

C H E R N O B Y L
EVALUATION & PLAN OF ACTION - 1996 ...

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CHERNOBYL ASSISTANCE PROGRAMME

PLAN OF ACTION

This document must be read in complement of the "Chernobyl Humanitarian Assistance and Rehabilitation Programme, Evaluation Mission Report" that was released during the Gomel Workshop, in April 1996. It might be worth to include in the reading list the ECHO Evaluation Report on the same programme released in April 1996.

1. INTRODUCTION

The second evaluation mission set up by the Federation in February 1996 put forward a set of four recommendations that can be listed as follows:

- ♦ Increase the capacity for the detection of thyroid gland cancer in children.
- ♦ Pursue both the monitoring of the radioactivity gamma related to caesium in the most contaminated areas and the distribution of milk powder and specific vitamins and micro-nutrients in some selected institutions.
- ♦ Develop a psycho-social programme, aiming at delivering simple clear and reliable information on the topic of radiation, their causes and effects.
- ♦ Advocate for the long term sustainability of the programme and a larger involvement of the three operating NSs in this programme.

The following is an attempt to develop an action plan taking one recommendation after the other and looking at practical issues.

The overall objective of the programme is to provide humanitarian assistance to the most vulnerable in the populations affected by the accident which took place in the reactor N°4 of the Chernobyl Nuclear Power Plant in April 1986. Since both the long term health consequences remain yet to be fully assessed and the continuing deterioration of the situation in Former Soviet Union (FSU) rendering the burden heavier to affected communities, assistance has to be planned in the long term. Ten years have already passed since the accident, more will go before the end of the programme.

The general strategy for the programme is based on the distribution of assistance through the network of the three operating National Societies (NSs). This includes mainly collection and dissemination of essential information to affected communities. Red Cross volunteers and staff play a key role as they are directly at the contact of the beneficiaries.

2. RECOMMENDATION n°1: *Increase detection of thyroid gland cancer in children*

2.1. Rationale

Thyroid gland cancer has been identified as the first consequence that might be directly related to the accident. Today, around 700 children have been diagnosed with this tumour, most of them being aged between 8 and 13 years old. So far the mortality rate remains very low, but since this type of tumour is very invasive, an early diagnosis followed by surgical treatment has been identified as essential to the adequate management of this cancer. The Red Cross programme is contributing to alleviating the consequences of the accident by increasing the capacity for detection of this deadly tumour.

2.2. Target population

The objective of this programme is to identify as quickly as possible the thyroid gland cancer in children, in particular in the most remote areas. The health authorities have little (if any) capacity to carry out screening in the most remote villages. The deteriorating situation in the Former Soviet Union requires urgent support. The Red Cross Programme is an attempt to bridge the gap at the detection level.

The current number of patients screened by a MDLs is about 50 per day. Since there will not any more be the whole body monitoring, it is assumed that the number of patient screened can be increased up to 70, or a maximum of 75 per day, making a total of 420 to 450 per day and 84 to 90,000 per year. An evaluation of the margin of increase has to be done by the technical staff of the Chernobyl Humanitarian Assistance and Rehabilitation Programme (CHARP).

Since the total population in the age group between 8 and 14 years old is 424,324 with a total percentage of 53.7% living in rural areas, it is well understood that this will not cover completely the needs. More "New" MDLs are needed. According to the data provided by the Delegation, the breakdown is as follows:

	<i>TOTAL</i>	<i>RURAL AREAS</i>	<i>URBAN AREAS</i>
<i>RUSSIA</i>			
Kursk	21,164	7,285 (34.4%)	13,879 (65.6%)
Briansk	101,778	71,245 (70%)	30,533 (29.9%)
<i>BELARUS</i>			
Gomel	170,000	110,000 (64.7%)	60,000 (35.4%)
Mogilev	25,790	8,567 (33.2%)	17,223 (66.8%)
<i>UKRAINA</i>			
Rovno	53,202	34,466 (64.8%)	18,742 (35.2%)
Zhitomir	52,384	46,323 (88.4%)	6,061 (11.6%)
<i>TOTAL</i>	<i>424,324</i>	<i>227,886 (53.7%)</i>	<i>196,438 (46.3%)</i>

Table 1: Number of Children from 8 to 14 years old

2.3. New MDL, their composition and budget required

Since five years, the CHARP has been based on the concept of the Mobile Diagnosis Laboratory (MDL). The concept remains valid, but its implementation must be adapted to the present circumstance. A new MDL is to be developed on the basis of a light vehicle which does not carry any more the whole body counter. The new MDL (including an estimated budget) can be described as follows:

