## Section 1: Response to Large-Scale Disasters

## 1. Police Activities in Large-Scale Disasters

### (1) Wide Variety of Police Activities

Japan is prone to a variety of natural disasters. In recent years, large-scale disasters such as earthquakes including the Great East Japan Earthquake, volcanic eruptions, and heavy rain falls have been occurring and caused great damage almost every year. In the event of such a large-scale disaster, the police, together with fire stations and the Self-Defense Forces (SDF), play a wide range of roles, such as conducting evacuation guidance and rescue operations for victims, searching for missing persons, conducting forensic examinations and identity checks, taking various traffic measures, and tackling various crimes in the disaster area.



### (2) Large-Scale Natural Disasters and Police Activities in 2018

In 2018, earthquakes, heavy rains, typhoons, volcanic eruptions, and other disasters brought 376 dead persons (including missing persons) and 4,051 injured.

	2014	2015	2016	2017	2018						
Dead and Missing Persons	165	14	92	69	376						
Injured Persons	621	467	3,305	605	4,051						
Completely or Partially Destroyed Houses	1,152	6,417	46,211	1,896	21,567						
Flooded Houses	25,674	17,091	11,359	20,317	34,827						
Destroyed Roads	2,690	1,123	2,763	4,372	7,664						
Collapsed Mountains	2,362	789	2,315	1,614	4,988						

Major Damage	Situations in	Natural	Disasters	(2014 - 18)	(Ac d	of the	End of A	nril 2010
Major Damaye	Situations in	inatura	Disasters	(2014-10)	י פרקו			

The police conducted disaster control activities such as evacuation guidance and rescue operations for victims, searching for missing persons, etc., during the January 2018 volcanic eruption of Mt. Kusatsu Shirane (Mt. Motoshirane), the June 2018 earthquake with epicenter in the northern Osaka Prefecture, the June and July 2018 heavy rain, the September 2018 Typhoon 21, and the September 2018 Hokkaido Eastern Iburi Earthquake.



Boat search activities (July 2018 heavy rain)



Rescue operations activities at a landslide site (2018 Hokkaido Eastern Iburi Earthquake)

In addition, based on the challenges identified from the July 2018 heavy rain and the 2018 Hokkaido East Iburi earthquake, it was recognized that there was an urgent need to address issues such as the safety management of unit members under harsh environment and the utilization of equipment and materials for the efficient operation by a limited number of unit members, bearing in mind measures against sediment disasters and flood damages. Therefore, the National Police Agency (NPA) took measures to overcome these issues by conducting an emergency inspection of the critical infrastructure for building National Resilience, and developing those equipment and materials that would contribute to safety management, equipment and materials for night photography for helicopter television systems, and advanced equipment and materials such as drones, etc.

### 2. Large-Scale Disaster Preparedness

(1) Large-Scale Disasters in the Heisei Period (Jan. 8, 1989 - April 30, 2019) and Strengthening of the Disaster Countermeasures System

# ① The Great Hanshin-Awaji Earthquake and the Establishment of the Inter Prefectural Emergency Rescue Units (IERU)

At 5:46 A.M. on January 17, 1995, "the 1995 Southern Hyogo Prefecture Earthquake" (hereinafter referred to as "the Great Hanshin-Awaji Earthquake") of magnitude 7.3 occurred with its epicenter in Awaji Island.

After the Great Hanshin-Awaji Earthquake, many lessons were learned about traffic regulations, systems for collecting and transmitting damage information, and the inter-prefectural dispatch of rescue units. Based on these lessons, various implemented measures became the basis of the subsequent large-scale disaster countermeasures system.

For example, the Great Hanshin-Awaji Earthquake was an urban epicentral earthquake that occurred in a large city with a high concentration of urban functions and population, and since the prefectural police alone could not fully cope with the disaster, it became clear that in the early stage of the disaster, it was necessary to promptly dispatch a large number of units capable of supporting themselves to the disaster area in order to collect damage information, rescue, and secure emergency traffic routes. In light of this situation, in June of the same year, the Inter-Prefectural Emergency Rescue Units (IERU) were established as a specialized disaster response unit capable of responding to a large-scale disaster over a wide area beyond the



Symbol Mark of the Inter-Prefectural Emergency Rescue Units (IERU)

boundaries of prefectures and having advanced rescue operation capabilities, self-support capabilities, etc., consisting of a security unit for rescue operations, etc. and a traffic unit for securing emergency traffic routes, etc.

In order to be able to quickly respond to a disaster, IERU conduct trainings at the prefectural police level. They also conduct large-scale joint trainings at the regional police bureaus' level and actively participate in disaster prevention trainings sponsored by local governments, etc., in order to improve their response capabilities.

## **(2)** Mid Niigata Prefecture Earthquake in 2004 and Strengthening of the Inter-Prefectural Emergency Rescue Units (IERU)

At 5:56 P.M. on October 23, 2004, a magnitude 6.8 earthquake called "the Mid Niigata Prefecture Earthquake in 2004 " (hereinafter referred to simply as "the Niigata Chuetsu Earthquake") occurred with its epicenter in the Chuetsu region of Niigata Prefecture.

Based on the lessons learned from this earthquake, the police established the Police Team of Rescue Experts (P-REX) in the Inter-Prefectural Emergency Rescue Units (IERU) of some prefectural police headquarters in April 2005 so that rescue operations can be carried out for victims more quickly and accurately at disaster sites that require extremely advanced rescue operation capabilities.

