

**Evaluation of the operation financed by ECHO**

**"Ukraine, Belarus and Russia Chernobyl Humanitarian Assistance  
and Rehabilitation Programme"**

**undertaken by the**

**International Federation of the Red Cross and Red Crescent in collaboration  
with the National Societies of the three countries concerned**

Evaluation mission : 26 February 1996 - 5 April 1996

External Consultants:

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**Specific aim of the Operation:**

**"To Carry out the activities of the IFRC global programme  
whose objectives are:**

**"the early detection of thyroid cancer among the population  
inhabiting the most highly contaminated regions;  
Prophylactic medical treatment of the children;  
informing the population"**

Contract No.: ECHO/TPS/B7-215/95/2301A

Period : 1 December 1995 to 31 May 1996

Contract signed: 18 January 1996

Budget: 500,000 Ecus

“The present report drawn up for the Economic Community Humanitarian Office (ECHO) does not necessarily reflect the ideas of this body, only those of the authors.”

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## **APPENDICES**

## **I. SUMMARY**

## 1. Introduction

On 26 April 1986, at a time of political and economic vulnerability in the USSR, the fourth reactor of the atomic power station situated at Chernobyl in the Ukraine released a cloud of radioactive isotopes into the atmosphere. For the most part, this only too famous cloud consisted of *iodine 134*.

Although a 30 km radius security zone was immediately established and 16,000 persons were immediately evacuated from it during the first few days, 4 million people were nevertheless affected by this accident, and 1,200,000 of them are still living in areas considered to be highly contaminated.

At the present moment the only pathology scientifically attributable to this release of radioactive iodine is thyroid cancer among children. Since 1986, 565 children have exhibited this pathology and its incidence is on the increase, with the highest rate in Belarus. The most vulnerable population group and therefore the one most likely to develop thyroid cancer over the next ten years is most probably to be found among the generations born between 1971 and 1987<sup>1</sup>.

International aid was only able to commence effectively after the collapse of the communist system.

Belarus, Ukraine and Russia, as with all the countries of the former USSR, are suffering from the consequences of this sudden entry into a market economy system which they cannot yet control. Prices are soaring but incomes remain stationary. Everything is now available, but even certain basic products are too expensive and have become inaccessible to the ordinary consumer.

A reform of the health system has begun and is concerned to reduce costly hospitalization in favour of a more economic ambulatory medical system. A partial privatization of pharmacies has increased the availability of medicaments, but the high prices make these unavailable to most of the population.

## 2. Evaluation Methodology

This has consisted of seeking information and analysing it in accordance with the various points mentioned in the terms of reference<sup>2</sup>. We have been careful to follow the whole planning process of this programme, both in its conception and throughout the various stages leading from the ordering of products to their distribution to the recipients.

Since the present ECHO funding was preceded by two others (1 March - 31 August 1994 and 1 November 1994 - 15 September 1995<sup>3</sup>) covering 50% of the total budget for the programme

<sup>1</sup> We will define four levels of intervention:

1. The most remote villages: active screening; continuation and strengthening of mobile teams of the Red Cross type.
2. Health structures within the "Radius": passive screening; clinical "early warning" methods primarily to detect thyroid cancer, and later other cancers.
3. "Oblast" referral structures: diagnostic confirmation (ultrasonography, tomodesitometry and especially biopsy puncture). Also post-surgical therapy checks.
4. Specialized referral structures (Minsk, Kiev, Obminsk and Moscow): diagnostic confirmation and therapeutic decision-making; thyroidectomy and radioactive iodine therapy.

<sup>2</sup> See appendix No 3.

<sup>3</sup> 500 000 F and 400 000 F respectively

undertaken by the International Federation of Red Cross and Red Crescent Societies (IFRC) in favour of the Chernobyl victims, the consultants carrying out this evaluation have taken into consideration factors preceding and concomitant with the evaluated operation.

The assembled data reflects the whole programme conducted in collaboration with the IFRC, the National Societies (NSs) and the regional health authorities, and deals particularly with the activities undertaken in 1995.

The information contained and transmitted in this report was collected during discussions with representatives and experts from Governments, Ministries of Health, Ministries in Chernobyl, and with the personnel of national hospitals. National Red Cross Societies (Ukraine, Russia, Belarus) and of the International Federation of Red Cross and Red Crescent Societies. Discussions held with both donors and other organizations present in these three countries enabled us to complete our information.

A visit to the 6 most contaminated oblasts<sup>4</sup> and to actual work locations of the mobile Red Cross teams allowed us to gain direct experience of the major problems facing these affected populations, to determine their present needs and also to measure the extent to which these are being satisfied.

The evaluation of this operation by the International Federation of Red Cross and Red Crescent Societies formed part of a more large scale operation<sup>5</sup> concerning humanitarian aid in favour of the victims of the Chernobyl accident in Belarus, Ukraine and Russia, financed by ECHO<sup>6</sup>. We wish to stress that the principal aim of the consultants who carried out this mission was to make recommendations for future humanitarian actions for the benefit of the populations affected by the Chernobyl accident. This aim has prevailed throughout the whole of the mission.

During the initial phase of the evaluation, interviews were carried out in the presence of both consultants, so as to develop a common approach and to identify the information requiring fuller analysis. Subsequently, certain interviews and visits were carried out separately.

*Thanks:*

We wish to thank:

- the whole IFRC team (Geneva and Minsk delegation) for the perfect organization of our mission, the logistic assistance and the clarity in communicating information;
- the Red Cross National Societies and various representatives of the Governments, Ministries of Health and Ministries in Chernobyl for their welcome and the earnestness of the discussions that we were able to have with their members;

<sup>4</sup> Rovno and Zhitomir in Ukraine, Kursk and Briansk in Russia, Gomel and Mogliev in Belarus.

