



## National Bridging Workshop on the International Health Regulations (IHR) and the OIE Performance of Veterinary Services (PVS) Pathway

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21-23 November 2018

Astana, Kazakhstan



Organized by Ministry of Health and Ministry of Agriculture of Republic of Kazakhstan, WHO and OIE

## **Acknowledgments**

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## ABBREVIATIONS & ACRONYMS

AI	Avian Influenza
CVCS	Committee of Veterinary Control and Surveillance
DG	Directorate General
GHSA	Global Health Security Agenda
FAO	Food and Agriculture Organization of the United Nations
FP	Focal Point
HQ	Headquarters
IHR	International Health Regulations (2005)
IT	Information technology
JEE	Joint External Evaluation
MEF	Monitoring and Evaluation Framework
MoA	Ministry of Agriculture
MoH	Ministry of Health
MoU	Memorandum of Understanding
OIE	World Organisation for Animal Health
PH	Public Health
PVS	Performance of Veterinary Services
SOP	Standard Operating Procedures
TOR	Terms of Reference
VS	Veterinary Service
WHO	World Health Organization

# INTRODUCTION

## BACKGROUND

The World Health Organization (WHO) and the World Organisation for Animal Health (OIE) are the two main international organizations responsible for proposing references and guidance for the public health and animal health sectors respectively. WHO and OIE have been active promoters and implementers of an intersectoral collaborative approach between institutions and systems to prevent, detect, and control diseases among animals and humans. They have developed various frameworks, tools and guidance materials to strengthen capacities at the national, regional and global levels.

- WHO Member States adopted a legally binding instrument, the International Health Regulations (IHR, 2005), for the prevention and control of events that may constitute a public health emergency of international concern. Through these regulations, countries are required to develop, strengthen and maintain minimum national core public health capacities to detect, assess, notify and respond to public health threats and as such, should implement plans of action to develop and ensure that the core capacities required by the IHR are present and functioning throughout their territories. Various assessment and monitoring tools have been developed by WHO such as the IHR Monitoring and Evaluation Framework (MEF), which includes *inter alia* the Annual Reporting Questionnaire for Monitoring Progress and the Joint External Evaluation (JEE) Tool.
- The OIE is the intergovernmental organization responsible for developing standards, guidelines and recommendations for animal health and zoonoses; these are laid down in the OIE Terrestrial and Aquatic Animal Codes and Manuals. In order to achieve the sustainable improvement of national Veterinary Services' compliance with these standards, in particular on the quality of Veterinary Services, the OIE has developed the Performance of Veterinary Services (PVS) Pathway, which is composed of a range of tools to assist countries to objectively assess and address the main weaknesses of their Veterinary Services.



These support tools shift away from externally driven, short-term, emergency response type 'vertical' approaches addressing only specific diseases, and contribute to a more sustainable, long term 'horizontal' strengthening of public and animal health systems. The WHO IHR MEF and the OIE PVS Pathway approaches enable countries to determine strengths and weaknesses in their respective functions and activities, and promote prioritization and pathways for improvement. Furthermore, they engage countries in a routine monitoring and follow up mechanism on their overall level of performance and help to determine their needs for compliance with internationally adopted references and standards.

The use of the WHO IHR monitoring tools and OIE PVS Pathway results in a detailed assessment of existing weaknesses and gaps, with the better alignment of a capacity building approach and strategies at country level between the human and animal health sectors. The two organizations have developed a workshop format (the IHR-PVS National Bridging Workshops) that enables countries to further explore possible overlapping areas addressed in their PVS and IHR capacity frameworks and develop, where relevant, appropriate bridges to facilitate coordination. A structured approach using user-friendly materials enables the identification of synergies, reviews gaps and defines the operational strategies to be used by policy makers for concerted corrective measures and strategic investments in national action plans for improved health security.

In Kazakhstan,

- a PVS Evaluation Follow-up mission was conducted in 2011 (a second PVS Evaluation Follow-Up took place in 2018, however the results of the report were not finalized at the time of the workshop);
- Interdepartmental Internal Evaluation of the Republic of Kazakhstan for IHR and GHSA, based on the JEE tool, was conducted in 2016;
- an Annual IHR self-evaluation was reported to the IHR secretariat in 2018.

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## OBJECTIVES OF THE WORKSHOP AND EXPECTED OUTCOMES

The main objective of the IHR-PVS Pathway National Bridging Workshop (IHR-PVS NBW) is to provide an opportunity to the human and animal health services of hosting countries to build on the reviews of performance, gaps and discussions for improvement conducted in their respective sectors, and to explore options for improved coordination between the sectors, to jointly strengthen their preparedness for, and control of, the spread of zoonotic diseases.

The IHR-PVS NBWs focus on the following strategic objectives:

- **Brainstorming:** discuss the outcomes of IHR and PVS Pathway country assessments and identify ways to use the outputs;
- **Advancing One Health:** improve dialogue, coordination and collaboration between animal and human health sectors to strategically plan areas for joint actions and a synergistic approach;
- **Building Sustainable Networks:** contribute to strengthening the inter-sectoral collaboration through improved understanding of respective roles and mandates;
- **Strategic planning:** inform planning and investments (incl. the National Action Plan for Health Security) based on the structured and agreed identification of needs and options for improvement

Expected **outcomes** of the workshop include:

1. Increased awareness and understanding on the IHR (2005) and the role of WHO, the mandate of the OIE, the IHRMEF and the OIE PVS Pathway, their differences and connections.
2. Understanding of the contribution of the veterinary services in the implementation of the IHR (2005) and how the results of the PVS Pathway and IHRMEF can be used to explore strategic planning and capacity building needs.
3. A diagnosis of current strengths and weaknesses of the collaboration between the animal health and public health services.
4. Identification of practical next steps and activities for the development and implementation of joint national roadmap to strengthen collaboration and coordination.

The agenda of the Workshop is available at [Annex 1](#).

## REPORT ON THE SESSIONS

From 21<sup>st</sup> to 23<sup>rd</sup> November 2018, the National Bridging Workshop (NBW) on the International Health Regulations (IHR) and the OIE Performance of Veterinary Services (PVS) Pathway for Kazakhstan was held in Astana. The Workshop was hosted at the kind invitation of the Government of Kazakhstan, with organizational support from the WHO Country Office in Kazakhstan and the OIE Sub-Regional Representation for Central Asia. The Workshop was attended by 57 participants from Ministry of Health (MoH) and Ministry of Agriculture (MoA), as well as representatives of World Health Organization (WHO), World Organisation for Animal Health (OIE), United States Center for Disease Control (CDC) and World Bank representation in Kazakhstan.

