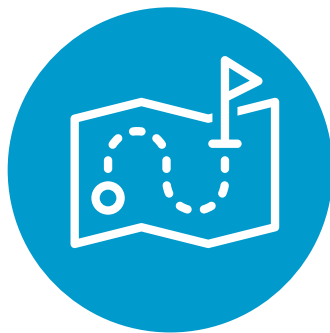


Surveillance and Information Sharing Operational Tool

An operational tool of the Tripartite Zoonoses Guide



Food and Agriculture
Organization of the
United Nations



World Health
Organization



World Organisation
for Animal Health
Founded as OIE

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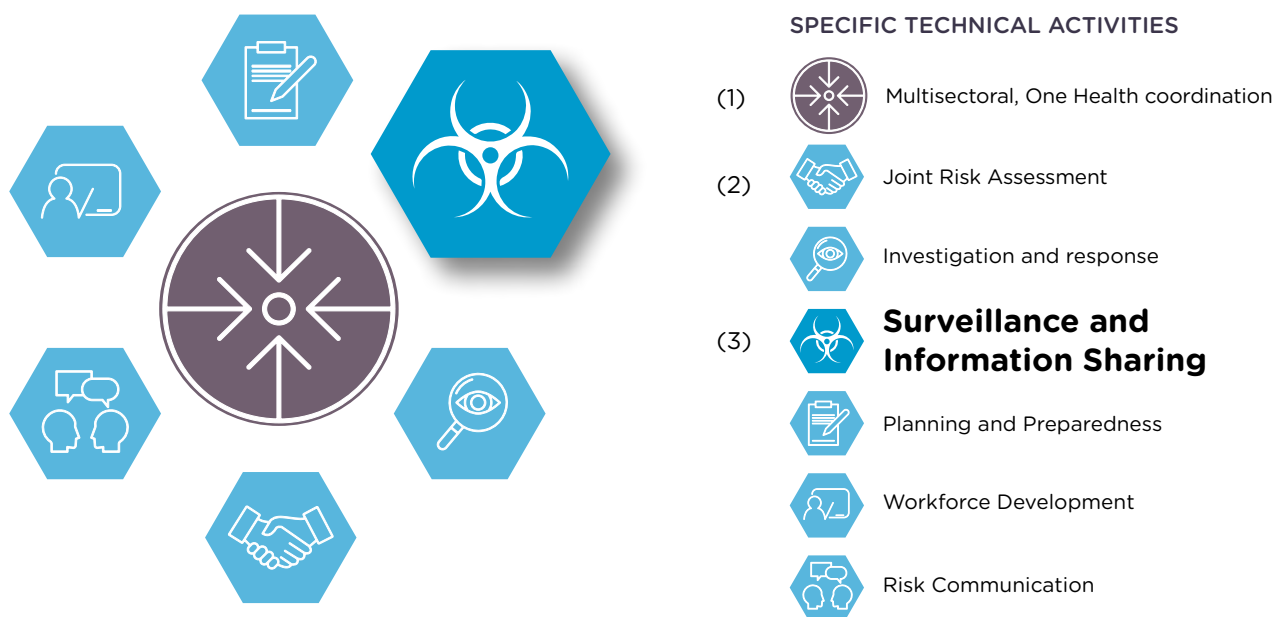
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Context of SIS OT

In 2019, the Tripartite organizations – the Food and Agriculture Organization of the United Nations (FAO), the World Health Organization (WHO) and the World Organisation for Animal Health (WOAH) – developed the Tripartite Zoonoses Guide (TZG)¹, which was the summation of a global effort of more than 100 experts worldwide to provide guidance and explain best practices for addressing zoonotic diseases in countries. This includes supporting countries in understanding national contexts and developing capacities for strategic technical areas.

Three Operational Tools (OTs) have been developed to support national staff in these efforts: (1) the Multisectoral Coordination Mechanism OT (MCM OT), (2) the Joint Risk Assessment OT (JRA OT), and (3) the Surveillance and Information Sharing OT (SIS OT). These tools can be used independently or in coordinated efforts to support national capacity for preparedness and response, ultimately linking to existing international policies and frameworks, and supporting efforts for global health security. Specifically, the SIS OT provides additional support in the area of coordinated surveillance and information sharing to countries implementing the TZG.

Figure 1. SIS OT in the context of the tripartite zoonoses guide



¹ Tripartite, FAO-OIE-WHO. (2019). Taking a Multisectoral, One Health Approach: A Tripartite Guide to Addressing Zoonotic Diseases in Countries.

Module 0

Introduction to the SIS OT

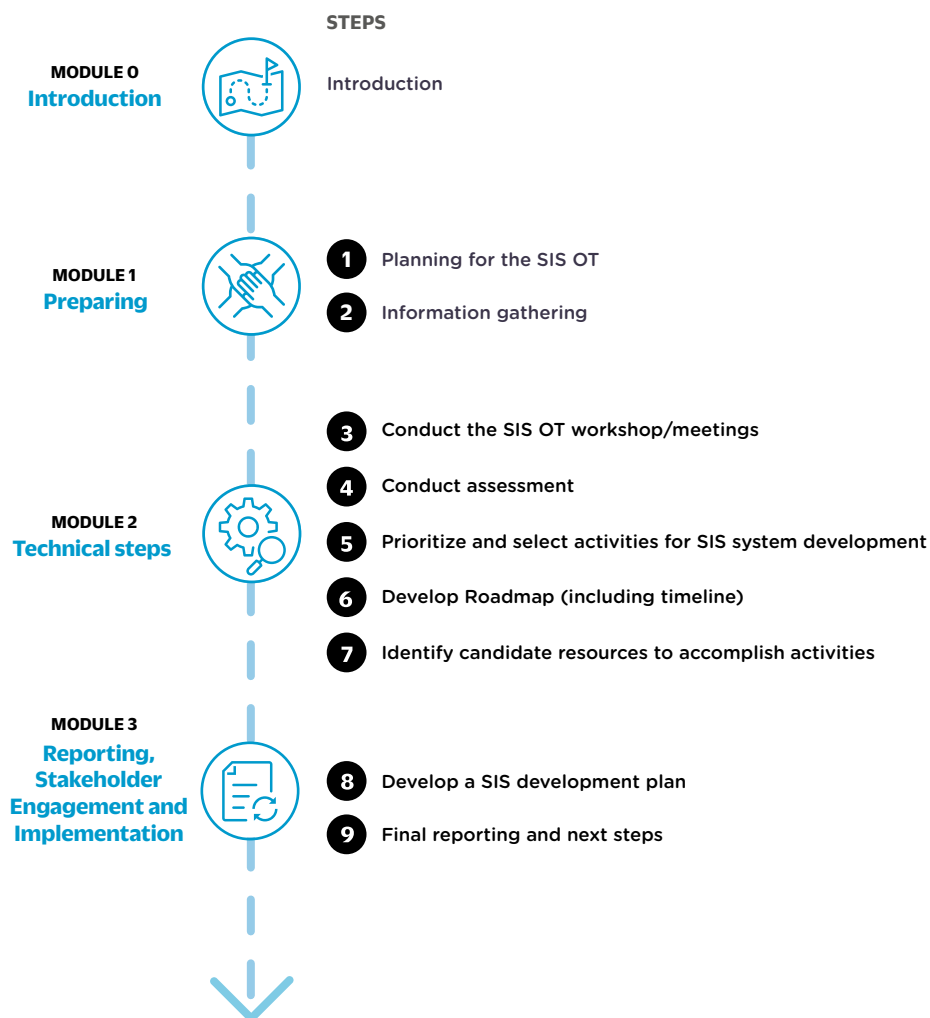
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Overview of the SIS OT

The nine steps of the SIS OT are divided into four modules (Fig. 2). This allows different participants to be included in the various modules.

Figure 2: SIS OT modules and steps



Key point

All users should complete Module 0, which introduces the SIS OT and One Health coordinated surveillance and information sharing concept.

Introduction

The SIS OT supports national authorities in their efforts to establish or strengthen a One Health multi-sectoral coordinated surveillance and information sharing (SIS) system for zoonotic diseases. Such a system is essential for early detection of disease events and timely, routine data sharing among all relevant sectors to support coordinated response, prevention, and mitigation of these events.

The SIS OT was developed as part of a joint Tripartite (FAO, WHO and WOA) effort to establish practical tools to help countries implement the guidance in the Tripartite Zoonoses Guide, in particular, Chapter 5.2 'Surveillance for zoonotic diseases and information sharing'. These two resources - the SIS OT and the TZG - are used together.

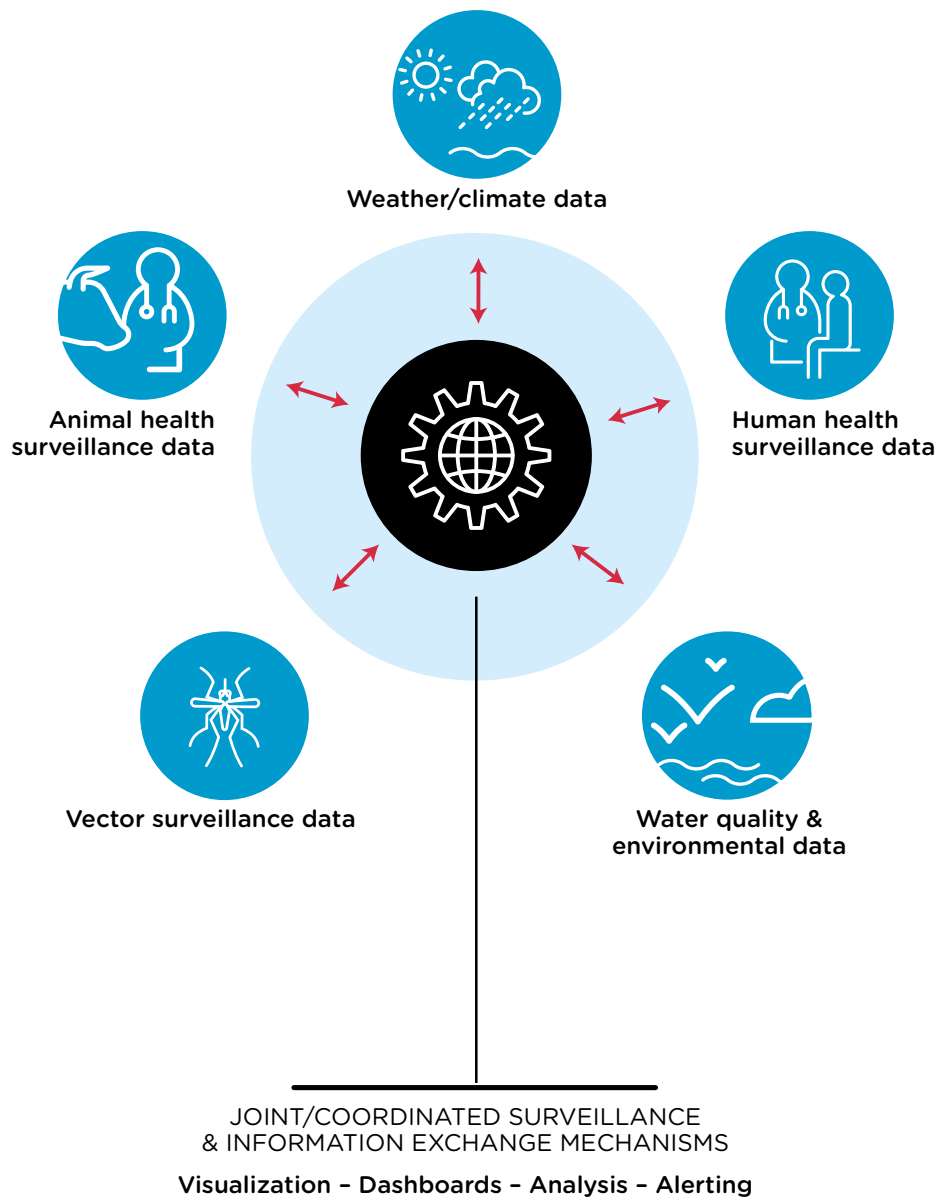
A One Health (OH) coordinated multisectoral SIS system is essential to identify zoonotic disease events within a country rapidly, through using information from the animal health, human health, environmental and other relevant sectors. A national coordinated SIS system for zoonotic diseases brings together the different surveillance elements of all relevant sectors at the human-animal-environment interface and enables them to work together and coordinate prevention and control efforts effectively.

There are a number of approaches to build coordinated SIS systems for sharing, visualization and analysis of data tailored to meet the specific surveillance and data sharing needs of a country. **Fig. 3** shows an example of a central shared or joint platform linking the different sectors. Countries can use such a coordinated surveillance system to improve understanding of zoonotic disease burden, to monitor disease trends, to serve as an early warning system, and to support outbreak investigation and response, both within a country as well as with neighboring countries or regional networks. Coordinated zoonotic disease surveillance and intersectoral data sharing strengthens national health system capacities and increases resilience against endemic and emerging health threats, as obligated under the International Health Regulations (2005)².

A coordinated SIS system may be an integral component of a functional national OH mechanism (sometimes referred to as a One Health task force or platform) for zoonotic diseases. These collaborative platforms allow ministries (or agencies) to develop or strengthen collaboration and coordination across the sectors responsible for zoonotic diseases and other health concerns. The objective of an OH mechanism is to coordinate the multisectoral OH approaches needed to address zoonotic diseases and other shared health concerns at the human-animal-environment interface, including both leadership and technical functions, and to strengthen and develop collaboration, communication, and coordination across the sectors and achieve better health outcomes (TZG Chapter 3). Implementation of the SIS OT can be complementary to use of the Multisectoral Coordination Mechanisms Operational Tool (MCM OT) to establish or strengthen an existing OH mechanism and improve coordination for the management of zoonotic diseases and other threats at the human-animal-environment interface.

