National and regional strategies to strengthen legislation on biosafety and biosecurity in Central Asia

Final Report
prepared by the Verification Research, Training and Information Centre (VERTIC)

The following report was produced as part of the European Union Centres of Excellence (CoE) Initiative Project 53 “Strengthening the National Legal Framework and Provision of Specialized Training on Bio-Safety and Bio-Security in Central Asian Countries”.
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<td>BWC:</td>
<td>Biological and Toxin Weapons Convention</td>
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<td>BWC ISU:</td>
<td>Biological and Toxin Weapons Convention Implementation Support Unit</td>
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<td>CAP:</td>
<td>Common Alerting Protocol</td>
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<tr>
<td>CBRNE:</td>
<td>Chemical, Biological, Radioactive, Nuclear, Explosive</td>
</tr>
<tr>
<td>CIMIC:</td>
<td>Civil Military Cooperation</td>
</tr>
<tr>
<td>EU CBRN CoE:</td>
<td>European Union Chemical, Biological, Radioactive and Nuclear Centres of Excellence</td>
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<td>FAO:</td>
<td>Food and Agriculture Organisation</td>
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<tr>
<td>IHR:</td>
<td>International Health Regulations</td>
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<tr>
<td>JEE Report:</td>
<td>Join External Evaluation Report conducted for some states by the WHO</td>
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<td>NFP:</td>
<td>National Focal Point</td>
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<td>TE:</td>
<td>Technical Expert</td>
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<td>TNE:</td>
<td>Team of National Experts</td>
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<td>VERTIC:</td>
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<td>WHO:</td>
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Introduction

EU CBRN CoE Project 53

The European Union Chemical, Biological, Radiological and Nuclear Risk Mitigation Centres of Excellence Initiative (EU CBRN CoE) aims to strengthen regional security to address the risks posed by CBRN materials. Its projects focus on legal, regulatory, enforcement and technical issues in 59 partner countries to strengthen their institutional capacity in CBRN risk mitigation.

EU CBRN CoE Project 53 (Project 53) was designed specifically to improve biosafety and biosecurity in Central Asia. Biosafety engages containment principles, technologies and practices, which are implemented to prevent unintentional exposure to biological agents and toxins, or their accidental release. Biosecurity focuses on measures designed to prevent the loss, theft, misuse, diversion or intentional release of biological agents and toxins.

Central Asia is a high-risk region for epidemics and pandemics of disease. This is due to the particular vulnerability in parts of the region to natural hazards, including droughts, earthquakes, river floods and landslides, as well as security challenges arising from poor sanitation and waste management systems, limited institutional and laboratory infrastructure, insufficient financial resources and the threat of terrorism. For example, in the past decade Central Asia was impacted by the highly contagious viral diseases Crimean-Congo Haemorrhagic Fever and Foot and Mouth Disease. Regional instability, including border issues, can also heighten CBRN concerns as there is potential for a ‘spill over’ of unrest and an increased risk of terrorism.

Project 53 addresses the spread of transboundary pests and diseases, whether caused naturally, accidentally or deliberately, as well as human, animal and plant health and food safety. It includes seven work packages implemented by a consortium, comprising of the International Science and Technology Center, Sustainable Criminal Justice Solutions, Public Health England, the Netherlands National Institute for Public Health and the Environment, and the Verification Research, Training and Information Centre (VERTIC). The partner countries include the Islamic Republic of Afghanistan, the Republic of Kazakhstan, the Kyrgyz Republic, Mongolia, the Islamic Republic of Pakistan, the Republic of Tajikistan, and the Republic of Uzbekistan. The objectives of the project are: to raise awareness of biosafety and biosecurity issues with national stakeholders, to stimulate regional cooperation on relevant issues, to support specialised training to international standards, and to assist partner countries in realising their international obligations in this field.

Work Package 1: Assessment and revision of national legislation on biosafety and biosecurity

Work Package 1 (WP 1) of Project 53 is led by VERTIC. It facilitates national implementation of international instruments on biosafety and biosecurity, including the Biological and Toxin Weapons Convention 1972 (BWC), the World Health

Organisation’s (WHO) International Health Regulations 2005 (IHR) and Codex Alimentarius (Codex), with the aim of coming to a ‘One Health’ system.

The BWC aims to exclude completely the possibility of biological agents and toxins being used as weapons. It prohibits the development, production, acquisition, transfer, retention and stockpiling of biological agents and toxins that have no justification for prophylactic, protective or other peaceful purposes. Whilst it is not explicit in the Convention text, there is an understanding between the States Parties that the use of biological and toxin weapons is also prohibited.

The IHR aim to prevent, protect against, control and provide a public health response to the international spread of disease. They define the rights and obligations of states to report public health events regardless of whether their origin is natural, accidental or deliberate.

The Codex Alimentarius is a collection of international food standards, guidelines and codes of practice presented in a uniform manner, with the aim of protecting consumer health and ensuring fair practices in the food trade. Codex Alimentarius is not legally binding and is a compilation of recommendations for voluntary application by states. However, it forms part of the international standards, guidelines and recommendations on which members of the World Trade Organisation must base their sanitary or phytosanitary measures, including those related to food safety.

Through enhancing biosafety and biosecurity, these three instruments contribute to the implementation of the One Health Initiative. The One Health Initiative is a global strategy to improve health and wellbeing for humans, animals and the environment. Its approach involves expanding interdisciplinary collaborations and communications between physicians, osteopathic physicians, veterinarians, dentists, nurses and other scientific-health and environmentally related disciplines worldwide. The three international instruments employed in WP 1 embrace the One Health approach by addressing different aspects of biosafety and biosecurity to protect humans, animals and plants. For example, the BWC gives effect to biosafety by requiring a range of preventative measures to account for, secure and physically protect biological agents and toxins, as well as measures to control transfers. These measures also strengthen biosecurity by preventing the loss, theft, misuse, diversion or intentional release of such substances. The BWC further strengthens biosecurity by obliging states to implement offences and penalties addressing the misuse of biological agents and toxins, and accompanying enforcement provisions. The IHR focus on the global response to both biosafety and biosecurity risks. They require states to assess events that may constitute a public health emergency and notify the WHO if they are of international concern, and to implement health measures to prevent the international spread of disease at points of entry. The Codex Alimentarius engages biosafety principles by protecting trans-boundary consumer health. It addresses issues such as contaminants, antimicrobial resistance, nutrition, pesticides, biotechnology and animal feed quality in trade.

Work Package 1 involves identifying and analysing gaps in national laws and regulations in relation to these international instruments, and formulating recommendations for each country to achieve comprehensive domestic

http://www.onehealthinitiative.com/
implementation. The methodology employed in Work Package 1 is well-established by VERTIC with proven effectiveness. Legislative gap analysis tools developed by VERTIC, in the form of surveys and matrices, enable a systematic and comprehensive review of existing legislation and regulatory measures and identify gaps and areas that require strengthening. It was important that the tools were complementary to and did not duplicate existing tools developed by other organisations such as WHO and FAO.3

VERTIC's pre-existing legislation survey for the BWC provided a benchmark for the development of other tools, including a survey for the IHR and a matrix for Codex Alimentarius. When compiling a legislation survey, the text of any legislative or regulatory provision which may fulfil an implementation criterion is copied into the appropriate cell, referencing the relevant source. A survey overview accompanies the survey. The overview lists the laws reviewed in the survey, additional laws that could be added to complete the survey, and a summary of the survey with recommendations for strengthening the state’s legislative framework. It was decided that a matrix, rather than a survey, would be utilised for Codex Alimentarius given the sheer volume of the Codex Alimentarius rules. In the matrix model, the relevant laws and regulations are simply referenced in each cell, rather than the full text of each provision. This has the same effect as a survey of identifying relevant laws, whilst ensuring the content is manageable and user-friendly. An overview similarly accompanies the matrix.

In order to implement Project 53, consortium members were required to identify and select national experts to create a Team of National Experts (TNE) in each partner country. They liaised with the EU CBRN CoE National Focal Points (NFP) from each partner country, who then liaised with Member Associations of the International Federation of Biosafety Associations, National Contact Points for the BWC, NFPs for the IHR, and Codex Contact Points to identify national experts in biosafety, biosecurity and biorisk management. The TNEs generally include government representatives from ministries of health, education, security, defence or agriculture, amongst others, as well as lawyers and legislative drafters who would be involved in WP 1. It was envisaged that a cross-section of expertise would facilitate the implementation of the complex, cross-sectorial international instruments under WP 1. The TNEs, and in particular the legal experts, were largely responsible for conducting the research and collating relevant legislation and regulations for the surveys and matrices and their corresponding overview. These surveys and matrices were then shared with VERTIC for feedback. VERTIC provided ongoing advice to the TNEs throughout this process. Although the analyses were considered confidential, partner countries were encouraged to discuss their findings with other states and relevant organisations in the interests of international and regional cooperation to tackle CBRN issues. Some states shared their experiences of implementation at conferences such as the WHO Technical Consultation on National Cross-sectoral Collaboration between Security and Health Sectors in Hong Kong, China in December 2018, the Biosafety Association of Central Asia and the Caucasus (BACAC) meeting in Tashkent, Uzbekistan in March 2019, and at regional workshops such as in Almaty, Kazakhstan in October 2018.