- ECHO/Evaluation in Brussels for information provided during the preparatory meetings.  
Evaluation of the operations conducted by "Hilfe für die Kinderklinik Minsk" (Aid for Children's Clinic in Minsk), by ECHO/EuroPA and the present action.

### **3. Evaluation Results**

<sup>5</sup> Evaluation conducted from 20 February 1990 to 20 March 1990. Cf. appendix No 1, "Mission Planning".

The present economic situation in Ukraine, Belarus and Russia prevents their governments from

fully providing the means necessary for satisfying the general health needs of the population.

The aid provided for the populations affected by the Chernobyl accident comes within the context of humanitarian action for promoting collaboration between all the national and international players, and aims to establish some measures of intervention to deal with the medical, economic and social consequences of this disaster.

Concerning the medical aspects of this aid, the majority of the international funding (Sasakawa Foundation, WHO etc.) has been principally devoted to scientific research rather than to active care for the affected persons.

ECHO appears to be one of the few institutional sponsors financing actions which directly take charge of the patients; thus fulfils its mandate under humanitarian aid.

Among the operations financed by ECHO for victims of the Chernobyl accident, that undertaken by the IFRC and the NSs is certainly the one that has benefited the most people and whose health impact will be the greatest.

Although not a specialist organization in screening programmes, the IFRC - by virtue of its internal organisation and collaboration with the NSs - is carrying out this programme efficiently.

The objectives and operational strategy funded by ECHO are relevant; the range of activities undertaken and the means employed are appropriate to the total problem. Although there has been a slight delay<sup>7</sup> this has in no way harmed the progress of the activities, which have continued thanks to other sources of IFRC finance<sup>8</sup>.

Summary of the position as follows:

Strong points:

1. This action got off the ground immediately after the opening up of the New States to the international community (1990).
2. It deals with the population group at level 1, as previously defined; it therefore addresses the needs of the more remote groups.
3. The aims of the operation are pertinent insofar as:
  - they directly concern the most affected section of the population

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<sup>7</sup> A major delay between the submission of the project and the effective signing of the contract was the cause of this late start (submission in October 1995, signature on 18 January 1996, theoretical start date of the operation 1 December 1995, duration 6 months); an extension, of the duration of the operation will probably be necessary for its overall completion (about 3 months).

<sup>8</sup> The other sources of finance are essentially: the Canadian, Icelandic and Japanese Red Cross Societies.

- they seek to:
  - increase awareness,
  - inform about the real risks and
  - screen at an early stage, not only for the pathologies associated directly with radiation

(thyroid cancer), but for all treatable pathologies.

4. This operation planned by the IFRC fulfils a need not covered by the other programmes in operation (for the most part national medical programmes).
5. The presence of National Red Cross Societies facilitates collaboration with the medical authorities of the different countries.
6. The IFRC has proven its capacity for implementing this type of operation (which is admittedly unusual in the sphere of humanitarian aid).
7. Highly competent monitoring and auto-evaluation procedures (with specialists in nuclear medicine, public health and epidemiology) guarantee the quality of its programme.
8. Intelligent presentation via information brochures for public distribution and via various articles in the press.

Weak point:

1. There has been no analysis concerning the reproducibility of the tests. Although the various teams employ the same methodology, there is no analysis concerning the concordance of the diagnostic tests.

Limitations:

It should nevertheless be recalled that the initial objectives were to work in the most contaminated "Oblasts" and more particularly in the remotest villages; at no time was it the intention to examine all the individual inhabitants. With the means at present available to it, the IFRC will never exceed the figure of "60,000 persons examined per annum".

## **4. Recommendations**

### **4.1. General**

Having regard to the length of time that humanitarian aid will be needed by victims of the Chernobyl accident, agreement among the principal donors and operators is indispensable.

The two main objectives for future medical action should be:

- early screening of thyroid cancer<sup>9</sup> for the generations born between 1971 and 1987;
- constant vigilance for the emergence of all types of cancer:

- from now on: leukemias;



- within the coming ten years and for a further 50 years : cancers affecting other organs (lungs, intestines, bladder etc.).

In order to support the Ministries of these three countries and to attain these objectives, ECHO could continue to support the activities at the two levels already mentioned i.e. 1 and 4, as well as informing the Ministries of Health in order to persuade them to develop methodological strategies for clinical reasoning at level 2 and in a general way ensure that the Health Ministries reinforce coordination between the different levels.

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<sup>9</sup> The thyroid cancer epidemic is expected to peak in 2006.

#### ***4.2 Specific to the IFRC Operation***

In order to improve the cover of its activities and therefore to increase its effectiveness, IFRC should:

- redefine the target population for active screening and direct it towards the generations born between 1971 and 1987, living in the more isolated villages,
- and, above all, increase the number of mobile teams. Although, in terms of population coverage, it should be possible to attain the objective with 20 mobile teams, it would be more realistic, in terms of feasibility, to limit the number of teams to a minimum of 10.

In order to improve the quality of its services, the IFRC should use its next seminar as a vehicle for analysing the reproducibility of the medical tests carried out by the mobile teams.

Provided that the above-mentioned recommendations are implemented, ECHO could continue its support for the programme conducted by the International Federation of the Red Cross and Red Crescent by supplying the means for:

- maintaining its present programme, whilst bearing in mind that equipment will need to be renewed on a regular basis;
- and even increasing its activities, in order to improve the coverage of the target population.

## II. REPORT ON THE EXTERNAL EVALUATION

### 1. Context

#### 1.1. Socio-economic and Political Situation

Belarus, Ukraine and Russia, as with all the countries of the former USSR, are still suffering from the collapse of communism and their sudden entry into a market economy system which they are as yet unable to control. Prices are soaring but incomes remain stable. All commodities are now available, but even certain basic requirements are too expensive and therefore inaccessible to the ordinary consumer.

