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Emergency Response Planning in Central Asia: Common Challenges and Opportunities for Cooperation

Final Report
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Introduction

In the past decade, Central Asia witnessed cases of Foot and Mouth Disease (FMD) or Crimean-Congo Haemorrhagic Fever (CCHF).[1] The FMD and the CCHF are highly contagious viral diseases affecting animals. If the former primarily affects cloven-hoofed livestock and wildlife, the latter is also transmissible to humans through ticks. Those diseases have been eradicated from other parts of world, but can be readily re-introduced into a region when early detection is failing. In a study on the current status of the CCHF in the WHO Eastern Mediterranean Region[2], the authors noted that "[t]ogether with the early recognition of CCHF, the search for an effective treatment and prophylaxis […] will rely on collaboration between endemic countries". The large amount of livestock in Central Asia remains a fertile breeding ground for such highly contagious threats, with potential transboundary effects. Moreover, both FMD and CCHF are listed on the Australia Group's list of human and animal pathogens and toxins for export controls[3] and therefore call for security considerations beyond the mere animal and public health response.

Those considerations are not only important for Central Asian countries. The 2014 Ebola outbreak in West Africa raised a number of concerns regarding the affected countries' capacities to respond to large-scale epidemics. Not only did the number of cases quickly overwhelm public health systems, but the strength and comprehensiveness of the legal and regulatory systems in place in the affected countries for emergency health response and public health security were also put into questions. As the virus spread across Guinea, Liberia and Sierra Leone, it required action from a diverse group of stakeholders, ranging from multiple states and their military forces to local and international humanitarian organisations.

A 2014 study on Global Rise in Human Infectious Disease Outbreaks[4] shows that between 1980 and 2010 the number of outbreaks tripled worldwide. The spread of infectious diseases is concomitantly boosted by numerous developments such as transboundary movements and trade liberalisation. Even if natural hazards and man-made emergencies can be reduced through preventive measures, they cannot be entirely prevented. However, the number of fatalities and the amount of damages they cause can be greatly reduced through emergency planning and protection measures.

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[1] See World Animal Health, World Animal Health Information Database Interface, available at: http://www.oie.int/wahis_2/public/wahid.php/Wahidhome/Home. In 2014 and 2016 the OIE Delegate of Kazakhstan has declared respectively 1 and 5 zones FMD free (with and without vaccination being practicised) according to the provisions of Chapter 8.8 of the Terrestrial Code, Edition 2016. No outbreaks of CCHF were reported in Kyrgyzstan and Mongolia respectively between 2008 and 2017, and 2006 and 2016. Similarly, Tajikistan did not report outbreaks of CCHF between 2007 and 2017; and Uzbekistan did not report any outbreaks of FMD nor CCHF between 2005 and 2017.

[2] Seif S. Al-Abria, Idris Al Abaidanib, Mehdi Fazlalipourc, Ehsan Mostafavid, Hakan Leblebicioglue, Natalia Pshenichnayaf, Ziad A. Memishg, Roger Hewsonh, Eskild Peterseni, Peter Malaj, Tran Minh Nhu Nguyenj,Mamunur Rahman Malikj, Pierre Formentyk, Rosanna Jeffriesk, Current status of Crimean-Congo haemorrhagic fever in the World Health Organization Eastern Mediterranean Region: issues, challenges, and future directions, International Journal of Infectious Diseases 58 (2017), pp. 82–89

[3] Australia Group, List of Human and Animal Pathogens and Toxins for Export Control, July 2017. Available at: www.australiagroup.net/en/human_animal_pathogens.html (last accessed 28 March 2018).

[4] Katherine F. Smith, Michael Goldberg, Samantha Rosenthal, Lynn Carlson, Jane Chen, Cici Chen, Sohini Ramachandran, Global rise in human infectious disease outbreaks, J. R. Soc. Interface 2014, 29 October 2014.

The responsibility of states to provide assistance and relief, as well as to prepare for such emergencies is deeply rooted in international law. Under United Nations General Assembly Resolution 46/182, each state has a primary responsibility to provide assistance and relief to its population:

> *"4. Each State has the responsibility first and foremost to take care of the victims of natural disasters and other emergencies occurring on its territory. Hence, the affected State has the primary role in the initiation, organization, coordination, and implementation of humanitarian assistance within its territory."*

The Resolution recognizes, however, both the principle of state sovereignty and the principle of non-intervention. It is widely accepted that the affected state, even in the event that it receives foreign assistance, retains overall direction, control, coordination and supervision of the provision of assistance within its territory.[5] States should therefore develop their own internal procedures for emergency response planning and receipt of foreign assistance.

The World Health Organisation (WHO) International Health Regulations (IHR) are an international legally-binding instrument intended to strengthen the international community's capacity to prevent and respond to acute public health risks with cross-border effects. They entered into force on 15 June 2007. Article 13 of the International Health Regulations also calls upon each state party to "develop, strengthen and maintain, […] the capacity to respond promptly and effectively to public health risks and public health emergencies of international concern…". Beyond the obligation to develop response capacities, states are bound by an obligation to notify the WHO of "all events which may constitute a public health emergency of international concern within its territory" (Article 6).

The strong connection between the public health response to natural outbreaks and the response to deliberate use of biological agents and toxins to spread diseases suggests a health and security interface. In 2014, 64 countries, international organisations and non-governmental stakeholders came together to strengthen both global and national capacities to prevent, detect, and respond to the threat of infectious diseases in humans and animals, whether occurring naturally, or by accidental or deliberate actions. This partnership, called the "Global Health Security Agenda", illustrates the connection between both responses. It acknowledges the essential need for a multilateral and multisectoral approach to strengthen both the global capacity and nations' capacity to prevent, detect, and respond to the threat of infectious disease, whether naturally occurring, deliberate, or accidental. One of the notable features of the partnership are the action packages called "respond 1" and "respond 2". They require states to develop effective co-ordination and improve their capacity to control outbreaks. Additionally, they require states to develop and implement frameworks outlining roles, responsibilities, and best practices for sharing relevant information between and among appropriate human and animal health, law enforcement, and defence personnel.

[5] International Law Commission, Third report on the protection of person in the event of disasters, A/CN.4/629, 31 March 2010, para. 79-89.

Therefore, emergency response planning in the context of biological events[6] is guided by two considerations. First, in order to better respond to fast spreading outbreaks of a transboundary character, public health, security and defence communities should work together. Second, drawing on all sectors' resources and experiences requires a legal and regulatory framework to ensure civil and military co-ordination, effective risk assessment and integrated alert protocols.

Methodology and Scope of the Report

Work Package 1 of the project "Strengthening the National Legal Framework and Provision of Specialized Training on Bio-Safety and Bio-Security in Central Asian Countries (CBRN Centres of Excellence Project 53)" focuses on the assessment and revision of national legislation and best practices in the area of biosafety, biosecurity, and harmonisation with the appropriate international regulations such as IHR, Biological and Toxin Weapons Convention (BTWC) and Codex Alimentarius including the area of regional emergency response with the aim of coming to a "One Health" system. In this context, VERTIC analysed national and transnational emergency intervention schemes focusing on biological events, which incorporate the modi operandi of Common Alerting Protocol (CAP) and Civil Military Cooperation (CIMIC) [7] of Afghanistan, Kazakhstan, Kyrgyzstan, Mongolia, Tajikistan and Uzbekistan.

This report identifies key requirements and best practices from guidance documents on CAP and CIMIC (Section 1). Even though CAP standards and CIMIC-related guidelines are not legally binding, key principles need to be followed to facilitate and improve their implementation. The report also contains summaries about policies and procedures of participating countries in relation to emergency responses, focusing on national legislation and institutions (Section 2). The information gathered in this part of the report derives from initial desktop research conducted by VERTIC, which was then consolidated with feedback from the officials of relevant countries. Finally, the report aims to identify regional initiatives, common challenges and opportunities for co-operation in emergency response planning in Central Asia (Section 3).

1. Common Alerting Protocol and Civil Military Cooperation

1.1 The Common Alerting Protocol

In emergency situations, receiving accurate and timely warnings can save lives, reduce economic losses, alleviate human suffering, and speed up response times. In November 2000, the United States National Science and Technology Council (NSTC) recommended that "a standard method should be developed to collect and relay instantaneously and automatically all types of hazard warnings and reports locally,

[6] For the purpose of this report, biological events can be defined as any intentional or unintentional release of biological agents and toxins with potential danger for humans, animals or plants.
[7] Those concepts are further defined in the report.

regionally and nationally for input into a wide variety of dissemination systems."[8] Acting on that recommendation, an international working group of more than 130 emergency managers and information technology and telecommunications experts convened to discuss standardised warning architectures. The meeting led to the adoption of the "CAP 1.0 specification" as a Committee Standard by the Organization for the Advancement of Structured Information Standards (OASIS) Emergency Management Technical Committee in August 2003.

The Common Alerting Protocol (CAP) is an international standard format for emergency alerting and public warning. It is designed to exchange warnings about "all-hazards" - weather events, earthquakes, tsunamis, volcanoes, public health crises, power outages, and many other emergencies - over various types of networks. Its "all-media" scope includes communications media ranging from sirens to cell phones, fax, radio, television and other various digital communication networks based on the Internet. The CAP format enables the simultaneous communication of alerts for any kind of emergency over many different alerting systems, thus increasing effectiveness while streamlining the process of sending alerts. Alert messages are composed of an <alert> segment, which may contain one or more <info> segments, each of which may include one or more <area> and/or <resource> segments.

