risk information through national and provincial networks, ensuring that ability is supported with the necessary information technology.

ACTIVITIES AND TIMELINE

PRIORITY ACTIVITIES	MINISTRY	UNIT	2018	2019	2020	2021	2022
Indicator P.2.1 A functional mechanism is established for the coordination and integration of relevant sectors in the implementation of IHR → 2017 Capacity level 3							
• Orientation of IHR national focal point (National)	MOH	KARKES		x			
• Orientation for IHR National Focal Point (International)	WHO			x	x	x	x
• Develop Reporting mechanism to IHR NFP (internal MOH) and to WHO, including role and responsibilities	MOH	KARKES		x			
• Develop Action plan for coordination and communication	MOH	KARKES				x	x
• Develop Annual report of IHR implementation and sharing to relevant stakeholders	MOH	KARKES				x	x

TAANTIMICROBIAL RESISTANCE (AMR)

Target: Support work being coordinated by WHO, FAO, and OIE to develop an integrated global package of activities to combat antimicrobial resistance, spanning human, animal, agricultural, food and environmental aspects (i.e. a one-health approach), including: a) Each country has its own national comprehensive plan to combat antimicrobial resistance; b) Strengthen surveillance and laboratory capacity at the national and international level following agreed international standards developed in the framework of the Global Action plan, considering existing standards and; c) Improved conservation of existing treatments and collaboration to support the sustainable development of new antibiotics, alternative treatments, preventive measures and rapid, point-of-care diagnostics, including systems to preserve new antibiotics.

JEE recommendations:

- Establish an Inter-Ministerial Committee on the implementation of the Indonesia NAP on AMR, to ensure a systematic and comprehensive "One Health" approach. This should comprise: the Coordinating Ministry of Human Development and Cultural Affairs; the Coordinating Ministry for Political, Legal and Security Affairs; the Ministry of Health; the Ministry of Agriculture; the Ministry of Marine Affairs and Fishery; the Ministry of Environment and Forestry; the Ministry of Defence; the National Agency of Drug and Food Control; the Ministry of Research, Technology and Higher Education; the Ministry of Finance; the Ministry of Communication and Informatics; and the Ministry of Foreign Affairs.
- Formally appoint designated laboratory surveillance on AMR in the human, animal, aquaculture, and environment sectors
- Formally appoint designated sentinel sites on AMR in the human, animal, aquaculture, and environment sectors
- Implement the WHO Global Antimicrobial Surveillance System (GLASS) on surveillance of AMR, using a One Health approach
- Promote public awareness and community empowerment on AMR through human and animal healthcare providers at local

ACTIVITIES AND TIMELINE

PRIORITY ACTIVITIES	MINISTRY	UNIT	2018	2019	2020	2021	2022
Indicator P.3.1 Antimicrobial resistance (AMR) detection →2017 Capacity level 2							
• NRL appointment	MOMAF			x			
• Capacity building for referral and testing laboratory, incl test material	MOMAF			x			
• NRL appointment	MOA						
• Facilitate establishment of an Antimicrobial Resistance Control Committee (ARCC/KPRA)	MOA			x			
• Facilitate ARCC/KPRA studies on antimicrobial usage (AMU) and AMR	MOA			x			
• Build stakeholder capacity to conduct monitoring, surveillance and testing for AMU and AMR.	MOA			x			
• Raise stakeholder's awareness of prudent and appropriate use of antimicrobials and the health risks of AMR.	MOA			x			
• Advocate stakeholders (GOI, private sector/industry) for adherence to regulations/ policies on AMU and AMR.	MOA			x			
• NRL appointment	MOH						
• Review NAP AMR Indonesia 2017-2019 to appoint NCC	MOH						
• Development of NAP AMR Indonesia the next 5 period	MOH						
Indicator P.3.2 Surveillance of Infections caused by AMR pathogens → 2017 Capacity level 2							
• Global Surveillance ESBL E Coli	MOH		x				
• Development of integrated surveillance guideline	MOH			x			
• Coordination meeting PPI working group, MOH, cross sectors/ unit	MOH		x	x	x	x	x
• Workshop/Dissemination PPI Program PPI at referral hospitals (18 regional hospitals)	MOH		x				
• Workshop/Dissemination PPI Program PPI at referral hospitals (20 referral hospitals)	MOH		x				
• Workshop PPI	MOH			x	x	x	x
• Technical assistance at hospital	MOH		x	x	x	x	x

• StudiumGenerale	MOH						
• WAAW	MOH						
• AMR surveillance at shrimp and fish farmers developed	MOMAF		x	x			
• Prevention of fish diseases	MOMAF		x	x			
• AMU Surveillance in shrimp and fish farmers	MOMAF						
• Preparation of Fish Drug Regulations	MOMAF		x				
• Implementation of biosecurity 3 zona at medium scale poultry farm	MOA						
• AMU Surveillance at poultry farm	MOA						
• Link laboratory diagnostics to field animal disease surveillance and control programmes	MOA		x				
• Strengthen laboratory diagnostic capacity for EIDs and zoonoses	MOA		x				
Indicator P.3.3 Healthcare associated infection (HCAI) prevention and control programs → 2017 Capacity level 3							
• Implementation of the Smart Society Movement Program Using Medicines (GemaCermat) for Pharmacists and Communities	MOH		x	x	x	x	x
• Optimization of the role of pharmacists as agents of change	MOH		x	x	x	x	x
• Preparation of antibiotic guidelines	MOH		x				
• POR and GemaCermat publication through the media	MOH			x	x	x	x
• Increasing Cooperation in disseminating the Use of Antibiotics and Antibiotic Control in Health Services	MOH			x	x	x	x
• Cross-sector coordination meeting in AMR control for relevant stakeholders	MOH			x	x	x	x
• Monitoring and Evaluation of the implementation of the GemaCermat	MOH			x	x	x	x
• Study and performance data Evaluation on Indicators of Rational Drug Use	MOH			x	x	x	x
Indicator P.3.4 Antimicrobial stewardship activities → 2017 Capacity level 3							
• Workshop Implementation PPRA at hospitals	MOH		x				
• Workshop PRA at FKRTL	MOH			x	x	x	x
• Technical assistance PRA at hospitals	MOH		x	x	x	x	x

• Supervision PPRA	MOH			x	x	x	x
• Dissemination of Referral Health Services (one of them is the PRA program)	MOH		x	x	x	x	x
• Coordination meeting KPRA	MOH		x				
• Coordination meeting KPRA	MOH			x	x	x	x
• Strengthening Health System	MOH		x		x		x
• Support AMR Activity	MOH			x		x	x
• Strengthen disease surveillance and data analysis capacity to support disease control policy	MOA		x				
• Conduct disease identification and targeted surveillance activities in high-risk environments and on animals at high risk of contracting zoonoses and EIDs, including farmed wildlife and migratory birds	MOA		x				
• Develop GOI capacity to implement targeted zoonoses and EID prevention and control programme	MOA		x				

TA ZOONOTIC DISEASE

Target: Adopted measured behaviors, policies and/or practices that minimize the transmission of zoonotic diseases from animals into human populations.

