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**International Federation of
Red Cross and Red Crescent Societies
and the
Iranian Red Crescent Society**

**Operations Review
of the
Red Cross Red Crescent
Movement Response to the
Earthquake in Bam, Iran**

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ABBREVIATIONS

BAFIA	Bureau for Aliens and Foreign Immigrants/Ministry of the Interior
BHCU	Basic Health Care Unit
BTC	Basic Training Course
ERU	Emergency Response Unit
FACT	Field Assessment and Coordination Team
IAD	International Affairs Department/IRCS
IRCS	Iranian Red Crescent Society (also the National Society)
ITSH	Internal Transport, Storage and Handling
MdM	Médecine du Monde
MENA	Middle East and North Africa
MOH	Ministry of Health, Iranian Government
MSF	Médecine sans Frontières
OCHA	UN Office for Coordination of Humanitarian Affairs
OPD	Out Patients Department
RC	Red Cross National Society
RCRC	Red Cross Red Crescent Movement
RDRT	Regional Disaster Response Team
SAR	Search and Rescue
Secretariat	Secretariat of the International Federation of the Red Cross Red Crescent Societies
SMS	Short Message Service (text message)
SOP	Standard Operating Procedure
TOR	Terms of Reference
UNDAC	United Nations Disaster Assessment and Coordination
UNICEF	United Nations Children’s Fund
WFP	World Food Programme

EXECUTIVE SUMMARY

Purpose

This Operations Review of the Red Cross Red Crescent Movement response to the Bam earthquake was conducted during February and March 2004 against Terms of Reference jointly agreed between the Federation Secretariat and the Iranian Red Crescent Society (IRCS).

The objective of the Review was to assess the planning, management and coordination of the emergency response between December 26th 2003 and February 29th 2004, and to make recommendations for the enhancement of IRCS, Federation Secretariat and National Societies' performance in disaster response. The goal was to capture lessons learned at an early stage before memories of the early events faded and before the Federation Emergency Support Units had withdrawn or been handed over to the IRCS.

Background

An earthquake of magnitude 6.5 struck the city of Bam at 5.26am on December 26 2003. At least 26,000 people were killed and 30,000 injured. Approximately 85% of the city was destroyed. Health facilities and administration buildings collapsed, both in the city and surrounding villages. All services were temporarily cut including telephone, electricity and water.

The situation in Bam in the few days following the earthquake was chaotic. A lack of security led to unregulated distribution of relief items, as well as theft. The IRCS decided to distribute to all who requested assistance, preferring to be over-generous than to refuse assistance to survivors. The relief effort was complicated by the influx of many thousands of people from surrounding areas into Bam. During most of the Review period the IRCS with assistance from other agencies has been distributing relief items on a house-to-house to some 170,000 people, some living in tented camps and others sheltering close to their damaged homes.

Response

The IRCS senior management was notified of the earthquake within minutes and launched a massive relief and rescue operation for which it has received recognition both nationally and internationally. The first IRCS rescue team reached Bam at 7.45 am the same morning. The operation comprised search and rescue, emergency medical treatment, medical evacuation and psychosocial support to survivors. The IRCS mobilised more than 50% of its national disaster preparedness stocks for relief assistance, distributing more than \$50 million worth of food and non-food items in a two month period. According to the IRCS, more than 19,000 staff, volunteers and youth took part in the first ten days of the emergency, with an average of 9,000 engaged in the operation during the first two months.

On December 26th 2003 the IRCS requested assistance from the International Federation, especially the Emergency Response Unit (ERU) Field Hospital, together with other ERUs for water and sanitation, specialised water, basic health care and relief. These were supported by a Logistics ERU and coordinated by a Federation Field Assessment and Coordination Team (FACT). The deployment of these ERUs was timely and the ERUs have shown commitment and professionalism. The system of joint ERU deployments worked and teams in the field collaborated well within their specialist areas. The Federation was successful in its coordination of ERUs and other Federation delegates. The Federation

achieved a high level of international media coverage for the IRCS and Federation operations. The Federation Relief operation was approximately one-third that of the IRCS by value as at the end of February and provided an important adjunct, especially in the provision of medical services. Given the absence of international relief operations in Iran over many years, this intervention was politically significant. The assistance provided by foreign agencies, including the RCRC, appears to have been greatly appreciated by the people of Bam.

On the day of the earthquake, the Federation launched a Preliminary Appeal for CHF 15,409,300, followed on 8th January 2004 by a Revised Appeal for CHF 51,903,000 to support 210,000 beneficiaries for 6–8 months. The UN Flash Appeal and the Federation Revised Appeal were launched at the same meeting in Bam, the first such joint launch. By the end of February, Appeal coverage stood at 52% (CHF 27.1 million), a figure that may not increase significantly as donor National Societies shift their focus to bilateral rehabilitation and recovery programmes.

The IRCS saw the role of the Federation Secretariat as supporting the IRCS by coordinating the Federation inputs and providing financial support, while the IRCS implemented its own operation and coordinated the inputs of some 80 foreign agencies to the overall relief effort. Communication and coordination between the IRCS and the Federation has been intense but they have operated for the most part in parallel rather than together.

At the end of February, there were substantial funds unspent from the Appeal and remaining within National Societies. This provides scope for rehabilitation programmes and for support to the IRCS in replenishing its emergency stocks. It also opens up the possibility of developing a capacity building programme for the IRCS, to build on its current substantial disaster management capacity and meet its responsibilities under the 2003 Comprehensive Disaster Response Plan.

Challenges

In mounting a very large and generally highly successful operation, both the IRCS and the Federation faced a series of challenges, including:

For the IRCS:

- Ø Expectations on the IRCS to meet needs were very high
- Ø The volume of national and international relief goods in Bam was beyond the capacity of the IRCS to manage systematically, and warehouse space was inadequate
- Ø Volunteers, while many in number, were inadequately equipped and organised
- Ø IRCS Branch structures and operating procedures in Bam were not standardised
- Ø IRCS standard operating procedures did not match with those used by international agencies
- Ø There were insufficient mechanical diggers and trucks at an early stage
- Ø The International Affairs Department was severely stretched in coordinating the relief effort of so many foreign agencies
- Ø A number of other disasters in Iran occurred within the period of the Bam operation, requiring a response from the IRCS
- Ø Bam was the first test of new government regulations on disaster response, which have not yet been internalised by government ministries and authorities and, as a result, the operation was complicated by role overlap and a degree of competition.

While, for the Federation:

- Ø Obtaining adequate counterparts and volunteers was a challenge
- Ø The rapid rotation of IRCS managerial staff and lack of handover between counterparts was problematic

- Ø The 200-bed referral hospital was established to replicate the previous referral capacity in Bam but had a maximum of 47 in-patients during its first two months
- Ø The operation was initially hampered by a lack of transport and there was a delay before obtaining vehicles from Abu Dhabi
- Ø Records of IRCS/Federation relief goods delivered and relief goods distributed could not be completely reconciled
- Ø The availability of translators was a constraint
- Ø Finding experienced delegates to deploy the day after Christmas was a challenge
- Ø Some delegates came poorly equipped
- Ø There were a number of gaps between first and second rotation of delegates

Recommendations

Key recommendations are summarised below: (for further detail, see Section 9 of the report)

For the Federation/IRCS

- Ø Develop a capacity building plan for the IRCS, in consultation with the Federation, to include some or all of the following:
 - I Develop standard team structures for disaster response and defined roles for staff and volunteers from provincial and local branches
 - I Improve systems for the reception, warehousing, distribution and reporting of relief items, especially the integration of international inputs with nationally sourced supplies
 - I Introduce disaster risk mapping
 - I Purchase equipment for the personal support of volunteers
 - I Purchase basic equipment for rescue work and sensing equipment, and increase the number of sniffer dogs
 - I Organise training in Camp Management, Medical Triage, FACT and FACT methodology (for application inside and outside Iran), ERU, DMIS, RDRT, and FRITZ (new Federation logistics tracking system).
 - I Establish a National Disaster Response team for deployment within Iran, trained to Federation standards
 - I Plan the development of an ERU field hospital and ERU medical training in Iran, as part of IRCS capacity building in emergency health
 - I Improve IRCS capacity to make better use of international Search and Rescue teams
- Ø For future operations, the IRCS and Federation to move to integrated rather than parallel operations, with IRCS and Federation personnel working together in the field
- Ø The Federation structure in-country to reflect the National Society chain of command, with National Society designated counterparts
- Ø The IRCS to appoint a FACT trained member of staff as counterpart to the FACT leader in any future Federation emergency operation in Iran
- Ø Jointly explore how the Federation can assist the IRCS to explain its mandate, capacity and development plans to the international disaster relief community
- Ø Provide a briefing paper for foreign relief organisations on the IRCS and Iranian culture
- Ø Improve IRCS branch awareness of ERUs and their function

For the Iranian Red Crescent

- Ø Decentralise decision making in emergencies
- Ø Review volunteer training programmes and personal equipment needs for disasters
- Ø Deploy only trained volunteers into relief and rescue situations
- Ø Modify the design of the IRCS registration booklet, with advice from the Federation
- Ø If the proper authorities are not able to do so, be ready to take photographs of disaster victims soon after the disaster to help with identification
- Ø Resolve, with Government, role overlap in disaster response between government ministries
- Ø Modify the IRCS counterpart system to provide for a body of key counterpart personnel on a minimum one-month rotation system
- Ø Introduce liaison officers in the Relief & Rescue, and Health & Treatment Organisations these organisations to work directly with the Federation and other international agencies

For the Federation

- Ø Make psychosocial assessment and activities a routine part of Federation emergency response for mass casualty disasters
- Ø Adopt a standard Logframe approach to planning for Appeals
- Ø Improve communication on ERUs so that National Societies in disaster prone countries are aware of possible demands on them in the case of ERU deployment and agree in advance on the provision of counterpart staff, volunteers, translators etc.
- Ø Reduce gaps in delegate deployments by earlier call up and standby arrangements
- Ø Aim to get at least one delegate to the site of the disaster within 12 hours, at latest 24 hours, ideally from the RDRT, or possibly a National Society member of staff with RDRT/FACT field experience, equipped with a mobile or satellite phone
- Ø Introduce a standard package of personal and office equipment for FACT
- Ø Provide finance and administration capacity within or alongside FACT
- Ø Either a) exclude assessment from FACT responsibilities or b) provide it with the non-operational capacity to undertake full relief and rehabilitation assessments
- Ø Inform National Societies of procurement procedures for Federation Appeal funded goods
- Ø Clarify with the ICRC which organization is responsible for providing support to tracing in mass-casualty natural disasters

For ERU deploying National Societies

- Ø Logistics ERU to focus on logistics duties only
- Ø All ERU first rotations to be staffed by delegates with prior emergency experience and with BHC and ERU training (as per Standard Operation Procedures)
- Ø Reduce gaps in delegate deployments by earlier call up and standby arrangements
- Ø ERU training to clarify and strengthen the role of the ERU team leader in information dissemination and team management
- Ø Consider building on the modular design for the Hospital ERU and BHCUs to allow for a) a small, fast surgical triage and treatment unit, and b) a unit to serve longer-term basic health care needs
- Ø ERU hospital to have the stand-by capacity to be fully self-sufficient in professional/medical staff for one month, in case numbers of local personnel prove inadequate
- Ø Hospital ERU to cater for its own water and sanitation and compound management needs for the ERU delegates
- Ø For National Societies with both SAR and ERU teams, make a formal link between their operating procedures to provide additional assessment and contextual information for ERUs before or as they deploy

1. INTRODUCTION

This Operations Review of the Red Cross Red Crescent Movement response to the Bam earthquake was commissioned by the Federation Secretariat and conducted during February and March 2004 by a team of six: three independent consultants, two Red Cross staff and one staff member from the Iranian Red Crescent (IRCS). The Client for the Review is the Federation Deputy Secretary General.

The Terms of Reference for the Review were jointly agreed between the Secretariat and the IRCS, and can be found in Appendix 1. The objectives as stated in the TOR were:

- Ø To assess the planning, management and coordination of the immediate response and emergency phase from the date of the earthquake, December 26 2003 to February 29 2004;
- Ø To use lessons learned from the emergency phase to make recommendations for the enhancement of IRCS, Federation Secretariat and other national Societies' efficient and effective performance in both disaster response and planning for transition and rehabilitation, in the light of their experience in the Bam operation;
- Ø To gather baseline information for the future final evaluation of the operation and related programmes to which the IRCS has committed itself, to be conducted towards the end of 2004.

The goal was to capture lessons learned from the emergency phase at an early stage before memories of the events faded and before the Federation Emergency Support Units withdrew or were handed over to the IRCS.

This is not an impact study and, at the request of the IRCS, has not included a systematic collection of beneficiary feedback, although opportunities were taken to speak with residents in Bam as a cross-check to information gathered from other sources.

This Review does not, in general, make comparisons with other similar operations (Gujarat, Turkey etc) as these will be addressed by a wider review of Federation emergency operations conducted over the last few years, which is planned for later in 2004, and to which this report will form a source document.

The IRCS is committed to conducting a further full evaluation at the end of the operation¹ in late 2004. The IRCS has commissioned a separate review of its disaster response from the Applied Education Institute (AEI) in Tehran, which is related to the National Society. The AEI exercise will complement this Review and, hopefully, will be shared with the Federation.

The Review Team would like to thank the Iranian Red Crescent and Federation staff, volunteers, and delegates both for the constructive attitude they have taken to the Review and for their practical assistance in carrying out the Review.

2. METHODOLOGY

The methodology for the Review included:

- Ø *Document review* – Documents consulted are listed in Appendix 2.
- Ø *Interviews* with IFRC Secretariat in Geneva, and Federation and IRCS personnel in Tehran, NGOs, UN agencies, and government representatives in Bam, and telephone interviews with Secretariat staff and returned delegates. A schedule of interviewees is included as Appendix 3.

¹ The Revised Appeal of January 8 2003 sets the time frame of the Operation as 6-8 months

- Ø *Email correspondence* with National Society major participants in the operation (by pledges or direct participation) which were invited to respond to a short set of questions on the perceived performance of the Movement in relation to Bam. Three National Societies responded.
- Ø *A Feedback meeting* was held in Tehran at the end of the Review visit with the IRCS and Federation Head of Delegation where participants were invited to help clarify and focus the Reviews' initial findings.

The Review team members and their assigned responsibilities were as follows:

Simon Lawry–White	Independent Consultant	Team Leader/Protocol, FACT, IFRC/IRCS relations, Coordination
Bernard Chomilier	Independent Consultant	Logistics, Relief, Telecommunications, Camp management
Hassan Esfandiar	Iranian Red Crescent	Protocol, Liaison, Review logistics, IRCS perspectives
Michael Pelly	Independent Consultant	Health, ERU Field Hospital, BHCUs
Elena González Romero	Spanish Red Cross	Finance, HR, Media/Communications, Psychosocial support
Thomas Söderman	Swedish Red Cross	Water and Sanitation, Tracing, ICRC

The Review experienced a number of constraints.

- Ø It was organised quickly and had to fit with team members' prior commitments.
- Ø The timing of the Review was organised to avoid the Iranian New Year but, unfortunately, two of the four days set for the field visit to Bam were public holidays and the team was only able to observe only one full working day in Bam.
- Ø Some information requested by the team was not forthcoming.
- Ø Only a few Federation delegates in Bam at the time of the Review were there in the early days of the emergency.

3. BACKGROUND

At 05:26:52am on December 26th 2003, the city of Bam² and its surrounding villages was struck by an earthquake of magnitude 6.5³. The earthquake was said to have killed 42,000 people, although at the end of March the Iranian Office of Statistics revised this figure downwards to 26,271⁴, with 525 people still unaccounted for.

More than 30,000 people were injured, 7,800 of them seriously, and some 75,000 people were made homeless. Approximately 85% of the city was destroyed. Health facilities and administration buildings collapsed, both in the city and surrounding villages. All services were temporarily cut including telephone, electricity and water. Ancient underground irrigation channels (qanats) were badly damaged, threatening the long-term future of agriculture in the region. Schools were destroyed leaving up to 30,000 children without access to schooling. The ancient citadel of Bam (Arg-e-Bam) was almost completely destroyed. The Bam earthquake was one of the deadliest national disasters in modern Iranian history, and certainly the worst for 100 years.

There were three tremors before the main earthquake, at 8pm the previous night, at 12 midnight and 4.30am. The last of these was severe and the population took it to be the main quake. It was an extremely cold night and most people went back to bed after the third tremor. Being a Friday, (the weekend), there

² Bam is located 1,200 km southeast of Tehran in Kerman Province, South East Iran.

³ Also variously reported as magnitude 6.3, 6.6 (US Geological Survey) and 6.7.

⁴ The difference compared with the previous official estimate was claimed to be mainly due to the double counting of bodies during the chaos caused by the disaster

were more people at home than usual. The timing and the weather added to the high death toll. The main earthquake lasted some 12 seconds and was caused by a tectonic fault slippage only 10 km below the ground surface.

The Bam Region is relatively isolated. The rural areas, in particular, are poor and have suffered several years of drought and crop failures. As a result, the population was already economically vulnerable before the earthquake struck. The Bam city housing stock was mainly constructed of mud bricks which, while ingeniously designed to cope with the climate, made them extremely vulnerable to earthquake damage. Deaths resulted as much from suffocation by the dust generated by the earthquake as from direct physical injury.

The Iranian authorities and the Iranian Red Crescent Society (IRCS) mounted a swift and very large-scale response to the disaster, with assistance from the international community. The first medical evacuations took place in the morning of the 26th and air evacuation started at 2pm. 12,000 people were medically evacuated by private car, ambulance, helicopter and aircraft and taken to hospitals in Kerman and other provinces. A 6-member committee, chaired by the Governor of Kerman, was established to coordinate relief efforts. At Bam airport the Iranian military carried out triage⁵ and early treatment and coordinated the medical evacuation, handling up to 150 flights per day.

More than 1950 personnel from international Search and Rescue (SAR) and Health and Relief teams from 44 countries arrived in the area. The UN despatched its Disaster, Assessment and Coordination Team (UNDAC) to support the government in coordinating the international response. Within a few days temporary shelters had been provided for most of the homeless.

Accurate population statistics for Bam are hard to obtain. The town had a population of approximately 92,000 before the earthquake, including a number of Afghan refugees. The population of the whole region was approximately 200,000. The earthquake resulted in various overlapping population movements which have subsequently given rise to a confused picture of the number of survivors and those requiring support. It is reported that some 10,000 people left the city in addition to those medically evacuated, while a much larger number entered the town looking for relatives and in order to receive relief supplies. People travelled from all over the country to Bam to search or care for relatives. Some of those evacuated for medical reasons later returned to the city. The influx of people from the surrounding area swelled the population of the city to over 200,000, which severely increased the burden on the relief effort, complicated the effective delivery of aid, and made targeting of priority groups more difficult.

Approximately 1,000 people were pulled to safety from the rubble by survivors and by the IRCS and other authorities. While the rescue operation was reinforced by 35 international SAR teams, perhaps only 25 lives were saved as a result of their intervention. The first of these teams arrived more than 36 hours after the event, too late to find many survivors. It is not the nature of the mud houses to collapse in a way that creates voids in which people could survive. Despite the large numbers of experts and volunteers on hand, the scale of the disaster meant that the rescue workers were not equal to the rescue task.

The day after the earthquake the population was already desperate for assistance. It was not possible to control the distribution of relief goods effectively in the first three days after the earthquake, as there was no effective law and order and no functioning police force. During this time relief trucks were stopped and unloaded, there was uncontrolled distribution of goods and substantial theft of supplies, although the extent is not and perhaps cannot be known. Some of these supplies were sold in other cities. The situation was

⁵ Meaning the ranking of sick or injured people according to the severity of their sickness or injury in order to ensure that medical and nursing staff facilities are used most efficiently

chaotic and insecure with thousands of people wandering the streets, and roads in the city blocked with traffic while the main road to Kerman was heavily congested. There was a fear of unrest because of the influx of rural people afraid that their only source of food had been destroyed. It was not until day 3 that control was re-established.

On the third day bulldozers and loaders arrived and started to dig up dead bodies. Mass graves were organized for the burial of the dead. Perhaps 5,000 of the victims were buried without identification. In the early days there were no tracing mechanisms in place.

Substantial quantities of international relief goods were received directly to Bam from overseas. The scale of the response by the international community, and the level of solidarity shown, came as a surprise to the Government and to ordinary Iranians. The authorities operated an open skies policy for the first 10 days and relaxed their visa regime to allow foreign workers easy entry into the country. After this, it was decided that flights should not longer be received at Bam as there were adequate quantities of relief goods, so flights were then received at Tehran and other airports.

After fifteen days the acute emergency phase was over.

4. IRANIAN RED CRESCENT RELIEF AND RESCUE OPERATION

All informants to the Review acknowledged that the IRCS were successful in mounting an exceptional operation to save and sustain the lives of victims and survivors of the Bam earthquake. “No one can deny that the Red Crescent was effective in the rescue phase”⁶.

4.1 Immediate Response

Of seven IRCS members of staff resident in Bam at the time of the earthquake, 1 was killed, 3 were injured and 3 started the IRCS assistance to the population. The staff member killed was found still clutching the phone with which he was trying to warn others that they should leave their houses to avoid injury.

Immediately after the earthquake, the IRCS headquarters in Tehran was alerted by several IRCS branches that tremors had been felt. Even before receiving notification from the Seismological Institute in Tehran, the IRCS was able to determine that Bam was the likely epicentre of the earthquake because of these reports and because telecommunications to Bam and surrounding branches had been cut. A relief team from Kerman⁷ was mobilized at 6am and arrived in Bam at 7.45am. Meanwhile, all 28 IRCS provincial branches were requested to send assistance. At 12.30am, the President of the IRCS and the Head of Relief and Rescue Organisation arrived in Bam. Two IRCS provincial branches arrived the same day bringing relief goods. The IRCS Bam warehouse was damaged but held a stock of 1,000 tents. IRCS Disaster Task Forces were set up in Tehran and Bam by 2pm on the 26th. Two IRCS helicopters were used for medical evacuation and IRCS sniffer dogs were brought in.

The senior IRCS representation was later strengthened by the arrival by the Head of International Affairs Department. After 5 days, the President returned to Tehran and his place was taken by the Secretary General to ensure continuity in the leadership of the IRCS operation in Bam.

The IRCS Youth Centre in Bam escaped undamaged and became the centre of operations. The IRCS opened 6 clinics and provided 4 mobile clinics with 10

⁶ UN informant

⁷ the provincial capital, some 185 kilometres and 1.5-2 hours drive from Bam

ambulances patrolling the city, with all of these being functional within 48 hours. Triage was undertaken at the operations centre. IRCS clinics attended to 50,000 people in the first 10 days.