Relations between Ukraine and Russia may degenerate at any moment, but Belarus and Russia are tending to move closer together. Russia, in any case, will not relinquish its image as a great power and manifests a vague desire to reconquer. Of the three countries, Belarus is economically the weakest and appears indeed to be the most fragile.

#### 1.2. Health System

Officially medical services are free of charge, but they must in fact be paid for as soon as a certain quality of care is required.

Reform of the health system is underway and is concerned to reduce both the number of hospital beds and the length of stay in favour of a more economic ambulatory medical system.

Equipment is mostly extremely outdated or even non-existent, but multilateral aid received over several years is tending to remedy this situation. Indeed some hospital departments are now very well equipped.

Although modern medicaments were previously unavailable, this is no longer the case; but they are still financially inaccessible to the majority of the population.

**1.3. The Nuclear Accident and its Consequences**  
<sup>10</sup> Iodine 131: the most volatile element; it spread throughout the world. In man, it immediately lodges in the thyroid gland. It emits gamma rays and its period of half-life is 8 days. Almost all the contamination by radioactive iodine took place, therefore, during the first days following the accident. Caesium 137: it spread over a surface of more than 211,000 km<sup>2</sup> around Chernobyl, affecting Ukraine, Russia and especially Belarus. It liberates a cloud of radioactive isotopes into the atmosphere. The (regrettably) famous cloud was composed essentially of iodine 131. It behaves biologically like potassium. It is particularly concentrated in mushrooms and wild berries. In man and composed essentially of iodine 131. It emits gamma rays and its period of half-life is 30 years. Strontium 90: 80% of the strontium emitted during the accident remains within the exclusion zone of 30 km around the power station. Biologically it behaves like calcium; it settles in the bones, where it can persist for many years. It emits beta rays and its period of half-life is 28 years. Plutonium 239: the heaviest element; practically all the plutonium emitted remains in the exclusion zone. Biologically one of the most toxic. It emits alpha rays and its period of

greatest secrecy. This zone has since been permanently forbidden to the inhabitants and, in principle, no one will ever be able to live there again. Nevertheless, there is a probable tendency for it to be *recolonized*, by Chechen refugees among others.

*Discretion* concerning the real extent of the accident and lack of public information were maintained until 1990 and increased the distress. In one way or another, 4,000,000 people were finally affected by this accident<sup>11</sup> and 1,200,000 of them are still living in zones contaminated by *caesium* 137. Some villages have yet to be relocated.

Economic difficulties and the increased cost of unpolluted foodstuffs are increasingly prompting inhabitants of the contaminated areas to resume their former agricultural and forestry activities, and thus to consume contaminated food.

At the moment, thyroid cancer<sup>12</sup> among children is the only pathology whose increased incidence can be scientifically attributed to the Chernobyl accident. Indeed, among the three affected countries 565 children have contracted this disease since 1986. In Belarus, the most affected state, the incidence has increased from 0.9/1,000,000 in 1986 to 36/1,000,000 in 1994. The population at greatest risk of developing thyroid cancer over the next ten years is most probably to be found among the generations born between 1971 and 1987.

In the remotest villages, early and reliable screening for thyroid cancer is only possible by means of mobile teams. Essentially, lack of methodological capacity and to a lesser extent appropriate equipment, make it impossible for the national personnel working in the most peripheral health structures to carry out this activity. It is important to install a sound referral system so that severe cases can be referred in good time to the national endocrinological institutes, the only services capable of performing thyroidectomy among children<sup>13</sup>.

## **2. Conduct of the Operation**

### **2.2. General Aims of the International Federation of Red Cross and Red Crescent Societies Programme<sup>14</sup>**

The specific aim of the operation is to maintain the programme started by the IFRC and the NSs in 1990 and to pursue its general objectives.

These general objectives are:

- to offer a screening examination to adults and children residing in the most contaminated regions and to direct them towards referral structures where the diagnosis and treatment of detected pathologies can be undertaken (target population : 60,000; target pathology : thyroid cancer);
- to measure the radioactivity (gamma, alpha and beta) in the atmosphere and soil in order to create a "contamination map" and to highlight severely contaminated zones;

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<sup>11</sup> 2,400,000 people in Belarus, 1,000,000 in Ukraine and 700,000 in Russia.

<sup>12</sup> The lack of iodine in the whole of the affected region, the delay and inadequacy of cover in the iodine saturation campaign at the time of the accident and the absence of a systematic deiodization programme once the acute period was past are all factors which have contributed to the development of thyroid cancers.

<sup>13</sup> We will define four levels of intervention:

1. The most remote villages: active screening; continuation and strengthening of mobile teams of the Red Cross type.
2. Health structures within the "Radius": passive screening; clinical "early warning" methods designed primarily to detect thyroid cancer, and later other cancers.
3. "Oblast" referral structures: diagnostic confirmation (ultrasonography, tomodenafometry and especially biopsy puncture). They also operate post-surgical therapy checks.

- to monitor the radioactivity of foodstuffs and, more specifically, garden and forest products (berries, mushrooms etc.);
- to inform the public concerning the means of preventing the negative effects of radioactivity, via a brochure widely distributed by the mobile teams;
- to distribute powdered milk and vitamins to children of school age, so as to guarantee them some protective Immunization (target population : 60,000 children).

This programme is appropriate because it targets the most affected populations and benefits them directly.