JEE Recommendations:

- Surveillance of wildlife health should be included in the SIZE information system
- Increase budgetary and human resources allocation to One Health Response teams, and to the prevention and detection of zoonotic diseases at sub-national level
- The integrated SIZE One Health surveillance system should be implemented at district level throughout the Republic of Indonesia
- Assess the executive levels of responsible One Health executive officers in the various relevant ministries, to streamline intersectoral One Health progress through collaboration between participants of equivalent hierarchical levels.

ACTIVITIES AND TIMELINE

PRIORITY ACTIVITIES	MINISTRY	UNIT	2018	2019	2020	2021	2022
Indicator P.4.1 Surveillance systems in place for priority zoonotic diseases/pathogens → 2017 Capacity level 3							
• Identification of priority zoonotic diseases include AI, Rabies, Anthrax	MOA		x			x	
• Conduct disease identification and targeted surveillance activities in high-risk environments and on animals at high risk of contracting zoonoses and EIDs, including farmed wildlife and migratory birds.	MOA			x			
• Strengthen disease surveillance and data analysis capacity to support disease control policy.	MOA			x			
• MOH regulation for rabies control	MOH	ZOONOSES	x	x		x	
• Surveillance development	MOH	ZOONOSES	x	x			
• Development/ try out of risk mapping tools (Zoonotic and EID)	MOH/WHO	ZOONOSES	x	x	x	x	x
• Surveillance development	Ministry of Environment and Forestry (MOEF)		x	x			
Indicator P.4.2. Animal Health and Veterinarian Workforce → 2017 Capacity level 3							
• Development of FETPV - Training FETPV	MOA		x	x	x	x	x
• Establishment of MOA regulation for the implementation of veterinary authorities in the sub-national	MOA		x	x	x	x	x
• Develop GOI capacity to implement targeted zoonoses and EID prevention and control programme	MOA			x			
Indicator P.4.3 Mechanisms for responding to infectious zoonoses and potential zoonoses are established and functional → 2017 Capacity level 2							
• Surveillance and response of zoonoses outbreaks	MOH	ZOONOSES	x	x	x	x	x
• Zdap national coordination	MOH	ZOONOSES	x				
• Procurement for zoonosis disease: rabies n lepto vaccine	MOH	ZOONOSES	x	x	x	x	x

• IEC material for zoonoses diseases	MOH	ZOONOSES	x	x	x	x	x
• Training for surveillance/epidemiology officer in primary health center, animal health center, and district health center that focused on investigation infectious disease with One Health approach.	PMK		x	x			
• Support zoonoses and EID communication activities; disseminate the communication strategy on One Health targeted zoonoses and EID prevention and control.	MOA		x	x			
• Support establishment of a national web-based platform for zoonoses and EID information access and sharing.	MOA		x	x			
• Identify poultry health best practices	MOA		x	x			
• Build capacity of technical service providers.	MOA		x	x			
• Provide technical assistance for poultry farmers.	MOA			x			
• Promote certification system for poultry farms which are able to fulfil animal health practices required by government.	MOA			x			
• Raise awareness of poultry health best practices to farmers.	MOA			x			
• Conduct study to support evidence-based policy making to improve the quality of poultry marketing processes.	MOA			x			
• Build stakeholder (Government, Private) capacity to improve biosecurity along the poultry market chain.	MOA			x			
• Advocate for stakeholder collaboration on interventions to improve the quality of poultry marketing processes.	MOA			x			
• Raise awareness of stakeholders and consumers to improve the quality of poultry and poultry product marketing processes.	MOA			x			
• Support disease emergency preparedness planning.	MOA			x			

TA FOOD SAFETY

Target: States Parties should have surveillance and response capacity for food and water borne disease risk or events. It requires effective communication and collaboration among the sectors responsible for food safety and safe water and sanitation

JEE Recommendations:

- Provide a 'train the trainers' programme for inspectors on official controls to ensure food operators' compliance with legislation
- Ensure the implementation of Food Safety Management Systems in processing plants of food of animal origin
- Following food safety risk analysis, strengthen research in foodborne disease epidemiology and outbreak investigations

ACTIVITIES AND TIMELINE

PRIORITY ACTIVITIES	MINISTRY	UNIT	2018	2019	2020	2021	2022
Indicator P.5.1 Mechanisms are established and functioning for detecting and responding to foodborne disease and food contamination → 2017 Capacity level 3							
• TOT on Food Safety	MOH and National Food & Drug Control (NFDC)		x	x	x	x	x
• Strengthen of Food safety risk analysis, research in foodborne disease epidemiology and outbreak investigations	MOH	KESLING	x	x			
• IEC material for food safety	MOH		x	x	x	x	x
• Food Safety Implementation System: a. Animal Product Safety Monitoring at UPH (Target 19,000 samples	MOA		x	x	x	x	x
b. NKV certification (veterinary control number) animal farm/ UPH (Target 123 UPH)			x	x	x	x	x
c. UPH Supervision (Target 50 UPH)			x	x	x	x	x
d. NKV Auditor Training and Veterinary Public Health Supervisor			x	x	x	x	x

TA BIOSAFETY AND BIOSECURITY

Target: A whole-of-government national biosafety and biosecurity system is in place, ensuring that especially dangerous pathogens are identified, held, secured and monitored in a minimal number of facilities according to best practices; biological risk management training and educational outreach are conducted to promote a shared culture of responsibility, reduce dual use risks, mitigate biological proliferation and deliberate use threats, and ensure safe transfer of biological agents; and country specific biosafety and biosecurity legislation, laboratory licensing, and pathogen control measures are in place as appropriate.

