A. News of the Earthquake in Kobe

When the earthquake struck Kobe at 5.46 a m on 17 January, it was 8:46 p.m. GMT on 16 January, 9:46 p.m. in Geneva; and 3 46 p.m. on 16 January in New York. Less than 30 minutes after the quake occurred (10:15 p.m. Geneva time), the Asia and Pacific Monitoring Officer from DHA's Relief Coordination Branch (RCB) in Geneva was informed that a strong earthquake had been felt in Kyoto. Immediately, DHA's system of monitoring urgent disasters was put into action. At 22:19, the Reuters news agency report that a big earthquake had been felt in Japan was received in the DHA Operations Centre, followed at 23:11 by an Associated Press agency report that a strong earthquake had shaken Osaka. The RCB Duty Officer also received a faxed preliminary report from the US Geological Survey, indicating that an earthquake of magnitude 6.8 on the Richter scale had struck 25 miles west of Osaka.

At 11:21 p.m., the RCB Duty Officer attempted to telephone emergency contacts in Tokyo but was unable to get through. Through the night, the Monitoring Officer kept a close eye on Japanese news broadcasts, including the morning Nippon Hoso Kyokai (NHK) News telecast, which is not broadcast in Europe until one hour later (midnight Geneva time) for technical reasons. At 12:17 a m. on 17 January, the Duty Officer received a call from the US Office of Foreign Disaster Assistance asking for more information.

The noon NHK news broadcast, seen in Geneva at 4:00 a m, indicated that Kobe had been severely damaged by the quake. The same bulletin having been seen in New York, the RCB officer in Geneva discussed DHA's response with colleagues in New York. They agreed that, although this was an earthquake in a developed country, a situation in which DHA normally only monitors the situation unless there is an official request for help, the magnitude of the disaster was such that DHA needed to take additional action.

At 6:35 am in Geneva, the Duty Officer received a call from the Swiss Government's Disaster Relief Unit requesting information. At 7:05 a.m., the Duty Officer was able to get through to UNDP Tokyo and asked that office to send all available information. At 8:30 a.m., the Monitoring Officer, now the designated Desk Officer for the disaster, called Tokyo's Disaster Prevention Bureau of the National Land Agency and was informed that search and rescue teams from Tokyo, Osaka. Nagoya and other cities had already been dispatched to Kobe, that a Government assessment mission had also been sent to identify needs, that further rescue teams were being mobilised and that there was no need for foreign search and rescue teams to be sent to Kobe.

In light of the number of requests for information and offers for assistance that DHA had received, the Chief of the Relief Coordination Branch decided to issue an Information Report to inform the international community of the situation. At 8:35

a.m. the Desk Officer called the Ministry of Foreign Affairs to check the Government's position regarding international assistance but could not get through. By 9:00 a.m., DHA's Geneva office was receiving calls from European search and rescue teams requesting information, as they responded to the images on their morning news bulletins. By this time, Western media organisations had managed to send correspondents from Osaka to cover the disaster, and camera crews were already relaying back images of destruction.

The Desk Officer called the International Federation of Red Cross and Red Crescent Societies and was told that the Japanese Red Cross Society (JRC) was not appealing for assistance from sister societies. Neither the Government nor the JRC requested international search and rescue (SAR) assistance.

Due to the distance involved and flight schedules, even if teams had set off from Europe on 17 January, they could not have arrived in Japan before the afternoon of 18 January. Because of the damage to roads and railways, it would have taken several hours to reach rescue sites in Kobe, which would put their arrival time at least 36 hours after the earthquake. This time factor made it difficult for international SAR teams from other continents to reach Kobe during the window of time when survival remained likely. With these considerations in mind, DHA issued its first Information Report, sent simultaneously to all the search and rescue teams who have links with DHA's Geneva office

The UN Secretary-General sent a message of condolence to Japan, stating that the UN was ready to respond to any request for assistance. Numerous countries also sent messages, many mentioning that their governments were ready to respond to a request for assistance.

B. Offers from International Search and Rescue (SAR) Teams

At 16:30 hours on 17 January (Japan time), the Swiss Embassy in Tokyo offered to dispatch (upon receipt of a request) a search and rescue team with 25 sniffer dogs and 60 persons, which could be in Kobe within 24 hours. At 17:00 hours the French Embassy offered the services of a 60-man rescue team with dogs and equipment. Russia and Israel also offered specialized SAR teams the same day. On 18 January, Algeria, Germany, Hungary and Singapore made offers. In all, 15 different countries offered to send SAR teams.