2 International Health Regulations (2005) Third Edition <https://www.who.int/publications/i/item/9789241580496>

Figure 3: hypothetical coordinated surveillance and information sharing system



Overview of the SIS OT

The SIS OT is an operational tool which guides a stepwise process that enables users to establish or strengthen the capacity for coordinated, multisectoral surveillance and information sharing for zoonotic diseases within their country.

The SIS OT includes a stepwise assessment for users to evaluate the existing capacity within their country, and to identify activities and ultimately create a roadmap and a workplan to establish or strengthen their SIS system.

In addition, the SIS OT leverages and links users to a curated toolbox with existing resources that can help improve surveillance capacity which have been developed by the Tripartite (FAO, WOA, WHO), partners, and other institutions. These resources include templates and applications for data collection, evaluation, and reporting. They also include workshop guides and other tools, guidance documents and instructive materials to assist completing the steps to establish a coordinated zoonotic disease surveillance system. Many of these different resources were already available. However, there was no previous systematic approach to bring these resources into a single toolbox, nor a standard means to identify the most useful resources to create, implement, and/or maintain coordinated surveillance capacity and information sharing platforms. The SIS OT addresses this gap.

The SIS OT is meant for use by countries at all levels of coordinated surveillance capacity, from guiding development of baseline national capacity for those countries not having that capacity at all, to supporting further improvement for those which have an advanced system. It is designed to bridge existing surveillance systems and not to create new zoonotic diseases surveillance systems or structures.

Objectives of the SIS OT

1. Provides a stepwise methodology to guide assessment of the national structures or mechanisms already in place to support coordinated zoonotic disease surveillance and cross-sectoral information sharing. It is based on the framework of activities necessary to develop a national coordinated SIS system for zoonotic diseases.
2. Generates an SIS development plan which includes a list of activities and a timeline to advance development of the national coordinated surveillance system for zoonotic diseases.
3. Provides an inventory of suggested resources to support each of the activities in the list, based on nationally established priorities and unique situational needs.

How is the SIS OT organized?

- The **SIS OT Guide** (this document) describes the whole SIS OT process, step by step, including the annexes to facilitate understanding and use of the tool:
 - Annex 1: Template Terms of Reference for the planning team and working group
 - Annex 2: SIS OT Workshop templates (participant lists, agenda)
 - Annex 3: SIS OT Information gathering checklist
 - Annex 4: SIS OT Evaluation Framework
 - Annex 5: Workshop report template
- The **SIS OT Workbook**³ is an Excel-based tool which guides the stepwise assessment of the existing level of capacity development of a national coordinated SIS system for zoonotic diseases, the prioritization and identification of activities, and development of a roadmap and a plan. It includes a toolbox listing all the resources included in the SIS OT and provides a short description and links for each resource.
- **Supplemental materials** (available in English) are supporting or optional materials available to accompany the use of the SIS OT:
 - Stakeholder mapping
 - Resource evaluation matrix
 - SIS OT Resource inventory

Introduction to the SIS OT Workbook

The core instrument of the SIS OT is the SIS OT Workbook. This is an Excel-based tool, which provides a stepwise approach to guide user assessment of the degree of national SIS capacity, development of a SIS development plan and selection of the tools and resources to help implementation of planned activities. The SIS OT Workbook is based on two main components: the SIS OT Evaluation Framework and the Resource Toolbox.

The SIS OT Evaluation Framework

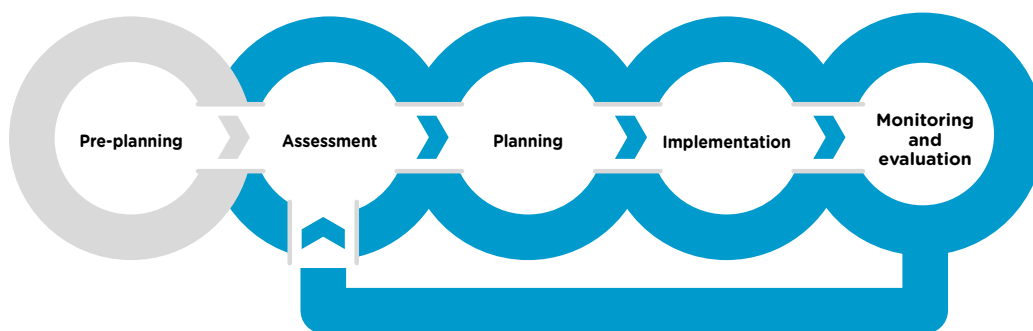
The SIS OT Evaluation Framework (Annex 4) forms the basis for the assessment section of the SIS OT Workbook. The framework is a series of 32 unique activities grouped in five main stages of surveillance system implementation (**Fig. 4**):

1. **Pre-planning** includes preparatory activities to establish the coordinated SIS system, such as identifying preliminary stakeholders, prioritization of zoonotic diseases and goal setting.
2. **Assessment** includes activities to determine the needs (gaps) between the current and desired situation as it relates to the coordinated SIS system and its infrastructure, or to the health surveillance system and infrastructure of the individual participating sectors.

³ https://www.fao.org/fileadmin/user_upload/faoweb/Themes__pages/Animal_health/SISOT_Workbook.xlsm

3. **Planning** includes activities in preparation for developing and strengthening coordinated surveillance capacity. This can include establishing the necessary policy and legal frameworks, developing strategy and surveillance plans, developing budgets and identifying necessary financing, and planning for coordinated communications.
4. **Implementation** includes activities to carry out the plans and develop the coordinated SIS system.
5. **Monitoring and Evaluation** includes activities to measure and assess performance of coordinated surveillance activities and the coordinated SIS system. Monitoring and evaluation generate evidence as to whether activities are meeting their objectives and are useful for tracking progress and presenting data for the purpose of improvement.

Figure 4: stages of One Health coordinated surveillance system implementation process

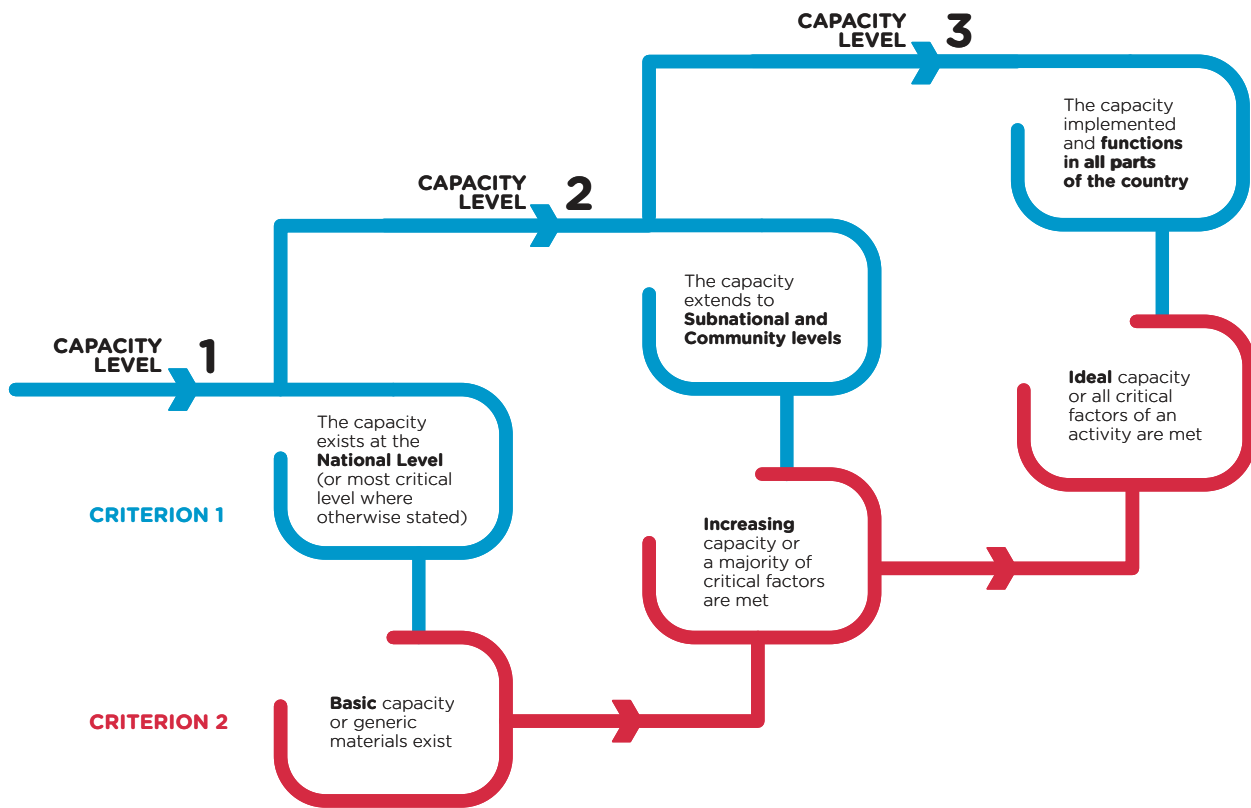


Each stage includes a number of activities, and for every activity there is a progression of capacity level (Level 1, 2 and 3) based on two criteria:

- **Criterion 1:** the degree to which the capacity exists in a country, ranging from ‘exists only at the national level’ (Level 1) to ‘currently implemented in all parts of the country including the local level’ (Level 3).
- **Criterion 2:** the degree of advancement of capacity, ranging from basic or generic level (Level 1) to all critical factors or ideal capacity level exists (Level 3).

The criteria are specific to each activity capacity level of the country (**Fig. 5**).

Figure 5: capacity levels and associated criteria



Note: Some activities have only one or two capacity levels, for example, only Level 1 or Level 1 and Level 3.

The Resource Toolbox

The Resource Toolbox is a repository of resources contained within the SIS OT Workbook. The Resource Toolbox includes templates and applications for data collection, evaluation, and reporting, template data sharing agreements or standard operating procedures (SOPs); guidance documents; and other instructive materials. In some cases, the developer/owner submitted a resource for inclusion in response to a survey conducted by the SIS OT development team. The team identified other candidates and requested agreement for inclusion from their respective owners or developers.

The SIS OT Resource Inventory (see supplemental materials: SIS OT Resource Inventory), in addition to the tools and resources included in the SIS OT Workbook, contains the list of country-based example resources, as well as surveillance-related manuals, codes and regulations from global, regional and national authorities.

The resources evaluation methodology used an evaluation matrix developed by the SIS OT development team to systematically assess the characteristics of each resource candidate for inclusion in the SIS OT (see supplemental materials: Resource evaluation matrix). A set of nine attributes were evaluated using a series of standardized questions:

1. **Accessibility:** logistics for accessing and using the resource; evaluates openness, cost, and user support.
2. **Language:** availability of the tool in different languages; translatability of the resource; ability of the resource to translate text.
3. **Data needs and management:** system and device activities required for the resource to operate; data storage and security.
4. **Data analysis and interpretation:** how the resource processes and quality checks data; output and reporting capacity.
5. **Ease of use:** level of complexity and difficulty to navigate and understand the resource; technical or operational skill sets required for resource use.
6. **Flexibility:** adaptability of the resource for use in different contexts or scenarios.
7. **Acceptability:** metrics of the resource's acceptance for use based on publications, reports; number of pilots or implementations.
8. **One Health:** ability of the resource to facilitate communication, collaboration and coordination across various One Health sectors (human health, animal health, environmental health and others).
9. **Tool impact:** evidence of where the resource resulted in improvement in One Health or surveillance capacity based on monitoring and evaluation indicators or past examples.

The matrix generates a score for each attribute as well as an overall score for the resource. Each resource was independently evaluated using the matrix by two reviewers from the SIS OT development team and an additional group of subject matter experts. For each resource, reviewers' scores were combined to calculate a final score for each attribute and an equally weighted overall score. These resource evaluation scores are included in the Resource Toolbox to help users in the resource selection process.

The Resource Toolbox in the SIS OT Workbook assigns specific resources to support achieving all levels of capacity for each activity.

Note: Based on applicability, the same resource may be assigned to different stages and activity capacity levels. Some resources can support accomplishing all capacity levels for a given activity.

Two categories are used to assign the resources to each respective activity and capacity level:

- **Resources best fit for purpose:** resources whose primary purpose or function directly assists the user to complete the defined activity
- **Other relevant resources:** resources that partially or indirectly assist the user to complete the defined activity.

To help user understanding and selection, the Resource Toolbox provides the following additional information for each resource:

- **Resource type:**
 - assessment tool
 - guided/facilitated tool or process
 - guidance document
 - template
 - hardware or software
- **Resource generality:**
 - One Health, generalized: a general resource based on One Health principles
 - One Health, disease/threat specific: a disease or threat (for example, antimicrobial resistance, food safety) specific resource based on One Health principles
 - Sector specific, generalized: a general resource specific to one sector (for example, animal health, public health, environment)
 - Sector specific, single disease: a resource specifically developed to address a single disease within one specific sector
- **Resource evaluation scores**
 - **Attribute scores:** Based on the combined evaluation results, the SIS OT Workbook scores each resource on each of the nine attributes discussed above, using a 1 to 10 scale. A score of 10 is the highest possible value and indicates the most desirable outcome for that particular attribute. In contrast, a score of 1 is the lowest possible value and indicates that the tool has substantial limitations for the attribute.
 - **Overall score:** Attribute scores combine to calculate a resource score, equally weighted across the nine attributes to account for differences in number of questions per attribute.
 - **Adjusted overall score:** An adjusted resource score based on weighting assigned to the nine attributes by the users, reflecting the preferences and needs of the country. The adjusted score can differ considerably from the raw overall score in cases of strong preference for one attribute over others. The adjusted overall score is calculated based on the results from the Attribute survey, which is included in the SIS OT Workbook to help define the attributes that are preferred or most important in user's resource selection.

This resource scoring system is designed to demonstrate areas of strength and 'fit for purpose' when considering a resource rather than to directly compare one resource against another. It aims to assist users in choosing the most appropriate resource for their current country needs/situation by comparing strengths and limitations across resources within the same attributes that the user has identified as most important to the country.

