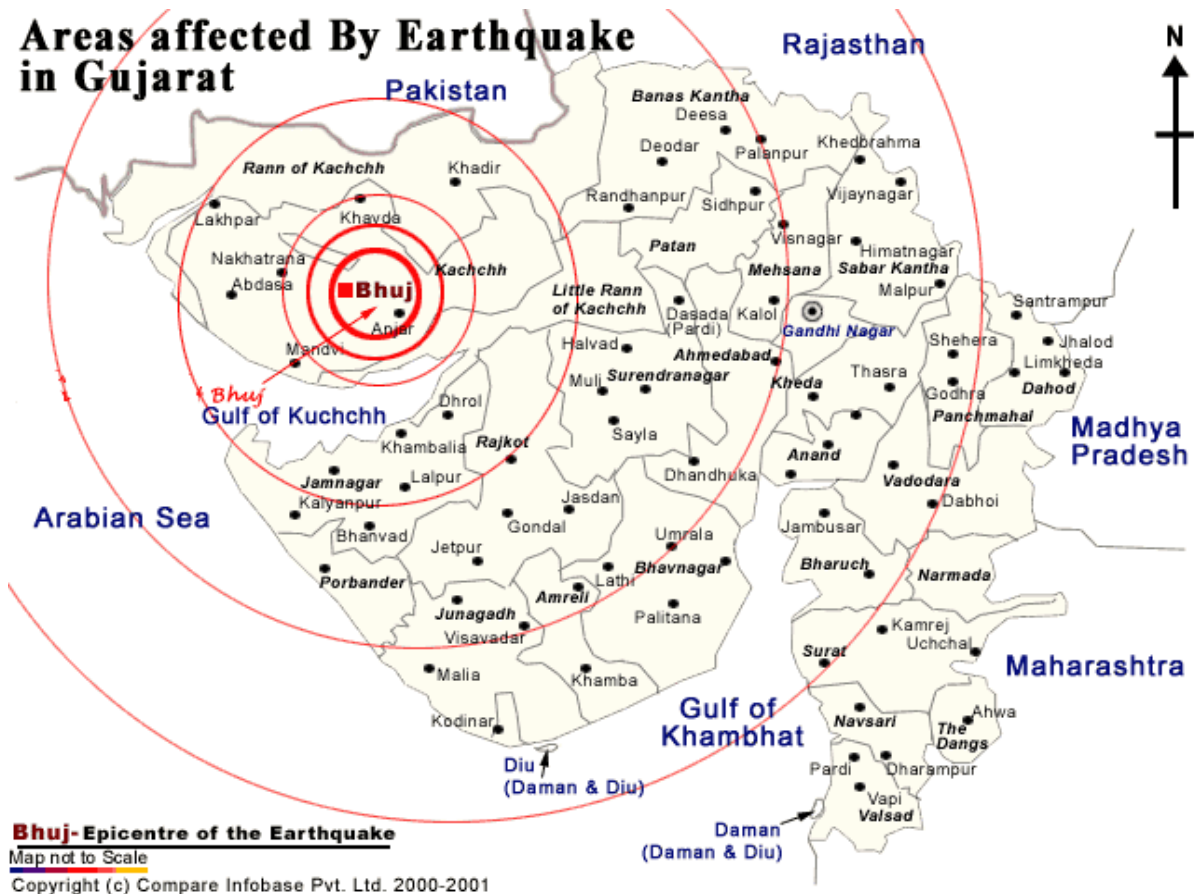


**IFRC\***

**Choreographer of Disaster Management**

**The Gujarat Earthquake**



\* International Federation of Red Cross and Red Crescent

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## **Introduction**

It was Republic Day in India. The more than 41 million Gujaratis of the western seaboard state of India bordering Pakistan were getting ready to celebrate India's 50 years of independence when the ground shook under their feet. News of the 7.9 Richter earthquake that had hit Gujarat arrived almost instantaneously at the International Federation of the Red Cross and Red Crescent Societies (IFRC) in Geneva on that cold Friday morning of 26<sup>th</sup> January 2001.

Given the short response window for natural disasters, a number of actions had to be taken during the first 24 hours. The accumulated experience of Federation staff had to be leveraged to estimate the size and gravity of the disaster. The Federation immediately engaged in a dialogue with its network of donor National Societies (NSs) while the Indian Red Cross entered into negotiations with government officials to secure the participation of the international community in the relief effort. As Marcel Fortier, the India Desk Officer at the Federation explained, "Today we no longer react to information. We take a proactive stance - we draw up a relief response plan, press all the buttons and launch our "missiles" as fast as we can. As information trickles in, we guide the funds, goods and people we have mobilized to best meet our objectives."

## **Gujarat Earthquake**

At around 08:50 local time on Friday 26<sup>th</sup> January 2001, a series of earthquakes peaking at a massive 7.9 on the Richter scale hit Gujarat, one of India's four wealthiest states. The epicenter of what turned out to be the most destructive quake in independent India's history, was 20km from the city of Bhuj, one of the least accessible parts of the country. The quake had damaged the state's commercial capital, Ahmedabad, less than 100km away from the epicenter and was clearly felt in neighbouring states and Pakistan. Search and rescue operations involving military forces and volunteers were confronted with a massive task (See Exhibit 1 for timeline).

Fortier recalled, "That morning the information we received from the stricken region was at best sketchy and anecdotal. Communication with the area was extremely difficult." As the news of flattened cities and villages swept the state and went around the world, the search, rescue and relief figures soared. One of the first pieces of information that reached IFRC was that the receiving infrastructure of the local military airport of Bhuj had been disrupted as the tower and air control equipment were destroyed. Numerous airport staff were reported killed or wounded and the cracks in the airstrip required for hasty repair. Entire sections of Gujarat's fragile network had completely collapsed. The fragmented water pipeline system was seriously damaged leaving areas adjacent to the epicenter of the quake without running water. Power and telecommunication lines were also severely affected. Fortier continued, "We soon knew that this was a big disaster in terms of human loss, scale and scope of damage, and people requiring assistance. The immediate aftershocks were strong, lasted for days and ran into the hundreds."

