



Food and Agriculture  
Organization of the  
United Nations

## FINAL REPORT

# WORKSHOP ON INTEGRATED SURVEILLANCE AND INFORMATION SHARING USING TRIPARTITE ZONOTIC GUIDE-SURVEILLANCE INFORMATION SHARING OPERATIONAL TOOL (TZG-SIS OT) FOR CROSS-SECTORAL ZONOSSES IN INDONESIA

4-8 OCTOBER 2021



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WORKSHOP ON INTEGRATED  
SURVEILLANCE AND INFORMATION  
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GUIDE-SURVEILLANCE INFORMATION  
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(TZG-SIS OT) FOR CROSS-SECTORAL  
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**4-8 OCTOBER 2021**

# FOREWORD

## COORDINATING MINISTRY FOR HUMAN DEVELOPMENT AND CULTURAL AFFAIRS (CMHDCA)

First, allow me to thank God the Almighty for His grace and blessing that this Report on the Workshop of Integrated Surveillance and Information Sharing using Surveillance Information Sharing Operational Tools (SIS OT) for cross-sectors In Indonesia, conducted using hybrid meeting platform in Bogor on 4-8 October 2021, can be published. This workshop involved ten ministries and institutions and more than 30 local government's representatives and 18 international development partners, who were brought together to demonstrate support and commitment in addressing zoonotic diseases' threats through the strengthening of integrated surveillance.

As we all are aware of, there are numerous zoonotic pathogens in the world, including Indonesia, and some of these pathogens have the potential to cause Extraordinary Disease Events or outbreaks and pose threats to health's sovereignty. This will definitely impact humans in the aspects of health's security and sovereignty, food, economics, as well as environment. Surveillance is an integrally important part of zoonoses' prevention and control, which is urgently needed to be addressed through One Health's collaborative approach and coordinated multi-sector surveillance system to identify and respond to zoonoses' events in an immediate manner. Thus, SIS OT is launched to assess the cross-sectoral zoonotic diseases' coordinated surveillance and information-sharing's mechanism and structure, as well as to guide the development of action plan. Indonesia is the first country to implement the SIS OT pilot considering that the cross-sectoral collaboration amongst Indonesia's institutions and international partners.

On another hand, this SIS OT workshop has also resulted in a prioritized development plan to improve the national coordinated surveillance system for zoonoses, with a number of proposed tools and supporting resources, road map, and roles and responsibilities agreed upon to implement activities. The success of SIS OT implementation requires high commitment and participation from the multi sectors, stakeholders – locally as well as nationally. SIS OT supports the national authority in the efforts to build and strengthen surveillance system as well as Sharing Information System (SIS) for zoonotic diseases under the cross-sector One Health coordination.

Considering the importance of this workshop's results, in this opportunity I sincerely hope that in the future, all stakeholders are to fully contribute to drafting the policies and implementation of SIS OT by putting the interest of the people and the country as the main consideration. With this opportunity I also would like to extend our sincere gratitude to all Ministries, Institutions and partners who have been actively involved, particularly Ministry of Agriculture, Ministry of Health, and Ministry of Environment and Forestry, FAO Indonesia, as well as Tripartite partners–

WHO, FAO, and OIE- together with all members of committee who were involved to facilitate the workshop. May the strong cooperation and collaboration that we all have worked on together be improved to help strengthen the health sovereignty in Indonesia.

A handwritten signature in blue ink, appearing to read 'drg. Agus Suprpto, M.Kes'. The signature is stylized and somewhat abstract, with a prominent vertical stroke on the left side.

**drg. Agus Suprpto, M.Kes**

Deputy Minister for Health Quality Improvement Coordination and People's Development,  
Coordinating Ministry for Human Development and Cultural Affairs of the Republic of Indonesia

# FOREWORD

## MINISTRY OF AGRICULTURE

I would like to first thank God the Almighty for the completion of the Report on the Workshop of Integrated Surveillance and Information Sharing using Surveillance Information Sharing Operational Tools (SIS OT) for cross-sectors In Indonesia. The workshop was conducted in Bogor on hybrid meeting platform on 4-8 October 2021. Directorate General of Livestock and Animal Health Services (DGLAHS) of the Ministry of Agriculture has been cultivating strong relationship with the FAO Emergency Centre for Transboundary Animal Diseases (ECTAD) Indonesia in preventing and controlling zoonoses and emerging infectious diseases in Indonesia since 2005. As we all are aware of, zoonoses lead to loss on animal health sector and also affect public health, thus, the effective and coordinated prevention and control by bringing together all stakeholders from animal health, human health, environmental/wildlife health and others becomes pivotal.

This report presents information related to cross-sector national surveillance's assessment results as well as recommendations of SIS OT follow-up activities in Indonesia. SIS OT is an operational tool that guides gradual assessment processes on zoonoses' coordinated cross sector's surveillance capacities and information system of a country. Cross Sector's Surveillance System and Information-Sharing within One Health (OH) coordination is crucial to immediately identify zoonotic disease's event in a country, through the utilisation of information obtained from animal, human health and environment/wildlife, as well as other related sectors.

Through this workshop, all sectors agreed on the coverage and rationale of the cross-sectoral targeted priority zoonotic diseases and recommended the development of coordinated surveillance actions as well as strengthening the information-sharing of zoonoses through Indonesia Coordinated One Health and multi-sectoral surveillance for zoonoses. This workshop has facilitated the cross-sector's understanding on SIS OT supported by the Food and Agriculture Organization (FAO) together with the World Health Organization (WHO) and World Organization for Animal Health (WOAH) to use the One Health approach to conduct integrated surveillance in Indonesia in managing zoonoses. Furthermore, this SIS OT workshop has become an important step to strengthen multi sectoral coordination on cross-sectoral integrated surveillance system for zoonoses in Indonesia. Together with the Ministry of Health (MoH), Ministry of Environment and Forestry (MoEF), coordinated by the Coordinating Ministry for Human Development and Cultural Affairs (CMHDCA), related line ministries and stakeholders, are all committed to participate in implementing the SIS OT pilot activities in Indonesia.

In this opportunity, I would also like to extend our highest appreciation and gratitude to the FAO ECTAD Indonesia, who has been supporting DGLASH in preventing and controlling zoonoses. I do believe that our collaboration will contribute to the human health, food security and people's welfare, nationally as well as internationally. I do hope that we can continue to work closely together to achieve the animal-disease-free Indonesia.

A handwritten signature in black ink, appearing to read 'Nasrullah', with a horizontal line underneath.

**Dr. Ir. Nasrullah, M.Sc.**

Director General of Livestock and Animal Health Services  
Ministry of Agriculture of the Republic of Indonesia

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# 1. BACKGROUND

Zoonotic diseases risk both animal and human health, and they may also have an impact on livelihood, economy, food security, and national and global health. Surveillance is a vital aspect of zoonoses prevention and management, but it cannot be properly managed by a single sector. A collaborative One Health approach and an integrated multi-sector surveillance system are critical in identifying and responding to zoonotic disease events in a specific country. This type of coordination system combines multiple elements of surveillance from animal health, human health, environment, and other relevant sectors functioning at the human-animal-environment interface to facilitate information sharing and collaboration. An integrated cross-sectoral zoonotic disease surveillance and information sharing program will improve national health system capacity and security against zoonoses and emerging infectious disease/EID.

The United Nations Food and Agriculture Organization (FAO), in collaboration with the World Health Organization (WHO) and the World Organization for Animal Health (OIE), developed a Surveillance and Information Sharing Operational Tool (TZG-SISOT) in 2018, as part of the Tripartite Zoonoses Guide/TZG to assist national authorities in their efforts to

build or improve an integrated multi-sector surveillance and information sharing system for zoonoses. There are plans to pilot TZG-SISOT application in four countries in Asia-Pacific, Central Asia and Europe, Africa, and North and East Africa in order to develop TZG-SISOT.

Indonesia has already gained experience and contributed to the successful implementation of a pilot on Tripartite Zoonosis Guide-Joint Risk Assessment tool (TZG-JRA tool) in 2018 as part of efforts to increase risk assessment capacity for public health concerns, including zoonoses and EIDs. A Joint External Evaluation (JEE) 2017 also recommends the establishment of a national structure for surveillance and information sharing across the human and health sectors, which would then be adopted at the provincial and district levels. With Indonesia's experience in supporting the TZG pilot program and the successful adoption of some TZG tools, it has been agreed that the TZG pilot on Surveillance and Information Sharing Operational Tool (SIS OT) will begin in February 2021. Due to COVID-19, the implementation of the SISOT pilot in Indonesia is done remotely and supported by the Tripartite (FAO-WHO-OIE) from headquarters and regional offices, with direct support from FAO-WHO country

offices, as a hybrid event (combination of online and on-site).

Based on the previous cross-ministerial SIS OT sensitization meeting in February 2021, Indonesia has committed to participate in SIS OT pilot activities in Indonesia. It was agreed to appoint the Coordinating Ministry for Human Development and Cultural Affairs as the coordinator for the cross-ministerial SIS OT pilot. To ensure that the SISOT pilot follows the SISOT modules and steps, several activities were carried out prior to the workshop, including the formation of a national planning team, the identification of working groups, a routine weekly tripartite meeting (WHO-OIE-FAO), facilitator training, and a pre-workshop engaging SISOT stakeholders and working groups to collect data and information for the SISOT assessment process. A hybrid SISOT workshop was held in Bogor from October 4-8, 2021, to better prepare for the SISOT

pilot. The workshop made recommendations for the formulation of a roadmap and the reinforcement of integrated surveillance and information sharing action plans for zoonoses through Indonesia Coordinated One Health and multi-sector surveillance for zoonotic diseases.

### **SURVEILLANCE INFORMATION SHARING OPERATIONAL TOOL (SIS OT)**

SIS OT is an operational tool designed to take users through a step-wise process of developing or improving their country's integrated cross-sector monitoring and information sharing capacity for zoonotic disease. SIS OT contains a step-wise assessment for users to evaluate their existing capacity based on available work indicators, which leads to the development of a roadmap and workplan for building or improving their SIS system.



**Figure 1. SIS OT Activity Cycle**

SIS OT is an operational instrument that assists in three major issues: (1) assessment, (2) planning, and (3) implementation, which are implemented in a cycle, cross-sectorally, and continually during integrated surveillance.

**Figure 1** depicts the SIS OT activity cycle

SIS OT strengthens and links users to a curated toolbox of resources that could increase surveillance capacity already produced by the Tripartite (FAO, OIE, WHO), and other institutions. These resources include a template and an application for data collection, evaluation, and reporting. The resources also include workshop guidelines, additional manual documents, and directive materials to assist in the completion of stages to build an integrated zoonoses surveillance system. Finally, SIS OT facilitates the development of a roadmap and the sharing of surveillance information, as well as the use of these resources to build or strengthen in-country integrated surveillance systems. Many of these resources are already in place. However, there were previously no systematic approaches available for organizing resources towards one specific storage. Furthermore, no standards exist for identifying the most beneficial resources for developing, applying, and/or maintaining surveillance capacity and an integrated information sharing platform. SIS OT strives to fill that gap.

The SIS OT Assessment Work Book is the primary tool for SIS OT. This document includes an excel-based tool with step-wise approach to help users assess the level of development of national surveillance information sharing capacity. CBG is an activity framework and requirement (referred to as "activity") that evolves in five distinct steps and is required for developing an integrated zoonoses surveillance. The tool assists users in identifying the next steps that must be completed in order to continue with the development of each activity and guides users in selecting the most relevant and appropriate resources for the given country.