Since Japan is an earthquake-prone country, it has a great number of search and rescue personnel trained for possible earthquakes. Especially the local governments in the Tokyo Metropolitan Area (which was affected by the Great Kanto Earthquake of 1923) and the Shizuoka Prefecture (where the Tokai Earthquake is expected) have well-trained teams with various equipment such as fiberscopes and infrared sensors. Japan has 490 police officers and 501 fire service rescue workers especially trained and registered to be dispatched as a JICA (Japan International Cooperation Agency) - JDR (Japan Disaster Relief) Team to overseas search and

rescue sites. In addition, the Self-Defense Forces have an average of 500 people always on standby to join the JICA-JDR Team in case of large-scale disaster abroad. The first teams were mobilized immediately on 17 January. The bottleneck to mobilizing further teams on 17 January was transportation to the rescue sites. By late afternoon on 17 January, national emergency offices in Tokyo clearly recognized that this was the problem with the rescue activities, not a shortage of professional SAR teams in Japan. When offers arrived from international SAR teams, it was rather a surprise, since the earthquake had not hit the Tokyo Metropolitan Area nor was this the Tokai Earthquake. Emergency planners had foreseen various international reactions in case of an earthquake in Tokyo (including inquiries from countries with many nationals residing there, or offers of teams if there were an impact on the global economy) but not in case of other disasters. Neither had local SAR teams thought of asking for international SAR teams. What they wanted was further mobilization of SAR teams from Japan who, upon arrival in Kobe, could immediately fit into and follow the local SAR command structure.

The answer to all these offers from international SAR teams was, "We appreciate your offers of good will. We are mobilizing our teams in the country, and there is enough SAR personnel in Japan. At this stage we do not foresee any need for international SAR teams."

C. Arrival of International SAR Teams

The Swiss Embassy in Tokyo repeated its willingness to provide SAR teams. The offer of the Swiss and French SAR teams were reported by the international and local mass media. Irritated by the growing number of casualties, some people in Tokyo loudly voiced their opinion that introducing international SAR teams might be of help. Then, since there are very few sniffer search dogs in Japan, the NFA decided to accept the Swiss team which had a "different technology" in its search methods. The fire rescue command in Kobe was not expecting this decision. The acceptance of an international SAR team meant extra preparations - for interpreters, special transport in Kobe, and arrangements for a place to sleep - and at the rescue sites there were no empty spaces to set up tents for an operations base. They preferred to mobilize more national SAR teams who could immediately work under their command. In Tokyo there was a series of contacts with the Swiss Embassy regarding operational points and risk aspects (what would happen if the international SAR team were killed by a building collapse as the result of an aftershock?) Then it was decided to accept the search-dog team. This was announced to the media late in the afternoon of 18 January.

The Swiss team left Zurich at 13:00 hours local time on 18 January (21:00 hours Japan time), arrived at Kansai International Airport at 9:20 a.m. on 19 January, was immediately airlifted to Kobe by helicopter, was briefed on the situation by the local fire rescue command on the situation, and reached the first rescue site at 13:20 hours on 19 January (55 hours after the earthquake). Eight interpreters as well as 2 Government officials from Tokyo worked as coordinators for the Swiss team. Rescue teams from Kobe, Tokyo, Osaka and Kumamoto were assigned to work with the Swiss search team in rescue activity.

The arrival of the Swiss team was greatly covered by the mass media and filled the people watching TV outside the directly affected area with high expectations. The Swiss team also brought a TV camera crew from Switzerland.

In the late afternoon of 18 January, the French Embassy in Tokyo repeated its offer of an SAR team. A series of contacts were made regarding the feasibility of arranging vehicles for a 60-member team and securing a sufficient number of interpreters. On the afternoon of 20 January it was decided to accept the offer. The Hyogo Prefectural Police would be the local counterpart for the French SAR team. The French team arrived at Kansai International Airport at 12:01 noon on 21 January.

On 18 January, the British Embassy in Tokyo transmitted an offer from a British NGO, International Rescue Corps (IRC), to the Ministry of Foreign Affairs in Tokyo. On 19 January the Ambassador made a strong recommendation to the Japanese authorities about IRC's capability and high-tech search equipment. The MOFA informed the British Embassy that if the IRC could find a reliable NGO counterpart in Kobe to look after their local transport and other on-site arrangements, they could come. One Japanese, who belonged to a newly established NGO, volunteered to be their counterpart and confirmed that he would make the local arrangements. The British Consulate arranged for local transport. The IRC arrived in Kobe with a TV camera crew from Yorkshire on 23 January.

One American lady with a search dog and another American rescue man arrived individually in Kobe on 21 January without any prior arrangements. Later the two Americans were allowed to work at the same sites where the Swiss and French teams were. A French NGO SAR team called COSI also came to Kobe.