Under normal circumstances, P-REX is working to acquire and improve skills in effective rescue operations methods based on various disaster cases through practical trainings using high-performance rescue equipment, police aircraft (helicopter), etc., and education by specialized institutions such as disasters and medical cares. In addition, they are working to improve generalship of commanders through practical training of unit command procedures, etc.

### **③** The Great East Japan Earthquake and the Establishment of Disaster Response Units

At 2:46 P.M. on March 11, 2011, the "2011 Tohoku District-off the Pacific Ocean Earthquake" (hereinafter referred to as the "Great East Japan Earthquake") of the moment magnitude 9.0 occurred with its epicenter off the coast of Sanriku. The high tsunami generated by this earthquake hit the Tohoku region including the Pacific coast, causing accidents at the Fukushima Dai-ichi NPS.

Until the Great East Japan Earthquake, the police had assumed disaster relief measures such as rescue activities immediately after the disaster by organizing and operating troops. However, the Great East Japan Earthquake resulted in the dispatch of large-scale units over a long period of time in response to tsunamis and nuclear disasters. Based on this experience, in 2012, the police expanded the rapid response units to be immediately dispatched from all over the country to the affected areas in the event of a large-scale disaster. In addition, in order to complement and restore the functions of the police in the affected areas, regardless of the type and scale of the disaster, general units to be dispatched in the event of a prolonged disaster response were newly established, and the Disaster Response Units composed of both units were newly established.

Rapid response units are dispatched during a period of about two weeks from immediately after the disaster occurrence and carry out disaster control activities in a short period of three days to one week. In principle, they conduct activities without receiving any support such as the arrangement of accommodations and the procurement of supplies from the police in the disaster area.

General units are dispatched after a certain period of time has passed after a large-scale disaster. They conduct searches for missing persons, vigilance and patrol, traffic control and regulations, consultation services, initial investigation, etc., and carry out a wide range of activities based on the requests of the disaster area over a long period of time.



Disaster Response Units

### **④** 2016 Kumamoto Earthquake and Enhancement of Disaster Rescue Training

At 9:26 P.M. on April 14, 2016, an earthquake with a magnitude of 6.5 occurred with its epicenter in the Kumamoto region of Kumamoto Prefecture. At 1:25 A.M. on the 16th of the same month, an earthquake with a magnitude of 7.3 occurred with its epicenter in the same region.

In order to systematize rescue operations for collapsed wooden buildings as part of countermeasures against damages after large-scale earthquakes that may occur in our country in the future, the NPA collected and organized a huge amount of data on rescue operations activities led by the police, especially for collapsed buildings where the degree of loss of space inside the buildings was significant among all rescue operations activities by the police in this



Training utilizing variable training units

series of earthquakes ("2016 Kumamoto Earthquake"), and analyzed the trends of rescue operations activities. As a result, the issues related to the deployment of squads and equipment and materials were clarified, and the NPA reached the consideration that the time required for rescue operations activities could be efficiently and effectively shortened by improving the rescue operations capability required from the time of entry into the collapsed building to the rescuing of a person because he/she is sandwiched between collapsed beams, etc. The NPA has established disaster rescue training facilities to carry out systematic and staged rescue training in an environment that is more suited to a particular disaster site. In 2016, the Kinki Regional Police Bureau Disaster Rescue Training Facility was put into operation, and in 2018, the Metropolitan Police Department and the East Japan Disaster Rescue Training Facility were put into operation. These facilities are equipped with a variable training unit that was developed in consideration of the building collapse mechanism, etc., and it is possible to conduct training that reflects the items that have been sequentially identified through each survey and analysis. In addition, a training zone for inundation areas has been established. It reproduces the environment close to the actual site of disaster such as tsunamis and heavy rains. It is possible to carry out training for stacking sandbags and rescue training using boats, ropes, etc.

#### (2) Measures to Check and Establish a Crisis Management System

In line with the "Fundamental Plan for National Resilience" and the "Three-Year Emergency Response Plan for Disaster Prevention, Disaster Mitigation, and Building National Resilience," the police are promoting efforts such as the enhancement of disaster resistance of police facilities, the renewal and maintenance of police aircraft (helicopter), and the maintenance of disaster equipment and materials.

In addition, in order for a disaster control headquarters to fully function even in the event of a large-scale disaster, the system of the police in the affected area in the most recent large-scale disaster and the status of their response, etc. are verified, and based on the results of the verification, personnel are secured according to the content of the work required at the Disaster Control Headquarters, and an effective system by duty is established.

Furthermore, in order to prepare for potential large-scale disasters in the future, the NPA has developed rescue operations training standard and disaster control activity manuals for each squad, and is promoting practical disaster control trainings by using training facilities and others. Trapped persons in need of rescue A house buried in earth and sand CSR (Confined Space Rescue) Removal of earth and sand (heavy machinery operation) Person in need for rescue sandwiched by cellings, beams, etc. An unstable building likely to collapse Removal of heavy loads (lifting heavy objects: lifting) A person left at a high place in need of rescue, etc Reinforced concrete walls or columns Elimination of obstacles Rescue from a high place (rope rescue) (Breaching) Strengthening Training for heavy CRS training capabilities through practical training

Rescue Operations Activities Based on Practical Training



In 2018, at various sites in the Hokkaido Eastern Iburi Earthquake, rescue operations activities were conducted based on disaster characteristics by making use of the past ordinary trainings based on lessons learned from past disasters.