Preparing for the SIS OT

- 12 **Step 1**
Planning for the SIS OT
- 16 **Step 2**
Information gathering





Read this first Important instructions prior to using the SIS OT

1. Users are strongly encouraged to read the entire SIS OT Guide prior to starting the steps.
2. Users are encouraged to read TZG Chapter 5.2 ('Surveillance for zoonotic diseases and information sharing').
3. The SIS OT is applicable to all countries and for all levels of national coordinated surveillance capacity.
4. Completion of the nine steps described in this tool may require several meetings or workshop sessions. The same group of experts from all relevant sectors should be present at all key meetings/workshops.
5. The success of this process is based upon joint discussion and shared decision-making among all relevant sectors.
6. Use of the SIS OT is adaptable to each country's context. Modify instructions to best support each process.

Step 1: **Planning** for the SIS OT

Facilitates planning for use of the SIS OT Steps 2 to 9

Goals for step 1

- Select the SIS planning team
- Identify all agencies/stakeholders relevant for a coordinated SIS system for zoonotic diseases
- Select the SIS working group
- Determine the objectives for the coordinated SIS system
- Plan for the SIS OT workshop/meetings

Step 1.1. **Select the SIS planning team**

Countries should use existing mechanisms and expertise to support composition of the SIS planning team (planning team). For example, if there is an existing OH mechanism or SIS coordination mechanism in the country, their representation in the planning team is necessary. The planning team should include professionals actively engaged in decision-making and implementation of animal health and human health surveillance for zoonotic

diseases, as well as relevant environmental health surveillance, such as those professionals responsible for vector surveillance and control. This will likely include animal and human health epidemiologists, laboratory specialists, and wildlife experts. If international experts are involved in the SIS OT implementation, they should also be included in the planning team.

Instructions

- Select members of the planning team, including representation of those involved in a national OH platform or any existing multisectoral surveillance coordination mechanism, to ensure representation from the human, animal and environmental health sectors.
- List the confirmed members for the planning team, along with their contact information.

Step 1.2. Identify all agencies/stakeholders relevant for a coordinated SIS system for zoonotic diseases

The planning team identifies all the relevant agencies, stakeholders and organizations at the national and subnational levels that are involved, or need to be involved, in a working group that uses the SIS OT, to establish or strengthen coordinated surveillance for zoonotic diseases in the country. All appropriate ministries, agencies, regulatory authorities, funding agencies, national and subnational bodies, and other governmental or nongovernmental stakeholders should be represented.

If the stakeholder mapping/analysis for coordinated surveillance was not previously done, it is recommended at this initial step. Supplemental materials provided for stakeholder mapping can be used to guide the process of the visualization and mapping of the network of organizations as they interact at different levels within the country to identify those that should be represented on the working group.

Instructions

- Conduct stakeholder mapping to identify stakeholders/agencies at multiple levels, to review their interlinkages and inform the composition of the working group.
- Select key stakeholders/agencies for the working group, considering involvement of overall governmental authorities and funding agencies, to ensure government commitment and political will.

Step 1.3. Select the SIS working group

The planning team requests the relevant agencies, stakeholders, and organizations at national and subnational levels, as identified by the stakeholder mapping process, to appoint representatives to the working group.

The working group works with the planning team to use the SIS OT, identify the activities and write the SIS development plan. Ideally, members of the working group

are also involved in implementation of the SIS development plan. Therefore, a balanced representation from all relevant stakeholders/agencies, with sufficient scope of expertise among the appointed representatives, should be ensured in the selection process of the working group.

Instructions

- Contact key stakeholders/agencies to appoint representatives to the working group.
- Select members of the working group and confirm their willingness and ability to fully participate.
- List the contact information of confirmed members for the working group.

Note: The template for the terms of reference for the planning team and working group is provided in Annex 1.

Step 1.4. Determine objectives for the coordinated SIS system

The objectives of the coordinated SIS system should be clearly defined at the time of starting the SIS OT process, as they might differ from one situation to another. The objectives can change with progression of the coordinated system development and should be reviewed every time the SIS OT process is repeated to monitor the progress and update of the SIS development plan.

The planning team and selected stakeholders from the working group should establish and agree on the target objectives of the coordinated surveillance system, including points such as:

1. Prioritized zoonotic diseases to be covered;
2. Sectors and ministries to be included in the coordinated surveillance and information sharing system;
3. The targeted degree of coordinated surveillance coverage across the country at national or subnational levels; and
4. Stakeholders to be directly involved in coordinated surveillance and information sharing.

This should be considered throughout the stage of information gathering and will inform the assessment and planning processes.

Instructions

- The planning team discusses the target objectives of the coordinated surveillance system through virtual or face-to-face discussions.
- The planning team and working group discuss and reach agreement on the objectives of the coordinated surveillance system at the workshop or in the meetings prior to the start of the assessment process.

Step 1.5. Plan the SIS OT workshop/meetings

The planning team is responsible for organization of the workshop/meetings. The focal points or leads for surveillance activities from the agencies/sectors currently involved in zoonotic disease surveillance who are not part of the planning team should still participate during the planning process, in addition to the workshop. Development partners and other stakeholders not included in the planning team or working group can be considered to participate in the workshop as observers.

On average, a 4-day workshop should accommodate the SIS OT process, as outlined in this guide. Alternatively, conduct the process through a series of in-person or online meetings/work sessions following the overall structure and approach outlined in these guidelines.

Participant contact lists and a sample agenda are available in Annex 2 (SIS OT workshop templates).

Instructions

- Determine dates acceptable for all sectors/agencies and agree on agenda and duration of the workshop.
- Identify workshop location and venue.
- Agree upon roles and responsibilities for the workshop, for each participating agency/sector.
- Agree upon budget and funding to conduct the workshop.
- Invite members of the planning team and working group to the workshop.
- Invite observers to the workshop (based upon country's decision)
- Share information gathering checklists and the SIS OT Guide with participants prior to the workshop for advance preparation.
- Request participants bring all information and data referenced in step 2 with them to the workshop.
- Translate the TZG, SIS OT and other materials into local languages, as needed.
- Prepare national workshop agenda (Annex 2).
- Identify and prepare equipment and materials for the venue. This should include a laptop that can run Excel (.xls) and PowerPoint (.ppt) files, a video projector, and a screen.

Note: If the workshop format is not feasible for logistic, financial, or other reasons, the working group could carry out the SIS OT process through online or in-person consultations and meetings. In this case, it is important to ensure that the same group of experts (planning team and working group members) is involved in all key meetings.

Step

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Step 2: Information gathering

Facilitates preparation for the use of the SIS OT steps 3 to 7

Goal for step 2

- Gather information and data necessary for understanding the current situation for the OH coordinated SIS system.

The planning team and working group complete this step before starting the SIS OT assessment process in module 2. Information related to the existing sector-specific and multisectoral surveillance mechanisms for zoonotic diseases at the national and subnational levels, including any supporting data sharing agreements, documentary resources, and other relevant information, is gathered by planning team and working group members. This includes the results of any previous internal or external evaluations that included an assessment of a relevant surveillance system, such as report of national evaluations or reports of previous World Organisation for Animal Health (WOAH) Performance of Veterinary Services (PVS) evaluations or Joint External Evaluation (JEE) missions.

Instructions

- Planning team and working group members complete one SIS OT information gathering checklist (Annex 3) for each organization/agency represented.
- Working group members submit completed checklists and relevant documentation to the planning team.
- Planning team is acquainted with the SIS OT Evaluation Framework (Annex 4) to prepare for the assessment questions.
- Planning team reviews the information for key issues and anticipated challenges.

Planning team will identify questions from the SIS OT Evaluation Framework that need to be clarified with the decision-makers prior to the workshop. The results from this information gathering step are shared with the working group in advance of the workshop and inform the activities of the working group in module 2.

Technical steps of the SIS OT

- 18 Step 3**
Conduct the SIS OT workshop/ meetings
- 19 Step 4**
Conduct Assessment
- 24 Step 5**
Prioritize and select activities for SIS system development
- 25 Step 6**
Develop roadmap
- 26 Step 7**
Identify candidate resources to accomplish activities



Step 3: **Conduct the SIS OT workshop/meetings**

Facilitates implementation of the SIS OT steps 4 to 9

The SIS OT workshop gathers the members of the planning team and working group involved in the previous planning steps. The planning team and working group carry out the key steps of the SIS OT process during the workshop, from the SIS OT assessment through planning of next steps based on the assessment results. When the workshop format is not feasible, the planning team and working group may conduct the SIS OT process through sequential online or in-person meetings.

Typically, a SIS OT workshop runs over 4 days. The first one to two days introduce the SIS OT principles with a presentation of the current situation of zoonotic disease and coordinated surveillance in the country, followed by the assessment process (step 4). The subsequent day reviews output from the assessment and introduction to the process for selecting tools and resources according to the results, prioritizing and identifying activities, and developing the roadmap and a draft national SIS development plan. The last day finalizes the national development plan, assigns responsibilities, establishes commitments, and reports the SIS OT results to relevant decision-makers. The workshop agenda should be flexible and adjusted according to the available timeframe to ensure that the SIS development plan is finalized. The template annotated workshop agenda is available in Annex 2.

Instructions

- Assign workshop facilitator(s).
- Designate a person(s) to record assessment results and decision points in the SIS OT Workbook (steps 4 to 8).
- Designate a notetaker(s) to record main discussion points for inclusion in the final workshop report (step 9).

Step 4: Conduct assessment

Utilizes the SIS OT Workbook to carry out assessment of the existing coordinated surveillance system capacity

Goal for step 4

- Perform the assessment using the SIS OT Workbook

The planning team and working group, in a plenary or group work sessions, conduct this process. The SIS OT information gathering checklists completed in module 1, supporting documentation, and participant expertise and experience with existing surveillance programs that address zoonotic diseases in their respective sectors guide the responses to the questions on current levels of capacity for the various activities.

Follow the steps described below to carry out the assessment process using the SIS OT Workbook.

Step 4.1. Open the SIS OT Workbook and read the instructions

When opening the SIS OT Workbook for the first time the facilitator should ensure that the tool is saved under a new name (i.e., 'Save as'). This ensures that a blank copy of the SIS OT Workbook is available for future reassessments and labels the current assessment with appropriate name and date information for easy file identification. For better functionality, it is recommended to save it in the 'Documents' section (for example, C:\Users\Username\Documents).

The SIS OT Workbook contains the following navigation menu:

- Instructions: outlines purpose and implementation of the tool;
- Map: quick access to the different assessment steps;
- Assessment results: shows results of assessment;
- Attribute survey: assigns user-weighted values to resource attributes to guide; identification of resources most likely to be appropriate and of interest for the user;
- Toolbox: links users to a curated toolbox with existing resources;
- Resources selection: records resources selected for use;
- Prioritization and Roadmap: records activities prioritization results, the implementation timeline and roadmap; and
- SIS Development plan: records workplan for activities implementation.

Start from the 'Instructions' page for a quick introduction to the assessment process.

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Step 4.2. Conduct the assessment

After reading the instructions, proceed to the Map page (**Fig. 6**) using the navigation menu on the left, or by clicking on the "Next: Map" button on the upper or lower right.

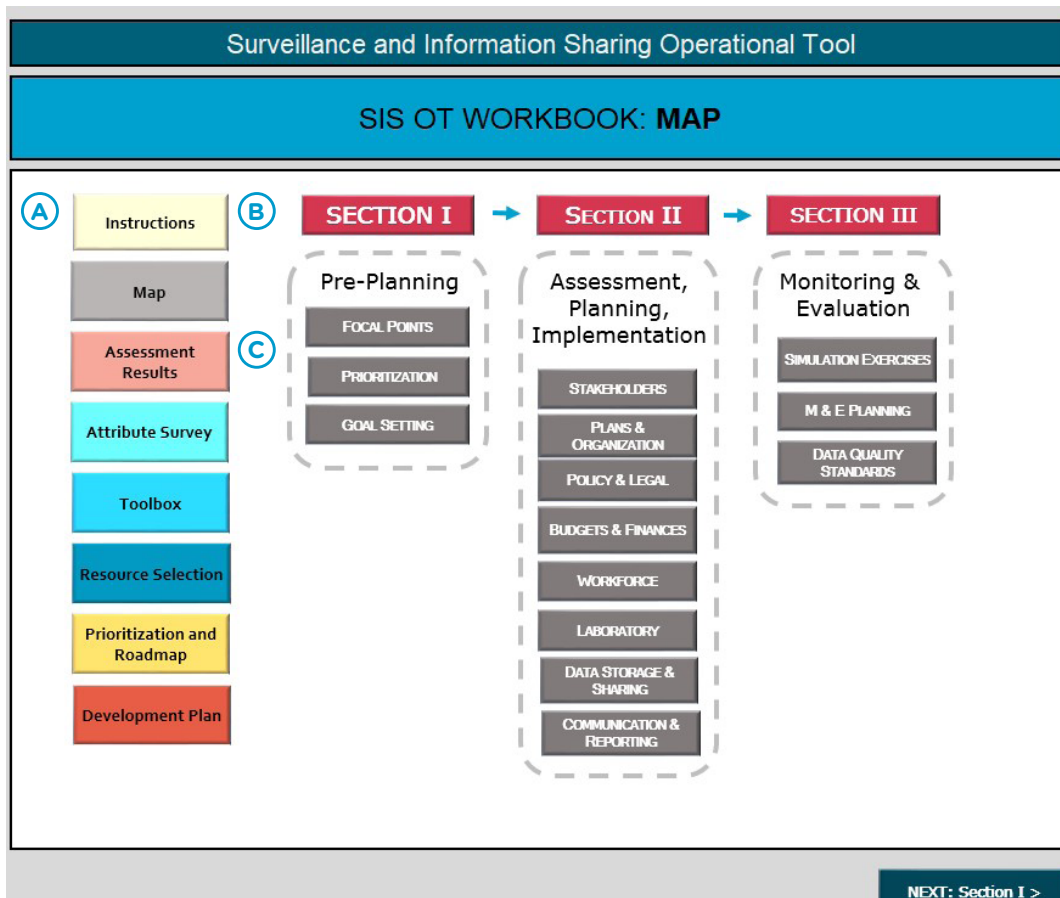
The Map provides:

- SIS OT navigation menu with buttons linking to all the steps in the SIS OT process in the workbook (denoted with **A** in **Fig.6**).
- Assessment navigation map grouped into three sections:
 - Section I: Pre-planning;
 - Section II: Assessment; Planning; and Implementation;
 - Section III: Monitoring and Evaluation.