CAP alert messages primarily provide a single input to activate all kinds of alerting and public warning systems. They reduce the workload associated with using multiple warning systems while enhancing technical reliability and target-audience effectiveness. Standardized alert messages also guarantee consistency in the information transmitted over multiple delivery systems, another key to ensuring effective warnings. In addition, CAP alert messages normalize warnings from various sources so they can be aggregated and compared to improve situational awareness and pattern detection.

The World Meteorological Organization (WMO) and the International Telecommunications Union (ITU) are collaborating to promote CAP as the foundation standard for public alerting in societies worldwide. Members are encouraged to list their nationally authorized alerting organizations on the "Register of Alerting Authorities", established by WMO and ITU. Among the twelve hazards categories identified in the register, at least three are particularly relevant to the emergency preparedness to biological events.

Key considerations should be kept in mind when implementing CAP at the national level. Reporting lines and coordination between public health authorities, first responders and alerting authorities must be clearly identified. An infrastructure should be able to receive, generate and disseminate authenticated messages through multiple alerting mechanisms following CAP communication standards. Such an infrastructure should rely on trained authorised personnel that ensure that composed CAP alerts are understood by all in the same way, and remain easily accessible to all. Finally, the established infrastructure should be identified as the CAP alerting authority within the WMO Register of Alerting Authorities.

[8] Working Group on Natural Disaster Information Systems, Subcommittee on Natural Disaster Reduction, Effective Disaster Warnings, November 2000, available at: http://tap.gallaudet.edu/emergency/nov05conference/EmergencyReports/EffectiveDisasterWarnings.pdf

CAP does not operate in a vacuum, therefore pre-emergency and comprehensive risk assessment would help identify populations at risk and need for continuous monitoring. Communication and alert systems should be maintained and the general public should be educated about the warning system.

From a regional perspective, the coordination of CAP standards for interoperability could be useful for emergency response in case of cross border emergencies. Specifically designed alerting procedures and communication infrastructure aggregating CAP alerts from regional partners could be envisaged.

Common Alerting Protocol (CAP) – Key requirements and best practices

At the national level:

- Designate reporting lines/coordination between public health authorities, first responders and the alerting authority;
- Designate a CAP alerting authority for CBRNe
    - Provide information for the WMO Register of Alerting Authorities
- Establish and follow CAP communication standards:
    - Set up infrastructure to receive and disseminate CAP alerts
        - Generate authenticated messages
        - Use multiple public alerting mechanisms
        - Be able to be understood by all in the same way
        - Be easy to access and use
    - Train authorised personnel in composing and issuing CAP alerts
- Carry out comprehensive risk assessments and identification of populations at risk in the pre-emergency phase;
- Continuously monitor risks;
- Maintain systems so that alerts are reliable and timely;
- Carry out public education on the warning system

At the regional level:

- Coordinate CAP standards for interoperability;
- Establish alerting procedures for cross-border emergencies/threats
- Establish common communication infrastructure aggregating CAP alerts from regional partners

1.2 Civil-Military Cooperation

Peace support, humanitarian activities and responses to natural disasters and complex emergencies require cooperation between sectors from different backgrounds and cultures. Both civil and military sectors have relevant expertise that can be beneficial to emergency response. On the one hand, militaries can contribute to emergency relief through their ability to rapidly mobilize and deploy unique assets and expertise to remote areas. On the other hand, civilian organisations generally have a long established relationship with the population and are often better equipped to identify the needs of the beneficiaries. Finally, while working with the military assets,

civilians must ensure that their neutrality, impartiality, operational independence and that the civilian character of humanitarian assistance is not compromised.

Civil-military cooperation is particularly relevant in responding to biological events. The transversal aspects of a biological incident often lead to the interaction between the emergency response, public health and security or defences sectors. In the case of deliberate dissemination of biological agents or toxins, the public health issue also becomes a security concern. Ultimately, CBRN defence capacities often lie within the armed forces of states.

At the international level, the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) developed Guidelines on the use of foreign military and civil defence assets in disaster relief (Oslo Guidelines) in 1994 (updated in 2006 and 2007). It aims to establish a basic framework for formalizing and improving the effectiveness and efficiency of the use of foreign military and civil defence assets in international disaster relief operations (natural, technological and environmental emergencies) in peacetime.[9] The guidelines are primarily intended for use by United Nations humanitarian agencies and their implementing and operational partners. However, they can also be used by state decision-makers and regional organisations when considering the use of military and civil defence assets to provide assistance to civilian populations in natural disasters and technological or environmental emergencies during times of peace. Those guidelines were later complemented by the United Nations OCHA Guidelines on the use of military and civil defence assets to support United Nations Humanitarian Activities in Complex Emergencies covering the use of military and civil defence assets in armed conflict situations. In 2004, the United Nations Inter-Agency Standing Committee (IASC) also adopted the Civil-Military Guidelines and Reference for Complex Emergencies (IASC Guidelines) that promote common understanding and a coherent approach to civil military relationships in a changing institutional framework and operational environment.

Even if the scope of application of those documents varies, the rationale for civil-military cooperation remains the same. While recognising the complementarity between civil and military assets, all guidelines promote and protect the principles of humanity, neutrality and impartiality inherent to humanitarian assistance. In this context, civil-military cooperation ensures effective dialogue, inter-operability, and effective use of all stakeholders' agencies.

Civil-military cooperation in the context of biological events therefore requires various prerequisites, such as the adoption of a national disaster plan and the establishment of local emergency management authorities. Adopting legislation providing for and enabling international cooperation on emergency response and humanitarian relief, as well as procedures for receiving, using and monitoring foreign military assets is also necessary. Operations should avoid fully relying on military

[9] According to the Oslo guidelines, Military and Civil Defence Assets "comprise relief personnel, equipment, supplies and services provided by foreign military and civil defence organization for IDRA [International Disaster Relief Assistance]." Furthermore, the guidelines define civil defence organization as "any organization that, under the control of a Government, performs the functions enumerated in paragraph 61 of Additional Protocol I to the Geneva Conventions of 1949."

assets and maintain civilian ownership of the response. Military assets should remain impartial and their intervention clearly delimited in scope and scale.

In addition, a steady flow of timely information is essential in critical areas (security, logistics, medical, transportation, and communications) of civil-military coordination at, and during, both the response and preparation stages. Establishing training programmes and communication schemes can therefore contribute to fostering civil-military understanding.

At the regional level, the identification of national points of contact and the establishment of training and cooperation partnerships will improve a regional approach to disaster relief and emergency responses.

Civil-Military Cooperation (CIMIC) – Key requirements and best practices

At the national level:

- Establish a National Disaster Plan
- Establish procedures to set up a Local Emergency Management Authority (or similar)
- Establish a legislative basis for international cooperation on emergency response and humanitarian relief
- Establish procedures for receiving, using and monitoring of Foreign Military Assets
- Establish procedures and institution to coordinate and monitor foreign military assistance, focusing on the following principles:
  - Impartiality of the military
  - A set scale, scope and duration of military intervention
  - Avoiding full reliance on military assets / Maintain civilian ownership of the response (Military responsibility over core civilians functions should cease as soon as possible)
  - In case of use of MCDA, provide information on how to tailor international assistance to its particular customs and culture
- Establish training programmes and communication schemes to foster Civil/Military understanding

At the regional/international level:

- Identify national points of contact for cooperation on disaster relief
- Establish cooperation partnerships for training and disaster relief with foreign countries

2. National Emergency Response Schemes in Central Asia

2.1 Emergency Response Planning in Afghanistan

National context and potential risks

Afghanistan is a landlocked Central Asian country with 34 million inhabitants, comprised of 14 ethnic groups living in 34 administrative provinces. Afghanistan has three points of entry designated further to its obligations under the IHR: Hamid Karzai Airport, and Turkham and Islam Qala border crossings.[10]

Recurrent natural disasters cause losses of lives, livelihoods and property in Afghanistan. Between 1954 and 2006, the country experienced 112 large-scale disasters, which led to massive problems of food insecurity and population exodus from the worst hit areas. In addition, years of continued conflict, insecurity, high levels of poverty and unemployment and poor infrastructure have increased the country's vulnerabilities. With between 5 and 50 human cases of CCHF reported every year in Afghanistan, the diseases is considered to be widespread and endemic. In 2008, 30 human cases were reported in a period of 4 months, leading to nine deaths.[11] Afghanistan also experiences large numbers of FMD outbreaks every year. From January to June 2009, the number of outbreaks reached 1022 in the whole country.[12]

At the Regional Project 53 Kick-off Meeting (2-3 February 2017, Bishkek, Kyrgyzstan), the Afghanistan National Team of Experts (NTE) noted that poor sanitation and waste management, as well as very low coping capacities create a high level of risk for Cholera and other diseases epidemics. Terrorist attacks were also mentioned as a potential risk.

Existing framework and authorities

Since 2003, Afghanistan, in partnership with the United Nations (UN) and other development organizations, has developed several key policy documents, such as the Disaster Management Framework, National Strategy for Disaster Management, and the National Disaster Management Plan.

The National Emergency Response Commission has been established as the highest emergency coordination body in the country. It is chaired by the Afghan Vice-President and gathers 22 key government ministries, the United Nations Assistance Mission in Afghanistan (UNAMA), Kabul Municipality and International Security Assistance Force (ISAF). It coordinates responses and assistance requests from the international community. The Afghanistan National Disaster Management Authority (ANDMA) acts as the secretariat of the Commission. Under the Sendai and Hyogo Frameworks, the ANDMA has been recognised as Afghanistan's focal point and national platform.

In addition to the central authority, each ministry has its specific area of responsibilities. Of particular interest for biological hazards is the Ministry of

[10] WHO, Joint External Evaluation of IHR Core Capacities of the Islamic Republic of Afghanistan, 2017, p.50.