JEE Recommendations:

- Complete ongoing work to finalize a broader National Strategic Plan for biosafety and biosecurity in laboratories in Indonesia, bringing together laboratory functions in different ministries to address IHR (2005) technical areas such as zoonotic disease, laboratory systems, workforce development, food safety, real time surveillance and AMR in a single overarching plan
- Develop a continuously updated and monitored nationwide inventory of high consequence agents in storage
- Educate and deploy a nationwide function for maintenance and control of laboratory safety facilities and equipment
- Develop a master training and certification scheme for biosafety and biorisk officers in both the human and animal sectors, accredited and certified by relevant international bodies such as WHO, FAO, OIE, IFBA, NSF, etc.

ACTIVITIES AND TIMELINE

PRIORITY ACTIVITIES	MINISTRY	UNIT	2018	2019	2020	2021	2022
Indicator P.6.1. Whole-of-government biosafety and biosecurity system is in place for human, animal, and agriculture facilities → 2017 Capacity level 3							
• Draft finalization NSP for biosafety and biosecurity	MOH			x		x	
• Develop PP Biosafety and biosecurity National Guidelines	MOH				x		
• Refreshment of Assessor SMBL	MOH			x			
• Develop SMBL Certification body	MOH			x			
• Laboratory building standard according to Biosafety and biosecurity	MOH			x	x		
• Comprehensive Biomedical Waste Management system	MOH			x	x		
• Indonesia Biological weapon act	MOH			x	x		
• Develop monitoring national Inventory of high consequence agents in storage				x			
• Stakeholder Networking Cross-sectional Meeting						x	x
• Infrastructure and equipment	MOH & MOA		x	x	x	x	x
P.6.2. Biosafety and biosecurity training and practices → 2017 Capacity level 3							
• Educate and deploy a nation-wide function for maintenance and control of laboratory safety facilities and equipment: a. training				x	x	x	
b. Assistance			x			x	
c. Certification				x			x
• Develop a master training and certification scheme for biosafety and biorisk officers in both the human and animal sectors, accredited and certified by relevant international bodies such as WHO, FAO, OIE, IFBA, NSF, etc: a. Training			x	x	x	x	x
• OHLN 6. In-Service Laboratory Training	PMK		x	x			

TA IMMUNIZATION

Target: A functioning national vaccine delivery system—with nationwide reach, effective distributions, access for marginalized populations, adequate cold chain, an ongoing quality control—that is able to respond to new disease threats

JEE Recommendations:

- Develop a national coverage improvement plan focused on equity, which addresses dropouts and intensifies community awareness of the benefits of vaccination
- Conduct an EPI coverage survey to validate the reported administrative data
- Strengthen EPI data quality. Specifically, integrate private sector EPI coverage reporting, and strengthen web based reporting and recording mechanisms
- Optimize the use of the Stock Management System (SMS) tool to ensure the availability of vaccines in both public and private sectors
- Conduct the vaccine investment case study for Health Care Security (BPJS).

ACTIVITIES AND TIMELINE

PRIORITY ACTIVITIES	MINISTRY	UNIT	2018	2019	2020	2021	2022
Indicator P.7.1.Measles Vaccine as part of national immunization program → 2017 Capacity level 4							
• MR campaign fase 2 in 28 provinces: a. Vaccine and medical devices procurement	MOH	Immunization	x	x	x	x	x
b. Advocacy and Socialization meeting - national level			x	x	x	x	x
a. Training for health workers - national level			x	x	x	x	x
b. IEC (PSA, printing and distribution material)			x		x		
c. Monitoring and evaluation			x	x	x	x	x
d. MR coverage survey integrated with routine immunization - Contract with independent organization			x				
• Develop cMYP 2020 - 2024	MOH	Immunization	x				
• Defaulter tracking - Drop Out DPT1-MCV1 > 10%	MOH	Immunization	x	x			
Indicator P.7.2. National Access Vaccine Delivery → 2017 Capacity level 4							
• Replace and maintaining cold chain equipment	MOH	Immunization	x				
• Implementation of SMS stock vaccine and logistics	MOH	Immunization	x	x	x		

TA NATIONAL LABORATORY SYSTEM

Target: Real-time biosurveillance with a national laboratory system and effective modern point-of-care and laboratory-based diagnostics

JEE Recommendations:

- All puskesmas should be accredited according to plan, and have point of care TB diagnostics in place by 2020
- Increase the number of accredited health laboratories every year to reach 100% coverage
- Increase the number of national reference laboratories for Medical Device Evaluation IEC 60601, stability testing and performance evaluation
- Strengthen the availability of peripheral animal referral labs and their accreditation to ISO 9001
- Increase the number of agents that can be tested at point of care, at primary health care centres for humans and at animal health centres for animals
- Work on decreasing the time of turnover from referral to result, as this may affect treatment.

ACTIVITIES AND TIMELINE

PRIORITY ACTIVITIES	MINISTRY	UNIT	2018	2019	2020	2021	2022
Indicator D.1.1 Laboratory testing for detection of priority diseases → 2017 Capacity level 4							
• Revised MOH regulation no 411/2010 on Clinical Laboratories	MOH	YankesRujukan	x	x			
• Online Laboratory Data Collection	MOH			x	x	x	x
• Review of laboratory reference systems	MOH			x	x	x	x
• Monev Environmental surveillance with 10 BTKL	MOH	Surveillance	x	x	x	x	x
• Development of Veterinary Center (Balai) in Papua	MOA			x			
Indicator D.1.2 Specimen referral and transport system → 2017 Capacity level 4							
• Lab personnel orientation in collecting, culture, packaging, shipping and inspecting diphtheria specimens culturally and electronically at 7 B / BTKL	MOH	Surveillance	x	x	x		
Indicator D.1.3 Effective modern point of care and laboratory based diagnostics → 2017 Capacity level 3							
• HR training for clinical lab tool calibration (BPFK: Jakarta, Surabaya, Medan, Makassar)	MOH	Yankes			x		
• Guidelines for working methods Clinical lab tool calibration	MOH	Yankes			x		
• Improve HR at Laboratory (BBTKL)	MOH	Surveillance	x	x	x	x	x
• Improve examination capacity at the lab	MOA		x	x	x	x	x
Indicator D.1.4 Laboratory Quality System → 2017 Capacity level 3							
• Accreditation of Puskesmas in accordance with Ministry of Health's Strategic Plan and RPJMM	MOH	MUTU?	x	x			
• Surveyor training			x	x	x	x	x
• External Quality Assurance for Laboratorium	MOH	Surveillance	x	x	x	x	x