At the Federation a cross-organizational task force of 15-20 people<sup>1</sup> ready to work round-the-clock was set up. Fortier described their activities: “We quickly put together an information bulletin and sent it off to all NSs. We put on alert status all those National Societies (NSs) that are sponsors of Emergency Response Units (ERUs). We quickly consulted a number of websites and satellite information to gather information on the region and build an estimate of the size of the affected population to see where we could add value. In the meantime, our delegation in Delhi was making the necessary arrangements to reach Gujarat.” By the afternoon of the same day, the task force issued a preliminary appeal for CHF 2 million to assist 50,000 beneficiaries. It released CHF 200,000 from the Disaster Relief Emergency Fund (DREF) - approximately 10% of the preliminary appeal - and continued sharing information with participating NSs. “The preliminary appeal is a marketing, planning and coordination tool for us,” explained Fortier. “It helps us kick-off and motivate action from NSs, it allows NSs to approach their respective governments, and it becomes a transparent coordinating mechanism with other humanitarian organizations.”

Fortier continued, “The fact that the earthquake had happened on Friday allowed us to organize ourselves without much distraction during the weekend. We proceeded by by-passing rules, knowing that on Monday we would obtain the necessary internal authorizations. We got a lot of things done including a relief operation plan for the next 100-120 days that culminated in the launch of a full appeal of CHF 25.6 million on Tuesday 30<sup>th</sup> January.”

The IFRC Delhi team and the Indian Red Cross arrived at the disaster zone on Saturday afternoon, followed by the first batch of relief supplies. By then, the Logistics and Resource Mobilization department of IFRC had issued its first local procurement order for shelter and blankets. Bernard Chomilier, head of the Logistics and Resource Mobilization department recalled his first telephone conversation with the IFRC delegate: “Just imagine one of our people trying to gauge the extent of damage by what he saw. Early assessments can only be based on past experiences. Indeed all he reported on was rubble. Everything had been flattened within the airport’s radius.”

On Sunday morning, the first Field Assessment Coordination Team (FACT) members, namely the team leader together with the water sanitation and health experts arrived in Bhuj. By Sunday night the Indian government publicly welcomed “acts of solidarity.” This was also thanks to the active role played by the Indian Red Cross in convincing the government to “open up its doors.”<sup>2</sup>

Fortier was proud of their achievement: “When we returned to our offices at 9:00 on Monday morning, we had commitments to the tune of four million CHF. Fifteen NSs were on the case, ready to intervene. We had in fact mobilized people, financial resources and goods. Contrary to five years ago when we used to work sequentially, today, thanks to technology, the capability of our logistics department and the willingness of our partners to play the same game, we can

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<sup>1</sup> Divisions, departments and units part of the task force: Logistics and Resource Mobilization department (RMU & FLU), Federation Emergency Response Preparedness department (ERU unit and FACT unit), Human Resources, Finance, and Asia & Pacific departments.

<sup>2</sup> Given the political tensions with Pakistan, it was not obvious that the Indian Government and the local military forces would welcome international assistance and hence open their airspace to accommodate the arrival of commercial/aid aircrafts.

immediately launch all our missiles simultaneously and then guide and coordinate them as more precise information comes in.”

## **The International Red Cross and Red Crescent Movement**

The International Red Cross and Red Crescent Movement is composed of three independent bodies: the International Committee of the Red Cross (ICRC), National Societies (NSs) and the International Federation of the Red Cross and Red Crescent Societies (IFRC).

ICRC, established in 1863 in Geneva, was at the origin of the Movement. It was an impartial and independent organization whose exclusively humanitarian mission was to protect the lives and dignity of victims of war and internal conflict.

NSs, approved by ICRC, were independent bodies that acted as auxiliaries to their respective governments. Roughly 60% of funds raised by NSs came from their respective governments and the remaining 40% from income-generating activities and private donations. They provided a range of services including disaster relief, health and social programmes, and assistance to people affected by war. By 2001 there were 178 NSs (with more in the making) - almost one in every country in the world.

The president of the American Red Cross War Committee, Henry Davison, founded IFRC in Paris in 1919 in the aftermath of World War I. The five founding members of IFRC were the following NSs: Britain, France, Italy, Japan and the United States. NSs, through their statutory contributions, covered 50% of IFRC’s operational budget. The Federation, as a “serving leader”<sup>3</sup> and the representative of its member NSs in the international community, directed and coordinated international assistance of the Movement to victims of natural and technological disaster, to refugees, and in health emergencies. The Federation provided support to NSs during disasters by launching international appeals to raise funds, mobilize goods and personnel and coordinated the relief operation of the network. It bridged the coordination gap between participating NSs that had resources and receiving or affected NSs with scarce or limited resources. Through its 14 regional offices, 63 country field offices, six sub-delegations and two regional logistics centers it provided assistance in the aftermath of disasters through rehabilitation and capacity building programmes. IFRC, the world’s largest humanitarian organization, focused on four core areas: promoting humanitarian values, disaster response, disaster preparedness, and health and community care.

Marcel Fortier clarified the relationship between IFRC and NSs: “NSs are independent organizations that may or may not embrace and follow IFRC’s advice and recommendations. As auxiliaries of their governments, they might or might not get involved in relief efforts in certain countries or types of disaster. Above all, there are instances in which governments do not wish to ‘internationalize’ their domestic disasters and hence do not welcome any assistance that can be provided by IFRC through its network of participating NSs.”

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<sup>3</sup> Didier Cherpitel, IFRC’s Secretary General

The different entities of the Movement intervened depending on their capabilities, resources, and the magnitude of the disaster: in principle, NSs dealt with small emergencies, regional offices intervened in medium scale disasters, and IFRC in Geneva stepped in big humanitarian disasters and emergencies requiring international assistance and coordination. Decisions on the level of intervention were taken swiftly and simultaneously by each party.

By providing assistance to around 30 million people annually – from political refugees to victims of natural disasters - disaster response activities continued to be IFRC’s largest portion of work.

## **Disasters and Conflicts<sup>4</sup>**

Data from the last decade revealed that, on average, disasters claimed just over 75,000 deaths and affected 211 million people per year. Floods accounted for two-thirds of the 211 million people affected, while famine affected a figure close to one-fifth. While famine was the most deadly of all disasters (42% of the death toll), the most expensive disasters were floods, earthquakes and windstorms. On average, earthquakes constituted less than 10% of natural disasters, claimed around 10% of the death toll and affected less than 1% of people struck by natural disasters. In monetary terms, however, they roughly accounted for 34% of estimated damages (See Exhibits 2 & 3).