[11] Seif S. Al-Abria, Idris Al Abaidanib, Mehdi Fazlalipourc, Ehsan Mostafavid, Hakan Leblebicioglue, Natalia Pshenichnayaf, Ziad A. Memishg, Roger Hewsonh, Eskild Peterseni, Peter Malaj, Tran Minh Nhu Nguyenj, Mamunur Rahman Malikj, Pierre Formentyk, Rosanna Jeffriesk, Current status of Crimean-Congo haemorrhagic fever in the World Health Organization Eastern Mediterranean Region: issues, challenges, and future directions, International Journal of Infectious Diseases 58 (2017), pp. 82–89

[12] See World Animal Health, World Animal Health Information Database Interface, available at: http://www.oie.int/wahis_2/public/wahid.php/Wahidhome/Home.

Agriculture and Livestock's responsibility for pest attacks and cattle epidemics management. The Animal Health (Veterinary) Law also requires the nomination of an Enquiry and Notification Point within the Ministry of Agriculture and Livestock to enhance communication on sanitary and phyto-sanitary measures at the national and international levels. A contact point should also be designated at the Animal Health Authority for the same purpose.

National CAP – CIMIC considerations

Afghanistan identified the Afghan Meteorological Authority as the alerting authority with the World Meteorological Organisation's Public Weather Services. However, no precise hazard categories have been specified.

In terms of Civil-Military coordination, the Afghanistan Civil Military Working Group has been established in the country. Co-chaired by the Office of the Deputy Special Representative of the Secretary-General of the UNAMA Resident / Humanitarian Coordinator and the Agency Coordinating Body for Afghan Relief (ACBAR), the Working Group includes senior military officials serving with the ISAF, and humanitarian and development actors working in Afghanistan. It aims to facilitate timely and adequate communication between civil society and military actors. In parallel to the working group, the Provincial Reconstruction Teams (PRT) Executive Steering Committee (ESC) is an ambassadorial/ ministerial-level body co-chaired by the Minister of the Interior and COMISAF, which provides guidance for and oversight of all existing and proposed PRTs in Afghanistan. It includes ambassadors of all the PRT troop-contributing states and potential contributing nations, as well as key Afghan ministry officials. A PRT Working Group has also been established to resolve operational issues and prepare agendas and issues for the Executive Steering Committee. The Working Group includes NGO representatives. At the regional, provincial and districts levels, coordination meetings are taking place under governmental supervision and with the support of the UN/UNAMA/NGO field offices.

In May 2008, the Afghanistan Civil Military Working Group developed Guidelines for the Interaction and Coordination of Humanitarian Actors and Military Actors in Afghanistan. The guidelines set out the principles guiding international military actors and the Afghan National Security Forces, as well as reaffirming humanitarian principles. Finally, the document recalls that use of military assets in Afghanistan must adhere to the principles set out in the IASC Guidelines on the Use of Military and Civil Defence Assets to Support UN Humanitarian Activities in Complex Emergencies (MCDA Guidelines) issued in March 2003, and Guidelines on the Use Of Military and Civil Defence Assets in Disaster Relief (Oslo Guidelines) updated in November 2006.

Regional cooperation

In accordance with the official request of the Ministry of Foreign Affairs of Afghanistan, the country has been granted observer status at the Center for Emergency Situations and Disaster Risk Reduction in Almaty since September 2016.

The 2008 Guidelines for the Interaction and Coordination of Humanitarian Actors and Military Actors in Afghanistan and other institutions set up for civil military coordination in the country as mentioned above, offer a large platform for cooperation with foreign military forces and international organisations involved in Afghanistan.

Potential gaps identified and areas of improvement

The NTE noted that an all-hazards risk assessment is necessary in the country since, to date, no systematic multi-hazards risk assessment has been conducted of Afghanistan's own capacities.

The Global Faculty for Disaster Reduction and Recovery notes that despite the development of an institutional framework for Disaster Risk Management within the country, the lack of a budget, human resources and general insecurity impede the full implementation of the Strategic Action Plan for Disaster Risk Reduction. In addition, managing crisis situations remains particularly challenging in Afghanistan due to limited access to remote settlements and poor transport connectivity.

A recent VERTIC Survey of Afghanistan's National Implementation Measures for the BWC concluded that Afghanistan does not have measures related to the training of law enforcement personnel in the event of an incident involving dangerous biological agents and toxins.

By joining the Center for Emergency Situations and Disaster Risk Reduction in Almaty as an observer, Afghanistan gained access to an important regional information exchange platform. The example of the 2008 Guidelines for the Interaction and Coordination of Humanitarian Actors and Military Actors in Afghanistan can be of interest to other countries in the region.

As a member of the Regional Consultative Committee (RCC) on Disaster Management, Afghanistan participated in the 13th annual meeting of the RCC held in Islamabad. The final statement of the meeting reiterates RCC member countries' commitment to maintain the RCC as a regional platform for the development and sharing of good practices, leveraging science, innovation and technology, as well as to support RCC countries in developing synergies on Early Warning Systems from trans-boundary, national and subnational to community levels.

2.2 Emergency Response Planning in Kazakhstan

National context and potential risks

Kazakhstan is the largest country in Central Asia and the ninth largest country in the world. It has a population of 17.79 million inhabitants. Large parts of Kazakh territory are covered by mountain and desert.

Kazakhstan is highly prone to droughts, earthquakes, river floods, and landslides. Earthquakes are a dominant risk, affecting an annual average of about 200,000 people and causing about $1 billion losses in gross domestic product (GDP). In May 2003, the Zhambyl region was shaken by an earthquake, which affected over 40,000 people.

Frequent flood hazards also pose a significant risk, and have resulted in widespread displacement of populations and secondary hazards such as mudflows. The last flood and mudflow episode in 2015, in the South-eastern region of Almaty, led to the evacuation of nearly 900 people, and the declaration of the State of Emergency in the city of Almaty. In February 2008, another flood disaster displaced over 13,000 persons (approximately 1,800 families). The changing precipitation pattern of climate change also increases the frequency and intensity of droughts, and strains the management of water resources. Based on climate projections, an increase in torrential rains will bring more frequent mudflow events.

Kazakhstan is also affected by various epidemic hazards. In December 1998, 7 people were killed and 593 made ill by a bacterial infection, while from 1999−2000, 280 people were infected by typhus. In total, 704 confirmed human cases of CCHF have been registered in Kazakhstan from 1948 to 2013, with an overall case fatality rate of 14.8%. Similarly, the southern regions of Kazakhstan are considered endemic for CCHF, with cases reported from these territories on an annual basis.[13] Between 2010 and 2013, several outbreaks of FMD were also identified in the East and South-eastern part of the country.[14]

The country also has a number of important sites related to past CBRN activities. The Vozrozhdeniya Island and the Semipalatinsk Test Site – both situated in Kazakhstan – were testing sites for the Soviet biological and nuclear programmes.

Existing framework and authorities

Since 2001 and the adoption of its strategic development plan, Kazakhstan recognizes its vulnerability to natural hazards and has taken measures to create an institutional framework to mitigate associated risks. The President's Decree No. 451 "On measures aimed to prevent disasters in the territory of the Republic" from 19 March 2004 outlines Kazakhstan's long-term direction for national disaster management.

In accordance with Article 7 of the Law of the Republic of Kazakhstan "On Civil Protection" the Minister of Internal Affairs established an Interdepartmental State Commission for the Prevention and Elimination of Emergencies in 2014. The Commission is a consultative and advisory body aiming at the formulation and implementation of a unified state policy in the field of civil protection. Chaired by the Minister of Internal Affairs, the Commission is supported by the Committee for Emergency Situations of the Ministry of Internal Affairs of the Republic of Kazakhstan.

The Committee for Emergency Situations was created as a department of the Ministry of Internal Affairs of the Republic of Kazakhstan. It carries out strategic functions

[13] Talgat Nurmakhanov, Yerlan Sansyzbaev, Bakhyt Atshabar, Pavel Deryabin, Stanislav Kazakov, Aitmagambet Zholshorinov, Almagul Matzhanova, Alya Sadvakassova, Ratbek Saylaubekuly, Kakimzhan Kyraubaev, John Hay, Barry Atkinson, Roger Hewson, Crimean-Congo haemorrhagic fever virus in Kazakhstan (1948-2013), International Journal of Infectious Diseases 38 (2015), pp. 19–23, p. 21.

[14] See World Animal Health, World Animal Health Information Database Interface, available at: http://www.oie.int/wahis_2/public/wahid.php/Wahidhome/Home. In 2014 and 2016 the OIE Delegate of Kazakhstan has declared respectively 1 and 5 zones FMD free (with and without vaccination being given) according to the provisions of Chapter 8.8. of the Terrestrial Code, Edition 2016.

that ensure inter-sectorial coordination in the field of preventing and eliminating emergencies, civil defence, and fire prevention. It ensures the functioning and further development of the state system for the prevention and elimination of emergencies. To date, the Committee, its territorial bodies and subordinate organisations employ over 32,000 persons. It maintains standby mobile 24/7 civil defence units and rescue teams for domestic disaster relief that carry out several missions each year.

In case of epidemic and epizootic situations, the Government of the Republic of Kazakhstan can restrict the pasture of cattle along the state's border or impose quarantine lines, in accordance with Article 21 of the Law on State Border.

National CAP – CIMIC considerations

Kazakhstan identified Kazhydromet (i.e. Kazakhstan Hydrometeorological Service) as the alerting authority for geophysical and meteorological hazards to the World Meteorological Organisation Public Weather Services.