<i>ITEMS</i>	<i>CHARACTERISTICS</i>	<i>EST. COSTS</i>
<i>Vehicle</i>	<i>An eight/ten seat van, the Toyota Hi-Ace is the type recommended by the Federation</i>	<i>CHF 24,000*</i> <i>(CHF19,000*</i> <i>if directly purchased from Japan)</i>
<i>Ultrasonic scan</i>	<i>Portable, including two probes and a thermic printer, to do the detection of the thyroid gland anomalies, provided with gel canister and refill bottles and paper..</i>	<i>CHF 25,000</i>
<i>Blood analyser</i>	<i>A Beckson and Dickinson, as provided for previous MDLs, with micropipettes and centrifuge equipment.</i>	<i>CHF 5,000</i>
<i>Urine analyser</i>	<i>Clinitec 100, similar to the one included in the previous MDLs.</i>	<i>CHF 2.650</i>
<i>Portable computer</i>	<i>To collect the data from the patients checked during the day. N.B. The currently recommended type is a Compaq Contura with a portable printer (but without Telecommunication equipment)</i>	<i>CHF 4,000</i>
<i>Gamma Radiation Counter</i>	<i>To monitor gamma radiation (Related to Caesium) in selected places.</i>	<i>CHF 1,000</i>
<i>Light medical equipment</i>	<i>Such as stethoscopes (2), sphygmomanometer (1), otoscope (1) and disposable tongue depressors, so as to perform complete medical check-up.</i>	<i>CHF 750</i>
<i>TOTAL</i>	<i>For one "New" MDL For six "New" MDLs</i>	<i>CHF 62,400 CHF 374,400</i>

Table 2: Composition of "New MDLs"

* *All cost given here are without transport and spare parts kits (Except if specifically mentioned)*

According to estimations provided by the Delegation, running costs for the Programme (including the administrative costs,) on a monthly basis amounts for a total 43,250CHF, equivalent to an annual total of CHF519,000.

2.4. Staff

The staff of the new MDL should not be very different from the previous one, it should include:

- ♦ A driver/Dosimetrist/Cleaner
- ♦ 2 Lab technicians, 1 for the urine and 1 for the blood analysers.

- ♦ 1 Computer Operator (who must have some knowledge of the maintenance of the computer)
- ♦ 1 Endocrinologist
- ♦ 2 Ultra Sound Doctor/Physician (one of whom would be the Team Leader)

The job description for this staff will be adapted from the ones currently used.

2.5. Geographical repartition

Since the radioactivity is decreasing by natural decay, and the previous 5 years of exercise have demonstrated that alpha and beta radiation are very low, it is highly recommended to reorient the activities of the MDLs on the most contaminated areas. The evaluation mission suggested that the International Chernobyl Co-ordinating Committee (ICCC) looks at the possibility to allocate differently the MDLs, taking into consideration the actual needs of the affected populations. Belarus, the hardest hit country, has nearly a quarter of its entire population living in contaminated areas and therefore should receive more assistance than the other two countries. An allocation of the "New" MDLs as follows: 3 to Belarus, 2 to Ukraine and 1 to Russia should be considered.

2.6. Future of the "Old" MDLs

Looking at this issue implies to look at the long term development with special attention on disaster preparedness. The 3 NSs have accumulated an enormous experience in the mass screening of populations affected by radioactive contamination. The whole body counter installed in the "old" MDLs is particularly adapted to the fast screening of populations, therefore it should not be discarded or left unattended. As everyone knows, the likelihood of having another accident is not nil, therefore it is of utmost importance to build on the expertise and experience accumulated.

Discussions should be initiated with the three relevant authorities to keep both the equipment and the staff in "working conditions". ICCC should think about taking an initiative in this regards.

Suggestion has been made to have the WBM from the vehicles in the poorest state of repair removed and transferred to Oblast hospitals in the most contaminated areas. This would be implemented on the basis that a similar accident occurring in the future, the WBM will be returned to the RC. This operation will result in "Non WBM MDL's" that will work as the New MDL until the end of 1997 (providing they are mechanically fit). After this time they should be used to maintain the 3 remaining "Old MDL's". The three remaining "Old MDL's" (that still have their WBM) will continue to work in the most contaminated areas until the end of 1997 in the areas most contaminated.

2.7. Time span for implementation

The "Old MDLs" are to be maintained at least until the end of 1996, best until the end of 1997, so as to allow a progressive phasing out of these equipment with transfer of the staff to the new MDLs. A six months period between the placement of purchase orders and the actual entry into operation of these equipment should be scheduled.

The proposed time frame is as follows:

- | | |
|---------------------------------|--------------|
| ♦ Plan of Action - Final Draft: | 20 June 1996 |
| ♦ ICCC Meeting | August 1996 |

- ♦ Assessment for Psycho-Social Programme Aug- Sept. 1996
- ♦ Appeal for the New MDLs Programme: 1 Sept. 1996
- ♦ Purchase & transfer of 3 New MDLs Before 1 March 1997
- ♦ Purchase of the subsequent 3 MDLs 1 September 1997
- ♦ Phasing out of the "NonWBM MDL's" 31 December 1997.
- ♦ Replacement of the remaining 3 "Old MDL's" 31 December 1997.