## **2.2. Strategies of the Operation**

This programme is situated at level 1 of the health pyramid and therefore provides direct aid to the recipients. Although it is directed more particularly at children, it also targets all populations inhabiting the more isolated villages of the six most contaminated "oblasts". These people have little access to health structures and since the accident have never undergone any examination for the detection of radioactivity.

Vulnerable population: 4 million inhabitants, including 1 million children. Target population: 1,200,000 persons, including 400,000 children.

Since 1992, six mobile teams have been carrying out a screening programme (essentially to highlight thyroid problems in order to facilitate the early detection of thyroid cancer) among this population and checking the radioactivity in these zones. These Mobile Diagnostic Laboratories<sup>15</sup> are based in the "oblasts" of Gomel and Mogilev (Belarus), Bryansk and Kursk (Russia) and Zhitomir and Rove (Ukraine). Each team is equipped with a 4 W.D. vehicle to transport the necessary diagnostic equipment and to enable it to traverse all types of terrain. Depending on the target population, these mobile teams work either at peripheral health structure (FAP<sup>16</sup>) level, or at school centre or factory level.

The different stages of the examination take 45 minutes and seek to measure:

- ambient gamma radioactivity;
- external alpha and beta radiation;
- caesium radioactivity of foodstuffs and water;
- internal corporeal Caesium radioactivity;

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<sup>15</sup> MDLs

<sup>16</sup> FAP : Feldsher Ambulatory Point

- and to carry out the following examinations:
- echography of the thyroid gland;
- electrocardiography;
- haematology of eight components;
- biological urine test of ten components.

These are completed by arterial pressure and ocular measures, and by an ear nose and throat examination.

All these data are systematically stored on a computer and a card is given to the patient, who is then immediately informed of the results. If an abnormality is detected, the patient is sent to the "area" hospital for further tests. Depending on the seriousness of the case, treatment for benign pathologies is at regional level, and for thyroid cancers surgery is carried out by national institutes specializing in endocrinology.

The retro-information on the final diagnosis and the treatment of each case is transmitted to the mobile team.

Very good access to the vulnerable populations is guaranteed, because the teams go directly into their homes and workplaces. Thanks to the effective media coverage of this action via information brochures, radio messages and press articles, the public is able to appreciate the value and effectiveness of this screening process.

The ultimate objective would be to examine the target population at least once a year. Even though certain Ministry of Health districts also employ the same type of mobile team as the Sasakawa Foundation<sup>17</sup> however, the target population is not covered.

The present resources of the IFRC cannot guarantee an annual visit by the MDLs, and it will not therefore be possible for the figure of "60,000 persons examined annually" to be exceeded.

### **2.3. Technical Assistance**

The IFRC representatives, a delegate and a project coordinator will undertake the general coordination of the programme in order to ensure that it is carried out correctly and supervised efficiently. Apart from their excellent technical and personal competence, they have succeeded in establishing a very good human and working relationship.

The IFRC has been able to guarantee the quality and international aspect of the programme. Its activities are coordinated by a Russian medical coordinator and a Ukrainian administrator/logistician.

The conduct of its activities at "oblast" level is undertaken in collaboration with the national staff employed by the IFRC and the members of the Red Cross National Societies.

The MDL staff are nationals and are variously skilled (from 6 to 8 persons: a radiologist, a specialist in echography, an endocrinologist, 2 laboratory technicians, 2 dosimetry technicians and a secretary with computer skills). The members of the mobile teams are paid according to the national rates. They volunteer for work in these contaminated zones and only receive minor benefits by way of compensation (food allowances, seaside holidays etc.).

In 1992, training seminars were held in Germany. Since then the teams have been partly renewed,

and trained in the field. All the teams met at a seminar in 1993 in order to pool their ideas. The next seminar is planned for April 1996, and should be accompanied and reinforced by additional training.

A complete, dynamic and competent team based in Minsk provides efficient administrative, financial and logistic backup.

*The ECHO<sup>18</sup> - (500,000 E) operation represents the financing of:*

*Medical products: 52% of the total budget,*

*- medical supplies: 39.7%*

*- medical equipment: 32%*

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<sup>17</sup> The Sasakawa Foundation works in Ukraine and Belarus.

<sup>18</sup> Initial proposal of October 1995 for a period of 6 months from 1 December 1995 to 31 May 1996, contract signed 18 January 1996. Consultants' working document.

*- multivitamins: 26.2%*

*Food products: 17.6% of the total budget.*

*Technical assistance: 16.7% of the total budget, comprising*

*- 45 nationals<sup>19</sup> (x 6 months): 72.7%*

*- 1 technical coordinator (x 6 months): 27.3%*

*Staff training: 1% of total budget.*

*Transport and storage: 11.7% of the total budget, comprising*

*- local transport: 84%*

*- international transport: 32.9%*

*- storage: 3%*

*Communications equipment: 0.8% of the total budget. Logistics products (ECHO stickers): 0.18% of the total budget.*

### **2.3. Operation Planning**

This ECHO financing helps to support the whole programme conducted by the IFRC and the NSs, and enables these activities to be continued. The estimate of the necessary funding was based on calculations of the needs required for previous activities. This estimate has proved to be accurate.

The medical supplies and equipment envisaged were delivered to each individual MDL.

The implementation of certain activities were, for various reasons, subject to slight delay:

- delay in signing the contract:

project submitted: October 1995

completion time, 6 months: 1 December 1995 - 31 May 1996

signature: 16-18 January 1996;

- in future, the IFRC hopes to arrange a local supply of powdered milk. It has gone out to tender for local supplies, with a stipulation as to quality; but this involves longer delays;

- the import of all medicaments is subject to quality control, and this is even more stringent

in Russia. The IFRC is therefore negotiating with local pharmaceutical firms for the production of vitamins incorporating quality controls.