4.2 IRCS Relief Operation

4.2.1 IRCS Approach to Relief Distribution

Senior members of the IRCS explained that the Iranian approach to charity dictates that the IRCS should be generous and, if necessary, overgenerous in its distribution of relief items. It is not culturally acceptable in such a catastrophic situation to discriminate between those who are deserving and those who are not.

The IRCS considers that it was not possible to divide beneficiaries from non-beneficiaries and, in any case, this is not the task of the IRCS. As a result, the IRCS did not ask questions of the population during the early days of the relief distributions, and this contributed to what some see as the excessive distribution of relief goods.

The IRCS makes its distributions house-to-house as it is considered undignified to make people stand in lines at distribution points. The IRCS approach to targeting and distribution does not marry with that of international agencies western approach, which normally operate in a resource constrained environment where careful targeting is essential.

Learning from other emergency operations shows that unrestricted distribution to all comers can favour the more physically active, especially young men who may benefit disproportionately by demanding and receiving more assistance, while more vulnerable groups miss out. Blanket coverage, which was achieved, does not guarantee fair distribution or protection of minorities. In effect, a lack of targeting leads to unfair distribution and unwitting discrimination against vulnerable groups⁸. This may apply to the earliest distributions in Bam. Once the registration process was in place, children, the elderly, female-headed families and the handicapped were especially targeted in the distribution plan, according to the IRCS.

4.2.2 Registration

By the end of the first week and over a period of two days the IRCS had registered 213,775 people in 52,560 families⁹. After 15 days, a further registration exercise reduced the figure to 39,065 families comprising 171,700 people. By the time of the Review visit a third registration was underway. The registration process included rural areas where the IRCS was not carrying out distributions directly. As part of the registration process, booklets were issued to each family. The population figures have remained a source of debate throughout the relief operation. Various estimates provided by OCHA from different assessments give the beneficiary population figure for end February variously as 84,000; 96,200; 143,360; and 155,033.¹⁰ The IRCS considers that its registration processes provide accurate figures for targeting.

The IRCS was not able to say how many registration booklets had been issued. This hampered attempts by the Relief ERU to clarify why certain quantities of relief items were requested in different sectors. The Relief ERU considered that a different design of booklet would have improved information collection and targeting and minimized fraud. This is a possible area for development for the IRCS.

⁸ The review has not assessed whether any one group was disproportionately favoured in this case

⁹ Many people had lost all forms of identification in the earthquake

¹⁰ The MOH published population census data in January and February 2003, setting the population of Bam at 72,393 and 82,000 (approx) respectively.

4.2.3 Assessment and Targeting

Even at the time of the Review, agencies working alongside the IRCS in relief were not confident that the IRCS was able to assess the needs of the beneficiary population accurately. It is not clear whether the IRCS has the ability to target vulnerable groups specifically. Early in the operation unaccompanied children were identified and special provision was made. This is reflected in the Revised Appeal which includes an objective to: "Fully or partially meet the basic shelter, care and educational needs of 1,850 unaccompanied children". The Review has not been able to assess whether this has been achieved. However, there does not seem to be any record or discussion of the needs of women and children in general, of the elderly, or of female headed households.

4.2.4 Relief Distributions

Very substantial quantities of relief items were received and distributed by the IRCS. The city was divided into 6, and later into 14, sectors, with assistance in each sector being coordinated by one IRCS provincial branch. Some 100,000 tents and 380,000 blankets were provided during the first week. Several thousand volunteers were mobilized by the IRCS for the relief and rescue phase¹¹. The IRCS hired vehicles in addition to commissioning vehicles from the Ministry of Works in their home provinces and erected a mobile vehicle workshop. The IRCS provided more than 2,000 collection points across the country for public donations.

By the end of February, the total value of food and non-food items sent to Bam by the National Society was approximately US\$50 million. The IRCS has not disclosed the total amount of government, international and private donations it has received for the Bam earthquake. Following the appeal for international assistance by the Iranian Government, the IRCS coordinated relief effort was supplemented by over 240 donated consignments from overseas.

The table indicates the cumulative distributions of food and non-food items (NFI) by the IRCS from 26th December to 24th February 2004, as reported by the IRCS and recorded in Operations Update no 9 (2.3.04). The table shows the NFI funded from the Federation Appeal and distributed by the IRCS.

There is a consensus that all those who needed relief goods received them. This represents a very considerable achievement on the part of the IRCS. There is, however, a lack of accurate distribution data from IRCS and at the time of the Review it was not possible to obtain exact, detailed figures. Different reports provided by the IRCS cannot be reconciled. The figures supplied may represent the quantities of goods sent to Bam but almost certainly do not represent an accurate picture of what was distributed. For example, the IRCS reports that 504,000 blankets have been distributed in total, with 465,000 from the 15th January to 15th February, which is almost certainly incorrect as the majority of blankets were distributed before the 15th January.

¹¹ According to the IRCS, 19,119 staff, volunteers and youth took part in the first 10 day emergency phase, with an average of 9,000 working in the operation in January and February. The Federation has a number of times reported 8,500 as the figure for the volunteers mobilised from the emergency phase onwards. The discrepancy may come from the difference between volunteers and youth (volunteers) which are two separate categories for the IRCS.

Non-Food Distributions			Food Distributions	
Item	Total distributions	Including Appeal stock	Item	Quantity
Tent	108,454 pcs	2,652 pcs	Canned food	4,448,300 tins
Family tent	1,479 pcs	74 pcs	Bread	123,877 carton
Blanket	504,024 pcs	59,730 pcs	Sugar	510,318 kg
Warm clothes	589,165 pcs	-	Mineral water	2,083,112 bottles
Hygiene kit	101,269 cartons	-	Rice	1,441,786 kg
Heater/Stove	118,602 pcs	5,165 / 4,505	Pulses	491,839 kg
Kitchen Utensils	59,716 sets	14,237 sets	Biscuit	1,082,137 boxes
Jerry Can	28,733 cans	3,816 cans	Power milk	60,039 boxes
Body bag	1,386 pcs	-	Tuna	2,797,497 tins
Mobile/fixed water tanks	88 pcs	-	Dates	32,429 kg
Nylon (plastic sheet)	265,847 pcs	-	Edible oil	93,229 kg
Lantern	108,858 pcs	7,880	Tea	192,500 kg
Shoes	56,222 pairs	-		
Moquette	52,086 pcs	-		
Bandage	6,344 pcs	-		
Stretcher	625	-		
Washing powder	909,874 boxes	-		
Soap	1,035,777 bars	-		
Generator	30 pcs		-	
Detector	26 pcs		-	
Field shower	18 pcs	-		
Kettle	99,176 pcs		-	

IRCS distributions in rural areas began a few days after the first distributions in Bam. Some villages in the surrounding area had to wait at least a week to receive any assistance in extremely harsh winter conditions and without shelter. The FACT made an assessment in 15 villages identifying shortage of food, while noting that houses were less severely damaged than those in the town.

The IRCS has developed a methodology for establishing and supporting people in camps of 5,000 people each. Initially 14 and later 18 camps were set up in Bam, though each with less than 5,000 people. The IRCS is known for its efficiency in setting up camps, with 3 minutes the average time for the IRCS to put up a family tent. In Bam, the IRCS did not find it possible to implement the camp system fully because many residents were reluctant to leave the site of their ruined homes, but preferred to pitch tents on or near their houses so as to protect their land from intruders. As a result, distributions of food and non-food items were made both to camps and in the streets.

4.2.5 Food

From the beginning of the operation through to the end of February, the IRCS has been providing its standard food package¹². In addition, 17 IRCS mobile bakeries allowed for the distribution of bread 3 times per day. The Sphere minimum standard of 2,100kcal/person/day has been exceeded.

From 1st March an agreement was reached with WFP to provide wheat flour, vegetable oil, high energy biscuits, sugar and salt to the IRCS warehouse in Kerman. The IRCS was to supplement the ration with tea and canned fish, assembling the family food parcel for transportation and distribution in Bam. WFP has attempted to negotiate an extremely low rate for ITSH (Internal Transport, Storage and Handling). The IRCS is rightly cautious about accepting an uneconomic level of ITSH. WFP is only prepared to provide food for 100,000

¹² 3 kg of rice, 1 kg of sugar, 600gr of edible oil, 200gr of tea, 1 kg of pulses, 7 tins of tuna fish, 7 tins of canned food, 2 boxes of washing powder, and 2 bars of soap.

people as opposed to the figure of 155,000 proposed by the IRCS. As a compromise, it has been agreed that WFP will provide the full distribution for 2 months rather than 3, with the IRCS covering the third month. (In preparing the final report, the author has been notified that the agreement with WFP was subsequently cancelled by the President of the IRCS).

4.2.6 Issues Arising

Relief distribution has been one of the most contentious areas in the relationship between the IRCS and international agencies. The reasons for this need to be clearly understood and will need to be addressed for future operations involving international donations or international agencies to be successful.

On the basis of its mandate, the IRCS has insisted that all relief goods should be distributed by the National Society. Also, the bulk of international relief goods have been assigned to the IRCS. The IRCS has interpreted this as meaning that all international relief goods should be taken to IRCS warehouses. Both of these factors have generated considerable difficulty.

All agencies interviewed highlighted shortcomings in the IRCS tracking systems. The reception, warehousing, distribution and reporting of relief functions were all considered to be below standard. IRCS officials acknowledged that the sheer scale of the operation meant that their logistics systems could not cope with the volume of materials involved. The IRCS further recognises the need to strengthen its logistical capacity and harmonise these systems with those of the global Federation systems. This will not be a trivial task.

Observing the problems faced by the IRCS, some agencies refused to allow their goods to go into IRCS warehouses, while others had their items removed once they saw the difficulties the IRCS was facing. Some NGOs even accused the IRCS of misappropriating their relief goods. Substantial volumes of relief goods were probably stolen but the Review has not been given any evidence of misappropriation by the IRCS and it is likely that any loss of items was related more to the swamping of the IRCS management systems than to any malpractice on its part.

Some international organizations suffered the loss of significant quantities of relief items between Bam airport and the city although a proportion of these items were later found. While this was not directly the responsibility of the IRCS, donors' confidence in the ability of the Iranian authorities to look after relief goods has been shaken.

Whatever the rights and wrongs, the fundamental issue is one of trust. The IRCS was slow to accept that its logistical systems had not been working 100% reliably. For international agencies to be comfortable with future operations in Iran, their trust in the IRCS management of logistics and relief will need to be strengthened. The IRCS demonstrating an improved capacity in the management of relief goods may be an important precursor to the launching of new initiatives such as the planned Federation Strategic Relief Centre to be based in Tehran.

Some NGOs bringing goods into the country were not in a position to hand their relief goods over to the National Society for distribution as they are obligated to their own donors to distribute items directly. In most cases, the IRCS would not permit this, though as time went on some NGO distributions did take place under IRCS monitoring. The IRCS insistence that it should conduct all relief distributions in camps and sectors was not acceptable to some foreign organizations, who then attempted to reach local agreement with IRCS staff on the ground to conduct joint distributions and joint monitoring. These arrangements were not acceptable to IRCS headquarters.

As a result of these restrictions, NGOs tended to work either in the one camp managed by BAFIA¹³ or in the outlying villages where the IRCS presence was much lighter. NGOs then had freedom to undertake their own distributions, allowing them to satisfy donor requirements, while achieving greater media coverage than if the IRCS had distributed their goods.

Some donors do not allow their goods to be handed over to a state entity. Technically, the IRCS is now a non-government body, but it is still perceived to be part of government. Another sticking point for some donors was the IRCS assumption that foreign donations could be used to replenish IRCS stocks. Some donors do not give relief items for replenishment and, in these cases, relief goods have to be distributed directly and not retained in IRCS warehouses.

The IRCS was not aware of all the complications applying to internationally donated goods and has yet to agree ways of working that solve these problems, though the IAD has tried to be flexible.

This subject of relief distribution is likely to re-emerge at the donors' lesson learning meeting to be held in Kerman 14th – 15th April 2004. The IRCS is advised to prepare in advance of the meeting so that it can address how it intends to deal with the shortcomings in its logistics systems and how it intends to address the various constraints on the use and distribution of international donations.

The recurring questions have been – 1) why was it necessary to distribute 108,000 tents and 2) where are they now? This very large number represents approximately 1 tent per beneficiary, depending which population baseline is used.

Part of the explanation for the volumes of IRCS tents and blankets distributed lies in the several different purposes to which they were put:

- Ø To assist the affected people
- Ø To support national organizations and the task force for their administration purposes
- Ø To support international organizations in their setting up
- Ø To provide for those people referred by the government, as the IRCS felt it must cooperate with the government
- Ø Some blankets were used for wrapping dead bodies
- Ø Due to the weather conditions, people requested more blankets than the normal standards.

It was not possible to obtain information on where all the tents distributed are and it is likely that this information will not be available in future. From its family cards, the IRCS deduces that there were some 52,000 tents standing in Bam city. Some have been dismantled because of the heat, some families have moved to new temporary accommodation, and other materials will have gone with the authorities to which they were issued.

The lesson for the IRCS is that unregulated distribution of relief materials should not be allowed in future operations.

4.3 Psychosocial Support

The psychological impact of the earthquake on survivors was enormous. According to the MOH and UNICEF some 25,000 people were in need of psychological support. Apart from concerns that they could not perform their traditional mourning ceremonies because of the summary burial of victims, people were traumatized, afraid of the many aftershocks which occurred and

¹³ Bureau for Aliens and Foreign Immigrants within the Ministry of the Interior. BAFIA was managing one camp, while the IRCS was responsible for the remaining 13, later 17. Why BAFIA was running a camp for internally displaced people is not clear.

frightened by the dark. Nocturnal incontinence and mental disorders have seen a marked increase and there has been some rise in domestic violence. There have been many suicide attempts over the past few months. It has been observed that survivors have become risk takers, for example, driving in Bam has become even more reckless than before the earthquake.

The IRCS has a significant capacity and track record in psychosocial support. The psychosocial support provided by the National Society appears to have been excellent. It was launched from day 2, using tent by tent visits to provide support, encouragement and information in tandem with the distribution of relief items. Three psychosocial support teams were established with a total of 160 members, providing support primarily to groups of children and women. A psychiatrist provided individual support, including to ERU hospital in-patients.

The respective roles of the IRCS and the Welfare Organisation (MOH) in the provision of psychosocial support services were not clear initially but, by the end of January, it had been agreed that the Welfare Organisation should support orphans, disabled and the elderly, and the chronically mentally ill, while the IRCS provides more general support to children and families.

The FACT called for a psychosocial assessment team to come to Bam. The Regional Delegation, together with the Icelandic and Danish Red Cross, undertook an assessment mission from 7–26th January¹⁴. The IRCS has requested assistance in the development of a framework for briefing and de-briefing staff and volunteers, including a training manual. The Federation assessment highlighted the need for those providing psychosocial services to know the culture of the people concerned. The psychosocial services initiated by the Turkish Red Crescent¹⁵ in two camps and continued by the IRCS provide a good model. There is much to be learned by the Federation from the experience of Iran and other National Societies in the Middle East on this subject.

The experience from Bam suggests that psychosocial programming (PSP) can be beneficial from very early on after a disaster. The Federation, which has been developing its approach to psychosocial activities, needs to decide how PSP can be delivered as part of the Federation's disaster response tools. One option would be to include a PSP delegate in FACT deployments for mass casualty disasters.

4.4 ICRC Relief Supplies

The ICRC responded to the earthquake on the first day. Relief supplies left over from the Iraq border operation and stored in the Kermanshah warehouse in western Iran were immediately loaded onto 23 trucks and transported to the Bam area. At the same time, an aircraft was chartered in Amman to fly in additional supplies. In total the ICRC supplied close to CHF 1 million worth of relief supplies. The ICRC also provided two trucks with trailers for use by the IRCS.

4.5 Bilateral Operational Support

The Turkish Red Crescent (TRCS), under a bilateral agreement with the IRCS, helped to establish two camps, including a "Turk-Iran Friendship" tented camp for earthquake survivors and brought in some US\$596,000 worth of relief supplies. The Saudi Arabia Red Crescent provided a flying hospital and evacuated 257 patients from Bam. The SARC flying hospital had treated 1849 patients by January 12th.

¹⁴ The Italian Red Cross made a visit with a view to undertaking a mental health assessment although, to date, no further action has resulted

¹⁵ Some of the Turkish delegates were able to speak Farsi

4.6 Tracing

Traditionally, IRCS tracing activities in Iran have focused on cases involving prisoners of war, relatives in Iran looking for family members abroad or relatives overseas looking for family members in Iran. For this emergency, IRCS capacity was reinforced for tracing missing, wounded or deceased children and adults, and unaccompanied or vulnerable children. The ICRC provided tracing-related training to IRCS in February.

A joint ICRC/IRCS team of 4 arrived in Bam on December 30th with 10 satellite phones and organised mobile tracing units. Survivors were provided with the means to contact their families in Iran and abroad, with an average of 4,000 outgoing calls per day.

Details of survivors evacuated from Bam were entered into a database by the authorities and made available to the public. However, these records were not totally accurate. Some evacuees were either not entered at all or their data was not accurately maintained, and the information on those released from hospitals or who died from their injuries was not reliable. From early in the operation, the central IRCS tracing service in Tehran started to register the missing, with the support of the ICRC.

At the time of the Review, an experienced IRCS officer was running a tracing office in Bam in one of the camps, funded by ICRC. The British Red Cross provided a Farsi speaking tracing officer for 28 days. The tracing service seems to have been operated in a professional manner and will remain operational as long as required. The tracing office received 300 tracing requests in the Review period.

Many relatives do not know where victims were buried. Hundreds of people were buried without proper identification in mass-graves during the first hours and days. The authorities started to take pictures of the dead at a later stage. Hundreds of relatives of the victims will probably be left without proper information on where they are buried. The IRCS also took pictures of victims. It is not in the mandate of IRCS to take photos of victims, rather this is the role of a government agency, the Behesht Zahra organization. However, IRCS may still need to play this role if no other authority is doing so in practice.

Given the Federation mandate for non-conflict disasters¹⁶, the Federation should consider whether it should be supporting the NS tracing service in addition to, or instead of, the ICRC.

4.7 Media

The IRCS were extremely visible in the international media. IRCS gillets were seen everywhere and the Head of International Affairs Department (IAD) conducted 65 international interviews in the first week.

The IRCS sent 3 cameramen and 3 journalists to Bam. The cameramen filmed the destruction from helicopters and the IRCS used these and other images to create a 13-minute CD-ROM covering the IRCS and International Federation response.

¹⁶ under the Seville Agreement

4.8 Challenges faced by the IRCS

In carrying out a successful relief and rescue operation the IRCS faced a series of challenges:

- Ø Some IRCS informants considered that the organization did not mobilize relief goods fast enough. The modest quantity of stocks available in Bam and from the surrounding branches was very quickly used up and the substantial additional supplies coming from the main IRCS warehouses were delayed long enough for the population to have become desperate for support.
- Ø While the IRCS was extremely successful in mobilizing large numbers of volunteers, they did not have adequate personal equipment¹⁷, nor did they have adequate basic equipment for a rescue operation, in particular shovels. These had to be purchased in Kerman by IRCS officials on their way from Tehran to Bam¹⁸.
- Ø The large numbers of volunteers itself placed a burden on the relief effort. Food and shelter were required from the same sources as the local population. It was only because the zones were being managed by provincial branches that these volunteers could be catered for.
- Ø Relief teams arriving from the various branches did not have a standard operating procedure for organizing their disaster response. Many volunteers were unclear of their role and wandered through the city looking for something useful to do. A smaller number of better equipped and briefed volunteers might have been more effective.
- Ø Warehouse space under the control of the National Society was inadequate for the volume of goods being supplied by branches across the country.
- Ø National Society staff felt under pressure from the extremely high expectations of the local population, who were very demanding and assumed the National Society was able to cope with every eventuality. IRCS personnel were concerned that a refusal to hand out relief goods would lead to disorder.
- Ø The IRCS did not have sufficient heavy equipment. At the start, there was only 1 JCB for digging grave sites in the city. Even when additional equipment was brought in, it took 5 days to remove the dead bodies.
- Ø The IRCS only has 10 sniffer dogs and does not have specialist equipment for detecting human life under collapsed buildings. Both of these arrived in large numbers with international SAR teams, some 36–48 hours after the earthquake, by which time it was only possible to rescue a few additional survivors. It was reported by the UN that the IRCS did not make best use of the SAR teams by targeting them on specific objects to be investigated. Instead, the international teams were sometimes left to make their own assessments, which reduced their effectiveness still further.
- Ø While the IRCS has more than 3,000 vehicles in total, it has only 50 tipper trucks and even fewer flatbed lorries. The approach taken by the IRCS provincial branches was to keep equipment necessary to mount another emergency response back at base and request lorries from the Ministry of Works in their home province to be sent to Bam. There were not enough lorries and most of these were the wrong kind to unload and transport relief goods.
- Ø The Bam airport was small in relation to the number of relief flights arriving. The airport had a shortage of equipment and, even though there was a large number of volunteers in Bam, there were not enough available to unload aeroplanes in good time. Planes waited for up to 24 hours to be unloaded, resulting in thousands of dollars in additional charter fees being incurred.
- Ø The first medical teams did not have proper triage cards and systems in place for assessment and identification of cases.
- Ø The International Affairs Department was overwhelmed by having to deal with scores of foreign rescue teams and NGOs¹⁹. The Director General of the

¹⁷ Food, bedding etc

¹⁸ The IRCS eventually sent a total of 16,153 shovels to Bam

¹⁹ At the height of the operation there were some 120 NGOs in Bam

Department worked extremely hard to facilitate communication between these teams and the rest of the IRCS but having few senior people in the department with language skills and authorised to take decisions created a communication bottleneck.

- Ø Few people in the National Society had any prior knowledge of ERUs and how they work²⁰. The IRCS was keen for ERUs to be deployed and to be retained in Iran but expected them to be self-supporting from the outset. Instead, the National Society found that it had to support them in terms of translation, dealing with local authorities, and finding local staff. The IRCS felt that this drew some of its capacity away from the main relief effort, while IRCS personnel in Bam felt that foreign organisations should be able to look after themselves.
- Ø The IRCS Relief and Rescue Organisation acknowledged that information collection on the progress of relief distributions for the Bam operation did lag behind, partly due to the organisation having to respond to multiple emergencies in the same period, including floods (14,000 families homeless), further smaller earthquakes, and the much-publicised train fire and explosion in north-eastern Iran which destroyed several villages.

5. THE FEDERATION RESPONSE

5.1 Federation Delegation

The Federation has undertaken no operations in Iran for the past 30 years. There has been a Federation Representative in Iran since the late 1990s and a Delegation was opened in 2002. The Federation currently has no Status Agreement with the Government of Iran. The Federation Head of Delegation and staff are housed in offices within the IRCS.