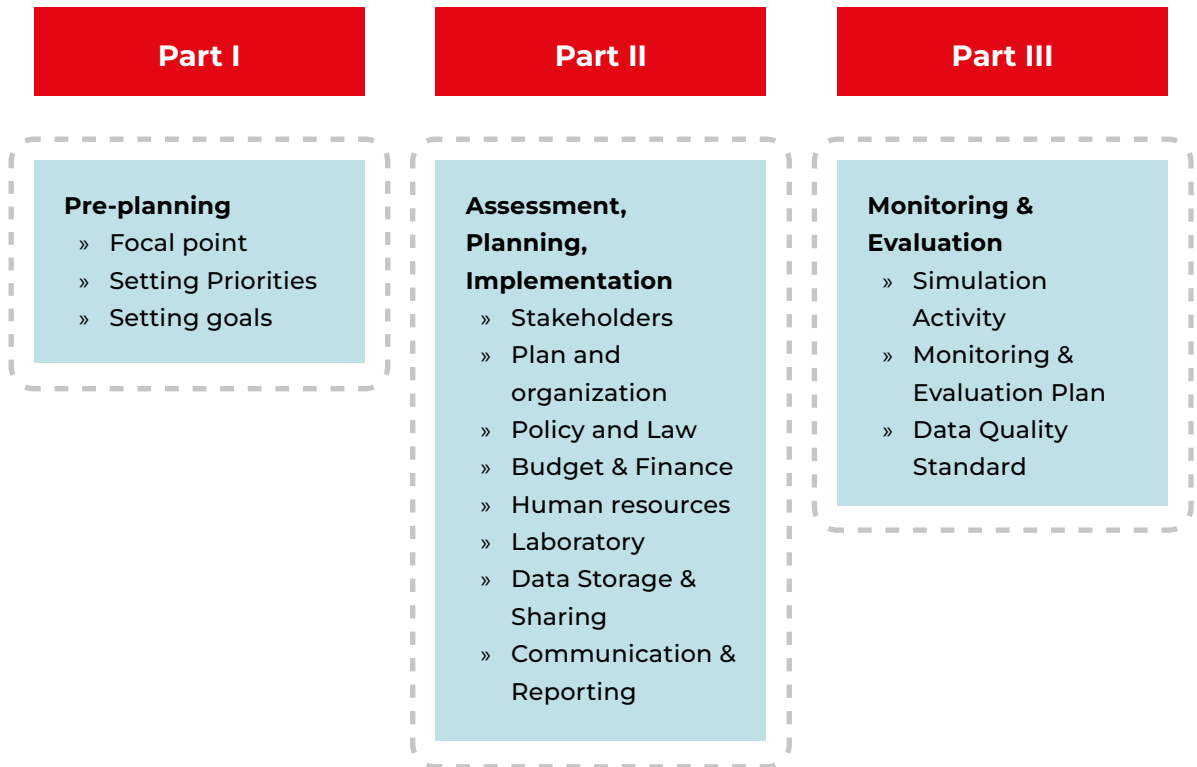
SISOT is intended to be utilized by all countries at all levels of integrated surveillance capacity, from directing the development of national fundamental capacities for countries lacking such capabilities to assisting or boosting capacities for countries with sophisticated systems. Rather than developing a new zoonoses surveillance system or structure, this system is intended to address existing gaps.

The steps for surveillance information sharing operation tools are as follows:

**Figure 2. Steps for surveillance and information sharing**



**Figure 3. Assessment Workbook SIS OT**



## 2. REVIEW OF SIS OT WORKSHOP

The workshop took place in a hybrid format (online and on-site) from October 4 to 8, 2021, from 08.00 to 17.00 WIB. Zoom meetings are used to facilitate online workshops as well as on-site workshops in Bogor (The Alana Hotel and Conference Center, Sentul City, Jl. Ir H Juanda No.76, Sentul, Kec. Babakan Madang, Bogor, Jawa Barat 16810), with funding from FAO Rome and FAO-USAID GHSP Indonesia, and facilitated by the FAO-WHO-OIE tripartite.

The objectives of the SIS OT are as follows:

- 1\_ To assess existing surveillance capacity for zoonoses surveillance in a specific nation and to communicate information in a coordinated manner using the Capacity Improvement Guideline;
- 2\_ To define prioritized actions, a roadmap, an action plan, and a timetable for improving zoonoses surveillance capacity;
- 3\_ To identify appropriate lists of tools and resources to support priority list achievement, based on established national priorities and situational demands;
- 4\_ To plan and create agreement among participants on responsibilities and commitment to carry out each activity.
- 5\_ To advocate to the high-level decision-makers on SIS OT workshop recommendations and follow-up

### EXPECTED OUTPUTS:

- 1\_ A detailed assessment of the country's capacities for integrated zoonoses surveillance and information exchange is carried out.
- 2\_ A list of prioritized activities, a roadmap, an action plan, and a timetable for an integrated zoonoses surveillance capacity are developed.
- 3\_ A list of acceptable tools and resources to support achievement of the priority list is identified, based on the established national priority and unique situational needs.
- 4\_ Consensus among participants on responsibilities and commitment to carry out each activity are built.
- 5\_ Senior decision makers and cross-sectoral ministries are aware of and provide support for SIS OT workshop recommendations and follow-ups

The workshop is led by Deputy  
3 Coordination on Health Quality  
Improvement and Population Development,  
of the Coordinating Ministry for Human  
Development and Cultural Affairs in  
partnership with the ministries of agriculture,  
health, environment and forestry, as well  
as other ministries and institutions, and  
development partners at the national and  
international levels. The workshop had a  
total of 116 participants. A detailed list of  
participants is provided in **annex 1**.

**During the workshop, the following SIS  
OT steps were discussed and worked on:**

**1\_ SISOT Workbook Assessment**

- ▶ Pre planning: focal point, priorities, and setting objectives
- ▶ Assessment, planning, and implementation (stakeholders, planning and organization, policy, and implementation)

- ▶ Funding allocation and financing
  - ▶ Finance, human resources, lab, data storage, communication, and reporting
  - ▶ Monitoring and evaluation: simulation, M&E strategy, data quality requirements
- 2\_ Identifying and prioritizing operations, or developing a monitoring and information exchange system**
- 3\_ Developing a road map, including a time frame**
- 4\_ Resources/tools selection**
- 5\_ Creating a development plan (activities, target capacity, resources/tools, implications, implementation, difficulties, priorities, time frame, responsible individuals, stakeholders).**
- 6\_ Final report**

### 3. EXECUTIVE SUMMARY

SIS OT is an operational tool for guiding a gradual assessment process on a specific country's (in this example, Indonesia's) integrated surveillance capacity and cross-sectoral information system for zoonotic disease. A cross-sector Surveillance and Information Sharing System coordinated by One Health (OH) is critical for the rapid detection of zoonotic disease events in a country, using information from animal health, human health, environment, and other relevant sectors. Under a cross-sectoral OH coordination, SIS OT assists national authorities in their efforts to create and strengthen zoonotic disease surveillance and information sharing (SIS).

During the SIS OT workshop, participants agreed on the scope and rationale for zoonotic disease targets such as Rabies, Avian Influenza, Japanese Encephalitis, Nipah, Anthrax, Leptospirosis, and others (Zoom pooling: 88 percent agree). The most commonly mentioned areas for SIS activities are Bali, North Sumatra, West Java, West Kalimantan, West Sumatra, North Sulawesi, and other provinces, and will involve stakeholders such as the ministry of health (MoH), animal health, ministry of environment and forestry (MoEF), ministry of home affairs (MoHA), the Coordinating Ministry for Human Development and Cultural

Affairs, sub-national technical implementing units (UPTD), IVETRI (Bblitvet), the Institute of Vector and Reservoir Control Research and Development (B2P2VRP Salatiga), livestock and animal health district offices, public health laboratory (*Labkesmas*), disease investigation centers (BBVET/BVET), natural resource conservation center/agency (BBKSDA/BKSDA), animal health center (*PUSKESWAN*), public health center (*PUSKESMAS*), provincial and district health offices, National Parks, Environmental Health Technology Center (BTKL), ministry of marine affairs and fisheries (MMAF), and universities. Information on the rationale and scope of integrated surveillance information sharing system, as well as the SIS target can be found in Annex 2.

The followings were established during the SIS OT workshop, which took place from 5-7 October 2021: 1) a step-wise methodology for independent evaluation of current national structures or systems; 2) a list of target activities to be completed, a plan for improving surveillance and information sharing, and a timetable for the development of integrated surveillance national system for zoonotic disease; and 3) a list of resources to support the list of activities, based on nationally determined priorities and unique situational needs.

The SIS OT recommendations will be implemented across three time periods: short-term (<1 year), mid-term (1-3 years), and long-term (>3 years). Each activity has a ministry/institution assigned as the lead implementer, with other ministries/agencies involved in the activity's implementation. Since 2021, a portion of SIS OT activities have been carried out in parallel and will continue to be carried out in accordance with the established timetable.

# 4. SUMMARY OF ASSESSMENT RESULTS

**Table 1** gives a summary of the SIS OT assessment for activities required to develop and strengthen an integrated cross-sectoral SIS system for zoonoses in Indonesia. The full report can be found in **Annex 3**.

**Table 1. Summary of SIS OT Assessment Result**

ACTIVITY GROUP	NUMBER OF ACTIVITY	CAPACITY LEVEL			
		SUB-PAR	BASIC	INTERMEDIATE	ADVANCED
Pre-Planning	3	1	2	0	0
Assessment	11	8	2	1	0
Planning	8	7	1	0	0
Implementation	10	5	5*	0	0
Monitoring and Evaluation	3	2	1	0	0

Notes: \*The basic level is the highest capacity for one of the activities.



# 5. ACTIVITY IDENTIFICATION AND PRIORITY SUMMARY

According to the day 2 session, 34 tasks were recognized and deemed relevant out of 35 activities under step 4 self-assessment. There are 28 HIGH priority activities and 6 MEDIUM level activities out of 34 total. Out of 34 activities, workshop participants agreed that 27 (79.4 percent) are FEASIBLE, 3 (8.8 percent) are QUITE FEASIBLE, and 4 (11.8 percent) are DIFFICULT. According to the time frame for implementation, participants agreed that 7 activities (20.6 percent) must be completed within a year, and 27 activities (79.4 percent) are expected to be completed within 2-3 years. The workshop also agreed on the need for a ranking of activity implementation, with short-term (implemented within a year) and mid-term (within 2-3 years)

## **The following are the short-term activity rankings (within 1 year)**

- 1\_ Identification of the First Stakeholder
- 2\_ Setting Goals
- 3\_ Setting Priorities
- 4\_ Stakeholders Mapping
- 5\_ Surveillance Plan Assessment
- 6\_ Other Operational Plans Assessment

## **The following are the mid-term activity rankings (within 2-3 years)**

- 1\_ Integrated surveillance framework and strategic plan, national operation plan
- 2\_ Legal framework assessment
- 3\_ Laboratory capacity assessment
- 4\_ Infrastructure mapping
- 5\_ Political supports
- 6\_ Financial planning
- 7\_ Human resource management
- 8\_ Exchange of data and information
- 9\_ Implementation of integrated surveillance system



## 6. ROADMAP

The roadmap describes the activities required to meet the goals of cross-sectoral integrated surveillance. The roadmap also specifies which quarter and year each activity will be carried out. Several factors must be considered during the roadmap development process, including the capacity level of the specified target, feasibility, implementation schedule, and priority. Based on the consensus, six of the 34 activities are classified as short-term (< 1year) while the remaining 28 are classified as mid-term (2-3 years).