The total duration of this phase should cover a period of 5 years, after which another evaluation should look at the results and make recommendations for the follow-up.

2.8. Monitoring

Monitoring process of the programme should be carried out according to the Federation Regulations, as it was before, on a routine basis under the supervision of the programme technical team. Additional technical expertise might be provided either by Federation Secretariat staff or by Consultant expert hired for a specific purpose. Provision of the budget has to be made to guarantee that such mission can be possible.

2.9. Evaluation

An external evaluation mission carried out by experts should be organised once every two years. The recommendations of these missions must be discussed and endorsed by ICCC when it comes to re-orientation of the programme. As it occurred in 1993 and 1996, an international symposium might be convened if major changes are to be discussed, if possible once every three years. As well, provision of budget must be guaranteed for this purpose.

3. RECOMMENDATION n°2: *Pursue the monitoring of the radioactivity gamma and the distribution of milk powder and specific vitamins and micro-nutrients.*

This recommendation is the continuation of the previous activities with some adaptations. These can be summarised as follows.

3.1. Specific Objective

The objective of this recommendation is to pursue the monitoring of gamma radiation in limited most contaminated areas. This aims at the detection of increased level of radioactivity and provision of a complement of safe food to specific group of vulnerable children living in institutions.

3.2. Gamma radioactivity control

As mentioned in the evaluation mission report, control of radioactivity should be limited to gamma radioactivity (Caesium) and only in the most contaminated areas. These can be identified on maps available as the areas with radioactive contamination above 15 Curies per km². The MIRA Counter (or a similar type) used in the previous MDLs is suitable for this kind of monitoring.

3.3. Distribution of milk powder and specific micro-nutrients

As a support to nutritional status of children, distribution of non contaminated milk powder (following the Federation policies) to selected institutions has been initiated at the beginning of the programme. This is to be continued with a target population of 60,000 children per year, identified in the most contaminated areas.

In order to complement the diet affected by various restrictions, the evaluation mission recommended to associate to the milk powder essential micro-nutrients. These must be strengthened with selected vitamins (A, C and D) and micro-nutrients such as stable iodine as well as ferrous sulphate and folic acid. This would compensate somehow the unbalanced diet of these populations.

For both these activities, budget have to be worked out. Based on the 1996 Budget, the cost of this can be estimated at approximately CHF.300,000.

4. RECOMMENDATION n°3: *Develop a psycho-social programme*

This recommendation was already put forward as a recommendation of the October 1993 International Seminar in Kiev, but not implemented. Interestingly, little work has been done on why it was not implemented. One of the reasons might be that the concept put forward by the workshop was so different from what people traditionally think in term of psychological support. A lot of education work has to be done to make people aware of the benefit they can get from such programme. However during the last thirty months the psychological stress has been increasingly recognised as an essential cause of the distress of affected populations. Local practitioners start to become interested in this issue and link has been established with a Professor in psychiatry from Minsk, fully aware of the difference between psychiatry and psychological support who is willing to co-operate with the Red Cross. It is of utmost importance that the Federation starts implementing this part of its programme.

4.1. Specific Objective

In any disaster situation, affected communities are first and most efficient in the provision of relief to other people affected. The efficiency of this action is further boosted when the stricken community is fully aware of the mechanisms at work. The objective of this recommendation is to assist affected communities in understanding the causes of the situation they are confronted to.

4.2. Rationale and Strategy

The February Evaluation Mission felt that the state of confusion that remains with local population is mainly due to a complex situation where lack of information about the accident and total lack of understanding of the consequences of the breakdown of FSU. Not knowing what has happened is probably the best way to miss all and every opportunity to recover from this disastrous situation. The psycho-social programme aims at restoring the community 's capacity to recover from this process. Delivery of simple, understandable and reliable information through community leaders, or other reliable and well respected people, is the basis for this programme.

4.2. Resources needed

During the last Gomel Workshop, this aspect caught the attention of most participants and it is clear that a pilot project could be started in Belarus and after evaluation, be extended to the other two republics. The concept for this psycho-social programme would be to develop the capacity of NSs' staff and volunteers to provide adequate, reliable and understandable information targeting affected populations. For the credibility of the programme it is important that this information is delivered by persons who knows well the community and if possible are living among it. This is the strength of RC Volunteers. Given the level of manpower in the NSs, there are limited options to start this project. One would be to revive the Visiting Nurse Programme (VNP) and give it new terms of reference. These would include a component of psychological support. A pilot phase should be developed within the next few months. The first objective would be to organise a training session so as to introduce the concept of psychological support as we understand it (as it significantly differs from what the FSU is used to). An assessment mission would be undertaken before the end of the 1996 year so as to make recommendations for the development of this programme. These would include the objectives of the programme, the definition of the trainig programme, its content and the target group to be addressed. A specific plan of action for this part of the programme will have to be worked out. The assessment mission should review the need to have a delegate to co-ordinate the work during the implementation phase.