The Head of Delegation post was vacant at the time of the earthquake and the Acting Head of Delegation was out of Iran on vacation²¹. Immediately after the earthquake struck the only staff member in the Tehran Delegation was the Finance Assistant, who then had to handle finances, act as driver and cover administration.

When the Federation Secretariat Operations Manager was notified of the earthquake on the morning of the 26th, he contacted the Federation Representative from Lebanon who happened to be in Tehran on vacation and asked him to act as a communication point with the IRCS in Tehran until the Acting Head of Delegation returned. The Programme Coordinator from the Regional Office took over this liaison role from the Lebanon Representative on his departure.

In this situation, the Federation was fortunate to have an experienced delegate in Tehran at the time of the earthquake and that the Secretariat succeeded in contacting him. Having no Head or Acting Head of Delegation in Tehran on December 26th was unfortunate timing.

From the end of December on, the Delegation's time has been almost completely taken up with the earthquake operation, especially in making logistical arrangements for delegates and missions passing through Tehran. In January, the office was strengthened by the appointment of an Admin delegate who has played an important support role and helped to set up Federation admin systems.

²⁰ It is likely that IRCS IAD was much better informed about ERUs than the Relief and Rescue Organisation.

²¹ A new Head of Delegation had been appointed with a start date in March 2004, which, in the light of the disaster, was brought forward to January 1st, with the HoD arriving on January 10th

5.2 Decision to mount a Federation operation

The Secretariat in Geneva was in direct contact with the senior management of the IRCS on the morning after the earthquake. The initial conclusion was that an international Federation response would not be required. This situation changed in the afternoon of the 26th when the Iranian Government made an appeal for international assistance and the IRCS asked for the Federation to mobilize support at 5pm.

The IRCS requested the deployment of the ERU field hospital in particular. The make-up of the Federation response was agreed in a teleconference²² between the IRCS, the Secretariat and ERU deploying National Societies on the 27th. The IRCS initially wished to limit ERU deployments to 1 logistics, 1 watsan and 1 hospital ERU. This was later expanded to a larger contingent made up of the field hospital, water and sanitation and basic health care ERUs. The Federation proposed the deployment of a FACT (Field Assessment and Coordination Team) to which the IRCS agreed.

5.3 Field Assessment and Coordination Team (FACT)

An SMS alert was issued to FACT trained personnel at 5pm on 26th December indicating that a FACT deployment was unlikely, but at 10am on 27th a further SMS invited FACT members to make themselves available. Only 12 potential FACT members responded and by 1pm on the 27th a team of 5 had been agreed. The FACT leader “self-selected” and left Norway before the FACT deployment had been finally agreed. While FACT members should not be in a position to deploy themselves, in practice the Operations Manager in Geneva welcomed this development and the formal instruction to deploy as FACT leader was passed to him in Frankfurt airport later the same day. The FACT TOR was issued at 5pm on the 27th December.

The first FACT member, a Logistics Delegate, arrived in Bam on the 27th having flown directly from Denmark to Bam on a military transport, while the FACT leader arrived on the 28th, having been delayed by travelling through Tehran. The three other FACT members comprised a Reporting Delegate, an Media/Information Delegate and one Delegate acting in a new FACT role focused on the assessment of rehabilitation needs. The FACT did not include medical or watsan delegates. The FACT was intentionally kept small by the Operations Manager in case the IRCS should be reluctant to accept a large number of foreign delegates.

The capacity of the FACT was not in practice limited to 5 people because:

- Ø The team was joined in Bam by a Disaster Management Delegate from the Regional Office, who is an Iranian citizen
- Ø Soon after arrival, the FACT leader requested a medical coordinator who arrived 3 days later
- Ø The French Red Cross watsan delegates supported FACT with watsan assessments

Once established, the FACT leader called for the deployment of the American RC Relief ERU and a psychosocial assessment team.

On arrival, the FACT leader made contact with the UNDAC team. It was agreed that FACT should lead in the cooperation with the IRCS while the UNDAC team managed the cooperation with the Iranian authorities. As FACT arrived after the UNDAC team, it was able to draw on the assessment data UNDAC had already collected.

²² As with other operations, the use of teleconferencing has proven productive and popular with National Societies

FACT personnel were ill-equipped and found themselves dependent on ERUs for food and accommodation in the early days. The Norwegian RC is now considering whether it should maintain a stock of equipment for FACT to be provided to FACT members on deployment, whether or not they work for the Norwegian RC. (Schedules of various equipment modules used by UNDAC are included as Appendix 4 as an illustration of possible standard kits that could be deployed with FACT.)

Some of the FACT members became ill or suffered from sleep deprivation due to the cold, which impaired their performance. Partly for these reasons, the first deployment of a rehabilitation expert as part of FACT was not seen as a success. This does not mean that the concept should be abandoned but, with hindsight, a PSP delegate would probably have been more appropriate. Bringing in a rehabilitation delegate at an early stage is a good idea but perhaps 10-14 days into the operation would be more appropriate.

The FACT did not produce an assessment report as such. The two reports issued by FACT are, in effect, situation reports, although the second report does include a FACT assessment of 15 villages surrounding Bam, highlighting food shortages. FACT quickly became operational, coordinating the arriving ERUs, liaising with the IRCS, attending coordination meetings, and starting up the Federation operation.

According to Standard Operating Procedures for ERUs, it is the FACT assessment that determines what configuration of ERUs is required, if any²³. In this situation a FACT assessment was irrelevant to the ERU deployments as these were agreed before the FACT leader even arrived in Bam. Only the Relief ERU was specifically requested by the FACT leader. FACT made the best use of the ERU resources which were already being deployed.

In light of the rapid ERU deployments, a FACT assessment report would have been partially redundant. However, the Federation needs to consider how serious a part of the work of FACT assessment really is. In this case, it would have been valuable to have a full assessment of needs, identifying: vulnerable groups and the best ways of protecting their rights; the coping capacities of National Society, survivors and the local authorities; the capacity of other international agencies; and where the Federation can play its most valuable role. The IRCS was not in a position to do this, especially given its intense engagement in the relief and rescue effort.

In order to make such assessments, the FACT has to have the capacity to stand back from the immediate operational needs. FACT did not have the capacity for this task. Some informants indicated that the FACT training does not in any case provide sufficient depth in how to undertake needs assessments.

The FACT leader was perhaps 12-24 hours later in arriving than the ideal. The lesson here is that the Federation needs a delegate on site with a satellite or functional mobile phone within 24 hours, ideally 12 hours, after the incident. This means bringing someone from the capital city, a neighbouring country, or a regional delegation (preferably RDRT trained) to undertake the very initial assessment which can feed into decisions on FACT and ERU deployments and handle early media interviews, if necessary.

²³ From IFRC web site page on ERU's - "If a Field Assessment and Coordination Team assessment or disaster response plan recommends the deployment of one or more ERU units, specific requests are made for the type required, such as water and sanitation or basic health care. National Societies sponsoring the ERUs then consider making them available. The director of the Secretariat's Disaster Management and Coordination Division makes the final decision on deployment, based on the assessment report and advice from technical departments such as health, logistics, field support and telecommunications. If the go-ahead is given, ERUs form part of the Federation's emergency response".

The FACT leader stayed in Bam for three weeks, after which there was a gap of ten days before the new Head of Operations arrived. There was also a two-week gap between the departure of the FACT Reporting Delegate and the arrival of a successor.

5.4 Emergency Response Units

5.4.1 ERU Deployments

A total of 12 National Societies participated in the deployment of nine ERUs²⁴. This was the largest ever deployment of ERUs. Comments are provided in this section²⁵ on each ERU deployment.

ERU deployments were made combining the resources of deploying Red Cross societies. Overall, this seems to have been a success. ERU teams covering the same sectors showed commitment in working together as one team. Joint deployments were as follows:

- Ø Norwegian/Finnish ERU field hospital
- Ø Swedish/German water and sanitation ERU
- Ø British/Danish logistics ERU

Others ERUs deployed were:

- Ø German Basic Health Care Unit (2)
- Ø Japanese Basic Health Care Unit (initially 1, later 2)
- Ø French Red Cross watsan ERU
- Ø Austrian Red Cross specialized water ERU
- Ø Spanish mobile specialized watsan ERU and
- Ø American RC Relief ERU

Overall, the performance of the ERUs was professional and ERU members showed commitment and determination. Their contribution has been appreciated by the National Society. Speed of deployment was good, once instructions were received.

ERU deploying RCs felt under pressure to make an operational response because of the nature the disaster and this pressure was passed on to the Secretariat. National Societies coordinated their ERU deployments via the Secretariat and had to make compromises, including joint deployments, in order to achieve a coordinated approach. The one exception was the Japanese RC, which notified the Secretariat that their basic health care ERU was to be deployed under a bilateral arrangement with the IRCS²⁶. Despite this, the Japanese ERU was brought under the Federation umbrella in Bam. The first ERU units arrived at the same time as the FACT, with an average time to reach Bam of 3-4 days after the earthquake. Overall, the ERU response times were good.

As with the FACT team, the choice of delegates for deployment with the ERUs was restricted by staff absences from National Societies over the Christmas holiday period. The plus side of the timing of the earthquake was that the Operations Manager in the Geneva Secretariat was able to make rapid decisions and take action without interference from other parts of the Movement which were mostly on vacation.

²⁴ The total is 11, if the 2 BHCUs from Germany and Japan are counted individually

²⁵ A series of learning points arising from the ERU deployments was prepared in advance of the ERU working group meeting in Berlin, April 5-6, 2004. In the event, these were not tabled at the meeting but for reference the summary is attached as Appendix 10.

²⁶ The Japanese RC has indicated that the Federation process for making decisions on ERU deployment is too slow and faced with the same conditions again, the JRC would have to make the same decision. "When a big disaster occurs ERU holding National Societies cannot simply stay at home without mobilizing ... In Japanese RC case, we have only the BHC and therefore we have to deploy,... it is beyond coordination". The Federation Secretariat tends to the view that the JRC refusal to be coordinated is a way of avoiding the risk of non-selection, as other National Societies bid to deploy ERUs of the same type.

The deployment of ERUs was not based on a detailed assessment of the needs of survivors. The ERUs were accepted as a 'package' by the IRCS and would not have been welcomed without the ERU Field Hospital. The first priority was for the Logistics ERU followed by the ERU hospital. The final shape of the ERU deployments was influenced by strong pressure from the sending National Societies to deploy ERUs that had not been requested by IRCS. The Federation Secretariat tried to referee a solution that was roughly in line with needs in the field, while keeping all parties 'onside'.

ERU deployments were made irrespective of FACT assessment, which in this case was probably too slow and (in some cases) not relevant to deployment decisions anyway. This raises a number of questions for further consideration by the Federation Secretariat and ERU Working Group:

- Ø How can this case be reconciled with the Standard ERU Operating Procedures which state: "If a Field Assessment and Coordination Team assessment or disaster response plan recommends the deployment of one or more ERU units, specific requests are made for the type required"
- Ø If the priority is to get there first – who cares about assessment? Is the best approach to hold back from deploying a field hospital (for example) because 10 other countries are already sending one, or is the priority to be the first of the 11?
- Ø What is the dividend for those RCs who do compromise and coordinate their deployment with the Federation in the initial trade-off discussions? Does the advantage actually go to those who just deploy anyway?
- Ø The deployment of ERUs almost certainly allowed the sending RCs to increase their fundraising, which should eventually benefit the people of Bam and/or the IRCS. Is this an adequate justification for ERU deployment - or does there have to be a prima facie case for ERU relevance and impact?

Other points noted by the Review in relation to ERUs include:

- Ø *Reporting.* Some ERU Team Leaders reported that they did not know that they had to report to a common Federation system, which points to inadequate briefing. As with other Federation/ERU missions, there was a paucity of End of Mission Reports submitted to the Federation.
- Ø *Sector Meetings.* ERU Team Leaders considered it important for them to attend the relevant sector meetings with local Bam authorities, rather than the IFRC Coordinator attending these meetings alone. IRCS agreed with this point and the Federation should note this for the future.
- Ø *Mutual support.* ERU teams were supportive of FACT and other Federation delegates in terms of material assistance, although if FACT delegates had been properly equipped, this would not have been necessary. As the operation developed, FACT was supportive to ERUs in many areas of logistics and camp life.
- Ø *Translation.* Translation remained a constraint for the entire IFRC operation. Those ERUs that hired good interpreters enjoyed a major advantage.
- Ø *Orientation.* Expatriate staff would have benefited from briefing materials from the Federation on the IRCS and on Iranian cultural norms (not just the dress code).
- Ø *Burn Out.* Some ERU personnel stayed on too long, beyond the 'burn-out' point, even after the Federation HR delegate pointed this out to the ERU team leader.
- Ø *Job satisfaction.* Some delegates in later rotations felt underutilised and were not very satisfied in their roles.

5.4.2 ERU Field Hospital

The IRCS and with Federation Secretariat have been discussing the development of an ERU field hospital for Iran for some time. The deployment of the Federation ERU hospital to Bam was seen by the IRCS as an opportunity for the deploying

RCs to donate a field hospital to the IRCS and for the National Society to develop its own capacity.

The hospital ERU had to obtain permission to operate from the MoH, for the importation of equipment and medicines, and for its foreign doctors and nurses to be able to practice legally in Iran.

The field hospital was deployed against a backdrop of the Imam Khomeini Bam city hospital having been badly damaged in the earthquake and, at the time that ERU deployment decisions were made, it was not clear whether this hospital would be able to function.

The ERU hospital team saw their first outpatients on 2nd January and the hospital opened on the same day. The IRCS considers that the deployment was timely. The ERU hospital was in effect two ERUs combined into one to provide a 200 bed hospital. The occupancy rate has been low, with the highest number of in-patients being 47, mostly due to a lack of demand and referrals. Referral rates to the Ukrainian field hospital may have been higher as this was working directly under the MOH which made the referral decisions, rather than under the IRCS.

The size of the ERU hospital was set not according to need but in order to meet a commitment by the Federation/IRCS to replace the 240 hospital beds previously available in the city. This is reflected in the Revised Appeal where the first objective for Health is: "Restore former referral capacity". In practice, the hospital had a maximum of 160 beds and was only staffed to manage 60 in-patients. Staffing levels were therefore roughly appropriate to the actual occupancy. In terms of need, the hospital was unnecessarily large.

The Deputy Minister of Health declared on 1st January that the Federation/IRCS field hospital would be the only referral hospital in Bam, while there were several other field hospitals in Bam at the same time. (See Appendix 7). The need for the hospital to function as a district hospital has increased over the period of the operation, even though occupancy rates are still not high²⁷.

The cumulative activity by the field hospital by the end of February 2004 is summarized below.

ADMISSIONS		ACTIVITIES		OUTCOME	
OPD total	31,650	Lab exams	3,986		
" < 5 yrs	2,749	X-rays	2,678		
Hospital	818	Operations (inc.CS)	270	Discharges	688
		Caesareans (CS)	34	Transfers	167
		Deliveries	256	Deaths	25

Cumulative Activity RCRC Field Hospital, Bam
To end February 2004

Good clinical work has been performed. The deployment of the Norfinn ERU hospital was appropriate and the TOR realistic. There was a showpiece layout and good site space. In general the disease profile has been non-emergency, with mostly respiratory infections and diarrhoea, and no reported epidemics²⁸ (although this may well change as the summer months approach). The majority of admissions are motorbike accidents, respiratory diseases, vascular disease and suicide attempts. A proportion of cases relate to opium abuse, which is common.

The hospital has experienced a number of difficulties:

²⁷ Occupancy rates may increase with the closure of the Indian Military hospital at the end of March

²⁸ Initial assessments from the UN identified the threat of outbreaks of diarrhoeal disease due to insufficient sanitation facilities, as well as a threat of respiratory tract infections. These threats have not materialized.

- Ø The hospital ERU has fallen into the gap between acting as an emergency field hospital and a referral hospital, partly because no exit strategy could be concluded at an early stage
- Ø Little trauma surgery has been performed because acute medical needs had already been dealt with through treatment by other teams and by medical evacuation before the ERU hospital opened
- Ø There have been many paediatric admissions yet the hospital was short of paediatric equipment²⁹
- Ø Many small items have gone missing from work areas, reflecting the inadequate security arrangement in the compound
- Ø Many of the expatriate nurses were trained in trauma or intensive care rather than the district hospital role the hospital played from early on
- Ø The ERU hospital was not adequately self-sufficient in staffing in the initial phase and its dependence on the National Society in the set-up phase was a constraint
- Ø Coherence between international teams was a problem on the occasions when team leaders focused on their National Society's bilateral agreement with the IRCS rather than the best mode of operation for the hospital

The hospital is run jointly with the IRCS and the Ministry of Health. On 18th January the MOH and the IRCS signed an agreement setting out a framework for how the hospital was to be operated clarifying the respective roles of the IRCS and the MOH in the management of the hospital and the provision of staff. In essence, the IRCS was responsible for the management of the hospital, while the MOH provided the medical staff and oversaw technical standards (the text of the agreement is included as Appendix 6). The agreement purposely did not address the handover of the hospital, which remains contentious.

The arrangement for the leadership of the joint NorFinn hospital needs simplification. There are currently 4 people in areas of individual command: Joint Team Leader, Medical Coordinator, Head Nurse and Admin Coordinator. This has led to some confusion within the hospital and should be simplified.

The Malaysian Red Crescent made its first international deployment of delegates, sending a medical team of four to establish an orthopaedic OPD based on the need for such a unit within the hospital. The Malaysian delegates had recently attended RDRT³⁰ training. This deployment was considered to have been successful and suggests that RDRT trained personnel from non ERU-deploying National Societies could be considered for future ERU or FACT deployments.

The IRCS was aware of the need to take over the hospital within 3 months of the start of the operation but did not anticipate being asked for large numbers of medical and ancillary staff from early on. The IRCS was surprised by the large number of expatriates arriving to staff the hospital. When the Federation Medical Coordinator asked for 150 doctors and nurses, the IRCS declined. There was no prior agreement on the provision of counterpart staff. However, the IRCS has subsequently succeeded in mobilizing large numbers³¹ of medical staff who have been released from other jobs on a temporary basis on two-week rotations. MOH and IRCS have had difficulty staffing in this acute situation³². 200 out of the 500 medical staff in Bam before the earthquake were killed and it is probable that many of the survivors will not return to work after their official three-month break.

²⁹ It benefited from a donation from the American hospital on its departure

³⁰ Regional Disaster Response Team

³¹ According to the IRCS website, 845 medical personnel have been deployed to Bam on rotation. The IRCS is aware that its capacity to provide medical staff has declined since it stopped running hospitals of its own. This capacity has been maintained overseas, with the IRCS already running 14 hospitals in other countries, and planning to increase this number

³² According to the IRCS Health Coordinator, the hospital needs 27 doctors and 45 nurses to support all the current services (as of end February)

The value of the semi-permanent wooden building erected for sterile surgery is questionable. The decision to erect the facility was taken unilaterally by the Norwegian Red Cross. Surgical cases were few and there were good facilities both in Kerman, only two hours drive away, and at the Indian Army Field Hospital in Bam. This unit may be more heavily used after the Indian military hospital leaves at the end of March.

It is likely that the field hospital will remain in Bam for a year but the current structure will probably not survive. Prefabricated structures are being considered in the planning of the remainder of the operation.

The field hospital and clinics' water and sanitation capacity were provided by specialized water and sanitation ERUs. Ideally, water and sanitation units would be included in the standard hospital/clinic equipment as there is some risk of all watsan units already having been deployed to another disaster. The field hospital at least should consider how to cater for its own water and sanitation needs.

It would be useful to improve standardization of equipment and protocols of care between the National Societies deploying the field hospital. (Also see Appendix 5 for suggestions from Norwegian and Finnish delegates).

In such a disaster, the ERU field hospital cannot be deployed in time for it to play a truly life saving role. The Review proposes the development of a small, surgical/primary dressing ERU to provide immediate, life saving care, and on-going assessment³³. In order to play a life-saving role, this unit needs to be operational within 48 hours. The Basic Health Care Unit ERU could be modified to play this role. This would allow the deployment of additional resources to provide on-going, non-emergency care if such facilities are not available in the affected area. Small ERU modules would be able to respond more precisely to emerging needs. If the hospital ERU is to continue to provide medium-term district hospital care in future operations, it will need to focus on surgery, paediatrics, obstetrics, general and elderly medicine as the priorities, rather than surgical intervention.

The IRCS sees the deployment of the ERU hospital as an opportunity to develop its own ERU hospital capability. This aspiration deserves Federation support, with some qualifications. The Iran context demands that the ERU hospital approach should be tailored to local circumstances – medical practice, use of drugs, staffing regime, services available from other providers, etc. If the IRCS wants to use its ERU hospital in international deployments, this will require further training and support from the Federation Secretariat and the RCs which already have this capacity.

5.4.3 Out Patient Department

The German Red Cross agreed not to deploy its Hospital ERU but, instead, to send a Basic Health Care ERU. This was despatched on 29th December and was originally intended to form the OPD for the hospital. However, on arrival, the German RC team found that the Finnish RC had already been tasked with running the OPD³⁴.

In the original hospital layout, the OPD was within the hospital but after a month the decision was taken to move the OPD outside the fenced compound for security reasons and to allow for additional services and a better waiting area.

The OPD has been very busy from its opening, with patient numbers peaking at 800 per day. The demand on its services shows that it has been valued by the population of Bam. The presence of foreign doctors appears to have increased its perceived value. The OPD seems to have worked well, though the environment

³³ The ERU Working Group is already discussing the setting up of a triage unit

³⁴ The reasons for this were not clear to the Review team

surrounding the OPD appeared somewhat chaotic with patients' families, staff, security guards and others crowding a small and unstructured area.

5.4.4 Basic Health Care ERUs³⁵

The Basic Health Care Units provided a generally good quality service, though at the time of the Review visit they were underutilised. The BHCU records show that the disease profile was non-emergency.

German Red Cross

The GRC was allocated 2 clinic sites within the town, one in the football stadium, and one on a school playground. The German team was initially short of transport and counterparts. Eventually they developed a close working relationship with the IRCS. It took a few weeks for the IRCS and MOH to supply adequate staff. Some IRCS volunteers were inexperienced and came and went without notice. The number of patients peaked at approximately 120/day/clinic but by the middle of February this had fallen to 40 plus. The clinical work in the German RC clinics had already been taken over by the IRCS at the time of the Review visit and appeared to be running well.