The assessment map buttons link to overviews for the sections (denoted with **B** in **Fig. 6**) and for the categories of activities (denoted with **C** in **Fig. 6**) within each section:

- Section buttons link to the workbook page and provide an introduction to the section and stages in that section.
- Category buttons link to workbook pages covering the categories of the activities (for example, Focal points, Policy & legal, Data quality standards) and the capacity levels corresponding to each activity.

Figure 6: the SIS OT workbook map



- (A)** Navigation menu **(B)** Section buttons **(C)** Category buttons

Instructions

- Go to the Map page.
- Start the assessment.

Note: The assessment can be done in a linear manner, following the order of the categories within each section using the ‘Next’ buttons at the bottom of the pages, or in a user-preferred order directly accessing specific categories through the ‘Map’.

- Start the assessment with Section I: ‘Pre-planning’ stage by clicking on the button “Section I” or the ‘Next: Section I’ button on the lower right to go to the section overview (**Fig. 7**).

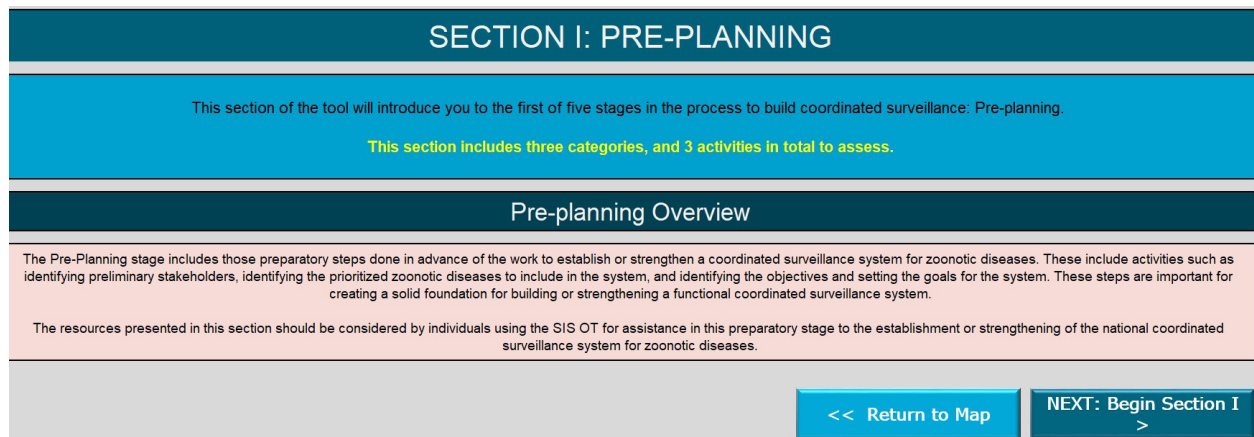
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Figure 7: the section I: pre-planning overview page



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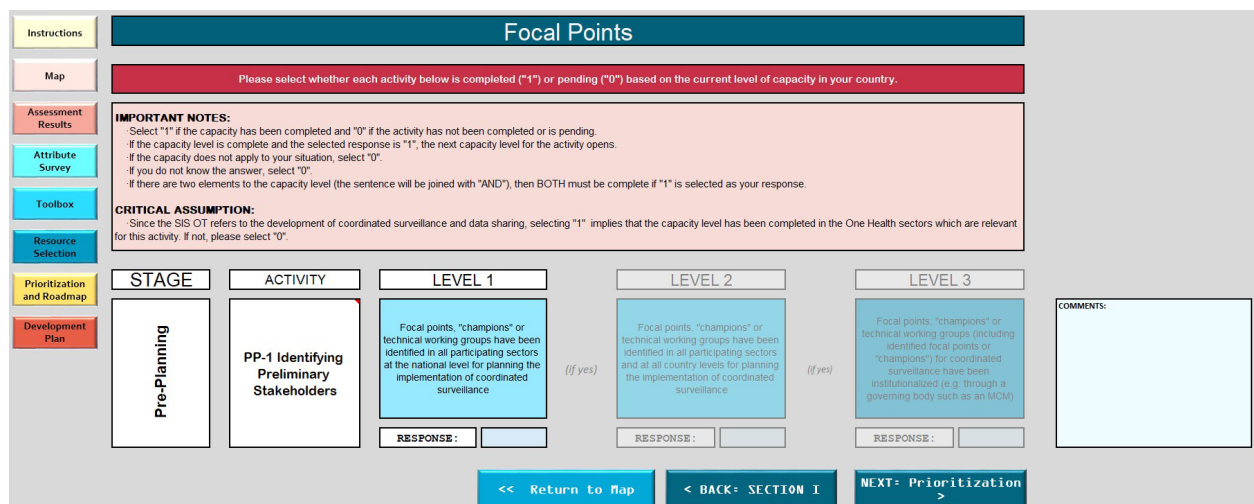
7

8

- After familiarization with the introductory overview for the stage, click ‘Next: begin Section I’ to go to the first activity category in the preplanning stage, ‘Focal Points’ (**Fig. 8**).

9

Figure 8: ‘Focal points’ category page



-
- Read the 'Important Notes' and 'Critical Assumption' at the top of the page for the activity before proceeding with the assessment.
 - Assess the capacity level of each activity within the category, starting from Capacity Level 1, and select a response from the dropdown list.
 - If the Capacity Level 1 is pending or not complete or does not apply to your national situation, select "0" (not achieved).
 - If all the elements for Capacity Level 1 are complete in all One Health sectors relevant for this activity and included in the coordinated surveillance, then the selected response is '1' (achieved). In this case, the next capacity level for the activity opens, and the color of the cells changes from grey to blue.
 - Complete the assessment process in the same manner for Level 2 and Level 3.
 - The comment box can be used to record important discussion points for further reference, when necessary.
- Once the assessment for an activity is complete, move down to the next activity. Repeat the capacity assessment process for the next activity. After completing all activities on the page for a category, click the 'Next' button or navigate through the Map to advance to the next category for assessment.
 - After completing all categories within a section, proceed to the next section by using the "Next" button, or through the Map page, and repeat the process. Users can return to the previous category by using the 'Back' button.
 - After completion of all sections, proceed to "Assessment Results" (in the Results page) or go back to the Map. From there, it is possible to access all category pages to revise any assessments, if needed.

Note: Some activities have only one or two capacity levels, for example only Level 1 or Level 1 and Level 3.

Step 4.3. Review the assessment results

Results of the assessment and access to the relevant resources, according to the completed assessment, are displayed on the 'Assessment Results' page.

Note: The assessment results present the next capacity level (Level 1, Level 2 or Level 3) of the activity, as the 'target capacity level' for the country to achieve next. For example, if Level 1 capacity level is achieved for a particular activity, the target capacity level will be 'Level 2'. An activity is considered fully met and competent when a country has achieved the Level 3 of capacity.

Instructions

- Go to the 'Assessment Results' page using the tool navigation menu on the left or by clicking on the "Next: Results" button from the page of last category 'Data Quality Standards', or navigate using the Map.
- Review 'Assessment Results' which indicate the target capacity levels to achieve for each of 32 assessed activities organized by stage and category (**Fig. 9**).
- If the target capacity level shows 'N/A' as the result, the assessment for this particular activity has not been completed, therefore return to the assessment page of this activity using the corresponding button on the right next to the Resource Guide column.

Fig. 9: assessment results

		ASSESSMENT RESULTS				If the target capacity level is N/A return back to assess this activity	
Instructions	Map	STAGE	ACTIVITY	Activity Description	Target Capacity Level		Resource Guide
Results	Pre-Planning	PP-1 Identifying Preliminary Stakeholders	PP-1 Identifying Preliminary Stakeholders	Focal points, "champions" or technical working groups have been identified in all participating sectors and at all country levels for planning the implementation of coordinated surveillance	Level 2	Click to View Level 1 Resources No Level 2 Resources (see Level 1) Click to View Level 3 Resources	Focal Points
Attribute Survey			PP-2 Prioritization	A list of zoonotic diseases is broadly distributed to the subnational and community levels	Level 2	Click to View Level 1 Resources No Level 2 Resources (see Level 1) No Level 3 Resources (see Level 1)	Prioritization
Toolbox			PP-3 Goal Setting	Goal(s), roles and responsibilities of the coordinated surveillance system have been re-evaluated to reflect the current needs of the coordinated surveillance system	Level 3	Click to View Level 1 Resources Click to View Level 2 Resources Click to View Level 3 Resources	Goal Setting
Tools Selection		A-1 Stakeholder Mapping	A-1 Stakeholder Mapping	Stakeholder analysis has been used to identify participants at all country levels	Level 2	Click to View Level 1 Resources Click to View Level 2 Resources Click to View Level 3 Resources	Stakeholders
Prioritization and Roadmap			A-2 Surveillance System Linkage Assessment	The interlinkages between current prioritized zoonotic disease surveillance systems have been assessed among sectors	Level 1	Click to View Level 1 Resources Click to View Level 2 Resources Click to View Level 3 Resources	Plans & Organization
			A-3 Legal Frameworks Assessment	The legal frameworks (rules, policies, guidelines and regulations including international standards) that govern the ethical and privacy standards for surveillance and data sharing have been assessed	Level 1	Click to View Level 1 Resources Click to View Level 2 Resources No Level 3 Resources (see Level 1)	Policy & Legal
Development Plan			A-4 Frameworks and Strategic Plans	Frameworks and strategic plans relevant to the coordinated surveillance system have been assessed for potential consolidation and linking at the national level	Level 1	Click to View Level 1 Resources Click to View Level 3 Resources	Plans & Organization

Step

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Step 5: **Prioritize and select activities for SIS system development**

Helps prioritize and organize activities for further development to improve the national SIS system.

Goal for step 5

- Prioritize and select activities for the development plan

The planning team guides the activities prioritization and selection process conducted in a plenary meeting.

Instructions

- Designate facilitators from the planning team to guide all discussions in groups or in plenary.
- For the prioritization process of activities, use the 'Prioritization and Roadmap' accessible through the navigation menu from any page of the SIS OT Workbook.
- For each target activity, select an implementation time and priority (for example, 'to be addressed now- in 1 year' - high priority; 'to be started in 2-3 years' - medium priority; 'to be started in > 3 years' - low priority) from the dropdown list. If the activity is assessed as complete, select 'completed' from the dropdown list and do not address it in the discussions.
- Determine and agree upon a timeframe (for example, 3 years, or 5 years) for the SIS development plan.
- Select the activities to be addressed for this SIS development plan based on their implementation time and priority and with consideration of agreed plan's timeframe (for a 3 year plan, high and medium priority activities can be selected).
- For the activities which have been decided not to be addressed, select 'not to be addressed for this plan' from the dropdown list.

Note: If the prioritization process is carried out in groups, ensure equal representation of all sectors in each group.

The assessment and prioritization identify target activities to address with consideration of the situation at the time of the SIS OT process, but the picture can change when the SIS OT process is repeated in the future. The 'SIS Development plan' in module 3 further addresses the identified activities.

Step 6: **Develop roadmap**

Helps develop a roadmap to implement the identified target activities

Goal for step 6

- Develop a timeline to implement the target activities

The roadmap uses strategic planning to place target activities on a timeline, all grouped in a single visual Gantt chart representation. A facilitated plenary discussion develops it with support of 'Prioritization' results from step 5.

Instructions

- Designate one or two facilitators from the planning team who will guide the discussion.
- For the roadmap discussion, use the 'Prioritization and Roadmap' page of the SIS OT Workbook.
- Use the results of the activities prioritization and identification process:
 - Modify the Gantt chart according to the selected plan timeframe (for example, 5 years, starting from 1st quarter of year 2022).
 - For each target activity selected for the SIS development plan decide on implementation timeframe including both the activity duration (for example, one quarter; two quarters; or to the end of the planning period) and time to start the activity (for example, first quarter of Year 1) with consideration of the implementation time and priority previously selected for this activity. Indicate this timeframe on the Gantt chart by color shading and using the drop-down lists in the 'Activity start quarter' and 'Activity duration' columns.

Note: It is recommended to revise the roadmap prior to the SIS development plan discussions to ensure that the distribution of activities is appropriate for the planning period and capacity to accomplish the activities.

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Step 7: **Identify candidate resources to accomplish activities**

Introduces recommended resources and identifies candidate resources to accomplish target activities

Goals for step 7

- Complete the attribute survey
- Identify candidate resources

The resources to help activity implementation can be selected at any time, when it is considered to be necessary: through the separate meetings, during the workshop or at the time of planning and execution of the activity. To help selection it is recommended to first complete the attribute survey. The attribute survey can be redone every time when the specific requirements for the resource are changed.

Step 7.1. **Complete the attribute survey**

The survey assigns weight values to the nine resource evaluation attributes, as shown in **Fig. 10**.

Instructions

- Go to the 'Attribute Survey' page in the SIS OT Workbook accessible through the navigation menu.
- Assign a point value (between 0 and 100) for each of the nine attributes in the corresponding box. Distribute the values so that a total of 100 points between the nine attributes, according to their relative importance for resource selection to the user.

This exercise allows the tool to calculate a user-specific adjusted overall score for each resource, based on the weighted point values the users assigned to the attributes.