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Objective of the report

The objective of this report is to develop national and regional strategies for legislative improvement in the area of biosafety and biosecurity in Central Asia. The report encourages partner countries to continue their implementation progress through providing country-specific advice on how to proceed with legal drafting, a strategy for inter-agency cooperation and an ‘Action Plan’ of activities and delegated responsibilities for legislative drafting, review and adoption. In particular, it considers whether more effective implementation of international instruments on biosafety and biosecurity in each partner country would be best achieved through amendment to existing legislation and regulations or the creation of completely new laws. The report further promotes regional cooperation to achieve legislative harmonisation among the partner countries, recognising the necessity of multi-state collaboration to tackle issues of a transboundary nature.

Methodology of the report

The report is informed by the outcomes of the legislation surveys and matrices and the accompanying overviews completed under EU CBRN CoE Project 53 WP 1. Feedback from national and regional workshops and direct country feedback are also taken into account. The report analyses the findings under WP 1 and proposes a national strategy for each partner country. It then considers the implementation trends in the region to propose a regional strategy to strengthen biosafety and biosecurity across Central Asia.

National Strategies

Afghanistan

Summary

The legislation survey for the BWC and the matrix for Codex Alimentarius were finalised for Afghanistan in early 2019. It was decided that no survey would be conducted for the IHR for reasons outlined below. The implementation of WP 1 was led by the TNE, which was established in February 2017. The TNE is comprised of representatives from the Ministry of Public Health, the Ministry of Agriculture Irrigation and Livestock, the Ministry of Foreign Affairs and the Afghanistan Atomic Energy High Commission. The research conducted under WP 1 indicates that Afghanistan’s implementation of international agreements on biosafety and biosecurity would be significantly strengthened by the enactment of Afghanistan’s Biological Weapons Convention Bill and the Veterinary Bill, as well as through amendments to existing legislation such as the Penal Code and the Food Safety Law. Afghanistan is also encouraged to continue its progress with IHR implementation standards.

Legal drafting

The BWC survey for Afghanistan analysed ten domestic laws, as well as the Draft Veterinary Diagnostic and Research Laboratory Regulation. It appears that there may be several other laws on subjects such as trade, transportation, public health and criminal procedure, as well as a Biological Weapons Convention Bill, that were not included in the survey. It is recommended that these laws be taken into account in future
legal drafting on biosafety and biosecurity. The crux of the recommendations in the survey overview is that the current gaps in the domestic law could be remedied through finalisation and implementation of the Biological Weapons Convention Bill.

Animal health laws include some of the definitions and preventative measures to account for, secure and physically protect biological agents and toxins as required under international law. However, these provisions are derived from the perspective of animal health legislation. It is recommended that they be further developed from the perspective of public health, biosecurity and biological weapons. Afghanistan’s veterinary and terrorism laws include some of the offences, penalties and alternative forms of liability required under the BWC. However, these are limited in their application and it is recommended that new offences, penalties and forms of liability for activities involving biological weapons be drafted to ensure effective implementation. The Penal Code and the Law on Combat Against Terrorist Offences establish most, but not all, of the required bases of jurisdiction. The survey overview further recommends that control lists for biological agents and toxins, as well as dual-use biological equipment and technology, be developed. More specific provisions on controlling transfers and enforcement measures are also recommended.

With regard to the IHR, in 2016 the World Health Organization compiled a Joint External Evaluation of IHR Core Capacities of the Islamic Republic of Afghanistan (‘JEE Report’). In light of this comprehensive analysis, it was decided that no IHR survey would be conducted for Afghanistan. The JEE Report noted that whilst Afghanistan had achieved “some remarkable results in several technical areas of IHR”, implementing legislation was lacking and no assessment had taken place to “identify needed laws and regulations or to adjust those existing to facilitate implementation of IHR.” The report concludes that the current legislation is “not sufficient to facilitate the full implementation of IHR”. Accordingly, an IHR survey may in fact complement the report and assist with the implementation process. The report identifies various laws that govern some of the IHR-related areas. These include the Animal Health Law and the Food Law, both of which appear to have been enacted since the report was released, indicating that Afghanistan has made steps towards more comprehensive implementation. The Environmental Law was also found to be relevant to implementation of the IHR. At the time of the report, the National IHR NFP had been designated but their functions were not yet in place. It is recommended that Afghanistan continue its progress towards full implementation of the IHR, utilising the JEE Report and creating an IHR survey to identify and remedy the current gaps.

Some of the Codex Alimentarius requirements are implemented through Afghanistan’s Food Safety Law and Regulation, as well as the Pesticides Law. The Draft Veterinary Law is also relevant to the Codex rules. The survey overview makes various recommendations to ensure more thorough domestic implementation of Codex, including incorporating the missing definitions, developing food-related offences, improving requirements for registration and licenses in relation to food safety, measures for inspections and investigations, strengthening of food hygiene requirements and commodity regulation. The survey overview recommends the adoption and implementation of the Draft Veterinary law. Review and amendment of the Food Safety

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Law and Regulation would further enhance Afghanistan’s implementation of Codex Alimentarius.

**Strategy for inter-agency cooperation**

The Ministry of Public Health and the Ministry of Agriculture, Irrigation and Livestock are involved in the implementation of both the BWC and Codex. For the BWC, the Ministry of Agriculture, Irrigation and Livestock has the power to issue operating licences for animal disease diagnostic laboratories, clinics and private animal hospitals. The Ministry of Finance is also empowered to issue licences for brokering. The Afghanistan Atomic Energy High Commission was competent for the BWC survey and the draft BWC Bill. In relation to Codex, the Ministry of Public Health and the Ministry of Agriculture have a Memorandum of Understanding regarding the National Codex Contact Point. The Ministry of Commerce and Industries is also invested in consumer protection.

In relation to the IHR, the JEE Report recognised the willingness of the Ministry of Public Health and the Ministry of Agriculture, Irrigation and Livestock to cooperate and develop capacity to adopt a one-health approach. The report also acknowledged the role played by emergency response bodies, including the Afghanistan National Disaster Management Authority and National Emergency Preparedness and Response Committees in the provinces. The report recommended as a top action priority to: “establish a national committee of legal advisors and public health officers representing all sectors relevant to IHR, including the IHR National Focal Point (NFP), to review national legislation, decrees, policies and administrative procedures to identify gaps and corrective measures to accelerate the implementation of IHR.”

**Proposed Action Plan**

Based on the findings from WP 1, the following ‘Action Plan’ is proposed to strengthen national implementation of international instruments on biosafety and biosecurity.

1. Creation of a coordination body on biosafety and biosecurity with representatives from the Ministry of Public Health, the Afghanistan Atomic Energy High Commission, the Ministry for Agriculture, Irrigation and Livestock, as well as legislative drafters.
2. Finalisation of the Biological Weapons Convention Bill, led by the Afghanistan Atomic Energy High Commission, in consultation with VERTIC.
4. Completion of the draft amendments for implementation of Codex Alimentarius, in consultation with legislative assistance providers like the FAO.
5. Submission of the draft amendments for implementation of Codex Alimentarius to Parliament.
6. Completion of the IHR legislation survey, utilising the JEE Report and taking into account updates to legislation since 2016, in consultation with the WHO and with support from VERTIC.
7. Drafting of necessary amendments to existing laws and creation of new laws to ensure full implementation of the IHR.
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<td>CBRN-NFP, Laboratory Consultant/Director, Epidemiologist: Ministry of Public Health</td>
<td>Ministry of Public Health</td>
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<td>representatives from the Ministry of Public Health, the Afghanistan</td>
<td>Deputy Director for Security, Directorate General Border Affairs &amp; Security: Ministry of</td>
<td>Ministry for Agriculture, Irrigation and Livestock</td>
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<td>Atomic Energy High Commission, the Ministry for Agriculture, Irrigation</td>
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<td>and Livestock, as well as legislative drafters.</td>
<td>Chemical and Biological Weapons Prohibition Supervisor: Afghanistan Atomic Energy High</td>
<td>Afghanistan Atomic Energy High Commission</td>
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<td>Completion of draft amendments for implementation of Codex Alimentarius,</td>
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<td>Ministry of Public Health</td>
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<td>in consultation with legislative assistance providers like the FAO.</td>
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<td>Ministry of Commerce and Industries</td>
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<td>Submission of the draft amendments for implementation of Codex Alimentarius to Parliament.</td>
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<td>Completion of the IHR legislation survey, utilising the JEE Report and</td>
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<td>and taking into account updates to legislation since 2016, in</td>
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<td>Ministry for Agriculture, Irrigation and Livestock</td>
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<td>consultation with the</td>
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WHO and with support from VERTIC.

Drafting of necessary amendments to existing laws and creation of new laws to ensure full implementation of the IHR.

Submission of amendments / bills to Parliament.

Ongoing monitoring of the effectiveness of biosafety and biosecurity laws in Afghanistan.