TA REAL TIME SURVEILLANCE

Target: Strengthened foundational indicator- and event-based surveillance systems that are able to detect events of significance for public health, animal health and health security; improved communication and collaboration across sectors and between sub-national (local and intermediate), national and international levels of authority regarding surveillance of events of public health significance; improved country and intermediate level/regional capacity to analyse and link data from and between strengthened, real-time surveillance systems, including interoperable, interconnected electronic reporting systems. This can include epidemiologic, clinical, laboratory, environmental testing, product safety and quality, and bioinformatics data; and advancement in fulfilling the core capacity requirements for surveillance in accordance with the IHR and the OIE standards

JEE Recommendations:

- Advocate and encourage local government units to honour existing commitments to sustainable implementation and adequate funding of surveillance programmes
- Train health staff at provincial and district levels (including training of trainers), and provide refresher training courses, to strengthen surveillance in areas with existing surveillance systems, and to establish them in those without systems yet(especially for the wildlife sector)
- Establish a mechanism for sharing surveillance data between the human and animal sectors at national level. This mechanism can then be adopted at provincial and district levels.

ACTIVITIES AND TIMELINE

PRIORITY ACTIVITIES	MINISTRY	UNIT	2018	2019	2020	2021	2022
Indicator D.2.1. Indicator and Event-Based Surveillance Systems → 2017 Capacity level 3							
• Increase and improve capacity for EWARS and Event based surveillance at province level (34 provinces)	MOH	Surveillance	x	x	x	x	x
• Improve capacity for EWARS at laboratory and hospital				x	x		
• TOT Rapid Response Team at National Level	MOH	Surveillance	x	x			
• Revising PMK no 949 for EWARS implementation	MOH	Surveillance		x			
• Advocacy to policy maker at province	MOH	Surveillance		x	x	x	x
• Training to improve the ability to intervene in Emerging Infectious Diseases	MOH	INFEM	x	x			
• EID Expert Team Meeting	MOH	INFEM	x	x			
• Network Meeting	MOH	INFEM	x	x			
• Development of RRT Training Module for EID	MOH	INFEM	x				
• Advocacy activity on EID policies at Sub National level	MOH	INFEM	x				
• Advocacy activity on EID policies at Sub National level	MOH	INFEM		x			
• Stakeholder meeting for EID	MOH	INFEM	x				
• Development of weekly report and risk analysis instrument on EID	MOH	INFEM		x			
• Increased HR Capacity in detect and reportthrough ISIKHNAS in the province	MOA	P2H	x	x	x	x	x
• Increased HR Capacity in detect and reportdiseases through ISIKHNAS in the district/municipality	MOA	P2H	x	x	x	x	x
• Capacity building of human resources in managing provincial and regional	MOA	P2H	x	x	x	x	x
Indicator D.2.2. Inter-operable, interconnected, electronic real-time reporting system → 2017 Capacity level 3							
• Electronic reporting systems for notifiable diseases for human health implemented (EWARS)	MOH	Surveillance	x	x	x	x	x
• Electronic Reporting systems for data sharing between sectors exist and implemented (SIZE)	PMK		x				

• Electronic reporting systems for notifiable diseases for animal health implemented (ISIKHNAS)	MOA		x	x	x	x	x
Indicator D.2.3. Analysis of surveillance data → 2017 Capacity level 2							
• Laboratory data feeds into the surveillance systems (system)	MOH	Surveillance	x	x	x	x	x
• Improve data analysis	MOH	Surveillance	x	x	x	x	x
• Trial EID risk assessment	MOH	INFEM					
• Improve public health/ surveillance laboratory capacity	MOH	Surveillance					
Indicator D.2.4. Syndromic surveillance systems→ 2017 Capacity level 4							
• Syndromic surveillance Puskesmas/ sub-national for EID	MOH	INFEM	x	x			
• Continuity and Strengthening Surveillance sentinel ILI-SARI	MOH	ISPA	x	x	x	x	x

TA REPORTING

Target: Timely and accurate disease reporting according to WHO requirements and consistent coordination with FAO and OIE.

JEE Recommendations:

- Increase the reach of the wildlife information system (SEHATSATLI) to all provinces in Indonesia; strengthen interoperability between information systems for data sharing between animal and human health at national level; then adopt these systems at provincial and district levels
- Activate and encourage local government and communities, in line with the "One Data" policy, to enhance their commitment to provide and share PHEIC information and data, including through timely acknowledgement of outbreaks and emergencies
- Strengthen the information infrastructure for PHEIC management at all levels, especially in the 112 priority districts (Presidential Decree No. 131/2015)—including through retraining the IHR NFP and OIE focal point, and providing continuous capacity building/training for staff at province and district levels
- Strengthen risk assessment capacity at national level to facilitate reporting to WHO, OIE and FAO.

ACTIVITIES AND TIMELINE

PRIORITY ACTIVITIES	MINISTRY	UNIT	2018	2019	2020	2021	2022
Indicator D.3.1 System for efficient reporting to WHO, FAO and OIE → 2017 Capacity level 3							
• OIE NFP training	MOA		x	x	x	x	x
• Maintenance of fish disease monitoring system (Software for Fish Disease Monitoring System / SSMPI) on line as a basis for reporting fish diseases to OIE	MOMAF		x				
• Development of a fish disease monitoring system (SSMPI) on line and an Indonesian Aquatic Animal Diseases Alert System / IAADAS as a basis for reporting fish diseases to OIE	MOMAF			x			
• Evaluation of fish disease reports through SSMPI on line (34 Provinces)	MOMAF		x	x			
Indicator D.3.2 Reporting network and protocols in country → 2017 Capacity level 3							
• Preparation of the Minister of Health Regulation on One Data Policy	MOH	PUSDATIN	x				
• Research and routine data synchronization to accommodate One Data				x			
• Integration of Health Information System				x			
• Minister of Health Regulation on Puskesmas Information System (Review of Puskesmas Information System Standard)			x	x			
• Ministry of Agriculture regulation on Animal Health Information System	MOA		x				
• Public hearing of the Ministry of Agriculture's SI Animal Health				x			
• Drafting of the Ministry of Marine Afffairs (MOMAF) on Fish Diseases	MOMAF		x				
• Capacity building for Reference laboratory and fish disease testing laboratories				x			

TA WORKFORCE DEVELOPMENT

Target: State parties should have skilled and competent health personnel for sustainable and functional public health surveillance and response at all levels of the health system and the effective implementation of the IHR (2005). A workforce includes physicians, animal health or veterinarians, biostatisticians, laboratory scientists, farming/ livestock professionals, with an optimal target of one trained field epidemiologist (or equivalent) per 200,000 population, who can systematically cooperate to meet relevant IHR and PVS core competencies

JEE Recommendations:

- Ensure that functional positions are filled with qualified personnel who have been appropriately trained
- Ensure that the veterinary workforce at field level is sufficient to perform ante- and post-mortem inspections at slaughterhouses, and animal health surveillance and control activities, in line with international standards
- Provide appropriate incentives for human and animal health workers to be assigned to local level posts and to remote areas
- Strengthen linkages with academia and international partners, in order to ensure that the quality of applied epidemiology training meets global standards.

