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## LEAGUE OF RED CROSS AND RED CRESCENT SOCIETIES

International Federation of National Red Cross and Red Crescent Societies

### CHERNOBYL (USSR) HUMANITARIAN ASSISTANCE AND REHABILITATION PROGRAMME

#### Situation Report No. 1

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#### 1. GENERAL

The League Appeal for the Chernobyl (USSR) Humanitarian Assistance and Rehabilitation Programme, seeking for CHF 4,900,000, was launched on 25 June 1990.

At the beginning of August 1990 the League established a permanent delegation in Kiev, Ukrainian SSR. Its main task within the first two months was to continue the in-depth survey of the situation and priority needs on the basis of recommendations formulated by the League Group of Experts which visited the affected areas in January 1990.

Based on the results of the field survey, as well as additional information collected by the League delegation in the affected areas which count a total population of approximately 4 million people, the League is considering to adjust its initial plans.

The needs in permanent reassessing of the results and adjusting the medium and long-term objectives of the programme are justified, in the League's opinion, by the fact that very few organisations have ever faced a disaster of this type and of this scale.

Therefore, the League delegation continued to learn more about the scientific realities of radiation and, for this purpose, have established contacts with the office of the International Atomic Energy Agency (IAEA) based in Gomel, Byelorussia.

It has been confirmed that the area contaminated by radioactive fallout in Ukraine only (20 percent of all contaminated areas in the USSR) is enormous, approximately 3.5 million hectares. However, the contamination is irregular. In some settlements one could only identify some spots with high radiation. Even though a large number of people have been resettled and more will be resettled during 1990-91, a large number of people still live and will remain in affected areas for a long time. Some people from the so-called "30 km zone", who were resettled in 1987, have even moved back to their homes in these heavily affected areas.

The government policy is to provide food from non-contaminated regions, but the food supplied is not enough which forces people to eat their local products. The lack of baby food is particularly critical.

Nearly all people in the settlements complain about a deterioration of their health condition. The most common complaints are of headaches, dizziness, pains in joints, insomnia and frequent nose bleeding. Mothers complain about infections in children's mouths.

Visits to the rural hospitals and clinics have confirmed the lack of basic diagnosis and laboratory equipment.

## 2. RADIATION

The two-month survey of priority needs confirmed the need for establishing Red Cross services for the measurement of radiation contamination.

By the end of October, the League will provide the Soviet Red Cross with approximately 400 geiger counters, to be used by the Red Cross staff and volunteers in the affected areas. This number will represent 10% of the requirements identified initially.

These units will allow to identify and measure the level of GAMMA radiation. Detection of contamination from Cesium, which is GAMMA radiation, gives approximately 85% of the radionuclides.

On the other hand, BETA radiation from consumed contaminated food products is considered more dangerous. Therefore, the League is considering to propose that the initial target of 4,000 geiger counters be reduced to approximately 2,000 (\*) for the sake of providing stationary or mobile instruments allowing to measure contamination in food products, as well as whole body monitors.

This equipment, while more expensive, will allow to considerably increase the available capacity to ensure that "dirty" food is prevented from being consumed to the extent possible. The lack of such equipment in the affected areas, especially in the remote settlements, is obvious.

At the beginning of November 1990, the Soviet Red Cross and the League will organise a 3-day training course for a group of future trainers in using portable geiger-counters.

As contamination is often located in spots, it is important especially for families living in the affected areas to be able to locate these spots so that they can stay away from them and be warned not to gather fruit, berries or mushrooms from the grounds around such areas.

Most people are convinced that there should be at least one geiger-counter in each village or settlement. Therefore, the League proposes to the participating National Societies interested in this programme to continue providing support to this important part of the

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\* According to the available information, the local production of the geiger-counters is expected to be considerably increased at the beginning of next year.

programme which is also aimed at strengthening the operational capacity of the Red Cross Societies of Byelorussia, Russian Federation and Ukraine.

### 3. MEDICAL SITUATION

The medical situation in the rural areas of all these Soviet Republics is more or less the same. The lack of proper medical equipment for diagnosis purposes is obvious. Every single hospital and clinic visited by the League Delegate, was hoping for some kind of assistance from the League.