Afghanistan National Disaster Management Authority
National Emergency Preparedness and Response Committees
WHO
VERTIC

Kazakhstan

Summary

Legislation surveys for the BWC and IHR, the matrix for Codex Alimentarius, and the corresponding overviews were completed for Kazakhstan in December 2018. The legislative gap analysis was primarily conducted by Kazakhstan’s Technical Expert (TE). Relevant documents were translated into English and Russian. The analyses indicate that whilst Kazakhstan has laws addressing all three international instruments, there are gaps that need to be considered. Implementation can be strengthened through updating health, veterinary, food and criminal laws, and through the development of technical requirements for working with biological and toxic agents. The TE has begun drafting a law on biosafety and biosecurity to address some of these implementation gaps.

Legal drafting

The survey for the BWC analysed 58 different laws. It appears that the vast majority of the requirements of the BWC are addressed to some extent in national legislation. However, the survey also identifies various gaps in the current legislation for some definitions, offences, alternative liabilities and enforcement measures, as well as inadequate standards for biosecurity. In particular, the definition of ‘biological weapons’ needs to be developed, and acts of storing, transporting and constructing biological weapons, and participating in biological weapons-related offences need to be criminalised. The survey overview acknowledged a need for further harmonisation of national health regulations and animal health rules with international standards on biosafety and biosecurity. In particular, the relevant rules need to be mandatory, rather than advisory in nature. The survey overview further recognised a need to develop regulatory technical requirements to ensure the safety of persons working with biological agents.
The survey for the IHR identifies 47 relevant laws which can be amended and built upon to improve national implementation. The survey overview for the IHR provides thorough and targeted recommendations. Suggestions include amending the Code on the Health of People and the Health Care System, approving a draft plan for the implementation of IHR, developing and approving a draft order for a regulation on the IHR NFP, and amending orders for the Minister of Internal Affairs and the Minister of National Economy.

The matrix for Codex Alimentarius indicates that Kazakhstan has relatively comprehensive laws regarding food standards, with 51 different applicable laws. Nevertheless, taking into account the depth and extent of the Codex rules, legislative gaps remain. Gaps have been identified in relation to some definitions, food additives and risk control, standards of ethical conduct of international trade, low acid food, low moisture food and coffee. The survey overview recommends amendments to existing legislation including the Code on Public Health and the Healthcare System, the Law on Safety of Food Products, the Law on Civil Protection and the Technical Regulations to resolve these matters.

Kazakhstan is currently drafting a law on biosafety and biosecurity. The current proposal includes relevant definitions, prohibitions on activities involving biological weapons and unauthorised activities in relation to biological agents and toxins, an outline of the competence of authorised bodies in the field of the health and epidemiological welfare of the population, the creation of a Biological Safety Compliance Committee which monitors compliance with the requirements of biological safety and security, and biological safety requirements. This is a commendable step towards full and effective implementation, which should be guided by the results yielded under WP 1.

**Strategy for inter-agency cooperation**

An analysis of the legislation surveys for the BWC, IHR and Codex Alimentarius reveals that many government ministries are invested in biosafety and biosecurity issues in Kazakhstan. The Ministry of Health featured most frequently in all three surveys, having the authority to issue orders and supervise many aspects of biosafety and biosecurity in the country. The Ministries of Investments and Development, Agriculture, and National Economy had all issued orders in relation to matters within the scope of all three surveys. The Ministries of Transport and Communications, Education and Science, Defence, Internal Affairs, and Energy were also found to be relevant to biosafety and biosecurity issues. With no less than nine government department stakeholders, it is clear that inter-agency cooperation is necessary to comprehensively address biosafety and biosecurity international obligations in Kazakhstan. It is recommended that appropriate representatives from these ministries meet with legislative drafters on a regular basis to advance legislative and practical implementation.

Kazakhstan’s Biological Safety and Security Bill designates the Security Council as having the competence to coordinate the activities of state bodies and organisations for the implementation of measures related to biological safety and security and to organise control over the implementation of laws related to biological safety and security.
Proposed Action Plan

Based on the findings from WP 1, the following ‘Action Plan’ is proposed to strengthen national implementation of international instruments on biosafety and biosecurity.

1. Security Council to coordinate the completion of the draft law on biosafety and biosecurity, in consultation with the TE, relevant government ministries, legislative drafters and VERTIC.
2. Submission of Biosafety and Biosecurity Bill to Parliament.
3. Completion of draft amendments to ensure full implementation of the IHR, including amending the Code on the Health of People and the Health Care System, developing and approving a draft order for a regulation on the IHR NFP, and amending orders for the Minister of Internal Affairs and the Minister of National Economy.
4. Submission of drafts for implementation of the IHR to Parliament.
5. Completion of the draft amendments to existing legislation for implementation of Codex Alimentarius, in consultation with legislative assistance providers such as the FAO.
6. Submission of the draft amendments for implementation of Codex Alimentarius to Parliament.
7. Ongoing monitoring of biosafety and biosafety laws in Kazakhstan by the TE, with committee meetings being held where necessary.

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<th>Stakeholders</th>
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<td>biosafety and biosecurity, in consultation with the TE, relevant</td>
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<td>Submission of Biosafety and Biosecurity Bill to Parliament.</td>
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<td>Completion of draft amendments to ensure full implementation of the</td>
<td>VERTIC</td>
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<td>IHR, including amending the Code on the Health of People and the Health</td>
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<tr>
<td>Care System, developing and approving a draft order for a regulation on the IHR NFP, and amending orders for the Minister of Internal Affairs and the Minister of National Economy.</td>
<td>Ministry of Investments and Development, Ministry of National Economy, Ministry of Health, Ministry of Agriculture</td>
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<tr>
<td>Completion of the draft amendments to existing legislation for implementation of Codex Alimentarius, in consultation with legislative assistance providers like the FAO.</td>
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<tr>
<td>Ongoing monitoring of biosafety and biosafety laws in Kazakhstan by the TE, with committee being held meetings where necessary.</td>
<td>All of the above</td>
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</table>
**Kyrgyzstan**

**Summary**

The implementation of WP 1 for Kyrgyzstan was led by a private lawyer (‘the Consultant’), in consultation with the NFP for Project 53 from the Republican Centre of Quarantine and Especially Dangerous Infections Control. The Consultant engaged in frequent meetings with various stakeholders, such as the State Inspectorate for Veterinary and Phytosanitary Safety, representatives from the Ministry of Health including the Coordination Laboratory Council, the IHR NFP, and several delegates from the WHO. The surveys and matrix produced through WP 1 identify a number of areas where national laws on biosafety and biosecurity need strengthening. It is recommended that the Consultant be retained to lead the drafting of laws which remedy these gaps and specifically reflect the requirements of the three international instruments.

**Legal drafting**

The BWC survey identifies 37 different laws, codes, government decisions, instructions, rules, orders and guidelines which facilitate domestic implementation. Laws will need to be developed to include key definitions. Kyrgyzstan’s Criminal Code incorporates many of the offences, penalties, alternative forms of liability and jurisdictional bases associated with the misuse of biological weapons. It is recommended that the Criminal Code be amended to encompass the full scope of criminal liability, including the development and possession of biological weapons and the threatening, encouraging and ordering of offences involving biological weapons. Jurisdiction could also be extended on the basis of protection, passive personality and universality. Enforcement measures under the Criminal Procedure Code are comprehensive, with few gaps that may be addressed through amendments. Kyrgyzstan’s legislation includes control lists for dangerous biological agents and toxins, which will need to be amended to allow for updating of those lists. Further laws will also need to be developed to include preventative measures to account for, secure and physically protect biological agents. Current laws include an authorisation system for controlling transfers of dangerous biological agents and toxins, and intangible technology. It is recommended that these laws be developed to include a catch-all clause to encompass non-controlled items, specific trans-shipment measures and controls over the brokering of dangerous biological agents and toxins. Full and effective implementation of the BWC can be achieved through the adoption of specific biosafety and biosecurity laws as well as amendments to existing legislation under the Criminal Code and Criminal Procedure Code.

11 different laws, orders, regulations, rules, programmes and plans were considered during the preparation of the IHR survey. The survey indicates that implementation of the IHR in Kyrgyzstan is lacking, and the survey overview makes a variety of recommendations to ensure effective implementation. The roles and responsibilities in relation to IHR in Kyrgyzstan are spread across different bodies. It is suggested that these be coordinated and that the role of the National Coordinator be strengthened. The survey overview further proposes that Kyrgyzstan receive technical assistance to develop and implement the international regulatory framework in relation to IHR, including the formation of a unified methodological approach; assessment, analysis and discussion of national implementing legislation; development of legal, regulatory and
methodological frameworks for epidemiological surveillance of infectious diseases and health protection in the territory; development and adoption of laws regulating state bodies on IHR; and the structuring of a network of health and epidemiological surveillance institutions.