ACTIVITIES AND TIMELINE

PRIORITY ACTIVITIES	MINISTRY	UNIT	2018	2019	2020	2021	2022
Indicator D.4.1. Human resources are available to implement IHR core capacity → 2017 Capacity level 3							
• Mapping of national HR needs (doctors, nurses, veterinarians, biostatistics, lab sciences, epidemiologists)	MOH	PPSDM	x	x	x	x	x
• Fulfillment of Health Human Resources through the Nusantara Sehat program	MOH			x	x	x	x
• Fulfillment of Health Human Resources through special duty programs (tuksus)	MOH			x	x	x	x
• Competency improvement of health human resources	MOH			x	x	x	x
• Increased competence of Animal Quarantine human resources (veterinary and veterinary paramedics)	MOA		x	x	x	x	x
• Development of animal health workforce network and work coordination	MOA		x	x	x	x	x
• Quality assurance / standards / competencies of human health	MOH			x	x	x	x
• Quality assurance / standards / competencies of Animal health	MOA			x	x	x	x
• Mapping training needs related to Detect-4 (human health workforce development)	MOH			x	x	x	x
• Mapping training needs related to Detect-4 (animal health workforce development)	MOA			x	x	x	x
• Leadership training for inter-disciplinary and multi countries students. The purpose is to develop the collaboration and coordination to solve health issues.	PMK		x	x			
• Leadership training for inter-disciplinary health professional to solve health problem. This training including in-class training and field visit in Citarumriver.	PMK		x	x			
• Global Health Diplomacy (GHD) Training is a three to five-day intensive program that combine 40 percent theory and 60 percent practice.	PMK		x	x			
Indicator D.4.2. Applied epidemiology training program in place such as FETP → 2017 Capacity level 4							
• Capacity building for the Head of Department regarding applied-epidemiology in decision making and training curriculum for Health Office Heads (technical standards)	MOH		x	x	x	x	x
• Applied-epidemiology training in frontline-like training at FKTP	MOH			x	x	x	x

• Applied-epidemiological technical guidance for people in potential outbreaks areas	MOH			x	x	x	x
• Advocacy to stakeholders (central / regional) regarding HR utilization (incentives, placement, quality standards, etc.)	MOH			x	x	x	x
• Updating of curriculum and modules ofToT surveillance to support health advocacy	MOH			x			
• ToT on surveillance to Support health advocacy	MOH			x			
• Capacity building for epidemiologist to US CDC for Surveillance System	MOH			x			
• One Health training (outbreak investigation)	MOH		x	x	x	x	x
• AMTC	MOH		x	x	x	x	x
• Support One Health collaboration and coordination between government and universities	MOA		x				
• Support curriculum development for pre-service and in-service poultry health capacity building	MOA		x				
• Support the development of FETPV in Indonesia	MOA		x				
• Capacity building for field epidemiology for veterinary officers (FETP degree & non degree)	MOA		x	x	x	x	x
• Advocacy to stakeholders (central / regional) regarding HR utilization (incentives, placement, quality standards, etc.)	MOA						
Indicator D.4.3. Workforce strategy → 2017 Capacity level 3							
• Strengthening the HR database for PPSDM planning	MOH			x	x	x	x
• Development of a national PPSDM strategic plan				x	x	x	x

TA PREPAREDNESS

Targets: Preparedness includes the development and maintenance of national, intermediate and local or primary response level public health emergency response plans for relevant biological, chemical, radiological and nuclear hazards. This covers mapping of potential hazards, identification and maintenance of available resources, including national stockpiles and the capacity to support operations at the intermediate and local or primary response levels during a public health emergency

JEE Recommendations:

- Review and update national disaster plans, particularly with regard to CBRN hazards, surge capacity, resource mobilization (including treatment facilities and laboratories), and stockpiles
- Increase understanding and capacity to prevent, verify and respond to multiple hazards among relevant stakeholders (e.g. points of entry, laboratories, local government, etc.). Include regular stakeholder planning meetings and simulation exercises
- Increase local disaster planning, including by expanding contingency plans for multiple hazards from 300 districts/municipalities to a further 174 districts by 2020, and by increasing local government planning and budget allocations for disasters
- Review national disaster risk assessments (including risk indexes) in the context of all IHR-related hazards, and compile into a national risk profile

ACTIVITIES AND TIMELINE

PRIORITY ACTIVITIES	MINISTRY	UNIT	2018	2019	2020	2021	2022
Indicator R.1.1 Multi-hazard national public health emergency preparedness and response plan is developed and implemented → 2017 Capacity level 3							
• Review the National Contingency Plan	MOH	ISPA		x		x	
• table top exercise of national contingency plans according to the district/ city hazard risk management result	MOH	ISPA	x	x	x	x	
• preparedness training on biological, nuclear and chemical threats that have the potential for public health emergency	MOH	ISPA		x	x	x	x
• Review the National Contingency Plan for zoonosis and EID	MOH	ISPA		x		x	
• table top exercise of national contingency plans on zoonosis & EID in district/ city	MOH	PIE		x	x	x	x
• table top exercise of national contingency plans on zoonosis and EID in province	MOH	PIE		x	x	x	x
• Contingency plan for district with direct access to international POE	MOH	KARKES	x	x			
• EID and Pandemic Preparedness Workshop as part of Hospital Emergency Plan (Hospital Disaster Preparedness Plan)	MOH	PIE		x			
• Workshop on pandemic and EID preparedness plans in the hospital	MOH	PIE		x			
• Mapping and review SOP plan for distribution of drugs and PPE.	MOH	ISPA	x	x	x	x	x
• table top exercise of national contingency plans according to the province hazard risk management result	BNPB (National Disaster Management Agency)		x	x	x	x	x
• The simulation of national contingency plans becomes an operational plan according to the results of risk hazard management in stages/ tiered.	BNPB				x		x
Indicator R.1.2 Priority public health risks and resources are mapped and utilized → 2017 Capacity level 2							
• Training / Workshop to use JRA tools for zoonotic diseases	MOH	Zoonoses	x	x			
• One Health Training / Workshop for high risk areas for each sector followed by joint training	MOH	Zoonoses	x	x	x	x	x
• Assessment of infrastructure, facilities and HR in National and Regional Hospital	MOH	ISPA		x			
• EID risk mapping	MOH	PIE	x	x	x	x	x