Japanese Red Cross

The Japanese BHC ERU team arrived on 29th December and started clinics on the 31st. Their equipment was temporarily lost in transit and the ERU staff were first housed with the IRCS, only later moving to the Federation compound where they became part of the Federation Health Coordination structure. Their equipment arrived on 4th January, but from 31st December to 3rd January they were still able to treat 229 patients by using the NorFinn ERU facilities. The main Japanese clinic was located near the IRCS operations centre in the middle of Bam. As of mid-January, the main Japanese clinic was treating 150 patients per day, while a satellite health post was opened in Hamadan camp. In mid-February, the clinic started to take in IRCS staff and was due for handover at the end of March.

The Japanese clinic appears to have been run well and its activities have been very thoroughly documented. The Japanese RC recognised the importance of psychosocial activities very early on.

The Japanese RC used the opportunity to expose many Japanese RC personnel to international work. The Federation Head of Operations in Bam and the Geneva-based ERU Officer questioned why the Japanese RC had so many delegates, at a much higher delegate to patient ratio compared with other clinics and the hospital, and above ERU standards. As the IRCS was keen to reduce the number of expatriate delegates, it also wondered why the Japanese clinic needed more than twice the number of delegates of the German clinic, yet with the same patient throughput.

The Japanese RC obtained translators from early on (with Japanese, English and Farsi). The clinic has found (unsurprisingly) differences between Iranian and Japanese approaches to clinical situations.

³⁵ BHC level clinical care was also provided by a number of NGOs including MdM France, MdM Greece OPD and MSF France

5.4.5 Water and Sanitation ERUs

Watsan ERUs were deployed as follows:

<i>Deploying Red Cross Society</i>	<i>Type of ERU/Mission</i>	<i>Serving</i>
Austrian	Specialized Water	The Federation field hospital and the Federation compound
French	Mass Water	Displaced people
Spanish	Mobile Specialized Water (5 mobile treatment units)	Water and sanitation to BHC clinics and the Imam Khomeini Bam city hospital
Swedish/German	Mass Water and Sanitation (Swedish equipment, Swedish and German delegates)	Water for displaced people Sanitation for displaced people Sanitation for the Federation compound

The water and sanitation work carried out by the different ERUs appears to have been of a high standard. International water and sanitation quality standards and Sphere standards appear to have been met or exceeded. Watsan teams seem to have worked together well from the beginning, pooling information, staff and equipment. The appointment of a Federation Watsan Coordinator contributed to the good working environment.

In the immediate aftermath of the earthquake the IRCS was distributing bottled water, and so there was no imminent risk to life from a lack of drinking water. This was as well, given that ERUs experienced delays on arrival because of a lack of transport and the time taken to clear their equipment and become operational.

The contribution of the water and sanitation ERUs is summarized in Appendix 8. At the time of the Review visit the Austrian and Spanish units were still operated by their own staff, while the Swedish/German and French equipment had been handed over to the Federation as a temporary measure. Swedish and French ERUs finished their assignments by the end of January.

The water supply in Bam was restored within a few hours of the earthquake with sufficient capacity to cater for urgent needs. Water for the city supply is drawn from deep boreholes and is of a high quality, but had not been declared safe to drink by the MOH even though it is chlorinated twice before being distributed.

The IRCS, the Government and private contractors operated large fleets of tanker trucks. At peak, 110 tankers were supplying water each day. This was reduced to 30 by 27th January and 22 by the end of February as trucking is being phased out. Demand has increased significantly since the earthquake due to the boom in the population. There is still a risk that, in the short term, increased demand in the summer may mean a loss of pressure and contamination of piped water.

The Water Organization in Bam has succeeded in connecting 66km of new distribution pipes, installing 3,000 taps, and 1,000 storage tanks. In the same period, Federation ERUs have installed 25 tanks or bladders and 25 water points.

It was not possible to locate manifests for the imported ERU water and sanitation equipment. However, 75 bladder tanks, 18 pumps and 3 70-95 cu.m. storage tanks were in stock at the end of February³⁶.

The most useful ERU equipment for the IRCS is probably the Spanish specialized water unit as it can be cleaned, maintained and stored for future use easily, and

³⁶ The Federation received an in-kind donation of the equipment in early January valued at £46,000

is relatively straightforward to operate. When handing over ERU equipment, an inventory should be taken and lists drawn up of items which will need replacement. Liners of storage tanks, bladders, pipes and fittings will need replacement perhaps using Appeal funds. Training in how to set up, operate and store the equipment is a vital part of the hand-over.

A shortage of volunteers and local labour hampered the activities of the watsan ERUs from the beginning and was still a problem at the end of February. This forced ERU team members to undertake tasks they would normally have given to volunteers or local labour, such as digging pit latrines.

The Review Team considers that there was an unnecessarily large deployment of water and sanitation ERUs. The quality of the work carried out is not in question. However, the relevance of these deployments is, given the capacity of the Iranian Red Crescent and Iranian authorities in water and sanitation. While mass water storage did make a contribution to the camps, water treatment was largely unnecessary. Water quality was verifiably good from the outset and ERUs' treating water was not cost effective. There was a stronger case for the hospital needing the specialised water plant.

It may have been better to provide technical expertise rather than sending relatively expensive equipment and personnel. The current ERU watsan concept is best suited to situations where little or no local, technical or material resource exists, which is not the case with the IRCS or in Iran in general.

5.4.6 British/Danish Logistics ERU

On the advice of the FACT leader, the British/Danish RC Logistics ERU was sent to Kerman rather than Bam. This decision was quickly changed when it was realised that the team would be needed in Bam. Unfortunately, thinking that they would be based in Kerman, the team had come without proper personal equipment which then had to be procured in Kerman. This delay had no significant effect on the performance of the ERU.

Overall, the ERU functioned well and provided an essential backstopping function without which the rest of the Federation operation would have struggled. At the outset, the ERU focused on the air transport operations where their support proved vital. The air operation was supported by IRCS youth volunteers, working on 3-4 day rotations. An IRCS counterpart from IAD worked closely with the ERU at the airport. There were very few good quality trucks available. Many of the trucks used were dump trucks provided by the Ministry of Transport which are difficult to load, and dangerous in the middle of a chaotic airport.

The pipeline for the operation was divided into two phases, the first consisting of air operations and the second of shipping and trucking. The team established excellent relationships with the Bam Airport authorities. Initially, the Iranian authorities operated an 'open skies' policy but two weeks after the disaster flights to Bam were restricted and were then sent to Tehran where delays caused by customs clearance slowed down the arrival of relief items.

Shipping and trucking proved problematic with incorrect documents provided by shipping companies and a poor linkage between the Logistics ERU and the IRCS Logistics Department in charge of clearances in Tehran. There was a substantial amount of damaged goods, such as heaters, because of poor packaging. The new arrangements with DHL to provide free charter flights ran into teething difficulties and both parties should review this experience with a view to future improvement.

Initially there was no warehousing available to the Federation in Bam and so the Federation correctly decided to erect a series of rubbhalls which became available for use on the 5th January. The rubbhalls were poorly erected and without being

supervised by a representative of the manufacturer (Giertsen). Of the 8 rubbhall's erected, several do not close properly and one was destroyed by the wind.

There were a number of problems in the tracking of goods. The Logistics ERU did not succeed in establishing a tracking procedure right from the beginning. Until January 5th, when the Federation warehousing was set up, all goods were signed over directly to the IRCS. The IRCS received goods consigned to them for their own distribution programmes without knowing the reporting requirements from the Federation. Despite the efforts of the Logistics and Relief ERUs, at the time of the Review it was not possible to get a full picture of where all Federation consignments from Geneva had gone to.

At an early stage it became clear that the IRCS would not be able to provide the necessary fleet of vehicles to the Federation and a decision was therefore made to send vehicles from the Abu Dhabi Federation fleet base. At the end of February the Federation had 18 light leased vehicles from Abu Dhabi (which was more than adequate) and 2 trucks donated by USAID. The IRCS was very efficient in paying the necessary bond for the release of these vehicles, which are to be re-exported at or before the end of the operation.

There is an excellent working relationship with the IRCS in Kerman. A logistician has been based in Kerman to make procurements for the Bam operation. These have so far been minor (US \$17,000) but the volume of requisitions has been increasing. Federation procurement procedures were being adhered to.

However, an important link with the IRCS in Tehran was missing. Had a Logistician been based there, this might have reinforced the communication between IRCS and the Federation, although it was noted that the ERU logistician who spent time in Tehran was not successful in practice in improving links with IRCS. This is an area where the IRCS and the Federation delegation in Tehran should be working to strengthen working ties.

Tents and blankets were adequately supplied and as the operation proceeded, it might have been more useful to switch to providing more heaters and hygiene kits and reduce the volume of tents and blankets. Overall, quantities of unsolicited or inappropriate goods arriving in Bam from overseas were minimal, but two IRCS warehouses were found to be full of used clothes, which cannot be used in Bam as they are not deemed acceptable by local people.

The Logistics ERU became involved in a number of administration tasks outside its TOR, including financial book keeping, changing money, booking flights and providing a welcome service. These were all essential tasks but not part of the job of a logistics ERU. In the view of the Review team, the effectiveness of the Logistics ERU was diminished by their acting in an administrative role. It is important for the Logistics ERU to focus on its core duties – even if the Federation Secretariat or ERUs request otherwise.

At the time of the Review, the Logistics and relief ERUs were integrated into the Federation in Bam.

5.4.7 American Relief ERU

This was the first official deployment of a Relief ERU. The deployment order was signed on 1st January 2004. The ERU's responsibilities included: the distribution of relief supplies in coordination with the IRCS; Federation non-food item distribution reporting; coordinating with other organisations in the relief sector; and support to the IRCS in displaced persons camps. These tasks seem to have been well managed by the Relief ERU.

2,000 tents were imported from Federation stocks in Iraq where they had been placed in case of a refugee crisis following the Iraq War. These tents originally came from the IRCS factory in Iran. The Federation Iraq operation will recharge the Bam operation budget some \$200,000. On reaching Iran the import of these tents was delayed by the authorities. The Iraq Programme Manager has received no notification of the receipt of these tents in Iran.

Distributions of relief goods were organised by the IRCS. Federation relief goods were distributed in coordination with the IRCS IAD, according to requests coming from each sector of the city. The Relief ERU proved effective in reporting Federation distribution activities and worked well with the IRCS. The link with the Logistics ERU proved crucial in tracking goods to their final destination. The Relief/Logistics ERUs were successful in providing full reporting for the goods they handled through the Federation logistics mobilisation system. The Relief ERU worked alongside individual IRCS sector leaders in the town and made a substantial effort to reconcile IRCS distribution figures, though with only partial success.

From the middle of January, the Relief ERU team leader chaired a weekly interagency sectoral meeting for relief and food supply distribution³⁷. By the end of February both the Logistics and Relief ERUs were integrated into the Federation operation.

5.4.8 ERU Hand-Over

In mid-February, the Federation Secretariat ERU Officer visited Bam in order to prepare a phase out plan for the ERUs. Both the IRCS and the Iranian Government have been keen to see the number of expatriates working in Bam reduced³⁸. Due to sensitivities over the handover of the hospital and continuing staffing difficulties for some other ERUs, handover arrangements have not been straightforward. It seems likely that the handover processes will have been completed more or less within the three month standard lifespan for ERU deployments³⁹.

5.5 Federation Appeal and Reports

On the day of the earthquake, the Federation launched a Preliminary Appeal for CHF 15,409,300 to support 200,000 beneficiaries for six months. There was a quick and generous response to the Preliminary Appeal, which was almost fully funded by 8th January 2004 when the Revised Appeal for CHF 51,903,000 was launched to support 210,000 beneficiaries for 6–8 months. The Disaster Relief Emergency Fund (DREF) was not used.

At the end of February, Appeal coverage stood at 52% (22% in cash – CHF 11,562,762 and 30% in kind and services – CHF 15,708,584), with outstanding needs of CHF 23,647,413. The graph in Appendix 9 shows the progress of fund raising against the Appeal⁴⁰. Pledges to the Appeal have come from more than forty countries. National Societies which do not traditionally participate in Federation Appeals did so in this case, making both cash and in kind donations, including Saudi Arabia, UAE, Qatar, and Malaysia Red Crescent Societies.

The Revised Appeal document presents a comprehensive set of objectives and activities. (Appeal objectives are summarised in Appendix 9). However, the

³⁷ According to the IRCS they attended these coordination meetings, but according to the Relief ERU they did not.

³⁸ The IRCS expectation was for about 6 expatriates to remain in Bam and a similar number in Tehran.

³⁹ According to an update (3.4.04) from the Federation representative in Tehran, a new MoU had been signed for the hospital, together with the Austrian WatSan ERU, the Japanese RC had handed over to IRCS, while the German, Spanish and Swedish RC ERUs will have handed over in early April, with the Federation team leaving the compound and moving to offices in a hotel. At the same time, the IRCS was working on a Phase-in Plan, in order to take over from the Federation.

⁴⁰ The Appeal funds have been divided into five codes: the Bam earthquake operation, ECHO, Psychosocial Programme, Replenishment of relief stocks, and OPEC.

scope for evaluation of Appeal activities is limited as the Federation is yet to adopt a standard Logframe approach for Emergency Appeals, whereby objectives and activities are set alongside indicators, risks and assumptions. The eight Operations Updates released in the Review period have documented the progress against the Appeal fully and regularly, though slow delivery of information by the IRCS has been a frustration for the reporting delegates.

A donor meeting was held in Iran on 18–19th January 2004. This was hastily organized, but seems to have been both informative and productive in terms of a further release of funds to the Appeal. On January 20th the delegates made a field visit to Bam.

Fund raising for the Appeal now seems to have stalled at roughly the 50% mark, and may not increase significantly from this point as National Societies turn their minds to the recovery phase, with an emphasis on bilateral funding. As in the past, some National Societies have sought to avoid the Federation Programme Support levied on any donations given through the Federation Appeal⁴¹.

The preliminary and revised appeals are somewhat contradictory on the question of rehabilitation. The preliminary appeal includes rehabilitation, stating that in the light of past experience with earthquakes, “the longer term needs will be considerable (housing, shelter, and school construction, rehabilitating water lines etc)”. However, the revised appeal does not include rehabilitation objectives but instead, in addition to emergency needs, focuses on disaster preparedness, especially re-equipping the IRCS and capacity building for the IRCS and for communities.

It was reported that, as of the end of February, some National Societies still retained millions of additional dollars in funds raised in response to the earthquake which were not channelled into the Appeal, even though this is still only half funded. At the time of the Review visit, a new round of bilateral RC/IRCS assessment missions was beginning with a view to planning the use of the outstanding funds on a bilateral basis, with the IRCS welcoming all such missions^{42,43}.

As the graph in Appendix 9 shows, income to the Appeal came close to its peak at almost the same time as the Revised Appeal was launched. This seems to illustrate that National Societies prefer to fund longer term rehabilitation work bilaterally. At the time of the Review, the CHF 11.6 million cash income component was only 25% utilised but planning was underway for its full utilisation. There may be an argument for the Appeal to focus on emergency funding, to be followed by a more detailed Rehabilitation Plan to which National Societies could contribute on a multilateral or bilateral basis⁴⁴.

Some European National Societies have been successful in raising funds from ECHO funding for programmes which will be implemented in the reconstruction/recovery phase alongside the main Appeal. The question was raised as to whether ECHO funding to RCs promotes bilateralism, as these funds do not go through the Federation.

⁴¹ This has involved them in some interesting semantics, for example: “We are responding to the Appeal, but not through the Appeal”

⁴² Both the IRCS and the visiting National Societies expect the Federation Head of Delegation and the Bam Operations Team to coordinate these visits and provide all transport, travel, hotel and camp accommodation.

⁴³ The confusion between the mixed roles as manager of the multilateral Appeal and the facilitator/coordinator of bi-lateral programmes needs further review beyond the TOR of this Review. The IRCS would prefer there to be one coordinated and managed Appeal, led by the Federation Secretariat, but this cannot work where the IRCS makes bilateral agreements with National Societies without the full participation of the HoD and the Geneva Secretariat.

⁴⁴ This is only a tentative suggestion to which no firm recommendation is attached. This is a complex discussion which should be more fully explored in the wider review of Federation emergency responses planned for later in 2004.

5.6 Federation Media and Communications

The Federation and individual National Societies despatched a total of 16 media delegates to Bam. A Media/Information Delegate from the Regional Delegation was included in the FACT, arriving on 28th December. The Operations Manager in Geneva decided that the profile of the emergency required the Federation's media presence to be strengthened and asked the Head of Communications from the Geneva Secretariat to go to Bam, where he was based from 31st December until 11th January. After the launch of the Appeal on January 8th all the media delegates gradually left, leaving one Federation Audio-visual Delegate and one Reporting Delegate. An Information Delegate arrived on January 17th for a six-month assignment and has produced web stories and audio-visual materials in cooperation with the IRCS.

During the first two days of her posting the FACT Media/Information Delegate was located in the IRCS building, and was able to attend the IRCS crisis meetings. However, when she moved to the Federation compound, this flow of information stopped. Two media coordination meetings were organized by the Federation for Federation and RC media delegates. There was an efficient and informal media sharing process between the delegates.

The team of Media Delegates was able to communicate in 12 languages, including Arabic, Urdu and Hindi, which helped to keep the international community up to date on events and assisted National Society fundraising. Federation Delegates made every effort to focus attention on the work of the IRCS. However, the IRCS do not consider that their operation was adequately represented by the Federation.

The Revised Appeal included an objective to: "Advocate with relevant actors on behalf of particularly vulnerable groups, to ensure their needs are met." Given the lack of differentiated information on vulnerable groups, it is hard to see how this commitment could have been fulfilled.

During the early days the Federation press releases focused on the facts and figures related to the operation. UN reports were used as an authoritative source for statistics. Later, the emphasis shifted to human interest stories. The Federation and RC conducted more than 1,000 interviews in total between Geneva and Bam. Federation organised interviews with foreign media are listed in Appendix 10. The magazine "Bam is still Alive" was produced at the end of February for media and donor information and for use by the Federation MENA regional conference in Bahrain.

The most visible sign of the Federation presence was the field hospital, which attracted most of the media attention. Other ERUs achieved media coverage because individual National Societies sent their own media delegates. The high media profile was reinforced by the visits of Princess Rania, Prince Charles, the Federation President, the EU Commissioner for Humanitarian Aid, and the EU High Representative for Common, Foreign and Security Policy.

The IRCS Head of IAD was the media counterpart and the only person authorized by the IRCS to speak to the international press. This added to the pressure on him and, in future, it would be useful for IRCS to authorize and brief additional spokespersons. After his departure the Federation no longer had a media counterpart.

An issue arose over access by media delegates to the hospital. The Director of the hospital felt that patients' privacy had been violated in the search for media stories. There is need for such information but also limits to the invasion of patients' privacy. Guidelines for the access of media personnel to medical hospitals or clinics would be useful.

5.7 Federation Telecommunications

There was no need for a telecom ERU in this operation but telecom delegates have been attached to the FACT and Federation operation in Bam. The Iranian Government gave permission to the ERUs to bring satellite communications equipment into the country. VHF frequencies were also authorized. Telecommunications was not a problem during this operation and the Federation received excellent support from the IRCS, which is highly competent in this area, having benefited from workshops run by the Field Support and Telecommunications Unit in Geneva. The Federation had continuous internet access via satellite and, for the first time, used wireless networking within the Federation compound. Because of political and administrative issues, the Ericsson GSM Emergency System could not function.

A two-week gap between the first and second telecom delegate was filled by a French RC ERU telecom delegate, who was paid for by the Federation for this period. Given the importance of a stable, functioning telecommunications system in such an operation, the Federation should strive to eliminate gaps between telecom delegate assignments.

5.8 IRCS Counterparts

This was a major issue for all ERUs. This operation was new territory for both the IRCS and the Federation as Iran had not received external international input on this scale previously. ERU teams have no experience working in the Iranian context and the IRCS was unprepared for the level of demand for counterparts.

During the Review, frequent references were made to difficulties caused by the turnover of counterparts and the lack of handover between them. A typical rotation period was 2 weeks. It is not culturally acceptable for people to be away from their families for long periods, especially for women. It therefore represents something of an achievement that the IRCS has been able to provide so many volunteers and counterparts. Even so, the National Society has recognized that systems for counterpart staff need to be improved. The Federation has not questioned the quality of counterpart staff, whose professionalism has been appreciated. Rather Federation concerns focus on availability, turnover, handover and the period of rotation.

For the majority of volunteers, a 2-week rotation period is quite acceptable if there is a senior IRCS member of staff overseeing and briefing them, and ensuring that there is a continuous, standardized level of service. If rotation periods are made longer, volunteers may become discouraged or may not volunteer in the first place. The spirit of volunteerism is a Fundamental Principle of the Movement and needs to be maintained.

However, a rapid turnover of senior sector and HQ staff working in the field was problematic and caused disruption and confusion within the operation. It is therefore recommended that the IRCS identify a group of perhaps 12-15 experienced individuals who can be posted into emergency operations for a period of at least one month⁴⁵ rather than the current two weeks, and in such a way that handover between them can be assured. A small body of experienced personnel would be sufficient to fill the vital leadership positions. With longer rotations for management staff, the majority of volunteers could continue with their normal rotation periods without disruption of the work. At the same time, the IRCS needs a set of operating procedures for relief management to ensure their managers follow a consistent approach in the field.

The Revised Appeal included some fairly ambitious targets for training and skills transfer as a result of IRCS counterpart staff and volunteers working with the ERU teams. For example, training sessions on watsan, field hospital and primary

⁴⁵ with short breaks for rest and recuperation

health care were to be conducted before the handover of ERU equipment. It is unlikely that these targets will be met although there is still time for training to be conducted before the operation ends.

5.9 Federation Temporary Staff

The ERU teams tried to solve their staffing problems by hiring local staff, but reported that initially they were not permitted to do so by the IRCS, as the Federation has no legal status in Iran. According to the IRCS, no restrictions were imposed other than the need to follow local labour law. The IRCS itself is limited in the ways it can contract casual labour. Working through an employment agency, 12 staff have been employed somewhat belatedly to assist the water and sanitation ERU teams but, at the time of the Review, had yet to report for work. It is hard to escape the impression that, had the IRCS seen these ERUs as a high priority, the staffing situation would have been resolved more quickly.

The legal status of temporary workers employed on a daily basis by the Federation has not been resolved. At the end of February, the Federation had 150 local staff employed by the Federation as cooks, drivers, guards and cleaners. No one was clear whether the Federation is legally covered in case of accident or any form of industrial dispute. Furthermore, once these employees have been with the Federation for a period, local labour law may make it difficult to dismiss them.