Since the beginning of the year, the MDLs have carried on their activities but, because of the above-mentioned delay, an extension of the contract length will probably be necessary for the overall execution of the operation (milk and vitamin distribution to the recipients).

### *Recommendations*

*\* To improve the cover and therefore the efficiency of its programme, the IFRC should both*

- redefine the target population for active screening and direct it towards the generations born between 1971 and 1987, living in the more isolated villages. This is the most*

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<sup>19</sup> 2 medical coordinator, 1 administrator/logistician, 6 team leaders, 6 endocrinologists, 30 laboratory technicians, 1 secretary.

*vulnerable group in terms of "exposure" and therefore the one most likely to present a thyroid cancer.*

*whilst bearing in mind*

- that it will be impossible to refuse these adults who come forward during the screening process,*
- that a strictly defined population is always more difficult to reach,*

*and even more so when*

- as in the present case, the targeted children are going to become or are already adult, and therefore more difficult to locate*
- and above all, increase the number of mobile teams. Although, in terms of population coverage, it should be possible to attain the objective with 20 mobile teams, it would be more realistic, in terms of feasibility, to limit the number of teams to a minimum of 10.*

*\* During its next seminar, the IFRC should organize a session for evaluating - through concordance tests - the diagnostic quality of its teams. This analysis of test reproducibility would highlight the weak points of their teams and would enable their training session to concentrate upon them.*

### **3. Supply and Quality of the Products**

The IFRC headquarters in Geneva is responsible for invitations to tender. For the medical equipment and supplies, orders have been placed with suppliers offering good value for money and quoting short delivery periods. The supplies are in accordance with European quality norms and standards.

### **4. Storage and Distribution Channels**

Powdered milk and multivitamin supplies were previously delivered directly to the three capital cities, but in order to reduce the administrative procedures they are now delivered at "oblast" level.

The NS members are responsible for their reception, storage and allocation to the local



administrative officers, who are then responsible for the final distribution to the recipients.

It should be noted that since this distribution destined for children is carried out through schools, it can only take place during the school terms. This explains why a storage period is sometimes necessary and why the distribution may be delayed (school holidays from July to September).

The medical supplies and equipment are delivered as a whole to the IFRC in Minsk. Allocation of these articles to the various mobile teams is the responsibility of the IFRC co-ordination team and is commissioned according to the requirements of each MDL.

The various distributions are supported by records and signed receipts from the recipients, and this system is first supervised at NS level and then by the IFRC.

The orders and distributions are appropriate and correspond to real needs. The IFRC supervises the whole distribution network efficiently.

## **5. Monitoring and Auto-Evaluation of the Programme**

### ***5.1. Monitoring***

The medical coordinator carries out an on-site monthly inspection of the six mobile teams. Together they analyse the results of the examinations and the follow-ups of the referred patients, and a monthly statement is forwarded to Minsk.

An intermediate operational report should be submitted the following month.

### ***5.2. Auto-evaluation***

An internal evaluation carried out by experts in nuclear medicine, epidemiology and public health had just been completed when we arrived. The whole future orientation of the project will depend upon its findings.

## **6. Operational Capacity**

### ***6.1. Operational Capacity***

Back in 1990, the IFRC demonstrated its originality in setting up this very specific approach to humanitarian aid. It has proved its ability to adapt to specific situations, as well as its operational competence, both in Geneva and in the field.

### ***6.2. Coordination mechanisms***

This programme is coordinated by the "International Chernobyl Coordination Committee" (ICCC), with members from the NSs in Belarus, the Ukraine and Russia and from the IFRC. This committee meets three or four times annually, with the goal of conducting a status report to enable strategies to be adapted and budgets to be defined. There is always a preliminary technical meeting in order to assemble the elements necessary for analysing the situation.

The NSs play a major role in furthering collaboration with the national health structures. A memorandum has been signed with every Ministry of Health concerned.





- psychological support for isolated populations and those living in a very disturbed psycho-social context.

<sup>20</sup> Cf. appendix No 4, "Thyroid gland pathology, comparison January to December 1994 and 1995"

### Evaluation Form

Operational Partner: IFRC (International Federation of Red Cross and Red Crescent Societies)  
 Contract Ho: ECHO/TPS/B7-215/95/2301A  
 Contract Amount: 500,000 ECU  
 Country: Belarus, Ukraine and Russia  
 Consultants: Pierre-fies Laafaert (NM Consultants)  
 Monique Pont

Operation Period: from 1 November 1995 to 31 May 1996  
 Evaluation Period: from 26 February to 20 March 1996  
 Date of Report: 5 April 1996

Description of Objectives A	Input (Quantity and costs) B	Period of Activity (planned / actual) C
Examination of 60,000 persons p.a.(1)	<ul style="list-style-type: none"> <li>• Expatriate staff: 22,800 ECUs</li> <li>• Local staff: 60,720 ECUs</li> <li>• Medical equipment 80,460 ECUs</li> </ul>	6 months / 6 months
Milk distribution to children of school age (2)	<ul style="list-style-type: none"> <li>• Medical supplies: 99,713 ECUs</li> </ul>	6 months / 6 months
Vitamin distribution to children of school age (2)	<ul style="list-style-type: none"> <li>• 38,400 tonnes 88,161 ECUs</li> <li>• 42,000 x 1,000</li> </ul>	6 months / 6 months

73,023 ECUs
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Results D	Accomplishment of objectives E	Comments F
56,000	93%	In reality, a permanent and routine activity in place since 1990
0	0%	Delay due to strategic change. The IF8C decided to obtain supplies locally.
0	0%	Delay due to strategic change. The IFRC decided to obtain supplies locally.

(1) Partially subsidized by ECHO. 6 months salary are covered plus the annual medical supply for the sampling

(2) Entirely subsidized by ECHO.