The Codex matrix identifies legislation which establishes the legal and organisational basis of relevant state bodies, departments and agencies and their rights and obligations. Kyrgyzstan’s Technical Regulations establish requirements for raw materials, finished products and production facilities, as well as market circulation rules and conformity assessments. However, the survey overview notes that Kyrgyzstan’s domestic law does not include governing standards for a number of matters included in the Codex rules, including requirements for production facilities, food derived from modern biotechnology and food irradiation, among others. The survey overview states that it is both necessary and important for Kyrgyzstan to adopt a ‘Law on Safety and Quality of Food Products’, which should contain provisions on quality and safety requirements in the manufacturing, packaging, labelling, storage and transportation of food products, the monitoring of quality and safety in food products, the government bodies responsible for decision-making in this field and the standards and recommendations of the Codex Alimentarius Commission. It is further recommended that the law address the examination, disposal or destruction of substandard and dangerous food products.

Strategy for inter-agency cooperation

Multiple ministries are engaged in the domestic implementation of the BWC, including the Ministries of Health; Environment and Emergencies; Transport and Communications; Defence; Foreign Affairs; Internal Affairs; Justice; Economic Development, Industry and Trade; and Agriculture, Water Management and Processing Industry.

The Ministry of Health is officially appointed as the NFP on IHR. The Regulation ‘On State Sanitary and Epidemiological Service of the Kyrgz Republic’ nominates the system of the State Sanitary and Epidemiological Service as being subordinated to the Ministry of Health and comprising of: the Department of State Sanitary and Epidemiological Surveillance of the Ministry of Health; the Ministry of Defence; the Ministry of Internal Affairs; the Scientific Production Association ‘Preventative Medicine’; the Republican Centre of Quarantine and Especially Dangerous Infections; the Republican Centre for Immunoprophylaxis; and centres for AIDS control. The Ministry of Transport and Communications and the State Customs Service are identified to run sanitary and quarantine stations. The Ministry of Ecology and Emergency Situations and the Ministry of Agriculture, Water Resources and Processing also play a role in the national health systems.

Similarly, departments in multiple government ministries have a vested interest in food safety laws, namely: the Ministry of Health’s Department of Disease Prevention and State Sanitary and Epidemiological Surveillance, the Ministry of Agriculture’s Department of Fisheries, the Ministry of Economy’s Department of Technical Regulation and Metrology and the Centre for Standardisation of Metrology, and the Ministry of Finance’s State Custom’s Inspectorate.

Considering the number and variety of ministries relevant to biosafety and biosecurity in Kyrgyzstan, it is preferable that their cooperation is coordinated through a central person like the NFP for Project 53. Kyrgyzstan has previously indicated an intention
for an interdepartmental working group to develop a draft law on biological safety and security.

**Proposed Action Plan**

Based on the findings from WP 1, the following ‘Action Plan’ is proposed to strengthen national implementation of international instruments on biosafety and biosecurity.

1. The Consultant, the NFP for Project 53, representatives from relevant ministries, legislative drafters and VERTIC, to coordinate the development of a new law on biosafety and biosecurity and the amendment of current laws.
2. Submission of the draft laws to Parliament.
3. The NFP for IHR, the Consultant and the NFP for Project 53 to coordinate the development of new legislation implementing the IHR, in consultation with representatives from relevant ministries, legislative drafters and VERTIC.
4. Submission of the draft law(s) to Parliament.
5. The Consultant, the NFP for Project 53 to coordinate the development of a draft law on Safety and Quality of Food Products, in consultation with representatives from relevant ministries, legislative drafters and the FAO.
6. Submission of the draft law to Parliament.

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<tr>
<th>Activity</th>
<th>Country point of contact</th>
<th>Stakeholders</th>
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<tr>
<td>Submission of the draft laws to Parliament.</td>
<td>NFP for Project 53</td>
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<tr>
<td>The NFP for IHR, the Consultant and the NFP for Project 53 to</td>
<td>NFP for IHR</td>
<td>Ministry of Health</td>
</tr>
</tbody>
</table>
| Coordinate the development of new legislation implementing the IHR, in consultation with representatives from relevant ministries, legislative drafters and VERTIC. | NFP for Project 53 | Department of State Sanitary and Epidemiological Surveillance  
Ministry of Defence  
Ministry of Internal Affairs  
Scientific Production Association ‘Preventative Medicine’  
Republican Centre of Quarantine and Especially Dangerous Infections  
Republican Centre for Immunoprophylaxis  
Centres for AIDS control.  
Ministry of Transport and Communications  
State Customs Service  
Ministry of Ecology and Emergency Situations  
Ministry of Agriculture, Water Resources and Processing |
| Submission of the draft law(s) to Parliament. | The Consultant | NFP for Project 53 in coordination with the Consultant | Ministry of Health’s Department of Disease Prevention and State Sanitary and Epidemiological Surveillance  
Ministry of Agriculture’s Department of Fisheries |
<p>| The Consultant, the NFP for Project 53 to coordinate the development of a draft law on Safety and Quality of Food Products, in consultation with representatives from relevant ministries, legislative drafters and the FAO. | | | |</p>
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<tr>
<th>Submission of the draft law to Parliament.</th>
<th>Ministry of Economy’s Department of Technical Regulation and Metrology Centre for Standardisation of Metrology Ministry of Finance’s State Customs Inspectorate</th>
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<tbody>
<tr>
<td>Ongoing monitoring of biosafety and biosecurity laws in Kyrgyzstan.</td>
<td>All of the above.</td>
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**Mongolia**

**Summary**

Mongolia’s TNE includes persons representing all ministries and agencies relevant to biosafety and biosecurity. The team also includes a number of lawyers. For activities under WP 1, the team was led by the country’s NFP for Project 53 and separate NFPs for the BWC, Codex and the IHR. In the continuation of implementation efforts, the TNE proposes to engage the pre-established National Committee for Biosafety, which is mandated to organise and manage biosafety in Mongolia. The surveys and matrix make recommendations to amend existing laws and adopt new laws to strengthen biosafety and biosecurity in the country.

**Legal drafting**

The survey for the BWC encompasses 34 different laws in Mongolia on a range of subjects, including quarantine, crime, labour safety and health, waste, environmental protection, emergencies, customs, terrorism, plants and animals. Although these laws make a contribution towards implementation of the obligations under the BWC, the survey overview proposes the development of a draft law on the control of biological agents and toxins to ensure comprehensive implementation. The draft law should include the definitions within the BWC, as the definitions in current legislation are restricted to the context of zoonotic diseases. Mongolia’s criminal and terrorism laws encompass offences, penalties and alternative liabilities for some of the prescribed activities under international law. However, some relevant activities are not included and the terrorism provisions are restricted specifically to acts of terrorism, which does not fully reflect the breadth of the BWC. It is therefore recommended that further criminal provisions be adopted for activities involving dangerous biological agents and toxins, including the transportation of such materials, the construction, acquisition or retention of facilities intended for their production, as well as activities involving the materials without authorisation. The modes of liability will also need to be expanded, and jurisdiction could be established on the basis of the universality principle and for situations when the victim is a national of Mongolia. Enforcement measures are substantially implemented through the Criminal Procedure Law and laws on intelligence gathering and disaster protection. The survey overview recommends...
supplementing these laws with measures to enable the surveillance of individuals suspected of misusing dangerous biological agents and for training of law enforcement. Furthermore, comprehensive measures to account for, secure and physically protect biological agents and toxins, including a national licencing authority, will need to be adopted in Mongolia’s law. Control measures for transfers of such materials will also need to be developed, along with a responsible authority for import and export.

The IHR survey overview makes a variety of recommendations to strengthen implementation of the IHR. It identifies 25 existing definitions out of the 53 required under the IHR, some of which will need to be amended to accurately reflect the IHR definitions. It suggests that the government approve a coordinating institution entitled to implement the IHR and manage relevant sectors. It further proposes implementing regulatory steps for informing, cooperating with, and seeking assistance from the WHO in case of an outbreak. The regulation of medical and hygiene measures for transport and associated fees would further improve Mongolia’s implementation of the IHR. Similarly, a law outlining the technical requirements pertaining to conveyances and conveyance operators is needed.

The matrix for Codex canvases 276 different instruments, including national programs, regulations, approved decisions and policies, procedures, guidelines, and standards. The matrix overview proposes amendments to five existing laws on food; food safety; standardisation, technical regulation and accreditation of conformity assessment; violation; and animal health. Amendments to national standards is also necessary to ensure their conformity with Codex. The overview further recommends adopting new laws on trade, inspection and biosafety.

**Strategy for inter-agency cooperation**

In the survey overview for the BWC, it is proposed that a group tasked with the establishment of a specialised legal framework on biosafety and biosecurity be established. There already exists a National Committee for Biosafety, operating under the State Administrative Central Organisation for Environmental Issues, which is mandated to organise and manage the biosafety of Mongolia. The survey overview proposes that the task group include members of the National Committee for Biosafety and relevant state institutions, which would include the Health Minister and State Administrative Central Organisations for agriculture, waste, nature and the environment, state secrets, science and technology, labour and occupational health, and emergency incidents. Interested members of the TNE and participation of the legal focal point for the BWC should also be considered. The TNE also acknowledged the importance of informing the National Security Council of efforts to strengthen biosafety and biosecurity legislation.