The workshop used an interactive methodology and a structured approach with user-friendly material, case studies, videos and facilitation tools. All participants received a *Participant Handbook* which comprised of all necessary information such as the objectives of the workshop, instructions for working groups, expected outcomes of each session etc. Sessions were structured in a step-by-step process as follows:

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### OPENING SESSION

Greetings to the participants were given by Dr Zaire Achmetova (Deputy Director of the Department of Public Health Policy, MoH), Dr Amangeldy Eshmuchambetov (Head of Department of organization of veterinary activities of the Committee of Veterinary Control and Surveillance, MoA), Dr. Mereke Taitubayev (Head of OIE Sub-Regional Representation for Central Asia) and Dr Oleg Chestnov (WHO Representative in the Republic of Kazakhstan). They highlighted the importance of the One Health approach and fruitful collaboration between Public and Animal Health, identifying gaps in order to progress towards a better coordination, and development of a roadmap to build the sustainable bridge between the two sectors.

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### SESSION 1: THE ONE HEALTH CONCEPT AND NATIONAL PERSPECTIVES

A documentary video introduced the One Health Concept, its history, rationale and purpose and how it became an international paradigm. The video also introduced the workshop in the global and national context by providing high level background information on the collaboration between WHO, OIE and FAO.

The representatives of the Ministries of Health and Agriculture briefly presented their structures and achievements in terms of One Health and improvement of the cooperation of the two sectors in addressing zoonoses. The representative of the Public Health Service presented the way IHR is being implemented in the country after a self-evaluation had been conducted in 2016. A roadmap for IHR (2018-2023), one for antimicrobial resistance, and a comprehensive plan of action on laboratories are the basis for the interaction between human health and veterinary services. The Central Reference Laboratory, involving three ministries (Health, Agriculture and Education and Science), with its specific tasks related to the integration of public health and veterinary systems is one of the bases the Veterinary Service highlighted as the visible implementation applying the One Health concept, together with clear actions developed on the antimicrobial resistance.

The workshop approach and methodology were explained, and the participant handbook was presented.

A second documentary video provided participants with concrete worldwide examples of intersectoral collaboration in addressing health issues at the human-animal interface.



## Outcomes of Session 1:

At the end of the session, the audience agreed that:

- Intersectoral collaboration between animal and human health sectors happens, but mainly during outbreaks; with a better preparedness, much more could be done at the human-animal interface.
- The two sectors have common concerns and challenges and conduct similar activities. Competencies exist and can be pooled. This needs to be organized through a collaborative approach;
- WHO, OIE and FAO are active promoters of One Health and can provide technical assistance to countries to help enhance inter-sectoral collaboration at the central, local and technical levels.

## SESSION 2: NAVIGATING THE ROAD TO ONE HEALTH – COLLABORATION GAPS

Participants were divided into five working groups of mixed participants from both sectors and from different levels (Central, Provincial, District). Groups were provided with a case study scenario (Table 1) based on diseases relevant to the local context (anthrax, avian influenza, brucellosis, echinococcosis, rabies) developed in collaboration with national representatives.

*Table 1: Scenarios used for the different case studies*

### **Rabies** (disclaimer: this incident is completely fictional)

A stray dog which was known to have bitten two cows and was behaving aggressively towards people was reported to have bitten some children in the same neighborhood. It was shot dead by the Police in the outskirts of Jezkazgan two days ago. The carcass of the dog was destroyed before the Veterinary authorities were able to take the head of the dog for confirmation of rabies diagnosis.

### **Anthrax** (disclaimer: this incident is completely fictional)

Nine people went to the Taraz oblast hospital close to the border post, showing identical anthrax-like lesions. One of these patients is a worker at the village's slaughterhouse.

At least 60 people who reportedly ate untested meat in the city of Taraz were examined for anthrax. The patients were urgently referred to the primary health care center after they developed symptoms typical of cutaneous anthrax. The man who sold the untested meat disappeared, after hearing that his neighbors were sick.

### **Avian influenza-** (disclaimer: this incident is completely fictional)

Two people were admitted at the infectious diseases Hospital in Almaty, with pneumonia. Laboratory testing by RT-PCR resulted positive for H5N1 subtype of avian influenza. One of the patients is a semi-commercial broiler producer who sells his birds three times a week at the local market. The other patient reported having visited the same market 7 days prior to disease onset and having bought four chickens.

### **Brucellosis** (disclaimer: this incident is completely fictional)

During the last month, three cows, all belonging to a small-holder dairy farmer in the village of Akzhar aborted. At the time of the first two abortions, the farmer did not bother reporting the problem to his local veterinary officer, as his farm was too far from the District Veterinary Office. However, the third abortion occurred a day before the market day and he happened to be in the town of Khromtau, where he met with the district veterinarian and mentioned that three of the cows had a recently aborted their calves. The veterinarian immediately went to the farm and carried out a Milk Ring Test on the three animals which had aborted and found them all to be positive for brucellosis.

### **Echinococcosis** (disclaimer: this incident is completely fictional)

A farmer in the Mangystau region was taken to hospital with jaundice and abdominal pain. An ultrasound detected atypical seals in the liver, and laboratory tests confirmed that the patient was infected with

*Echinococcus multilocularis*. This is the fourth case in the last two months in this area, where local residents are starting to worry because local dogs are often infected with Echinococcus.

Using experience from previous outbreaks of zoonotic diseases, the groups discussed how they would have realistically managed these events, and evaluated the level of collaboration between the veterinary and the public health services for 15 key technical areas: coordination, investigation, surveillance, communication, etc. These activities/areas of collaboration were represented by color-coded *technical area cards*: green for “good collaboration”, yellow for “some collaboration”, and red for “collaboration needing improvement” (Figure 1).



*Figure 1: Restitution of the working group session on case study scenarios to evaluate the level of collaboration between the sectors for 15 key technical areas for 5 different priority zoonotic diseases*

During an ensuing plenary session, each group presented and justified the results of their work. Output 1 summarizes the results from the five disease groups.

### Outcomes of Session 2:

- Areas of collaboration are identified and joint activities discussed.
- Level of collaboration between the two sectors for 15 key technical areas is assessed (Output 1).
- The main gaps in the collaboration are identified.

### SESSION 3: BRIDGES ALONG THE ROAD TO ONE HEALTH

Documentary videos introduced the international legal frameworks followed by human health (IHR 2005) and animal health (OIE standards) as well as the tools available to assess the country’s capacities: the annual reporting and JEE tools for public health services and OIE PVS Pathway for veterinary services. The differences and connections between these tools were explained. A large matrix (IHR-PVS matrix), cross-connecting the indicators of the IHR MEF (in rows) and the indicators of the PVS Evaluation (in columns) was set-up and introduced to the participants (Figure 2).

