MISSION REPORT

INTERNATIONAL CONFERENCE
“RADIOACTIVITY AFTER THE NUCLEAR EXPLOSIONS AND ACCIDENTS”


Background
At the invitation of Professor Yuri Israel (and further to the recommendation of Professeur Pellerin,) the Federation was invited to participate to the above mentioned conference. Given both my current status and my good knowledge of the Federation Chernobyl Humanitarian Assistance and Rehabilitation Programme, it was agreed that I would attend the conference with the following objective.

Objective:
Participate at the International Conference “Radioactivity after the nuclear explosions and the accidents” held in the Russian Federation Academy of Sciences, in Moscow and present the Federation Chernobyl Humanitarian Assistance Programme (CHARP).

Venue
The whole Conference took place in several rooms of the Academy’s building. This is a huge building that can accommodate several meetings at the same time in various halls and rooms. Though simultaneous translation was provided for all non Russian speakers and participants, the language barrier was the most serious obstacle to the full understanding of the communications.

Content
This conference was convened at the invitation of the Russian Federation’s Academy of Sciences (Prof. Israel) and was largely advertised in Russia and the whole Former Soviet Union. Most prominent scientists from several republics of FSU, such as Prof. Iliyn, Prof. Israel, Prof. Alexakin or Prof. Belayev, attended all the sessions. International speakers, comparatively outnumbered, included representatives of the USA, Germany, France, United Kingdom, Belgium and Romania.

The opening address was delivered by Professor Iliyn who focussed on the challenges of the Linear Non Threshold Theory (LNT). Following that important lecture, a total of more than 400 communications were presented in four lectures sections and three posters sessions. All the documents presented in the poster sections were in Russian language, without translation not even for the summary. During all the sections, participation was extremely intense, and active discussions followed most of contributions and were carried out far beyond the schedule.

Subjects covered were mainly about dosimetry and dose reconstitution, aiming at getting more and more accurate and reliable data on contamination of people. The numerous techniques developed by different research institutes provide sometimes significantly different data. Therefore the urgent need to come to a smaller number of techniques, maybe more specific and sensitive, and that could be accepted by most authors. This type of presentations could be defined as “Development of the know-how”.

My presentation (copy attached in Annex 1) was the only one related to humanitarian assistance. It was received with great interest and generated questions on the programme itself and requests for copies of the final versions.

**Future perspectives**

Studies and reports included work that was carried out in areas as diverse as Chernobyl, Kazakhstan (Semipalatinsk Test Site, STS, with some interesting information in view of the possible mission there) East Ural and Techa River Valley, Novaya Zemlya Test Site, Yenesisi River, and even North West Pacific Coast. Fortunately, not all the incidents reported lead to dramatic humanitarian consequences as Chernobyl and Techa River Valley, and this may be the explanation why humanitarian organisations are not present in this type of forum. However, it must be stressed that the expertise developed by the Federation with CHARP may prove very useful and effective in other affected areas.

Since most of these accidents are quite old, the focus of the new programmes must be on the rehabilitation of affected communities. As shown by the example of Semipalatinsk Test Site, the demand is just at its beginning since the lack of support from central authorities reveals the immense vulnerabilities of these communities.

Some participants also requested address of the Federation Delegation in Minsk for further contacts. In this regard, though contact was established by phone with the Moscow Delegation, nobody could attend any of the sessions.

**Conclusion**

Besides the rich opportunity to meet specialists from different field of experience and to assist to exchanges of experience and sometimes confrontation of opinion, such meeting prove an important opportunity to introduce humanitarian organisations. Humanitarian needs in technological/nuclear disasters is a domain that remain largely to be explored and invested by humanitarian organisations. This type of meeting can be a first approach to learn more about the technicalities of this complex field and also to advocate for a specific role for humanitarian organisations and advertise their own know how.

**ANNEX: 1 LECTURE**
CHARP, TEN YEARS OF RED CROSS EXPERIENCE IN HUMANITARIAN RESPONSE TO CHERNOBYL DISASTER

Dr J.P. Revel, Prof. P. Pellerin, Dr A. Khomov, N. Nagorny

ABSTRACT

Now fourteen years old, Chernobyl Disaster is still continuing to have a significant humanitarian impact. Through this, it weights heavily on the affected communities' development over three different republics.

The International Federation of Red Cross and Red Crescent Societies is implementing since 1990 its Chernobyl Humanitarian Assistance and Rehabilitation Programme in six of the most contaminated oblast of Belarus, Ukraine and Russian Federation. Significant changes have occurred since the programme started and a major shift is currently taking place towards rehabilitation of the affected areas. After nearly ten years of continuous activity, it is felt that some conclusions can be drawn and challenges are to be taken up.