According to the 2011 Minister of Health Order No. 151, the National Centre for Communicable Diseases operates as the IHR coordinating body. In addition to the Minister of Health, the Minister of Road, Transport and Tourism; the Minister of Infrastructure and Development; the Minister of Agriculture; and the Minister of Labour feature in IHR-related laws.

As for the Codex Alimentarius, a National Codex Council, consisting of 20 members, was approved by order of the Minister of Food, Agriculture and Light Industry. The State Secretary of the Ministry of Food, Agriculture and Light Industry is the National Codex Coordinator. Other relevant Ministries include the Ministry of Health, the
Ministry of Justice and Internal Affairs and the Ministry of Labour. The State Administrative Central Body is in charge of food and is responsible for issuing licences on export and import and determining limits of contaminants and pesticide residue in foods. The General Agency for Special Inspection, the Mongolian Agency for Standardisation and Metrology, the Customs Office, the National Centre for Social Health, the National Centre for Communicable Diseases, the National Centre for Zoonotic Diseases, the Veterinary Institute, the National Reference Laboratory on Food Safety and the State Central Laboratory for Veterinary and Sanitation all have functions relevant to the implementation of Codex.

**Proposed Action Plan**

Based on the findings from WP 1, the following ‘Action Plan’ is proposed to strengthen national implementation of international instruments on biosafety and biosecurity.

1. Establishment of a group tasked with developing a specialised legal framework on biosafety and biosecurity, including representatives from the TNE, the National Committee for Biosafety, relevant state institutions and legislative drafters.
2. Development of a draft law on biological agents and toxins as well as necessary amendments to existing laws, in consultation with legislative assistance providers like VERTIC.
3. Submission of draft laws to Government.
4. The NFP for IHR to lead the drafting of amendments to existing laws and necessary new laws to implement the IHR, in consultation with the WHO, legislative drafters and relevant government departments.
5. Submission of drafts to Government.
6. The NFP for Codex to lead the drafting of amendments to existing laws and standards and the adoption of necessary new laws to implement Codex, in consultation with the National Codex Council, legislative drafters and relevant government departments, and with support from the FAO’s assistance programs.
7. Submission of draft laws to Government.
8. Ongoing monitoring of biosafety and biosecurity laws in Mongolia.

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<tr>
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<tr>
<td>Establishment of a group tasked with developing a specialised legal framework on biosafety and biosecurity, including representatives from the TNE, the National Committee for Biosafety, relevant state institutions and legislative drafters.</td>
<td>NFP for BWC National Biosafety Committee Project 53 NFP</td>
<td>Ministry of Health State Administrative Central Organisations for: agriculture, waste, nature and the environment, state secrets, science and technology, labour and occupational health and emergency incidents. VERTIC</td>
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<tr>
<td>Development of a draft law on biological agents and toxins as well as</td>
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necessary amendments to existing laws, in consultation with legislative assistance providers like VERTIC.

Submission of draft laws to Government.

The NFP for IHR to lead the drafting of amendments to existing laws and necessary new laws to implement the IHR, in consultation with the WHO, legislative drafters and relevant government departments.

Submission of draft laws to Government.

| NFP for IHR | National Centre for Communicable Diseases Project 53 NFP | Ministry of Health  
| Ministry of Road, Transport and Tourism  
| Ministry of Infrastructure and Development  
| Ministry of Agriculture  
| Ministry of Labour  
| WHO |

The NFP for Codex to lead the drafting of amendments to existing laws and standards and the adoption of necessary new laws to implement Codex, in consultation with the National Codex Council, legislative drafters and relevant government departments, and with support from the FAO’s assistance programs.

Submission of draft laws to Government.

| NFP for Codex | National Codex Coordinator  
| National Codex Council Project 53 NFP | Ministry of Food, Agriculture and Light Industry  
| Ministry of Health  
| Ministry of Justice and Internal Affairs  
| Ministry of Labour  
| State Administrative Central Body  
| General Agency for Special Inspection  
| The Mongolian Agency for Standardisation and Metrology  
| Customs Office  
| National Centre for Social Health  
| National Centre for Communicable Diseases  
| National Centre for Zoonotic Diseases |
Pakistan

Summary

Activities under WP 1 were overseen by representatives from Pakistan’s National Institute of Health. The surveys and matrix reveal that existing laws implement the international instruments to an extent, but indicate that further efforts will need to be undertaken to ensure comprehensive biosafety and biosecurity in the country. Progress in this regard is underway with a draft BWC Implementation Bill having been put before Pakistan’s federal cabinet. The adoption of a Food Safety Law and the strengthening and harmonisation of national laws implementing the IHR are also advised.

Legal drafting

37 different laws were analysed for Pakistan’s BWC survey. Importantly, the definition of ‘biological weapon’ is not included in the current legislation. Similarly, many of the offences, penalties and alternative forms of liability for unauthorised activities involving biological agents and toxins are missing or are too limited to satisfy implementation requirements. For example, the prohibition on the use of biological weapons under the Protection of Pakistan Act is limited to acts done, “with the purpose of waging war or insurrection against Pakistan or threatening the security of Pakistan.” It is recommended that any activity with biological weapons and any unauthorised activity involving biological agents and toxins be prohibited, regardless of the circumstances. Jurisdiction for offences has been established on the basis of territoriality and nationality, but could be extended into the other forms of extraterritorial jurisdiction based on residence, protection, passive personality and universality. The control lists of biological agents have been implemented. However, they will need to be extended to include related technology and to encompass control of all activities related to biosafety and biosecurity, rather than just transfer control. Other measures which will need to be implemented include legislation for laboratory biosafety and biosecurity and legislation to control the import of biological agents and toxins and related equipment. The requirements in relation to export control and enforcement measures are largely satisfied.
Notably, Pakistan has a BWC Implementation Bill, which has reportedly been finalised and is in the process of being approved by Pakistan’s federal cabinet. Although it did not form part of the survey, it is anticipated that the Bill will remedy some of the identified gaps. It is recommended that the Bill be analysed in relation to the survey and any remaining gaps be addressed in subsequent amendments.

The IHR survey for Pakistan was completed using information in its 2016 JEE Report and laws and regulations available in open sources. It is recommended that Pakistan’s national experts review the legislation survey and update it with laws and regulations that have not been identified. This will result in a comprehensive gap-analysis, which could guide the development of new legal provisions to fully implement the IHR. The survey acknowledges that numerous legal instruments, including regulations and administrative measures, provide a legal foundation for IHR implementation. It is proposed that these laws be updated and new legislation be introduced to fully reflect the updated 2005 IHR. Overall, Pakistan would benefit from the harmonisation of national, interprovincial and provincial laws, polices, and administrative arrangements, to coordinate IHR-related activities and strengthen its implementation.

The Codex matrix recommends that a National Food Safety Law and implementing regulations be adopted in Pakistan. This would address any gaps in the current state of implementation and ensure that implementation occurs uniformly across a national, rather than just a provincial level. It is noted in the 2016 JEE Report that some provinces lack laws in essential areas such as food safety, and that provinces which already have such laws could provide technical assistance to others to ensure consistency across the country. The National Food Safety Law should address all areas of the Codex requirements. In particular, food hygiene and food labelling rules will need to be addressed. In developing the National Food Safety Law, the priorities and recommendations in the National Food Security Strategy and the 2016 JEE Report should be adopted.

**Strategy for inter-agency cooperation**

The Ministry of Health is engaged in the implementation of the BWC, with representatives from the National Institute of Health leading the activities under WP1. The Animal Quarantine Department of the Ministry of Food, Agriculture and Livestock also has an interest in laws relevant to BWC implementation.

Implementation of the IHR is assigned to the Ministry of National Health Services Regulation and Coordination, which includes the NFP for IHR. It is recommended that this Ministry initiate a review of IHR-implementation with the Ministry of Law and Justice.

Based on information in the 2016 JEE Report, the Codex matrix notes that the National Codex Contact Point is with the Ministry of Food Security and Research and is envisaged to come under the National Animal and Plant Health Inspection Service. If it has not yet occurred, this position should be established. The report further established that food safety is the responsibility of multiple ministries at the federal level and departments of health at the provincial level. Relevant agencies include: the Ministry of National Food Security and Research, the Ministries of Health, Agriculture, Livestock and Fisheries, the National Animal and Plant Health Inspection Service, the Punjab Agriculture Food and Drug Authority, the Punjab Food Authority and the Sindh Food Authority.
Proposed Action Plan

1. Review and adoption of BWC Bill by the federal cabinet and by Parliament.
2. Ministry of National Health Services Regulation and Coordination to review and update IHR Survey.
3. Ministry of National Health Services Regulation and Coordination to draft amendments to existing laws and new laws for the implementation of IHR, in conjunction with legislative drafters and in consultation with the WHO.
5. Ministry of Food Security and Research to review and update the Codex survey.
6. Development of a National Food Safety Law, which fully implements the Codex requirements, in consultation with legislative drafters, relevant government agencies and with support from the FAO’s assistance programs.
7. Submission of the National Food Safety Law to Parliament.