TA EMERGENCY RESPONSE OPERATIONS

Target: Countries will have a public health emergency operation centre (EOC) functioning according to minimum common standards; maintaining trained, functioning, multi-sectoral rapid response teams and "real-time" biosurveillance laboratory networks and information systems; and trained EOC staff capable of activating a coordinated emergency response within 120 minutes of the identification of a public health emergency

JEE Recommendations:

- Implement comprehensive training in case management and infection prevention and control for all health personnel based on an all-hazards approach, and including the IHR (2005)
- Develop a national health sector contingency plan for IHR-relevant hazards and integrate it with the National Disaster Management Authority contingency plan
- Improve public health emergency management capacities—specifically on IHR (2005)—for designated referral hospitals, including through training, infrastructure development, and standard operating procedures (SOPs)
- Improve coordination and collaboration for emergency response between the operations centres within the Ministry of Health and between the MOH and other related sectors
- Strengthen information exchange systems between the Ministry of Health and other agencies by holding regular meetings, conducting joint exercises, and establishing memoranda of understanding (MOU) with other operations centres.

ACTIVITIES AND TIMELINE

PRIORITY ACTIVITIES	MINISTRY	UNIT	2018	2019	2020	2021	2022
Indicator R.2.1 Capacity to Activate Emergency Operations → 2017 Capacity level 3							
• Health Cluster Coordination Meeting	MOH	PKK	x	x			
• Implementation of MOH & BNPB cooperation based on the 2014 MoU on Disaster Risk Reduction in health disaster management	MOH	PKK	x	x	x	x	x
• The implementation of MOH & BMKG cooperation based on the 2014 MoU	MOH	PKK	x	x	x	x	x
• Collaboration with the 3 Universities on the Implementation of Health Crisis Risk Management based on the MCC that was arranged in 2017 (UI, UGM and Unibraw) and the Cooperation Agreement which is targeted to be signed in 2019 with 3 other Universities (planned with Unhas, Unsyah Kuala and Unpad)	MOH	PKK	x				
Indicator R.2.2 Emergency Operations Centre Operating Procedures and Plans → 2017 Capacity level 2							
• Preparation of a joint EOC between the PKK, SKK Directorate and NCC							
• Revised Minister of Health Regulation No. 64/2013 on Health Crisis Management	MOH	PKK		x			
• Preparation of Technical Guidelines for Provincial Minimum Service Standards in Health crisis management (Permendagri)	MOH	PKK		x			
• Preparation of Health Cluster Guidelines	MOH	PKK		x			
Indicator R.2.3 Emergency Operations Program → 2017 Capacity level 3							
• Capacity building of districts and provinces for contingency plans (3-year programs), namely: Assistance, training: response maps, Hospital preparedness in disasters, SIPKK, Contingency Plans, TTX & Simulation)	MOH	PKK	x	x	x	x	x
Indicator R.2.4 Case management procedures are implemented for IHR relevant hazards → 2017 Capacity level 3							
• PMK Dissemination About Ambulance Services							

TA LINKING PUBLIC HEALTH AND SECURITY AUTHORITIES

Target: In the event of a biological event of suspected or confirmed deliberate origin, a country will be able to conduct a rapid, multisectoral response, including the capacity to link public health and law enforcement, and to provide and/or request effective and timely international assistance, including to investigate alleged use events

JEE Recommendations:

- Completely revise infectious disease outbreak and health quarantine laws to ensure the inclusion of land quarantine measures and clear mandates for collaboration
- Review MOUs with veterinary authorities. Identify points of contact and the triggers for notification and information sharing between relevant authorities
- Review regulations to strengthen IHR capacity including counter terrorism measures, including at points of entry
- Finalize the MOU and SOPs on developing and implementing an electronic zoonosis and emerging infectious disease information system that is linked to other human and animal health databases. The MOU and SOPs should be effective between the Coordinating Ministry for Human Development and Cultural Affairs; the Ministry of Health; the Ministry of Agriculture; the Ministry of Environment and Forestry; and the National Disaster Management Authority
- Increase the number of provinces that have received training on biological defense and public health emergency of international concern (PHEIC) countermeasures from 11 to all provinces.

ACTIVITIES AND TIMELINE

PRIORITY ACTIVITIES	MINISTRY	UNIT	2018	2019	2020	2021	2022
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 → 2017 Capacity level 4							
• Revision of the Sea and Air Quarantine Law to Law on Health Quarantine)	MOH	HUKOR	x				
• Revision on Infectious disease Law			x	x			
• Finalization of the • Instruction on Enhancing Ability to Prevent, Detect and Respond to Disease Outbreaks, Global Pandemic and Nuclear Emergency, Biological and Chemical			x				
• Completing MOUs and SOPs on the development and implementation of information systems for emerging zoonotic and infectious diseases connected between human and animal health databases / Zoonotic Information Systems and Emerging Infectious Diseases (SIZE)			x	x			
• Increasing Number of Provinces / Districts / Cities that Receive Training on Terrorism / Emergency Nuclear Biological Chemical (NUBIKA)	BNPT (National Counterterrorism Agency)						

TA MEDICAL COUNTERMEASURES AND PERSONNEL DEPLOYMENT

Target: A national framework for transferring (sending and receiving) medical countermeasures and public health and medical personnel among international partners during public health emergencies

JEE Recommendations:

- Review and update legislation and standards for international deployment of health personnel according to international standards, in order to encourage further deployments
- Develop regulations for sending medical countermeasures, based on international standards
- Develop SOPs on how to monitor and evaluate the work of national and international response teams during emergencies
- Map available response teams and health care facilities (including those run by NGOs, government, and other actors) capable of integrating foreign personnel during emergencies
- Advocate and encourage activity and greater involvement of the health sector in international/regional coordination platforms such as ASEAN's AHA Centre.