Donor response, however, varied according to the nature of the disaster. Contrary to “creeping” crises such as drought/famine or health emergencies (e.g. HIV), earthquakes and floods readily attracted donor and public attention and money. As Fortier said, “Earthquakes are easier to manage. People and donors see victims and they react to it. In fact, you know that you can raise more money than you can actually spend. This was the case for the Gujarat earthquake. Our full appeal was to the tune of 25.5 million CHF: we raised four million CHF in less than four days and 100 million CHF by the end of the campaign. Our main challenge is to raise resources that allow us to be better prepared for our disaster response.” Most disaster responses, however, remained under-financed and required downscaling as the average coverage was about 75% of the initial appeal.

During the last decade, conflicts killed nearly 2.3 million people - over three times the 665,500 killed by natural disasters. Conflicts affected on average 31 million people per year, one seventh of people annually affected by disasters. On average, 242 million people per year (a total slightly below the population of the United States of America), were either killed or affected by disasters and conflicts.

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<sup>4</sup> The Center for Research on the Epidemiology of Disasters (CRED), School of Public Health, Catholic University of Louvain, Belgium, maintains an Emergency Events Database (EM-DAT). Our source of data and definitions in this section has been the “2001 World Disaster Report” of IFRC, which draws upon CRED’s work.

*Disaster.* A situation or event, which overwhelms local capacity, necessitating a request to national or international level for external assistance.

*Killed.* People confirmed dead, or missing and presumed dead.

*Affected.* People requiring immediate assistance during a period of emergency, i.e. requiring basic survival needs such as food, water, shelter, sanitation and immediate medical assistance.

*Estimated damage.* The economic impact of a disaster on direct damage (e.g. to infrastructure, crops, housing)

## **Logistics and Resource Mobilization Department**

The Logistics and Resource Mobilization department, part of the Disaster Management and Coordination Division (See Exhibit 4), was composed of the Field Logistics Unit (FLU) and Resource Mobilization Unit (RMU). It was manned by six permanent staff and a fluctuating number of temporary and staff onloan from NSs (See Exhibit 5).

Chomilier, head of the Logistics and Resource Mobilization department recounted, “After a long career with Médecins Sans Frontières (MSF), I joined IFRC’s regional office in Nairobi six years ago. At that time, logistics at the Federation was a low performing, poorly organized cell essentially handling a purchase function. Three years ago, I moved to Geneva as the head of the logistics unit. I started working and improving on the expanded role of logistics that had gone beyond procurement to include all relevant supply chain activities, from planning and warehouse management to training and reporting. I worked relentlessly to enhance our profile and status within the organization.” Chomilier had to change the mind-set of his colleagues and educate them on the complexity of logistics. Previously, they saw the goods arrive on TV and would tell him “You just pick up the phone, order the goods and the goods are there.” He had to work on and around IFRC’s procedures, set up for accountability, to ensure a speedy response by the Federation. By delivering results and embarking on a standardization exercise that covered all its processes and activities, Chomilier slowly built his team’s reputation. With the reorganization of the Federation, logistics was conferred with a new status as a department<sup>5</sup> and the recognition that more resources were required for it to perform its function.

Birgitte Stalder-Olsen was the head of RMU. She had been with the Red Cross Movement for over 22 years: 9 years with the Danish NS and 13 at the Federation. She was in charge of the procurement of a couple of hundred items – from food, shelter, medicine to telecom units - for an average value of 150 million CHF per year, that is, 50% of the value of IFRC appeals. Her unit was responsible for the planning, coordination and reporting of goods mobilized through the NSs. Over the years she had established a personal and worldwide network of contacts with major NSs and key suppliers (minimum three suppliers per item). In recent years, her unit had introduced applications developed in-house using standard software tools (spreadsheets and dbases) to manage the unit’s activities.

Rob McConnell, head of FLU, joined IFRC in 1999. With a background in vehicle management, his unit was in charge of overall fleet management, deployment of logistics delegates, logistics Emergency Response Unit (ERU), reception and storage of goods on site, and onward transport to the final point of relief distribution.

In an effort to improve its disaster management capability, IFRC over the years had developed three main mechanisms and tools to respond to emergencies. The oldest mechanism in place (30 years old) was the Disaster Relief Emergency Fund (DREF) which provided seed money to initiate relief activity before the launch of an international appeal. The Field Assessment and Coordination Team (FACT) was deployed immediately for large disasters to assess the situation and activate an appropriate relief operation, and the Emergency Response Units (ERUs), which consisted of specialized equipment and people that addressed logistics, health,

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<sup>5</sup> The hierarchical structure of IFRC is as follows: unit, service, department and division

telecommunication and water and sanitation issues, had been introduced more recently. (See Exhibit 6 for more details on FACT and ERU). The Logistics and Resource Mobilization department played a central role in the FACT exercise through the participation of a logistics expert, and the ERU deployment through a Logistics ERU.

## **Behind the scenes**

Christof Johnen, the FACT officer explained, “The FACT concept is new to IFRC as in the past each donating and host country NS had the tendency to send its own assessment team with obvious cost and coordination implications.” To make the FACT concept work, the Disaster Management and Coordination Division of IFRC engaged in the organization of twelve-day FACT training sessions in different locations around the world aimed at imparting a consistent methodology, building team spirit, and a common pool of expertise.

Stalder-Olsen explained the interaction between the FACT team and her unit, “Mobilization starts with an appeal to the donating NSs based on our preliminary assessment and the subsequent field assessment carried out by FACT.” Based on its experience of past disasters and information received from FACT, the RMU prepared a relief mobilization table with a list of items and the requested amounts which was circulated among NSs via email and followed up by targeted phone calls. Stalder-Olsen confirmed, “As needs keep changing and pledges keep arriving, transparency with our donors on the status of goods required and mobilized becomes key.” The NSs ready and willing to procure and ship (dispatch to destination) certain items mentioned on the relief mobilization table according to the shipping instructions (e.g. receiving port), confirmed their pledges to the RMU. The pledge became effective once the RMU, typically through a phone call, assigned a commodity tracking number to it. Stalder-Olsen explained the reasoning behind the tracking system: “We introduced the commodity tracking system a few years ago to have a view over the movement of goods (from procurement, transport, warehousing to distribution) as well as to avoid and pin down the arrival of unsolicited goods.” The NSs then informed the RMU on the shipping details (e.g. arrival date and hour of the consignment).