5.10 Federation Finance and Administration

In the first month of the operation, the Federation experienced cash shortages. The Logistics ERU took \$20,000 in cash, which acted partially as a float for the Federation. The finance function was performed by the British/Danish RC Logistics ERU for the first 6-7 weeks. The Tehran delegation provided additional funds which were carried to Bam by the Federation President on his way to the joint launch of the Federation and UN Appeals.

The FACT did not include a finance or administration delegate. The Finance Delegate arrived on Jan 24th, which was far too late. It is essential that such delays are avoided in future.

The Federation and the Norwegian Red Cross supported each other through cash flow problems by lending each other cash at various stages. Up to the end of February, the British RC has generously covered Federation expenses of \$12,000⁴⁶. The first cash from Geneva arrived with a delegate on February 6th. The Federation eventually set up a US Dollar bank account in Kerman with assistance from the delegation in Tehran and two transfers totalling \$500,000 were sent from Geneva. Only \$28,000 had been spent in Bam by the end of February.

For the most part, the ERUs were financially independent and did not discuss their money situation with the Federation⁴⁷. The Finance delegate questioned whether it was efficient for all ERUs to be running their own finance and administration functions but as the Federation Secretariat did not provide any such function, the ERUs had little choice. In any case, the current SOPs for ERUs require them to be financially self-sufficient.

At the time of the review visit, two months after the Appeal, there was still no Operations Budget. The budget holder was the Head of Operations in Bam. According to Federation procedure, an operational budget should be approved at latest one month into an operation. Cash requests were by-passing the normal

⁴⁶ This was partially a pragmatic decision, as the BRCS, having maintained the books for some weeks found it difficult to separate BRCS from Federation expenditure

⁴⁷ The Logistics ERU and the FACT did discuss and support each other in overcoming their cash flow problems

approval procedures in the absence of an agreed budget. In operational terms, an Operations budget was not needed until the reconstruction phase, which was due to start shortly after the Review visit.

A Federation Administration delegate arrived in Bam on January 21st. She had no TOR and was provided with a very general job description two weeks after arrival. The delegate had HR but not administration experience, but could not be appointed as an HR delegate as this was her first mission. At the time of the Review, the Admin delegate in Bam was due to move to Tehran.

5.11 Human Resources

ERU Human Resource issues were handled by the ERU Officer based in Geneva. Given the number of ERU delegates in this operation, this proved unrealistic. A Federation Human Resources delegate arrived in Bam on 14th January. The Review team considers that this was too late as the HR function for a team of some 120 delegates is important. The HR delegate was able to handle personnel problems in the spot. Although provided with a TOR, the HR delegate does not feel that she has been given a clear definition of tasks. She carved out an important role as a listening ear and as a facilitator of relations between ERU teams, especially from the second month on.

Within the Federation compound, ERU teams tended to live separately. Newcomers were not officially introduced to the rest of the expatriates. The Federation has missed a training opportunity by not bringing about more exchange between doctors, nurses, logisticians, water and sanitation engineers etc.

At the beginning of the operation, delegates were hampered by a lack of sleep and proper hygiene facilities – hardly surprising given the chaotic situation and the lack of basic equipment for some delegates. There was a general shortage of transport and translators, the latter remaining an obstacle on and off during the operation.

Contacts between IRCS personnel and delegates were limited with regard to day to day work and very limited on a social level. Many delegates were limited to the camp, especially the hospital staff, and they took few opportunities to visit the town, partly for security reasons.

The quality, cost and timing of meals provided in the Federation canteen was a cause of concern, especially at the beginning. The canteen was underutilized because of the preference of some delegates to eat elsewhere, which is regrettable, as this could have been a point of greater social contact⁴⁸.

Surveys by the region PSP delegate from Amman amongst the delegates showed that a minority were suffering from work related stress. Some delegates were clearly burned out but were still working in Bam and it was not quite clear why they had not been withdrawn by their respective National Societies. The role of the Federation HR delegate in advising whether delegates should be withdrawn is currently ambiguous.

Many delegates arrived in Iran without any awareness of Iranian culture and norms. While the dress code for women was emphasized, there appears to have been no briefing on wider aspects of culture – something the Federation should bear in mind for future operations.

Two RDRT trained staff from the Regional Office were deployed during the early part of this operation but the RDRT did not play a significant role. It was not

⁴⁸ To some extent, differences in taste and cuisine might have resulted in country teams eating separately anyway

made clear in the review whether this was because the RDRT is not fully developed at the regional level or because it was not adequately factored into the planning for this operation.

It is possible that the functions of HR and Administration could be combined into the job of one delegate. At the time of the Review the HR delegate was carrying out administrative tasks while the Admin delegate was due to be transferred to Tehran.

The Head of Operations introduced regular meetings for ERU Team Leaders in order to ensure proper coordination of activities. These were attended by the IRCS. Holding a meeting of all delegates would clearly have been difficult, especially when there were 120 delegates on site. However, an effort should be made to involve all delegates in briefing sessions.

The Review team had a clear sense that many delegates did not understand what other teams were doing, and had little knowledge or exposure to the operations of the IRCS. Previous reports, even from predecessors in the same ERU, seemed to be absent and the context and reasons for earlier operational decisions were sometimes not understood.

The performance of ERU team leaders in these functions was patchy in this operation. ERU training should address these issues more fully in future. The ERU team leader is not only a technical head but takes responsibility for his/her team members. There should be a particular obligation on ERU team leaders to:

- Ø Ensure that the hand-over to their successor includes briefing on the Federation operation as a whole
- Ø Monitor ERU team performance and act where performance is poor or when delegates are exhausted to allow them R&R or send them home
- Ø Brief team members on key information from Federation delegates, the National Society and other ERUs
- Ø Ensure team members know and follow security guidelines

In some cases, ERU personnel deployed in the first rotation did not have prior emergency experience. In the view of the review team, this should be avoided as far as possible, as the early and often chaotic period of an emergency response requires the most experienced personnel to be on hand. Delegates with no prior experience should be deployed in second or subsequent rotations to gain the experience which they can use in the first rotation in future emergencies.

This does represent a challenge for deploying RCs, as their stand-by rotas may not contain sufficient experienced staff. The numbers of inexperienced staff being deployed and the inappropriate expectations of some delegates in terms of the technical levels at which they expect to operate⁴⁹ indicate that some deploying National Societies do not have enough experienced staff on their rosters.

This points to a need for a wider net of candidates to be developed, either through further collaboration with other deploying RCs, or through better use of the FACT and RDRT registers for deployment of experienced staff within individual ERUs, rather than relying just on the staff working within the deploying RC. For these registers to be internationalised, the use of staff in ERUs from National Societies other than the sending RC will need further consideration.

5.12 Camp Management

It is unusual for the Federation to set up a compound of the scale seen in Bam where, at one stage, there were more than 120 expatriate delegates living on site. The camp was established thanks to coordination between the Relief, Logistics, Watsan and Japanese ERUs, with assistance from the IRCS Hamadan

⁴⁹ including both over or underestimating the technical competence of local personnel

Branch, to create the first fully serviced compound in Bam⁵⁰. At the time of the Review visit the compound was well organized.

At the beginning of the operation a FACT member in charge of logistics and relief was obliged to focus on building up the camp. He purchased equipment from the Danish Civil Defence Rescue Team on its departure⁵¹. The Federation Camp Manager arrived somewhat late, with no job description and without funds and had to turn to the Logistics ERU for financial support.

Either the Federation will need to provide itself with the necessary staff and equipment ready to be flown to a disaster area or, given that the need for such a compound is rare, decide that stand-by capacity emergency capacity for compound management is not required.

5.13 Compound Security

A delegate from the Finnish ERU was given responsibility for security in the Bam compound on or around January 10th. Several security incidents in and around the Hospital/Federation compound were reported to the Head of Operations, including:

- Ø Thefts
- Ø Unknown people wandering in the compound including at night
- Ø Strangers taking photographs and looking inside tents
- Ø Soldiers walking around inside the compound
- Ø Throwing of stones at delegates
- Ø Female delegates being shouted at from the military post close to the compound

Fences were erected on the perimeter of the compound but some expatriates still felt unsafe. Security guidelines were developed and issued by the Head of Operations but, at the time of the Review visit, most of the delegates interviewed said that they had not received security guidelines, even though a set was issued to the Review team on arrival in Bam. Future ERU trainings need to reemphasise the need to follow security guidelines. With the scaling down of the Federation operation, and a possible move to hotel accommodation, the security situation should improve, though the city is unlikely to be fully stable for some time to come⁵².

6. COORDINATION

6.1 The National Society and the Federation

The communication and working relationship between senior levels of the IRCS and the Federation were reported to be excellent. On the ground, the two parties both made an intense effort to communicate and coordinate their activities. The operations ran in parallel, with the Federation coordinating international RCRC input, and there was little overlap between them, especially at the beginning of the operation.

In general, Federation personnel were not involved in IRCS activity. There has been an increasing level of participation by the IRCS in the ERU Hospital and Clinics. There has been some joint working on relief, sometimes directly with the

⁵⁰ The IRCS was unhappy to see that, at first, the Red Crescent was not displayed in the compound while other NS logos were on display.

⁵¹ a condition of the purchase of the DEMA camp unit is for it to be repatriated to Denmark and, on behalf of the Federation, be refurbished and prepared for future rapid deployment.

⁵² During the review mission, there were several indications that the population of Bam is not happy with the provision they have received from the authorities. The large influx of outsiders into the city since the disaster, and the prospect of having to spend the hot summer in tents or temporary buildings with poor insulation are contributing to their discontent and the security situation remains far from settled.

IRCS staff supervising individual sectors in the city, and the Federation and IRCS have work together on PSP and health assessment. These are the exceptions.

Working relationships have not always been easy. Having separate offices and compounds has hampered effective communication and collaboration. IRCS officials have made frequent visits to the Federation compound, but have not always felt themselves to be seen as valued partners. The Federation twice set up an office for the IAD in the Federation compound but felt that this was ignored by the IAD. Federation personnel have not been invited to internal IRCS coordination meetings, despite frequent requests to be allowed to do so.

The Federation operation in Bam has been managed directly from Geneva, bypassing the country delegation in Tehran. This is the norm for such operations. However, the Federation command structure has not matched that of the IRCS which has centralised decision making in Tehran⁵³, not in Bam. As the decision makers for the two parties were not located in the same place, this hampered communication and decision-making.

From an IRCS perspective, the Federation was (and is) in Bam to support the National Society. In mounting an emergency response in Iran, the IRCS does not see the Federation as an equal partner⁵⁴. From an IRCS perspective, it has provided more support to the Federation than the other way round.

The IRCS appears to have held the Federation, 'at arms length', seeing its work as largely separate. The work of both parties could have been enhanced if there had been a much closer integration, so as to make best use of their respective expertise and resources. However, given the lack of joint working in the past and the general suspicion of foreigners, scope for such integration was always going to be limited in this case. An attempt to integrate operations at the outset might have slowed down the emergency response. After the first two-three weeks, the work of international delegates and the IRCS could have been enhanced by closer joint working. The IRCS was unfamiliar with Federation emergency deployments and ERUs in particular, while Federation delegates were not well-informed about the capacity and mode of operation of IRCS.

Planning for further integration of IFRC/Federation activities should be considered as a future goal. One options is to deploy ERU and other trained delegates within an IRCS operation, rather than deploying ERUs as standalone units. The ERU sending RCs would have less profile in this way but perhaps add more value through skills transfer to the IRCS. This would require a higher level of cooperation and openness on all sides than in this operation.

6.2 With Government

The roles of respective government and other authorities in disaster response are set out in the 2003 IRCS Comprehensive Disaster Response Plan⁵⁵. The overlap of mandates between ministries is not part of this review but is raised here because the difficult relationship between the IRCS and the MOH in particular lay behind ERU staffing and handover problems, some of which were not resolved by the time of the Review.

It would be appropriate for the IRCS to propose to the government how, in future, it will be able to clarify its responsibilities in disaster situations in relation to the MOH, the Ministry of the Interior (including BAFIA), the Ministry of Foreign Affairs, the Army and the provincial authorities, so as to reduce overlap and competition. The experience of the Bam operation has shown that, whatever the

⁵³ Although in some respects the structure is decentralised

⁵⁴ This is reasonable given that the total Federation contribution to the emergency is less than 10% of the IRCS response to date

⁵⁵ This was only available in Farsi but is being translated by the Secretariat

respective roles of these authorities as set out in the Comprehensive Disaster Response Plan, these arrangements are not yet fully functional.

6.3 With the UN and international community

In the early days of the emergency, the IRCS considers that the UN teams were not proactive enough in their response, but their performance was said to have improved later on⁵⁶.

In the early weeks of the emergency, cooperation between the Federation and the UN was reported by both sides to have been very good and built on past cooperation and joint training exercises. This close cooperation allowed the first ever joint launch of IFRC and UN emergency appeals in Bam on January 8th.⁵⁷

An interpreters' tent was established at the UN compound with multiple languages available to international teams. This served foreign teams well for the first two weeks, after which volunteer translators left Bam. From then on, it was up to teams to hire translators, as some of the ERUs did.

Many international agencies did not understand the position or mandate of the IRCS within Iran, and perhaps still do not. The IRCS expressed an expectation that the Federation would be able to improve not just RCRC coordination mechanisms but all international coordination between the IRCS and international actors in relief and rescue. The IRCS sees that the Federation is well placed to play this role because of its position and its contacts and knowledge of international humanitarian community. How far this is possible should be discussed between the parties.

6.4 Coordination of NGOs

The UN had the primary coordination role for international NGOs, while all relief distribution was coordinated by the IRCS. The IRCS International Affairs department worked extremely hard to coordinate NGOs and overall succeeded in making these partnerships work. Difficulties arose over the IAD being too busy to talk to all incoming NGOs and with the IRCS coordination of NGO relief distributions, as discussed above.

NGOs arriving in Bam found it difficult to know who was in charge. The command structure within the authorities was far from clear, although the Bam Task Force had been established very early on. Far from there being no one in charge, the problem was the opposite – all authorities claimed to be in charge at first. This was confusing for NGOs.

The IRCS was impressed by the dedication and professionalism of some NGOs, much less so with others. The IRCS was concerned about the poor quality of relief goods imported by some NGOs and felt that they made promises they were then unable to keep. Some appeared to be more taken up with their own publicity, rather than collaborating fully with the IRCS. Some NGOs had to be supported by the IRCS with tents and food. The IRCS may want to consider with the Government whether in future an open-door policy allowing all comers into the country is the best policy or whether there should be some form of screening of NGOs.

⁵⁶ While outside Review TOR, informants from international agencies did not generally seem to have been impressed with the performance of the UN in its coordination role. At the time of the Review visit the usual medical advisory/coordination role played by WHO did not appear to be happening.

⁵⁷ UNDAC had a much larger assessment and coordination team than the Federation. This benefited the FACT in as far as information gathering was concerned but also illustrates the difference of approach to assessment and coordination. It is not suggested that the Federation needs a team of 21 people, as with UNDAC, but it is notable that the work of the UNDAC, backed by the UN Country Team, resulted in the UN launching a far smaller appeal than the Federation

NGOs reported that even when camps were oversupplied with relief items, the people still demanded more and that coordination between NGOs themselves was inadequate. Security was a problem. One NGO reported seeing items 'walking away from warehouses' and were obliged to employ their own guards until the authorities took action to improve security.

7. DEVELOPING IRCS DISASTER MANAGEMENT

7.1 Disaster Response Capacity

As will be evident from the Review findings above, the Iranian Red Crescent has an enormous disaster response capacity. The IRCS has almost 7,000 staff distributed across its 28 provincial and 320 local branches and in its Tehran headquarters. It has 2 million volunteers (aged 29 and over) who contribute to the organization through giving their time and expertise and, in some cases, paying a subscription. In addition, there are 1.3 million youth members, mainly students. (Students were mostly involved in this operation on 3-4 day rotations within air operations. Volunteers tended to be on rotations of 2 weeks.)

The IRCS is obliged by its mandate to maintain a capacity to respond to disasters affecting 1% of the population, ie 700,000 people, for a period of one month. The IRCS holds a stock of some 120,000 tents and 700,000 blankets distributed across the country in 14 provincial warehouses and at the Relief and Rescue Organization headquarters in Tehran. A computerized warehouse management system links the warehouses. The IRCS has a very good HF communication network between headquarters and its branches.

The IRCS is well connected to, and strongly supported by, the Iranian Government. The IRCS derives its income from government grants, a small % of general income tax, income from rents and other assets, and from public donations. It has a mandate based in law to respond to emergencies and acts as the chair of the Rescue and Relief committee. All other government departments are obliged to help the IRCS, which plays a coordination role and is held accountable.

The Bam operation has utilized well over 50% of the entire stock of the IRCS, part of which will be replenished from the Federation Appeal funds. (Details are being negotiated between the Federation and the IRCS). The Appeal included a figure of 50,000 tents for replenishment, which seems reasonable, given that this number would have been required in the Bam operation using any assessment measure. The IRCS has its own production facilities for tents and blankets. At the time of the Review, it was re-stocking tents from its factory at a rate of 600 tents per day.

7.2 IRCS Structure

The IRCS is structured into five organizations: Relief and Rescue, Health and Treatment, Youth, Volunteers, and the International Affairs Department (IAD).

All communication with international organizations, including the Federation, passes through the IAD but IAD does not have decision making powers in operations. In the Bam context, having to communicate through IAD has tended to slow down decision making and dilute the communication between the Federation and the Relief and Rescue, and Health and Treatment Organisations, who are the implementers of the IRCS operations in Bam.

The IRCS considers that "all key IRCS departments were in the field (Relief/Rescue, Treatment department, Logistics, and Finance), and Federation

(personnel) were given the chance to have full access to them"⁵⁸. The majority of delegates interviewed disagreed strongly with this and felt their access to other IRCS departments, especially the Relief and Rescue Organisation, was often restricted at field and HQ levels, thereby restricting the development of technical counterpart relations.

Federation and IRCS perspectives on this point differ significantly, while both parties recognise that the IRCS and Federation should establish more direct links between Federation Operations personnel and the implementing organisations of the IRCS.

7.3 Constitution and Mandate

From 2000 on the IRCS negotiated a change in the terms of its mandate with the Government. After some years of discussion, a new constitution was agreed in May 2003. This reinforces the IRCS national mandate for disaster response, re-establishes its role in the provision of emergency medical services and makes the IRCS a non-government body⁵⁹.

Before the revolution the IRCS had 600 clinics and hospitals with 16,000 beds. These were ceded to the Government after the revolution. The IRCS is re-establishing its medical services and is taking steps to reclaim its former hospitals. As a result of the change of IRCS mandate, the relationship between the IRCS and the MOH has also changed. The experience of the Bam earthquake has shown that the working relationship between the two is difficult.

The Secretary General has acknowledged that the IRCS does not have all the instruments to be able to implement fully its part of the Comprehensive Disaster Response Plan. This provides scope for the IRCS and the Federation to work together to develop the National Society's capacity to meet its revised obligations.

7.4 Building IRCS Disaster Management Capacity

The Bam operation has confirmed that the IRCS is able to mount a very substantial relief and rescue operation. It has also highlighted deficiencies in its management systems and its internal communication. The Review team was not shown any plan for the development of IRCS disaster preparedness or response capacity either by the National Society or the Federation. (At the time of the Review, an assessment of health capacity building needs was underway.)

The Bam operation has highlighted the following capacity building needs. This list could be used as the basis for a Disaster Management Capacity Building Plan:

- Ø Information and reporting systems, especially with regard to reception, warehousing, distribution and reporting of relief items.
- Ø Disaster risk mapping, working with other specialist institutes in Iran.
- Ø The preparation of training manuals for volunteers and a clearer delineation of roles for volunteers in emergency situations so they can become effective more quickly.
- Ø Additional stocks of equipment are required for the personal support of volunteers working in emergencies.
- Ø Search and Rescue capacity - including additional sniffer dogs and sensing equipment.
- Ø Camp management – while the IRCS has long experience of camp management, some staff indicated that their management approach was not systematic enough.
- Ø Medical triage

⁵⁸ IRCS response to the first draft report

⁵⁹ IRCS Elections due for early 2004 were postponed because of the Bam earthquake

- Ø The development of Emergency Response Units appropriate to the Iranian context, including an ERU field hospital⁶⁰, with ERU medical training courses to be held in Iran.
- Ø While the IRCS has 7,000 staff and perhaps 200 with foreign language skills, only two people have been FACT trained. The IRCS would like to increase this number.
- Ø Emergency management by Relief and Rescue needs to be further decentralized to Heads of Provincial Branches, allowing them to respond effectively, without recourse to Tehran, thereby speeding up disaster response.
- Ø Training on standard operating procedures for dealing with the international media has been identified by the President of the IRCS as a need, and the Federation Media Delegate has already started work on this area.

The IRCS/Federation Joint Recovery Assessment conducted during the review period also identified IRCS capacity building priorities, some of which overlap with the list above. These included:

- Ø Improved disaster management capacity, including: risk mapping, rapid assessment, reporting and monitoring
- Ø Initiate water and sanitation training and education and training
- Ø Build and activate the orthopaedic service centre
- Ø Carry out earthquake preparedness campaign
- Ø Increase disaster preparedness warehousing and urban search and rescue capacity

Faced with a cataclysmic event where a full 700,000 people would need assistance, the Bam experience has shown that the IRCS response, medical, logistics and reporting systems would not be able to cope – indeed it is not certain that any agency anywhere could do so. A disaster on this scale is a real possibility in Iran because of the series of tectonic faults which run close to Tehran. Any support the Federation can give the IRCS in improving its readiness for a major catastrophe would represent a sensible use of the funds remaining either from the Appeal or still held by National Societies.

7.5 Disaster Risk Reduction

In the past, disaster-related policies in Iran have largely focused on emergency response, and less on natural hazard prevention and mitigation.

The IRCS sees a role for itself in education of citizens in disaster prone areas, but it does not consider that it has the prime responsibility for such education under its mandate. However, it would be useful for the IRCS to continue to be engaged in such activities. In the recent past, five provinces in Iran have implemented a programme of Self-Help Relief with support from the German Red Cross, the aim of the programme being to train citizens in disaster reduction.

The main reason for the very large number of casualties in Bam was the poor quality of housing. In order to reduce the number of casualties in future earthquakes, the number one concern for the authorities should be the application of the building codes that already exist in Iran but which have not been applied in Bam.

The IRCS is not responsible for, nor expert in, such codes, but could well involve itself in disaster risk assessment, identifying areas and communities where earthquake risk and poor housing construction coincide, working with these communities to educate them on risk reduction, and lobbying for better building techniques to be used.