ACTIVITIES AND TIMELINE

PRIORITY ACTIVITIES	MINISTRY	UNIT	2018	2019	2020	2021	2022
Indicator R.2.1 Capacity to Activate Emergency Operations → 2017 Capacity level 3							
• Advocacy and dissemination of the role of the MOH in the mechanism of medical counter measures to cross programs / sectors	MOH	PKK	x	x	x	x	x
• Mobilization for logistic/ medicine				x	x		
• Country participates/ has formal agreement in regional/ international partnerships (i.e. AADMER, WHO GOARN etc)			x	x	x	x	x
Indicator R.2.2 Emergency Operations Centre Operating Procedures and Plans → 2017 Capacity level 2							
• Regulation/ policy for Emergency Medical Team (EMT) referring to global standard and Indonesia condition (clustering), including: •Personnel registration•Personnel certification•Personnel deployment	MOH	PKK	x				
• Database of Health personnel (Health worker database who can be mobilized for emergency and outbreak)	MOH	PKK	x	x	x	x	x
• Database/ Mapping of health care facilities (including those run by NGOs, government, and other actors) capable of integrating foreign personnel during emergencies	MOH	PKK	x	x	x	x	x
• Monitoring and evaluation of international medical/ personnel countermeasures	MOH	PKK	x	x	x	x	x
• Mobilization for health personnel	MOH	PKK	x	x	x	x	x

TA RISK COMMUNICATION

Target: States Parties should have risk communication capacity which is multi-level and multi-faced, real time exchange of information, advice and opinion between experts and officials or people who face a threat or hazard to their survival, health or economic or social well-being so that they can take informed decisions to mitigate the effects of the threat or hazard and take protective and preventive action. It includes a mix of communication and engagement strategies like media and social media communication, mass awareness campaigns, health promotion, social mobilization, stakeholder engagement and community engagement

JEE Recommendations:

- Further integrate and align the cross-agency risk communication system
- Increase risk communication skills in local government, particularly for non-natural disasters
- Further develop and regularly update risk communication guidelines and SOPs for the health sector
- Update communication strategies, including messaging and media strategy
- Increase the number of disaster alert villages, and increase disaster education in schools and the community, especially in disaster-prone areas.

ACTIVITIES AND TIMELINE

PRIORITY ACTIVITIES	MINISTRY	UNIT	2018	2019	2020	2021	2022
Indicator R.5.1. Risk Communication Systems for Unusual/Unexpected Events and Emergencies → 2017 Capacity level 3							
• To develop national health risk communication guideline	MOH	ROKOM	x				
• To regulate national health risk communication guideline				x			
Indicator R.5.2. Internal and Partner Communication and Coordination for Emergency Risk Communication → 2017 Capacity level 3							
• Annual meeting with multi-sectoral and multi-stakeholder for communication	Ministry of Information and Technology (MOIT)		x	x	x	x	x
• Regional meeting with multi-sectoral and multi-stakeholder	MOIT		x	x	x	x	x
• Regular/annual meeting with multi-sectoral and multi-stakeholder	PMK		x	x	x	x	x
• Regular/annual meeting with multi-sectoral and multi-stakeholder for coordination and communication	MOH	ROKOM	x	x	x	x	x
Indicator R.5.3 Public Communication for Emergencies → 2017 Capacity level 4							
• Availability of MOH communication plan or risk communication plan	MOH	ROKOM	x	x	x	x	x
• Appointed and trained government spokesperson in every government ministry and agency	MOH	ROKOM	x	x	x	x	x
• Engagement with Mass Media and social media	MOH	ROKOM	x	x	x	x	x
• Engagement with Social Media	MOIT		x	x	x	x	x
Indicator R.5.4 Communication Engagement with Affected Communities → 2017 Capacity level 4							
• Regular briefing, training and engagement of social mobilization and community engagement teams including volunteers	Ministry of Social Affair (MOSA)		x	x	x	x	x
• Community outreaches (Hotline)	MOH	ROKOM	x	x	x	x	x
Indicator R.5.5. Addressing perceptions, risky behaviours, and misinformation→ 2017 Capacity level 4							
• Community consultation mechanisms are in place	MOH	ROKOM	x	x	x	x	x
• Content complaints (community reporting system for hoaxes) and rumours surveillance. Example: Aduankonten	MOIT						

TA POINTS OF ENTRY

Targets: States Parties should designate and maintain the core capacities at the international airports and ports (and where justified for public health reasons, a State Party may designate ground crossings) which implement specific public health measures required to manage a variety of public health risks

JEE Recommendations:

- Conduct a human resources needs assessment at designated points of entry (POE) that systematically identifies gaps in performance, redundancies and future performance needs (e.g. for training, staff recruitment)
- Review national policy on information sharing and simultaneous communication of public health events between IHR National Focal Points and other competent authorities at neighbouring country POEs, especially at ground crossings
- Evaluate effectiveness in responding to public health events at POEs and publish the results
- Review additional POEs that could be designated for IHR implementation, considering geography and the number and distribution of existing POEs.

ACTIVITIES AND TIMELINE

PRIORITY ACTIVITIES	MINISTRY	UNIT	2018	2019	2020	2021	2022
Indicator POE.1. Routine capacities are established at PoE → 2017 Capacity level 4							
• Adequately trained health personnel: • Detection and Response for Public Health Emergency Containment Training in POE for Port Health Officer	MOH	KARKES	x				
• Flight Surgeon and Flight Nurse Training for Port Health Officer			x				
• Training for Health Quarantine Capacity				x	x	x	x
• Availability of national policy on information sharing and simultaneous communication of public health events: a. Advocacy and dissemination of Health Quarantine Law	MOH	KARKES	x				
b. Develop Draft Guidelines of Health Quarantine			x	x			
• Additional designated POEs: Review additional 129 designated POEs	MOH	KARKES		x	x	x	x
• Adequately equipped POE: Maintain POE that are adequately equipped (Infrastructure, referral, equipment, etc)			x	x	x	x	x
Indicator POE.2. Effective Public Health Response at Points of Entry → 2017 Capacity level 4							
• Improve capacities on preparedness at POE: 1. Preparedness at POE	MOH	KARKES	x	x	x	x	x
• Improve information sharing and communication with related stakeholders: 1. Health Quarantine Implementation in Ground Crossing Workshop	MOH	KARKES		x	x	x	x
2. Sharing information system with related stakeholders (immigration, finance, home affairs, maritime)			x	x			
3. Develop MOU with risk countries (i.e. African countries) on vaccination requirements and certificate			x	x			
4. Integration of Health Quarantine Program with related ministries and stakeholders				x	x	x	x

TA CHEMICAL EVENTS

Target: States Parties should have surveillance and response capacity for chemical risk or events. This requires effective communication and collaboration among the sectors responsible for chemical safety, industries, transportation and safe disposal

JEE Recommendations:

- Finalize the updated legislation on chemical hazards that will apply to all relevant agencies and which will serve as a basis for the national chemical emergency preparedness and response plan; provincial/district contingency plans for chemical events; technical guidelines; and protocols for response actions
- Develop a national systematic surveillance system for chemical events, supported by appropriate infrastructure (i.e. poison centres), laboratory and clinical toxicology capacities, and relevant technical expertise on risk assessment and case management
- Develop national programmes and services for ensuring a sustainable available workforce/surge capacity for preparedness and response to chemical emergencies
- Strengthen information exchange and coordination among relevant sectors and stakeholders at all levels (local, national and international), across prevention, preparedness, response and recovery.