## 9. Future ECHO Actions

Within the socio-economic context of these three countries the programme to help the Chernobyl victims clearly illustrates how humanitarian aid can be made to function, and more than this it shows unequivocally the need for international, scientific, political, technical and financial collaboration in order to address the consequences of this accident.

The IFRC operation, despite the weaknesses already noted, responds perfectly to the urgent needs of these populations and is both technically and operationally of high quality. It provides the opportunity for ECHO to express its desire to carry out its humanitarian mandate and to reflect the solidarity of the citizens and governments of the European Union with those of Eastern Europe.

The humanitarian aid allocated to the Chernobyl victims must be the object of concerted action on the part of Ministries of Health, the Chernobyl authorities, donors and operators. In view of the duration of assistance required, the allocation of the funding must be strictly cost-efficient and of real benefit to the target populations.

The two main aims for future medical actions should be:

- to cover the generations born between 1971 and 1987 by early screening for thyroidcancer<sup>21</sup>;
- to be on the lookout for any type of cancer:
  - from now on: leukemias in the coming ten years and for 50 years thereafter;
  - cancers affecting other organs (lungs, intestines, bladder etc.);

In order to support the Ministries of these three countries and to attain these objectives:

- ECHO could continue support at the two levels already cited i.e. 1 and 4, and;
- heighten the awareness of Ministries of Health so that they develop/ methodological

strategies for clinical reasoning at level 2 and

- generally ensure that Ministries of Health reinforce coordination between the various levels.

Provided the above-mentioned recommendations are implemented, ECHO could continue to support the programme operated by the International Federation of Red Cross and Red Crescent Societies by supplying the means for:

- both maintaining its present programme, without overlooking the fact that:
  - the equipment will have to be regularly renewed;
  - this programme will require modifying to reflect the epidemiology of the pathologies appearing within the coming 10 years;
- and even increasing its activities in order to improve the coverage of the target population.

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<sup>21</sup> The peak epidemic for thyroid cancer is anticipated to be in 2006.

## APPENDICES

## **APPENDIX No 1**

### **Mission planning**

#### **Friday 9 February:** Brussels

- Briefing at ECHO headquarters: with those in charge of the humanitarian programmes in favour of the Chernobyl victims and members of the ECHO/Evaluation team, co-ordinators for this evaluation.
- Consultation of documents concerning this evaluation.

#### **Monday 12 February:** Brussels

- Briefing at ECHO headquarters: with the scientific and medical officers of the DGX11 in charge of the programmes concerning Chernobyl, and members of the ECHO/Evaluation team.

#### **Tuesday 27 February:** Geneva

- Meeting with those in charge of the "Chernobyl" programme of the International Federation of Red Cross and Red Crescent Societies (IFRC).
- Discussion with those in charge of the IPHECA programme of the WHO.

#### **Wednesday 28 February:** Düsseldorf

- Meeting with those in charge of the programme operated by Hilfe für Kinderklinik, Minsk.

**Thursday 29 February:**  
Ukraine - Kiev

- Departure for the Ukraine: arrival at Kiev.
- Formalities with the Ukrainian Red Cross.

**Friday 1 March:**  
Ukraine - Kiev

- Meeting with the leader and economic representative of TACIS within the European Union Delegation in Kiev.
- Meeting at the Kiev Institute of Endocrinology and Metabolism: with Prof. Epshtein and his collaborator.
- Meeting with the economic and commercial representative of the French Embassy in Kiev.
- Dinner/Discussion with the IFRC.

**Saturday 2 March:**  
Ukraine - Kiev

- Meeting with the IFRC and the Ukrainian Red Cross: presentation of their programme and organisation of the evaluation schedule.
- Dinner/Discussion with the officers of the IFRC.

**Sunday 3 March:**  
Ukraine

- Departure for the Rovno district.

**Monday 4 March:**  
Ukraine - Kiev

- Meeting with the Director of Medical Programmes of USAID.
- Meeting with the Head of the International Department of the Chernobyl Ministry.
- Meeting at the French embassy: First Secretary and the Attaché for Scientific and Technical Co-operation.

Ukraine - Rovno

- Meeting with the President of the Rove Section of the Ukrainian Red Cross.
- Meeting with the Ministry of Health
- Visit to the Dispensary for Radiological Protection and meeting with the Director
- Visit to the Mobile Laboratory (MDL) of the IFSC.

**Tuesday 5 March**  
Ukraine - Kiev

- Meeting with the person in charge of "Children of Chernobyl" (Enfants de Tchemobyl), a Ukrainian Association.
- Visit to the Medical Centre administered by the Franco-Ukrainian Association, 'Children of Chernobyl'

- Visit to the Institute of Endocrinology and Metabolise responsible for taking care of children afflicted with thyroid cancer.
- Ukraine - Zhitomir
- Meeting with the Vice-president of the Zhitomir Section of the Ukrainian Red Cross
  - Meeting with the first assistant of the Department for the Medical Care system of the Ministry of Health
  - Visit to the Children Endocrinology Centre and meeting with its chief medical officer and staff.
- Wednesday 6 March:**  
Ukraine - Kiev
- Russian Embassy
- Ukraine - Zhitomir
- Visit to the MDL working in the convalescent home for children from the contaminated zones. Meeting with the President of the Zhitomir Section of the Ukrainian Red Cross
  - Visit to the central pharmacy and Meeting with two people in charge.
- Thursday 7 March:**  
Ukraine - Kiev - Zhitomir
- Return to Kiev.
- Friday 8 March:**  
Ukraine - Russia
- Journey from Kiev to Kursk
  - Public holiday in Belarus, Russia and Ukraine.
- Saturday 9 March:**  
Russia - Kursk
- Meeting with the President of the Kursk Section of the Russian Red Cross and the person in charge of International Humanitarian Affairs at the central office in Moscow who accompanied us to Briansk
  - Meeting with the principal person in charge of the regional administration, the person in charge of protection from radiation and the departmental head of medical care of the Ministry of Health
  - Visit to the convalescent home for students
  - Visit to a Red Cross medico-social centre.
  - Meeting with the Patriarch of the Orthodox Church.
- Sunday 10 March:**  
Russia - Kursk
- Visit to the Red Cross medico-social centre
  - Visit to the Kursk region sanatorium.