In close coordination with the ERU unit<sup>6</sup> at the Federation, Chomilier’s department was behind the deployment of the various ERUs. The Logistics ERU ideally went into action before the arrival of the goods at final destination. Based on the mobilization table and local infrastructure conditions, it estimated the need, size, and number of required tent warehouses (‘Rubhalls’) as well as an adequate site for their erection (See Exhibit 7). Before clearing the goods through customs, it obtained special agreement (tax exemption for the imported goods) and arranged for the transportation (trucks, fuel, drivers, insurance etc.) of the goods to the Rubhalls. “Some of the ERU equipment is very sophisticated and apt for adverse conditions,” explained Isabelle Séchaud, the field logistics officer. “For example, some of the office equipment that works under extreme climatic situations - dust, wind, heatwaves during the day (up to 45°) and cold nights (down to 0°) - is included in the Danish ERU. Their equipment is waterproof and very simple to install - all you need to do is plug it in.”

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<sup>6</sup> Part of the Federation Emergency Response Preparedness Department

Upon receipt of each consignment, the Logistics ERU issued a goods receipt note to the RMU. The RMU updated its database (on a daily basis), advised the relevant NSs who proceeded with the settlement of their supplier invoices. The Logistics ERU was then entrusted with the storage, stock control, and security of the goods. The FLU received a copy of the daily stock movement and dispatch list. Upon receipt of a release note from relief delegates, the Logistics ERU arranged for the forwarding of goods to the point of final relief distribution. Chomilier emphasized, “The logistics systems and documents we have in place today are relatively new. They are, however, still rudimentary with no interface among them, thus resulting in multiple data entry (See Exhibits 8 & 9 for process flow).”

Stalder-Olsen talked about the codification and standardization process underway within the department: “Today we have frame agreements with suppliers for five key items such as blankets and plastic sheets. This has drastically simplified our task. We agree on a price with these suppliers who know our requirements in terms of quality and are obliged to keep a predetermined stock at their own cost.” Chomilier related the benefits of standardization for IFRC and the NSs network: “For example, once the UK NS agrees to send 10,000 blankets, my problem is solved. They are aware of the item specifications, our frame agreement with key suppliers and the shipping requirements.”

IFRC’s code of conduct regulated private sector donations. By setting standards that included ethical and operational issues, the Federation had the right to refuse certain donations and thus avoid goods being pushed through its network. Chomilier clarified, “For example, we have strict policies regulating drug donations. These policies are in line with World Health Organization (WHO) guidelines. We are also obliged to adhere to guidelines provided by a recipient country’s Ministry of Health.”

Talking about the role of FLU, McConnell was clear, “We are not here to define our job. Logistics is there to tackle the complex matching of demand and supply. While we figure out if and how best to meet the demand for relief, the relief delegates should define the needs, pull the items out of the warehouses we manage, and distribute them to the needy.”

## **Debriefing session**

Roughly three months after 26<sup>th</sup> January 2001, Chomilier called for a debriefing session with his staff and colleagues in the division (Federation Emergency Response Preparedness and operations managers) to review the various aspects of their intervention during the Gujarat earthquake as a means to consolidate and institutionalize the lessons learnt. He quickly went over the slides summarizing IFRC’s relief operations. The numbers were clear. In 30 days, his department, the FACT team and the Logistics ERU had organized the arrival of 45 charter planes carrying basic shelter material - 255,000 blankets, 34,000 tents, and 120,000 plastic sheets – and other items such as kitchen sets and jerry cans. The military staff at Bhuj airport had fully supported this operation. Despite the fact that they were mourning deceased colleagues, they continued to work under difficult and dangerous conditions to cater to charter planes flown in by different humanitarian organizations from all over the world.

Johnen started by recalling the fortunate circumstances under which the Logistics team was mobilized. “On 26<sup>th</sup> January, a Logistics training session in London was coming to its close. This allowed us to immediately intercept and engage one of the most experienced and trained team leaders. We actually caught him at Heathrow airport. Instead of heading back home, an entry visa to India was organized and he took the first flight to India. Two other Logistics members who had completed the London training session with him joined him in Gujarat that same Sunday. Within a couple of days of the disaster, we had the Logistics ERU team on site.”

There was common agreement, however, that instead of assessing the disaster the FACT team had been drawn into operational activities from the minute it arrived in Gujarat. During the numerous aftershocks they were at the Bhuj military airport receiving the first relief items and the ERUs. They were the decision-makers behind the establishment of the compound composed of Rubhalls that ended up hosting the 135 relief operators. In the first day or two after the arrival of the supplies, they even acted as relief delegates, distributing goods to the needy. Given the road conditions and lack of transportation, it was almost a week before they were able to communicate any reliable information on the extent of the disaster. Similar to other disasters, the media and its operators became an important source of information for them.

Stalder-Olsen commented, “Since the FACT team went quickly into doing instead of assessing, nobody, including us in Geneva, had a full picture of the disaster zone. In fact, for a few days we were left in the dark. Requirements kept on changing. You may all recall that the initial information we got from the field was that the Indian government did not want any tents. Three days later, we received a request for 10,000 units. Soon afterwards, the government’s request shot up to 60,000 units - only to settle on the figure of 35,000.”<sup>7</sup> In this particular case, IFRC was faced with a constraint, that of availability. Given the shelf life of tents (two years) and the lead-time required for their production, no supplier had the requested amount of 35,000 tents in stock. At the same time, demand for this product had increased overnight as a host of humanitarian organizations simultaneously approached the same global suppliers. To complete the picture, Stalder-Olsen reminded everybody how their standardization efforts, frame agreements and code of conduct helped them expedite the relief operations during the Gujarat earthquake.

McConnell and Fortier were full of praise for the RMU’s newly institutionalized tracking system: “It worked. At almost any time, we knew who was sending what, with what means, where and when.” McConnell emphasized, “If we look at our data on the Bangladeshi earthquake some ten years ago we see that a substantial amount of time and energy was spent on the management and disposal of unwanted goods as 95% of goods received were unsolicited.”<sup>8</sup> In the Gujarat event, the amount of unsolicited goods was as low as 5% making our job in the field much easier.”