⁶⁰ IRCS personnel also expressed an interest in developing an “environmental sanitation ERU”. The Review team did not capture the full details of what was intended by this

8. ASSESSMENT BY EVALUATION CRITERIA

<i>Criteria</i>	<i>Assessment</i>
Efficiency in the use of inputs to create the desired outputs	<ul style="list-style-type: none"> Overall, IRCS and Federation resources employed well Not all IRCS volunteers were able to make an adequate contribution because of materials/defined roles Some theft and loss of relief goods and inadequate IRCS logistics Some loss in efficiency in coordination as IAD was overstretched dealing with influx of foreign agencies Cash flow and equipment problems hindered FACT
Cost-effectiveness in obtaining inputs at the best cost-cutting and them to best use	<ul style="list-style-type: none"> ERU deployments provided services not available from the IRCS, while unit costs of ERUs are higher than corresponding IRCS operations Too many watsan ERUs were deployed Appeal was only 50% funded and cash portion of pledges underutilized as at end February
Effectiveness, including timeliness, in activities achieving their purpose	<ul style="list-style-type: none"> IRCS was very quick to reach the disaster area and start work ERUs arrived in good time, despite slight delay in request for deployment Federation warehouse erection took too long Some delay in assistance to outlying villages
Relevance of activities to the local needs and priorities	<ul style="list-style-type: none"> Relevance to life saving and the provision of shelter Assistance provided in all sectors was appropriate (except water treatment) IRCS and Federation responsive to expressed needs of people and authorities
Connectedness, of the short-term emergency measures to longer-term approaches.	<ul style="list-style-type: none"> At the time of the Review, the connection to future rehabilitation was still being planned ERUs already or being handed over to IRCS (This area needs further review in main evaluation)
Coverage of the major population groups facing life-threatening suffering	<ul style="list-style-type: none"> IRCS and Federation provided the greatest assistance of any organization to the largest number of beneficiaries. All beneficiaries received assistance via coordinated effort of national and international agencies IRCS registration covered the whole area, though support to outlying villages was slower than in the city Federation ERU hospital and BHCUs provided assistance alongside many other agencies
Coherence between the measures adopted and any agreements between the Federation and the IRCS, and the policies of the Federation, specifically the Red Cross Red Crescent Code of Conduct and the Sphere Standards	<ul style="list-style-type: none"> Concerns were expressed that some delegates did not behave according to the Code of Conduct Sphere standards in shelter and water were upheld or exceeded IRCS and Federation policy and procedures in disaster response need to be harmonised

9. RECOMMENDATIONS

The recommendations below have been developed by building on the learning points emerging from the review.

9.1 For Federation/IRCS Cooperation

1. Develop a capacity building plan for IRCS, with the Federation, with a view to the IRCS meeting its responsibilities under the Comprehensive Disaster Response Plan, taking in some or all of the following elements:
 - Ø Develop standard team structures and defined roles in disaster response for the staff and volunteers for provincial and local branches
 - Ø Improve information and reporting systems, especially with regard to reception, warehousing, distribution and reporting of relief items. (Federation systems can be used as a model)
 - Ø Introduce disaster risk mapping, working with other specialist institutes in Iran (for eg seismology and construction standards)
 - Ø Develop training manuals for volunteers
 - Ø Purchase stocks of equipment for personal support of volunteers and stocks of basic equipment for rescue work
 - Ø Increase the number of sniffer dogs
 - Ø Purchase sensing equipment
 - Ø Organise training in Camp Management
 - Ø Organise training in Medical Triage
 - Ø Organise training in FACT (and FACT methodology), ERU, DMIS, RDRT, and FRITZ (new Federation logistics tracking system).
 - Ø Establish a National Disaster Response team for deployment within Iran, trained to Federation standards, which at a later stage could form part of the Federation's regional disaster response capacity.
 - Ø Plan the development of an ERU field hospital and ERU medical training in Iran, as part of IRCS capacity building in emergency health (including public health, first aid and triage).
 - Ø Improve IRCS branch awareness of ERUs and their function
2. The IRCS and Federation to agree how future operations can be *integrated* rather than *parallel*, building on the mutual learning from the Bam operation. Ensure team leaders in operational roles (eg ERU team leaders and Heads of Branches/Zones) can work together directly.
3. The Federation structure in-country to reflect the National Society chain of command – where this is centralised, a senior liaison/management capacity is required at HQ
4. Jointly explore how the Federation can assist the IRCS to explain its mandate, capacity and development plans to the international disaster relief community.
5. Handover of water and sanitation equipment to include a joint inventory and a plan for items of equipment that need replacement before equipment can be reused in the next emergency – for example tank linings and bladders.
6. IRCS and Federation to agree on standard specifications for tents.

7. Identify representatives from the IRCS and the MOH to advise the Federation on appropriate levels of care for future hospital/clinic ERU deployments, should they be required, in consultation with an experienced local public health physician or a hospital medical director. (This same approach could also be used in other disaster-prone countries).
8. Ensure a briefing paper is prepared which can be given to foreign relief organisations, to a) explain the mandate and mode of operation of the IRCS and b) provide a cultural overview so that foreigners working in Iran can act appropriately and feel more familiar with Iranian society.
9. The IRCS to appoint a FACT trained member of staff as counterpart to the FACT leader in any future Federation emergency operation in Iran.

9.2 For the Iranian Red Crescent

10. Decentralise decision making in emergencies to Heads of Provincial Branches – this will require delegation of responsibility and the ability for one branch to call directly on others for assistance.
11. Prepare a statement for the Kerman donors meeting in April stating how IRCS intends to improve logistics systems and raise international donor confidence in IRCS ability to manage relief distributions
12. Modify the design of the registration booklet to improve information collection, targeting and minimising fraud. Consult the Federation on format, with American RC advice as from its ERU experience as required.
13. Be ready to take photographs of victims immediately after a disaster to help with identification and tracing, if government authorities are not doing so.
14. Work with the Government to resolve role overlaps between Ministries' roles which emerged during the Bam earthquake operation, especially in relation to: the Ministry of Health, the Ministry of the Interior (including BAFIA), the Ministry of Foreign Affairs, the Army, and provincial authorities.
15. Modify the counterpart system for working in Federation operations to allow for one-month rotations for a group of key counterpart personnel, while retaining the standard 2-week rotations for the majority of volunteers.
16. Ensure that air operations are serviced with flatbed lorries, not tipper trucks.
17. IRCS Rescue teams to learn how to target international search and rescue teams using specialist equipment to "objects" where people are likely to be found alive, so as to maximise the effect of international SAR assistance. (In addition to building IRCS SAR capacity).
18. Expand the number of liaison officers in the International Affairs Department able to deal with international agencies and speak on behalf of the IRCS. Introduce liaison officers, with language skills, into the Relief and Rescue, and Health and Treatment Organisations to ensure direct counterparts are available to work with the international delegates.

9.3 For the Federation

19. Make psychosocial assessment and activities a routine part of operations for natural disasters, with rapid assessment and early response, working with the relevant National Society. (A standard approach to PSP needs assessment is required).

20. Adopt a standard Logframe approach to its planning in Appeal documents, with objectives, activities, indicators, risks and assumptions fully set out, to allow better monitoring and evaluations.
21. Improve the communication material and methods concerning ERUs so that receiving National Societies are aware in advance of what might be expected from them in terms of counterparts, volunteers (and translators where required).
22. Reduce gaps in delegate deployments by earlier call up and standby arrangements, especially for second rotations.
23. Clarify the role of the Federation Human Resources Delegate with regard to delegates of the ERU National Societies.
24. Appoint a security officer to take a more proactive role in security, in case of a major Federation deployment, where a Federation compound is to be set up.
25. Encourage more interchange in the field between all delegates on a shared site, especially between disciplines, to increase learning and interest for all delegates, especially after the immediate crisis period (typically 14 days).
26. All FACT and ERU personnel in the first rotation to have had prior exposure to emergency operations and BTC, and one or more of ERU, FACT, or RDRT training (as per the SOPs).
27. ERU training should clarify and strengthen the role of the ERU team leader in information dissemination and team management.
28. Provide briefing materials for all National Societies in disaster prone countries where FACT and ERU might be deployed so that the host National Society is a) aware of the need to provide staff and volunteers from an early stage and b) agrees in advance to provide adequate human resources.
29. Aim to get a delegate with a mobile/satellite phone to the site of the disaster within 12 hours, latest 24 hours, and before FACT can arrive. This would ideally be a member of RDRT, or possibly a member of the National Society experienced in RDRT/FACT international assignments.
30. Clarify with the ICRC whether it is responsible for providing support to tracing in natural disasters and, if not, the Federation to include this within its SOPs for disaster response.

FACT

31. Introduce a standard package of personal and office equipment for FACT, held in stock for rapid deployment (with the DEMA FACT Camp Unit repatriated from Bam as one option).
32. Ensure FACT has adequate cash to start an operation.
33. Provide finance and administration delegates from the start of an operation, either within or alongside FACT, with a clarified job description for the Admin. Delegate.
34. Resolve the issues of assessment within FACT. Either a) remove the assessment responsibilities, or b) provide FACT with a *non-operational* capacity to undertake full relief and rehabilitation assessments.

Logistics

35. National Societies to be informed of the procedures to be followed when procuring goods using Federation funding to prevent problems with tracking, reporting and donor accountability.
36. The agreement with DHL to be reviewed in the light of the Bam operation, relationships further clarified and the agreement concluded.
37. Rubbhalls to be erected under the supervision of the Norwegian manufacturer (Giertsen).
38. Finalise the two new Federation logistics systems, Humanitarian Logistics Software (with the Fritz Institute) and the Relief Distribution Software (with Nestlé).
39. The Logistics ERU to focus on logistics only and FACT and ERU teams to avoid making requests that divert the Logistics ERU from its task.

Field Hospital ERU

40. Consider redesigning the Hospital ERU into two separate parts to create a faster, more flexible, better tailored, and cost effective service (also relevant to the IRCS in developing its ERU capacity):
 1. A small fast surgical triage and treatment unit, with the best possible technology, that can be withdrawn when the primary response is over
 2. A unit to provide more stable basic health care, which can be phased in 2-3 weeks after the emergency, with procedures and medicines tailored to the local context, rules, and ways of working.
41. ERU hospital to have the capacity to be fully self-sufficient in professional/medical staff for one month (provided there are no legal obstacles in-country). The full complement of staff would only be deployed if numbers of local staff or volunteers proved to be inadequate.
42. Hospital ERU to cater for its own water and sanitation needs, perhaps via an agreement with a National Society already having an appropriate water ERU.
43. Pro-forma, standardised Memoranda of Understanding to be devised covering: collaborative working; legal issues (eg certification of foreign medical staff); and the handover of medical facilities.
44. Clarify leadership of the ERU hospital.
45. Explore the potential for a triage group, following training along lines of the MIMS (Medical Incident Management systems) courses run throughout Europe.

National Societies with SAR Team and ERUs

46. For National Societies with both SAR and ERU teams, make a formal link between their operating procedures to provide additional assessment and contextual information for ERUs before or as they deploy

APPENDIX 1 – TERMS OF REFERENCE

International Federation of the Red Cross and Red Crescent Societies

Operations Review of the RC/RC Response to Earthquake in Bam 20-02-04

Background

Iran suffered a major earthquake measuring 6.5 on the Richter scale on the morning of 26 December 2003 at 05:28 (local time), centered on the city of Bam, Kerman Province in the southeast of the country. Given the scale and scope of the disaster, the Government of the Islamic Republic of Iran and the Red Crescent Society of the Islamic Republic of Iran (IRCS) formally requested international assistance. At the time of writing, according to official statistics the effects of the earthquake are approximately as follows

42,000 people killed

30'000 injured

45'000 homeless and some 30'000 with relatives in villages

1'850 children registered as unaccompanied or homeless

Over 85% of buildings destroyed

95 health houses, 14 rural and 10 urban health centres and 3 hospitals damaged beyond use

Population of 210'000 affected

Role and activities of the Iranian Red Crescent Society

As the mandated national lead agency in emergency response, the IRCS, supported by the International Federation, continues to be at the forefront of large-scale relief efforts mobilized on behalf of the people affected by the earthquake. The following is a list (not necessarily comprehensive) of IRCS response:

Search and rescue:

Deployment of 8,500 relief workers (3,200 search and rescue, 50 teams.)

The first teams were onsite within 2 hours of the earthquake. 26 Rescue machines, 10 Rescue Dog Teams, 1206 heavy vehicles, 534 light vehicles, 246 Ambulances, 8 Bus hospitals put into operation

Coordination of dozens of national and international search and rescue teams

Provision of emergency medical services to the injured and transfer to the field hospital or airport.

Emergency assistance to the affected population:

Establishing Medical Services Centre in Bam in first day. Establishing 3 mobile clinics and 3 fixed clinics. Organising 19 mobile medical teams
Coordination of 28 international medical teams. Dispatching 14 specialized medical teams to Bam. 12,441 medical doctors, nurses and relief workers of IRCS participated in the operation. Providing treatment and medical services to 61,000 persons in Bam and transfer of 756 persons to other medical centres outside the region
Three Psychological support Teams from IRCS consisted of 160 persons

Distribution of ID and ration cards among 52,560 families (213,795 persons) until 14/01/2004

Distribution of emergency relief items

Operating two water purification units for clinics and people.

Role and activities of the International Federation

The Federation responded by launching a preliminary Appeal (no. 25/03) on 26 December 2003 to support IRCS in providing immediate relief and basic assistance to the intended 200,000 beneficiaries, as well as undertaking an assessment with a view to providing longer-term rehabilitation and reconstruction assistance. A revised Appeal was launched on 8 January 2004. This was intended to assist 210,000 people, and articulated how the Federation will assist the IRCS to effectively respond to the actual emerging needs in Bam while serving to emphasize the Federation's commitment to supporting the IRCS in carrying out effective, targeted, and discrete rehabilitation activities in the health, water and sanitation, shelter, logistics, and disaster preparedness sectors.

The Federation deployed a Field Assessment and Coordination Team (FACT), and eleven member Red Cross and Red Crescent national societies contributed by sending specialized health, water/sanitation, logistics and relief Emergency Response Units (ERU's). These ERUs provided the bulk of the Federation's coordinated operation in terms of resources, both equipment and personnel, contributing to the high visibility of the operation.

In addition, many other National Societies, sent relief flights with emergency items, as well as SAR teams in the initial stages.

ERUs included:

- Ø Logistics ERU – joint British Red Cross / Danish Red Cross
- Ø Relief ERU – American Red Cross
- Ø Referral Hospital ERU – joint Finnish Red Cross / Norwegian Red Cross
- Ø Basic Health Care ERUs – German Red Cross, Japanese Red Cross
- Ø Water-sanitation ERUs – Austrian Red Cross, Swedish Red Cross / German Red Cross, French Red Cross, Spanish Red Cross

This represents the largest deployment of ERUs to a single operation since Bhuj, India in 2001 and has provided an opportunity to use joint National Society deployments and provide an operational platform for greater cooperation and coordination of activities amongst the various ERUs.

The ICRC donated from its Kermanshah warehouse and from its Amman logistic base, a total of: 19'000 blankets, 4772 kerosene heaters, 13'786 family food parcels, 1500 family tents and 10 medical kits. Additionally, the central IRCS tracing service in Teheran has been registering the missing with the support of the ICRC. An ICRC-IRCS team organized mobile tracing units and has been providing the victims of the earthquake with the means to inform their families in Iran and abroad with essential news of the effect of the earthquake on their family and property. The ICRC also provided its expertise in the identification of fatalities.

Objectives of the Operations Review

It is International Federation policy to measure the efficiency and effectiveness of its disaster response and generate lessons learned to improve future performance, build on past experience and, contribute to knowledge sharing within the Federation and international humanitarian community.

The objectives of this review are:

- Ø To assess the planning, management and coordination of the immediate response and emergency phase from the date of the earthquake, December 26 2003 to February 29 2004.,
- Ø To use lessons learned from the emergency phase to make recommendations for the enhancement of IRCS, Federation Secretariat and other national Societies' efficient and effective performance in both

disaster response and planning for transition and rehabilitation, in the light of its experience in the Bam operation;

- Ø To gather baseline information for the future final evaluation of the operation and related programmes to which the IRCS has committed itself, to be conducted towards the end of 2004

While the exercise will focus primarily on the emergency phase, the review will also draw out lessons to inform future planning of recovery, disaster preparedness and risk reduction measures to be implemented during the remainder of the Operation to the end of 2004.

Client

The Client for the Review is the Federation Deputy Secretary General/Director of National Society and Field Support. The Client is responsible for approving the Terms of Reference and accepting the final report.

Scope of the review

The Operations Review will address 4 key areas:

Quality of the IRCS and Federation's Disaster Response

The exercise will review all aspects of the IRCS and Federation's emergency response against the following criteria:

- Ø Efficiency in the use of inputs to create the desired outputs
- Ø Cost-effectiveness in obtaining inputs at the best cost putting them to best use
- Ø Effectiveness, including timeliness, in activities achieving their purpose
- Ø Relevance of activities to the local needs and priorities
- Ø Connectedness, of the short-term emergency measures to longer-term approaches.
- Ø Coverage of the major population groups facing life-threatening suffering
- Ø Coherence between the measures adopted and any agreements between the Federation and the IRCS, and the policies of the Federation, specifically the Red Cross Red Crescent Code of Conduct and the Sphere Standards

In addition to:

- Ø Assess the effectiveness, appropriateness and skills of international expertise
- Ø Review assessment processes, including the level, nature and responsiveness of consultation with beneficiaries and its impact on decisions made as part of the Federation's response including diversity of assistance
- Ø Assess the support mechanisms for the operations with particular attention to Management, Finance and Human Resources and how they impacted on the operations

Disaster Response Mechanisms

The exercise will assess the effectiveness and efficiency of the Federation's disaster response mechanisms, specifically:

Field Assessment and Coordination Team

- Ø Assess the effectiveness of the FACT response in terms of decision-making, performance, deployment and location
- Ø Assess the relevance of FACT deployment in terms of skill mix and competencies (should a broader team have been deployed at the outset with management, coordination, assessment, liaison, finance and administrative responsibilities?).
- Ø Assess the need for modification of FACT TORs as a result of the BAM experience.

Emergency Response Units

- Ø Assess the appropriateness and added value of each ERU deployment;
- Ø Assess the relevance and performance of the ERUs deployed
- Ø Assess the degree of support by the ERUs to IRCS;
- Ø Assess the role of the ERUs as perceived by the IRCS;
- Ø Assess the coherence and coordination of their work with relevant authorities (Ministry of Health, Water Board etc);
- Ø Assess and review the degree of internal and external coordination of their functions;
- Ø Identify possible gaps in service delivery of the ERU system and alternative models in the context of strengthening the response system.

Human Resources

- Ø Assess the contribution of human resources from National Societies other than those sending FACT or ERU team members.

Capacity Building of the Iranian Red Crescent

The review will:

- Ø Assess the effectiveness of the International Federation's capacity building efforts and its impact on the IRCS response to the BAM earthquake;
- Ø Identify key strategic focal areas that would benefit from capacity enhancement in future responses;
- Ø Assess the degree to which IRCS capacity can respond to the rehabilitation phase.

Coordination

The review will:

- Ø Assess the degree of coordination, coherence and complementarity among RCRC members, the government of Iran, the UN and other agencies involved in the response;
- Ø Identify key factors promoting or hindering effective coordination;
- Ø Identify key lessons and, where necessary, recommend desirable action to improve coordination in future responses.

Methodology:

The methodology will include:

- Ø A review of key appeal, situation reports, financial reports case studies and other available reports;
- Ø Addressing key issues identified by the Iranian Red Crescent, PNS and the Federation Secretariat
- Ø An interview survey of key personnel including management and volunteers from the National Society, Geneva Secretariat and delegations, Iranian Government, FACT and ERU members, UNDAC team members and representatives of other operational national and international agencies etc;
- Ø Feedback from service users in Bam and its surrounds;
- Ø Discussion with selected PNS emergency managers;
- Ø A workshop to be conducted in Teheran prior to the departure of the Review team.

Review Team

An external Consultant will lead the Operations Review team. The team members will reflect relevant specialisms in emergency response (relief, health, wat/san, ERUs, Logistics etc). A representative from the IRCS will also participate as a resource person to the review team. The team members will possess:

- Ø Knowledge of Red Cross Red Crescent disaster response and preparedness mechanisms.
- Ø Knowledge of the systems of International Federation.

- Ø Capacity to analyse and articulate lessons learnt in the context of complex emergencies.
- Ø Experience in evaluation and preparing analytical reports
- Ø Good interview and interpersonal skills

Timing

Timing for the Review exercise will be as follows:

February 17-19 Geneva - data collection, initial interviews and finalising the TOR

Feb 25- March 6 Iran – mission to Tehran and Bam

March 5 Workshop in Tehran

By March 26 Draft report available

March 26-April 2 Period for comments on the draft

By April 10 Final report completed

Report

The report will be structured as follows:

Main report

- Ø Executive Summary
- Ø Purpose
- Ø Scope
- Ø Approach, methodology, and composition of team
- Ø Constraints
- Ø Context
- Ø Findings
- Ø Conclusions
- Ø Recommendations

Annexes

- Ø TOR
- Ø Bibliography
- Ø List of Interviewees
- Ø Timeline
- Ø Questionnaire formats

In accordance with Federation policy, the final Review report will be published on the IFRC web site. Management of the concerned organisations may also be advised using management letters to highlight operationally important technical and other details.