Russia - Zheleznogorsk

- Meeting with the Mayor of the town, the departmental head of medical care of the Health Department and the President of the town's Red Cross Section
- Visit to the registry office
- Visit to a hospital in the town
- Visit to the DDL.

**Monday 11 March:**  
Russia - Briansk

- Visit to the Special Centre for the Chernobyl victims and extensive interview with the head of the centre
- Interview with the President of the Red Cross Section of the Briansk Region
- Visit to the MDL working in a highly contaminated village.

**Monday 12 March:**  
Belarus - Gomel

- Visit to the Red Cross Committee and its Social Centre
- Visit to the MDL working in the heating station of the town
- Visit to the Special Dispensary for Chernobyl victims and meeting with the Dispensary director, the person in charge of the regional mobile teams responsible to the Ministry of Health and the "co-ordinator" of all the mobile teams working in the region.

**Wednesday 13 March:**  
Belarus - Mogilev

- Meeting with the departmental head of the Mogilev Regional Administration and the head of the radiological department and regional diagnostic centre
- Visit to a Red Cross medico-social unit and meeting with the President of the Regional Section of the Red Cross
- Visit to an occupational centre for elderly people
- Visit to a KDL in a village.

**Thursday 14 March:**  
Belarus - Minsk

- Visit to the Paediatric Surgical Clinic of hospital 10.1 in Minsk, supported by "Hilfe Für Kinderklinik Minsk", and meeting with those in charge of the NGO and the various officers of the clinic
- Visit to the Endocrinological Institute (situated in hospital No. 1 in Minsk) and meetings with the director of the Institute, people in charge of the nuclear medicine unit and those in charge of the surgical departments
- Meeting with the Minister for Chernobyl.
- Meeting with His Excellency the German Ambassador and his attaché for humanitarian affairs.



- Friday 15 March:**  
Belarus - Minsk
- More intensive visit to the Paediatric Surgical Clinic and detailed discussion with the medical team. Summing-up meeting with those in charge of the "Hilfe Für Kinderklinik"
  - Meeting with His Excellency the United States Ambassador and his attaché for humanitarian affairs.
- Saturday 16 March:**  
Belarus - Minsk
- Summing-up meeting with the IFRC
  - Drafting of the preliminary summary
- Sunday 17 March:**  
Belarus - Minsk
- Drafting of the preliminary summary
  - Meeting with Mr. Lewartowski
  - Dinner and discussion with the IFRC
- Monday 18 March:**  
Belarus - Minsk
- Planned meeting with the person in charge of radiological Batters at the Ministry of Health
  - Meeting with the Charge d'Affaires of the Japanese Embassy
  - Conference.
- Tuesday 19 March:**  
Belarus - Minsk
- Participation in the Conference
  - Meeting with the person in charge of administering the TACIS programmes in Belarus
  - Meeting with His Excellency the French Ambassador
  - Meeting with one of those in charge of the training programme subsidised by TACIS (Histopathological Service of Cambridge University).
- Wednesday 20 March:**  
Belarus - Belgium
- Journey from Minsk to Brussels.
- From Thursday 21 March to Friday 29 March:**  
Brussels
- Drafting of the provisional report.
- Friday 29 March:**  
Brussels
- Delivery of the provisional report to the ECHO evaluation unit.

**Tuesday 2 February:**  
Brussels

- Discussion of the provisional report with the ECHO evaluation unit.

## **Appendix No.2**

### **Persons interviewed**

- Co-ordinator of the "Hilfe Für Kinderklinik Minsk".
- Doctor from the nuclear medicine department of the Thyroid Cancer Centre at the No 1 hospital in Minsk.
- Physician from the nuclear medicine department of the Thyroid Cancer Centre at the No 1 hospital in Minsk.
- Surgeon from the nuclear Medicine department of the Thyroid Cancer Centre at the No 1 hospital in Minsk.
- The director of the No 1 hospital in Minsk.
- The director and whole team of the clinic of paediatric surgery at the No 1 hospital in Minsk.
- Alexandre, librarian "interpreter", Institute of Endocrinology and Metabolism, Minsk.
- Marina and Zoia, interpreters, Ukrainian Red Cross, Kiev.
- Sasha, Medical Co-ordinator of the Chernobyl Programme, IFRC, Minsk.