Health in affected areas is still a source of concern, the number of thyroid gland cancer in teenagers remains higher than in non contaminated areas. Level of stress of various origin must be decreased in order to facilitate transition to rehabilitation.

Most important part of the programme remains in the health sector with the monitoring of health of populations living in contaminated areas. Thyroid gland cancer early detection must be continued by all means and all measures aiming at improving health and nutritional status must be implemented. Careful monitoring of "Liquidators" must be continued.

Secondary victimisation of affected communities should be prevented through encouragement to rehabilitation of economic sectors, mainly cattle raising and agriculture.

International community may have a significant role in safeguarding long term support to humanitarian assistance.

The presentation is based on the last evaluation mission which took place in the three affected countries between 30 August and 10 September 1999.
Dear Mr Chairman,
Dear Colleagues, ladies and gentlemen,

It is a great pleasure and a true honour for me to speak today in front of such an audience and I would like to join my voice to the others speakers in congratulating the organising committee of this conference for such an important and timely initiative.

The International Federation of Red Cross and Red Crescent Societies was created in 1919 with the mandate to assist all those affected by disasters events, be they natural ones such as earthquakes, cyclones, famines or man made such as refugee migrations or technological accidents. During its eighty one year old history, the Federation has assisted billions of people all over the world. Through its unique network of 175 National Societies and millions of volunteers world wide, it has been able to mobilise the resources to carry out its mandate and it remains committed to continue to take new challenges. What I am going to present today is a summary of the Federation’s Chernobyl Humanitarian Assistance and Rehabilitation Programme, known by its acronym as CHARP.

In any disaster situation, poor people and poor communities are always the most affected. Technological disasters, and among them nuclear accidents, act in the same way, most affecting the already most vulnerable. Humanitarian needs resulting from Chernobyl disaster have been largely underestimated since hundreds of thousands, even millions according to some sources, of people living far beyond the boarders of the Republic of Ukraine, have been affected by the fall out of this explosion. The timeframe of such a disaster goes far beyond what was experienced before in any other kind of disaster. CHARP, along the original mandate of the Federation, seeks to alleviate the human suffering of those most affected in the three republics of Belarus, Russian Federation and Ukraine.

The Federation’s CHARP
The Federation programme started in 1990, with the request for assistance sent by the Red Cross National Societies of the three affected countries. Since then, the programme never stopped. Three external evaluation missions were carried out, in 1993, 1996 and 1999, and each time, adjustment and adaptation of the programmes recommended by the missions, were implemented so as to meet the needs of affected populations.

The programme consists mainly in the medical screening of the population living in the remote areas of the most contaminated oblast of the three republics. This is carried out by a total of six mobile diagnostic laboratories (MDL’s): three in Belarus (Brest, Gomel and Mogilev) two in Ukraine (Rovno and Zhitomir) and one in Russia (Briansk). Each one being staffed with a team of 8 professionals travelling all the year through the villages of the affected areas. The second generation of MDL is currently working, with the main objective of detection of early stages of thyroid gland cancer in both children and adults. Thorough medical check-up complete the patient’s examination, blood and urine samples are collected for analysis. Results are immediately fed back to the person and stored in the computer for further reporting and sharing with official health authorities.

In addition, provision of preventive drugs such as multivitamins and micro-nutrients as well as thyroid hormone substitutes is organised within the programme. Milk powder was provided to children in institutions until recently as a complementary food ration. Regular training of the MDL staff is organised within the framework of CHARP, with a view to keep them in contact with the most up to date technical knowledge. Since 1997, a psycho-social support programme

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has been set up with a view to complete the assistance and further strengthen the communities' rehabilitation.

**Findings**

After ten years, the lessons learnt by the programme cover several sectors.

**Health condition**

So far, with a target figure for screening at 90,000 per year, more than half a million people have been screened over the three republics, more than 55% of them being children and adolescents. Hundreds of thyroid gland nodules were detected, in which cancers were suspected, and tens were further confirmed by specific tests carried out in the regional or national reference centres. Over the years, somatic complaints and disorders have dramatically increased among the affected populations, although these never proved to be directly related to the consequences of the accident.

Mental health needs remain largely to be addressed. Widespread anxiety and depression can be found among the population throughout the affected areas. This is further increased by the communities’ lack of confidence in their future. Diverse and sometimes conflicting messages are disseminated by media as well as various groups or community leaders who see in the worsening of an already bleak situation a way to attract sympathy from outside or increase their own popularity in their countries.