Figure 10: the attribute survey (scoring is shown as an example)

Instructions

Map

Assessment Results

Attribute Survey

Toolbox

Resource Selection

Prioritization and Roadmap

Development Plan

Attribute Survey

You have now completed responses in all three sections! Before moving on to Results, we will first determine the attributes of any given resource that are most important for your use. The exercise below allows you to assign weighted point values to the 9 different attributes used to evaluate the resources in the SIS OT.

The point values you assign should be based on their relative importance to you for selecting these resources, and are used to calculate a user-specific adjusted overall score for each resource, based on the evaluation scores that were assigned by the SIS OT team of reviewers.

The weighted scores can help you better identify resources that align with your preferences.

Please assign point values (ranging from 1-100) totalling 100 to each attribute described below.

ATTRIBUTE	ATTRIBUTE DESCRIPTION	POINT VALUE
Accessibility	The logistics for accessing and using the tool, such as openness or accessibility, cost, and user support.	10
Language	The availability of the resource and ease of translation into different languages	10
Ease of Use	The level of complexity and difficulty to navigate and understand the resource, as well as technical or operational skillsets required to use the tool.	10
Flexibility	The adaptability of the tool for use in different contexts and scenarios.	5
Data Needs	The system and device requirements that need to be met for the resource to operate, as well as data storage and security.	15
Data Analysis	How the resource processes and quality checks data, including tool output and reporting capacity.	5
Acceptability	Metrics of the resource's acceptance for use, based off publications, reports, and/or number of pilots and implementations.	10
One Health	The ability of the resource to facilitate communication and collaboration across One Health sectors (human, animal, environmental health and relevant partners)	20
Impact	Evidence that the resource has resulted in improvements in One Health or surveillance capacity based on monitoring and evaluation indicators or past examples	15
TOTAL		100

← Must be between 1 and 100, and the sum of all attributes must total 100!

<< Return to Map
NEXT: ASSESSMENT RESULTS >

- Step
- 1
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Step 7.2. Identify candidate resources

Instructions

- After completion of the attribute survey go to the 'Assessment Results' page of the SIS OT Workbook, using the navigation menu 'Assessment Results' button or clicking on the "Next: Assessment Results" on the bottom.
- Access the page with recommended resources (**Fig. 11**) for the activity through the link corresponding to the target capacity level in the 'Resource guide' column indicated by the arrow (**Fig. 9**).
 - The resource pages contain the list of resources grouped by the purpose 'Best fit' and 'Other relevant' resources to accomplish each activity. It lists each resource with a short description, type, generality, and evaluation score to facilitate selection. The corresponding 'Go to toolbox' button provides access to more detailed information for each resource. The 'Toolbox' in the navigation menu provides direct access to the page with information about all resources included in the toolbox.
 - Based on the introductory information presented on the resources, select one or two candidate resources to assist accomplishing the activity.

- Go to the 'Resource selection' page accessible through the navigation menu to record identified candidate resources. Record the first candidate resource selected in the 'Resource 1' column using the dropdown list for each activity. To record a second selected resource, if existing, use column 'Resource 2'.
- Users can return to the results page by using the 'Return to Results' button on each page, and can additionally return to the map using the 'Return to Map' button.

Fig. 11: resources page

Focal Point Resources																	
DESIGNATION	RESOURCE NAME	SHORT DESCRIPTION	RESOURCE TYPE	RESOURCE GENERALITY	Accessibility	Language	Ease of Use	Flexibility	Data Needs	Data Analysis	Acceptability	One Health	Impact	RAW SCORE	ADJUSTED SCORE (Based on user preferences)	Go to Toolbox: [Resource Name]	
LEVEL 1 RESOURCES	Resources Best Fit For Purpose	Policy Field Analysis (PFA)	A specialized stakeholder mapping that allows to visualize the system of organizations as they interact for a given policy issue	Guidance document	One Health; Generalized	7.8	8	9.8	10	7.1	4.0	7.0	8.8	5.0	75%	75%	Go to Toolbox: Policy Field Analysis (PFA)
	Other Relevant Resources	Africa CDC Event Based Surveillance Framework	A guidance to public health practitioners seeking to implement event-based surveillance at each administrative level.	Guidance document	One Health; Generalized	8.0	6.0	8.2	8.3	6.1	3.5	4.0	7.0	6.0	63%	64%	Go to Toolbox: #N/A
		Evaluation of Collaboration in a multisectoral Surveillance system (EcoSur)	A tool that aims to evaluate the organization and functioning of collaboration in a multisectoral surveillance system and to analyse strengths and weaknesses of this collaboration.	Guided/facilitates tool or process	One Health; Generalized	8.3	6.0	8.5	7.8	8.3	6.7	3.3	9.1	4.7	70%	71%	Go to Toolbox: Evaluation of Collaboration in a multisectoral Surveillance system (EcoSur)
		Integrated Disease Surveillance and Response (IDSR)	A strategy aimed at strengthening capacities for detection, confirmation and response to suspected cases and outbreaks, and for use of information to predict and plan for public health events.	Guidance document	Sector Specific; Generalized	7.4	10	7.4	8.7	6.7	4.5	8.0	7.2	8.5	76%	77%	Go to Toolbox: Integrated Disease Surveillance and Response (IDSR)
		The One Health Systems Assessment for Priority Zoonoses (OH-SAPZ)	The tool is aimed to facilitate a systematic assessment of national structures for One Health coordination with respect to preventing, detecting, and responding to zoonotic diseases.	Self-assessment tool	One Health; Generalized	7.9	7.3	7.2	7.8	6.5	5.2	4.0	8.3	9.7	71%	74%	Go to Toolbox: The One Health Systems Assessment for Priority Zoonoses (OH-SAPZ)
<< Return to Map << Return to Results																	

Note: The selection can be preliminary. The final selection of the resources for a specific activity can be made at the time of planning and conducting that activity by the planning team and/or persons responsible based on familiarization with the actual resources and conditions required for their use.

Reporting and next steps

- 30 **Step 8**
Develop SIS development plan
- 32 **Step 9**
Final reporting and next steps



Step 8: **Develop a SIS development plan**

Develops the SIS development plan to support activity implementation and monitor progress

Goals for step 8

- Develop the SIS development plan to support implementation of the activities

This step further turns the activities into a SIS development plan. In addition to elements already defined in steps 5, 6 and 7, the group assigns responsibilities defining the leading sector, along with roles, responsibilities for each partner organization and agrees on actions needed to achieve the activities and key indicator(s) for monitoring and evaluation of progress.

Instructions

- Use the 'SIS Development plan' page in the SIS OT Workbook for this step.
- The activities and elements from the completed worksheets of the SIS OT Workbook which are reflected in the SIS development plan table include:
 - Activity and target capacity level
 - Selected resources and tools
 - Activity start time
 - Activity duration
- Complete the remaining columns for each activity, including the list of actions necessary to achieve the activity, roles and responsibilities for implementation of these actions and indicators to monitor and demonstrate achievements and advocate for resources and support. Review and adjust all elements reflected from different worksheets where necessary. This can be in smaller working groups but should subsequently be agreed upon by all participants in the plenary session.



Tips for completing step 8

- 1 The actions listed as necessary for completion of an activity may include those connected to use of the selected resources, for example, organization of a facilitated workshop.
2. Indicators developed for each activity in the SIS development plan should be SMART:
 - **S**pecific
 - **M**easurable
 - **A**chievable
 - **R**elevant (directly related to the activity)
 - **T**imebound

Note: The SIS development plan is a dynamic document, and the SIS OT team may modify it later according to changing circumstances. The list of actions, and consequently the rest of the plan elements, might be changed or complemented after using the selected supporting resources.

Figure 12: an example of a filled SIS development plan (see the SIS OT Workbook), as completed for a selected activity.

DEVELOPMENT PLAN											
CATEGORY	ACTIVITY	Description	Selected resources and tools	Actions	Lead, and Role/ responsibility of each partner	Anticipated challenges	Activity start	Activity duration	Point of contact (name, title, organization, sector) of each partner	Indicator for this Requirement	Other notes
EXAMPLE											
Prioritization	PP-2 Prioritization	A list of prioritized zoonotic diseases exists for inclusion in a coordinated surveillance system	OHZDP	Perform the prioritization exercise (e.g. CDC One Health Zoonotic Disease Prioritization (OHZDP) workshop) Update the sectors priority diseases lists according the results of the prioritization exercise	Lead: Animal Health (AH) The Human Health (HH) representative will contact CDC and identify participants from HH sector. AH rep will coordinate logistics and venue	May require additional funds for conducting a multisectoral exercise; To contact CDC to explore on possibility to conduct OHZDP workshop.	Year 1- Q2	1 Quarter	Linda Bianca, Dir of Animal Health Services, MoA Dan Fisher, Dir of Health Services, MoH	Prioritization exercise held and attended by all relevant sectors The priority lists are updated according the prioritization exercise results for all relevant sector	

Step 9: **Final reporting and next steps**

Facilitates production of the final report for the SIS OT workshop

Goals for step 9

- Develop the final workshop report

The final report provides a detailed record of all the discussions held and decisions made throughout the SIS OT workshop to inform elaboration of the SIS development plan. In this step, notes taken during the discussions and relevant information from all Annexes are summarized in a report available immediately after the workshop.

Instructions

- Use Annex 5 (Workshop report template) to elaborate the report. Following the notes and instructions in the template facilitates appropriate references to the material used during the SIS OT.

Note: At the workshop the final reporting to the decision-makers can be done in the form of a presentation. The report including the development plan can be finalized after the workshop and submitted to the decision-makers in the relevant sectors for validation and support.

Recommended next steps after the SIS OT workshop

- Completion of the final workshop report and validation by the decision-makers.
- Implementation of the SIS development plan and selection of the tools and resources to support it.

Periodical reassessment of the coordinated SIS system using the SIS OT Workbook to monitor the progress and update or revision of the SIS development plan.

Annexes

- 34 Annex 1**
Template terms of reference for the SIS OT planning team and working group
- 36 Annex 2**
SIS OT workshop templates
- 40 Annex 3**
Information gathering checklist
- 44 Annex 4**
SIS OT framework and dictionary
- 56 Annex 5**
Meeting/workshop report template

Annex 1. **Template terms of reference for the SIS OT planning team and working group**

1. Terms of reference for the SIS OT planning team

The Surveillance and Information Sharing Operational Tool (SIS OT) planning team, hereby referred to as the ‘planning team,’ will usually consist of six to ten key focal points who will be tasked with initiating and planning for the SIS OT. This multisectoral team nominated by the lead ministries/agencies (maximum three persons per agency) responsible for animal health and human health surveillance for zoonotic diseases, and relevant environmental health surveillance (for example, Ministry of Health, Ministry of Agriculture and Ministry of Environment, among others) includes key staff actively engaged in decision-making and implementation of zoonotic disease surveillance. If there are existing One Health platform or multisectoral surveillance coordination mechanisms in the country, these should additionally be represented on the planning team. The planning team will have oversight for implementation of the SIS development plan and any follow-up reassessments following use of the SIS OT.

1. The planning team will then have the following roles and responsibilities

1. Work with Tripartite (FAO, WHO and WOAH) headquarters, regional and country offices to support facilitation of the SIS OT process in the country.
2. Identify all agencies and stakeholder organizations at national and subnational levels involved in zoonotic disease surveillance, performing a stakeholder mapping if needed to conduct this step. Select key stakeholders/agencies to be included in the working group.
3. Request appointments of representatives from the stakeholder organizations identified through the stakeholder mapping and confirm their willingness and ability to fully participate. Establish the SIS OT working group.
4. Select a team of representatives from the working group and hold discussions (virtual or face to face) to agree on the rationale and scope for using the SIS OT and objectives for the coordinated SIS system.
5. Lead information gathering related to the existing sector-specific and multisectoral surveillance mechanisms for zoonotic diseases. One information gathering checklist is to be completed for each agency/stakeholder organization by their representative in either the working group or the planning team.

6. Collect all information gathering checklists to prepare for the SIS OT assessment, compile the information and share the results with the working group.
7. Prepare for the SIS OT workshop, including the necessary logistics to conduct the workshop in either a virtual or hybrid format. Review the SIS OT Framework and information gathering checklists ahead of the workshop. Get agreements and approvals necessary to proceed prior to the SIS OT workshop. Organize meetings with the working group in preparation for the workshop.
8. Organize and lead activities in the workshop following the steps in the SIS OT process. Work with Tripartite staff to facilitate the SIS OT process.
9. Lead and coordinate with decision-makers and technical teams to implement the development plan and the roadmap outlined during the SIS OT workshop.
10. Organize and lead follow up SIS OT reassessment.

2. Terms of Reference for the SIS OT working group

The SIS OT working group, hereafter referred to as the 'working group,' will consist of ten to fifteen representatives from relevant organizations identified by the planning team to participate in the SIS OT. Organizations represented will include those ministries, agencies, regulatory authorities, and other organizations at the national and subnational levels that are involved in surveillance for zoonotic diseases, animal health, public health, environmental health (including wildlife), and food safety, and any non-governmental organizations that may contribute to zoonosis surveillance. Representatives nominated by their organizations should include decision-makers as well as technical staff. Funding agencies, development partners, and other stakeholders can be considered for inclusion in the working group, or can participate in the SIS OT workshop as observers.

The working group will be responsible for the following roles and responsibilities:

1. Gather information and data related to the existing sector-specific and multisectoral surveillance mechanisms for zoonotic diseases. Complete the information gathering checklist, one per each agency/stakeholder organization represented in the working group, and send it to the planning team.
2. Participate in the meetings organized by the planning team in preparation for the SIS OT workshop.
3. Participate in the SIS OT workshop.
4. Participate in implementation of the development plan and the roadmap outlined during the SIS OT workshop.
5. Participate in follow up SIS OT reassessments organized by the planning team.