According to Article 4 of the Law of the Republic of Kazakhstan No. 387-II "On the State of Emergency" of 8 February 2003, "[t]he state of emergency shall be introduced in the case when the democratic institutions, independence and territorial integrity, political stability of the Republic of Kazakhstan, the safety of its citizens are under the serious and immediate threat and disturbed the normal functioning of the constitutional organs of the state." The circumstances that are grounds for the introduction of the state of emergency in Kazakhstan include "emergencies of social nature", and "emergencies of natural and technogenic character". In such situations, Article 5 of the same Law provides that "[t]he state of emergency throughout the territory of the Republic of Kazakhstan or in particular areas is introduced by the President of the Republic of Kazakhstan by the relevant decree after formal consultation with the Prime Minister and Chairpersons of the Chambers of the Parliament of the Republic of Kazakhstan with immediate informing of the Parliament of the Republic of Kazakhstan." Article 14 of the Law reads that "[i]n order to ensure the state of emergency the forces and means of internal affairs, national security, the authorized body in the field of civil protection and other state bodies are used."

In January 2017, Kazakhstan signed the Almaty declaration calling to consolidate efforts to ensure the effective implementation of regional instruments, such as the CIS inter-parliamentary Model Law on the "Support and Regulation of International Assistance in Emergency Situations and Initial Rehabilitation". The Model Law contains provisions on civil-military coordination, and is based on the model law developed by the IFRC together with UN OCHA and the Inter-Parliamentary Union.

Regional cooperation

The most relevant cooperation agreement undertaken by the Republic of Kazakhstan is its membership in the Center for Emergency Situations and Disaster Risk Reduction, headquartered in the Kazakh city of Almaty. Based on an intergovernmental agreement between the Ministers of Emergency Situations of the Republic of Kazakhstan and the Kyrgyz Republic, the Center has been in operation

since July 2016. It was accredited the status of an intergovernmental organization by the Ministry of Foreign Affairs of Kazakhstan. The Center's main functions cover:

- cooperation with interested parties in emergency management and the DRR field;
- implementation of joint international projects in emergency management and the DRR field;
- conducting of special exercises, workshops, training courses and other events;
- implementation of measures for the harmonization of legislation in emergency management and the DRR field;
- participation in preparation and organization of international exercises, rescue and humanitarian operations in the territories of the Parties and in other countries and assistance in securing participation of the forces and resources of the Parties in these events;
- exchange of experience and implementation of best practices for emergency management and disaster risk reduction;
- other activities in emergency management and the DRR field.

In a roundtable on civil-military cooperation, Yerbolat Sembayev, Director of the Department of International Cooperation, Ministry of Foreign Affairs of the Republic of Kazakhstan cited the establishment of the Center as an example of how Almaty has become a regional hub for humanitarian assistance. In the same roundtable, a representative of the Republic of Kazakhstan noted that Kazakh search and rescue teams are being deployed for international operations.[15] According to the Committee for Emergency Situations' website, Kazakhstan provided humanitarian aid to several countries worldwide.

In 2006, the United States Centers for Disease Control and Prevention (CDC) established a Global Disease Detection Regional Center in Kazakhstan to enhance local public health ability to contain and control infectious diseases, improve radiation safety, and counter the potential for bioterrorism. Assistance provided through the Center and in partnership with international agencies have helped contain outbreaks of epidemics (including typhoid, botulism, human influenza, and Crimean-Congo haemorrhagic fever), improve laboratory systems, build surveillance systems for acute infectious respiratory illness, and strengthen health institutions through training in field epidemiology and outbreak response.

Furthermore, Kazakhstan signed the Almaty declaration, which recognised the importance of legislation in ensuring effective international coordination during disasters, and expressed support for the aforementioned model legislation on the regulation of international assistance in emergency situations. In addition, the declaration supports continued and increasing cooperation on disaster management at the regional level, including through the platform of the Center for Emergency Situations and Disaster Risk Reduction. Kazakhstan is also a member of the Regional Consultative Committee (RCC) on Disaster Management.

[15] International Peace Institute, Regional Civil-Military Coordination in Disasters: Central Asia Within a Global Network, October 2013. Available at: https://www.files.ethz.ch/isn/172411/ipi_e_rpt_regional_civil_military_rev.pdf

Moreover, Kazakhstan has ratified several international or bilateral agreements in the field of civil defence, emergency preparedness and response.[16] Those agreements guide the activities of the Committee for Emergency Situations of the Ministry of Internal Affairs of the Republic of Kazakhstan.

Potential gaps identified and areas of improvement

One of the lessons learned from the 2003 earthquake in the Zhambyl region was that the scale of the disaster would have been less if the local population had been adequately informed about the potential dangers of the earthquake and the mitigation measures that were implemented. Subsequently, several steps have been taken by the Republic of Kazakhstan to integrate disaster risk reduction and emergency preparedness into school curricula throughout the country. The website of the Committee for Emergency Situations of the Ministry of Internal Affairs of the Republic of Kazakhstan also displays information on action to be taken by the population in case of "accidents on chemically dangerous objects and spill of strong toxic agents". Since 2016, a project implemented by the Global Facility for Disaster Reduction and Recovery has also aimed to strengthen early warnings in the mountainous regions of Kazakhstan. Efforts are focusing on cross-boundary cooperation and capacity-building of national hydro-meteorological services to leverage technology for severe weather forecasting and to enhance Kazakhstan's ability to prepare for and respond to disasters. However, it remains unclear if the Kazhydromet identified as the alerting authority with the World Meteorological Organisation Public Weather Services covers all types of emergencies. There is currently no alerting authority identified for environmental, health and CBRNe hazards categories. Likewise, it could not be ascertained if Kazakhstan has adopted CAP communication standards.

The 2009 VERTIC Survey of the Kazakhstan's National Implementation Measures for the BWC concluded that Kazakhstan does not have measures related to the training of law enforcement personnel or the co-operation and co-ordination with public health officials and other agencies in the event of an incident involving dangerous biological agents and toxins.

Kazakhstan possesses a developed framework for emergency preparedness and disaster risk reduction. Best practices and lessons learned could thus be shared with neighbouring countries. Moreover, the country hosts at least two regional centres relevant for regional cooperation in the field of biological events. The international and regional instruments signed or ratified by Kazakhstan in the field of emergency preparedness and response also constitute important tools to leverage regional cooperation in this area.

[16] For the full list of agreements please see: http://www.emer.gov.kz/en/activity/the-international-cooperation/international-agreements

2.3 Emergency Response Planning in Kyrgyzstan

National context and potential risks

The Kyrgyz Republic is a landlocked country in the eastern part of Central Asia; divided into 7 provinces, 25 cities, 28 urban villages and 444 ayil-okmotu (rural districts). The country has more than 5 million inhabitants composed of a large majority of Kyrgyz (65%), followed by Uzbek (13.8%), Russian (12.5%) and Ukrainian (1%) minorities. Kyrgyzstan has 11 points of entry (2 airports, 1 railway station, 8 other ground crossings) designated in accordance with its obligations under the IHR.[17] With 80% of its territory covered by the Tian Shan Mountains, the country is particularly vulnerable to natural hazards. Landslides, mudflows and floods are major hazards, with 200-300 events every year. Seismic activity is constant, with more than 3000 earthquakes registered annually. In addition to being classified as one of the most seismic countries of Central Asia, the Kyrgyz Republic is also at risk of various industrial and transport-related hazards. Between 1988 and 2007, Kyrgyzstan has also suffered various epidemic disasters including a large typhus fever infection affecting 458 people in 1998. From 2010 to 2014, several FMD outbreaks occurred in the Kyrgyz Republic, with a peak of 23 new outbreaks in the Chuy region in October 2011 particularly affecting cattle.

As a consequence of climate change and global warming, an increase of hydro-meteorological disasters has been noted in Kyrgyzstan. With a likely increase in frequency and severity of hydro-meteorological hazards such as floods and droughts, it is feared that a higher prevalence of infectious diseases, epidemics and pandemics such as cholera, malaria and bird flu could be experienced. Those phenomena can also have transboundary impacts.

At the Regional Project 53 Kick-off Meeting (2-3 February 2017, Bishkek, Kyrgyzstan), the Kyrgyzstan National Team of Experts (NTE) identified burial of animals as a source of biological risk. The State Veterinary Inspectorate registered more than 1200 soil anthrax foci and 3 natural plague foci, which pose a potential risk of dangerous infectious diseases for both animals and humans.

Existing framework and authorities

According to Resolution No. 175 of 16 May 2007, the Ministry of Emergency Situations of the Kyrgyz Republic is the central executive body responsible for protecting the population from natural and man-made emergencies. The Ministry is tasked with monitoring and forecasting dangerous natural, man-caused processes and phenomena, their prevention and assessment. It maintains control over civil defence forces and the State Fire Service in order to ensure their constant readiness for carrying out measures to protect the population and Kyrgyz territories. The Ministry is also responsible for the detection and identification of areas affected by radioactive, chemical, and biological materials and other contaminants.

In the field of state supervision of technological, technical and industrial safety and mining supervision, the Ministry oversees compliance with the requirements of

[17] See WHO, Joint External Evaluation of IHR Core Capacities of the Kyrgyz Republic, 2017, p. 54.

industrial safety in the design, examination, construction, installation, expansion, reconstruction, technical re-equipment, diagnostics, repair, commissioning, operation, conservation or liquidation of hazardous production facilities. It approves the conclusions of the industrial safety expertise for design documentation, technical devices, buildings and structures, industrial safety declarations and other documents related to hazardous production facilities.