Before incorporating such 34 activities in the table to determine when they will be implemented, they were prioritized based on short-term, mid-term, and long-term implementation. Given the limited available resources, it is not possible to complete all 28 activities in a short amount of time (2-3 years). As a result, only ten activities will be chosen during the mid-term period. The remaining 18 activities will be carried out over a long period of time. A detailed list of activities and a timetable can be found **Annex 4**.



# 7. SELECTED TOOLS

Tools are chosen and used to assist in the process of increasing the target's capacities and each activity. Tools are chosen based on the highest values criteria, which include accessibility, language, user friendliness, data needs, and analysis, as well as tools that have been used in Indonesia, such as OHDZP, Surveillance Evaluation Tools (SET), OHSMART, and IHR-PVS National Bridging Workshops. A detailed explanation of the tools chosen can be found in **Annex 5**.



## 8. SUMMARY OF SIS DEVELOPMENT

To assist activity implementation, the SIS development plan was made in collaboration with cross-sectoral leaders/policy holders, relevant stakeholders, and national and international development partners. All leaders agreed on each agency's tasks and responsibilities, including a list of actions that must be completed in order to complete activities, indicators for monitoring and presenting activity achievement, as well as advocating for tools and their supports. The agreement takes into account the tasks, functions, and authority of each

agency involved in SIS development, such as technical agencies of the ministries of agriculture, health, and environment and forestry, to support the ministry of home affairs' implementation and to coordinate SIS-related activities in the coordinating ministry for human development and cultural affairs, as well as other government agencies and stakeholders who will support and involve in planning, implementation and monitoring and evaluation of SIS in Indonesia. A detailed result of SIS development plan can be found in **Annex 6**.



## 9. OTHER ISSUES DISCOVERED DURING THE SIS OT

Several key issues were raised during the workshop as a result of the assessment of SIS OT priority activities. Based on a number of researches agreed upon, particularly for the results on the assessment of “**Basic Capacity Level – not yet achieved**” indicate that it does not mean that all activities required are yet initiated by the Government of Indonesia,

it may mean that the activity scope as well as activities are yet planned based on the agreement of the multi-sector involved. For the SIS OT scope and targets, the workshop’s participants agreed that some activities may still be categorized within this Level (Basic).

The following are some documented aspects of SIST OT activities.

NO	ASPECT	ASSESSMENT RESULTS	NOTES
1	Framework and strategic plan assessment	Basic capacity has not been achieved	Basic capacity level is yet achieved for the diseases within the scope. However, for a number of diseases, such as Rabies and AI, the activities have been implemented.
2	Surveillance plan assessment	Basic capacity has not been achieved	
3	Other operational plans assessment	Basic capacity has not been achieved	
4	Legal framework assessment	Basic capacity has not been achieved	There are general regulations, such as the presidential regulation on Satu Data Indonesia and the presidential regulation on One Map, but no legal umbrella for cross-sectoral mechanisms.
5	Financial planning// budgeting	Basic capacity has not been achieved	Budgets are available, but they are still sectoral and have not been designed for integrated surveillance.
6	Workforce assessment	Basic capacity has not been achieved	Workforce assessment is available, but it is not comprehensive.
7	Workforce planning	Basic capacity has not been achieved	There are several activities connected to surveillance capacities, but they do not follow review results.
8	Exchange of data and information	Basic	Data sharing for certain diseases has been done and implemented in various locations.
9	Simulation trainings	Basic capacity has not been achieved	Integrated surveillance simulation is only done in pilot regions.

# ANNEXES

## ANNEX 1. KEY MINISTRIES INVOLVED

### 1\_ Coordinating Ministry for Human Development and Cultural Affairs

- ▶ Assistant Deputy of Disease Prevention and Control, Deputy of Health Quality Improvement and Human Development

### 2\_ Ministry of Agriculture (MoA)

- ▶ Directorate of Animal Health, Directorate General of Livestock and Animal Health Services
- ▶ Directorate of Veterinary Public Health, Directorate General of Livestock and Animal Health Services, Ministry of Agriculture

### 3\_ Ministry of Health (MoH)

- ▶ Directorate of Health Surveillance and Quarantine, Directorate General of Disease Prevention and Control
- ▶ Director of Vector-borne and Zoonotic Diseases Prevention and Control, Directorate General of Disease Prevention and Control

### 4\_ Ministry of Environment and Forestry (MoEF)

- ▶ Directorate of Species and Genetic Biodiversity Conservation, Directorate General of Natural Resource and Ecosystem Conservation

## SIST OT Planning Team

### CROSS-MINISTERIALS TEAM

1	dr. Sinurtina Sihombing, M.Kes	Coordinating Ministry for Human Development and Cultural Affairs
2	Ahmad Alfarobi Jauharul Ilmi, S.Pt	Coordinating Ministry for Human Development and Cultural Affairs
3	drh. Ikke Yuniherlina	Zoonoses Group, Directorate of Vector-borne and Zoonotic Diseases Prevention and Control, Ministry of Health
4	Edy Purwanto, SKM, M.Kes	Surveillance Group, Directorate of Health Surveillance and Quarantine, Ministry of Health
5	Luci Rahmadani Putri, SKM, MPH	Emerging Infectious Disease Group, Directorate of Health Surveillance and Quarantine, Ministry of Health
6	drh. Sitti Ganefa Pakki, M.Epid	Zoonoses Group, Directorate of Vector-borne and Zoonotic Diseases Prevention and Control, Ministry of Health
7	dr. Chita Septiawati, MKM	Emerging Infectious Disease Group, Directorate of Health Surveillance and Quarantine, Ministry of Health
8	drh. Gunawan Setiaji, MS	Zoonoses Section, Directorate of Veterinary Public Health, Ministry of Agriculture
9	drh. MM Hidayat, M.Sc	Animal Disease Surveillance Section, Directorate of ANimal Health, Ministry of Agriculture
10	drh. Purnama Martha Simanjuntak, M.Si	Animal Disease Surveillance Section, Directorate of Animal Health, Ministry of Agriculture
11	drh. Syafrison, M.Si	Animal Disease Surveillance Section, Directorate of Animal Health, Ministry of Agriculture
12	drh. Yunita Widayati	Animal Disease Prevention & Control Section, Directorate of Animal Health, Ministry of Agriculture
13	Dr. Ichwan Muslih, S.Si, M.Si	Directorate of Species and Genetic Biodiversity Conservation, Ministry of Environment and Forestry
14	drh. Dedi Chandra	Directorate of Species and Genetic Biodiversity Conservation, Ministry of Environment and Forestry

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**TRIPARTITE TEAM (FAO-WHO-OIE)**

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15	Luuk Schoonman	FAO ECTAD Indonesia
16	Farida Camallia Zenal	FAO ECTAD Indonesia
17	Ali Rizqi Arasyi	FAO ECTAD Indonesia
18	Riana Aryani Arief	FAO ECTAD Indonesia
20	Andri Jatikusumah	FAO ECTAD Indonesia
21	Endang Wulandari	WHO Indonesia
22	Sean Shadomy	FAO Rome
23	Gunel Ismayilova	FAO Rome
24	Gael Lamielle	FAO RAP
25	Yin Myo Aye	FAO RAP
26	Lesia Thompson	OIE SRR
27	Kaylee Errecaborde	WHO

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**SIS OT Participants**

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<b>NO</b>	<b>OFFICIAL/MINISTRY/AGENCY</b>
28	Assistant Deputy of Disease Prevention and Control, Deputy of Health Quality Improvement and Human Development, Coordinating Ministry for Human Development and Cultural Affairs
29	Director of Animal Health, Directorate General of Livestock and Animal Health Services, Ministry of Agriculture
30	Director of Veterinary Public Health, Directorate General of Livestock and Animal Health Services, Ministry of Agriculture
31	Director of Health Surveillance and Quarantine, Directorate General of Disease Prevention and Control, Ministry of Health
32	Director of Vector-borne and Zoonotic Diseases Prevention and Control, Directorate General of Disease Prevention and Control, Ministry of Health
33	Director of Species and Genetic Biodiversity Conservation, Directorate General of Natural Resource and Ecosystem Conservation, Ministry of Environment and Forestry
34	Director of Fire and Disaster Management, Directorate General of Territorial Administration Development, Ministry of Home Affairs
35	Animal Health Surveillance Section, Directorate of Animal Health, Ministry of Agriculture
36	Animal Disease Prevention and Control Section, Directorate of Animal Health, Ministry of Agriculture

- 37 Zoonoses Section, Directorate of Veterinary Public Health, Ministry of Agriculture
- 38 Surveillance Section, Directorate of Health Surveillance and Quarantine, Ministry of Health
- 39 Emerging Infectious Diseases Section, Directorate of Health Surveillance and Quarantine, Ministry of Health
- 40 Zoonoses Section, Directorate of Vector-borne and Zoonotic Diseases Prevention and Control, Ministry of Health
- 41 Sub-directorate of Biodiversity, Directorate of Species and Genetic Biodiversity Conservation, Ministry of Environment and Forestry
- 42 Sub-directorate of Preservation, Directorate of Species and Genetic Biodiversity Conservation, Ministry of Environment and Forestry
- 43 IVETRI (BBLITVET), Agricultural Research and Development Agency, Ministry of Agriculture
- 44 Center for Biomedic and Basic Health Technology, Ministry of Health
- 45 Director of Fire and Disaster Management, Directorate General of Territorial Administration Development, Ministry of Home Affairs
- 46 Center for Animal Quarantine and Animal Biodiversity, Ministry of Agriculture
- 47 Center for Forest Research and Development, Research and Development and Innovation Agency, Ministry of Environment and Forestry

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**COORDINATING MINISTRY FOR ECONOMIC AFFAIRS (CMEA)**

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- 48 Deputy II (Food and Agribusiness)
- 49 Deputy Assistant for Livestock and Fisheries Agribusiness Development

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**MINISTRY OF AGRICULTURE (MOA)**

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- 50 Animal Protection Section, Directorate of Animal Health
- 51 Animal Health Organisation and Resources Section, Directorate of Animal Health
- 52 Animal Product Safety Supervision Section, Directorate of Veterinary Public Health
- 54 Animal Product Quality and Certification Laboratory (BPMSH)
- 53 DIC Maros
- 54 DIC Wates
- 55 DIC Denpasar

56 DIC Medan

57 DIC Subang

58 DIC Banjarbaru

59 DIC Bukittinggi

60 DIC Lampung

61 Loka Veteriner Papua

62 Agricultural Data and Information Center

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#### **MINISTRY OF HEALTH (MOH)**