Annex 2. **SIS OT workshop templates**

1. Workshop participants list and agenda

1.1 **National participants**

SIS OT Planning Team

	Name	Title /affiliation	Contact details (email)
1			
2			
3			
4			
5			
6			

SIS OT Working Group

	Name	Title /affiliation	Contact details (email)
1			
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SIS OT Facilitators

	Name	Title /affiliation	Contact details (email)
1			
2			
3			
4			

	Name	Title /affiliation	Contact details (email)
5			
6			

Observers

	Name	Title /affiliation	Contact details (email)
1			
2			
3			
4			
5			
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2. Model annotated agenda for SIS OT pilots

For use by FAO, WHO and WOAHA country or regional office focal points, SIS OT development team and national participants

2.1. National participants

Country

Introductory Pre-Pilot Preparatory Webinar with SIS OT Facilitators & SIS OT Planning Team^{*}:

Dates

(Webinar to be held 4 to 8 weeks in advance of the planned SIS OT workshop, with additional video/teleconferences as necessary)

Draft Agenda:

1. Review of SIS OT Pilot Objectives
2. Introduction to the TZG & SIS OT
3. Roles & Responsibilities of the SIS OT Planning Team and Working Group
4. Introduction to the SIS OT module 1
 - a. Step 1: Planning for the SIS OT
 - b. Step 2: Information Gathering
5. Timeline and Final Preparations for SIS OT Workshop

^{*}Lead Facilitators:

National SIS OT Planning Team

FAO (HQ, Regional, Country)

WHO (HQ, Regional, WCO)

WOAH (HQ, Regional)

SIS OT development team

Four day SIS OT Pilot Workshop

Location

Dates

Lead Facilitators:

*National SIS OT Planning Team
FAO (HQ, Regional, Country)
WHO (HQ, Regional, WCO)
WAOH (HQ, Regional)
SIS OT development team*

Participants:

*National SIS OT Planning Team
National SIS OT Working Group*

Draft agenda

DAY 1		
Time	Agenda	Facilitator/ Presenter
	Opening Remarks/Official Welcome	<i>TBD</i>
	Getting started (objectives, agenda overview, introductions)	<i>Facilitators</i>
	Introduction to the SIS OT and objectives for Workshop	<i>Facilitators</i>
	BREAK	
	Introduction on existing zoonotic disease surveillance systems by national government ministries: strengths, weaknesses and gaps	<i>Facilitators</i>
	Review of the objectives of the coordinated surveillance and information sharing system (SIS)	<i>Planning Team</i>
	Planning Team Report Out on steps 1 and 2 of the SIS OT Process: Planning and information gathering	<i>Planning Team</i>
	LUNCH	
	Introduction to the SIS OT Assessment process (step 4)	<i>Facilitators</i>
	Work Session-SIS OT Assessment (step 4)	<i>All participants</i>
	BREAK	
	Work Session (step 4): SIS OT Assessment (continued)	<i>All participants</i>
	Wrap up and Planning for Day 2	<i>Planning Team</i>

DAY 2		
Time	Agenda	Facilitator/ Presenter
	Review Day 1 & Objectives for Day 2	<i>Planning Team</i>
	Work Session (step 4): SIS OT Assessment (continued)	<i>All participants</i>
	BREAK	
	Introduction to step 5 & 6: Prioritization and selection of activities and development of Roadmap	<i>Facilitators</i>
	Work Session (step 5): Prioritization and selection of activities	<i>All participants</i>
	LUNCH	
	Work Session (step 5): Prioritization and identification of activities (continued)	<i>All participants</i>
	Work Session (step 6): Development of roadmap	<i>All participants</i>
	BREAK	
	Work Session (step 6): Development of roadmap (continued)	<i>Facilitators</i>
	Wrap up and Planning for Day 3	<i>Planning Team</i>

DAY 3		
Time	Agenda	Facilitator/ Presenter
	Review Day 2 & Objectives for Day 3	<i>Planning Team</i>
	Introduction to step 7: Identification of candidate resources to accomplish activities	<i>Facilitators</i>
	BREAK	
	Introduction to step 8: Development of SIS development plan	<i>All participants</i>
	LUNCH	
	Work Session (step 8): Development of SIS development plan	<i>All participants</i>
	Wrap up and Planning for Day 4	<i>Facilitators</i>

DAY 4		
Time	Agenda	Facilitator/ Presenter
	Review Day 3 & Objectives for Day 4	<i>Planning Team</i>
	Work session (step 9): Final reporting	<i>All participants</i>
	Presentation of the SIS OT workshop results	<i>Planning team</i>
	BREAK	
	Discussion of the SIS OT workshop results and recommendations	<i>All participants</i>
	Next steps	<i>Planning Team</i>
	Participant feedback on Operational Tool, workshop process and gaps	<i>All participants</i>
	Closing Remarks	<i>TBD</i>

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Annex 3. Information gathering checklist

Zoonotic diseases pose risks to both animal and human health, and can impact livelihoods, economies, ecosystems, and national and global food and health security. Surveillance is an essential part of tackling zoonotic diseases but cannot be effectively addressed by one sector alone. A One Health coordinated multisectoral surveillance system is essential to identify zoonotic disease events within a country rapidly, through using information from the animal health, human health, environmental and other relevant sectors. Such a coordinated system brings together the different surveillance elements of all relevant sectors at the human-animal-environment interface and enables them to work together and coordinate prevention and control efforts effectively.

The Surveillance and Information Sharing Operational Tool (SIS OT) was developed to support national authorities in their efforts to establish or strengthen a coordinated surveillance system for zoonotic diseases.

The SIS OT process includes:

- A stepwise methodology to guide assessment of the national structures or mechanisms already in place to support coordinated zoonotic disease surveillance and cross-sectoral information sharing, based on the framework of activities necessary to develop a national coordinated surveillance system for zoonotic diseases.
- A toolkit or repository which leverages and links users to a curated set of existing resources developed by the Tripartite (FAO, WHO, WOA), partners, and other institutions, which can help develop or improve the coordinated surveillance system for zoonotic diseases, based on the self-assessment results, nationally established priorities and unique situational needs.

The SIS OT is intended for use by a working group or in a workshop setting, by participants representing animal health, human health, environmental health, and other relevant sectors within a country that have responsibility for zoonotic diseases. Participants should have disease surveillance expertise and the authority to make decisions regarding development of a national coordinated zoonoses surveillance system.

This checklist is a part of the preparatory process for using the SIS OT. The checklist is used to gather information and data necessary for understanding the current situation related to coordinated surveillance, which will inform the SIS OT self-assessment process. The checklist should be filled in once per participating agency/organization.

The SIS OT was developed as part of a joint Tripartite effort to establish practical tools to help countries implement the guidance in the TZG⁴, in particular, chapter 5.2 'Surveillance for zoonotic diseases and information sharing'. It is recommended to read this chapter prior to answering the questions in this checklist.

⁴ FAO-OIE-WHO. 2019. Taking a Multisectoral, One Health Approach: A Tripartite Guide to Addressing Zoonotic Diseases in Countries. <http://www.fao.org/documents/card/en/c/ca2942en>

Agency/organization	
Sector (animal health, public health, environmental, other)	
Staff completing this form (Name/Title)	
Point of Contact (Name/email)	

	Key Questions	Response	Related documents
1	<p>Is there any existing formal or informal One Health Multisectoral Coordination Mechanism (MCM)⁵:</p> <ul style="list-style-type: none"> • For zoonotic diseases? • For any other shared health concerns at the human-animal-environment interface (for example, for AMR, food safety, etc.)? 		Any documents related to the formal/official establishment/approval of the MCM, if existing
2	<p>Is there any formal or informal system, or platform (hereafter referred to as system) for coordinated surveillance⁶ for zoonotic diseases in your country?</p> <p>If yes:</p> <p>a. What sectors are included in this coordinated surveillance (select all that apply):</p> <ul style="list-style-type: none"> - Human health - Animal health (domesticated and wildlife) - Environment health (including air and water quality, vector surveillance and control, etc.) - Others (please list) <p>b. At what level does this existing system operate (select all that apply):</p> <ul style="list-style-type: none"> - At the national level? - At subnational levels? <p>c. Which zoonotic diseases are included in the existing multisectoral coordinated surveillance system?</p>		
3	<ul style="list-style-type: none"> • Is there any existing group responsible for coordinating and planning the implementation of the coordinated surveillance system for zoonotic diseases (for example, MCM, task force/Steering committee, technical working group, focal points)? • What documentation do you have on this? • Have they been institutionalized (given formal or official status)? 		Any documents related to establishment/ approval of the existing group for coordinating and planning
4	<ul style="list-style-type: none"> • Is there any list of prioritized zoonotic diseases agreed by Animal Health, Human Health and other relevant sectors? • Was this prioritized list developed using a multisectoral One Health approach? Which sectors were involved? • What process was used for agreement? 		List of prioritized zoonotic diseases for coordinated surveillance, and report or documentation of the process used
5	<ul style="list-style-type: none"> • Has stakeholder mapping⁷ been done? • What process was used? 		Results of stakeholder mapping

5 One Health Multisectoral Coordinated Mechanism (MCM): standing organized group (platform, committee, task force, working group etc.) that works to develop or strengthen collaboration and coordination across the sectors responsible for zoonotic diseases and other health concerns.

6 Coordinated surveillance system for zoonotic diseases: the platform or system that allows for the collection, aggregation and analysis of surveillance elements across multiple sectors collaborating at the human-animal-environmental interface, to enable them to work effectively together toward their aligned objectives and goals.

7 Stakeholder mapping: a consultative process whereby all relevant stakeholders to the zoonotic disease threat are identified and the relationships and networks among them mapped. Taken from TZG and adapted.

	Key Questions	Response	Related documents
6	<ul style="list-style-type: none"> • What are the legal frameworks (rules, policies, guidelines and regulations including international standards) in place for coordinated surveillance and data sharing? • Are there any gaps in the legal frameworks which limit information sharing? • Are there any planned changes in the existing legal frameworks? 		The documents related to the legal frameworks
7	What are the strategic plans ⁸ related to or governing zoonotic disease surveillance? (such as the National One Health Strategic Plan)		Existing strategic plans related to the zoonotic diseases surveillance
8	What are the existing operational plans ⁹ (including surveillance plans, case definitions, protocols, and Standard Operating Procedures) for zoonotic disease surveillance? For Animal Health Sector? Public Health Sector?		Joint/consolidated or unisectoral operational plans, including surveillance plans and related documents
9	<ul style="list-style-type: none"> • Has infrastructure mapping been carried out? <ul style="list-style-type: none"> - For the Animal Health Sector? - For the Public Health Sector? - For the Environmental Sector? • Which methodology was used? • Did the infrastructure mapping assess the linkages between sectors? 		Results of infrastructure mapping within and between sectors
10	<ul style="list-style-type: none"> • Have economic assessments been used to determine the financial needs for the coordinated surveillance system? • Is there funding available for the coordinated surveillance system? • Is it sustainable? 		Documents related to economic assessments
11	<ul style="list-style-type: none"> • Is there a budgetary plan for coordinated surveillance and the coordinated surveillance system? • What is the mechanism for distributing funds? 		Budgetary plan
12	<ul style="list-style-type: none"> • Have laboratory assessments been carried out? For each sector, list the name of the assessment and the last time it was conducted? <ul style="list-style-type: none"> - For which laboratories in the Animal Health sector? - In the Public Health sector? - Other sectors? 		Documents related to laboratory assessments
13	<ul style="list-style-type: none"> • Have the common data elements been identified and agreed upon within each participating sector to meet the common analytical goals of the coordinated surveillance system? • Are they standardized among participating sectors? • Do they adhere to international data standards? 		Materials related to the identified common data elements

8 Strategic plan: a prospective or forward-looking document highlighting where the national surveillance programme and system is going in the future. It defines the overarching vision and objectives and links surveillance to national One Health policies. In the context of surveillance, it provides the action items and objectives to guide the activities to improve surveillance capacity (for example, "in the next 5 years we shall increase the number of staff in the field from X to Y")

9 Operational plan: a document that describes planned activities and how they are conducted, including defining responsibilities and timeframes. In the context of surveillance, an operational plan (for example, Surveillance Plan) would provide all necessary information on how to properly conduct surveillance in a country, including: case definitions, SOPs for investigation, communication protocols, case confirmation including laboratory diagnostics, etc.