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<sup>7</sup> There were a number of reasons for the fluctuating figures: a) Most of the houses in the region were made of mud. With plastic sheets, damages, especially those to the roofs could be temporarily fixed; b) Social networks were strong and people who had lost their houses were taken in by relatives and friends, and c) people preferred options a) & b) to living in tents and hence refused them.

<sup>8</sup> Examples of unsolicited goods donated by the private sector include supermarket initiatives that invite customers to donate goods purchased at the store or donations of second-hand clothes. Examples of donations made by private companies through NSs include frozen fish to areas with severe power problems or chocolate bars to tropical countries with limited refrigeration facilities. Unsolicited donations usually create additional storing, handling, distribution and disposal problems.

Having said that, he explained the reasons behind the excessive stocks still in Bhuj: “It is difficult to gauge a local community’s contribution to relief efforts. This inevitably leaves us with what, *a posteriori*, are faulty estimates. In the Gujarat case, we mobilized 160 tons of high protein biscuits (BP5). The government and the local communities responded efficiently to the food requirements of the people, so we ended up using only 25 tons of the stock. Now it is up to us to obtain the agreement of both the donor and the Indian NS to store the remaining stock in India.”

What had worked very well was the deployment of the ERUs, six in total. Within days of the earthquake, a combined referral hospital comprising 310 beds<sup>9</sup>, a basic health care unit<sup>10</sup> and an emergency clinic<sup>11</sup> involving a medical team of 29 people were working alongside about 100 local health personnel. The specialized water and sanitation unit<sup>12</sup> supported these units. A telecom unit<sup>13</sup> that established a communication link between all units involved in the operation was also operational just three days after the quake. Although the Logistics ERU<sup>14</sup> had entered into action before the arrival of the bulk of goods at the Bhuj military airport, an earlier deployment would have facilitated operations.

But still something had gone seriously wrong. McConnell reported, “During the first two days, given the absence of relief delegates on site, supplies were distributed without any tracking, which is against our procedures. Then goods started piling up in our warehouses. It took two to three weeks for relief delegates to organize their operations and pull the supplies out of our warehouses.” Chomilier was aware of the source of the problem. With no relief department at IFRC, the operations manager and the local delegations in the field usually carried out this function. Chomilier reflected, “To bridge this gap, it might be necessary to develop a relief ERU and create a unit at the Federation.”

During the first 100 days of operation, IFRC had in fact assisted 300,000 people through the active participation of 35 partners. The price tag of this operation, borne by the international community, was 35 million CHF while another 35-40 million CHF was devoted to the recovery and rehabilitation phase.

Chomilier and his team recognized the opportunities for improvement: “During a major disaster,” said Chomilier, “we are lucky if we get a few hours of sleep per night. To improve this situation as well as our response time, we need to work on our appeal and standardization process, relationships with NSs, each and every tool at our disposal, and the overall readiness of the Federation to respond to disasters.”

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<sup>9</sup> 150 beds run and donated by Norwegian Red Cross (RC) and another 160 beds run and donated by the Finnish RC

<sup>10</sup> Donated and run by Spanish RC

<sup>11</sup> Donated and run by the Japanese RC

<sup>12</sup> Donated and run by the German RC

<sup>13</sup> Donated and run by the Austrian and Spanish RC and comprised of 80 handsets for delegates. Several vehicle-mounted radios, two base stations and a solar-powered repeater

<sup>14</sup> Donated and run by the British and Danish RC

## **The Road Ahead**

Chomilier knew that they had come a long way. The Gujarat earthquake was a benchmark as it was the first disaster where all the tools, mechanisms and practices developed by IFRC to manage emergencies had come together. Aware of the potential improvement opportunities, there was a need to work with stakeholders around IFRC's limited human and financial resources.

**Exhibit 1 - Gujarat Earthquake timeline**

Date	Activity
Friday , 26 Jan 2001	<p>India</p> <ul style="list-style-type: none"> <li>• Earthquake</li> <li>• Indian Red Cross releases relief items</li> </ul> <p>Geneva</p> <ul style="list-style-type: none"> <li>• Issuance of Press Release/Information Bulletin</li> <li>• Secretariat Task Force meeting</li> <li>• Participating NSs put in alert for Emergency Relief Units (ERU) deployment</li> <li>• Preliminary appeal: CHF 2 million to assist 50,000 people</li> <li>• Release of CHF 200,000 from the Disaster Relief Emergency Fund (DREF)</li> <li>• 8 Fact Assessment and Coordination Team (FACT) members mobilized</li> </ul>
Saturday, 27 Jan 2001	<p>Geneva</p> <ul style="list-style-type: none"> <li>• New Press Release/Situation Reports</li> <li>• Procurement order for shelter and blankets (local procurement)</li> <li>• Support to participating NSs for allocation/tracking of commodities &amp; shipping arrangements</li> </ul> <p>India</p> <ul style="list-style-type: none"> <li>• Indian Red Cross and Delegates from IFRC’s regional office at earthquake site</li> <li>• Indian Red Cross supplies arrive</li> <li>• GSM network coverage by Ericsson</li> </ul>
Sunday, 28 Jan 2001	<p>Geneva</p> <ul style="list-style-type: none"> <li>• New Press Release</li> <li>• Coordination with NSs</li> <li>• Order of deployment for 2 referral Hospital and Water Sanitation ERUs</li> </ul> <p>India</p> <ul style="list-style-type: none"> <li>• The government of India welcomes “acts of solidarity”</li> <li>• Arrival of FACT team leader, water sanitation, relief &amp; health experts in Bhuj</li> </ul>
Monday, 29 Jan 2001	<p>Geneva</p> <ul style="list-style-type: none"> <li>• Secretariat Task Force meeting</li> <li>• New Press Release</li> <li>• First cash request from the field and subsequent transfer to the field</li> <li>• First pledges received in Geneva</li> </ul> <p>India</p> <ul style="list-style-type: none"> <li>• Arrival of Telecom and Logistics FACT members</li> <li>• Arrival of Telecom and Water &amp; Sanitation ERUs</li> </ul>
Tuesday, 30 Jan 2001	<p>Geneva</p> <ul style="list-style-type: none"> <li>• Secretariat Task Force meeting</li> <li>• New Press Release</li> <li>• Full appeal: CHF 25.6 million to assist 300,000 beneficiaries for 120 days</li> <li>• Order of deployment of logistics ERU</li> </ul> <p>India</p> <ul style="list-style-type: none"> <li>• Arrival of Hospital ERUs</li> <li>• Arrival of information and reporting FACT members</li> <li>• Arrival of international relief supplies (tents, shelters and blankets)</li> <li>• Operational site established</li> </ul>
Wednesday, 31 Jan 2001	<p>India</p> <ul style="list-style-type: none"> <li>• Arrival of other ERUs and international relief supplies</li> </ul>