63 Health Quarantine Section, Directorate of Health Surveillance and Quarantine, MoH

64 Directorate of Basic Healthcare Services, Directorate General of Healthcare Services, MoH

65 Directorate of Referral Healthcare Services, Directorate General of Healthcare Services, MoH

66 IVRCRD Center for Vector R&D Salatiga, NIHRD

67 Center for Environmental Health and Disease Control Engineering (BBTKLPP) Jakarta

68 Center for Environmental Health and Disease Control Engineering (BBTKLPP) Yogyakarta

69 Center for Environmental Health and Disease Control Engineering (BBTKLPP) Surabaya

70 Center for Environmental Health and Disease Control Engineering (BBTKLPP) Banjar Baru

71 Center for Environmental Health and Disease Control Engineering (BBTKLPP) Medan

72 Center for Environmental Health and Disease Control Engineering (BBTKLPP) Palembang

73 Center for Environmental Health and Disease Control Engineering (BBTKLPP) Makassar

74 Center for Environmental Health and Disease Control Engineering (BBTKLPP) Batam

75 Center for Environmental Health and Disease Control Engineering (BBTKLPP) Manado

76 Center for Environmental Health and Disease Control Engineering (BBTKLPP) Ambon

77 Data and Information Center

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**MINISTRY OF ENVIRONMENT AND FORESTRY (MOEF)**

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- 78 Natural Resources Conservation Center (BKSDA) North Sumatra
  - 79 Natural Resources Conservation Center (BKSDA) Riau
  - 80 Natural Resources Conservation Center (BKSDA) East Nusa Tenggara
  - 81 Natural Resources Conservation Center (BKSDA) South Sumatra
  - 82 Natural Resources Conservation Center (BKSDA) West Kalimantan
  - 83 Natural Resources Conservation Center (BKSDA) Central Java
  - 84 Natural Resources Conservation Center (BKSDA) North Sulawesi
  - 85 National Park Center (BTN) Way Kambas
  - 86 National Park Center (BTN) Acatejawe Lolobata
  - 87 Data and Information Center
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**MINISTRY OF NATIONAL DEVELOPMENT PLANNING (BAPPENAS)**

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- 88 Direktorat Kesehatan dan Gizi Masyarakat, Deputi Bidang Pembangunan Manusia, Masyarakat dan Kebudayaan, Kementerian Perencanaan Pembangunan Nasional
  - 89 Direktorat Pangan dan Pertanian, Deputi Bidang Kelautan dan Sumber Daya Alam, Kementerian Perencanaan Pembangunan Nasional Republik Indonesia (BAPPENAS)
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**MINISTRY OF MARINE AFFAIRS AND FISHERIES (MMAF)**

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- 90 Directorate of Fish Health and Environment, Directorate General of Aquaculture
  - 91 Center for Fish Quarantine, Quality Control and Product Safety
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**MINISTRY OF DEFENCE (MOD)**

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- 92 Directorate of Health, Directorate General of Defence Force
  - 93 Directorate of Human Resources, Directorate General of Defence Force
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**NATIONAL AGENCY FOR DISASTER MANAGEMENT (BNPB)**

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- 94 Deputy Section of System and Strategy
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95 Deputy Section of Prevention

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**INDONESIAN NATIONAL ARMED FORCES (TNI)**

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96 Health Center (PUSKES) TNI

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**INDONESIAN NATIONAL POLICE (POLRI)**

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97 Center for Medic and Health (PUSDOKKES) POLRI

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**NATIONAL AND INTERNATIONAL DEVELOPMENT PARTNERS**

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98 FAO Indonesia

99 FAO RAP

100 FAO HQ

101 FAO Jordan

102 WHO Indonesia

103 WHO SEARO

104 WHO EMRO

105 OIE

106 OIE SRR

107 Infectious Disease Detection and Surveillance (IDDS) –USAID /FHI 360

108 AIHSP

109 Fleming Fund

110 USAID

111 Department of Foreign Affairs and Trade (DFAT) – Australia

112 United State – Defense Threat Reduction Agency (US-DTRA)

113 US-CDC

114 US-CDC Indonesia Office

## ANNEX 2. COVERAGE AND RATIONALE OF INTEGRATED SIS AND TARGETS

### Zoonoses target coverage :

Rabies, Avian Influenza, Japanese Encephalitis, Nipah, Anthraks, Leptospirosis. Other diseases: Bruselosis\_melitensis, Malaria, Schistoshomiasis, Campylobacteriosis, Hanta virus, Toksoplasmosis, Cyticercosis/ Taeniasis, Hepatitis, Trichinellosis, Paratuberculosis

**The most discussed target areas** for implementation: Bali, North Sumatra, West Java, West Kalimantan, West Sumatra, North Sulawesi other provinces: Maluku, North Maluku, East Nusa Tenggara, South Sulawesi, Banten, DKI, Central Java

**Stakeholders who must be involved:** MoH, animal health, MoEF, MoHA, Coordinating Ministry for Human Development and Cultural Affairs, Sub-national implementing units (UPTD), IVETRI, IVRCRD Center for Vector R&D Salatiga, Sub-national Livestock and Animal Health Offices, Public Health Laboratory, DICs (BBVET/BVET), Natural Resources Conservation Centers (BBKSDA/BKSDA), Animal Health Center (PUSKESWAN), Public Health Center (PUSKESMAS), Provincial and district Health offices, National Parks, BTKL and MMAF, Universities

## ANNEX 3. RESULTS OF SIS OT ASSESSMENT

ACTIVITIES	OBJECTIVES	CAPACITY LEVEL				ASSESSMENT RESULTS	NEXT TARGETS
		BASIC	INTERMEDIATE	ADVANCED			
<b>PP-1 Identification of First Stakeholders</b>	The objective of this activity is to identify focal points, "champions" or technical working groups from all participating sectors who will serve as leaders in the implementation of an integrated surveillance system for zoonotic diseases	Identification of a <b>focal point, champions or technical working groups in all participating sectors</b> at the national level in order to develop a plan for integrated surveillance implementation	Identification of a <b>focal point, champions or technical working groups</b> across all <b>participating sectors</b> and levels of governments in order to develop a plan for integrated surveillance implementation	<b>Intitutionalization of focal points, champions or technical working groups</b> (including identified focal points or champions) for integrated surveillance (for example in the form of MCM institution)	Basic	Intermediate	
<b>PP-2 Setting Priorities</b>	The purpose of this activity is to create a list of priority zoonotic diseases that should be agreed upon and developed by the human health, animal health, environmental, and other related One Health sectors for integrated surveillance activities	A list of priority zoonotic diseases has been developed for use in <b>the integrated surveillance system</b>	To widely distributed the priority zoonoses list at the subnational and community levels.	To develop a list of priority zoonotic diseases employing the One Health cross-sectoral approach, involving all <b>relevant sectors</b> in the process of setting priorities in a transparent, repeatable, and evidence-based manner	Basic	Intermediate	
<b>PP-3 Setting goals</b>	The purpose of this activity is to define, allocate, and agree on goals, roles, and responsibilities among all relevant sectors for the implementation of an integrated surveillance system.	To agree upon goals, roles, and responsibilities of <b>all participating sectors</b> in the <b>integrated surveillance system</b> at the national level	To agree upon the goals, roles, and responsibilities of <b>all participating sectors</b> in the <b>integrated surveillance system</b> and to expand at all available levels.	To re-evaluate the goals, roles, and responsibilities of <b>integrated surveillance system</b> to reflect recent demand from the said system	Basic capacity has not been achieved	Basic	

PRE-PLANNING

CAPACITY LEVEL						
ACTIVITIES	OBJECTIVES	BASIC	INTERMEDIATE	ADVANCED	ASSESSMENT RESULTS	NEXT TARGETS
<b>A-1 Stakeholders Mapping</b>	The purpose of this activity is to identify <b>stakeholders</b> for surveillance, epidemiology, laboratory, and information sharing from all sectors related to the zoonotic diseases for planning the implementation of integrated surveillance.	To identify <b>stakeholders</b> for surveillance, epidemiology, laboratory, and <b>information exchange</b> .	Analysis of <b>stakeholders to identify</b> all parties participating at all levels	Institutionalization and adoption of <b>stakeholders' roles and responsibilities</b> into policy	Basic	Intermediate
<b>A-2 Surveillance System Linkages Assessment</b>	The purpose of this activity is to conduct surveillance system assessments in order to map available infrastructures for cross-sectoral integrated surveillance, identify surveillance linkages across key sectors, and guarantee that deficiencies in surveillance infrastructures may be identified and improved so that cross-sectoral coordination can be carried out in the most effective and efficient manner feasible.	To assess <b>the linkages</b> between all existing priority zoonoses surveillance system in all relevant sectors	To assess <b>the linkages</b> between all existing priority surveillance system in all relevant sectors and at all levels	To assess <b>the linkages</b> between all existing surveillance system and the results show that it has met the targets of integrated surveillance system	Basic capacity has not been achieved	Basic
<b>A-3 Legal Framework Assessment</b>	The purpose of this activity is to identify accessible legal frameworks (including IHR and OIE standards) for animal and human surveillance, as well as codes of ethics and confidentiality in data collecting, processing, and sharing during surveillance, including agreements on data exchange and usage of available data.	Assessment of <b>legal frameworks</b> (laws, policies, regulations, and international-standard guidelines) that govern the code of ethics and the confidentiality of surveillance and data exchange	Assessment of legal frameworks (laws, policies, regulations, and international-standards guidelines) that govern the code of ethics and the confidentiality of surveillance and data exchange at all levels.	Assessment of legal frameworks (laws, policies, regulations, and international-standards guidelines) that govern the code of ethics and the confidentiality of surveillance and data exchange at all levels.	Basic capacity has not been achieved	Basic

CAPACITY LEVEL						
ACTIVITIES	OBJECTIVES	BASIC	INTERMEDIATE	ADVANCED	ASSESSMENT RESULTS	NEXT TARGETS
<b>A-4 Frameworks and Strategic Plan Assessment</b>	The purpose of this activity is to identify available surveillance on relevant frameworks and strategic plans for subsequent coordination and harmonization, or to develop a single document using cross-sectoral and One Health approaches, if possible.	Assessment of <b>frameworks</b> and <b>strategic plans</b> pertinent to the integrated surveillance system in order to identify the possibilities for consolidation and linkages at the national level		Assessment of <b>frameworks</b> and <b>strategic plans</b> pertinent to the integrated surveillance system in order to identify the possibilities for consolidation and linkages at all levels	Basic	Advanced
<b>A-5 Surveillance Plans Assessment</b>	The purpose of this activity is to identify existing surveillance plans and other related documents (SOP, case definition, protocol, etc.), coordinate and harmonize surveillance plans and other documents, and, if possible, develop a new one using cross-sectoral and One Health approaches.	Assessment of existing surveillance plans including case definitions, protocols, <b>Standard Operating Procedures</b> , and other documents on integrated surveillance system, to identify the possibility for consolidation and linkages at the national level		Assessment of existing surveillance plans including case definitions, protocols, <b>Standard Operating Procedures</b> , and other documents on integrated surveillance system, to identify the possibility for consolidation and linkages at all levels	Basic capacity has not been achieved	Basic
<b>A-6 Other Operational Plans Assessment</b>	The purpose of this activity is to identify available operational plans on zoonotic diseases and integrated surveillance (other than surveillance plans) in order to coordinate and harmonize surveillance plans and other documents, or to develop a new one using cross-sectoral and One Health approaches, if possible.	Assessment of existing <b>operational plans</b> on integrated surveillance system to identify consolidation and linkages potentials at the national level		Assessment of existing <b>operational plans</b> on integrated surveillance system to identify consolidation and linkages potentials at all levels	Basic capacity has not been achieved	Basic