	Key Questions	Response	Related documents
14	<ul style="list-style-type: none"> Have communications terminology and messages to inform stakeholders and the public for the coordinated surveillance system been aligned among all participating sectors? Is there a communications strategy and/or communications plan? 		Aligned communication terminology, example messages, and communications strategy or plan
15	<ul style="list-style-type: none"> Is there a mechanism or systematic way to share data between sectors? What is this mechanism? To which sectors is it accessible? Which is the level of data sharing by this mechanism (national, all country levels)? 		Documentation describing the data sharing mechanisms or infrastructure, such as a common data sharing platform
16	<ul style="list-style-type: none"> Where is the data within each of the relevant sectors for coordinated surveillance stored? If a common data sharing platform is utilized, is data stored in that platform and where is it stored? To which sectors is it accessible? What is the level of data stored (national, all country levels)? 		Documentation describing the data storage processes and infrastructure
17	<ul style="list-style-type: none"> Are there data privacy and security measures in place to protect coordinated surveillance data? Which data privacy and security measures are applied? 		Documentation describing the data privacy and security processes and infrastructure
18	<ul style="list-style-type: none"> Are the coordinated surveillance data used to generate outputs (for example, figures, graphics, reports or bulletins)? Are these outputs shared? At which levels (national, subnational, all)? Are the generated outputs, including monitoring and evaluation reports, used to inform response, policy and programming? 		Examples of generated outputs

Annex 4. SIS OT framework and dictionary

Note

1. Terms in blue text are explained in the Dictionary below
2. The term "coordinated surveillance" in the SIS OT context is specific to coordinated surveillance for zoonotic diseases

SIS OT framework					
ACTIVITY	ACTIVITY PURPOSE	Capacity Levels			
		LEVEL 1	LEVEL 2	LEVEL 3	
PRE-PLANNING					
PRE-PLANNING	PP-1 Identifying Preliminary Stakeholders	The purpose of this activity is to have focal points, "champions" or technical working groups identified in all participating sectors for leadership in implementation of a coordinated surveillance system for zoonotic diseases	Focal points, "champions" or technical working groups have been identified in all participating sectors at the national level for planning the implementation of coordinated surveillance	Focal points, "champions" or technical working groups have been identified in all participating sectors and at all country levels for planning the implementation of coordinated surveillance	Focal points, "champions" or technical working groups (including identified focal points or "champions") for coordinated surveillance have been institutionalized (for example, through a governing body such as an MCM ¹⁰)
	PP-2 Prioritization	The purpose of this activity is to develop a list of priority zoonotic diseases that should be jointly agreed upon and addressed by human health, animal health, environment, and other relevant One Health sectors for inclusion in coordinated surveillance activities	A list of prioritized zoonotic diseases exists for inclusion in a coordinated surveillance system	A list of zoonotic diseases is broadly distributed to the subnational and community levels	A list of zoonotic diseases is developed using a multisectoral One Health approach. Such an approach would involve all relevant sectors in an evidence-based, transparent, repeatable prioritization process
	PP-3 Goal Setting	The purpose of this activities is to define, distribute and agree on goals, roles and responsibilities among participating sectors for implementation of a coordinated surveillance system	Goal(s), roles, and responsibilities of all participating sectors of the coordinated surveillance system are agreed upon at the national level	Goal(s), roles, and responsibilities of all participating sectors of the coordinated surveillance system are agreed upon and expanded to include all country levels	Goal(s), roles and responsibilities of the coordinated surveillance system have been re-evaluated to reflect the current needs of the coordinated surveillance system

10 One Health Multisectoral Coordinated Mechanism (MCM): standing organized group (platform, committee, task force, working group etc.) that works to develop or strengthen collaboration and coordination across the sectors responsible for zoonotic diseases and other health concerns.

SIS OT framework					
ACTIVITY	ACTIVITY PURPOSE	Capacity Levels			
		LEVEL 1	LEVEL 2	LEVEL 3	
ASSESSMENT					
ASSESSMENT	A-1 Stakeholder Mapping	The purpose of this activity is to identify stakeholders for surveillance, epidemiology, laboratory, and information sharing from all sectors related to the zoonotic diseases for planning the implementation of coordinated surveillance.	Stakeholders working in surveillance, epidemiology, laboratory, and information sharing are identified	Stakeholder analysis identified participants at all country levels	Roles and responsibilities of stakeholders are institutionalized and adopted in policy
	A-2 Surveillance System Linkage Assessment	The purpose of this activity is to conduct a surveillance systems assessment to map existing infrastructure for surveillance coordinated among multiple sectors, identify existing surveillance interlinkages between sectors and ensure that weaknesses in surveillance infrastructure are identified for improvement so that coordination between sectors occurs as effectively and efficiently as possible.	The interlinkages between current prioritized zoonotic disease surveillance systems are assessed among sectors	The interlinkages between current surveillance systems are assessed among sectors and at all country levels	The interlinkages between current surveillance systems are assessed and determined to meet the objectives of the coordinated surveillance system
	A-3 Legal Frameworks Assessment	The purpose of this activity is to identify and assess existing legal frameworks (including IHR and OIE standards) for surveillance in animals and people, as well as ethical and privacy guidelines for collection, processing and sharing of data during surveillance, including existing data sharing and data use agreements.	The legal frameworks (rules, policies, guidelines and regulations including international standards) that govern the ethical and privacy standards for surveillance and data sharing are assessed.		The legal frameworks (rules, policies, guidelines and regulations including international standards) that govern the ethical and privacy standards for surveillance and data sharing are assessed at all country levels

SIS OT framework					
ACTIVITY	ACTIVITY PURPOSE	Capacity Levels			
		LEVEL 1	LEVEL 2	LEVEL 3	
ASSESSMENT					
ASSESSMENT	A-4 Infrastructure Mapping	<p>The purpose of this activity is to describe the national infrastructure and understand current capacity to build upon or initiate development of coordinated surveillance systems (as described in TZG, Chapter 4.1¹¹). In order to capture system-wide information, infrastructure mapping should include:</p> <ul style="list-style-type: none"> • Landscape analysis which focuses on assessment of the organizational structure of sector specific governmental and non-governmental bodies • Sector-specific structures and infrastructures, responsibilities, programmes, and activities related to zoonotic diseases and coordinated surveillance, including sector-specific needs and priorities; • International and regional obligations; • Collaborative, multidisciplinary, multisectoral, and/or One Health-specific activities and programmes within or among relevant sectors; • Activities in partnership with central or subnational government, universities, non-governmental organizations, industry or others, in sectors other than those of human health, animal health and the environment, and at central or subnational levels; • Frameworks, protocols, plans, and strategies relating to zoonotic diseases created by sectors or created collaboratively among sectors • Human and financial resources available • Barriers to collaboration 	Basic infrastructure mapping exercises described the structure and linkages within and between the sectors	Infrastructure mapping described the majority of mapping areas	Comprehensive infrastructure mapping has been used to describe all mapping areas
	A-5 Economic Needs Assessment	<p>The purpose of this activity is to determine the financial requirements for achievement of a desired level of capacity for a coordinated surveillance system in the country within a planned period of time</p>	Economic assessments have been used to determine national financial needs for the coordinated surveillance system		Economic assessments determined the financial needs at all country levels for the coordinated surveillance system

11 FAO-OIE-WHO. 2019. Taking a Multisectoral, One Health Approach: A Tripartite Guide to Addressing Zoonotic Diseases in Countries. <http://www.fao.org/documents/card/en/c/ca2942en>

SIS OT framework					
ACTIVITY	ACTIVITY PURPOSE	Capacity Levels			
		LEVEL 1	LEVEL 2	LEVEL 3	
ASSESSMENT					
ASSESSMENT	A-6 Laboratory Capacity Assessment	The purpose of laboratory assessment is to identify gaps or weaknesses in laboratory diagnostic capacity, training, and coordination as they pertain to the coordinated zoonotic disease surveillance system. The laboratory assessment should include evaluations that assess the capacity of individual laboratories within the coordinated surveillance system as well as the functionality and operation of the overall laboratory network. This will help to identify qualified central and subnational laboratories in all relevant One Health sectors, as part of the national laboratory network for coordinated surveillance systems, and external laboratories that can carry out testing if the capacity is not available nationally.	Laboratory assessments identified qualified national or international reference laboratories that can carry out testing to support the coordinated surveillance activities	Laboratory assessments identified qualified laboratories at all levels (including international) that can carry out testing to support the coordinated surveillance activities	Laboratory assessments identified a network of qualified laboratories that can carry out testing to support the coordinated surveillance activities
	A-7 Laboratory Transport and Interpretation Assessment	The purpose of this activity is to assess sector-specific laboratory capacity for potential harmonization between participating sectors and take a multisectoral One Health approach to collaboration, including: <ul style="list-style-type: none"> Joint procurement of reagents and laboratory consumables Standardizing diagnostic techniques and aligning local procedures with internationally recognized standards Mapping of the pathway from specimen collection to arrival at the laboratory for each of the relevant sectors to provide information on overlaps and gaps and allow identification of opportunities for synergies in sample transportation 	Laboratory supply, transport chains and results interpretation are assessed for harmonization between participating sectors at the national level	Laboratory supply, transport chains and results interpretation between participating sectors are assessed for harmonization at all country levels	The degree of harmonization in laboratory supply, transport chains and results interpretation between participating sectors are assessed and determined to meet the objectives of the coordinated surveillance system

SIS OT framework					
ACTIVITY	ACTIVITY PURPOSE	Capacity Levels			
		LEVEL 1	LEVEL 2	LEVEL 3	
ASSESSMENT					
ASSESSMENT	A-8 Workforce Assessment	The purpose of this activity is to provide an evidence base and national guidance for why and how education and training programmes are developed, how they achieve national and international standards, and how they will be implemented to meet country needs. Therefore, in order to develop and establish a One Health workforce, national governments, with the involvement of stakeholders, must understand and be able to articulate existing and emerging national workforce needs, which can be achieved through workforce assessments. The outcomes of workforce assessment may be used to develop a workforce strategy or plan that strengthens and aligns national education and training programmes.	Workforce assessments conducted to identify current workforce requirements, competencies, needs and gaps at all country levels	Workforce assessment conducted to identify current workforce requirements, competencies, needs and gaps at all country levels	
PLANNING					
PLANNING	PL-1 Political Will	The purpose of this activity is to ensure that political will is in place to support and advance the establishment of surveillance coordination between participating sectors	Decision-makers for the coordinated surveillance system has been identified	Political will for the coordinated surveillance system is established, and advocates exists at all country levels	There is an advocacy strategy that informs communication with decision-makers on the coordinated surveillance system
	PL-2 Common Data Elements	The purpose of this activity is to plan upon data sharing mechanisms to ensure that each relevant sector is engaged in, or at least aware of, information from the relevant sectors at subnational, national, and cross-border levels (where applicable). Best practice is for common data elements or variables to be identified or created in order to meet the common analytical goals of the coordinated surveillance system. Having common variables ensures that data collected from each participating sector can be shared between sectors, deaggregated and combined together.	The common data elements are identified and agreed upon within each participating sector to meet the common analytical goals of the coordinated surveillance system at the national level	The common data elements are identified and agreed upon within each participating sector to meet the common analytical goals of the coordinated surveillance system at all country levels	The common data elements are standardized among participating sectors based on the common analytical goals of the coordinated surveillance system and adhere to international data standards
	PL-3 Strategic Plans and Frameworks for Coordinated Surveillance	The purpose of this activity is to review existing surveillance-related strategic plans and frameworks for potential consolidation and alignment, or development of a single document, when possible, using a multi-sectoral One Health approach.	A multi-sectoral collection and review of the national strategic documents (strategies, frameworks and strategic plans) related to the coordinated surveillance system occurred, for the purposes of planning	National strategic documents (strategies, frameworks and strategic plans) for the coordinated surveillance system consolidated and linked based on assessment at all country levels	Revised strategic documents (strategies, frameworks and strategic plans) for the coordinated surveillance system aligned with international standards and recommendations

SIS OT framework					
ACTIVITY	ACTIVITY PURPOSE	Capacity Levels			
		LEVEL 1	LEVEL 2	LEVEL 3	
PLANNING					
PLANNING	PL-4 National Operational Plans	The purpose of this activity is to review existing surveillance-related national operational plans and other relevant documents for potential consolidation and alignment, or development of a single document, when possible using a multisectoral One Health approach	A multisectoral collection and review of the national operational plans and other relevant documents (including surveillance plans, case definitions, protocols, and Standard Operating Procedures) related to the coordinated surveillance system occurred for the purposes of planning	Revised operational plans and other relevant documents (including surveillance plans, case definitions, protocols, and Standard Operating Procedures) related to the coordinated surveillance and information sharing system are agreed upon by the agencies conducting surveillance at all country levels	Revised operational plans (including surveillance plans, case definitions, protocols, and Standard Operating Procedures) for the coordinated surveillance system are aligned with international guidelines and recommendations
	PL-5 Financial Planning	Since coordinated surveillance systems are resource-intensive, the purpose of this activity is to develop the budgetary plan and ensure funds distribution mechanisms are in place based on understanding of the monetary or financial underpinnings of developing and implementing a coordinated surveillance system.	There is a budgetary plan and a mechanism for distributing funds for coordinated surveillance at the national level	There is a budgetary plan and a mechanism for distributing funds for coordinated surveillance at all country levels	The budgetary plan and a mechanism for distributing funds was assessed and determined to meet the objectives of the coordinated surveillance system
	PL-6 Workforce Planning	The purpose of this activity is to develop a workforce strategy and education and training plan that strengthens and aligns national education and training programmes, based on results of workforce assessment.	An education and training plan for the coordinated surveillance system exists based on workforce assessment at the national level	An education and training plan for the coordinated surveillance system exists based on workforce assessment at all country levels	Workforce education and training is linked to national multisectoral workforce planning and is informed by international competencies and assessments
	PL-7 Frameworks Planning	The purpose of this activity is to ensure that all legal frameworks necessary for establishment/ improvement of coordinated surveillance within and between relevant One Health sectors are standardized between the participating sectors based on assessment results to support achieving intended outputs and outcomes of a coordinated surveillance and information sharing system.	Necessary legal frameworks (rules, policies, guidelines and regulations including international standards) standardized across sectors based on assessment at the national level	Necessary legal frameworks (rules, policies, guidelines and regulations including international standards) standardized across sectors based on assessment at all country levels	Revised legal frameworks for the coordinated surveillance system aligned with international standards and recommendations
	PL-8 Coordinated Communication Planning	The purpose of this activity is to agree on common terms and messages to be used between sectors and for communication with public	Communications terminology and messages align among all sectors participating in the coordinated surveillance system at the national level	Communications terminology and messages aligned among all sectors participating in the coordinated surveillance system and disseminated at all country levels	There is a communications strategy and/or communications plan (which includes terminology and messaging) that informs communication with stakeholders and the public for the coordinated surveillance system