In term of budget, preliminary estimates show as follows:

<i>ITEM</i>	<i>CHARACTERISTICS</i>	<i>EST. COSTS</i>
Assess. Mission	10 days mission from 2 external experts.	2 x 10,000 CHF
Workshop	4 day workshop to train local volunteers	8,000CHF
Delegate	6 person/month	18,000CHF
Material Dev.	Development of specific materials	5,000CHF
Administ. Costs	(Approx. 5%)	2,500CHF
Miscellaneous	(Approx. 2%)	1,000CHF
TOTAL		54,500CHF

4.3. Time frame

The pilot project consists in organising an assessment mission and a training of trainers for the VNP that would become more familiar with the technicalities of psychological support programme. It requires a major effort to be undertaken since there is a lot of work to be done to clarify some aspects and develop new skills. However, the manpower exists and links have already been established with key resource persons based in Minsk. Outside the region, UNESCO headquarters in Paris have been approach to share their experience in their 9 social centres all other the region. The Federation Psychological Support Programme and its Reference Centre in Copenhagen are committed to respond to this proposed strategy. Further work is needed on the development of this pilot project and an assessment mission should be foreseen exclusively focusing on the identification of training

needs and available local resources. If this is fulfilled, it is anticipated that the ToT session might be organised in Belarus, in fall 1996, so that VN can be in a position to start their specific activity by the end of 1996. When completed, the objective should be to have one trained VN per rayon.

5. RECOMMENDATION n°4: *Advocate for the long term sustainability*

5.1. Specific Objective

Nuclear accidents are known to have long lasting consequences. Their impact on health must be followed over dozens of years. This is a major difference with other humanitarian operations that last a maximum of several years. Since programmes such as CHARP require sophisticated equipment, their sustainability is of critical importance. Only the long term commitment of donors and actors of the programmes can prevent the collapse of such a programme before it has achieved its full objectives. In order to motivate external donors to pursue financial and technical support to the programme, the ONSs have to demonstrate their commitment to the long term development of this programme.

5.2. Strategy

Attempts should be made to develop a financial contribution to the programme from the 3 ONSs. They should be encouraged to discuss with their governments and appeal for public generosity. Bearing in mind the difficulty to get such support, it is important to start with advocacy and advertising campaigns in the media to make the CHARP known outside the affected areas. The recent Gomel workshop was a good start for that. At this level the CHARP is linking with institutional development and management training for the NSs involved in this programme. Specific evaluation was to be carried out on this issue.

In term of time frame and objective to be reached, the following proposition should be discussed and agreed upon by ICCC. Within a period of 5 years, the financial implication of the 3 NSs should cover at least 50% of the running costs of the programme. If achieved, this target could help in motivating external donors to pursue their financial support when it comes to the renewal of heavy equipment, if this is recommended by further evaluation missions.

6. GENERAL CONSIDERATIONS

6.1. Time Frame

The above set of recommendations has been developed after the review of a five year period of activity. Taking into account the long time span of the health impact of nuclear disasters, it is anticipated that at least another five year period will be needed to get clearer picture of the health consequences of the accident. Even though most of the damage has already been inflicted, emergence of solid tumours, other than thyroid gland cancer, and leukaemia might occur during this period, making the surveillance more needed.

6.2. Budget

Compared to the previous MDLs, the "New" MDLs are based on a structure which is much less expensive and will require a lower cost in term of maintenance. The running

costs of the other components of the programme are to be worked out soon, so that adequate funding can be searched for. It is essential to get long term commitment of the various donors who have expressed interest in this programme.

Audit of this programme will be carried out according to the Federation's rules and might be adapted to meet requirements of specific donors.

6.3. Monitoring and Evaluation

As mentioned earlier, regular monitoring is performed by the programme technical staff with the support from Federation Secretariat in Geneva. Financial provision should be made to ensure an external evaluation at least every two year.

6.4. Relationship with local health authorities

The CHARP, as it is, bridges a gap in the detection network of the public health authorities. In Belarus, hospitals and few health centres have an ultrasound scan to check for thyroid gland cancer. The problem is to allow the children from remote areas to be screened since transport is not easy in rural areas. Thus the importance of bringing the detection equipment at the doorstep of affected communities. As mentioned during the Gomel Workshop, the needs in transportation of suspected cases to the referral centres (or specialised dispensary) has to be organised so that all children suspected of cancer be operated within one month.

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