APPENDIX 2 – DOCUMENTATION

Information Bulletin No 01, Iran Earthquake, 26th December 2003

Emergency Appeal, Iran: Earthquake, 26th December 2003

Emergency Appeal, Iran: Bam Earthquake, 8th January 2004

Operations Update, Iran: Earthquake, 27th December 2003

Operations Update, Iran: Earthquake, 29th December 2003

Operations Update, Iran: Earthquake, 1st January 2004

Operations Update, Iran: Earthquake, 5th January 2004

Operations Update, Iran: Earthquake, 11th January 2004

Operations Update, Iran: Earthquake, 19th January 2004

Operations Update, Iran: Earthquake, 30th January 2004

Operations Update, Iran: Earthquake, 18th February 2004

Operations Update, Iran: Earthquake, 2nd March 2004

Assessment Report, Psychosocial Support Assessment Mission to Bam, Islamic Republic of Iran for IRCS, IFRC and the Danish and Icelandic Red Cross Societies, 7-26th Jan 2004

TV/Radio Print, 28th December 2003 – 15th March 2004

Iran: Earthquake, Preliminary Appeal No 25/03, Operations Update no 3, Draft

Daily Update, Iran Bam Earthquake, Internal Report/Elements for External Use, 2nd January 2004, Field Assessment and Coordination Team

TOR for FACT Team, Iran Earthquake, December 2003

Draft Evaluation of the Federation/RCM Response to Earthquake in Bam, 10th January 2004

Swedish Red Cross Water and Sanitation ERU, Assistance in the Earthquake Bam, Iran, Report, 8th-24th January 2004

IFRC Amman Regional Delegation, Regional Stock Movement Report, 14th August 2003

EOM Report, BRCS/DRC Logistics ERU Deployment to Bam/Iran, R North (Logs ERU T/L) Jo Lea (Logs ERU Systems), 27th December 2003 – 28th January 2004

EOM Report, BRCS/DRC Logistics ERU Deployment to Bam/Iran, Peter Pearce (Team Leader), 25th January – 25th February 2004

IFRC, What do we do – ERUs: Specialised Personnel

Iranian Red Crescent, Latest News, 18th February 2004

Red Cross Red Crescent Disaster Management, Disaster Monitoring

Red Cross Red Crescent – Iran Earthquake: Earthquake in Iran

Bam Earthquake, 6.5 Richter, Kerman, Iran, 26th December 2003

Indicative PNS Operational Capacity Statement

Logistics and Resource Mobilisation Department: Iran Bam Earthquake based on preliminary Appeal 25th December 2003

Iranian Red Crescent Presentation on Response to Bam Earthquake, 26th December 2003

Bam Earthquake, Iranian Red Crescent Operation: A Summary of Activities and Achievements until 15th January 2004 for Red Cross and Red Crescent Donors Meeting, Tehran, 19th January 2004

General News concerning Bam Earthquake in Iran, 27th December 2003, No 2

Iran Earthquake: Summary of Research Targets, 16th January 2004

Flash Appeal: Bam Earthquake of 26th December 2003, Islamic Republic of Iran, Relief, Recovery and Immediate Rehabilitation, UN, January 2004

Briefing Note: High lights following the Bam Earthquake, Office of the UN Resident Coordinator, Iran, Bam Office, UNDP, OCHA, 8th February 2004

Population Figures, Updated 18th February 2004

Iran – Earthquake OCHA Situation Report No 14, 9th February 2004

Mass burials do more harm than good – Experts, AlertNet, 30th December 2003

DFID Iran – Bam Earthquake Situation Report No 5, Relief Web, 7th January 2004

UNICEF Humanitarian Action, Bam, Iran, Donor Update, 6th February 2004

USAID Bureau for Democracy, Conflict and Humanitarian Assistance (DCHA), Office of US Foreign Disaster Assistance (OFDA), Iran – Earthquake Fact Sheet No 5, 2nd January 2004

Red Crescent Society of the Islamic Republic of Iran, Partnerships in Profile, 2003

IFRC, Monitoring and Evaluation Department, Evaluation of the Federation/RCM Response to Earthquake in Bam, Draft 5, 10th January 2004

IFRC TOR: Evaluation of the Movement's Emergency Response to the Bam Earthquake, Iran, February 2004

ALNAP Quality Proforma 2004, To assess the quality of the Evaluation of Humanitarian Action (EHA) process through EHA reports

Evaluation Department Final TOR, Scoping study on the Operation Review of the International Federation Response to the Bam Earthquake, 17th February 2004

Code of Conduct for all Staff of the Federation Secretariat, March 2003

Evaluation of Iran – Bam Earthquake Operation, TOR/ERU Deployments

IFRC, Monitoring and Evaluation Department, Operation Review of the RC/RC Response to Earthquake in Bam, Draft, 16th February 2004

MOU between the IRCS and IFRC on Mutual Cooperation, 28th May 2003

Agreement between Ministry of Health, Treatment & Medical Education and IRCS on procedure of management of IFRC field hospital in Bam, 26.1.04

Iran – Bam Earthquake Operation: Transition Plan for ERUs, Caroline Dunn,

APPENDIX 3 – INTERVIEWEES

Name	Organisation	Position
TEHRAN		
Ahmad Ali Noorbala	IRCS	President
Abbas Sahraee Ardakani	IRCS	Secretary General
Mostafa Mohaghegh	IRCS	Head, International Affairs Department
Mehrdad Eshraghi	IRCS	Acting Head, International Affairs Department
Hassan Esfandiar	IRCS	Desk Officer, International Operations
Mansoureh Bagheri	IRCS	Programme Coordinator, National Disaster
Hossein Sharifara	IRCS	Head of Communications
Mr Dabbaghzadeh	IRCS	USG Logistics and administration
Fatemeh Rezaee	IRCS	Tracing Officer
Mr Khodabakhsh	IRCS	Director of Logistics department
Iain Logan	IRCS	Head of field operations, Bam
Ms Shahmohamadian	IRCS	PSP Coordinator
Dr Safariya	IRCS	Health Coordinator/Head of Medical Services, Health and Treatment Organisation
Dr Salehi	IRCS	Health, responsible for treatment and rehabilitation
Mr Bizhan Daftari	IRCS	Head of Relief and Rescue Organisation
Mr Sarafrazi	IRCS	Warehouse Manager
Mr Parand	IRCS	Director of National Operations
Mohammed Mukhier	IFRC	Head of Delegation
Seifu Demeke Dele	IFRC	Finance/Administration delegate
Abolfazl Alipour	IFRC	Finance assistant
Aysegul Bagci	IFRC	Administrative/ liaison delegate
Ms Alman Ahmad	ICRC	Tracing Delegate
Mr Vahid Dehghan	ICRC	Logistics Officer
Kari Egge	UNICEF	Representative, Iran
BAM		
Mr Hafezian	IRCS	Head of administration, Kerman branch
Mr Saljugh	IRCS	Head of logistics, Kerman branch
Mr Sahamzadeh	IRCS	Director, Bam branch
Mr Ganjkarimi	IRCS	Former Director, Bam branch
Mr Mehti	IRCS	Volunteer
Dr Abna	IRCS	Head of operations, Kerman branch
Dr Arfaa	IRCS	Team Leader, PSP
Dr Tabatabaee	IRCS	Bam Field Hospital
Hill Mayer	IFRC	Media delegate
Dr Adelheid Marschang	IFRC	Acting Head of Operations, Bam (Senior Officer, Public Health in Emergencies, Health and Care Department)
Rikke Gormsen	IFRC	Regional PSP delegate in Amman (Jordan)
Toril Parelius	IFRC	HR from Norwegian RC
Helen Rasouli	IFRC	Administration
Hans Andersen	IFRC	Finance
Dr Hossam Sharkawi	IFRC	Regional Health Delegate Amman
Mauricio Londono Castano	IFRC	Telecommunication delegate
Walter Baumgartner	IFRC	Wat/San Co-ordinator
Jenney Iao	IFRC	Reporting Delegate
Johannes Hoffman	IFRC	Camp manager
Steve McAndrew	IFRC	Federation Relief team (formerly American ERU relief)
Linda Stops	IFRC	Federation Logistics team (formerly American ERU relief)
David Stevens	IFRC	Federation Logistics team (formerly British/Danish Logistics ERU)
John Kalhoj	IFRC	Federation Logistics team (formerly

		British/Danish Logistics ERU)
Bjarne Godfredson	IFRC	Federation Logistics team
Mr Andreas Hattinger	Austrian RC	Team Leader, ERU
Dr Seishi Takamura	Japanese RC	Team Leader
Gerhard Tauscher	German RC	Team Leader, ERU/Basic health care unit
Alexandre Claudon	French RC	Team Leader
Alfredo Gadea	Spanish RC	Watsan emergency response unit
Carlos Gamboa	Spanish RC	Present at the beginning of the operation
Mr Ruben Romero	Spanish RC	Team Leader, Spec Water ERU
Mr Ramon Juste	Spanish RC	Spec Water ERU
Dr Comander Talan	Indian Army Hosp	
Mr Kenneth Wibrån	Swedish RC	Team Leader, Wat/san ERU (interviewed in Sweden)
Mr Leif Löthman	Swedish RC	Wat/san
Mr Sven Jonsson	Swedish RC	Wat/san
Dr Birger Sandell	NorFinn Hospital	Head Of team
Dr Erkki Saarela	NorFinn Hospital	Med Coordinator/Anaesthetist
Dr Illkka Mikkonen	NorFinn Hospital	Head of OPD / Medical Doctor
Mrs. Marit Busengdal	NorFinn Hospital	Head nurse Hospital ERU
Dr Setayesh	Welfare Organisation	Director General, RC Clinic
Mr Ebrahim Nejad	Bam Water Board (Min. of Power)	Manager
Mr Alavi	Bam Task Force	Chair
Dr Soroosh Sereshki	MSF France	
Christa Lenkenhail	MSF France	
Dr Soroosh Serh	MSF France	
Dr Christa Linkanhei	MSF France	
Ms Zoë Brabant	MdM France	
Dr Nejad	WHO	Representative
Mr Shola Ismail	UNICEF	Emergency Field Co-ordinator
Ms Jenty Wood	Oxfam UK	Programme Manager
Elisabeth Settemsdal	OCHA	Humanitarian Affairs Coordinator, Bam
Marcus ?	WFP	Head of operations
Pete Sweetnam	Mercy corps	Emergency Programme Officer
Moustafa Osman	Islamic Relief	Head of Emergency Relief Department
Rahma ten Veen	Islamic Relief	Iraq Desk Support Officer
GENEVA		
Kalle Loovi	IFRC Secretariat	Operations Manager, Disaster Management and Coordination Division
John English	IFRC Secretariat	Officer, Operations Coordination, , Disaster Management and Coordination Division
Caroline Dunn	IFRC Secretariat	ERU officer, Disaster Management and Coordination Division
Abbas Gullet	IFRC Secretariat	Director, Disaster Management and Coordination Division
Birgit Stalder-Olsen	IFRC Secretariat	Logistics and resources mobilisation department
Rob McConnell	IFRC Secretariat	Logistics and resources mobilisation department
Isabelle Séchaud	IFRC Secretariat	Logistics and resources mobilisation department
Jean Paul Lucot	IFRC Secretariat	Field support and telecommunication unit
Hakan Sandbladh	IFRC Secretariat	Senior Officer, Health in Emergencies, Health & Care Department

Wiebke Hendriksen	IFRC Secretariat	Psycho-Social Support, Senior Officer, Health & Care Department
Ali Said Ali	IFRC Secretariat	Head, Middle East/North Africa Department
Evgeni Parfenov	IFRC Secretariat	Senior Desk Officer, Middle East/North Africa Department
Nina de Rochefort	IFRC Secretariat	Senior Officer, Organisational Development Dept
Amy Mintz	IFRC Secretariat	Senior Officer, Disaster Preparedness & Policy Dept
Hisham Khogali	IFRC Secretariat	Senior Officer, Disaster Preparedness & Policy Dept
TELEPHONE INTERVIEWS		
Dennis McClean	IFRC Secretariat	Media delegate
Rana Sidani	IFRC Regional Del	Media delegate
Chris Black		Media delegate
Suzane Charest		Media delegate
Cristina Estrada	Spanish RC	Media delegate
Halvor Fossum Lauritzsen	IFRC	FACT Leader
Jesper Lund	UNDAC Team	Head
Martin Zak	IFRC Secretariat	Operations Manager (week 1)

APPENDIX 4 – UNDAC– STANDARD EQUIPMENT LISTS

Level 1 - Personal Mission Kit

Holdall
All Weather jacket
Inner Flees
All Weather trousers
UNDAC T-shirt
UNDAC Vest
UNDAC Sweat-shirt
UNDAC kit-arm-band
UNDAC Kit-field cap
Sleeping bag (in bag)
Sleeping bag liner (in bag)
Inflating mattress
Mosquito net (in bag).
Repellent
Maglite torch
Water filter
First aid kit
Dust protection mask
Hexamine cooker
Field plate, - mug and - cutlery set
Dry wash

Level 2 – Mission Kit 1

Office Suitcase:
Paper A4 blank, 100 (sheets)
Laptop IBM Thinkpad, power supply for laptop, Telephone cable, Ericsson Mobile Phone SH888
Printer Canon BJC 80, Power Supply for Canon printer, Printer cables, Ink cartridges for printer
International Converters
High lighters, White board markers, Pens, High lighters, Pins, Clips, Stapler, Hole puncher

Assessment Suitcase

UN Flag , UNDAC Stickers, UN Armband, UNDAC brochure, Plastic pockets
Laptop IBM Thinkpad
Converter for laptop
Digital Camera IXUS
GPS Magellan 310
USB Memory stick
Extra batteries
International Converter, Charger for Camera Battery, Connection cable (Camera – PC),
Blocks and Notepads
UNDAC Mission Software
Pens, High lighters, White board markers, Sticky tape, Leatherman=s tool, Swiss knife
Multiplug with surge protection
Torch

Level 3 - Equipment Support Modules (Basic)

Subsistence Support Equipment

- 3 3-man tents (for rough climate)
- 1 Office tent with workspace for up to 8 people
- 1 2 ka/230 v Generator +(battery packed, volt stabilizer European standard plugs)
- Lamps for the tents (connectors and cables)
- 1 Cooker for 8 persons
- Food for 10 days for the staff (MRE=s)
- Water purification equipment for drinking water for 8 persons
- Miscellaneous equipment, e.g. torches, shovels, small tools

Office Support Equipment

- 3 Lap Tops (English keyboard, modem, Wave LAN, CDRW)
English version of Windows 2000/XP, Microsoft office 2000/XP
Support programs (SITA, Wave mail, Encarta, UNDAC Mission software)
- 3 Memory Flash cards 128 MB+
- 4 Additional Wave LAN cards
- 1 Laser jet printer (portable)
- 1 Flatbed scanner (portable) (could be combined fax, copier and scanner)
- 1 Fax (portable) (land line/satellite)
- 1 Portable Copy machine
- 1 Inmarsat mini M3 Satellite Phone (or Thuraya satellite phone)
- 1 Regional Bgan Satellite Phone (data transmission only)
- 1 Digital Camera
- 1 Volt stabilizer multi plug
- Extension cables and AC Adapters
- Collapsible table and chairs
- White board, collapsible
- Office supplies
- 1 2 ka/230 v Generator +(battery packed, European standard plugs)
- Working lights, lamps and connectors and cables (230 v)

Telecommunications Support Equipment

- 1 HF Base station kit incl. antenna
- 1 HF Repeater kit incl. antenna and power installation
- 8 VHF handset (Motorola)
- 8 Chargers for VHF Radios
- 1 VHF Base Station kit incl. Mast and antenna
- 1 VHF Repeater station
- 1 Programming kit
- 1 Lap Top (English version of Windows 2000/XP), Wave mail
- 1 2 ka/230 v Generator +(battery packed, European standard plugs)*
- Connector's and cables (230 v)
- 1 Jerry can (fuel)

Transport Support Equipment (On transport airlines only)

- 2 4x4 all terrain vehicles in white (diesel,) 5 seats, extra tank
(VHF/HF/GPS/INMARSAT Sat phone, mine blanket installed)
- Car Maintenance equipment
- Spare tires and snow chains
- 1 HF Base station kit incl. antenna*

APPENDIX 5 – DETAILS OF THE ERU FIELD HOSPITAL

- ERU “hospital” delegates currently 43.22 expatriate nurses
- Current complement of the ERU doctors = 1 GP, 1 Anaesthetist, 1 General Surgeon, 1 Orthopaedic Surgeon, 1 Paediatrician, 1 Gynaecologist

Services

- Radiology Approximately 100 x-rays taken per day
- Laboratory Partially staffed by IRCS
- Wards Average of 2 IRCS nurses/shift.
Reducing early March
- Maternity Majority of work done by local midwives
- Observation unit 2-4 IFRC nurses during daytime, 1-2 at night.
- Operating Theatre Currently staffed with expatriate OT nurses
IRCS staff, 2 per shift doing scrub, assist and packing
of instruments
- Anaesthetics Both expatriate and IRCS – 1 technician and 1 nurse
doing routine anaesthesia
- Pharmacy Stores are administered by IFRC
dispensing is handled by IRCS
some medicaments supplied by IRCS.

Additional Requirements proposed for the ERU Hospital

There comments on further requirements for the ERU hospital deployments were noted by the review team for the record and for further debate in ERU review meetings. They are *not* recommendations from the Review.

Equipment

Not available in the current design, but needed according the medical team:

a.)_Delivery room/maternity ward/gynaecology OPD:

- sonicaid
- infusion pump
- CTG monitor
- Suction device for curettage
- Incubator for newborn
- Blue light treatment for yellow babies
- (Examination table in OPD not suitable for gynaecology Pts)

b.) Operation Theater:

- Operation Theater should be inside fixed walls e.g. container, preferably specially equipped w/ fixed operation lamps, air conditioning and filtering etc Benefits are clean environment for adequate orthopedic surgery, rapid deployment (providing transportation by plane is possible), possibility to use the up to date technology the “western” surgeons and anesthetists are familiar with.
- Portable x-ray machine
- External fixation kits familiar for the operating surgeon
- Ultrasound device for (surgical) diagnostics
- Electric drills
- Skull trepanation kit

c.) Anesthesia:

- ventilator (electrically powered, possibility to use without pressurized gases)
- monitoring: minimal requirements: ECG, BP, SaO₂, temp (EtCO₂)
- infusion pump
- convertible anesthesia machine (draw-over feature useful, circle system if gases available, vaporizers for halothane, isoflurane (sevoflurane))
- oxygen concentrators

d.) ICU:

- monitoring as in OT for majority of the ICU beds
- oxygen concentrators/ (tanks if available)
- possibility for mechanical ventilation (together with OT)

e.)X-ray department:

- proper x-ray machine
- automatic film developer
- multiskilled x-ray technician/ radiographer

Medicines

Antibiotics:

- benzyl penicillin
- metronidazole
- gentamicin
- ciprofloxacin
- azitromycin

Analgesics:

- morphine is the drug of choice for severe pain
- fentanyl/ sufentanyl/ remifentanyl for anesthesia
- ibuprofen
- paracetamol

Anesthetics:

- main stream anesthetic is ketamine with or without benzodiazepines

- propofol as infusion with pump is excellent alternative especially when head trauma
- as inhalation anesthetic halothane and or isoflurane can be used with or without pressurized gases

Others:

- short chain heparinoids instead of heparin
- magnesium infusion for pre-eclampsia
- dexametasone

Personnel

1. Teams who have practiced/worked together and are familiar with the equipment provided is a prerequisite for effective ERU- hospital function in the primary response. Ideally teams coming from the same hospital/country may be preferable.
2. In teaching situation the turnover rate of local staff should be long enough if some learning is wanted e.g. several months instead of fortnight rotation as here.
3. In OT two teams / each table is needed for continuous work in heavy workload situations plus triage team that could be rotated between OT and ER.

Other aspects

1. Standardized equipments and protocols facilitate the international co-operation in emergency responses.
2. Modular systems for different disaster situations can be created as computer inventory lists and the proper material can be stored and deployed from different warehouses according the need and location of the disaster

From discussion with:

Erkki Saarela, anesthetist;
Lars Thore Olsen, surgeon;
Ilkka Mikkonen GP; and
Sirpa Ikonen, gynaecologist

APPENDIX 6 - MOH/IRCS AGREEMENT ON FIELD HOSPITAL

Text of the agreement between Ministry of Health and IRCS concerning the Bam Field Hospital

RED CRESCENT SOCIETY OF THE ISLAMIC REPUBLIC OF IRAN

In the name of God:

Agreement between the Ministry of Health, Treatment & Medical Education and the Red Crescent Society of the Islamic Republic of Iran on the procedure of the management of the International Federation of Red Cross & Red Crescent Societies field hospital in earthquake stricken township of Bam:

- 1- Provision and supplying all' required non-technical services, medicine, and equipments and provision of non-professional staff of the hospital will be taken care of by the Red Crescent Society.
- 2- Manager of the hospital, who will be assigned by the Red Crescent Society, will be responsible for the implementation of the article no. 1.
- 3- Ministry of Health will be responsible for offering technical services, preparing and implementing treatment protocols, devising a chain of referral technical hospital and health care centers following up of the situation of the patients and provision and distribution of technical staff.
- 4- The technical manager of the hospital who will be assigned by the Ministry of Health, Treatment & Medical Education will be responsible for the implementation of article no.
- 5- In order to provide coordination with the International Federation of Red Cross & Red Crescent Societies and follow up of the works, the Red Crescent Society will assign a liaison officer who will be responsible for the coordination of the activities of the hospital and relationship with the International Federation.
- 6- In case of exhausting foreign donated medicines and possible lack of medicines in hospital, Ministry of Health will undertake provision of the required medicines.
- 7- Authorities of Ministry of Health and Red Crescent Society in Kerman Province & Bam Township are responsible for the implementation of the abovementioned activities.

Dr. Mohammad Esmaeil Akbari
Deputy for Health
Ministry of Health, Treatment
the
& Medical Education

Dr. Ahmad Ali Noorbala
President
Red Crescent Society of
Islamic Republic of Iran

18th January 2004

APPENDIX 7 – OTHER FIELD HOSPITALS OPERATING IN BAM

Hospital	Arrive/Depart/Status	Comments
Iranian Military emergency surgical hospital	Left after one month	Deployed at Bam airport. Provided a rapid triage dressing station, centred around three buses, providing 1) essential laboratory and X-ray facilities, 2) surgical capability, 3) clinic facilities. The triage has been reported as very effective. The concept of using buses for the immediate situation provided rapid service. This left the area after a month.
Ukrainian Hospital	Left 27/1/04	Brief apparently effective deployment 27 major operations in 1 month Transferred patients to the Federation hospital on departure
Indian Military Hospital	Arrived 30/12/03 OPD started 1/1/04 Operations from: minor 3/1/04 major 5/1/04 Departure planned for March 31 st No new patients after March 25 th <i>NB - Federation ERU hospital likely to receive a significant influx and increase of patients after this date</i>	Seemingly excellent medical, surgical and orthopaedic unit, well-managed and coordinated. 182 major procedures, 75% orthopaedic. 3,500 minor surgical procedures Lower staff-patient ratio than to IFRC ERU hospital - 65 personnel for 75 beds Team has worked and trained together over time Bed occupancy 30-45 on average 600 outpatients per day
Indonesian Hospital	Brief mission, now left	
Jordanian Hospital	Brief mission, now left	
American Hospital	Ten day mission, now left	Reportedly well equipped, good technology
Saudi Arabian Hospital	Brief mission, now left	Also had a plane for medical evacuation
Three more??		