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SIS OT framework					
ACTIVITY	ACTIVITY PURPOSE	Capacity Levels			
		LEVEL 1	LEVEL 2	LEVEL 3	
IMPLEMENTATION					
IMPLEMENTATION	I-1 Mobilizing of Financial Resources	The purpose of this activity is to have available the budgetary resources required to support the coordinated surveillance system	Funding exists for coordinated surveillance at the national level	Funding exists for coordinated surveillance at all country levels	Sustainable funding (that is, included in the national budget) is allocated for coordinated surveillance activities and assessed and determined to meet the objectives of the coordinated surveillance system
	I-2 Mobilizing Human Resources and Stakeholders	The purpose of this activity is to have regular communication between coordinated surveillance system focal points and technical groups to address coordinated surveillance activities and issues.	Focal points or technical working groups meet on an ad hoc basis	Focal points or technical working groups meet on a routine basis and to address priority issues as they arise	Technical working groups regularly review and optimize coordinated surveillance activities
	I-3 Data Exchange & Information Sharing	The purpose of this activity is to initiate or build upon data sharing mechanisms to ensure that each relevant sector is engaged in, or at least aware of, information from the relevant sectors at all levels. This may include identifying sector-specific data elements to be shared in the coordinated surveillance system; determining the overall data subset to be shared between sectors through the coordinated surveillance system, establishing mechanisms to ensure appropriate data are collected and available for sharing across all relevant sectors, determining how and when the data should be shared to ensure timely delivery, and establishing sharing agreements.	There is a mechanism to share data between sectors at the national level	There is a mechanism to share data between sectors at all country levels	There is a mechanism to share data that is accessible, functional, and usable by all participating sectors
	I-4 Data Storage	The purpose of this activity is to have in place mechanisms for data storage and exchange, available IT infrastructure (for example, hardware, software, and online services), and technical support for establishing informatics systems, storage and maintaining data collected by the multiple sectors.	There is a structure and location to store and maintain data from multiple sectors at the national level	There is a structure and location to store and maintain data from multiple sectors at all country levels	There is a structure and location to store and maintain data from all relevant sectors conducting surveillance that is accessible, functional, and usable by all participating sectors

SIS OT framework					
ACTIVITY	ACTIVITY PURPOSE	Capacity Levels			
		LEVEL 1	LEVEL 2	LEVEL 3	
IMPLEMENTATION					
IMPLEMENTATION	I-5 Data Privacy and Security Measures	The purpose of this activity is to ensure that the coordinated surveillance data is protected by existing data privacy and security measures.	There are data privacy and security measures in place to protect coordinated surveillance data at the national level	There are data privacy and security measures in place to protect coordinated surveillance data at all country levels	There are data privacy and security measures in place to protect coordinated surveillance data which are assessed and meet the objectives of the coordinated surveillance system
	I-6 Data Privacy and Security Measures Implementation	The purpose of this activity is to gradually start implementation of the coordinated surveillance system.	There are data privacy and security measures in place to protect coordinated surveillance data at all country levels	There are data privacy and security measures in place to protect coordinated surveillance data which are assessed and meet the objectives of the coordinated surveillance system	Revised strategic documents (strategies, frameworks and strategic plans) for the coordinated surveillance system aligned with international standards and recommendations
	I-7 Surveillance Data Sharing	The purpose of this activity is to ensure that informal and formal mechanisms and agreements are used to share agreed information among the participating sectors.	Surveillance data are shared informally or formally on an ad hoc basis at the national level	Surveillance data are shared informally or formally in a routine and timely fashion at all country levels	Surveillance data are shared systematically in a routine and timely manner between all participating sectors through an interoperable or joint platform(s)
	I-8 Communication & Information Sharing	The purpose of this activity is to have effective communication to share information in place, across the government and within and among partner organizations and other relevant stakeholders, including media and the public	There is ad hoc information sharing and communication with relevant stakeholders	There is routine information sharing and communication with relevant stakeholders	There is routine and timely information sharing and communication with relevant stakeholders including cross-border, regional and international entities
	I-9 International Notification Requirements Compliance	The purpose of this activity is to ensure that the country complies with international notification requirements for zoonotic diseases	Comply with international notification requirements for all zoonotic diseases		
	I-10 Coordinated Data Visualization and Analysis	The purpose of this activity is to ensure that the aggregated coordinated surveillance data generates the outputs for sharing across the government and within and among partner organizations and other relevant stakeholders.	Coordinated surveillance data generate outputs (for example, figures, graphics, reports or bulletins) that are shared at the national level	Coordinated surveillance data generate outputs (for example, figures, graphics, reports or bulletins) disseminated to stakeholders at all country levels	Coordinated surveillance data, including monitoring and evaluation reports, generate outputs that inform response, policy and programming

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SIS OT framework					
ACTIVITY	ACTIVITY PURPOSE	Capacity Levels			
		LEVEL 1	LEVEL 2	LEVEL 3	
MONITORING AND EVALUATION					
MONITORING AND EVALUATION	ME-1 Simulation Exercises	The purpose of this activity is to conduct simulation exercises to evaluate the efficiency and functionality of the coordinated surveillance system under varying scenarios.	Simulation exercises conducted to evaluate the efficiency and functionality of the coordinated surveillance system at the national level	Simulation exercises conducted to evaluate the efficiency and functionality of the coordinated surveillance system at all country levels	Results of the simulation exercises inform and revise coordinated surveillance plans
	ME-2 Monitoring and Evaluation Planning	The purpose of this activity is to develop a monitoring and evaluation (M&E) plan for coordinated surveillance system activities. This includes jointly deciding and documenting the results to be achieved, how these results will be measured, the information that will need to be collected during each of the activities (including how often and by whom), and how that information will be used for M&E. This may include setting up the M&E of the coordinated surveillance, including identifying goals and objectives of the monitoring and evaluation and defining basic indicators for the main activities and their baseline so that changes can be measured.	There is a monitoring and evaluation plan that meets the objectives of the coordinated surveillance system	The monitoring and evaluation plan tracks performance and progress of the coordinated surveillance system	Results of monitoring and evaluation iteratively improve or expand the coordinated surveillance system and align with international standards and recommendations
	ME-3 Data Quality Standards	The purpose of this activity is to have a mechanism (or mechanisms) in place for monitoring and evaluation of quality of data shared within the coordinated surveillance system to ensure that shared data are complete, shared in a timely manner, and accurate at entry level (for example, healthcare facility, surveillance/ reporting officer).	There is a data quality management methodology	The data quality is tested and determined to meet the objectives of the coordinated surveillance system	The data quality aligns with international standards and recommendations

 **Note**

All terms and definitions below are used in the context of the SIS OT only and may be used differently elsewhere

SIS OT DICTIONARY	
TERM	DEFINITION
Ad hoc	Created when necessary or needed for a specific purpose
Advocacy strategy	A high level, overarching or conceptual plan or set of policies designed to promote understanding and awareness among stakeholders
Budgetary plan	An operational description that acts as a guideline for expected financial transactions over a defined time period
Champion	Any individual actively involved in advocating and implementation of coordinated surveillance
Common data elements	Shared variables that can be deaggregated and combined with data from other sectors or stakeholders for further analysis or investigations
Communication plan	A high level, overarching or conceptual plan designed following a communication strategy to manage routine and emergency communication among stakeholders
Communication strategy	A high level, overarching strategic overview directing routine and emergency communication among different stakeholders (including the public)
Coordinated surveillance system	The platform or system that allows for the collection, aggregation and analysis of surveillance elements across multiple sectors collaborating at the human-animal-environmental interface, to enable them to effectively work together toward their aligned objectives and goals
Data quality	The integrity of obtained data that may impact the reliability of the information recorded
Data quality management methodology	A process used to regulate the integrity of obtained data and ensure that it conforms to established data standards
Decision-makers	Sectors or stakeholders that are involved in making important actions in a process
Economic assessment	Systematic process of gathering, assessing and documenting information to evaluate and identify strengths, weaknesses, and gaps in the state of financial management and resources
Educational and training plan	An operational or action-oriented description of activities to be undertaken, often based on an overarching strategy used to inform and teach
Focal point	Point of contact representing organization/institution for coordinated surveillance
Formal	In an official manner, in accordance with established rules and regulations
Framework	A basic structure or idea underlying a system, concept, or document, or a specific set of rules, ideas, or beliefs used to approach a problem or decision
Informal	In an unofficial manner, without oversight from any established sectors
Information sharing	The process of distributing information within or between stakeholders, sector-specific systems and actors
Infrastructure mapping	Comprehensively collecting and reviewing information on what resources/capacity already exists in the country
Institutionalized	Given formal or official status
Interlinkages	A state in which two or more things are joined or connected together

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International data standards	Internationally agreed upon principles to which collected data should conform (for example, Health Information Systems Program, WOAHA Terrestrial Animal Health Code)
International notification requirements	Internationally agreed upon policies/regulations to address the rules and needs for reporting relevant incidents, [for example, WOAHA Terrestrial Animal Health Code, Chapter 1.1, WHO International Health Regulations (2005)]
International standards and recommendations	Internationally agreed upon principles and regulations that are used as reference points (for example, OIE Terrestrial Animal Health Code, Chapter 1.4, WHO Recommended Surveillance Standards, second edition).
Interoperability	Interoperability is the ability of computer systems or software to seamlessly exchange and use data/information
Interoperable platforms	Platforms for the seamless exchange and use of surveillance data/information within computer systems or software
Interoperable	Describes the extent to which systems and devices can exchange data, and interpret that shared data. For two systems to be interoperable, they must be able to exchange data and subsequently present that data such that it can be understood by a user (definition by Healthcare Information and Management Systems Society)
Joint platforms	Platforms working together
Laboratory assessment	Systematic process of gathering, assessing and documenting information to evaluate and identify strengths, weaknesses, and gaps in laboratory systems and capacity
Legal frameworks	System of rules, policies, guidelines, or regulations that govern activities in the context of governance authorities
Mechanism for distributing funds	A standing system, part of an infrastructure, or an organized group or network designed to manage finances
Monitoring and evaluation	A process to measure, track, improve performance, and assess the results of an ongoing or completed activity, programme, or policy by providing indications of the extent of progress and achievement of objectives, and progress in the use of allocated funds, for the purposes of improving performance, ensuring accountability, or demonstrating value. Includes: Monitoring: the continuing and systematic collection of information on specified indicators related to the project or process; and Evaluation: the systematic and objective assessment of the relevance, efficiency, effectiveness or impact of a project or process based on the set of information collected on the indicators during monitoring.
Monitoring and evaluation plan	A plan that outlines the monitoring and evaluation aspects of a program or activity
Operational plan	Document that describes current activities and how they are conducted, including defining responsibilities and timeframes. In the context of surveillance, an operational plan (for example, a surveillance plan) would provide all necessary information on how to properly conduct surveillance in a country, including case definitions, SOPs for investigation, communication protocols, case confirmation. including laboratory diagnostics, etc.
Participating sectors	Sectors, disciplines, stakeholders, or ministries that are actively involved in addressing the specific health threat using a multisectoral One Health approach. Other sectors and agencies that are stakeholders to the health threat (for example, private stakeholders, academia), may be included as needed
Political will	The desire of a country's governing/administrative authorities to commit to a cause.
Region	A group of countries that have some similarities, normally geographically linked
Relevant sectors	At a minimum, those sectors, disciplines, stakeholders, or ministries that are key to the specific health threat to be addressed using a multisectoral One Health approach. Other sectors and agencies that are stakeholders to the health threat (for example, private stakeholders, academia), may be included as needed
Roles and responsibilities	Positions, tasks and duties within a coordinated surveillance system defined and distributed between participating sectors
Sector	A distinct part or branch of a nation's sociological, economic, or political society or a sphere of activity such as human health, animal health, or environment
Simulation exercise	A process in which certain conditions/scenarios are modeled in order to provide a preparatory mechanism for practice/learning purposes

Stakeholder analysis	A consultative process whereby all relevant stakeholders to the zoonotic disease threat are identified and the relationships and networks among them mapped
Stakeholders	Any individual or group that is or should be involved as a partner in preventing or managing zoonotic diseases or other shared health threats at the human-animal-environment interface. Stakeholders include those who impact, are impacted by, or perceive themselves to be affected by zoonotic disease threats, including those who may be affected by measures to address zoonotic diseases
Standard Operating Procedures	A set of stepwise instructions (protocol) provided by an organization or entity that details how routine operations should be conducted.
Strategic plan	Prospective or forward-looking document highlighting where the national surveillance programme and system should go in the future. It defines the overarching vision and objectives and links surveillance to national One Health policies. In the context of surveillance, it provides the action items and objectives to guide the activities to improve surveillance capacity (for example, "in the next 5 years we shall increase the number of staff in the field from X to Y").
Sustainable funding	A system of financial revenue that is sufficiently reliable to accomplish long-term goals of programs
Technical working group	An ad hoc group of experts on surveillance who work together on specific goals, that can be involved in coordinated surveillance planning
Workforce assessment	Systematic process of gathering, assessing and documenting information to evaluate and identify strengths, weaknesses, and gaps in capacity and state of a working entity

Annex 5. **Meeting/workshop report template**

1. SIS OT meeting/workshop administrative overview

Notes/Instructions:

- Include date, time, place, chair, agencies attending

2. Meeting/workshop summary (executive summary)

- Summarize the goal/objective and overall outcome of the SIS OT meeting/workshop

3. The objectives for the coordinated SIS system

- Indicate the objectives agreed upon for the coordinated SIS system in your country

4. Summary of Assessment results

- List target capacity levels of the assessed activities (refer to Assessment Results page of the SIS OT workbook)

5. Summary of prioritization and selection of activities

- Describe the method used for prioritization of activities. List the activities selected for the SIS OT development plan (refer to Prioritization and Roadmap page of the SIS OT Workbook)

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6. The Roadmap

- Include developed Roadmap (refer to Prioritization and Roadmap page of the SIS OT Workbook)
- Provide brief comments on activities implementation timeline

7. Selected resources

- Indicate agreed steps for resources selection to support SIS OT development plan implementation
- Include the Table with candidate resources if they are selected at the time of reporting (refer to Resource selection page of the SIS OT Workbook)

8. Summary of the SIS development plan

- Include SIS OT Development plan table (refer to SIS Development plan page of the SIS OT Workbook).

9. **Recommended next steps**

- Summarize the next steps.

10. **Any other issues for the record**

- For example, significant sources of conflict or lack of agreement among partners.

Any other issues for the record

- Annexes to the report:
- Final workshop agenda
- Participants list
- SIS OT Workbook (completed)

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