**Socio-economical impact**

Besides these major negative health consequences, the general health and nutritional status of the population are badly affected by a combination of several vicious circles of various causes in which the collapse of the Soviet Union plays a major role. As a result of this major political event, resources available in rural areas have dramatically decreased in nearly all sectors of the economy. In the three affected republics, the current situation can be seen as a complex one with several negative trends at work. Less and less accessibility to fertilisers and seeds lead to decrease in the production and continuous reduction in the quality and quantity in the crops. For rural populations and low-income people in urban areas, this has a direct impact on the food availability and accessibility. Their nutritional status is eventually affected. Closure of industrial plants has a similar impact reducing the accessibility to food items.

Decreasing resources also affect provision of health care. Health care facilities, once staffed with numerous professionals are now increasingly deserted as they have limited budget if any to cover their running costs. Preventive health care programmes are first affected and this is illustrated by the rise witnessed in the incidence of communicable diseases such as tuberculosis or diphtheria some years ago.

Increased migration to urban areas is another major socio-economical consequence of this complex situation. This affects more significantly the rural communities in the affected areas, where young people want to seek higher income in the major cities. This results in an ageing of the remaining population and a another reduction in the working forces. In contaminated areas, the situation is even worse as the mere production from these regions is suspected radioactivity contaminated.

Polessje, the broad region contaminated is already first among the poorest of the rural regions of these three countries. Main activities include milk and meat production in collective farms, plus some subsistence agriculture in private family garden.
fall periods, the population is used to complement its diet with the "gifts from the forest", mushrooms and berries, as well as some game. Since these are collected in areas where caesium may have accumulated after the disaster in April-May 1986, careful information is needed on their actual health effects.

Is there any effects of the norms for radioprotection?
At this stage, this is an issue worth to raise. Initially created to prevent or limit radioactivity health impact, the norms for radioprotection, when used too drastically, may have a counterproductive impact in the long term. The debate is still going on between those who think that norms should be eased and those who think that, in the contrary, they should be further sharpened. However, ongoing discussions in the scientific community may result in significant adaptation of these norms in the years to come. If adequately translated in the reality, these may ease the situation of quite a lot of the affected communities.

It is worth looking carefully at the stigmatisation resulting from some mis-information about the norms application. To sharpen the norms more than internationally accepted levels indicates a high degree of care for the population, but one must wonder: at what costs? In most cases, this will result in the exclusion of large quantities of locally produced food stuff which, with very low levels of caesium, could be consumed without any real health impact. This exclusion from the market has a direct economical impact as it limits the income of producers.

Economically, if this is the only reason for local agricultural production to be rejected, this will further reinforce the stigmatisation of the region and its people. This will accelerate the already existing vicious circle leading to further impoverishment of these already poor communities. By all means, one should avoid this secondary victimisation and, on the contrary, wonder whether it is not time to start the process of rehabilitation through careful education and information of affected communities. Final decisions in this regard lay with the Governments and humanitarian organisation in general and the Red Cross NSs in particular have only a limited role to play in informing them as well as the communities. The role of the media, both local and external is critical in this regard through their contribution to this information process.

Challenges for the future
Humanitarian needs are enormous and require adequate response. Though the current situation may appear very difficult, affected communities are not totally deprived from resources. Based on these local resources supported and strengthened by external ones, humanitarian needs must be addressed in the major directions summarised as follows.

Continue health screening
Since thyroid gland cancer is so far the only health consequence from Chernobyl disaster, early detection and treatment of this cancer must be ensured at least until the group most at risk reaches the adult age. Through the MDL strategy, CHARP gained recognised expertise which must not be lost and should be incorporated in any disaster preparedness programme. Health check-up as a complementary service offered to the community must also be continued increasing the cost/effectiveness ratio of the MDLs, as well as the quality of the service offered to the communities. Equipment provided in mid 1997 are still in perfect working condition. It is anticipated that this equipment could still be working for another three years provided maintenance and running costs are adequately covered.

Psychological rehabilitation must be at the top of priority list for everyone. Psycho-social support programme must be continued and further developed to reach more communities. By
no mean a traumatised community can adequately start its rehabilitation process. Therefore dissemination of adequate messages will be of utmost importance. NSs should initiate discussions with all relevant ministries and media to start co-ordinated programmes for rehabilitation in all three countries.