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<td>Executive Director &amp; NC Global Fund, National Institute Health Chief, Public Health Laboratories Division, National Institute of Health</td>
<td>Ministry of Health Animal Quarantine Department of the Ministry of Food, Agriculture and Livestock VERTIC</td>
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<tr>
<td>Ministry of National Health Services Regulation and Coordination to review and update IHR Survey.</td>
<td>Ministry of National Health Services Regulation and Coordination Executive Director &amp; NC Global Fund, National Institute Health Chief, Public Health Laboratories Division, National Institute of Health</td>
<td>Ministry of National Health Services Regulation and Coordination Ministry of Law and Justice WHO</td>
</tr>
<tr>
<td>Ministry of National Health Services Regulation and Coordination to draft amendments to existing laws and new laws for the implementation of IHR, in conjunction with legislative drafters and in consultation with the WHO.</td>
<td>Ministry of National Health Services Regulation and Coordination Executive Director &amp; NC Global Fund, National Institute Health Chief, Public Health Laboratories Division, National Institute of Health</td>
<td>Ministry of National Health Services Regulation and Coordination Ministry of Law and Justice WHO</td>
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<tr>
<td>Submission of draft laws to Parliament</td>
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Ministry of Health  
Ministry of Agriculture, Livestock and Fisheries National Animal and Plant Health Inspection Service  
Punjab Agriculture Food and Drug Authority  
Punjab Food Authority  
Sindh Food Authority  
FAO |
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<tr>
<td>Submission of the National Food Safety Law to Parliament.</td>
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<tr>
<td>Ongoing monitoring of biosafety and biosecurity laws in Pakistan.</td>
<td>All of the above.</td>
<td>All of the above.</td>
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**Tajikistan**

**Summary**

WP 1 for Tajikistan was implemented by a TNE, consisting of representatives from the Nuclear and Radiation Safety Agency, the Ministry of Health, the Ministry of Agriculture, the Committee for Environmental Protection, Emergency and Civil Defense, as well as the Working Group for Harmonization of Tajikistan’s Legislation with the Provisions of International Documents. The team was led by the TE from the Nuclear and Radiation Safety Agency in consultation with legal experts. The work undertaken in the context of Project 53 WP 1 supported the objectives of Tajikistan’s National Action Plan on the implementation of UNSCR 1540, approved in 2016, and which identified a number of necessary measures related to biosafety and biosecurity.

The surveys and matrix reveal that considerable domestic legislation will need to be amended or adopted to ensure full and effective implementation of the requisite international instruments. Constructive developments such as the drafting of a Law on Biological Safety, the creation of an inter-agency working group for the IHR in collaboration with the WHO, and Tajikistan’s application for the EU BWC Extended Assistance Program are positive steps towards this goal. Amendments to the Food Safety Law would also strengthen implementation of the Codex requirements.
Legal drafting

The BWC survey reviewed 19 relevant laws, including laws on terrorism, export control and veterinary medicine. The definitions of biological agents, toxins and biological weapons in the BWC are not currently reflected in Tajikistan’s domestic legislation. Tajikistan’s Criminal Code establishes jurisdiction, offences and penalties applicable to some biological weapons-related activities. However, these provisions will need to be further developed to successfully prohibit all relevant activities with biological agents and toxins. In particular, alternative forms of criminal liability need to be established, as well as jurisdiction based on passive personality and universality. The Law on Export Control provides for the identification and development of control lists for weapons of mass destruction. At present, there do not appear to be control lists within the country’s regulations. Accordingly, these will need to be formulated. The survey overview proposes the adoption of integrated preventative measures to account for, secure and physically protect dangerous biological agents and toxins, as well as targeted measures to control transfers of such materials. Enforcement measures will also need to be expanded, including measures enabling training of law enforcement personnel in investigating biological incidents and promoting co-operation and co-ordination with public health officials and other agencies.

Tajikistan also has a Draft Law on Biological Safety, the first version of which was analysed by VERTIC experts. The VERTIC experts commented extensively and these comments were incorporated to a revised version of the draft. The Draft Law is on track to supplement some of the legislative gaps that are evident in the survey. It includes key definitions such as ‘biological agent’, ‘toxin’ and ‘biological weapon’, as well as a way to categorise risk groups for biological agents and preventative measures to account for, secure and physically protect dangerous biological agents and toxins.

Tajikistan’s IHR survey reviews 21 different laws, which are applicable to many of the IHR requirements. However, the survey also reveals numerous gaps which will need to be remedied. Many of the terms will need to be defined, or re-defined, to comply with the IHR. Provisions also appear to be lacking on matters such as: airports and points of entry, travellers under public health observation, container and container loading areas, health documents and certificates of vaccination, and treatment of personal data. It is anticipated that Tajikistan’s newly-created inter-agency working council on implementation of the IHR (discussed below) will take steps to remedy these gaps.

25 laws and by-laws were reviewed for the Codex matrix. These laws implement a significant number of the requirements under Codex Alimentarius, the most notable being the Food Safety Law. The Food Safety Law defines key terms relevant to Codex standards. However, it overlooks some terms which will need to be introduced, including ‘contaminant’, ‘foodborne pathogen’ and ‘hazard’. It establishes offences, administrative and criminal penalties and sanctions regarding violations of food safety requirements. It also provides for general principles of food safety, the responsibilities of relevant authorities, business operators and coordination between them, inspections and investigations, laboratory methods, enforcement and various aspects of food hygiene. The Healthcare Code, veterinary and customs laws and occupational safety systems also feature in the survey. Furthermore, a National Codex Contact Point has been designated. Considering the extensive implementation of Codex under current laws, any gaps or weaknesses could be addressed through amendments to existing legislation.
Strategy for inter-agency cooperation

Various government ministries are invested in the implementation of the BWC in Tajikistan, including the Ministries of Agriculture, Security, Internal Affairs, Defence, Emergency Situations, Justice, and Foreign Affairs. During the development of the Draft Law on Biological Safety, representatives from each of these ministries shared their expertise. It should be noted that Article 7 of the current Draft Law provides that “coordinating activities of ministries, agencies and local bodies of state authorities in ensuring biological safety [and] identifying authorised state bodies responsible for ensuring biological safety” are prerogatives of the government. With this in mind, it may be prudent to identify a key government official to coordinate these ministries throughout the development of the Draft Law and beyond.

The principal ministries for the implementation of Codex Alimentarius are the Ministry of Health and Social Protection of the Population (of which the National Coordinator on Codex is the Deputy Minister) and the Ministry of Agriculture. The Agency for Standardisation, Metrology, Certification and Trade Inspection of the Government “Tajikistandard” and the Ministry of Economic Development and Trade also feature in the survey, as well as the Food Safety Coordination Council, established under the Food Safety Law. It is recommended that the National Coordinator liaise with the abovementioned agencies when developing amendments to the current laws.

Tajikistan and the WHO have created an inter-agency working council on implementation of the IHR. The Ministry of Health and Social Protection of Population of Tajikistan entered into the agreement on behalf of the country. The Ministry had previously appointed the Department of Sanitary and Epidemiological Safety, Emergencies and Emergency Medical Care as the authority responsible for IHR issues and as the contact point on this issue. It further designated the State Sanitary and Epidemiological Surveillance Service as responsible for the organisation and implementation of epidemiological surveillance over infectious diseases of mass distribution.

Proposed Action Plan

Based on the findings from WP 1, the following ‘Action Plan’ is proposed to strengthen national implementation of international instruments on biosafety and biosecurity.

1. Finalisation of the Draft Law on Biosafety, led by the TE, in consultation with representatives of relevant ministries, lawyers, possibly the EU Extended Assistance Program and VERTIC.
3. Development of draft laws and amendments to implement the IHR by the inter-agency working council, in consultation with the WHO and relevant ministry departments.
4. Submission of drafts to Parliament.
5. Completion of draft amendments to existing legislation to ensure full implementation of Codex Alimentarius, led by the National Coordinator for Codex and in consultation with relevant ministries and lawyers, and with support from the FAO’s assistance programs.
6. Submission of the draft amendments for implementation of Codex Alimentarius to parliament.