In all districts, an increase in the number of diseases has been registered. However, some doctors admitted that part of the increase could be a result of the added number of medical examinations of the population, or could even be psychosomatic (stress-related).

It seems to be a fact, however, that radiation does in some way affected the immune system. A prevailing distinctive feature is that a number of diseases last longer and people, especially children, suffer more from the effects of the diseases.

Many schools have reduced the periods of tuition during the day as the children are more tired and easily get exhausted.

An analysis of the needs in medical equipment, particularly in diagnostic and laboratory equipment in the health institutions, has confirmed that the majority of the hospitals and clinics are lacking technological capacity to provide adequate treatment and diagnostic services to the population in the affected areas.

At the same time it has been clear that the resources which might be available within the International Red Cross would not be enough to cover even a small part of the needs, especially in the rural areas. It has been one of the reasons why the League proposed to the participating National Societies to concentrate on several health institutions which have inter-regional responsibilities.

By the end of September 1990 the League Delegation in Kiev confirmed that the Ukrainian Special Dispensary of Irradiation Protection has been meeting the criteria set up in the League Appeal (project description is enclosed herewith) for assisting in up-grading the operational capacity of the health institutions in the affected regions.

With regard to the two other health institutions mentioned in the Appeal, namely the Centre of Ecological Medicine in Mogilev (Byelorussia) and the Inter-regional Diagnostic Centre in Novosybkov, the assessment has shown that their opening is planned as of middle of 1991. There are also plans to move the Inter-regional Diagnostic Centre from Novosybkov to Bryansk.

In view of this the League proposes that the resources available with the participating National Societies be utilized for meeting more urgent requirements like provision of blood testing equipment, at least to each district hospital, which has been also identified among the biggest priority needs.

#### 4. RED CROSS

The League delegation survey of all the affected areas has also confirmed well-established and organised Red Cross infrastructures in all affected regions. The number of trained staff and volunteers does not leave any doubt that the defined goals could be achieved.

The relations of the Red Cross Societies with the local authorities are good and many Red Cross activities are sponsored by local organisations, plants, farms, etc.

#### 5. PLAN OF ACTION

- 5.1 The provision of portable dosimeters is planned to start in November 1990. The first training course for instructors in using these instruments will be organised in Kiev beginning of November. Subsequently training courses will be organised in the relevant republics, districts and regions. The reduced target for purchasing these instruments will be set at maximum 2,000 units depending on the availability of funds.
- 5.2 Equipment of 10 mobile Red Cross units, with food and whole body monitoring instruments in order to supplement existing facilities and provide for wider coverage of the existing needs, particularly in the rural and remoted settlements.
- 5.3 Production of information material on the effects of low level radiation contamination on health.
- 5.4 Distribution of baby food and vitamins among the children.
- 5.5 Provision of equipment to the Ukrainian Special Dispensary for Irradiation Protection. Identification of the health institutions in the most acute need for blood testing equipment. Supply of these institutions with the required equipment.

6. REVISED BUDGET

	CHF
- Provision of portable dosimeters (2,000 units)	1,300,000
- Provision of food monitoring instruments (10 units)	300,000
- Provision of whole body monitors	350,000
- Establishment of the Red Cross document production department	100,000
- League Delegation	150,000
- International seminar in Kiev	30,000
- Medical equipment	2,000,000 (*)
- Programme support	120,000
<b>Total</b>	<b>4,350,000</b>

(\*) Required in kind.

02.10.1990  
CHESITR1/LCT21/GAILLARD

CHERNOBYL - Humanitarian Assistance and Rehabilitation Programme

LIST OF CONTRIBUTIONS/PLEDGES

AT 25.09.1990

In cash:

earmarked for:

Australian RC	AUD 15,000	CHF 16,449.50	
British RC	GBP 10,000	CHF 25,500	radiation detectors
Canadian RC	CAD 10,000	CHF 12,000	
Finnish RC	FIM 50,000	CHF 18,125	delegation costs
	FIM 250,000	CHF 90,500	radiation detectors
Japanese R	JPY 13,264,000	CHF 100,000	radiation detectors
		CHF 25,300	delegation costs
Monaco RC		CHF 15,000	
Netherlands RC	DFL 10,350	app.CHF 7,600	radiation detectors

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approx. CHF 310,474.50

In kind:

Japanese RC	medical equipment	approx. JPY 13,736,000	CHF 129,800
Finnish RC	10 radiation survey meters	FIM 20,000	CHF 7,250
Norwegian RC	medical equipment	NOK 500,000	CHF 110,000

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CHF 247,050

CHECONTR.IB/LCT21/GAILLARD



PROJECT DESCRIPTION.1. PROGRAMME.

