

**EXPLANATORY NOTE**  
**ON INFORMATION CONCERNING THE IMPLEMENTATION OF MEASURES**  
**FOR THE ESTABLISHMENT OF A REGIONAL EARLY WARNING**  
**AND MUTUAL INFORMATION-SHARING SYSTEM**  
**ON THE THREAT AND OCCURRENCE OF EMERGENCIES**

According to scientific assessments, climate change is significantly accelerating glacier melt in Central Asia, and if current rates of degradation persist, the majority of glaciers in the region may disappear by the end of the present century. As a result, peak river runoff is expected to shift from July-August to April-May, while severe water scarcity during the vegetation period may become the norm. In addition, accelerated glacier melt will lead to the overfilling of moraine lakes and the weakening of soils. Consequently, any perceptible earthquake may undermine the stability of dams, reservoirs or moraine bodies and trigger mudflows.

Recognizing the importance of the timely transmission of transboundary emergency warnings among the countries of Central Asia, the Centre for Emergency Situations and Disaster Risk Reduction (hereinafter referred to as “the Centre”), with the technical support of I2NIK LLP, developed a prototype for the integration of national early warning systems of the Central Asian countries.

This prototype was demonstrated during the Regional Forum-Meeting of the Heads of Emergency Management Authorities of the Central Asian countries held in Tashkent in 2021 (hereinafter referred to as “the Regional Forum”), and the Centre’s corresponding proposal to establish a Central Asian Early Warning System was endorsed by the heads of emergency management authorities of the Central Asian countries. Accordingly, the Centre was mandated to advance the project concept for the establishment of a “Regional Early Warning and Mutual Information-Sharing System on the Threat and Occurrence of Emergencies”.

With a view to providing expert and technical guidance for the establishment of the Regional Early Warning System, the Centre proposed the creation of a Technical Working Group (hereinafter referred to as “the TWG”), composed of delegated specialist experts from the Central Asian countries. This initiative was likewise supported by the heads of emergency management authorities of the Central Asian countries.

With the support of the United Nations Office for Disaster Risk Reduction (UNDRR), the United Nations Development Programme (UNDP) and the German Society for International Cooperation (GIZ), the First Meeting of the TWG was convened in Almaty in September 2023. During this meeting, the idea emerged to prepare a joint appeal by the heads of emergency management authorities of the Central Asian countries to the leadership of the United Nations, calling for support for the regional initiative to establish a Central Asian Early Warning System and for its inclusion in the implementation programme of the global initiative “Early Warnings for All”.

At the subsequent Regional Forum, held on 10 November 2023 in Almaty, the heads of emergency management authorities endorsed the initiative and signed an **Appeal to the Secretary-General of the United Nations, António Guterres**, concerning the establishment of a Regional Early Warning System. Thereafter, the Appeal was transmitted to United Nations Headquarters in New

York through diplomatic channels, with the support of the Ministry of Foreign Affairs of the Republic of Kazakhstan.

The Centre continues to actively promote the project concept for the establishment of the Regional Early Warning System by presenting it at all available platforms and meetings and by submitting it to partners for consideration as a global project for joint cooperation.

In the current year, the Centre's project proposal was selected as a finalist in the Eurasian Development Bank (EDB) digital projects competition. Although the project was not selected as a winner, the EDB acknowledged its relevance and proposed consideration of the use of the existing Integrated Information System of the Eurasian Economic Union for the implementation of the project on the establishment of the Regional Early Warning System.

In 2024, the Centre commenced the implementation of a two-year project with the German Society for International Cooperation (GIZ) entitled "Climate Risk Management in Central Asia", focusing on the development of a technical solution for the establishment of a Regional Early Warning System for hydrological risks. Accordingly, the implementation of the GIZ project will serve as a foundation for the subsequent integration of existing monitoring systems for geophysical, geological, atmospheric, anthropogenic and other hazards in the Central Asian countries, thereby enabling the effective establishment of a Central Asian multi-hazard early warning system.

Following working-level consultations with partners, the OSCE Programme Office in Astana expressed interest and its intention, in collaboration with the OSCE Programme Office in Bishkek, to undertake further steps to advance the project on the establishment of a Regional Early Warning System for emergencies for Kazakhstan and Kyrgyzstan, utilizing existing OSCE regional programmes and mechanisms.

In addition, on 19 June 2024, the Centre received a delegation from the Directorate-General for European Civil Protection and Humanitarian Aid Operations of the European Commission (DG ECHO), during which representatives of the Directorate-General informed that the Centre's project concept for the establishment of the Regional Early Warning System is being considered as one of the directions for a pilot project planned for implementation in Central Asia with the support of the European Commission.

Furthermore, during the second meeting of the Technical Working Group (held online on 16 May 2024), a representative of the UNDP Regional Office for Central Asia presented the findings of studies conducted by an international early warning expert, Mr. Vasko Popovski, for the preparation of a Regional Report on the mapping of early warning systems in the Central Asian countries. The studies identified the following key challenges: the fragmentation of early warning processes and their insufficient integration into disaster risk management systems; limited financial and technological support for early warning systems; and the need to incorporate such systems into national development strategies and policies.

The international expert proposed the following measures to address technical, regulatory and institutional gaps:

- building the necessary capacities and providing resources for integrated early warning systems, including adequate and sustainable financing;

- promoting the digitalization and automation of early warning processes;
- integrating new communication channels and services for the dissemination of warnings;
- supporting the dissemination and implementation of the **#EarlyWarningsForAll (#EW4All)** initiative in Central Asia.

Accordingly, the measures proposed by the international expert to strengthen national early warning systems in the Central Asian countries are fully aligned with the priorities and initiatives advanced by the Centre.

In addition, the representative of the UNDP Regional Office for Central Asia confirmed readiness to support the advancement of the Centre's project concept through the engagement of an international expert to develop a detailed Concept Paper for the establishment of a Regional Early Warning System, based on the studies conducted. This document will serve as a key instrument for mobilizing donor financing for the implementation of the project.

The first step in the practical implementation of the project for the establishment of the Regional Early Warning System will be the development of detailed Terms of Reference outlining the phased implementation of the project, including system architecture, integration approaches, hardware, software, data management, security and related components, followed by their endorsement by the members of the Technical Working Group.

At present, the establishment and development of early warning systems as a key instrument for resilience and disaster preparedness is included on the agenda of virtually all international events in the fields of disaster risk reduction and climate change adaptation.

Overall, the initiative to establish a Regional Early Warning System is consistent with the Action Plan to ensure universal coverage by early warning systems by 2027, announced by the Secretary-General of the United Nations, António Guterres, during the Global Climate Conference held in Egypt in 2022, and fully aligns with Target G of the Sendai Framework for Disaster Risk Reduction 2015-2030, which calls for a substantial increase in the availability of and access to multi-hazard early warning systems, disaster risk information and assessments for people by 2030.