In terms of response mechanisms, Kyrgyzstan has set systems of investigation of public health emergencies, rapid response teams, as well as control measures (monitoring of events, infection control, monitoring of contacted persons, environmental control, mass prevention measures) and mobile diagnostic capabilities. For instance, the NTE noted the establishment of the Animal and Plant Protection Service in the Civil Defense System within the Ministry of Agriculture.

Resolution No. 156 of 13 March 2006 created the Interdepartmental Commission for the Prevention and Liquidation of Emergencies. This commission is a consultative and advisory body established with a view to formulating proposals for the formation and implementation of a unified state policy in the field of preventing and eliminating emergencies caused by accidents, catastrophes, natural and other disasters.

In 2011, the Kyrgyz Republic established the Kyrgyz National Platform for Disaster Risk Reduction. Acting as a multi-stakeholder platform, it contributes to the country's resilience by establishing a coordination mechanism, developing a culture of prevention through advocacy and integrating Disaster Risk Reduction (DRR) into national policies. This platform includes national components (Inter-ministerial Commission for Civil Protection of the Kyrgyz Republic, the Scientific and Technical Council (STC) under the Inter-ministerial Commission for Civil Protection of the Kyrgyz Republic) and international ones (Disaster Response Coordination Unit)

In 2017, Kyrgyzstan also initiated the adoption of the Disaster Assistance Act based on the Model Act on International Disaster Assistance developed by the Inter-Parliamentary Assembly of Member Nations of the Commonwealth of Independent States in 2014 and the Guidelines for the domestic facilitation and regulation of international disaster relief and initial recovery assistance.

Following a training on emergency risk communication organised by WHO in September 2017, a national communication strategy is currently being drafted in Kyrgyzstan. Moreover, the Ministry of Health is planning to conduct a pilot exercise for the new Emergency Risk Communication Plan in the beginning of 2018.

National CAP – CIMIC considerations

In terms of early detection, Kyrgyzstan uses IBES (indicator based epidemiological surveillance) for routine surveillance, as well as SBES (syndrome based epidemiological surveillance) and EID (operational epidemiological distribution). According to the NTE, operational warning plans in case of quarantine and dangerous infections will specify national contact points. Kyrgyzstan identified the Main Hydrometeorological Administration as the alerting authority with the World Meteorological Organisation's Public Weather Services. This authority is registered for geophysical, meteorological, fire, health, environmental, and CBRNe hazards

categories in line with the Common Alerting Protocol (CAP) based on ITU Recommendation X. 1303. According to Resolution No. 175, the Ministry of Emergency Situations creates and maintains constant readiness control points, systems and means of communication and warning.

Regarding civil-military coordination, Resolution No. 175 provides that the Ministry of Emergency Situations can use military units, such as the Republican Separate Saving Group, or the Rescue Services. Resolution No. 175 also states that the Ministry's activities are guided by the orders and directives of the Commander-in-Chief of the Armed Forces of the Kyrgyz Republic. It stipulates that the Ministry carries out its activities in cooperation with other ministries, state committees, administrative departments, international and non-governmental organizations directly and through subordinate bodies.

Although the new Disaster Assistance Act is not yet available, it can be expected to contain provisions on civil-military coordination, as is the case for the model law developed by the IFRC together with UN OCHA and the Inter-Parliamentary Union on which the CIS Model Act is based. In particular, the model law imposes an agreement between assisting and assisted states to provide aid through military actors (Article 7(c)), and forbids states from gathering sensitive information of a political, economic or military nature that is irrelevant to Disaster Relief or Initial Recovery Assistance (Article 16(c)(iv)). Moreover, Article 15 envisages operational coordination of assisting international actors, which, according to the model legislation commentary, could include "coordination with the relevant national disaster management authority, with military actors, or with UN structures, as determined by the government of the affected state".

Regional cooperation

The most relevant cooperation agreement undertaken by the Kyrgyz Republic is its membership in the Center for Emergency Situations and Disaster Risk Reduction in Almaty. Based on an intergovernmental agreement between the Ministers of Emergency Situations of the Republic Kazakhstan and the Kyrgyz Republic, the Center has been in operation since July 2016. It was accredited the status of an intergovernmental organization by the Ministry of Foreign Affairs of Kazakhstan. The Center's main functions cover:

- cooperation with interested parties in emergency management and the DRR field;
- implementation of joint international projects in emergency management and the DRR field;
- conducting of special exercises, workshops, training courses and other events;
- implementation of measures for the harmonization of legislation in emergency management and the DRR field;
- participation in preparation and organization of international exercises, rescue and humanitarian operations in the territories of the parties and in other countries and assistance in securing participation of the forces and resources of the parties in these events;
- exchange of experience and implementation of best practices for emergency management and disaster risk reduction;

- other activities in emergency management and the DRR field.

The Kyrgyz Republic implements several projects in the area of Emergency Response and Disaster Risk Reduction with international actors, including the European Union (EU), the Global Environmental Facility (GEF), the United Nations Development Programme (UNDP), the World Bank, Central Asia Regional Risk Assessment (CARRA), the German Agency for International Cooperation (GIZ), and the Japan International Cooperation Agency (JICA). Kyrgyzstan also developed bilateral linkages with other countries, including Pakistan in 2015.

Potential gaps identified and areas of improvements

At the Regional Project 53 Kick-off Meeting (2-3 February 2017, Bishkek, Kyrgyzstan), the NTE noted that the absence of systemic risk assessments affects the process of making informed decisions and timely corrective and preventive measures. It leads to an absence of effective risk communication. Moreover, the various entry points within the Kyrgyz territory require additional monitoring procedures, training and drills to ensure efficient control. Coordination between responding teams could be enhanced through the provision of guidelines and rules for joint actions to identify hazards, assess characteristics of specific risks and ensure operational communication and risk awareness.

A 2012 VERTIC Survey of the Kyrgyz Republic's National Implementation Measures for the BWC concluded that Kyrgyzstan does not have measures related to the training of law enforcement personnel or co-operation and co-ordination with public health officials and other agencies in the event of an incident involving dangerous biological agents and toxins. Similarly, the NTE confirmed that training and better coordination could improve Kyrgyzstan's response to these type of incidents.

In starting the process of adopting a new law on international disaster assistance, Kyrgyzstan is leading the way for Central Asian States. Knowledge and best practices that the Kyrgyz Republic inherited from this exercise could be beneficial to its neighbours and could contribute to regional integration. The adoption of such a law could also be the opportunity to integrate regional cooperation on CAP or CIMIC, especially through the Center for Emergency Situations and Disaster Risk Reduction in Almaty.

2.4 Emergency Response Planning in Mongolia

National context and potential risks

Mongolia has a population of roughly 3 million, almost half of which (1.38 million) resides in the capital, Ulaanbaatar. Despite a rapid urbanisation process, it is one of the least densely populated countries in the world, and a significant part of its population follows a nomadic lifestyle.

Mongolia is a landlocked country, characterised by high elevation (it is on average 1528 metres above sea level). Western Mongolia is mountainous, while the terrain in

Eastern Mongolia mostly consists of deserts, semi-desert plains and grassy steppes. Mongolia has designated three points of entry in accordance with its obligation under the IHR: Chinggis Khaan international airport, and two ground crossings (Zamiin-Uud and Sukhbaatar). In addition, the country totals twenty-four non-designated ground crossings, of which sixteen operate year-round.[18] The overall climate is cold with short but relatively hot summers.

Due to its climate and topography, the country is subject to several climatic hazards; mostly blizzards, snow storms, floods and dust storms. It also suffers from drought and desertification, and is threatened by earthquakes, especially since rapid urbanisation has led many citizens to live in precarious buildings. A climatic hazard specific to Mongolia is the "Zud", a combination of extreme cold and either severe snow or ice that is particularly devastating to livestock. As a large part of the Mongolian population relies on animal farming for its livelihood, the Zud is particularly threatening. The last recorded Zuds have been in 1993, 2001, 2002 and 2010. The Zud in 2010 is estimated to have killed around 17% of the country's livestock population, which strongly contributed to the urbanisation process. At least one case of FMD per semester was reported in Mongolia between 2010, 2013, 2014, 2015 and 2016[19]

Mongolia has relatively low levels of infectious disease, thanks in part to a successful vaccination campaign. The urbanisation trend in recent years has brought a slight increase in AIDS/HIV cases.

Existing framework and authorities

Mongolian legislation establishes a State Emergency Commission at the national level, supplemented and supported by Emergency Commissions at the local level. These councils provide policy recommendations and coordination at the national and local levels. The law mandates that government bodies, local administrations and other entities, as well as local volunteer groups be involved in the planning, organisation and implementation of disaster protection activities.

The State Emergency Commission draws up national disaster management plans and coordinates activity and input from local commissions, as well as relevant state agencies and ministries, including the Ministry of Health. It also oversees post-disaster reconstruction and mitigation efforts.

The National Emergency Management Agency (NEMA) is the state agency tasked with disaster preparation, response and management. The NEMA has over 4000 staff and operates a network of local departments.