- Svetlana AHISIMOHA, Chairwoman of the Zheleznogorsk City Red Cross Committee.
- Tamar AGABEKYAH, Deputy Chairman of the Red Cross Committee, Zhitomir, Ukraine.
- Alexander V.BOGDAN, Chairman of Red Cross Committee, Zhitomir Region, Ukraine.
- BOGIJSLASVSKY V., MD, Director; health programmes division, USAID Kiev.
- Anatoly BOICHUK, First Vice Chairman, Department of Health Care System of Rovno Region, Ukraine.
- Dr Sergei BOROVETS, Head Doctor of Rovno Specialised Dispensary of Radiological Protection of Population, Ukraine.
- Nina BYKOVA, President of the Mogilev Regional Red Cross, Belarus.
- Alexander CHEKHININ, Chief of Health Care Department of Zheleznogorsk.
- Filip CORNELIS, EU Delegation at Kiev.
- Dr Eugene DEMIDCHIK, Chief of Oncology Department, Centre of Thyroid Cancer, Minsk, Belarus.
- Eugenia DEMISYUK, Chairwoman of Narodichi district (Zhitomir region) Red Cross section.
- Vitaly V. DOROKHOV, Deputy Head Doctor, Diagnostic Centre, Bryansk, Russia.
- Dr Ovsei EPSHTEIN, Head of the Laboratory of Functional Diagnostics, Institute of Endocrinology & Metabolism, Kiev.
- Igor GENIN, President of the International Association "Children of Chernobyl", Kiev.
- Anthony F.GODFREY, Second Secretary, US Embassy, Belarus.
- Tim GOULD, Political and Economic Section, ED Delegation in Ukraine.
- Sergei GLUKHOV, Chairman of the Kursk Regional Red Cross Committee.
- James Hill, Programme Officer Europe Department, IFRC, Geneva.
- Ben HOFMAN, Head of Delegation, IFRC, Minsk.
- Vladimir ISHKOV, Chief of the Health Care Department of Kursk Region, Russia.
- Rachel JONES, Head of Programmes, TACIS, Minsk.
- Yuri P. KANASH, Deputy Head, Humanitarian Emergency Relief Division, Russian Red Cross Society, Russia.
- Alla S.KHABAROVA, Vice-President, Ukrainian Red Cross, Kiev.
- Dr T. KJELLSTRÖM, Director IPHECA, WHO, Geneva.
- Aleksei KOCHETOV, Chief of the Department of Liquidators of the Chernobyl Disaster, Kursk, Russia.
- Vasili V.KOLOMOYETS, Chief of Administration, Candidate of Technical Science, Zheleznogorsk, Russia.
- Vadim KOT, Deputy Chief Physician on Medical Affairs, Acting Director of the Gomel

Specialised Dispensary (Radiation Medicine Centre), Belarus.

- KOVALTYCK Vasili Petrovitch, Head of International Department, Minister of Chernobyl, Kiev.
- Daniel KUCHINSKI, Chief of Department of Radiological Medicine of the Regional Diagnostic Centre.
- Dr Victor V.KUREK, Head of the Chair for Children's Anaesthesiology, 1st Hospital, Minsk.
- Peter LEMBURG, Pf, MD, Head of the Paediatric Intensive Care Unit, Children's Hospital, Minsk, University of Düsseldorf. Director of the Association "Hilfe Für Kinderklinik Minsk".
- Feodor LESOVICH, Chief of Department of Regional Administration, Mogilev, Belarus.
- BiJcolai MANUILOV, Chairman of Bryansk Regional Red Cross Committee.
- Nikolai S.NAGORNY, Logistics Officer, IFRC, Minsk.
- Viktor M.NOVIKOV, Deputy Head Administration, Kursk, Russia.
- Evgeni PABFENOV, Desk Officer Europe Department, IFRC, Geneva.
- Evgeni PASHCHENKO, First Deputy Chief, Department of Health Care System, IFRC.
- Philippe PEGORIER, Economic and Commercial Attaché with the French Embassy in Ukraine.
- Dr Jean-Pierre REVEL, IFRC, Geneva.
- Dr Herbert SCHNOOR, President of "Hilfe Für Kinderklinik Minsk".
- Dr Peter SCHOENEMAN, "Hilfe Für Kinderklinik Minsk".
- Vladitir SOKOLENKO, Chairman of Rovno Red Cross, Ukraine.
- Dr G.SOUCHEKEVITCH, IPHECA, WHO, Geneva.
- Milka STAKIC, First Secretary, French Embassy, Kiev.
- Akira TATEYAMA, Charge d'Affaires, Japanese Embassy, Belarus.
- Dr Alexandr TOLSTANOV, Head Doctor, Children's Endocrinology Centre, Zhitomir Region, Ukraine.
- Henri TOMASINI, Attaché for Scientific and Technical Co-operation, French Embassy, Kiev.
- Eugène H.TSYBULENKO, URC.
- Olga VASILENKO, MD, Head Physician, Franco-Ukrainian Association "Children of Chernobyl" (Enfants de Tchernobyl), Kiev.
- Lidya S.YELOVAYA, Chairwoman of the Red Cross Committee, Gomel, Belarus.
- Anatoly ZAGORSKI, Deputy Chief of Regional Administration, Mogilev, Belarus.
- Anatoly ZAGREBELNY, Head of Humanitarian Department, Ukrainian Red Cross, Kiev.
- Dr Mariya ZYMOVETS, Radiology Dept., Institute of Endocrinology & Metabolism, Kiev.

### **Appendix No.3:**

#### **TERMS OF REFERENCE OF THE EVALUATION**

The aims of this evaluation mission were:

- to evaluate several operations which were implemented subsequent to the Chernobyl accident; to evaluate the initial pertinence of the aims and adequacy of the present strategies;
- to evaluate the institutional and operational competence of the partners; in terms of planning, preparation, monitoring, auto-evaluation, and operational and financial management;
- to evaluate the level of co-ordination attained by the partner with the other operators and potential donors in the countries concerned, as well as the ability to collaborate with the governmental authorities;

- to evaluate the results of the operations in terms of quantity and quality via health indicators, and to evaluate the impact of these operations on the target population of these three countries;
- to comment on the image of ECHO projected through the operations concerned;
- to evaluate the prior politico-economic and socio-health situations which influenced these operations; and to identify the present needs in order to highlight future actions which could be financed by ECHO within the sphere of humanitarian aid for the benefit of the Chernobyl victims and the three countries affected i.e. Ukraine, Belarus and Russia.