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| Finalisation of the Draft Law on Biosafety, led by the TE, in consultation with representatives of relevant ministries, lawyers, possibly the EU Extended Assistance Program and VERTIC. | Representative from the Nuclear and Radiation Safety Agency      | Ministry of Agriculture  
|                                                                          |                                                                | Ministry of Security  
|                                                                          |                                                                | Ministry of Internal Affairs  
|                                                                          |                                                                | Ministry of Defence  
|                                                                          |                                                                | Ministry of Emergency Situations  
|                                                                          |                                                                | Ministry of Justice  
|                                                                          |                                                                | Ministry of Foreign Affairs  
|                                                                          |                                                                | EU BWC Extended Assistance Program  
|                                                                          |                                                                | VERTIC  
|                                                                          |                                                                | BWC ISU |
| Submission of the Draft Law on Biosafety to Parliament.                 |                                                                |                                                                            |
| Development of draft laws and amendments to implement the IHR by the inter-agency working council, in consultation with the WHO and relevant ministry departments. | TNE Focal Point                                                 | Ministry of Health and Social Protection of Population  
|                                                                          |                                                                | Department of Sanitary and Epidemiological Safety, Emergencies and Emergency Medical Care  
|                                                                          |                                                                | State Sanitary and Epidemiological Surveillance Service  
| Submission of drafts to Parliament.                                     |                                                                |                                                                            |
| Completion of draft amendments to existing legislation to ensure full implementation of Codex Alimentarius, led by the National Coordinator for Codex and in consultation with relevant ministries and lawyers, and with  | National Coordinator on Codex: Deputy Minister of Ministry of Health and Social Protection Population | Ministry of Health and Social Protection of the Population  
|                                                                          |                                                                | Ministry of Agriculture  
|                                                                          |                                                                | Agency for Standardisation, Metrology, Certification  
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<th>Submission of the draft amendments for implementation of Codex Alimentarius to Parliament.</th>
<th>and Trade Inspection of the Government “Tajikistandard” Ministry of Economic Development and Trade Food Safety Coordination Council, established under the Food Safety Law FAO</th>
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<tr>
<td>Ongoing monitoring of biosafety and biosecurity laws in Tajikistan.</td>
<td>TNE NFP</td>
<td>All of the above</td>
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**Uzbekistan**

**Summary**

Uzbekistan’s TNE for WP 1 consists of representatives from the Ministry of Health, the Inspectorate for the Supervision of the Implementation of the Conventions on the Prohibition of Chemical and Biological Weapons at the State Committee of Industrial Safety, the Academy of Science, the European Commission’s Technical Assistance Programs, the Institute of Microbiology, the State Committee for Nature Protection, and experts on the IHR and Codex. The team was led by the NFP. The activities under WP 1 coincided with a period of change under Uzbekistan’s health system, which included a Presidential Decree requiring a review of all relevant legislation and related documents. The TNE for WP 1 is engaged in this process, which involves amending existing laws and producing additional legislation. Uzbekistan also recently adhered to the 1925 Geneva Protocol.

**Legal drafting**

Laws analysed in Uzbekistan’s BWC survey cover a range of subjects, including customs, crime and criminal procedure, terrorism, biosafety rules, the import and export of viruses, toxins and poisons, and epidemic control procedures. The survey reveals that definitions of biological weapons and non-state actors reflecting the requirements of international law will need to be adopted. The Criminal Code encompasses many of the offences and penalties relevant to biological weapons. This will need to be supplemented with an explicit prohibition of the transport and use of biological weapons, offences related to facilities intended for the production of biological weapons, unauthorised activities involving biological agents and penalties for providing false or misleading information to authorities. Penalties for these offences should apply to both legal and natural persons, preparatory offences and alternative criminal liability. Uzbekistan currently has legislation covering exports and imports of dangerous biological agents and toxins, including a control authority. These laws will need to be supplemented to provide for exemptions to authorisations, end-user controls, intangible transfers, transit, trans-shipment and re-export of dangerous biological
agents and toxins. Relevant enforcement measures are included in the Biosafety Rules and Instruction, the Code of Criminal Procedure and Criminal Code. The survey recommends introducing laws to include measures enabling investigations of suspected misuse of dangerous biological agents and toxins, intelligence gathering on suspected misuse, and prosecutions of offences involving such substances. Domestic law would also benefit from the adoption of measures regarding the training of law enforcement personnel in investigating biological incidents, as well as measures for the cooperation and coordination with public health officials and other agencies. Comprehensive implementation of the BWC could be achieved through a specific law implementing the Convention, as well as amendments to the Criminal Code, Code of Criminal Procedure, import and export laws, and the Biosafety Rules and Instruction.

Uzbekistan’s survey for the IHR includes 25 laws covering areas such as health, science and customs. Many of the IHR definitions are included in domestic legislation. However, many definitions are also missing, apply to a different context or use different terminology. Uzbekistan’s Decree ‘On Implementation Measures for the International Health Regulations’ implements many of the IHR requirements on information and public health response. Legislation is in place to establish a National Coordinator for IHR and their functions. IHR-implementing legislation needs to be strengthened in the areas of WHO’s recommendations, points of entry, health documents, charges, the IHR Roster of Experts, Emergency Committee and Review Committee, and the Annexes.

The matrix for Codex canvasses 18 different laws and decrees. The overview identifies that some key terms and Codex principles are lacking. It makes particular note of the need for better cooperation and coordination between the competent authorities. Compliance and enforcement provisions need to be strengthened, as well as laboratory methods. Food safety and control measures also need to be considered. Uzbekistan has a draft law on food security under development. This is envisaged to implement a legal foundation for laws on food safety inspection and definitions, among other obligations.

The TNE has indicated that Uzbekistan aims to update three specific laws in relation to dangerous microorganisms. It proposes to have a separate working group responsible for revising each rule, with professional experts contracted to undertake this work.

Strategy for inter-agency cooperation

The TNE for WP 1 includes representatives from the Ministry of Health, the Inspectorate for the Supervision of the Implementation of the Conventions on the Prohibition of Chemical and Biological Weapons at the State Committee of Industrial Safety, the Academy of Science, the European Commission’s Technical Assistance Programs, the Institute of Microbiology, and the State Committee for Nature Protection. Experts on IHR and Codex were contracted for Project 53.

Uzbekistan has an established Biosafety Commission with a representative from the Ministry of Health acting as chair. A Commission on the Implementation of the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction has been established at the State Committee of Industrial Safety. It also has a joint cooperative programme with the US Department of Defence and Defence Threat Reduction Agency on the prevention, detection and response to threats in relation to UNSCR 1540. This programme engages Uzbekistan’s ministries of Foreign Trade, Health, Agriculture, Defence and Foreign Affairs, State Committee of Industrial Safety and State Customs Committee.
The BWC survey identifies multiple ministries and agencies relevant to BWC implementation, including, the Ministry of Agriculture and Water Management, the Ministry of Health, the Ministry of Emergency Situations, the State Security Service and the Ministry of Internal Affairs. It also takes note of agencies dealing with terrorism, including the State Security Service, the Ministry of the Interior, the State Customs Committee and the Ministry of Defence.

The National Focal Point for IHR is the Ministry of Health. The Decree on the implementation of the IHR lists state and economic administration bodies responsible for such implementation, including: the Ministries of Health, Emergency Situations, Defence, Internal Affairs, Foreign Affairs, and Agriculture and Water Resources, as well as the Border Security Force of the State Security Service, the State Customs Committee, the State Committee on Ecology and Environmental Protection and several other companies and enterprises. Other relevant stakeholders include the State Committee for Nature Protection, and the State Committee of Industrial Safety.

Uzbekistan has a designated National Codex Contact Point. The Ministry of Health, State Veterinary Committee and Ministry of Agriculture are significantly involved in the laws related to Codex. In particular, the Sanitary and Epidemiological Service of the Ministry of Health and State Veterinary Committee are the ‘responsible authorities’ for Codex.

**Proposed Action Plan**

Based on the findings from WP 1, the following ‘Action Plan’ is proposed to strengthen national implementation of international instruments on biosafety and biosecurity.

1. Biosafety Commission to draft a law specifically implementing the BWC and necessary amendments to existing laws, in consultation with legislative drafters and VERTIC.
2. Submission of draft laws to Parliament.
3. IHR NFP and National Coordinator to engage relevant stakeholders and legislative drafters in drafting laws implementing IHR, in consultation with the WHO.
5. National Codex Contact Point to engage the responsible authorities for Codex, relevant ministries, legislative drafters and assistance providers like the FAO to develop the law on food security and other laws to implement Codex requirements.
7. Ongoing monitoring of the laws on biosafety and biosecurity in Uzbekistan.

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<td>Biosafety Commission Chair</td>
<td>Ministry of Health Ministry of Agriculture and Water Management</td>
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<td>legislative drafters and VERTIC.</td>
<td>Ministry of Emergency Situations&lt;br&gt;State Security Service&lt;br&gt;Ministry of Internal Affairs&lt;br&gt;State Security Service&lt;br&gt;Ministry of the Interior&lt;br&gt;State Border Guards Committee&lt;br&gt;State Customs Committee&lt;br&gt;Ministry of Defence&lt;br&gt;Inspectorate for the Supervision of the Implementation of the Conventions on the Prohibition of Chemical and Biological Weapons&lt;br&gt;VERTIC&lt;br&gt;BWC ISU</td>
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Regional Strategy

Regional trends

While most partner countries in Central Asia have some legislation for the BWC in force, none of them have comprehensive legislation implementing the BWC. The absence of specific implementing legislation means that many of the fundamental aspects of the BWC, such as the definitions of biological weapons, are not properly implemented. Furthermore, other laws that are related to BWC provisions often do not adequately reflect the Convention’s requirements. For example, terrorism laws may criminalise the use of biological weapons, but do so only in the context of acts of terrorism. This limitation does not properly reflect the BWC, which prohibits the use of biological weapons in any circumstance. However, some of the partner countries have drafted or are in the process of drafting a law on biosafety or biosecurity with the aim of remedying the gaps identified in the respective country’s surveys.