Through an interactive approach, working groups were invited to plot their *technical area cards* onto the matrix by matching them to their corresponding indicators. A plenary analysis of the outcome showed clear gap clusters and illustrated that most gaps were not disease-specific but systemic.



Figure 2: Mapping of the strengths and gaps of the current intersectoral collaboration by positioning the selected technical area cards on the IHR-PVS matrix.

The main gaps (clusters) identified were discussed and it was agreed that the rest of the workshop would focus on the following capacities:

- Priority technical area 1: Risk communication
- Priority technical area 2: Coordination at high, local, and technical levels
- Priority technical area 3: Human resources, education and training
- Priority technical area 4: Response and emergency funding

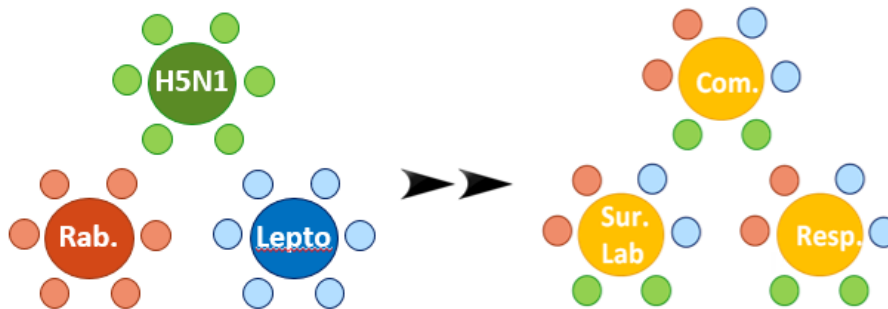
‘Finance’ and ‘Legislation’ came-up as the technical areas needing significant improvement. However, participants agreed that the audience of this workshop was not the best positioned to provide detailed recommendations relative to those domains. They remain nonetheless among the major gaps impairing the efficiency of the intersectoral collaboration.

### Outcomes of Session 3:

- Understanding that tools are available to explore operational capacities in each of the sectors.
- Understanding of the contribution of the veterinary sector to the IHR.
- Understanding of the bridges between the IHR MEF and the PVS Pathway. Reviewing together the results of capacities assessment may help in identifying synergies and optimize collaboration.
- Understanding that most gaps identified are not disease-specific but systemic.
- Identification of the technical areas to focus on during the next sessions.

## SESSION 4: CROSSROADS – PVS PATHWAY AND IHR MEF REPORTS

New working groups with representation from all previous groups were organized for each of the four priority technical areas (Figure 3).



*Figure 3: Generic graph describing the organization of working groups for Session 2-3 (left) and Session 4-5 (right).*

The matrix was used to link the identified gaps to their relevant indicators in the IHR MEF and in the PVS Pathway. Each working group then opened the assessment reports (Interdepartmental Internal Evaluation (IIE), PVS Evaluation Follow-up) and extracted the main findings and recommendations relevant to their technical area (Figure 4).



*Figure 4: Participants extracting results from the PVS and IIE reports.*

### Outcomes of Session 4:

- Good understanding of the assessment reports for both sectors, their purpose and their structure.
- Main gaps relevant to each technical area have been extracted.
- Main recommendations from existing reports have been extracted.
- A common understanding of the effort needed starts to emerge.

## SESSION 5: ROAD PLANNING

Based on the results of the previous sessions (case study exercises, extraction from reports) and their own experience, participants were asked to brainstorm on the identification of joint activities to improve their collaboration (Figure 5).



*Figure 5: The group working on “Risk communication” identified 7 activities to improve the collaboration between the two sectors in this domain.*

### Outcomes of Session 5:

- Clear and achievable activities are identified to improve inter-sectoral collaboration between the two sectors for all technical areas selected.

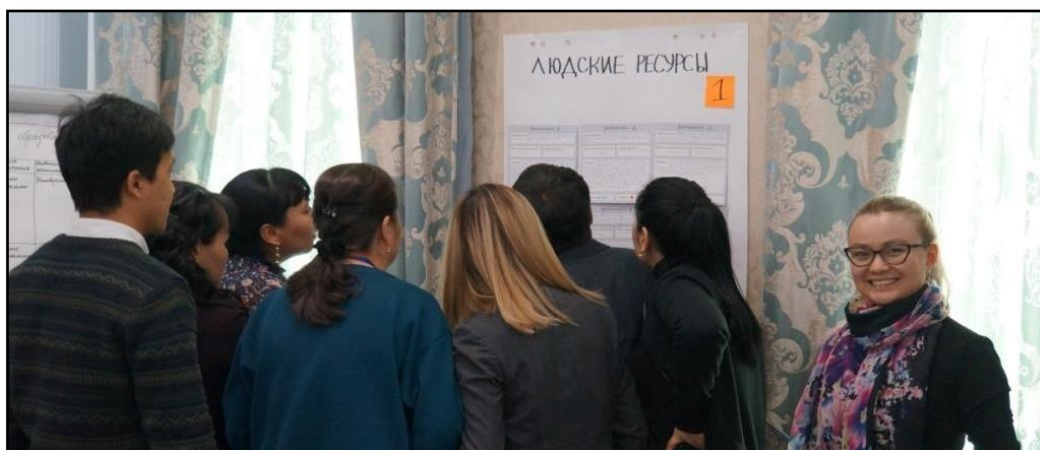
## SESSION 6: FINE-TUNING THE ROAD-MAP

Using the same groups as the previous session, participants were asked to further detail their activities by filling up an Activity card for each one. Required information included desired date of achievement, assignment of responsibility and a detailed process of implementation. The difficulty of implementation and the expected impact of each activity were also evaluated using red and blue stickers and a semi-quantitative scale (1 to 3).

Activities that were linked were then regrouped under specific objectives.

A World Café exercise was organized to enable participants to contribute to the action points of all technical areas (Figure 6). Each group nominated a rapporteur whose duty was to summarize the results of their work to the other groups. Each group rotated between the different boards to contribute and provide feedback on all technical areas. Rotating groups had the possibility of leaving post-it notes on the objectives and activities of other groups when they felt that an amendment or a clarification was necessary.

At the end of the cycle, each group returned to their original board and the rapporteur summarized the feedback received. Groups were given 20 minutes to address changes or additions suggested by the other participants. Objectives and activities were fine-tuned accordingly, and a final plenary session was conducted to discuss the outstanding points.



*Figure 6: World café exercise: the group on “Response and emergency funding” is providing feedback to the rapporteur of the group on “Human resources, education and training”.*

Overall, the five groups identified a total of 10 key objectives and 29 activities. The detailed results are presented in [Output 2](#).

### Prioritization of Objectives

To prioritize the objectives identified by the technical working groups, participants were invited to vote, indicating their preferred objectives, with green stickers affixed onto the selected objective card (Figure 7) to identify which five objectives (and their constituting activities) they considered as of highest priority.