Mongolia developed a strategy to implement the "Sendai Framework for Action 2017-2030 on Disaster Risk Reduction" in Mongolia that was approved by the Government on 27th December 2017. This strategy takes into account the seven goals and four priority directions of activity to reduce disaster risks, which 187 world

[18] WHO, Joint External Evaluation of IHR Core Capacities of Mongolia, 2017, p. 47.
[19] See World Animal Health, World Animal Health Information Database Interface, available at: http://www.oie.int/wahis_2/public/wahid.php/Wahidhome/Home.

countries unanimously approved at the Third United Nations World Conference on Disaster Risk Reduction, held in Sendai, Japan in 2015. Goals and priorities of the Sendai meeting were summarized in the Sendai Framework for Action 2015-2030 on Disaster Risk Reduction. The Mongolian strategy was developed according to the World Sustainable Development Program-2030, Paris Agreement against Climate Change, and Sendai Framework for Action in the Asian region and Concept of Sustainable Development of Mongolia-2030 to be implemented up to 2018-2030. It will be implemented in cooperation with ministries, agencies, local self-governing and administrative organizations, civil society, scientific organizations, private sector, citizens, the public community and international organizations. The approval and implementation of the strategy is expected to increase public knowledge and understanding of risk reduction for disasters, improve national and local systems and the legal environment for reducing disaster risks, create a disaster information database, strengthen disaster protection capacity, reduce disaster risks and ensure sustainable development in the country. The approval of this strategy is significant for the preparatory work ahead of the Second Asian Ministerial Conference on Disaster Risk Reduction to be organized in Mongolia in 2018, and to fulfil duties and promises undertaken by Mongolia at the Third United Nations World Conference on Disaster Risk Reduction and the Asian Ministerial Conference on Disaster Risk Reduction.

National CAP – CIMIC considerations

Under Mongolian law, the NEMA is tasked with keeping emergency communication and warning systems operational and ready for everyday situations, and to "promptly" disseminate warnings to the population when the readiness level is raised. In the past, Mongolia has reported challenges in effectively disseminating warnings to rural nomadic populations that lack access to radio, television and Internet.

The NEMA is tasked with preparing the national disaster protection plan, and to organise and monitor its implementation. It also requires administrators at the local level to plan, finance, manage and implement disaster protection measures in the territory. Training and preparation for emergency responses involves a range of stakeholders and actors, including national agencies, local governments, volunteer groups and the armed forces.

Local or national government officials are tasked with deciding when to escalate readiness to higher levels, depending on the affected areas. Responses triggered by an increase in the readiness level include sending out alerts to the population, shifting local administration personnel to special duties, mobilising manpower, machinery and materials and imposing quarantines. Under the law, armed forces can be mobilised and assigned to rescue and mitigation activities when approved by the President of Mongolia, under proposal by the Government.

Offers of assistance from international humanitarian aid providers are approved by the Government. The NEMA is tasked with coordinating disaster response, including organising and supervising domestic and international humanitarian aid.

International humanitarian Assistance in Mongolia is supervised by the State Emergency Commission, and must operate in accordance with laws, regulations and

guidelines. The new 2017 Mongolian Law on Disaster Protection explicitly forbids Assistance providers from taking part in the following:

- Discriminating against citizens based on their ethnic origin, age, sex, social origin, status, religion or opinion;
- Disclosing human secrets;
- Participating in matters not related to disaster protection activities and expressing political and religious affiliation;
- Lookinging for financial interests;
- Collectinging information on matters not related to humanitarian aid.

The Government has the power to immediately stop any international operation if these prohibitions are violated. These provisions follow guidelines set out in the United Nations Oslo Guidelines on The Use of Foreign Military and Civil Defence Assets In Disaster Relief.

Regional cooperation

The National Organisation for Disaster Prevention is tasked with developing cooperation with foreign and international organisations for disaster relief and with taking part in international search and rescue operations.

At the regional and international level, Mongolia is a member of the Asian Disaster Reduction Centre, Asian Disaster Preparedness Centre, International Civil Defence Organization, and the Disaster Management Committee of ASEAN. In addition, Mongolia has Search and Rescue agreements with China and the Russian Federation.

Beyond the region, Mongolia has had a partnership with the Alaskan National Guard since 2003. The two governments share similar terrain and weather conditions, and similar challenges related to dispersed, difficult to reach rural populations. Under this partnership, Mongolia and Alaska conduct joint activities and participate in each other's initiatives, including training and exercises, on a yearly basis. Mongolia has also carried out knowledge-sharing exchanges with Indonesia, to learn about the country's comprehensive wide-government approaches to tsunami mitigation and response.

The Asian Ministerial Conference on Disaster Risk Reduction held in November, 2016 in New Delhi, India approved the 2016-2030 Plan for implementation of the "Sendai Framework for Action 2015-2030 on Disaster Risk Reduction" in the Asian region. The Conference also decided to organize the Second Asian Ministerial Conference on Disaster Risk Reduction in Ulaanbaatar, Mongolia in 2018. The second conference will analyse and evaluate the progress of activity for the first three years stated in the Sendai Framework in Asia. It will look at obligations and promises of regional countries on Disaster Risk Reduction, measures taken to implement Sendai activities, and issue the "Ulaanbaatar Declaration" which will highlight measures to be taken to reduce the risk of natural disasters in Asia in 2018-2020.

Potential gaps identified and areas of improvement

It is not clear if NEMA has adopted CAP communication standards. The only entry for Mongolia in the WMO Register of Alerting Authorities is the National Agency for Meteorology, Hydrology and Environment Monitoring, which focuses exclusively on Geophysical, Meteorological and Fire emergencies. No alerting authority for Environmental and CBRNe hazards categories is listed. It is not clear how NEMA and the NAMHE cooperate, and if their alerting and communications systems are integrated or separate.

VERTIC's survey of Mongolian legislation did not find any provisions related to interagency cooperation and coordination in the event of an incident involving dangerous biological agents and toxins.

2.6 Emergency Response Planning in Tajikistan

National context and potential risks

The Republic of Tajikistan is a landlocked country in the southeast portion of Central Asia. Its population of 8.55 million is composed of 65% Tajik, 25% Uzbek and 3.5% Russian ethnicities.

Tajikistan is vulnerable to a variety of disasters caused by natural hazards, including floods, earthquakes, mud flows, landslides, epidemics, droughts, avalanches, insect infestations and wind storms, as well as technological hazards including transport, industrial and other accidents. Tajikistan's vulnerabilities also include epidemics with outbreaks of typhoid in 1997 (168 people were killed and 15,618 others affected) and 1999 (3 people were killed and 200 others affected). Few outbreaks of FMD were also reported in Tajikistan between 2011 and 2013.[20]

Climate change is expected to increase the frequency of already-common flooding and mudslides, as well as a reduction of up to 40% of glacial water flows. The forecasted results indicate that by 2050 the volume of river flow in the Amudarya River basin will be reduced by 10-15% and in the Syrdarya by 6-10%. The agriculture sector that employs around 60% of the population will be particularly exposed to these increased risks.

Existing framework and authorities

The Committee for Emergency Situations and Civil Defence was established under the Decree of the Government of the Republic of Tajikistan No. 400 of August 17, 1994 (hereinafter referred to as the Committee). Following structural changes to the Committee and the expansion of its authorities, its status has been revised. A new status of the Committee was approved by Decree of the Government of the Republic of Tajikistan No. 547 of November 29, 2017. In accordance with this decree, the Committee is the primary executive body that carries out activities to implement state policy in the field of: disaster management and civil defence, statutory regulation, the

[20] See World Animal Health, World Animal Health Information Database Interface, available at: http://www.oie.int/wahis_2/public/wahid.php/Wahidhome/Home.

provision of state services and the management of government-owned property, the implementation of unified state policy on preparation and the protection of the population and economic assets, and the territory of the Republic of Tajikistan from emergency consequences in peacetime and wartime. It coordinates at the national scale legal, defence and other measures aimed at protecting the population, economic assets and the territory of the Republic of Tajikistan from the consequences of natural and man-made emergency situations, and in case of occurrence of military activities.

The main authorities of the Committee include:

- implementation of the state policy in the field of civil defence, protection of the population, economic assets and the territory of the Republic of Tajikistan from natural and man-made emergency situations in peacetime and wartime;
- organization and conduct of civil defence measures, protection of the population and territory from natural and man-made emergency situations;
- management in the field of civil defence, protection of the population, economic assets and the territory of the Republic of Tajikistan from natural and man-made emergency situations in peacetime and wartime;
- coordination of activities of the primary and local bodies of executive power, organizations and institutions, regardless of their organizational and legal form within the framework of the unified state system of the Republic of Tajikistan on prevention and emergency mitigation;
- collection, development and exchange of information in the field of civil defence, protection of the population, economic assests and the territory of the Republic of Tajikistan from natural and man-made emergency situations;
- organization and provision of international cooperation in the field of civil defence, protection of the population, economic assests and the territory of the Republic of Tajikistan from natural and man-made emergency situations;
- organization of top-priority measures, conducting emergency-rescue and other emergency works in the emergency situations in peacetime and wartime;
- normative-legal regulation and other tasks, related to the authorities of the Committee.

In addition, the Committee exercises control over the use of financial and material support allocated by the Government of the Republic of Tajikistan, which it receives from other states, international and public organizations, and individual citizens. It also coordinates arrangements for the use of financial and material support allocated by the Government of the Republic of Tajikistan, which it received from other states, international and public organizations, individual citizens, as well as the control of establishment of emergency reserve funds, including state reserve funds and their intended use. The Committee includes local offices that implement the disaster management at the regional and district levels.

Since 2002, the State Commission of Emergency Situations is responsible for disaster risk management activities at the national level. Chaired by the Chairman of the Government, the Commission gathers representatives of the key ministries and agencies of the Republic of Tajikistan. It also has representation at the regional and district levels.