**Exhibit 2 - Types of disasters**

<b>Natural Disasters</b>	
1. Hydro-meteorological	<ul style="list-style-type: none"> <li>• Avalanches/landslides</li> <li>• Droughts/famines</li> <li>• Extreme temperatures</li> <li>• Floods</li> <li>• Forest/scrub fires</li> <li>• Wind storms</li> <li>• Other (insect infestation, waves/surges)</li> </ul>
2. Geophysical	<ul style="list-style-type: none"> <li>• Earthquakes</li> <li>• Volcanic eruptions</li> </ul>
<b>Non-Natural disasters</b>	
1. Industrial	<ul style="list-style-type: none"> <li>• Chemical spill</li> <li>• Collapse of industrial structures</li> <li>• Explosion</li> <li>• Fire, gas leak, poisoning, radiation</li> </ul>
2. Miscellaneous	<ul style="list-style-type: none"> <li>• Collapse of domestic/non-industrial structures</li> <li>• Explosion</li> <li>• Fire</li> </ul>
3. Transport	<ul style="list-style-type: none"> <li>• Air, rail, road and water-borne accidents</li> </ul>

Source: “2001 World Disasters Report”, IFRC.

**Exhibit 3 - Figures on 1991 to 2000 Disasters**

<b>Disasters</b>	<b>No.</b>	<b>People killed</b>	<b>People affected</b>	<b>Estimated damage in million of USD</b>
<b>1. Natural disasters</b>	<b>2,557</b>	<b>665,598</b>	<b>2,107,401,000</b>	<b>786,705</b>
Hydro-meteorological disasters	<b>2,292</b>	<b>605,407</b>	<b>2,088,220,000</b>	<b>546,326</b>
<i>Floods</i>	888	97,747	1,442,521,000	272,818
Geophysical disasters	<b>265</b>	<b>60,191</b>	<b>19,180,000</b>	<b>240,379</b>
<i>Earthquakes</i>	211	59,249	17,023,000	239,601
<b>2. Non-natural disasters</b>	<b>2,146</b>	<b>86,923</b>	<b>64,200</b>	<b>23,080</b>
<b>Grand total</b>	<b>4,703</b>	<b>752,521</b>	<b>2,108,025,000</b>	<b>809,785</b>

Source: “2001 World Disasters Report”, IFRC. EM-DAT,CRED, University of Louvain, Belgium

## **Exhibit 6 – Response Tools**

### **FACT - Field Assessment and Coordination Team**

To further strengthen its disaster response to complex emergency situations, IFRC had devised a rapidly deployable tool, the Field Assessment and Coordination Team (FACT), to carry out rapid field assessments, ensure coordination with dozens of actors, and make quick decisions. The team composed of three to seven members can call upon a core group of about 200 experienced Red Cross/Red Crescent disaster managers from within the Federation and from the NSs. This core group specialized in relief, logistics, health, nutrition, public health and epidemiology, water and sanitation, finance, administration, and psychological support with language capabilities, had received training from IFRC in FACT methodology. The team intervened in major humanitarian emergencies and was on standby and deployable within 12-24 hours notice for up to six weeks anywhere in the world. The Disaster Management and Coordination Division of IFRC was the authority that decided on the composition of the team.

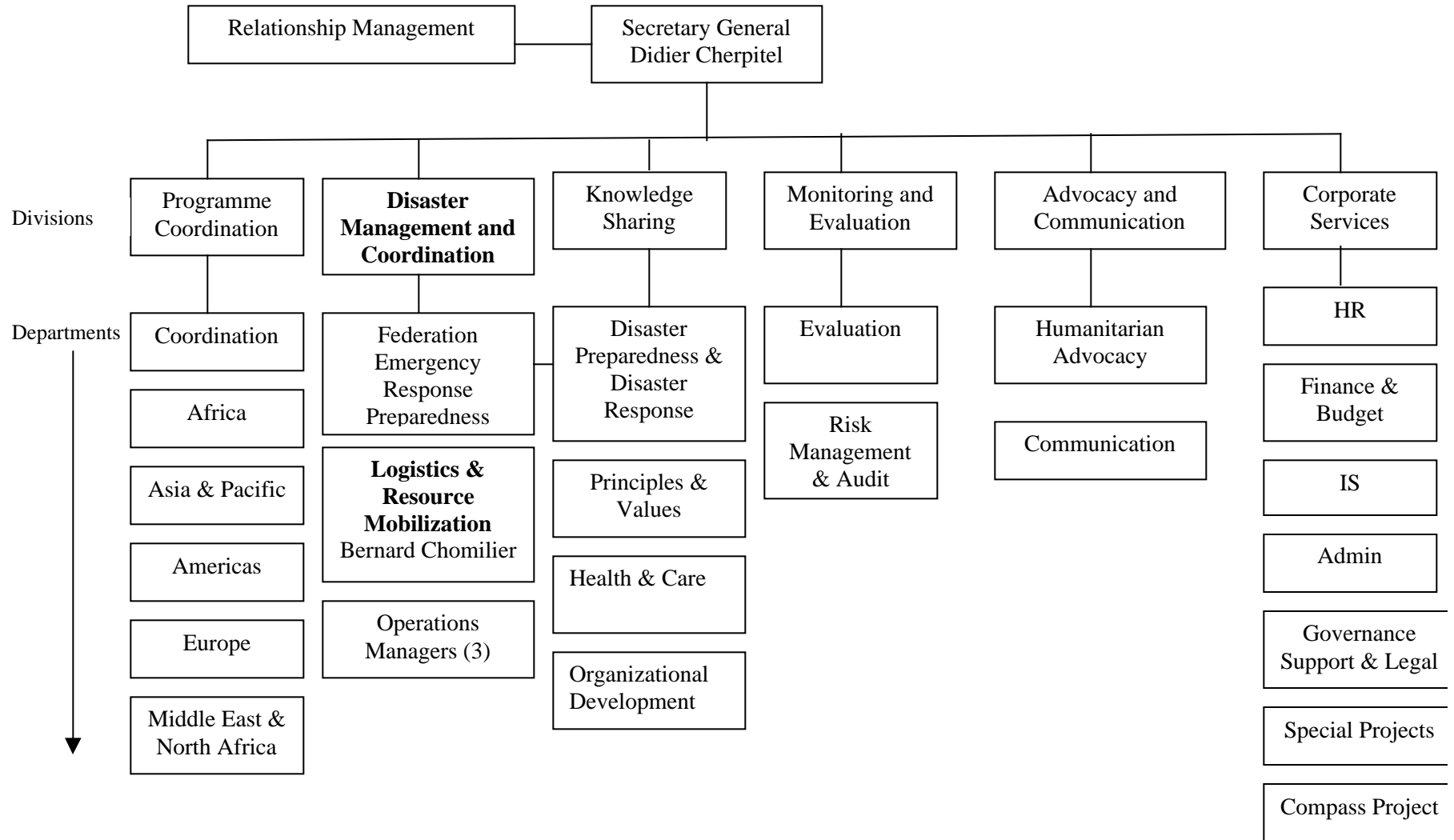
In coordination with other relief agencies, FACT carried out an assessment of the emergency situation in the field and identified the most pressing needs. It compiled an assessment report, an action plan recommending the most appropriate Red Cross/Red Crescent intervention and drafted an appeal, which was then launched by IFRC to member NSs and other donors. It facilitated and coordinated the start up of relief operations. It requested Emergency Response Units (ERUs) and coordinated their deployment, advised on and requested other human and material resources, and coordinated the assistance provided by the NSs in response to the disaster. After assisting in the implementation of the plan of action, the FACT team handed over the relief operation to the host NS and the IFRC delegation.