CAPACITY LEVEL						
ACTIVITIES	OBJECTIVES	BASIC	INTERMEDIATE	ADVANCED	ASSESSMENT RESULTS	NEXT TARGETS
<b>A-7 Infrastructures Mapping</b>	<p>The purpose of this activity is to describe national infrastructures and identify current capacity for improvement, as well as to begin the establishment of an integrated surveillance system. Infrastructure mapping must cover the following areas in order to get information throughout the entire system:</p> <ul style="list-style-type: none"> <li>• Landscape analysis focusing on assessing organizational structures in specific sectors within and outside of government bodies;</li> <li>• Structures and infrastructures, responsibilities, programs, and sector-specific activities on zoonoses and integrated surveillance, including specific needs and priorities of such sector;</li> <li>• National and international obligations;</li> <li>• Collaborative activities and programs, cross-disciplines, cross-sectors, and/ or One Health within specific sectors or between relevant sectors;</li> <li>• Activities in collaboration with central or local governments, universities, NGOs, industries, or others, in sectors other than human health, animal health, and environment, and at national or sub-national levels;</li> <li>• Frameworks, plan protocols, and zoonoses-related strategies produced by each sector or through cross-sectoral collaboration;</li> <li>• Availability of human resources and other resources;</li> <li>• Challenges encountered during collaboration.</li> </ul>	<p><b>Mapping of basic infrastructures</b> (in accordance with TZG Chapter 4.1) describes the structures and linkages within or between participating sectors</p>	<p><b>Infrastructure mapping</b> describes most of the mapped areas (in accordance with TZG Chapter 4.1)</p>	<p><b>Infrastructures mapping</b> describes all mapped areas comprehensively (in accordance with TZG Chapter 4.1)</p>	<p>Basic capacity has not been achieved</p>	<p>Basic</p>

ACTIVITIES	OBJECTIVES	CAPACITY LEVEL				
		BASIC	INTERMEDIATE	ADVANCED	ASSESSMENT RESULTS	NEXT TARGETS
<b>A-8 Economic Needs Assessment</b>	The purpose of this activity is to determine the financial requirements for obtaining the expected capacity level for integrated surveillance system at the national level within the set time frame.	<b>The economic assessment</b> defines the financial requirements for a national integrated surveillance system		<b>The economic assessment</b> defines the financial requirement for an integrated surveillance system at all levels	Basic capacity has not been achieved	Basic
<b>A-9 Laboratory Capacity Assessment</b>	The purpose of this activity is to identify gaps or deficiencies in laboratory diagnostic capacity, training, and coordination, as these are critical components of the integrated surveillance system for zoonoses. Laboratory assessment shall involve an evaluation of each laboratory's capacities within the integrated surveillance system, as well as the functionality and activities of the entire laboratory network. This will aid in identifying qualified laboratories at the central or local levels in all sectors important to One Health, as part of the laboratory networks for the integrated surveillance system, and external laboratories that can perform tests if capacities are not available within the country	<b>Laboratory assessment</b> identifies national and international referral laboratories capable of performing testing to support integrated surveillance activities	<b>Laboratory assessment</b> identifies referral laboratories at every level (including international) capable of performing testing to support integrated surveillance activities	<b>Laboratory assessment</b> identifies laboratory networks that are capable of doing testing to assist integrated surveillance activities	Intermediate	Advanced

CAPACITY LEVEL

ACTIVITIES	OBJECTIVES	BASIC	INTERMEDIATE	ADVANCED	ASSESSMENT RESULTS	NEXT TARGETS
<b>A-10 Laboratory Shipment and Interpretation Assessment</b>	<p>The purpose of this activity is to assess lab capacity in each sector specifically to allow for cross-sectoral harmonization and to build a cross-sectoral partnership utilizing the One Health approach, which includes:</p> <ul style="list-style-type: none"> <li>• Collective procurement of reagents and laboratory items;</li> <li>• Standardization of diagnostic techniques and harmonisation of local procedures against internationally-recognized standards;</li> <li>• Mapping of flows from specimen collection to specimen reception at laboratory in relevant sectors in order to provide information on the possibility of overlaps and gaps, as well as to create space for identification of possible collaboration in sample transportation.</li> </ul>	<p>Assessment of stock availability, shipment chain, and interpretation of laboratory results to determine harmonization amongst <b>participating sectors</b> at the national level</p>	<p>Assessment of stock availability, shipment chain, and interpretation of laboratory results to determine harmonisation amongst <b>participating sectors</b> at all levels</p>	<p>Assessment of the level of conformity of stock availability, shipment chain, and interpretation of laboratory results between <b>participating sectors</b>, where the results confirm it has met the targets of the integrated surveillance system</p>	<p>Basic capacity has not been made</p>	<p>Basic</p>
<b>A-11 Work force Assessment</b>	<p>The purpose of this activity is to give evidence-based and national guidelines on why and how education and training programs are designed, how such programs can satisfy international standards, and how such programs may be administered to suit the needs of the state. As a result, in order to build and establish a One Health workforce, the government at the national level, in collaboration with stakeholders, must understand and be able to express the current and potential needs of the stated workforce at the national level, which can be done through workforce assessment. The outcomes of this assessment can be utilized to establish a workforce strategy or plan to strengthen and harmonize national education and training programs.</p>	<p>Implementation of <b>workforce assessments</b> at all levels to identify requirements, competencies, needs, and current workforce gaps</p>	<p>Implementation of <b>workforce assessments</b> at all levels to identify requirements, competencies, needs, and current workforce gaps</p>	<p>Implementation of <b>workforce assessments</b> at all levels to identify requirements, competencies, needs, and current workforce gaps</p>	<p>Basic capacity has not been achieved</p>	<p>Basic</p>

ACTIVITIES	OBJECTIVES	CAPACITY LEVEL				ASSESSMENT RESULTS	NEXT TARGETS
		BASIC	INTERMEDIATE	ADVANCED			
PLANNING	<p><b>PL-1 Political Support</b></p> <p>The purpose of this activity is to secure political support to assist and advance the development of integrated surveillance among relevant sectors.</p>	<p>Identification of <b>decision makers</b> in the integrated surveillance system</p>	<p>Political <b>support</b> for integrated surveillance system exists at all levels</p>	<p>There is an <b>advocacy strategy</b> for communicating information on <b>integrated surveillance to decision makers</b></p>	<p>Basic</p>	<p>Intermediate</p>	
	<p><b>PL-2 General Data Element</b></p> <p>The purpose of this activity is to plan a data sharing mechanism to ensure that all sectors are involved in, or are at least aware of, all information from relevant sectors at sub-national, national, or trans-boundary levels (if available). Best practices refer to elements or variables of general data that are recognized or established in order to fulfill common analytic goals in an integrated surveillance system. Having general/similar variables ensures that data obtained from each relevant sector can be shared with others, aggregated, and combined into a single one.</p>	<p>Identification and agreement on <b>general data elements</b> in all <b>participating sectors</b> in order to achieve common analytical goals in an <b>integrated surveillance system</b> at the national level</p>	<p>Identification and agreement on <b>general data elements</b> in all <b>participating sectors</b> in order to achieve common analytical goals in an <b>integrated surveillance system</b> at all levels</p>	<p>Standardization of <b>general data elements</b> across all <b>participating sectors</b> in accordance with common analytical goals in an <b>integrated surveillance system</b> as well as compliance with international data standards</p>	<p>Basic capacity has not been achieved</p>	<p>Basic</p>	
	<p><b>PL-3 Framework and Strategic Plan of the Integrated Surveillance System</b></p> <p>The purpose of this activity is to review framework in relation to available surveillances, as well as strategic plans for potential consolidation and harmonization, or, if possible, to develop a document employing multi-sectoral and One Health approaches.</p>	<p>Implementation of a cross-sectoral study on national <b>framework</b> and <b>strategic plans</b> for an <b>integrated surveillance system</b>, for planning purposes</p>	<p>Consolidation and harmonization of <b>framework</b> and <b>strategic plans</b> pertaining to <b>integrated surveillance system</b> based on assessment at all existing levels</p>	<p>Revision of the <b>framework</b> and <b>strategic plans</b> pertaining to <b>integrated surveillance system</b> in accordance with international standards and recommendation</p>	<p>Basic capacity has not been achieved</p>	<p>Basic</p>	

ACTIVITIES	OBJECTIVES	CAPACITY LEVEL				ASSESSMENT RESULTS	NEXT TARGETS
		BASIC	INTERMEDIATE	ADVANCED			
<b>PL-4 National Operational Plan</b>	The purpose of this activity is to review operational plans relevant to existing surveillance as well as other relevant documents to enable for consolidation and harmonization, or, if possible, to develop one document using cross-sectoral and One Health approaches.	Implementation of cross-sectoral study on <b>operational plans</b> and other necessary documents (such as surveillance plan, case definition, protocols, and <b>Standard Operating Procedures</b> ) on <b>integrated surveillance system</b> for planning purposes	Revision of <b>operational plans</b> and relevant documents (such as surveillance plan, case definition, protocols, and <b>Standard Operating Procedures</b> ) on <b>integrated surveillance system</b> and information sharing agreed upon by all surveillance implementers at all available levels	Revision of <b>operational plans</b> (such as surveillance plan, case definition, protocols, and <b>Standard Operating Procedures</b> ) on <b>integrated surveillance system</b> in accordance with international guidelines and recommendations	Basic capacity has not been achieved	Basic	
<b>PL-5 Financial Planning</b>	Given the extensive resource requirements of the integrated surveillance system, the purpose of this activity is to develop a budget plan and ensure funding distribution based on an understanding of monetary or financial basic principles for the development and implementation of the integrated surveillance system.	A <b>budget plan</b> and <b>funding distribution mechanism</b> are available for integrated surveillance at the national level	A budget plan and <b>funding distribution mechanism</b> are available for integrated surveillance at all levels	Assessment of the available budget plan and <b>funding distribution mechanism</b> , which the results showing that it has met the targets of <b>integrated surveillance system</b>	Basic capacity has not been achieved	Basic	
<b>PL-6 Workforce planning</b>	The purpose of this activity is to develop a workforce strategy as well as education and training plans to improve and harmonize national education and training programs based on the results of a workforce assessment.	Education and training plans are available for an <b>integrated surveillance system</b> based on a national workforce assessment	<b>Education and training plans</b> are available for an <b>integrated surveillance system</b> based on workforce assessment at all levels	Workforce education and training on cross-sectoral national workforce planning, as well as in conformity with international accountability and assessment standards	Basic capacity has not been achieved	Basic	