ACTIVITIES AND TIMELINE

PRIORITY ACTIVITIES	MINISTRY	UNIT	2018	2019	2020	2021	2022
Indicator CE.1. Mechanisms are established and functioning for detecting and responding to chemical events or emergencies → 2017 Capacity level 2							
• Guideline Preparation for Participatory Approach for Communities in Small-Scale Gold Mining Areas (PESK)	MOH	Kesling	x	x			
• Strengthening the Chemical Laboratory Network	MOEF				x		
• Revision of Government Regulation No. 74/2001 on Management of Hazardous and Toxic Materials	MOEF		x				
• Preparation of Ministry of Environment Regulations concerning B3 emergency response systems and B3 waste	MOEF		x				
• Revitalization of the National Mercury Research Center	MOEF		X				
• Health Officer Training Module Preparation for the Implementation of Participatory Approach for Communities in PESK	MOH						
• Preparation of Ministry of Industry regulation on chemicals that are prohibited and regulated for weapons and for precursors	Ministry of Industry (MOI)		x				
• Revision of Ministry of Industry regulation No. 23/2013 on Labeling based on GHS	MOI		x				
• Preparation of Minister of Industry Regulation on list chemicals and organic chemicals	MOI		x				
• Ministry of Manpower regulation No. 5/ 2018 on the Safety and Health of the Work Environment (launching July 18, 2018)	Ministry of Manpower (MOM)		x				
Indicator CE.2. Enabling environment is in place for management of chemical events → 2017 Capacity level 3							
• Review and update of National Implementation Plan on POPs	MOEF		x	x			
• Cross Program Coordination, Cross Ministries and Institutions related to Chemical Events response	MOEF			x	x	x	x
• Preparation of Roadmap for Chemical Events	MOEF				x		
• Mapping of the distribution and potential risks of chemical industry on Java island	MOEF					x	
• Evaluation on the implementation of national action plans for reducing and eliminating mercury	MOEF		x	x	x	x	x

TA RADIATION EMERGENCIES

Target: States Parties should have surveillance and response capacity for radio-nuclear hazards/events/emergencies. This requires effective communication and collaboration among the sectors responsible for radio-nuclear management

JEE Recommendations:

- Finalize/establish national and local response plans for radiological/nuclear emergencies, supported by guides and protocols and based on formally established criteria for triggering urgent protective and other response actions such as sheltering, evacuation, iodine thyroid blocking (ITB), food and drinking water restrictions, etc., as well as case-management protocols for clinicians. Actions could include development of guidelines and protocols for specific emergency scenarios, treatment strategies or protective actions.
- Strengthen the capabilities of designated health care facilities (i.e. hospitals and labs) by developing the necessary infrastructure; providing equipment and services including bioassays and cytogenetic biodosimetry services and a national stockpile; and training the workforce in radiological/nuclear emergency response—especially at provincial level in areas adjacent to nuclear reactor facilities.
- Develop sustainable training programmes to strengthen human resource capacities for nuclear/radiological emergency response, especially at provincial and national levels, through regular training and exercises tailored to specific target groups and areas (e.g. first response, pre-hospital response, clinical case management, internal contamination assessment and management, long-term follow-up, management of non-radiological health consequences, etc.).
- Develop advocacy (awareness raising) and risk communication materials (frequently asked questions/FAQs, fact-sheets, infographics, etc.) and provide risk communication training for emergency responders on risk communication.

ACTIVITIES AND TIMELINE

PRIORITY ACTIVITIES	MINISTRY	UNIT	2018	2019	2020	2021	2022
Indicator RE.1 Mechanisms established and functioning for detecting and responding to radiological and nuclear emergencies → 2017 Capacity level 2							
• Minister of Health's Regulation on the Establishment of the National Referral Hospital for Nuclear Disaster	MOH	KESLING	x	x	x		
• Documents for the contingency plan of the Bandung Nuclear area	BATAN(National Nuclear Energy Agency)		x	x			
• Documents for the contingency plan of the Yogyakarta Nuclear area	BATAN		x	x			
• Meeting on nuclear preparedness and emergency response coordination of the Serpong nuclear area	BATAN			x	x	x	x
• Meeting on nuclear preparedness and emergency response coordination of the DIY nuclear area	BATAN			x	x	x	x
• Meeting on nuclear preparedness and emergency response coordination of the Bandung nuclear area	BATAN			x	x	x	x
• Meeting on nuclear preparedness and emergency response coordination of the PasarJumat nuclear area	BATAN			x	x	x	
• Nuclear emergency response	BAPETEN(Nuclear Energy Regulatory Agency)		x	x	x	x	x
Indicator RE.2 Enabling environment in place for management of radiation emergencies → 2017 Capacity level 3							
• Guidelines for Safeguarding the Impact of Radiation on Health	MOH	KESJAOR		x	x		
• Minister of Health regulation on Guidelines for Medical Management for Nuclear Emergency and Radiology	MOH	KESLING			x	x	
• Presidential Regulation on National Nuclear and Radiation Safety Policies and Strategies	BAPETEN			x	x	x	

• Revision of the PasarJumat nuclear area's emergency preparedness and response program document	BATAN			x	x	x	
• Revision of the Serpong nuclear area's emergency preparedness and response program document	BATAN			x	x	x	
• Nuclear emergency preparedness&response training at the Bandung nuclear area	BATAN			x		x	
• Nuclear emergency preparedness&response training at the PasarJumat nuclear area	BATAN			x		x	
• The preparation of the IEC Media for the Community around the Area	BATAN				x	x	