43 participants participated in the vote. Participants gave the top priority to the goals of foundational and systemic nature, such as establishment of a joint response system, a system of intersectoral collaboration, and even more long-term fundamental goals such as legislation enforcing the intersectoral collaboration, and pre- and post-graduation education. Full results of the vote can be found in [Output 3](#).

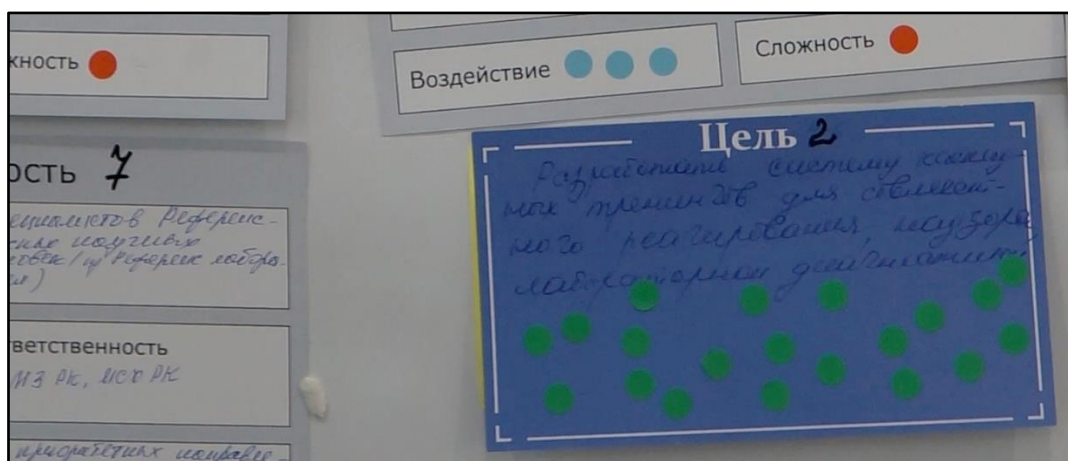


Figure 7: Participants used green stickers to vote for their priority objectives.

### Outcomes of Session 6:

- Harmonized, concrete and achievable road-map to improve the collaboration between the animal health and human health sectors in the prevention, detection and response to zoonotic disease outbreaks.
- Buy-in and ownership of all participants who contributed to all areas of the road-map.
- Prioritization of the activities.

## SESSION 7: WAY FORWARD

The discussion of the Session 7 was led by the representatives of the Ministry of Health and Veterinary Service of the Republic of Kazakhstan. Participants looked back at the Workshop exercises and discussed the respective results. From the beginning of the workshop the importance of the Roadmap implementation was highlighted by the participants. It was agreed that the goals and activities comprising the Workshop Roadmap are imperative steps towards the strengthening of the collaboration between Public and Animal Health sectors in Kazakhstan.

It was discussed, that the activities of the Workshop Roadmap could be efficiently conducted either as stand-alone actions such as joint intersectoral orders, or included into the draft National Kazakhstan IHR-PVS Roadmap as the One Health section. Also, the provisions of the Workshop Roadmap are recommended for use during the future JEE.

In addition, in order to adapt the provisions of the Workshop Roadmap to the national Kazakhstan state of affairs, so that the Roadmap activities could be processed for the further implementation by the Kazakhstan Government, it was recommended to conduct a one-day meeting with the key representatives from the Ministry of Health and Veterinary Service (from the central level and several oblasts).

The Chief Veterinary Officer (CVO), also OIE Delegate, expressed assurance that all Workshop Roadmap activities will find support in their entirety from the side of the Veterinary Service.

### Outcomes of Session 7:

- Understanding of how the outputs of the workshop can feed into other existing plans.
- Way forward is presented and discussed.
- Ownership of the workshop results by the country.

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## CLOSING SESSION

Summarizing the workshop, participants thanked WHO and OIE for the opportunity to work together and perform constructive work to improve the communication and coordination between the Veterinary and Medical Services. Participants emphasized the importance to bring together specialists from both sectors to better cooperate on zoonoses and food safety enabling Kazakhstan to improve the disease management. They underlined the need to keep the momentum for better communication and coordination between Animal and Human Health sectors, to develop a concrete collaborative Roadmap including all levels to better control zoonoses and other emergencies in the country. Participants expressed their willingness to continue collaboration on both the professional and individual levels.

The Workshop has been closed by the representatives of both sectors, Dr Zauresh Zhumadilova (Chief Expert of the Committee on Public Health Protection, MoH), Dr Tursyn Kabduldjanov (Deputy Chairman of the Committee of Veterinary Control and Supervision, MoA), and Dr Amangeldy Eshmuchambetov (Head of Department of organization of veterinary activities of the Committee on Veterinary Service, MoA) who thanked participants and organizers and highlighted the necessity of bridging the both sectors and strengthening this collaboration.

All the material used during the workshop, including movies, presentations, documents of references, results from the working groups and pictures were copied on a memory stick distributed to all participants.

A Russian version of this report is available at the following link: [www.bit.ly/NBWKazakhstanRU](http://www.bit.ly/NBWKazakhstanRU).



# WORKSHOP OUTPUTS

## OUTPUT 1: ASSESSMENT OF LEVELS OF COLLABORATION FOR 15 KEY TECHNICAL AREAS

Technical area (cards)	Rabies	Anthrax	H5N1	Brucellosis	Echinococcosis	Score
Finance	Red	Red	Red	Yellow	Red	9
<b>Education and training</b>	Red	Red	Yellow	Yellow	Red	8
<b>Emergency funding</b>	Yellow	Red	Yellow	Red	Red	8
<b>Communication w/ media</b>	Yellow	Red	Yellow	Yellow	Red	7
Legislation / Regulation	Red	Yellow	Red	Green	Yellow	6
<b>Human resources</b>	Yellow	Yellow	Yellow	Yellow	Red	6
<b>Response</b>	Yellow	Yellow	Yellow	Yellow	Yellow	5
<b>Coordination at high Level</b>	Yellow	Yellow	Yellow	Yellow	Yellow	5
<b>Coordination at local Level</b>	Yellow	Yellow	Yellow	Yellow	Green	4
<b>Coordination at technical Level</b>	Yellow	Red	Yellow	Green	Green	4
Risk assessment	Yellow	Green	Yellow	Yellow	Yellow	4
Laboratory	Yellow	Green	Green	Yellow	Red	4
Communication w/ stakeholders	Yellow	Red	Green	Green	Green	3
Field investigation	Red	Green	Green	Green	Yellow	3
Joint surveillance	Green	Green	Green	Green	Yellow	1