Similarly, in relation to both the IHR and Codex, none of the partner countries have specific legislation that incorporates all aspects of either of these instruments. Generally, health laws apply the IHR and food safety laws are utilised to implement the Codex requirements. Implementing legislation for these instruments is insufficient across the region and the survey and matrix overviews recommend the adoption of new laws specifically implementing the instruments, or significant amendments to current laws. The draft laws on biosafety and biosecurity that have been viewed under WP 1 appear to focus on implementation of the BWC, rather than the IHR and Codex.

Most of the partner countries have several ministries and agencies which have an interest in biosafety and biosecurity-related legislation. Whilst the Ministry of Health features most frequently in the surveys and matrices, there is generally a need for central coordination on biosafety and biosecurity in the partner countries. Legal expertise in this field also seems to be needed at the state level. This is reflected in the fact that some states hired private lawyers or external consultants to manage the work under WP 1. This high-quality legal support was of benefit to the surveys and matrix that had to be carried out, but it raises a concern that if the TNEs are disbanded following the completion of Project 53, there will be a lacuna in this field. To ensure that international obligations on biosafety and biosecurity are implemented in an efficient manner, all countries are advised to secure strong leadership and retain staff who are currently...
employed to sustain efforts on domestic implementation. Where appropriate, leadership may be conducted through the NFPs for the EU CBRN CoE and the NFPs for each international instrument, who will need to be given the necessary mandate and funding to continue their work. This will ensure consistency and retain expertise in the process of implementing the international obligations.

Legislative harmonisation strategy

Domestic implementation of international obligations can take many forms, and different approaches may be better suited to different countries, depending on their legal systems and legislation already in force. Whilst the surveys and matrices produced under WP 1 indicate what laws will need to be introduced, they do not dictate how they should be introduced.

The first approach states can employ is to introduce a stand-alone law on biosafety and biosecurity which covers everything under the BWC, the IHR and Codex. The benefit of this approach is that it ensures a wholesale importation of all the relevant international obligations ‘under one roof’ and may better accommodate integration of the three instruments. However, given the depth and complexity of the international instruments, as well as the differences in their content, states may find this approach cumbersome.

The second approach is to combine the BWC and IHR requirements, which are relatively interconnected, under one new law and the Codex obligations under another. This approach ensures some consolidation of laws on biosafety and biosecurity, but recognises the distinctions in subject matter and may make the drafting process more manageable.

The third approach is to create three distinct pieces of domestic legislation for each of the instruments. States may find this to be the most straight-forward approach, but in adopting it are encouraged to recognise the interrelationship between the instruments to ensure domestic harmonisation and avoid duplication.

Each of these approaches may be affected by current laws which already implement some of the requirements under the international law, such as laws on crime or trade. States may prefer to implement a mixture of one of the above approaches with amendments to existing laws. This would be most effective where the laws are able to complement each other without causing confusion or duplication. For example, a state may have a specific law implementing the majority of provisions in the BWC, but amend their import and export laws to implement the transfer obligations. Whilst it may be possible for states to effect implementation of their international obligations solely through amending existing laws, the results of WP 1 indicate that the existing legislation in the participating states is generally insufficient to support this approach, which may result in disparate, confusing, duplicitous and unduly complex laws. States are therefore cautioned against creating an overly ‘piecemeal’ approach.

In the overviews for WP 1, all partner countries were advised to adopt specific legislation on biosafety and biosecurity. This presents an ideal opportunity for regional collaboration on drafting biosafety and biosecurity laws. States would greatly benefit from the sharing of experiences, best practices and lessons learned. Information could be shared through ongoing collaboration between country representatives on biosafety and biosecurity, inter-state meetings and at regional events organised by bodies such as
the WHO and the BWC ISU. In particular, countries that have finalised their draft legislation on biosafety and biosecurity are strongly encouraged to share their expertise with other countries. In this circumstance, states are advised to regard the draft laws of other states with caution, as legislation that fully implements one country’s international obligations may not sufficiently implement another’s. Employing the survey and matrix methodology used under WP 1 would assist states in avoiding these pitfalls. States that share a common national language would particularly benefit from this process, as they can effectively use the wording of provisions that accurately translate the international obligations. The sharing of draft laws and expertise would involve a significant saving of resources and an avoidance of duplication between the efforts of the partner countries. Consistency in regional laws would also facilitate regional responses to biosafety and biosecurity threats, as discussed below.

Regional harmonisation is particularly important for laws which have a cross-border impact. Import and export legislation is an example of this, and it features in all three instruments. The BWC implementation requirements include provisions on the import and export of dangerous biological agents and toxins, control over their transit, trans-shipment and re-export. The IHR have a particular focus on transport and handling of biological substances, reagents and materials; points of entry such as airports, ports, and ground crossings; and ships, aircraft, lorries, trains and coaches in transit. It also specifically requires States Parties to collaborate with and assist other countries in responding to public health emergencies of international concern. Similarly, the Codex Alimentarius includes requirements in relation to import and export, the ethical conduct of international trade, inspection, certification and information exchange. Its food hygiene, packaging and labelling requirements will also impact upon import and export. Further, the Codex’s regional food safety emergency plan and exchange of information provisions require significant regional collaboration. Criminal laws and procedures relevant to the BWC and Codex would also benefit from regional harmonisation to enable more effective criminalisation and prosecution of crimes which have a transnational impact. Extension of jurisdictional bases, extradition agreements and other agreements on tackling biosafety and biosecurity-related crime would increase the effectiveness of criminal laws and enforcement in the region. Regional harmonisation is critical to strengthening standards on matters with a transnational impact. This would not only strengthen biosafety and biosecurity in the region, but also streamline trade.

Legal assistance

VERTIC is able to provide guidance for countries that wish to update their surveys or matrices and during the drafting of laws on biosafety and biosecurity. VERTIC’s Sample Act for the implementation of the BWC, Regulatory guidelines for the implementation of the BWC and Legislative guide to implement UNSCR 1540 are useful reference tools for BWC implementation. The BWC ISU is also mandated to assist states with their international obligations in relation to the BWC. States are encouraged to enquire into sources of support and funding, such as the EU BWC Extended Assistance Program.

Similarly, the WHO is well-placed to provide assistance with implementation of the IHR, particularly where states already have a working relationship with the WHO through working groups or the composition of JEE Reports. The Codex Alimentarius
Guidelines and the FAO’s assistance programs may be employed for continued work on implementing the Codex.

To ensure resources are used efficiently and to avoid duplication, assistance providers are encouraged to share information and communicate their findings and progress amongst each other, and to collaborate wherever possible. To facilitate this, states are similarly encouraged to proactively advise assistance providers about assistance they have received or are receiving from other providers.

**Regional emergency response**

The international instruments require states to cooperate in responding to regional emergencies. The BWC requires States Parties to carry out surveillance for diseases, develop response capabilities and establish coordination between government bodies. The IHR require States Parties to notify it of all events which may constitute a public health emergency of international concern within its territory. They also require States Parties to collaborate with each other in the detection and assessment of, and response to such events, and the provision or facilitation of technical cooperation and logistical support. The Codex also contains Principles and Guidelines for the Exchange of Information in Food Safety Emergency Situations.

As part of Project 53, VERTIC produced a report on ‘Emergency Response Planning in Central Asia: Common Challenges and Opportunities for Cooperation’. The report focused on the Common Alerting Protocol (CAP), an international communication standard for emergency alerting and public warning, and Civil-Military Cooperation (CIMIC). Following the report’s findings, it is recommended that states adopt legislation in relation to emergency responses both within their territory and the region, and are strongly encouraged to collaborate on designing a regional approach to emergency response in accordance with the CAP-CIMIC recommendations.

**Conclusion**

International law on biosafety and biosecurity is complex, requiring significant resources and expertise to ensure its effective implementation in domestic law. The outputs of Project 53’s WP 1 reveal that the partner countries in Central Asia have implemented the BWC, the IHR and Codex Alimentarius to some extent, but largely require new laws and/or amendments to existing laws to ensure comprehensive implementation. The success of WP 1 relied on the good will, hard work, and organisation of the partner countries and VERTIC. As a result, all partner countries have developed thorough gap analyses of their domestic laws on biosafety and biosecurity, and are equipped with the knowledge and expertise to ‘fill the gaps’ and finalise the legislative implementation process. This is reflected in some states beginning the drafting process for new laws on biosafety and biosecurity, or expressing an intention to do so. It is anticipated that this progress will continue beyond the completion of Project 53, with the increased commitment by partner countries to biosafety and biosecurity and ongoing support from assistance providers.
Sources

- Commonwealth of Independent States (CIS) Model Law on the ‘Support and Regulation of International Assistance in Emergency Situations and Initial Rehabilitation’
- Diagnostic tool for assessing status of national Codex programmes, WHO and FAO, 2016: https://www.who.int/foodsafety/areas_work/food-standard/DiagnosticTool-En.pdf?ua=1
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