APPENDIX 8 – WORK COMPLETED BY WATER/SANITATION ERUS

Water

Spanish RC mobile treatment plants were installed at the following locations:

- Ø German BHC centre with daily consumption of 3,500 litres
- Ø German BHC unit with daily consumption of 1,500 litres
- Ø Japanese HBC unit with daily consumption of 1,500 litres
- Ø District hospital (Imam Khomeini) with daily consumption of 1,500 litres

Latrines were also constructed nearby for use by the local population

French and Swedish RC teams installed storage capacities at the following locations:

In the camps:

- Ø Turkish camp: bladder tank of 10 m3
- Ø Turkish camp 2: corrugated iron sheet tank with 70 m3 storage
- Ø Hamadan camp: 3 bladder tanks of 10 m3 storage each
- Ø Bafia camp: 2 bladder tanks of 10 m3 storage each and a 95 m3 storage tank

In the streets:

- Ø One 70 m3 tank at the pump station
- Ø Six tanks of 11 m3 each at Mahaiavi street, Edalat square and Pasdaram street, sector 5 and two in sector 8
- Ø One bladder tank of 10 m3 in the sector 5
- Ø Four bladders of 5 m3 each at Azedi square, Jan Barean street, telecom station and sector 5

Sanitation

The following activities have been implemented (mostly by the Swedish RC).

- Ø 60 emergency latrine slabs installed in the IRCS Jadji camp
- Ø 50 emergency latrine slabs installed in the IRCS Bam centre
- Ø 30 emergency latrine slabs installed in the IRCS Hamadan camp
- Ø Latrines have been installed as well in the Federation referral hospital, the 3 clinics and the Red Cross and Red Crescent compound

APPENDIX 9 – APPEAL OBJECTIVES AND INCOME

Summary of Objectives from the Revised Appeal

Emergency relief (food and non-food)

Objective: basic food and non-food item needs of 150,000 most vulnerable beneficiaries are met.

Logistics Objective:

- Ø Support the ongoing IRCS and Federation relief operation by providing efficient logistical support in terms of warehousing, transport management and procurement.

Health Objectives:

- Ø Restore former referral capacities to treat emergencies and diseases in the affected area adequately
- Ø Restore parts of former Primary Health Care (PHC) capacities in the affected area to levels prior to the earthquake
- Ø Ensure the appropriate treatment and recovery for those injured in the earthquake
- Ø Ensure the prevention of, or effective treatment for, potential/additional health threats such as diarrhoeal diseases
- Ø Design a handover plan to the IRCS for PNS/ERU health facilities
- Ø Provide psychological support training for IRCS staff to benefit victims of the earthquake.

Water and Sanitation Objectives:

- Ø Prevent the outbreak of water-borne epidemics
- Ø Ensure an adequate and safe water supply and provide sanitation facilities to the referral hospital, the Red Cross and Red Crescent camp, and Bam city
- Ø Handover water sanitation ERUs to the IRCS.

Earthquake Orphans – Special Support Objective:

- Ø Fully or partially meet the basic shelter, care and educational needs of 1,850 unaccompanied children in Bam.

Disaster Preparedness

Objective 1: The IRCS capacity in management of Disaster Preparedness (DP) and Disaster Response (DR) has been strengthened at the national, regional, and branch level.

Objective 2: Support the Iranian Red Crescent Society in strengthening community-level disaster response mechanisms by incorporating risk management concepts of community disaster education, awareness raising, and action to reduce future disaster risks.

Objective 3: Address information technology and telecoms needs for improved disaster preparedness by:

- Ø Improving the current IRCS radio system in the Bam region to allow better relief coordination between the different branches, and between these branches and Teheran
- Ø Upgrading the existing IT/Telecom systems within the IRCS in Bam.

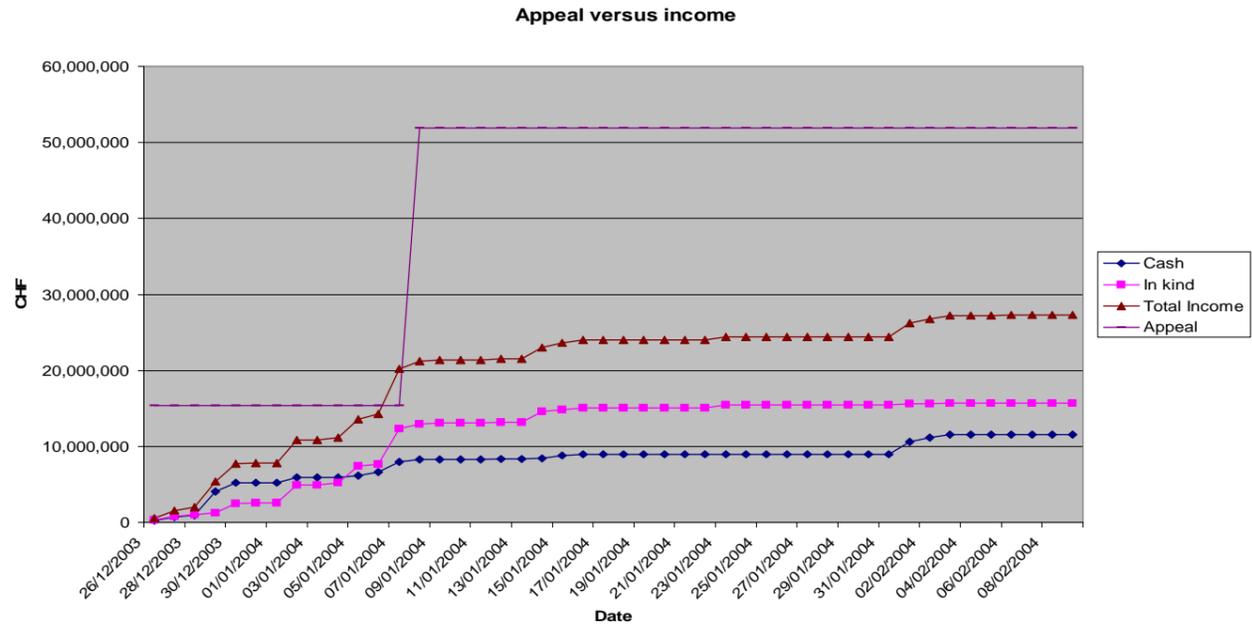
Information technology (IT) and Telecoms Support Objectives:

- Ø Ensure adequate coverage of radio systems and links between the IRCS Bam branch, the referral hospital and the Red Cross and Red Crescent camp to include mobile units
- Ø Improve the computing system set-up at the Federation compound
- Ø Contribute substantially to the overall security for Red Cross and Red Crescent staff, premises and stocks.

Communications – Advocacy and Public Information

Objectives:

- Ø Disseminate the needs of the beneficiaries to a wide audience including donors, governments and the public inside and outside of Iran
- Ø Advocate with relevant actors on behalf of particularly vulnerable groups to ensure their needs are met
- Ø Document the various phases of the relief and rehabilitation operation as they unfold in real time on the web, and through print and audio-visual media



APPENDIX 10 – INTERNATIONAL MEDIA INTERVIEWS

Date	TV/ RADIO /PRIN T	Media	Lan	Interviewee	Date	TV/ RADIO /PRIN T	Media	Lan g	Interviewee
26.12.03	Agency	AFP	EN	Roy Probert	29.12.03	PRINT	The Australian UN Radio,	EN	Caroline Dur
26.12.03	Agency	AP	en	Roy Probert	29.12.03	Radio	New York WILM Radio, Delaware	AR	Rana Sidani
26.12.03	Radio	BBC	EN	Mostafa Mohaghegh	29.12.03	Radio	USA Al-Jazeera channel	EN	Marie-Franç Borel
26.12.03	Radio newspaper	BBC French Berria (Spain/Basque)	FR	Roy Probert	30.12.03	TV		Ar	Rana Sidani
26.12.03	Radio	CBC (Canada)	EN	Roy Probert	30.12.03	Agency	AP	En	Rana Sidani
26.12.03	TV	CNN Delaware-based radio	EN	Knut Kaspersen Mostafa Mohaghegh	30.12.03	RADIO	AP - Radio	En	rana Sidani
26.12.03	Radio	DPA (Germany)	EN	Roy Probert	30.12.03	TV	AUBC BBC News 24	En	Caroline Dur
26.12.03	radio	Finnish Radio	Finnish	Roy Probert	30.12.03	TV	BBC World Today Cbs	EN	Martin Zak
26.12.03	Radio	Greek Radio	en	Roy Probert Mostafa Mohaghegh	30.12.03	RADIO	Australian TV Channel Africa, S.Africa	En	Rana Sidani
26.12.03	TV	ITN (UK)	EN	Roy Probert	30.12.03	Radio	CIEL-FM Belgique	EN	Marie-Franç Borel
26.12.03	Radio	NPR Los Angeles	EN	Roy Probert	30.12.03	RADIO	Irish Radio National Public radio-morning program	FR	Marie-Franç Borel
26.12.03	Radio	NPR washington	EN	Roy Probert	30.12.03	RADIO	National Public radio-usa	En	rana Sidani
26.12.03	Radio	Portuguese RDP Radio Caracol (Colombia)	EN	Martin Zak	30.12.03	RADIO	Canada Spanish Radio - Daliva	En	Rana Sidani
26.12.03	Radio	Radio Framboise (Lausanne)	FR	Roy Probert	30.12.03	RADIO	Swedish TV World TV channel	Fr	Rana Sidani
26.12.03	Radio	Luxembourg Radio	en	Roy Probert	30.12.03	TV		Sw	Thomas
26.12.03	Radio	Mediterrannée Radio Renacensa (Portugal)	FR	Roy Probert	30.12.03	TV		En	Rana Sidani
26.12.03	Radio	RAI news 24 (Italy)	en	Roy Probert	31.12.03	TV	Aljazeera TV BBC- arabic	Ar	Rana Sidani
26.12.03	TV	RFI Star TV (Hong Kong)	EN	Roy Probert	31.12.03	RADIO	BBC News 24	Ar	Rana Sidani
26.12.03	Radio	Swedish Radio	FR	Roy Probert Mostafa Mohaghegh	31.12.03	RADIO	BBC UK	EN	Halvor
26.12.03	Radio newspaper	Toronto Star	EN	Roy Probert	31.12.03	TV	CBS-Canada	En	Halvor
26.12.03	Radio	VATICAN RADIO	en	Roy Probert	31.12.03	RADIO	German TV Norwegian Radio Norwegian TV2	No	Halvor
26.12.03	Radio	VATICAN RADIO	EN	Martin Zak	31.12.03	TV	Radio Méditerranée Int'l, Tanger	No	Halvor
26.12.03	newspaper	Verdens Gang	Norw	Roy Probert	31.12.03	Radio	Radio Moyen Orient	FR	Marie-Franç Borel
26.12.03	Radio	VOA	EN	Roy Probert	31.12.03	RADIO	Swedish Newspaper Swedish Radio	Ar	Rana Sidani
27.12.03	Radio	BBC Five Live	en	Roy Probert	31.12.03	Print		Sw	Thomas
27.12.03	radio	BBC radio	EN	Knut Kaspersen	31.12.03	RADIO		Sw	thomas

27.12.03	TV	BBC World CBC (Canada)	EN	Mostafa Mohaghegh	31.12.03	TV	Swedish TV UN- arabic	Sw	Thomas
27.12.03	radio newspa per	(live) Dagbladet (Norway)	EN Nor w	Knut Kasperson	31.12.03	RADIO	radio	Ar	Rana Sidani
27.12.03	radio	Europe 1	FR	Roy Probert	1.1.04	TV	Aljazeera TV BBC arabic	Ar	Rana Sidani
27.12.03	radio newspa per	France Info	FR	Roy Probert	1.1.04	RADIO	Radio	Ar	Rana Sidani
27.12.03	newspa per	Le Parisien	EN	Knut Kasperson	1.1.04	RADIO	CBC Ireland radio - Dublin	En	Rana Sidani
27.12.03	newspa per	Neue Zürcher Zeitung	EN	Knut Kasperson	1.1.04	RADIO	Radio Moyen orient Voice of	Ar	Rana Sidani
27.12.03	Radio	NPR Washington	EN	Martin Zak	1.1.04	RADIO	America Aljazeera	En	Rana Sidani
27.12.03	Radio	Portuguese RDP Radiio Suisse	EN	Roy Probert	2.1.04	TV	TV-	Ar	Rana Sidani
27.12.03	Radio	Romande (evening)	FR	Roy Probert	2.1.04	RADIO	BBC radio Arabic	Ar	Rana Sidani
27.12.03	Radio	Radio Mediterrannée Suisse	FR	Roy Probert	2.1.04	TV	CNN	EN	Denis McCle:
27.12.03	Radio	Romande (lunchtime)	FR	Roy Probert	2.1.04	RADIO	radio Moyen Orient	Ar	Rana Sidani
27.12.03	radio	Radio vatican	fr	Roy Probert	2.1.04	RADIO	Radio- Canada, Les Actualités	FR	Marie-Franç Borel
27.12.03	Radio	Radio Vatican	FR	Martin Zak	2.1.04	RADIO	UN- arabic radio	Ar	Rana Sidani
27.12.03	Agency	Reuters Alertnet	en	Martin Zak	3.1.04	TV	Aljazeera TV- BBC	Ar	Rana Sidani
27.12.03	Radio	RFI	EN	Knut Kasperson	3.1.04	RADIO	Newshour BBC radio	EN	Denis McCle:
27.12.03	Radio	RFI Spanish	SP	Roy Probert	3.1.04	RADIO	Arabic	Ar	Rana Sidani
27.12.03	Radio	RMC Info Television Suisse	FR	Roy Probert	3.1.04	TV	CNN Spanish radio Moyen	SP	Cristina Estr
27.12.03	TV	Romande	FR	Roy Probert	3.1.04	RADIO	Orient	Ar	Rana Sidani
27.12.03	TV	TV5 (France)	FR	Roy Probert	3.1.04	PRINT	The Lancet	EN	Richard Mun
28.12.03	TV	Australia Broadcasting Corp.	EN	Martin Zak	3.1.04	RADIO	UN- arabic radio Aljazeera	Ar	Rana Sidani
28.12.03	Radio	BBC Belfast	EN	Martin Zak	4.1.04	TV	TV- UN- arabic	Ar	rana Sidani
28.12.03	Radio	BBC World French Service	FR	Marie-Françoise Borel	4.1.04	RADIO	radio British Medical	Ar	Rana Sidani
28.12.03	Radio	BBC World Service	EN	Martin Zak	5.1.04	PRINT	Journal Jo'Burgh 702/Cape	EN	Jemini Pand?
28.12.03	Radio	BBC World Service	EN	Martin Zak	5.1.04	RADIO	Talk	EN	Marie-Franç Borel
28.12.03	TV	Dubai TV	EN	Knut Kasperson	6.1.04	RADIO	Europe 1	FR	Marie-Franç Borel
28.12.03	Radio	Dutch Radio Business News	EN	Martin Zak	6.1.04	RADIO	Radio Galicia	SP	Marie-Franç Borel
28.12.03	radio	France Info	FR	Marie-Françoise Borel	7.1.04	AGENC Y	AFP	EN	Jemini Pand? J.M Suárez Toro
28.12.03	Radio	France-Info	FR	Marie-Françoise Borel	8.1.04	TV	Al Jazeera	SP	Jemini Pand? J.M Suárez Toro
28.12.03	newspa per	La Croix	FR	Marie-Françoise Borel	8.1.04	RADIO	ABC AFP-	EN	Denis McCle: J.M Suárez Toro
28.12.03	Radio	LBC - London	EN	Martin Zak	8.1.04	AGENC Y	Teheran	SP	Jemini Pand? J.M Suárez Toro
28.12.03	radio	LBC Radio (UK)	EN	Martin Zak	8.1.04	TV	Al Jazeera	AR	Saleh D
28.12.03	Radio	National Public Radio	EN	Martin Zak	8.1.04	AGENC Y	Australian AP	EN	Denis McCle:
28.12.03	Radio	NPR (Washington)	EN	Martin Zak	8.1.04	TV	BBC News 24	EN	Denis McCle:
28.12.03	radio	NRK (Norway)	Nor w	Knut Kasperson	8.1.04	RADIO	BBC Newshour	EN	Denis McCle:
28.12.03	Radio	Radio France internationale	FR	Marie-Françoise Borel	8.1.04	TV	BBC World	EN	Denis McCle:

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28.12.03	radio	Radio Luxembourg	fr	Roy Probert	8.1.04	RADIO	Cadena SER	SP	J.M Suárez Toro
28.12.03	radio	Radio Netherlands	EN	Martin Zak	8.1.04	RADIO	Cadena SER Las Palmas	SP	J.M Suárez Toro
28.12.03	Radio	Radio Renacensa (Portugal)	EN	Roy Probert	8.1.04	RADIO	Canarias 7	SP	J.M Suárez Toro
28.12.03	radio	Radio Renacensa (Portugal)	EN	Roy Probert	8.1.04	TV	CNN Asia Now	EN	Denis McCle
28.12.03	Radio	Radio Vatican RCF (Radio Chrétienne France)	FR	Martin Zak	8.1.04	RADIO	Independent Radio News (IRN)	EN	Denis McCle
28.12.03	radio	RFI	FR	Roy Probert	8.1.04	RADIO	RFI - Service persan	FR	Marie-Franç Borel
28.12.03	radio	RTL	FR	Knut Kaspersen	8.1.04	RADIO	RTE Austrian Radio English Service	EN	Denis McCle
28.12.03	radio	RTL	FR	Marie-Françoise Borel	9.1.04	RADIO	Service	EN	Marie-Franç Borel
28.12.03	Radio	RTL France	FR	Marie-Françoise Borel	9.1.04	WEB	BBC Online	EN	Denis McCle
28.12.03	TV	Sat 9 (Australia)	EN	Knut Kaspersen	9.1.04	RADIO	BBC Swahili	Swa	Abbas Gullet
28.12.03	TV	Television Suisse Italienne	Fr	Marie-Françoise Borel	9.1.04	RADIO	BBC World Today	EN	Denis McCle
28.12.03	TV	Télévision suisse italienne	FR	Marie-Françoise Borel	9.1.04	TV	CNN International	EN	Denis McCle
28.12.03	TV	Television Suisse Romande	FR	Martin Zak	13.1.04	PRINT	CBN Caspian Business News	TK	
28.12.03	TV	Télévision suisse romande	FR	Martin Zak	15.1.04	RADIO	VOA	EN	Hakan Sandbladh
28.12.03	TV newspaper	The Herald (Glasgow)	EN	Roy Probert	25.1.04	RADIO	BBC Newshour	EN	Till Mayer
28.12.03	radio	VOA	EN	Knut Kaspersen	26.1.04	TV	ARD-Morgenmagazin	DE	German Dr
28.12.03	radio	VOA	FR	Marie-Françoise Borel	26.1.04	TV	CNN Asia	EN	Iain Logan
28.12.03	Radio	Voice of America (VOA)	FR	Marie-Françoise Borel	26.1.04	AGENCY	DDP Mittlebayerische Zeitung	DE	Till Mayer
29.12.03	RADIO	BBC - newshour	En	Halvor	26.1.04	PRINT	Mohr	DE	Till Mayer
29.12.03	Radio	BBC Czech Europe	Cze	Martin Zak	26.1.04	PRINT	RNT	DE	Till Mayer
29.12.03	Radio	Today	EN	Martin Zak	26.1.04	PRINT	TAZ	DE	Till Mayer
29.12.03	Radio	BBC Radio Five Live	EN	Hakan Sandbladh	26.1.04	PRINT	Voice of America	EN	Marie-Franç Borel
29.12.03	TV	BBC World	EN	Rana Sidani	29.1.04	RADIO	Radio Moyen Orient	AR	Mostafa Mohaghegh
29.12.03	RADIO	BBC World Today	En	Rana sidani	4.2.04	RADIO	UN- arabic radio	AR	Rana Sidani
29.12.03	Radio	BBC WS World	EN	Jemini Pandya	4.2.04	RADIO	ARTE	FR	Crescent Mostafa Mohaghegh
29.12.03	Radio	BBC WS World Today	EN	Jemini Pandya	5.2.04	TV	CNN	EN	
29.12.03	RADIO	CBC Canada	En	Rana sidani	6.2.04	TV	BBC News	EN	Iain Logan
29.12.03	RADIO	CBC- Canada	En	Halvor	9.2.04	RADIO	24	EN	Iain Logan
29.12.03	RADIO	CBC- USA	En	Rana sidani	9.2.04	TV	BBC World	EN	Iain Logan
29.12.03	RADIO	CBC- USA	En	halvor	9.2.04	RADIO	BBC World Today	EN	Iain Logan
29.12.03	TV	CBS Jim Lehrer Channel 9 TV (AUS)	EN	Lauritzsen	9.2.04	RADIO	IRN Finnish Newspaper	EN	Iain Logan
29.12.03	TV	CKAC - Montreal,Canada	EN	Marie-Françoise Borel	13.2.04	PRINT	SKY TV	EN	Till Mayer
29.12.03	Radio	CNN	FR	Borel	13.2.04	TV	SKY TV	EN	Iain Logan
29.12.03	TV	CNN	En	Jemini Pandya	14.2.04	TV	SKY TV	EN	Till Mayer
29.12.03	TV	CNN	En	Halvor	19.2.04	TV	AI Arabia	AR	Various
29.12.03	RADIO	Danish Radio	ish	Halvor	19.2.04	TV	DRDK	DE	Till Mayer
29.12.03	WIRE	DDP	EN	Jemini Pandya	19.2.04	TV	DRS (Swiss)	DE	Till Mayer
29.12.03	Radio	Fréquence Plus,	FR	Marie-Françoise	19.2.04	RADIO	Voice of	EN	Iain Logan

		France		Borel			America		
29.12.03	Print	Herald Sun	EN	Caroline Dunn	9.3.04	TV	BBC/Farsi service	En	John english
29.12.03	PRINT	Metro News	EN	Jemini Pandya	9.3.04	RADIO	Free Europe radio	En	John English
29.12.03	Print	New York Sun	EN	Jemini Pandya	13.3.04	PRINT	Alsfelder Allgemeine	DE	Till Mayer
29.12.03	TV	Norwegian NRK TV	No	Halvor	13.3.04	PRINT	Leverkusener Anzeiger	DE	Till Mayer
29.12.03	RADIO	Norwegian radio	No	Halvor	13.3.04	PRINT	Mohr	DE	Till Mayer
29.12.03	TV	Norwegian TV2	No	Halvor	13.3.04	PRINT	Neue Westfälische	DE	Till Mayer
29.12.03	TV	Norwegian MTB TV	No	Halvor	13.3.04	PRINT	Oberhessische Zeitung	DE	Till Mayer
29.12.03	Radio	NPR	EN	Rana Sidani	15.3.04	RADIO	Voice International /Australia	En	Rana Sidani
29.12.03	Radio	Radio Canada	FR	Rana sidani					
29.12.03	Radio	Radio Frequence Plus	FR	Marie-Françoise Borel					
29.12.03	Radio	RTL Belgique	FR	Marie-Françoise Borel					
29.12.03	Radio	RTL Belgium	FR	Marie-Françoise Borel					
29.12.03	Radio	South Africa - Channel Islam	EN	Martin Zak					