*For each disease, the performance of the collaboration between the human health and the animal health sectors is color-coded: green for “good collaboration”, yellow for “some collaboration”, and red for “collaboration needing improvement”. The score uses a semi-quantitative scale (2 points for a red card, 1 for a yellow card and 0 for a green card). Technical areas marked in bold were selected and addressed in-depth throughout the rest of the workshop.*

## OUTPUT 2: OBJECTIVES AND ACTIONS IDENTIFIED PER TECHNICAL AREAS

Action	Timeline	Difficulty (1-3 scale)	Impact (1-3 scale)	Responsibility	Indicators
<b>HUMAN RESOURCES &amp; EDUCATION AND TRAINING</b>					
<b>Objective 1: Include One Health aspects in pre- and post-graduate education</b>					
<b>Include One Health aspects into the university curricula on specialties "Public Health" and "Veterinary Medicine" as well as into curricula of post-graduate education for specialists in public health and veterinary service</b>	2019	+	+++	MoH, MoA, Ministry of Education and Science (MES)	1) Establish working group to develop and include aspects of One Health into curricula 2) Develop and include One Health aspects into curricula of medical, veterinary, and postgraduate faculties (joint order of MES, MoH, MoA)
<b>Establish the system of continuous postgraduate education for veterinary medicine specialists</b>	2019	+	+++	MoA, MES	1) Develop curriculum for post-graduate education of veterinary specialists: - veterinary doctors - laboratory specialists - epidemiologists 2) Develop and implement the system of post-graduate education in selected veterinary faculties
<b>Objective 2: Develop a system of cascade training for joint response, surveillance, and lab diagnostics</b>					
<b>Train national trainers with involvement of international experts</b>	2019	+	+++	MoH, MoA, Committee on Emergency Situations (CES)	1) Train the trainers on: - joint emergency response; - laboratory diagnostics of priority zoonoses; - joint surveillance. 2) Engage international organizations for the expert support 3) Nominee candidates (2 trainers - MoH, 3 - MoA, 1 - CES) 4) Develop the plan to train national trainers 5) Train national trainers
<b>National trainers conduct cascade trainings to train regional trainers</b>	2019	+	+++	MoH, MoA	- Train 4 trainers in each oblast and city of central subordination: <ul style="list-style-type: none"> <li>• Epidemiologist</li> <li>• Veterinary epidemiologist</li> </ul>

					<ul style="list-style-type: none"> <li>Laboratory specialist of remote offices of National Center of Expertise</li> <li>Veterinary laboratory specialist</li> </ul> <p>- Issue joint legal order to conduct the trainings (incl. training plan, curriculum, list of participants)</p> <p>- Conduct trainings and issue training certificates</p>
<b>Regional trainers conduct regular trainings at the local level</b>	2019	+	+++	Committee of Public Health (CPH), Committee of Veterinary Control and Surveillance (CVCS)	<p>- Coordinate regular trainings with post-graduate education system</p> <p>- Issue joint legal order to conduct the trainings (incl. training plan, curriculum, list of participants)</p> <p>- Conduct trainings and issue training certificates</p>
<b>Objective 3: Improve human resource capacity for lab diagnostics of zoonoses</b>					
<b>Train specialists of Kazakhstan reference laboratories on diagnostics of priority zoonoses in the International Reference Laboratories</b>	2019	+	+++	MoH, MoA	<p>- 6 specialists (3 - MoH, 3 - MoA)</p> <p>- Priority areas:</p> <ul style="list-style-type: none"> <li>External quality assurance</li> <li>Biosafety and biosecurity</li> <li>AMR</li> <li>Food safety</li> </ul> <p>- Specialists: bacteriologists, virologists, toxicologists, radiologists, serologists, food safety specialists</p>
<b>COORDINATION AT HIGH, TECHNICAL, AND LOCAL LEVELS</b>					
<b>Objective 4: Develop functional system of intersectoral collaboration</b>					
<b>Develop legislation to enable intersectoral collaboration of national and regional coordinators in the field of zoonoses control</b>	2019	+	++	MoH, MoA	<p>- Define the structure and content of the legislative act</p> <p>- Approve by the joint legal order issued by MoA and MoH</p>
<b>Nominate two regional coordinators on zoonoses control in each oblast</b>	November 2019	+	++	MoH, MoA	<p>- Deputy heads of oblast Public Health and VS authorities could be nominated as coordinators</p> <p>- Nominate by the legal order of the respective Public Health/VS authority in each oblast</p> <p>- 34 regional coordinators</p>

<b>Develop joint SOPs for the national and regional coordinators on control measures related to zoonoses and coordination of technical experts</b>	November 2019	+	++	National coordinators	<ul style="list-style-type: none"> <li>- Study existing international and national experience (existing SOPs)</li> <li>- Develop and approve SOPs by national coordinators</li> <li>- Implement SOPs at all levels</li> </ul>
<b>Train national and regional coordinators on control of zoonoses</b>	2019	+	++	MoH, MoA	<ul style="list-style-type: none"> <li>- Develop and approve the curriculum program</li> <li>- Involve international organizations (WHO, CDC, OIE) in organization of and carrying out of training</li> </ul>
<b>Establish the group of technical experts on control of zoonoses, food safety, and emergency response at the regional level</b>	2019	+	++	Regional authorities of MoA, MoH, CES, Ministry of Internal Affairs (MIA)	<ul style="list-style-type: none"> <li>- Define the group members from different authorities: <ul style="list-style-type: none"> <li>• Local authorities – 2</li> <li>• VS – 2</li> <li>• Public Health – 2</li> <li>• VS laboratories – 4</li> <li>• PH laboratories – 4</li> <li>• CES – 2</li> <li>• MIA – 2</li> </ul> </li> <li>- Develop the joint action plan</li> <li>- Issue the legal act of the oblast local authorities (Akimat) on establishment of the group</li> <li>- Define periodicity of meetings – twice a year in peace time, and per emergency situation</li> </ul>
<b>Objective 5: Develop legislation on intersectoral collaboration</b>					
<b>Sign Memorandum of Understanding between MoA and MoH on control of zoonoses, food safety, and response onto the biological, chemical, and radiation emergencies</b>	1 quarter 2019	+	++	MoA, MoH	<ul style="list-style-type: none"> <li>- Define persons in MoH and MoA responsible for preparation of the MoU</li> <li>- Develop draft MoU</li> <li>- Discuss draft MoU</li> <li>- Sign MoU</li> </ul>
<b>Enact legislation on coordination of Medical and Veterinary Services in the context of One Health</b>	November 2020	+	+++	MoA, MoH	<ul style="list-style-type: none"> <li>- Establish joint group by MoH and MoA joint order</li> <li>- Evaluation of the existing legislation</li> <li>- Develop a roadmap to prepare the new law</li> <li>- Coordinate the draft with all stakeholders incl. NGOs and state bodies</li> </ul>