D. International SAR Teams On Site

The Swiss team was first briefed on the characteristics of the search sites: mostly collapsed wooden houses, with a possible danger of secondary disaster from aftershocks, etc. After they had been guided to the actual search site, they realized that it was not the type of site for which they were experienced. For the Japanese rescue teams, it was their first experience working with sniffer dogs. By the afternoon of 19 January, most of the SRC and RC building collapse sites had already been searched and the survivors rescued by Japanese teams. The sites where there were still possibilities of survivors were residential areas where the two-story wooden houses had collapsed and there was survival space underneath the timber columns and wooden sidings. For the Swiss sniffer dog to spot a survivor, people had to be kept away. Then the search dog and his handler would walk through the collapsed site. Rescue teams had to wait until the dogs had thoroughly sniffed through a site. As soon as the dog showed some reaction, the removal of debris and digging for a possible survivor could begin.

The above procedure caused great irritation to former residents whose family members were trapped under the debris and to Japanese rescue workers. The former residents already knew where their family member(s) had been sleeping, and the Japanese rescue workers could guess from the collapse pattern where the possible

survival spaces would be. The Japanese on site wanted to dig immediately for survivors without waiting for the sniffer dogs to finish. Former residents cried out, "What are you rescue workers waiting for? Aren't you going to rescue lives? He'll (She'll) be dead by the time the sniffer dogs finish!"

The Japanese rescue workers noticed that these sniffer dogs were adapted for searching out a particular spot in a large area with very few clues as to the whereabouts of survivors. Sniiffer dogs would be most useful after an avalanche of snow, a landslide or an RC or SRC commercial building collapse where there might be various possible locations for survivors. Japanese expectations regarding the "different technology" for searching quickly disappeared and turned to disappointment.

The Swiss team insisted on working through the night on the first day of their arrival. Japanese rescue teams pointed out the dangers of working without adequate lighting, possible further collapses from aftershocks, and the need to avoid any secondary casualties to search and rescue personnel. But, with the presence of the TV crew from Switzerland, the Japanese gave in. On the second night, after experiencing several minor aftershocks, the Swiss team realized the danger and agreed to halt its operations at night.

The French team was guided to the site of a major landslide which had engulfed several houses. The Japanese realized that the sniffer dogs would be more suitable for this type of site. The French team was quite reluctant to work at this site, pointing out that four days after the landslide there would be almost no possibility for anyone to have survived under the mud. Until they are able to recover all the expected number of bodies, a Japanese rescue team cannot declare that a site is finished. Consequently, they expected the sniffer dogs to help them with this difficult task. The French team asked to be guided to a SRC or RC building collapse site, the type of site they were familiar with. However, as it was four days after the earthquake, these limited sites had already been searched and finished.

The British Consul in Osaka picked up the IRC team by car and tried to reach possible sites. The Japanese who had volunteered to be their counterpart was unable to arrange a site for the IRC to work on. The first day, the IRC was caught in a traffic jam and could not do any substantial search activity. The IRC asked for help from the British Embassy in Tokyo. Then the Ministry of Foreign Affairs intervened (through emergency offices in Tokyo) with the local fire service to guide them to an appropriate site and help them work. The Kobe Fire Command was astonished at this request, explaining that it was already seven days after the earthquake and that they were now in the "roller search" phase. The emergency offices in Tokyo somehow pursuaded the Kobe Fire Command to allow the IRC to work on a site the next day. The British Ambassador was able to see their activities on site.

E. Results of International SAR Teams

The Swiss team, together with four Japanese rescue teams, recovered 9 bodies. The French team, together with the police rescue team, recovered 2 bodies. The IRC found 2 bodies. There were no survivors. The results of the COSI (French NGO SAR team) are not known.

The international SAR teams arrived during a period when the massive search and rescue activities were coming to an end. The last survivor was found by Japanese rescue teams on 23 January.

Table 11
Survivors Rescued After 19 January

Survivors counted by:	January				
	19	20	21	22	23
Fire Rescue	70	18	6	4	2
Self-Defense Rescue	44	12	3	0	0
Police Rescue	150>	8	4	2	0

A three-man Mexican search and rescue team also came to Kobe on 22 January. Upon arrival, they noticed that there was no longer a need for international SAR teams. They then expressed willingness to help as volunteers in other relief work. They were registered at the Hyogo Prefectural Government Office and helped in clearing debris and pulling undamaged belongings out of collapsed houses, a service welcomed by elderly people who needed a helping hand.