CAPACITY LEVEL						
ACTIVITIES	OBJECTIVES	BASIC	INTERMEDIATE	ADVANCED	ASSESSMENT RESULTS	NEXT TARGETS
<b>PL-7 Legal Framework Planning</b>	The purpose of this activity is to ensure that all required legal frameworks for the development /improvement of integrated surveillance within and across One Health relevant sectors have been standardized based on assessment results in order to support achievement of outputs and outcomes expected from an integrated surveillance systems and information sharing.	Standardization of <b>the required legal framework</b> (laws, policies, regulations, and international standard guidelines) in <b>all sectors</b> based on the assessment at national level	Standardization of <b>the required legal framework</b> (laws, policies, regulations, and international standard guidelines) in <b>all sectors</b> based on the assessment at all levels available	Revision of <b>legal framework</b> concerning the <b>integrated surveillance system</b> in accordance with international standards and recommendations	Basic capacity has not been achieved	Basic
<b>PL-8 A Coordinated Communication Planning</b>	The purpose of this activity is to agree on terminology and general messages that will be utilized across sectors, as well as to communicate with the general public.	Harmonizing terminologies and communication messages among <b>all participating</b> sectors in the integrated surveillance system at national level	Harmonizing and disseminating terminologies and communication messages among <b>all participating</b> sectors in the <b>integrated surveillance system</b> at all levels available	Communication <b>strategy</b> and/ <b>plan</b> (related to terminologies and messages) to disseminate information on the <b>integrated surveillance system</b> to <b>stakeholders</b> and the general public	Basic capacity has not been achieved	Basic
<b>I-1 Financial Resources Mobilization</b>	The purpose of this activity is to secure the financial resources required to support the integrated surveillance system.	Funding is available for integrated surveillance at national level	Funding is available for integrated surveillance at all levels	Assessment of <b>sustainable funding allocation</b> (for example from the national budget) for integrated surveillance activities, which the results show that it has met the targets of <b>integrated surveillance system</b>	Basic capacity has not been achieved	Basic

IMPLEMENTATION

CAPACITY LEVEL						
ACTIVITIES	OBJECTIVES	BASIC	INTERMEDIATE	ADVANCED	ASSESSMENT RESULTS	NEXT TARGETS
<b>I-2 Human Resources and Stakeholders Mobilization</b>	The purpose of this activity is to establish regular communication between integrated surveillance system focal points and technical groups in order to discuss and complete integrated surveillance activities and issues.	The focal point or technical working groups meet on an <b>ad hoc-basis</b>	The focal point or technical working group meet on a regular or on specific times to discuss emerging priorities issues	<b>The technical working group</b> studies and optimizes integrated surveillance activities on a regular basis	Basic	Intermediate
<b>I-3 Data Exchange and Information Sharing</b>	The purpose of this activity is to initiate or build a data exchange mechanism to ensure that each relevant sector is involved in, or at the very least aware of, information coming from all relevant sectors at all levels. This includes identifying sector-specific data elements to be shared within the integrated surveillance system; determining sub-set data that will be shared across relevant sectors through integrated surveillance; developing a mechanism to ensure collected data are proper and available for cross-sectoral data exchange; determining how and when data will be shared to ensure it is done in a timely manner; and developing an exchange mechanism [information/data].	A data sharing mechanism is available amongst participating <b>sectors</b> at the national level	A data sharing mechanism is available amongst participating <b>sectors</b> at all levels	Data sharing mechanisms are available and well-functioning, and they can be accessed and used by all participating <b>sectors</b>	Basic capacity has not been achieved	Basic
<b>I-4 Data Storage</b>	The purpose of this activity is to secure data storage and sharing mechanisms, IT infrastructure support (such as hardware, software, and online service support), and technical support for building data informatics, storage, and management systems generated by all participating sectors	The structure and location for cross-sectoral data storage and management are available at national level	The structure and location for cross-sectoral data storage and management are available at all levels	The structure and location for cross-sectoral data storage and management are <b>available</b> and well-functioning at all surveillance implementers, and can be accessed and utilized by all participating sectors	Basic	Intermediate

CAPACITY LEVEL						
ACTIVITIES	OBJECTIVES	BASIC	INTERMEDIATE	ADVANCED	ASSESSMENT RESULTS	NEXT TARGETS
I-5 <b>Data Privacy and Security Facilities</b>	The purpose of this activity is to ensure that integrated surveillance data is secured by data privacy and security measures	Privacy and security facilities for the protection of integrated surveillance data is available at the national level	Privacy and security facilities for the protection of integrated surveillance data is available at all levels	Assessment of privacy and security facilities for the protection of integrated surveillance data, the results of which suggest that it has met the targets of <b>integrated surveillance system</b>	Basic capacity has not been achieved	Basic
I-6 <b>Implementation of an Integrated Surveillance System</b>	The purpose of this activity is to gradually begin implementing the integrated surveillance system.	Piloting integrated surveillance systems in targeted locations	Expansion of the integrated surveillance system to new locations based on pilot results	Establishment of the integrated surveillance system as a national program	Basic capacity has not been achieved	Basic
I-7 <b>Data sharing</b>	The purpose of this activity is to ensure that mechanisms for formal and informal agreements are implemented to share information following agreement amongst all participating sectors.	<b>Formal and informal</b> data sharing at the national via <b>ad hoc mechanism</b>	<b>Formal and informal</b> data sharing at all available levels on a regular and timely basis	Systematic data sharing across all <b>participating sectors</b> via a joint <b>platform or interoperability</b> between platforms, on a regular and timely basis	Basic	Intermediate
I-8 <b>Data Communication &amp; Usage</b>	The purpose of this activity is to establish effective communication during information exchange across government levels and within each government unit, as well as between partner organizations and stakeholders such as the media and the public	An ad hoc mechanism for <b>information sharing</b> with relevant <b>stakeholders</b> is established	A mechanism for routine <b>information sharing</b> with relevant <b>stakeholders</b> has been established	A mechanism for routine and timely information sharing with relevant stakeholders, including transboundary, regional, and international organisations, has been established	Basic	Intermediate

ACTIVITIES	OBJECTIVES	CAPACITY LEVEL					ASSESSMENT RESULTS	NEXT TARGETS
		BASIC	INTERMEDIATE	ADVANCED				
<b>I-9 Conformity to International Notification Requirements</b>	The purpose of this activity is to guarantee that the state complies with international notification obligations for zoonotic diseases.	Conformity to <b>international notification requirements</b> for all zoonotic diseases				Basic	A higher capacity level is obtained	
<b>I-10 Integrated Data Visualization and Analysis</b>	The purpose of this activity is to ensure that integrated surveillance aggregate data can generate outputs that can be shared across government sectors and internal government units, as well as other relevant partner organizations and stakeholders	Integrated surveillance data generate outputs (such as photographs, graphs, reports, or bulletins) that are shared at the national level.	Integrated surveillance data generate outputs (such as photographs, graphs, reports, or bulletins) that are shared with stakeholders at all available levels	Integrated surveillance data, including monitoring and evaluation reports, generate outputs that assist in response, policy, and program development		Basic capacity has not been achieved	Basic	
<b>ME-1 Simulation Activity</b>	The purpose of this activity is to use simulation to evaluate the effectiveness and functionality of an integrated surveillance systems in different scenarios.	Implementation of a <b>simulation activity</b> at the national level to evaluate the effectiveness and functionality of an integrated surveillance system	Implementation of a <b>simulation activity</b> to evaluate effectiveness and functionality of an integrated surveillance system at all available levels	The use of <b>simulation activity findings</b> to support and revise integrated surveillance plans		Basic capacity has not been achieved	Basic	

		CAPACITY LEVEL				
ACTIVITIES	OBJECTIVES	BASIC	INTERMEDIATE	ADVANCED	ASSESSMENT RESULTS	NEXT TARGETS
<b>ME-2 Monitoring and Evaluation Plan</b>	The purpose of this activity is to create an M&E plan for integrated surveillance system activities, including deciding and documenting expected results, how results will be measured, what information will be collected in each activity (such as how frequently and by whom), and how this information will be used in M&E. This activity can also include arrangement of M&E of integrated surveillance, as well as the identification of other goals in monitoring and evaluation and the definition of fundamental indicators for primary activities to enable for the measurement of any change that occurs.	<b>A monitoring and evaluation plan</b> that meets the targets of integrated surveillance system is established	<b>Monitoring and evaluation plan</b> to trace performance and progress of integrated surveillance system	The outcomes of <b>repeated monitoring and evaluation</b> are utilized to improve or expand integrated surveillance system in accordance with international standards and recommendations	Basic capacity has not been achieved	Basic
<b>ME-3 Data Quality Standard</b>	The purpose of this activity is to provide a comprehensive, rapid, and accurate mechanism for monitoring and evaluating the quality of shared data within the integrated surveillance system, shared in a timely and accurate manner at specific data loading levels (such as health facilities, surveillance officers/reporters, and so on).	Methodology for <b>managing data quality is available</b>	Data <b>quality testing</b> , where the results show that it has met the targets of integrated surveillance system	Data quality is in accordance with <b>international standards and recommendations</b>	Basic	Intermediate

## ANNEX 4. SHORT AND MID-TERMS ACTIVITIES

### A. Short term activities conducted in 2022

ACTIVITIES	CAPACITY LEVEL OF IDENTIFIED TARGETS	FEASIBILITY	IMPLEMENTATION TIME FRAME	PRIORITIES	YEAR ONE (2022)			
					QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4
(A) Identification of the first stakeholders	INT: Focal points, champions, or technical working groups have been identified at all participating sectors and government levels for the implementation of integrated surveillance	Feasible	Short term (<1 year)	High				
(C) Setting priorities	INT: A list of zoonotic diseases has been widely distributed at the sub-national and community levels	Feasible	Short term (<1 year)	High				
(B) Setting Goals	BL: The goals, roles, and responsibilities of all sectors participating in the integrated surveillance system have been agreed upon at the national level	Feasible	Short term (<1 year)	High				
(D) Stakeholder mapping	INT: A stakeholder analysis has been conducted to identify participants at all levels of government	Feasible	Short term (<1 year)	High				
(E) Surveillance plan assessment	BL: Existing surveillance plans, including case definitions, protocols, and standard operating procedures, as well as other pertinent documents on the integrated surveillance system, have been evaluated for potential consolidation and links to the national level	Feasible	Short term (<1 year)	High				
(F) Assessment of other operational plans	BL: Existing operational plans relevant to integrated surveillance have been evaluated for potential national consolidation and linkages	Feasible	Short term (<1 year)	High				

## B. Mid-term activities to be implemented in 2023

ACTIVITIES	CAPACITY LEVEL OF IDENTIFIED TARGETS	FEASIBILITY	IMPLEMENTATION TIME FRAME	PRIORITIES	YEAR ONE (2022)			
					QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4
(3) Legal framework assessment	BL: The legal framework (rules, policies, guidelines, and laws, as well as international standards) that govern the code of ethics and privacy for surveillance and data exchange have been assessed	Feasible	Mid-term (2-3 years)	High				
(5) Infrastructure mapping	BL: Basic infrastructure activity mapping (as specified in TZG CH 4.1) has been used to describe structure and its relationships within and between such sectors	Feasible	Mid-term (2-3 years)	High				
(4) Laboratory capacity assessment	ADV: A laboratory assessment has been performed in order to identify lab networks that meet the requirements for conducting testing to support integrated surveillance activities	Feasible	Mid-term (2-3 years)	High				
Workforce assessment	BL: Workforce assessment has been done in order to identify requirements, competencies, needs and present gaps at national level	Feasible	Mid-term (2-3 years)	Medium				
(6) Political support	INT: A political commitment to an integrated surveillance system has been built, with support from all levels of government	Feasible	Mid-term (2-3 years)	High				
(1) Integrated surveillance framework and strategic plan	BL: A cross-sectoral review of the national framework and strategic plan related to the integrated surveillance system has been conducted for planning purposes	Feasible	Mid-term (2-3 years)	High				
(2) National operational plan	BL: A cross-sectoral evaluation of the national operational plan and other necessary documents (including the surveillance plan, case definition, protocol, and standard operating procedure) related to the integrated surveillance system has been developed for planning purpose	Feasible	Mid-term (2-3 years)	High				