Additionally, several laws govern disaster management in Tajikistan:

- Law on protection of the population and territories from natural and man-made emergency situations (No. 53 of 15 July 2004)
- Law of the Republic of Tajikistan on the "Fund for mitigation of emergency situations" (1993)
- Law of the Republic of Tajikistan on "Civil Defence" (1995, as amended in 2004)
- Law of the Republic of Tajikistan on "Emergency-Rescue Services and the Status of Rescuers"
- Law of the Republic of Tajikistan on "Universal Military Obligations and Military Service" November 29, 2000, No. 30
- Resolution of the Government of the Republic of Tajikistan of 1.06.2007 No. 318 approving the Regulations on the "Republican Centre for coordination of projects for emergency response and recovery".

In 2009, Tajikistan also adopted a pandemic influenza management plan. Similarly, under the Tajikistan National Disaster Risk Management Strategy for 2010 – 2015, a comprehensive assessment of epidemiological, epizootic and epiphytotic risks was to be undertaken by the Ministry of Health and the Ministry of Agriculture.

Finally, under the Law on the Legal Regime of the State of Emergency, the State of Tajikistan can trigger exceptional measures for a state of emergency in case of "natural calamities, accidents and catastrophes, epidemics threatening the life and health of the population …" (Article 1).

National CAP – CIMIC considerations

Early warning in Tajikistan targets the most vulnerable regions and uses cell phones, local radios centres as well as central radio and television to warn the population in case of threats. In addition, Tajikistan identified the Main Administration of Hydrometeorology and Monitoring of the Environment as the alerting authority with World Meteorological Organisation's Public Weather Services. This authority is registered for geophysical, meteorological, health, environmental, and CBRNe hazards categories in line with the Common Alerting Protocol (CAP) based on ITU Recommendation X. 1303.

Regional cooperation

Tajikistan implements several projects in the area of Emergency Response and Disaster Risk Reduction with international actors, including the Asian Development Bank, the Australia Department of Foreign Affairs and Trade, the Japan International Cooperation Agency (JICA), the New Zealand Ministry of Foreign Affairs and Trade, and the World Bank.

Together with Kazakhstan and Kyrgyzstan, Tajikistan participated in the negotiations that led to the establishment of the Centre for Emergency Situations and Disaster Risk Reduction in Almaty. In particular, the Republic of Tajikistan signed a Memorandum of Understanding to establish the Regional Centre for Emergencies and Disaster Response in October 2010, and became a member of the Organizing Committee that was formed in Almaty to accelerate the opening of the Centre in 2011. Nevertheless, to date, Tajikistan is not a member of the Centre.

In 2016 Tajikistan established the Regional Training Center on WMD Non-Proliferation and Export Control for countries of Central Asia, Caucasus and Afghanistan. The Center currently undertakes courses for law-enforcement agencies on nuclear and radiation security both at the national and regional level; additional training syllabuses with biological and chemical components are currently developed with OSCE.

From 19 to 23 September 2016, the Biosafety Association for Central Asia and the Caucasus (BACAC) in collaboration with the ISTC Regional Biosafety Training Centre (Dushanbe) delivered a Regional CCHFV/Ebola Capacity Building Training Seminar at the Tajik Research Institute of Preventive Medicine (TRIPM) in Dushanbe, Tajikistan. The 42 participants hailed from various Central Asian and Caucasus countries, including Armenia, Azerbaijan, Georgia, Iran, Kazakhstan, Kyrgyzstan, Mongolia, Pakistan, Tajikistan, Turkmenistan and Uzbekistan.

In January 2017, the Red Cross National Society and the Government of Tajikistan participated in a regional 'consultative conference on legal aspects of disaster risk reduction', held in Almaty, Kazakhstan. The event was hosted by the Centre for Emergency Situations and Disaster Risk Reduction in the framework of a project on "Consolidating and Strengthening DRR in Central Asia", and funded by the Department of the European Commission for Humanitarian Aid and Civil Protection (ECHO). Tajikistan also signed the Almaty Declaration, which recognised the importance of legislation in ensuring effective international coordination during disasters, and expressed support for the CIS inter-parliamentary Model Law on the "Support and Regulation of International Assistance in Emergency Situations and Initial Rehabilitation". In addition, the declaration supports continued and increasing cooperation on disaster management at the regional level, including through the platform of the Centre for Emergency Situations and Disaster Risk Reduction.

Potential gaps identified and areas of improvements

A recent VERTIC Survey of the Republic of Tajikistan's National Implementation Measures for the BWC concluded that Tajikistan does not have measures related to the training of law-enforcement personnel or co-operation and co-ordination with public health officials and other agencies in the event of an incident involving dangerous biological agents and toxins. However, it should be noted that a draft Law on Biological Safety tasks the government of the Republic of Tajikistan with "coordinating activities of ministries, agencies and local bodies of state authorities in ensuring biological safety" (Article 7). It should also be noted that, with the support of the OSCE, and in order to implement the National Action Plan on implementation of UNSCR 1540 and to upgrade the professional skills of law-enforcement specialists, border customs authorities, health officials, other ministries and agencies, who work with the biological agents and toxins, training modules on biosafety and biosecurity were developed in line with international requirements.

The Tajikistan National Disaster Risk Management Strategy for 2010-2015 notes the lack of a clear division of responsibilities amongst the local executive structures, the authorized state body in the field of protection of population and territories in emergency situations, as well as amongst relevant ministries and agencies of the

Republic of Tajikistan. Taking into account the unfulfilled tasks and gaps in the Strategy for 2010-2015, a draft National Disaster Risk Management Strategy project has been developed for the period up to 2030 that provides specific roles to the executive bodies at all levels to prevent and reduce the consequences of emergencies of natural and man-made origin.

VERTIC was not able to find information on the role of Tajikistan's armed forces in emergency planning, training and response, and on procedures to authorise foreign humanitarian aid, including foreign military assets, during emergencies.

The Unified State System on prevention and emergency mitigation began functioning in the Republic of Tajikistan in 2015. The Decree of the Government of the Republic of Tajikistan of December 31, 2014 No. 833 on "Structure and functioning of the Unified State System of the Republic of Tajikistan on prevention and emergency mitigation" approved its authority. The unified state system is designed to prevent and manage the consequences of natural disasters, ensure the safety of the population and reduce the potential for economic damage. The Unified State System comprises 25 ministries and agencies, local executive bodies of state power at the regional and district levels, which are its subsystems. The unified state system is united by governing bodies, forces and resources of ministries and agencies, local executive bodies of state power, local self-government bodies, as well as organizations, which have the authority to address the issues of protecting the population and territories from emergency situations in accordance with the tasks stipulated by the Law of Republic of Tajikistan "On protection of the population and territories from natural and man-made emergency situations".

The Emergency Management and Civil Defence Center of the CoES and its regional and local centres coordinate the activities of the subsystems of the Unified State System. Each subsystem of the Unified System carries out its activities in accordance with its Regulations and tasks to prevent and organize measures to eliminate the consequences of natural and man-made disasters. The list of the subsystems of the Unified State System is approved in Appendix 1 of the aforementioned resolution. This subsystem includes the Ministry of Defense, Health, Internal Affairs, Agriculture, Finance, Economic Development and Trade, as well as the Academy of Sciences and other interested departments.

2.7 Emergency Response Planning in Uzbekistan

National context and potential risks

Uzbekistan has a population of roughly 30 million people, making it one of the most populated countries in the region. Its climate is desert-continental, with cold winters (below zero) and hot summers (above 34 degrees Celsius), and low levels of precipitation. Part of Uzbekistan comprises the Republic of Karalpakstan, a formally sovereign republic. Karalpakstan has its own government, which maintains a veto power over laws and policies by Uzbekistan that affect it.

A significant geographical feature of Uzbekistan, tied with several natural disaster risks, is the Aral Sea. The former inland sea has been rapidly shrinking since the 1960s, causing issues of high salinity and heavy metal contamination in the soil.

Uzbekistan is very seismically active, and has been struck by very strong earthquakes in the past. In addition Uzbekistan is vulnerable to droughts, seasonal floods, mud floods, landslides, and locust invasions.

Existing framework and authorities

The Ministry of Emergency Situations (MoES) is the state's authorised body for emergency response and relief, and coordinates Departments for Emergency Situations at the regional (internal) level. The ministry conducts risk assessments and planning for emergency mitigation, organises training, and is in charge of monitoring the implementation of emergency preparedness plans and coordinating emergency rescue work.

MoES is responsible for the administration of the Civil Protection of Uzbekistan, and provides it with supervision and direction. The Civil Protection of Uzbekistan is deployed across the national territory, and is tasked with carrying out risk assessments at the local level, to prepare defensive measures and infrastructure and to protect the population in case of emergency situations.

The State System for prevention of, and response to, emergency situations is responsible for management of emergency epidemiological, epizootic and epiphytotic situations. The level of coordination and division of responsibilities for these situations between the State System and the Ministry of Emergency Situations is unclear from VERTIC's current analysis.

Government bodies of the Republic of Karalpakstan coordinate the activities of the Emergency Situations Department of the Republic to plan operations in its territory.

National CAP – CIMIC considerations

Uzbekistan has established a centralised state early warning system, employing sirens, loudspeakers, broadcasting to television and radio and SMS text directed to communities. This is enhanced by local warning systems near dangerous facilities. 2010 reports from the Ministry of Emergency Situations described on-going work to improve technologies, expand the system to the Republic of Karalpakstan, and provide warnings in the Mahalla language.

National laws state that information on emergencies and disasters must be communicated to the citizens "timely and reliably", and that government bodies must create local emergency notification systems and keep them in a ready state. The Civil Protection of Uzbekistan is also required to support and control warning and communication networks.

In case of a suspected dangerous disease outbreak, alerts are sent at the local level to the local division of the Republican Prophylactic Centre for Quarantine and Dangerous infections of the Ministry of Health of Uzbekistan, and reported from there

to the Ministry of Health. Other bodies that monitor risks related to biological events and public health are the Monitoring and Forecasting Service of the Ministry of Emergency Situations.