					<ul style="list-style-type: none"> <li>- Publish the draft in media and conduct public hearings</li> <li>- Forward consensus draft to the Mazhilis of the Parliament</li> <li>- Forward for official signing</li> </ul>
<b>RESPONSE AND EMERGENCY FUNDING</b>					
<b>Objective 6: Enable timely response with a joint emergency funding</b>					
<b>Establish joint Emergency Fund</b>	2019	+++	+++	MoH, MoA, Ministry of Finance (MoF), Ministry of Economy (MoE)	<ul style="list-style-type: none"> <li>- Develop regulation on the Emergency Fund, including algorithm of the interactions of all stakeholder sectors</li> <li>- Agree and endorse by the joint order of MoH, MoA, MoF, MoE</li> </ul>
<b>Objective 7: Set up an operational system for joint response</b>					
<b>Establish intersectoral expert working group to develop the joint emergency response system</b>	2019	+	+++	MoH, MoA	<ul style="list-style-type: none"> <li>- Nominate experts from both sectors</li> <li>- Develop concept note for working group</li> <li>- Develop ToRs for working group members</li> <li>- Agree and issue a joint order to establish the group</li> </ul>
<b>Develop the joint strategy for biological emergency response</b>	2019	+	+++	MoH, MoA	<ul style="list-style-type: none"> <li>- Develop the joint concept</li> <li>- Develop the draft strategy</li> <li>- Agree between sectors</li> <li>- Endorse by the joint order</li> </ul>
<b>Develop joint action plans on priority zoonoses within the framework of the joint strategy</b>	2019	+	+++	MoH, MoA	<ul style="list-style-type: none"> <li>- Priority zoonoses: <ul style="list-style-type: none"> <li>• Anthrax</li> <li>• Brucellosis</li> <li>• Rabies</li> <li>• Avian flu</li> </ul> </li> <li>- Draft the plans</li> <li>- Develop the budget for each plan</li> <li>- Agree the action plans between sectors</li> <li>- Endorse by joint orders</li> </ul>
<b>Develop joint SOPs and ToRs for joint action plans</b>	2019	+	+++	MoH, MoA	<ul style="list-style-type: none"> <li>- Develop ToRs for all personnel mentioned in the action plans</li> </ul>

					- Develop detailed SOPs for each action plan, including for sampling, transportation, receiving, storage of diagnostic samples, biosafety and biosecurity, etc.
<b>Objective 8: Test and improve functionality of the joint response system</b>					
<b>Conduct joint table top exercises (TTXs)</b>	2019	++	+++	MoH, MoA	<ul style="list-style-type: none"> <li>- To test and identify gaps and improve joint action plans on priority zoonoses</li> <li>- Conduct TTX on each joint action plan</li> <li>- Develop scenarios</li> <li>- Prepare the budget and identify number of participants for each TTX</li> <li>- Involve international experts to help in organization and delivery of TTXs</li> </ul>
<b>Conduct joint functional exercises</b>	2020	+++	+++	MoH, MoA	<ul style="list-style-type: none"> <li>- To train specific functions (fragments) of the joint action plans on priority zoonoses and improve identified gaps</li> <li>- Conduct exercises on each joint action plan</li> <li>- Prepare the budget and identify number of participants for each exercise</li> <li>- Involve international experts to help in organization and delivery of exercises</li> </ul>
<b>Conduct joint full-scale simulation exercises</b>	2020	+++	+++	MoH, MoA	<ul style="list-style-type: none"> <li>- To test in reality, identify gaps and improve the joint action plans on priority zoonoses</li> <li>- Conduct exercises on each joint action plan</li> <li>- Develop scenarios</li> <li>- Prepare the budget and identify number of participants for each exercise incl. epidemiologists, laboratory specialists, human and animal epidemiologists</li> <li>- Involve international experts to help in organization and delivery of exercises</li> </ul>

<b>Conduct joint meeting on emergencies at the national level to validate and test the functionality of the joint response system</b>	2019	++	+++	MoH, MoA	<ul style="list-style-type: none"> <li>- Annually</li> <li>- Number of participants – around 100</li> <li>- Physical meetings and teleconferences for specialists from regions</li> <li>- Goal of the meetings – analysis of the functionality of joint response system, assessment of how effective and coordinated were the actions of two sectors</li> </ul>
<b>RISK COMMUNICATION</b>					
<b>Objective 9: Establish joint operational system of risk communication</b>					
<b>Nominate persons responsible for joint risk communication in each sector</b>	January 2019	+	+++	CPH, CVCS	<ul style="list-style-type: none"> <li>- Develop ToRs</li> <li>- Agree and endorse by joint order</li> </ul>
<b>Develop SOPs for risk communication</b>	April 2019	+	+++	CPH, CVCS	<ul style="list-style-type: none"> <li>- Meeting of representatives of CPH and CVCS to define SOPs and schedule of their development</li> <li>- Develop and agree SOPs</li> <li>- Endorse SOPs by joint legal order</li> <li>- Train specialists of CPH and CVCS on SOPs</li> </ul>
<b>Train the trainers on risk communication and conduct subsequent cascade trainings for specialists in regions</b>	April 2019	+	+++	MoH, MoA	<ul style="list-style-type: none"> <li>- By joint order, nominate candidates from MoH and MoA to train trainers and approve the training schedule</li> <li>- Train national trainers</li> <li>- Define target groups, training schedule and conduct cascade trainings at local level</li> </ul>
<b>Objective 10: Establish joint operational system of communication with general public</b>					
<b>Develop joint communication strategies</b>	July 2019	+	+++	CPH, CVCS	<ul style="list-style-type: none"> <li>- To coordinate information share for general public and to exclude contradictory messages</li> <li>- Develop strategies including:</li> <li>- Define target audiences</li> <li>- Develop joint messages</li> <li>- Design information materials</li> <li>- Define communication channels</li> </ul>

<b>Develop and release joint awareness materials for general public for prophylaxis and prevention of zoonoses</b>	July 2019	+++	+++	CPH, CVCS, Ministry of Information and Communication (MIC)	<ul style="list-style-type: none"> <li>- Clear information strategy and its funding with all involved stakeholders</li> <li>- Define target groups</li> <li>- Develop messages</li> <li>- Develop information materials including audio, video, infographics for each zoonosis</li> <li>- Implement strategies</li> </ul>
<b>Establish joint call-center for information sharing with the general public</b>	April 2019	++	+++	CPH, CVCS	<ul style="list-style-type: none"> <li>- Agree regulation on the establishment and functioning of the joint call-center and endorse it by the joint order</li> <li>- Set-up unified multichannel number for phone and internet connection</li> <li>- Prepare standard messages</li> <li>- Inform publics about the joint call-center</li> </ul>
<b>Sign the Memorandum with mobile operators to inform general publics by SMS about emergencies</b>	March 2019	++	+++	CPH, CVCS, MIC	<ul style="list-style-type: none"> <li>- Prepare the draft Memorandum on information share by CPH specialists</li> <li>- Agree and sign the Memorandum with CVCS and MIC</li> <li>- Inform subordinate bodies of all organizations about Memorandum</li> <li>- Nominate responsible persons from all committees on the national level and in each region in accordance with developed SOPs</li> </ul>