ACTIVITIES	CAPACITY LEVEL OF IDENTIFIED TARGETS	FEASIBILITY	IMPLEMENTATION TIME FRAME	PRIORITIES	YEAR ONE (2022)			
					QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4
(7) Financial planning	BL: A budgeting plan and a method for allocating funds for integrated surveillance has been developed at the national level	Feasible	Mid-term (2-3 years)	High				
(8) Workforce planning	BL: An education and training plan for the integrated surveillance system has been developed based on workforce assessments at the national level	Feasible	Mid-term (2-3 years)	High				
(9) Data exchange & information sharing	BL: A mechanism for data exchange across sectors at the national level has been developed	Feasible	Mid-term (2-3 years)	High				
(10) Implementation of integrated surveillance system	BL: Integrated surveillance system is piloted in target areas	Feasible	Mid-term (2-3 years)	High				

### C. Long-term activities will be carried out throughout the years 2024-2025

ACTIVITIES	CAPACITY LEVEL OF IDENTIFIED TARGETS	FEASIBILITY	IMPLEMENTATION TIME FRAME	PRIORITIES
Surveillance system linkages assessment	BL: The current surveillance system for priority zoonoses has been assessed across sectors	Feasible	Mid-term (2-3 years)	Medium
Framework and strategic plan assessment	ADV: Framework and strategic plans related to the integrated surveillance system have been evaluated for potential consolidation and linkages at all levels of government	Feasible	Short term (<1 year)	Medium
Economic needs assessment	BL: An economic needs assessment has been conducted in order to establish the national financial requirements for an integrated surveillance system	Difficult	Mid-term (2-3 years)	Medium
Laboratory shipment and interpretation assessment	BL: Supply, shipment chain and interpretation of lab results has been assessed to be harmonized between participating sectors at national level	Feasible	Mid-term (2-3 years)	Medium
General data element	BL: Equivalent data elements were selected and agreed upon at each participating sector in order to achieve similar analytical goals of the national integrated surveillance system	Feasible	Mid-term (2-3 years)	High
Legal framework planning	BL: Required legal frameworks (rules, policies, guidelines, and regulations, as well as international standards) have been standardized across all sectors based on national assessments	Feasible	Mid-term (2-3 years)	High
Coordinated communication plan	BL: Terminologies and communication messages are standardized across all participating sectors in the national integrated surveillance system	Feasible	Mid-term (2-3 years)	High
Financial resources mobilisation	BL: Funding for integrated surveillance has been acquired at the national level	Feasible	Mid-term (2-3 years)	High
Human resources and stakeholders mobilization	INT: A focal point or technical working group meets on a regular basis to discuss priority issues as they arise	Quite feasible	Mid-term (2-3 years)	Medium
Data storage	INT: A structure and location for storing and managing data from various sectors is provided at all levels of government	Feasible	Mid-term (2-3 years)	High

ACTIVITIES	CAPACITY LEVEL OF IDENTIFIED TARGETS	FEASIBILITY	IMPLEMENTATION TIME FRAME	PRIORITIES
Data privacy and security	BL: Privacy and security measures to protect integrated surveillance data at the national level are provided	Difficult	Mid-term (2-3 years)	High
Data sharing	INT: Data is routinely and timely distributed in both formal and informal forms across all levels of government	Difficult	Mid-term (2-3 years)	High
Communication & data usage	INT: Routine information sharing with key stakeholders is available	Difficult	Mid-term (2-3 years)	High
Coordinated data visualization and analysis	BL: Integrated surveillance data is utilized to generate outputs (such as figures, graphs, reports, or bulletins) that are shared at the national level	Feasible	Mid-term (2-3 years)	High
Simulation activities	BL: Simulation activities are being carried out to assess the efficiency and functioning of the integrated surveillance system at the national level	Feasible	Mid-term (2-3 years)	High
Monitoring and evaluation planning	BL: A monitoring and evaluation strategy that meets the goals of the integrated surveillance system is available	Quite feasible	Mid-term (2-3 years)	High
Data quality standard	INT: Data quality has been tested and defined in order to fulfill the goals of the integrated surveillance system	Quite feasible	Mid-term (2-3 years)	High

## ANNEX 5. SELECTED RESOURCES

ACTIVITIES	TARGET CAPACITY-LEVEL	PROPOSED RESOURCES (PROPOSE DURING WORKSHOP)	REMARKS
<b>PP-1</b> Identification of the first stakeholders	<b>INT:</b> Focal points, champions, or technical working groups have been identified at all participating sectors and government levels for the implementation of integrated surveillance	Policy Analysis	<a href="https://www.researchgate.net/publication/242456068_Analyzing_Policy_Fields_Helping_Students_Understand_Complex_State_and_Local_Contexts">https://www.researchgate.net/publication/242456068_Analyzing_Policy_Fields_Helping_Students_Understand_Complex_State_and_Local_Contexts</a>
<b>PP-2</b> Setting priorities	<b>INT:</b> A list of zoonotic diseases has been widely distributed at the sub-national and community levels	OHZDP	Will be conducted in November 2021
<b>PP-3</b> Setting goals	<b>BL:</b> The goals, roles, and responsibilities of all sectors participating in the integrated surveillance system have been agreed upon at the national level	OHSRRT	For information on aid tools please contact CDC ERRB, CDC One Health Office, or Johns Hopkins Applied Physics Laboratory JHU/APL contact: Karen Meidenbauer, DVM, MPH Karen.meidenbauer@jhuapl.edu
<b>A-1</b> Stakeholders mapping	<b>INT:</b> A stakeholder analysis has been conducted to identify participants at all levels of government	OHSRRT, OH-SMART	<a href="https://simdos.unud.ac.id/uploads/file_pendidikan_1_dir/0f39f315dec9f06c02be39ec35e555b7.pdf">https://simdos.unud.ac.id/uploads/file_pendidikan_1_dir/0f39f315dec9f06c02be39ec35e555b7.pdf</a> Was done in Indonesia
<b>A-2</b> Surveillance system linkages assessment	<b>BL:</b> The current surveillance system for priority zoonoses has been assessed across sectors	SET	Was done in Indonesia in 2019 <a href="https://www.fao.org/ag/againfo/programmes/en/empres/tools_SET.html">https://www.fao.org/ag/againfo/programmes/en/empres/tools_SET.html</a>
<b>A-3</b> Legal framework assessment	<b>BL:</b> The legal framework (rules, policies, guidelines, and laws, as well as international standards) that govern the code of ethics and privacy for surveillance and data exchange have been assessed.	Policy Analysis	<a href="https://www.onehealthapp.org/">https://www.onehealthapp.org/</a>
<b>A-4</b> Framework and strategic plan assessments	<b>ADV:</b> Framework and strategic plans related to the integrated surveillance system have been assessed for potential consolidation and linkages at all levels of government	Development of One Health Strategic Plan	<a href="https://www.onehealthapp.org/">https://www.onehealthapp.org/</a>

ACTIVITIES	TARGET CAPACITY-LEVEL	PROPOSED RESOURCES (PROPOSE DURING WORKSHOP)	REMARKS
<b>A-5</b> Surveillance plan assessment	<b>BL:</b> Existing surveillance plans, including case definitions, protocols, and standard operating procedures, as well as other pertinent documents on the integrated surveillance system, have been assessed for potential consolidation and links to the national level	SET	Was done in Indonesia in 2019 <a href="https://www.fao.org/ag/againfo/programmes/en/empres/tools_SET.html">https://www.fao.org/ag/againfo/programmes/en/empres/tools_SET.html</a>
<b>A-6</b> Other operational plans assessment	<b>BL:</b> Existing operational plans relevant to integrated surveillance have been assessed for potential national consolidation and linkages	Workshop on IHR-PVS National Liaisons	Was done in Indonesia in 2017
<b>A-7</b> Infrastructure mapping	<b>BL:</b> Basic infrastructure activity mapping (as specified in TZG CH 4.1) has been used to describe structure and its relationships within and between such sectors	OH-SMART	<a href="https://simdos.unud.ac.id/uploads/file_pendidikan_1_dir/0f39f315dec9f06c02be39ec35e555b7.pdf">https://simdos.unud.ac.id/uploads/file_pendidikan_1_dir/0f39f315dec9f06c02be39ec35e555b7.pdf</a> Was done in Indonesia
<b>A-8</b> Economic needs assessment	<b>BL:</b> An economic needs assessment has been conducted in order to establish the national financial requirements for an integrated surveillance system	SurvCost, EcoSur, Cost Determination Tool, IHR Georgetown University	Georgetown University: financing related to JEE. Ecosur: Provide cost benefit analysis Survcost:
<b>A-9</b> Laboratory capacity assessment	<b>ADV:</b> A laboratory assessment has been performed in order to identify lab networks that meet the requirements for conducting testing to support integrated surveillance activities	NAPHS	<a href="https://extranet.who.int/sph/indonesia-national-action-plan-health-security-2020-2024">https://extranet.who.int/sph/indonesia-national-action-plan-health-security-2020-2024</a> available
<b>A-10</b> Laboratory shipment and interpretation assessment	<b>BL:</b> Supply, shipment chain and interpretation of lab results has been assessed to be harmonized between participating sectors at the national level	EcoSur	<a href="https://survtools.org/wiki/surveillance-evaluation/doku.php?id=quality_of_the_collaboration">https://survtools.org/wiki/surveillance-evaluation/doku.php?id=quality_of_the_collaboration</a>
<b>A-11</b> Workforce assessment	<b>BL:</b> Workforce assessment has been done in order to identify requirements, competencies, needs and present gaps at the national level	OH-SMART	<a href="https://www.onehealthapp.org/">https://www.onehealthapp.org/</a>
<b>P-1</b> Political support	<b>INT:</b> A political commitment to an integrated surveillance system has been built, with support from all levels of government	One Health Policy Advocacy Tools	<a href="https://www.researchgate.net/publication/242456068_Analyzing_Policy_Fields_Helping_Students_Understand_Complex_State_and_Local_Contexts">https://www.researchgate.net/publication/242456068_Analyzing_Policy_Fields_Helping_Students_Understand_Complex_State_and_Local_Contexts</a>

ACTIVITIES	TARGET CAPACITY-LEVEL	PROPOSED RESOURCES (PROPOSE DURING WORKSHOP)	REMARKS
<b>P-2</b> General data element	<b>BL:</b> Equivalent data elements were selected and agreed upon at each participating sector in order to achieve similar analytical goals of the national integrated surveillance system	IHR-PVS National Liaisons Workshop	Available in English, Russian, and French. Facilitated by WHO and OIE. Contact person for this evaluation is delarocques@who.int (Stephane de la Rocque de Severac) and Dr. Fancois Caya (f.caya@oie.int)*
<b>P-3</b> Integrated surveillance framework and strategic plan	<b>BL:</b> A cross-sectoral review of the national framework and strategic plan related to the integrated surveillance system has been conducted for planning purposes	OH-SMART, IHR-PVS National Liaisons Workshop	
<b>P-4</b> National operation plan	<b>BL:</b> A cross-sectoral evaluation of the national operational plan and other necessary documents (including the surveillance plan, case definition, protocol, and standard operating procedure) related to the integrated surveillance system has been developed for planning purpose	NAPHS	
<b>P-5</b> Financial planning	<b>BL:</b> A budgeting plan and a method for allocating funds for integrated surveillance has been developed at the national level	Cost Determination Tool, International Health Regulation, Georgetown University, WHO Resource Mapping Tool	
<b>P-6</b> Workforce planning	<b>BL:</b> An education and training plan for the integrated surveillance system has been developed based on workforce assessments at the national level	IDSR-SurvCost	<a href="https://www.onehealthapp.org/">https://www.onehealthapp.org/</a>
<b>P-7</b> Legal framework planning	<b>BL:</b> Required legal frameworks (rules, policies, guidelines, and regulations, as well as international standards) have been standardized across all sectors based on national assessment	Analysis of OIE PVS Gaps	