**Increase rehabilitation effort**

Post disaster rehabilitation is a complex process aiming at restoration of affected people’s living conditions, either as close as possible to what they were before the disaster or, if this is not possible, to conditions in which affected communities can do the best out of their daily life. It requires thorough co-ordination between all parties involved. Red Cross NSs are only one among the partners involved in this process that must be lead by government authorities. Since the disaster occurred fourteen years ago, rehabilitation of affected communities should now be the number one priority for all partners, i.e. authorities, communities, but also humanitarian organisations and the media.

**Role of the governments**

Since Governments have the overall responsibility for the liquidation of the Chernobyl consequences, it is their role to initiate major actions so as to move into rehabilitation. Since by mandate, RC NSs are auxiliary to government authorities, discussion between these obvious partners must take place to agree on what should be done.

First sector to be tackled will be economical consequences through the impact on local food production, since most of the affected areas are rural. In this regard, as already mentioned, the discussions about norms of radioprotection will be critical. Governments convinced of the accuracy of the norms as they are likely to be recommended in the near future, should start preparatory work. Careful education and information should be provided through various channels, on the health effects of caesium and the acceptable limits of its consumption as prescribed by WHO. Depending on the levels of remaining radioactivity in least contaminated areas, the decision to start (or restore) agricultural production may be considered. For those volunteering, incentives in the form of fertilisers and equipment must be provided for during several years as a lot of work has to be done to fully rehabilitate areas which have been left unattended for so many years...

**Role of the media**

Several studies have demonstrated the critical role of the media in building up or on the contrary decreasing the stress related to radioactivity. One of the primary rule for all messages should be consistent and take into consideration Hippocrates’s well known address: "do no harm!" In particular it is important to avoid conveying any message that may result in secondary victimisation of people living in the affected areas. Too often, it is thought that describing negative images may help affected people as this will bring sympathy or material assistance.

Careful and consistent education and information messages could also be provided to external communities in order to prevent stigmatisation and negative attitude towards those who live in affected areas and continue carrying out their normal (or usual) economical activity.

**Role of the RC branches**

In FSU as in any country in the world, RC NSs have a unique network to sustain efforts for rehabilitation. Visiting Nurses Programme, PSS and Disaster Preparedness can play a significant role in the dissemination of the messages. Through community mobilisation, they can restore confidence and contribute to reverse the negative trends. In this regard, CHARP is leading the way since the beginning by demonstrating through the medical screening the resilience of...
affected communities, even though the number of reported complaints is high. PSS is boosting this effect through encouraging experience sharing and active listening.

**Develop preparedness programme**

The likelihood of another major nuclear accident should not be excluded. Therefore, the need to develop disaster preparedness programme taking into consideration all expertise gained in the management of the Chernobyl disaster must be considered by all partners, not only official scientific and technical as well as political authorities, both at national and international level, but also humanitarian organisations which proved effective in meeting humanitarian needs.

**Ensure long term sustainability of the programme**

Even if CHARP proved to be very cost effective, it has a cost that must be supported by someone. During the first ten years, Participating National Societies as well as ECHO have taken most of the budget of both investment and running costs. Now, priorities are shifting and ensuring the long term sustainability is an absolute priority for the programme. Chernobyl disaster’s visibility is getting lower and lower compared with all the more recent humanitarian emergencies occurring in the world. Therefore, it is critical that humanitarian needs are part of the agenda of all meetings and forum aiming at solving the technical and economical problem created by Chernobyl in April 1986. National authorities may express their support to this initiative through increased contribution to the budget of the programme.

**Conclusion**

Following CNPP explosion in April 1986, humanitarian needs extend far beyond the geographical impact of the disaster. Humanitarian response programmes involve large population over a time span never seen before. CHARP represents the best alternative to match internally available resources, external support with the needs resulting from the disaster. "No other cost/ effective alternative to screening exist than MDL", said Prof. Mikolay Tonko, Director for the Ukrainian Institute of Endocrinology in Kiev, who continued: "The work done by Red Cross MDLs is extreme . In the 3 affected countries, authorities praised the role played by CHARP and call for more MDLs to be put in service. This high appreciation is to put to the credit of all RC and MDLs' volunteers and staff who work tirelessly, sometimes in difficult conditions, to carry out their humanitarian task of screening and feedback of information.

CHARP is going to face the challenge of sustainability. Financial basis remains fragile and must be further strengthened. Based on the budget estimates for the coming years provided by the Delegation, active fund raising must be undertaken both internally and externally. This can be successfully taken only by seeking new approaches and investing more in rehabilitation. Links with other components of the programme, such as PSS, or other programmes like a revitalised VNP, must be further developed so as to guarantee the transition to rehabilitation.

Mr Chairman, Ladies and Gentlemen, dear Colleagues, thank you for your attention.