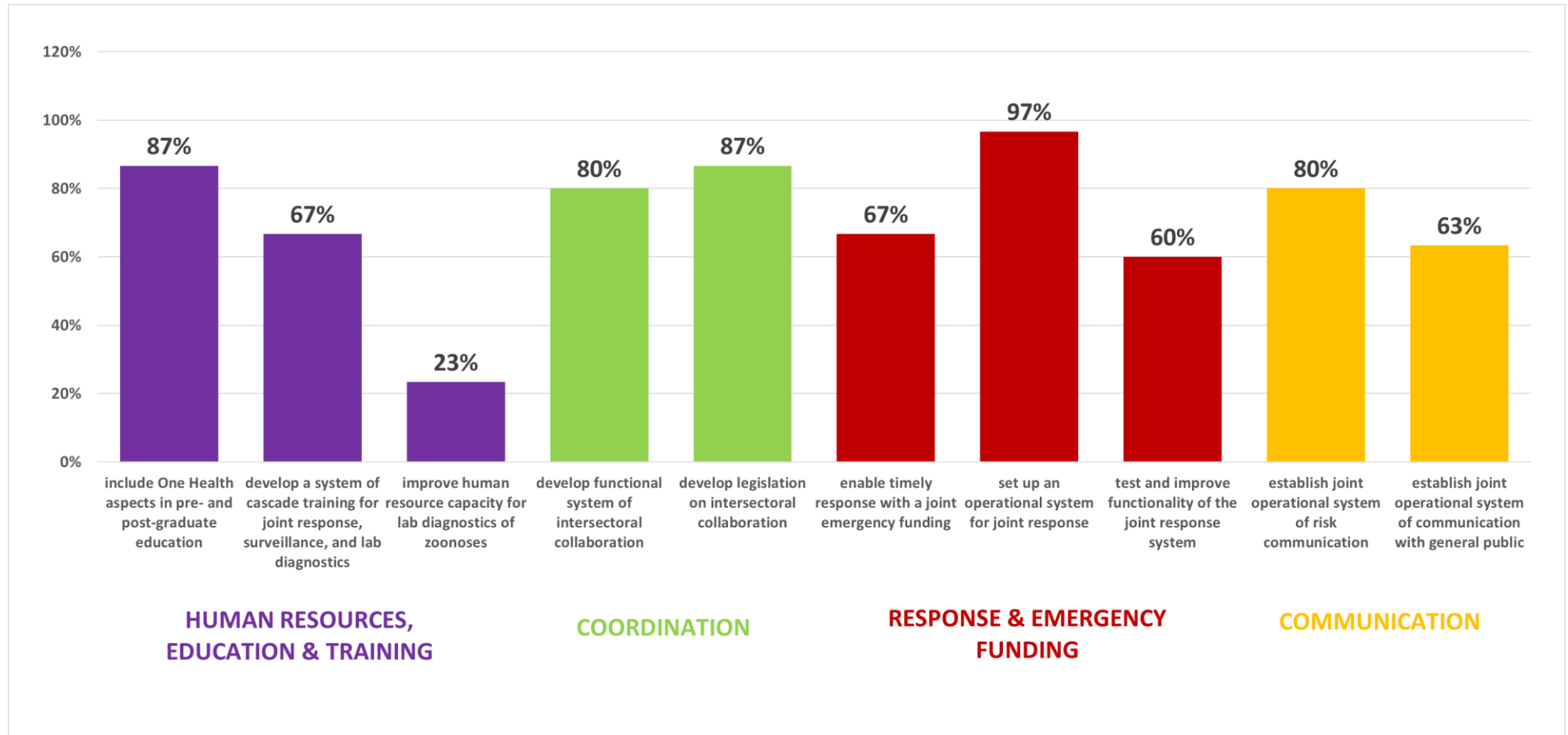
**Difficulty of implementation:** Low +, Moderate ++, Very difficult +++

**Impact:** Low impact +, Moderate impact ++, High impact +++



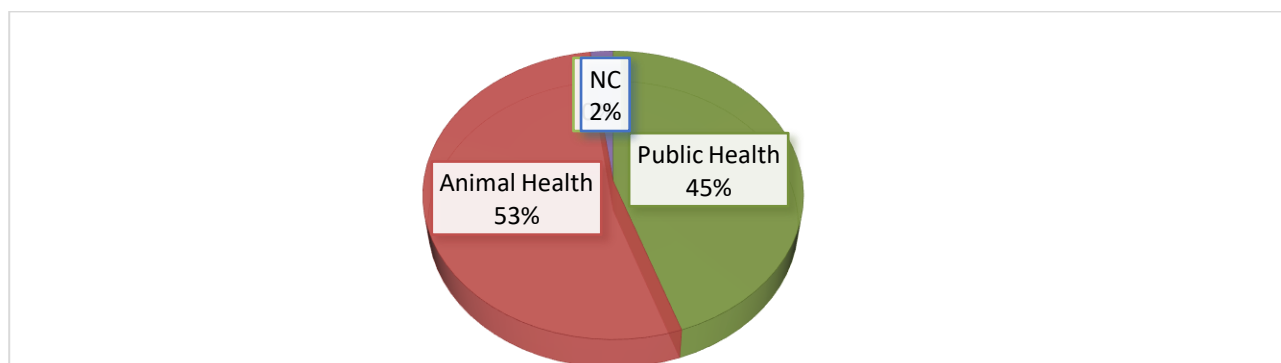
## OUTPUT 3: PRIORITIZATION RESULTS

All participants were asked to vote individually via sticking green stickers onto the objective cards to select which of the five identified objectives they considered as of the highest priority. Participants gave the top priority to the goals of the foundational and systemic nature, such as establishment of the joint response system, system of intersectoral collaboration, and even more long-term fundamental goals such as legislation enforcing the intersectoral collaboration, pre- and post-graduation education.



## WORKSHOP EVALUATION

An evaluation questionnaire was completed by 47 participants (Figure 8) in order to collect feedback on the relevance and utility of the workshop. Overall, the participants valued the workshop as very good and worth for recommendation for other countries. All workshop components such as the content, format, facilitation, and organization gained very high scores.