ACTIVITIES	TARGET CAPACITY-LEVEL	PROPOSED RESOURCES (PROPOSE DURING WORKSHOP)	REMARKS
<b>P-8</b> Coordinated communication plan	<b>BL:</b> Terminologies and communication messages are standardized across all participating sectors in the national integrated surveillance system	OHS	Detail explanation Tripartite Guide to Addressing Zoonotic Diseases in Countries' (specifically Chapter 5.2), Welcome to the One Health Surveillance Codex Document: The Knowledge Integration Platform!— One Health Surveillance Codex Document: The Knowledge Integration Platform 1.0 documentation (oh-surveillance-codex.readthedocs.io)
<b>I-1</b> Financial resources mobilization	<b>BL:</b> Funding for integrated surveillance has been acquired at the national level	Sustainable Financing Strategy for One Health Tools	<a href="https://www.onehealthapp.org/">https://www.onehealthapp.org/</a>
<b>I-2</b> Human resources and stakeholders mobilization	<b>INT:</b> A focal point or technical working group meets on a regular basis to discuss priority issues as they arise	Guideline Tools	<a href="https://www.onehealthapp.org/">https://www.onehealthapp.org/</a>
<b>I-3</b> Data exchange & information sharing	<b>BL:</b> A mechanism for data exchange across sectors at the national level has been developed	DHIS2	<a href="https://dhis2.org/in-action#map">https://dhis2.org/in-action#map</a> has been used in Indonesia
<b>I-4</b> Data storage	<b>INT:</b> A structure and location for storing and managing data from various sectors is provided. at all levels of government	DHIS2	
<b>I-5</b> Data privacy and security	<b>BL:</b> Privacy and security measures to protect integrated surveillance data at the national level are provided	DHIS2	
<b>I-6</b> Implementation of integrated surveillance system	<b>BL:</b> Integrated surveillance system is piloted in target areas	SIZE, Sentinel surveillance leptospirosis with One Health approach, ICBM (Rabies)	SIZE –has been implemented in 4 districts/cities
<b>I-7</b> Data sharing	<b>INT:</b> Data is routinely and timely distributed in both formal and informal forms across all levels of government	DHIS2	

ACTIVITIES	TARGET CAPACITY-LEVEL	PROPOSED RESOURCES (PROPOSE DURING WORKSHOP)	REMARKS
<b>I-8</b> Communication & data usage	<b>INT:</b> Routine information sharing with key stakeholders is available	DHIS2	
<b>I-10</b> Coordinated data visualization and analysis	<b>BL:</b> Integrated surveillance data is utilized to generate outputs (such as figures, graphs, reports, or bulletins) that are shared at the national level	DHIS2	
<b>ME-1</b> Simulation activities	<b>BL:</b> Simulation activities are being carried out to assess the efficiency and functioning of the integrated surveillance system at the national level	Simulation Aid Tools, OH-SMART	<a href="https://www.onehealthapp.org/">https://www.onehealthapp.org/</a>
<b>ME-2</b> Monitoring & evaluation plan	<b>BL:</b> A monitoring and evaluation strategy that meets the goals of the integrated surveillance system is available	Surf	<a href="https://www.mpi.govt.nz/dmsdocument/18091/direct">https://www.mpi.govt.nz/dmsdocument/18091/direct</a>
<b>ME-3</b> Data quality standard	<b>INT:</b> Data quality has been tested and defined in order to fulfill the goals of the integrated surveillance system	DQR	Data quality standard for AIDS, Tuberculosis and Malaria (The Global Fund), Gavi, the Vaccine Alliance; and the USAID-funde <a href="https://www.measureevaluation.org/our-work/data-quality/data-quality-review.html">https://www.measureevaluation.org/our-work/data-quality/data-quality-review.html</a>

## ANNEX 6. SIS DEVELOPMENT IN INDONESIA

NO.	ACTIVITIES	TOOLS	ACTIVITIES	LEAD & ROLE/ RESPONSIBILITIES OF EACH PARTNER	REQUIREMENT INDICATOR
<b>Short term</b>					
1	Identification of the First Stakeholder	Policy Analysis	1. Stakeholders identification workshop at the national level	1. Coordinating Ministry for Human Development and Cultural Affairs (Lead) 2. MoA 3. MoH 4. MoEF 5. MoHA	Workshops
2	Setting Goals	OHSRRT	1. Coordination meeting for dissemination of SIS OT results to relevant ministries/agencies 2. Please contact CDC ERRB, CDC One Health Office, or Johns Hopkins Applied Physics Laboratory (Karen Meidenbauer, DVM, MPH Karen.meidenbauer@jhuapl.edu) 3. Facilitator training 4. Please use OHSRRT during OHZDP Workshop or conduct separate OHSRRT workshop	MoH (Lead)	1. Workshop 2. Document on national integrated surveillance goals
3	Setting Priorities	OHDZP	1. Refresher facilitator 2. OHZDP Workshop	MoA (Lead)	
4	Stakeholders Mapping	OHSRRT, OH-SMART	1. Coordination meeting for dissemination of SIS OT results to relevant ministries/agencies. 2. Please contact CDC ERRB, CDC One Health Office, or Johns Hopkins Applied Physics Laboratory (Karen Meidenbauer, DVM, MPH Karen.meidenbauer@jhuapl.edu) 3. Facilitator training 4. Please use OHSRRT during OHZDP Workshop or conduct separate OHSRRT workshop	MoH (Lead)	

NO.	ACTIVITIES	TOOLS	ACTIVITIES	LEAD & ROLE/ RESPONSIBILITIES OF EACH PARTNER	REQUIREMENT INDICATOR
5	Infrastructure Mapping	OH SMART	1. Review of previous OH-SMART result 2. Facilitator training 3. OH-SMART Workshop	1. Coordinating Ministry for Human Development and Cultural Affairs (Lead) 2. MoA 3. MoH 4. MoEF 5. MoHA	Review results of follow-up on from previous workshop
<b>Mid-term</b>					
1	Coordinated Surveillance Framework and Strategic Plan	OH SMART	1. Customizing OH-SMART content 2. Facilitator training 3. Combining with IHR-PVS national liaisons workshop	1. MoH (Lead) 2. MoA	Document on results of national framework and plan
2	National Operation Plan	NAHPS	1. Collecting NAPHS implementation data from multi-sector ministries/agencies 2. Workshop on monitoring of NAPHS implementation relevant to zoonoses and surveillance (combine with lab - row 18)	1. MoH (Lead). 2. Coordinating Ministry for Human Development and Cultural Affairs 3. Cabinet Secretariat	Document on results of zoonosis NAPHS implementation
3	Legal framework assessment	Policy Analysis	1. Literature review on existing policies on cross-sectoral integrated surveillance and data sharing 2. Workshop on review of existing and required regulations for cross-sectoral integrated surveillance and data sharing	1. Coordinating Ministry for Human Development and Cultural Affairs 2. Cabinet Secretariat 3. MoH 4. MoA 5. MoEF	List of existing regulations (Presidential instructions etc.)
4	Laboratory capacity assessment	NAHPS	1. Review of lab assessment conducted in each sector. 2. Workshop on monitoring of NAPHS implementation (combine with activity under row 24) to identify laboratory networks	1. MoH (Lead) 2. MoA	List of cross-sectoral laboratory network
5	Infrastructure Mapping	OH- SMART	1. Review of previous OH-SMART results 2. Facilitator training 3. OH-SMART Workshop"	1. Coordinating Ministry for Human Development and Cultural Affairs (Lead) 2. MoA 3. MoH 4. MoEF 5. MoHA"	Results of a review of follow-up from a previous workshop

NO.	ACTIVITIES	TOOLS	ACTIVITIES	LEAD & ROLE/ RESPONSIBILITIES OF EACH PARTNER	REQUIREMENT INDICATOR
6	Political Support	OH Policy Advocacy Aid Tools	<ol style="list-style-type: none"> <li>To prepare a cross-sectoral policy brief for advocacy to ministries/agencies at the national, sub-national levels, and RPJMN (mid-term national development plan)</li> <li>National workshop of the Ministry/ Agency, as well as stakeholder workshops at the province and district/city levels</li> </ol>	<ol style="list-style-type: none"> <li>MoHA (Lead).</li> <li>Kemenko PMK</li> <li>Cabinet Secretariat</li> <li>CMEA</li> <li>Ministry of Defence"</li> </ol>	A cross-sectoral policy brief for ministry/agency is available
7	Financial Planning	Aid tool for determination of National Health Regulation Cost (IHR)	<ol style="list-style-type: none"> <li>Workshop using WHO Resource Mapping Tool</li> <li>Workshop to agree on a budgeting plan and mechanism for integrated surveillance at the national level (BAPPENAS and technical ministries/agencies)</li> </ol>	<ol style="list-style-type: none"> <li>BAPPENAS</li> <li>Coordinating Ministry for Human Development and Cultural Affairs</li> <li>CMEA</li> <li>MoH</li> <li>MoA</li> <li>MoEF</li> <li>MoHA"</li> </ol>	Budget allocation for surveillance activities is available
8	Workforce planning	IDSR-SurvCost	<ol style="list-style-type: none"> <li>WHO Africa Contact</li> <li>Adaptation of IDSR-SurvCost for cross-sectoral and Indonesian needs</li> <li>Workshop on workforce planning using IDSR-SurvCost</li> </ol>	<ol style="list-style-type: none"> <li>MoH (Lead)</li> <li>MoA</li> <li>MoEF"</li> </ol>	Workforce development plan for cross-sectoral integrated surveillance system, including education and training
9	Data exchange and information sharing	DHIS2	<ol style="list-style-type: none"> <li>Workshop on cross-sectoral data and information exchanges, including introduction to DHIS2</li> </ol>	<ol style="list-style-type: none"> <li>Coordinating Ministry for Human Development and Cultural Affairs (Lead)</li> <li>MoH</li> <li>MoA</li> <li>MoEF"</li> </ol>	The legality of data and information exchange mechanisms
10	Implementation of integrated surveillance system	SIZE	<ol style="list-style-type: none"> <li>Workshop to agree on integrated surveillance for certain diseases</li> <li>Development of SIZE implementation</li> <li>Sentinel leptospirosis integrated surveillance pilot</li> </ol>	<ol style="list-style-type: none"> <li>Coordinating Ministry for Human Development and Cultural Affairs (Lead)</li> <li>MoH</li> <li>MoA</li> <li>MoEF"</li> </ol>	Integrated surveillance activities have been implemented in the location



The FAO Emergency Center for Transboundary Animal Diseases (ECTAD) works in collaboration with the Directorate General of Livestock and Animal Health Services, Ministry of Agriculture to implement a zoonoses and emerging infectious diseases (EID) prevention, detection and response program in Indonesia. This program is funded by the United States Agency for International Development (USAID).

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