F. International Medical Teams

Beginning on 18 January, a number of countries (Bangladesh, China, Cuba, Greece, Poland, Thailand, the United Kingdom, Yemen and Yugoslavia) stated their willingness to send medical teams, if necessary. The Japanese Government expressed gratitude for these offers of good will but pointed out that a medical team would have to be able to speak Japanese with the patients in order to be of use to the affected population and, further, that a sufficient number of medical personnel in Japan could be mobilized to meet the demand.

On the occasion of a 22 January visit to Kobe by its Vice Prime Minister, Thailand reiterated its offer. The Vice Governor of Hyogo Prefecture explained that if the doctors could speak fluent Japanese and were willing to work with Japanese doctors, they could be of help to the people in evacuation centers. Thailand identified a doctor who was a graduate of a Japanese Medical School with a Japanese Doctor's License. The Thai medical team was thus able to man one of the temporary clinics in an evacuation center and treat cases of influenza and digestion problems. The Thai medical team was welcomed since it had a good command of the Japanese language. With the agreement of the Kobe Municipal Office, the Samsung Group (business

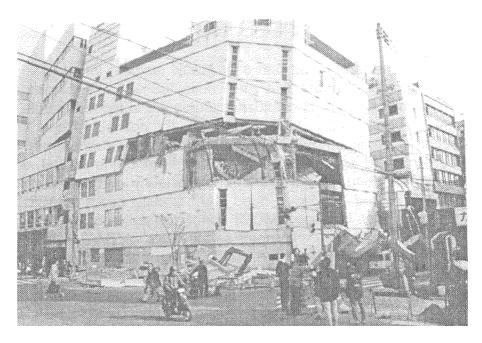


Photo 32 TV Reporters from Abroad Presenting Live Coverage Kobe was extensively covered by the international mass media Hyogo Prefectural Government



Photo 33 Farewell & Thank You Ceremony for Swiss SAR Team Governor of Hyogo presents letter of thanks, local rescue service did not come to this ceremony Hyogo Prefectura! Government

enterprises) of Korea also sent a 9-member medical team. This team was also appreciated since it had a good command of Japanese and a good knowledge of local conditions.

International medical NGOs who had counterparts in Japan also sent some medical personnel. The Salvation Army and Médecins sans Frontière (MSF) sent people, although most of the actual consultations were carried out by Japanese staff. As mentioned in Section VII. C., the medical needs changed drastically, and the present requirement was to take care of the colds (later influenza), digestion problems, fatigue and chronic diseases (diabetes, high blood pressure, rheumatism, etc.) of the evacuees. Fluency in Japanese and an understanding of the treatment and medicines these people had been receiving before the earthquake were indispensable. Médecins du Monde (MDM) repeated its offer to come to Kobe and finally identified AMDA, a Japanese international medical NGO as a counterpart Since the French doctors of MDM did not speak Japanese, AMDA assigned one Japanese medical doctor fluent in French, one translator and one coordinator also fluent in French to assist one French doctor. The Japanese medical doctor recalls that it was time-consuming to translate into French the symptoms the patients were explaining and to keep medical records in both French and Japanese.

A fluent command of Japanese and an acquaintance with the customary Japanese treatments for colds and digestion problems were the basic qualifications for any medical volunteer to be of help to the affected population. Without being able to directly question a patient about his condition, a physician is of no use. Serious injury cases, in which patients could not even speak, had already been accommodated in medical facilities during the first 24 hours.

Japan had sufficient medical personnel to cover its needs. The first three days were the most difficult, when there was an information gap regarding medical needs and available resources and when procedures for systematically allocating medical staff to evacuation centers had not yet been established. Also, traffic jams hampered the initial mobilization of medical personnel from all over Japan. However, once the mobilization system was in place, there were more than enough medical personnel. The Japanese Red Cross Society mobilized doctors and nurses from its affiliated hospitals and had a maximum number on 19 January. Beginning on 20 January, AMDA volunteered to be the focal point for individual doctors and nurses who wished to offer their services. AMDA organized daily convoys of medical buses to Kobe from Okayama, where the route into Kobe was less congested than from Osaka. But, in ten days' time, AMDA could not accommodate all the medical volunteers and asked them to remain on standby since there were more than enough.

An American medical NGO sent a 22-member team (with experience from the 1994 Northridge Earthquake in California) to carry out surgery for fractured bones and burns. They flew into Kobe on 22 January and wanted to be immediately guided to any outside camp where the injured were groaning with pain. When local authorities explained that the present medical needs were (1) to take care of colds and digestion problems, and (2) that unless they could speak fluent Japanese and were accustomed to Japanese treatment practices, they would not be of much help to the