*Figure 8: Answers to the question "which sector are you from?" (47 respondents)*

*Tables 2-5: Results of the evaluation of the event by participants (47 respondents)*

Workshop evaluation	'Satisfied' or 'Fully satisfied'	Average score (/4)
<b>Overall assessment</b>	100%	3.9
Content	100%	3.9
Structure / Format	100%	3.8
Facilitators	100%	3.9
Organization (venue, logistics, ...)	100%	3.9

*Participants had to choose between 1=Highly unsatisfied – 2=Unsatisfied – 3=Satisfied – 4=Highly satisfied*

Impact of the workshop on...	'Significant' or 'Major'	Average score (/4)
Your technical skills / knowledge	98%	3.5
The work of your unit/department	100%	3.7
The intersectoral collaboration in Kazakhstan	91%	3.3

*Participants had to choose between 1=No impact at all – 2=Minor impact – 3=Significant impact – 4=Major impact*

Average score for each session (/4)						
Session 1	Session 2	Session 3	Session 4	Session 5	Session 6	Session 7
3.8	3.7	3.7	3.6	3.7	3.9	3.8

Would you recommend this workshop to other countries?	
Absolutely	81%
Probably	13%
Likely not	0%
--No	0%

## APPENDIX

### ANNEX 1: WORKSHOP AGENDA

DAY 1 - Tuesday, 21 November 2018	
08:30 - 09:15	Registration of participants
09:15 - 10:00	<p><b><u>Opening Ceremony</u></b></p> <ul style="list-style-type: none"> <li>Deputy Director of the Department of Public Health Policy of MOH of Republic of Kazakhstan - Dr Achmetova Zaure Dalelovna</li> <li>Head of Department of organization of veterinary activities of the Committee on Veterinary Service of the Ministry of Agriculture of Republic of Kazakhstan - Dr Eshmuchambetov Amangeldy Enberenovich</li> <li>Head of OIE Central Asia Sub-Regional Office - Dr Mereke Taitubayev</li> </ul>
	Introductions of participants - All
	Group Photo – All
10:00 - 10:20	Tea break – All
10:20 - 12:00	<p><b><u>Session 1: Workshop Objectives and National Perspectives</u></b></p> <ul style="list-style-type: none"> <li>MOVIE 1: Tripartite One Health collaboration and vision (15')</li> <li>Veterinary Services and One Health – PPT (15')</li> <li>Public Health Services and One Health – PPT (15')</li> <li>One Health Coordination Desk PMO – PPT (15')</li> <li>Workshop approach and methodology – PPT (15')</li> <li>MOVIE 2: Driving successful interactions - Movie (25')</li> </ul>
	<b>Lunch (12:00-13:30)</b>
13:00 - 17:00	<p><b><u>Session 2: Navigating the road to One Health</u></b></p> <ul style="list-style-type: none"> <li>Presentation and organization of the working group exercise – PPT (15')</li> <li>Case study - Working groups by disease (120')</li> <li>Tea/Coffee break (15')</li> <li>Restitution (75')</li> </ul>

<b>DAY 2 - Wednesday, 22 November 2018</b>	
09:00 - 9:15	Feedback from day 1
09:15 - 12:00	<b><u>Session 3: Bridges along the road to One Health</u></b>
	<ul style="list-style-type: none"> <li>• MOVIE 3: IHR Monitoring and Evaluation Framework (25')</li> <li>• MOVIE 4: PVS Pathway (25')</li> <li>• MOVIE 5: IHR-PVS Bridging (10')</li> <li>Tea/Coffee break (15')</li> <li>• Mapping gaps on the IHR/PVS matrix (45')</li> <li>• Discussion – Plenary (30')</li> </ul>
<b>Lunch (12:00-13:00)</b>	
13:30 - 13:40	Greetings from Head of WHO Country Office in Kazakhstan - Dr. Oleg Chestnov (10')
13:40 - 15:00	<b><u>Session 4: Crossroads - IHR MEF, JEE and PVS Pathway reports</u></b>
	<ul style="list-style-type: none"> <li>• Presentation and organization of the working group exercise (15')</li> <li>• Extract main gaps and recommendations from the PVS and IHR reports (including the JEE), in relation to gaps identified on the matrix (90')</li> <li>Tea/Coffee break (15')</li> </ul>
15:00 - 17:15	<b><u>Session 5: Road planning</u></b>
	<ul style="list-style-type: none"> <li>• Presentation and organization of the working group exercise (15')</li> <li>• Objectives and Activities (Working groups by technical topic) (120')</li> </ul>

<b>DAY 3 - Thursday, 23 November 2018</b>	
09:00 - 9:15	Feedback from day 2
9:15 - 12:15	<b><u>Session 6: Fine-tuning the roadmap</u></b>
	<ul style="list-style-type: none"> <li>• Fine-tuning of activities (60')</li> <li>• World Café (90')</li> <li>Tea/Coffee break (15')</li> <li>• Plenary discussion on the Roadmap (60')</li> <li>• Presentation of the prioritization vote tool (10')</li> <li>• Prioritization vote (60')</li> </ul>
<b>Lunch (12:15-13:30)</b>	
13:30 - 15:30	<b><u>Session 7: Way forward</u></b>
	<ul style="list-style-type: none"> <li>• Results of the prioritization vote (15')</li> <li>• Integrating the action points into the IHR-MEF process (30')</li> <li>• Next steps (75') (lead by Ministry representatives)</li> </ul>
15:30 - 16:30	<b><u>Closing Session</u></b>
	<ul style="list-style-type: none"> <li>• Movie of the workshop (10')</li> <li>• Evaluation of the workshop (20')</li> <li>• Closing ceremony (40')</li> </ul>

## APPENDIX

### ANNEX 2: LIST OF PARTICIPANTS

<b>Public Health Sector</b>			
1	<b>Achmetova Zaure Dalelovna</b> Deputy Director of the Department on Public Health Policy <a href="mailto:z.akhmetova@mz.gov.kz">z.akhmetova@mz.gov.kz</a> 87789010085	2	<b>Toleubayeva Asem Batyrbekovna</b> Head of the Infection Control Department of Akmola oblast 87172317139 pa6 87713134379 <a href="mailto:epidakmola@mz.gov.kz">epidakmola@mz.gov.kz</a>
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30	<b>Sbanov Nurlan Bekbosynovich,</b> Deputy Director of the Veterinary Laboratory	31	<b>Kamsayev Erbol Muchametzhanovich,</b> Head of the Department on food safety of the Veterinary Laboratory

32	<b>Omarova Aigul Serikpayevna,</b> Head of the Reference Laboratory "Food safety analysis"	33	<b>Toishibekova Galiya Konyspaevna,</b> Specialist of the Reference Laboratory "Diagnostics of infectious diseases"
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