### **ERU – Emergency Response Unit**

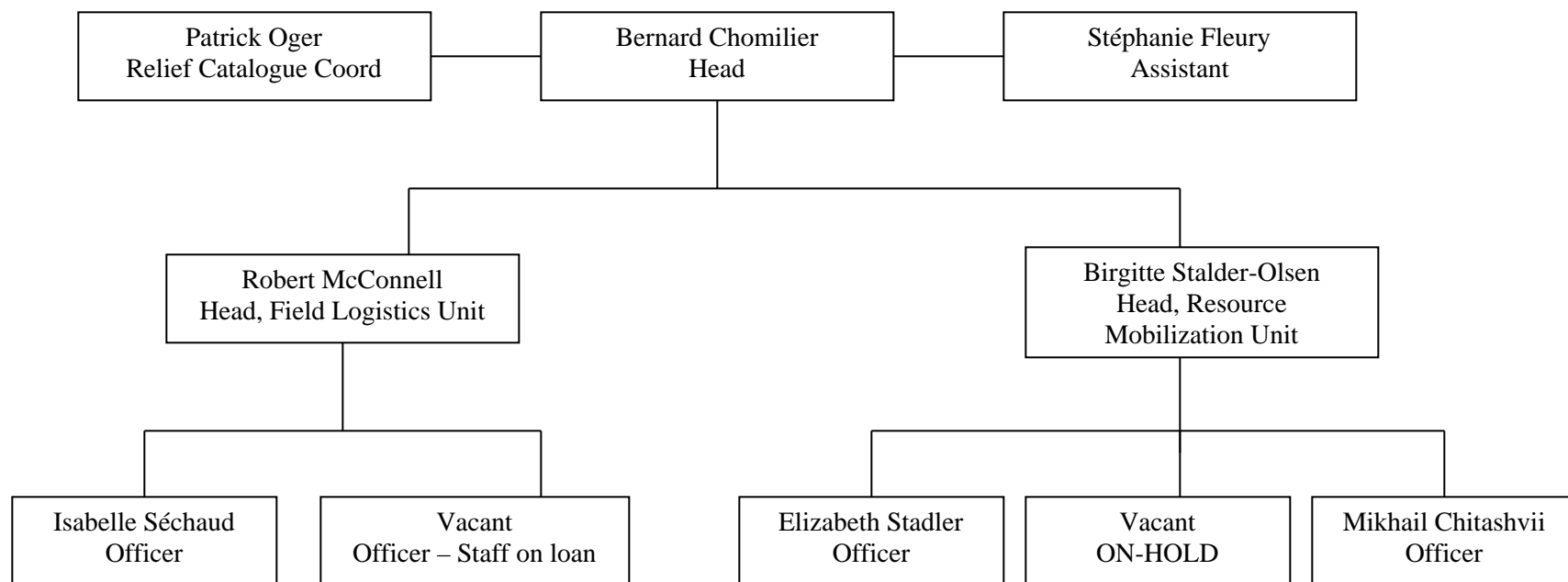
There were five types of ERU sponsored by a handful of NSs (Austria, Belgium, Britain, Denmark, Finland, Germany, Japan, Norway, Spain, and Sweden) and made available through IFRC to disaster areas. These were:

- 1. Logistics.** This unit organized field logistics. It managed the arrival, clearance (customs), storage and distribution of relief and prepared the arrival of other ERUs. There were two types of Logistics ERU: small, composed of 2 people and big, composed of 4 people and more if required. They included vehicle, food and office equipment and were on standby in the UK and Denmark and under development in Spain and Belgium.
- 2. Basic Health Care.** Provided immediate curative, preventive and community health care. It assisted, rehabilitated or further developed existing health care structures. This ERU served the primary health care needs of up to 30,000 people. It had 20 beds for patients needing overnight care. It was on standby in Germany, Norway, Finland, Spain, and Japan.
- 3. Water and Sanitation.** It comprised four modules:
  - Treatment (up to 600,000 liters/day) and drinking water supply unit (up to 40,000 people/day).
  - Distribution and trucking unit: storage and distribution of up to 75,000 liters per day to three separate storage and distribution systems.

**Exhibit 4 - Federation Secretariat Structure  
November 2001**



**Exhibit 5 - Logistics and Resource Mobilization Department  
November 2001**



- Specialized water and sanitation unit: treatment and provision of safe drinking water and basic sanitation for health installations, and for up to 15,000 people.
- Mass sanitation unit (for up to 40,000 people).