The LRCS Humanitarian Assistance and Rehabilitation Programme to the population of Ukraine SSR affected by the long term consequences of the Chernobyl Nuclear Power Plant disaster.

2. OBJECTIVES.

One of the objectives is to upgrade health and social institutions directly involved in treating and rehabilitating the population affected by radioactive contamination, with the priority target groups:

- children
- orphans
- servicemen and volunteers who participated in the decontamination operations immediately after the disaster.

3. PROJECT.

In the Ukraine SSR one of the health institutions which have been identified is the: UKRAINIAN SPECIAL DISPENSARY OF IRRADIATION PROTECTION.

4. LOCATION.

The Dispensary is located in a pleasant area surrounded by pine trees at the outskirts of Kiev.

5. DESCRIPTION.

The Kiev Dispensary of Irradiation Protection was established in August 1986 by the Ministry of Health of Ukrainian SSR with the purpose of examining and providing medical treatment to children suffering from the effects of radioactive contamination or living in contaminated areas. At the same time the Dispensary carries out research, coordinates work of local health services and provides practical consultation and advice to District hospitals.

The Dispensary consists of a hospital, poly-clinic and rehabilitation centre.

6. SCOPE OF MEDICAL ASSISTANCE.

It is estimated that approximately 350.000 live in the areas affected by the Chernobyl disaster.

Approximately 90.000 children living in the seriously affected areas are registered. Of these 12.000 have received an absorbed dose of the Thyroid gland of more than 200 REM.

Since 1986 approximately 7000 children have been treated at the hospital which has 130 beds.

The poly-clinic has during the same period examined approximately 30.000 children and adults.

The children are selected either by a team from the Dispensary travelling in the affected areas or by request of doctors at District Hospitals and clinics. In addition any family with children suspected of suffering from the effects of radiation can visit the poly-clinic or receive treatment at the hospital.

The present capacity at the hospital allows treatment of 2000-2500 children every year. At the poly-clinic approximately 12.000 examinations can be carried out every year.

## 7. STAFF.

The Dispensary Hospital consists of four departments:

- Radiation/Diagnosis
- Neurology
- Haematology
- Endocrinology

The total staff consists of 77 doctors and 147 nurses which includes research personnel, physiotherapists and part-time specialists and dentists.

## 8. EQUIPMENT AVAILABLE.

Of medical equipment available for diagnosis purpose the Dispensary has the following:

- Electrocardiograph, 2 sets, Sovjet made.
- X-ray, 1 set
- Ultra-sound diagnostic system, 1 set, on loan from another hospital.
- Gastrointestinal phibroscope, 1 set.
- Microscopes (for blood testing)

## 9. REQUIRED MEDICAL EQUIPMENT.

	no.	price
Ultra-sound diagnostic system, SSD-630, Aloka	1	
Ultra-sound app. for vascular res., Vacoscan VL	1	
Clinical analyser, Vitalad 31, Switzerland	2	
Biochemical analyser, Vitalad 31, Switzerland	2	
Gastrointestinal phibroscope, Olympus, Japan	2	
Quick body monitors, stationary & mobile	4	
Analyse counter blood cells, Cell Gyn,	1	
Technikon analyser counter blood cells, Finland	2	
Computer thomograf, T-9000, Somatom CR, GE, USA	2	
Thermo monitor for diagnosis, AGA-782, Adema, Sweden	1	

## 10. JUSTIFICATION.

The Kiev Dispensary of Irradiation Protection focuses primarily on examining and treating children who are one of the main target groups of the programme.

Many of these children have to come regularly for medical check-up. The staff is highly qualified and combines treatment, rehabilitation with medical research and training.

There is a need to increase the capacity of the Dispensary with special emphasis on diagnosis in order to include more children in the examinations. At the moment several thousand children are on a waiting list either to be examined or treated at the hospital.