Regional cooperation

Uzbekistan hosts the Central Asian CoE for CBRN risk mitigation in Tashkent.

Uzbekistan engages in cooperation and receives assistance on emergency preparedness and response from a range of organisations and multilateral fora regionally and internationally. These include UNICEF, the Commonwealth of Independent States, the Heart of Asia Regional Cooperation Initiative (Regional Technical Group on Disaster Management), the World Bank, and others.

Uzbekistan cooperates with NATO on civil emergency planning and disaster relief coordination In 2003 it hosted the large-scale Exercise Ferghana 2003, which simulated a multi-national response to a severe earthquake and involved regional countries and NATO member states.

Uzbekistan took part in joint Civil-Military Emergency Preparedness information exchanges with the US in 2011. The event included discussion of preparations, mitigation and recovery after the release of hazardous materials including chemical, biological, and radiological substances.

In January 2017, Uzbekistan signed the Almaty declaration, which recognised the importance of legislation in ensuring effective international coordination during disasters, and expressed support for the CIS inter-parliamentary Model Law on the "Support and Regulation of International Assistance in Emergency Situations and Initial Rehabilitation". In addition, the declaration supports continued and increasing cooperation on disaster management at the regional level, including through the platform of the Centre for Emergency Situations and Disaster Risk Reduction.

Potential gaps identified and areas of improvement

It is not clear if Uzbekistan has adopted CAP communication standards for all types of emergencies: the only entry for Uzbekistan in the WMO Register of Alerting Authorities is the Uzhydromet, which only focuses on meteorological emergencies. No alerting authority for environmental, health and CBRNe hazard categories is listed.

VERTIC was not able to find information on coordination of activities and information sharing between MoH and MoES with regard to monitoring risks of outbreaks and epidemics and alerting the population.

VERTIC was also not able to find information on the role of Uzbekistan's armed forces in emergency planning, training and response, and on procedures to authorise foreign humanitarian aid, including foreign military assets, during emergencies.

3. Towards a regional approach?

3.1 Common Challenges

The report identifies a disaster-prone region with a population of roughly 100 million. Sharing a high elevation landscape as well as a particular vulnerability to earthquakes and hydro-meteorological hazards such as floods and droughts, central Asian countries have an interest in joining their efforts to better respond to biological events and other emergencies. Except for one country, which has relatively low levels of infectious diseases due to successful vaccination campaigns, most of the project countries reviewed in this report have already experienced large-scale epidemics affecting hundreds of people. Most project countries experienced several FMD and CCHF outbreaks in the last decade. A recent study on the current status of CCHF in the WHO Eastern Mediterranean Region identified both a lack of collaboration between endemic countries and a lack of collaboration with regard to information sharing across health and research communities as challenges for successful therapeutic research and CCHF prevention and control strategies. The study further notes that using standardized methods and data collection tools in endemic countries could improve animal and disease surveillance.

At the Regional Project 53 Kick-off Meeting (2-3 February 2017, Bishkek, Kyrgyzstan), National Teams of Experts (NTE) noted that poor sanitation and inadequate waste management, as well as very low national disaster coping capacities create a high level of risk for cholera and other disease outbreaks. Similarly, the burial of animals was identified as a source of biological risk. Soil anthrax and natural plague foci pose a potential risk for dangerous disease outbreaks for both animals and humans. In this vulnerable context, fostered by poor infrastructure, strong urbanisation, heavy reliance on agriculture, and global warming, it is feared that a higher prevalence of infectious disease outbreaks, epidemics and pandemics such as cholera, malaria and bird flu may be experienced.

All project countries in this report have established national emergency coordination bodies. The composition and the powers granted to these bodies vary depending on national circumstances and identified needs. However, only three countries clearly provide for ministerial responsibilities for epidemiological, epizootic and epiphytotic risk assessment, epidemic management, or remediation of biological contamination. One country has also set up a system of investigations of public health emergencies, rapid response teams, as well as control measures and mobile diagnostic complexes. Overall, specific provisions on the coordination of activities between the Ministry of Health and the identified emergency body were adopted only in a selected number of countries.

Despite planned activities and provisions in draft legislation related to training in two countries, the report notes the general absence of specific legal provisions related to the training of law enforcement personnel or to cooperation and coordination with public health officials and other agencies in the event of an incident involving dangerous biological agents and toxins. Several stakeholders pointed out that the level of coordination, information sharing and division of responsibilities for such situations needs improvement in some countries. The absence of all-hazards

systematic risk assessments also negatively affects countries' capacities to make informed and timely decisions in emergency situations.

Regarding the CAP, most countries have set up national warning systems. One country acknowledged using IBES (indicator based epidemiological surveillance), SBES (syndrome based epidemiological surveillance) and EID (operational epidemiological distribution). It has adopted operational warning plans in case of quarantine and infectious disease outbreaks with clearly identified national contact points. Another country clearly identified the Ministry of Health as the recipient for alerts in case of suspected dangerous infectious disease outbreaks. It also set up a monitoring system for biological events. Nevertheless, it remains unclear for at least three countries if the CAP has been adopted at the national level. Likewise, not all countries have clearly registered an alerting authority for environmental, health or CBRNe hazards categories under the WMO Register of Alerting Authorities. Those omissions limit the application of the CAP or other national alerting protocol to biological emergencies. When no CAP communications standards have been adopted, it is difficult to determine if various alerting and communications systems are integrated or run as separate entities. Disseminating warnings to rural nomadic populations was also identified as a challenge in the implementation of national warning systems.

In terms of civil-military coordination, only three countries have legislation directly providing for the use of military assets in their jurisdictions. Two countries have confirmed its adherence to the Oslo Guidelines on the Use of Foreign Military and Civil Defence Assets in Disaster Relief, and provides for their internal use. However, the upcoming adoption of disaster assistance laws based on the Model Law on International Disaster Assistance developed by the Inter-Parliamentary Assembly of Member Nations of the Commonwealth of Independent States (CIS Model Law) in 2014 and the Guidelines for the Domestic Facilitation and Regulation of International Disaster Relief and Initial Recovery (IDRL Guidelines) could positively impact the legal and regulatory frameworks of the other countries. Generally, civil-military coordination components identified in the study do not specifically relate to biological events.

3.2 Opportunities for Cooperation

At the regional level, the most relevant initiative VERTIC identified is the Center for Emergency Situations and Disaster Risk Reduction in Almaty. Based on an intergovernmental agreement between two of the project countries, and with two other countries granted observer status or committee membership, the Center fosters cooperation and implementation of joint international projects on emergency management and disaster risk reduction. Since it started operating in July 2016, the Centre has conducted workshops, training courses, and exchanges of experience and best practices in the field of emergency management and disaster risk reduction. Other initiatives such as the Central Asia Regional Risk Assessment, the Global Disease Detection Regional Center in Kazakhstan or the Regional Consultative Committee on Disaster Management should not be neglected as they provide expertise in various areas and can help countries overcome some gaps in their overall approach to emergency preparedness to biological events. In addition, several

countries have benefited from bilateral cooperation and other regional initiatives such as the Central Asia CBRN risk mitigation CoE initiative hosted in Tashkent, Uzbekistan. Of particular interest for this report, one project country has cooperated with NATO and hosted a large-scale exercise simulating a multi-national response to a severe earthquake, involving regional countries and NATO member states. Other joint civil-military emergency preparedness information exchanges with the United States reportedly included discussions of preparation, mitigation and recovery after the release of hazardous materials including chemical, biological, and radiological substances.

Building upon existing regional initiatives such as the Center for Emergency Situations and Disaster Risk Reduction in Almaty, or other regional and sub-regional fora such as the Asian Ministerial Conferences on Disaster Risk Reduction, the project countries could carry out more peer exchanges and exercises on emergency response planning. Cooperation between project countries should target both policy and technical levels. Undeniably, this report highlights similar and shared disaster risks that link all the project countries. It also confirms that some countries have more developed civil-military coordination frameworks whereas other have already implemented the CAP system at the national level. Peer exchanges and sharing of best practices, resources and experiences would contribute to fostering emergency response planning in Central Asia. Similar exercises could be envisaged for risk assessments. In that pursuit, CAP alert messages normalize warnings from various sources so they can be aggregated and compared to improve situational awareness and pattern detection.

A review of legislation initiated on the basis of the CIS Model Law offers good prospects for the region. Not only could all countries benefit from their neighbours' legislation review experience, but the exercise could also provide an opportunity to integrate regional cooperation, CAP, and civil-military aspects in future laws. Based on the gaps identified by the NTE, such legislation could also include measures for training and internal coordination. Furthermore, the Almaty declaration – signed by three project countries – recognises the importance of legislation in ensuring effective coordination during disasters and supports the CIS Model Law.

Finally, the project countries may find it useful to examine other regional examples. In the Americas, six countries have ratified the Inter-American Convention to Facilitate Disaster Assistance, which regulates assistance and related issues between States Parties. Caribbean countries have established the Caribbean Disaster Emergency Management Agency and adopted the Agreement among the Member States and Associate Members of The Association of Caribbean States for Regional Co-operation in the Area of Natural Disasters. Similarly, Member States of the South Asian Association for Regional Cooperation (SAARC) adopted the SAARC Agreement on Rapid Response to Natural Disasters to provide an effective regional mechanism for rapid response to disasters and a joint response to disaster emergencies through concerted national efforts and intensified regional cooperation. The European Union Emergency Response Coordination Centre also provides an example of a coordination hub, which facilitates a regional response during emergencies.

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