It was on standby in Germany, Sweden, Austria and Spain.

4. **Referral Hospitals.** Provided full range of medical services. It included medical and surgical units organized in modular way. It had 120 to 150 beds and served up to 250,000 people. It was on standby in Germany, Norway and Finland.
5. **Telecommunications.** Established telecommunication between the disaster area, field offices, delegations, NSs and Secretariat. This ERU enabled the Secretariat to provide accurate information about an emergency, anticipate future needs as well as account for donations. It was on standby in Germany, Austria, and Spain and under development in Japan.

**ERU personnel and equipment.** The sponsoring NSs were responsible for the staffing of their ERUs and coverage of all personnel and operational expenses. Local professionals employed by Red Cross and Red Crescent offices supplemented the ERU's core technical staff. Each unit was equipped with survival equipment (food, beds, tents, electricity generators, mobile telephones, office equipment, etc.) and was self-supporting for up to four weeks. Most ERU equipment was standardized. Upon completion of assignment (within four months), the ERU equipment was usually handed over to the host NS, local authorities, Federation's country or regional delegation.

**ERU Deployment.** IFRC estimated the magnitude of a disaster and prepared a disaster response plan recommending, among other things, the deployment of specific ERUs. NSs sponsoring ERUs upon receipt of an alert would consider making them available subject to a number of issues including status of readiness. The Director of the Disaster Management and Coordination division of IFRC would make the final decision on the deployment of ERUs and the Secretariat issued a deployment order to the sponsoring NS. The NS was expected to dispatch the ERU within 48 hours of receipt of a deployment order. It took up to one week for an ERU to become fully operational.

#### **Zoom on Logistics ERU**

The Logistics ERU was primarily concerned with the reception, storage and forwarding of relief goods to operational areas during emergency situations. It also carried out logistics analysis and provided support to other ERUs (e.g. health and water). The logistics analysis consisted of collation of information regarding the capacity, capability and status of the port of entry in terms of receiving/handling, transportation and storage facilities as well as customs and immigration rules and regulations. It could also carry out local procurement of relief supplies and services. Logistics ERU operated according to IFRC standards and procedures. It was an integral part of IFRC and NS logistics efforts and assumed the functions of a focal point (information and coordination) on logistics issues. It was deployable and operational in all transit points, regions or countries. In the event of a large and complex operation, more than one Logistics ERU could be deployed. A Logistics ERU comprised: a landcruiser, a SATCOM tel/fax unit with cc-mail, a PC, a generator, a personnel survival equipment (incl. tent, food, medical kit), an admin kit, Federation forms, stickers & flags, HF & VHF L/C fitted radios, four VHF mobile units plus charges & spare batteries, 2 foldable chairs, a foldable table, a mobile fluorescent/halogen light unit & a bike.

*Source: IFRC*

**Exhibit 7 - Pictures**



Off-loading of plane at Bhuj Airport

Goods arriving at the Rubhalls

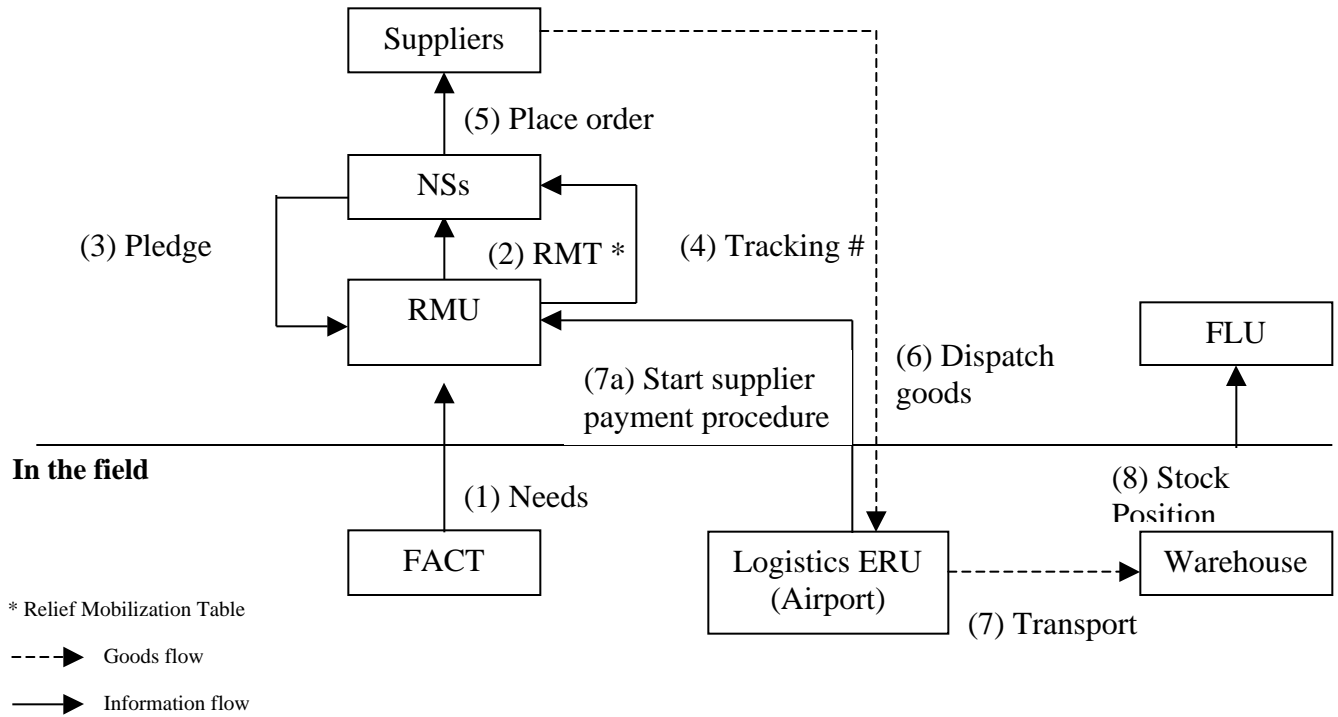


Goods ready to be transported to point of distribution

Overview of the Relief Camp



**Exhibit 8 - Goods Mobilization and First Shipment Process Flow**



**Exhibit 9 – Goods Distribution and Replenishment Process Flow**

