

# PROGRAMME UPDATE



International Federation of Red Cross and Red Crescent Societies  
Fédération Internationale des Sociétés de la Croix-Rouge et du Croissant-Rouge  
Federación Internacional de Sociedades de la Cruz Roja y de la Media Luna Roja  
الاتحاد الدولي لجمعيات الصليب الأحمر والهلال الأحمر

## EFFECTIVE INFORMATION TECHNOLOGY (IT) & TELECOMS IN FEDERATION DISASTER MANAGEMENT

30 June 2005

*The Federation's mission is to improve the lives of vulnerable people by mobilizing the power of humanity. It is the world's largest humanitarian organization and its millions of volunteers are active in over 181 countries.*

For more information: [www.ifrc.org](http://www.ifrc.org)

### In Brief

Appeal No. 05AA095; Programme Update no. 1, Period covered: January to June, 2005; Appeal coverage: 55%; Outstanding needs: CHF 122,272; Please note: this appeal has received considerable in-kind support from Cisco, provisionally valued at some CHF 150,000; adjustments are being made in the Federation's system to record these types of contributions, and this will be reflected shortly in the updated list".

Appeal target: CHF 272,272 (USD 234,381 or EUR 179,921).

Programme summary: The appeal is intended to fund the improvement of IT equipment deployed in emergency response situations. This equipment forms the backbone of IT and telecommunications requirements that support the critical IT systems, internet access and e-mail. Shortcomings have been identified in the existing equipment, particularly in relation to speed of deployment.

A prototype of the equipment has been developed through contributions from Cisco to prove the concept. This development has proved successful, although complex. The next step is to move the current equipment into a deployable prototype at an estimated cost of CHF 20,000. If this proves successful, the final step is to compare the prototype with other options available and either develop the prototype into a fully deployable solution or adapt other available solutions to Federation requirements.

This appeal has received considerable in-kind support from Cisco, provisionally valued at some CHF 150,000 (in the form of equipment, network experience and engineering time to develop the proof of concept, including Cisco professional engineers who have contributed to the prototype; adjustments are being made in the Federation's system to record these types of contributions, and this will be reflected shortly in the updated list

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*This Programme Update reflects activities to be implemented over a one-year period. This forms part of, and is based on, longer-term, multi-year planning. All International Federation assistance seeks to adhere to the [Code of Conduct](#) and is committed to the [Humanitarian Charter and Minimum Standards in Disaster Response](#) in delivering assistance to the most vulnerable. For support to or for further information concerning Federation programmes*

or operations in this or other countries, or for a full description of the national society profile, please access the Federation's website at <http://www.ifrc.org>

## Operational developments

The massive deployments following the Bay Of Bengal Earthquake & Tsunami demonstrated both the need for sophisticated IT and telecommunications systems and their complexity. The project proposed in this appeal would have greatly improved the timeliness of the response of IT and telecoms services. It would have also provided a more technically sound basis to develop the IT services provided in the service centres in Sri Lanka and Indonesia.

This program aims to deliver a tool for deployment in disasters, that:

- Provides almost instantaneous access to Internet based information, e-mail and critical IT systems, through a suit-case sized, wireless computer network;
- Provides internal telephone facilities (which could potentially be used for international calls as well, which could significantly reduce the use of expensive satellite phones);
- Can be deployed with a minimum of technical knowledge;
- Is standard across ERUs, FACTs and RDRTs;
- Can be deployed as accompanied luggage, readily available in disaster-prone countries.

The tool being developed is known as a "Network in a Box", a quick deployment computer network module to support Disaster Response Operations of the Federation with the following features:

- Multiple connectivity capability
- Internet and files sharing
- Field wireless coverage
- Voice Over IP solution.

The components of the program are:

- The evaluation of existing solutions used by the Federation and other agencies,
- Selection of the equipment
- Set-up a prototype
- Set-up documentation
- Set-up training program
- Set-up five deployable modules.
- Run three workshops for IT & Telecom technicians

## IT and Telecommunications

**Programme Goal:** National societies improve their responsiveness to disasters and their ability to resource their programs through successful use of standard IT and telecom solutions and partnerships.

**Objective:** Capacity in IT and telecom is improved, and strategic partnerships with private sector are leveraged.

### Progress/Achievements (activities implemented within this objective)

#### Expected programme results:

- Disaster Management: improving the quality and speed of deployment of IT/ Telecom systems in emergencies: aim is to deploy "Network in a Box" to 3 emergencies during 2005.
- Partnerships: developing long-term partnerships with the private sector to fund, deliver, support and maintain a standard set of solutions: aim is that Cisco plays an important role in the ongoing support of the "Network in a Box".
- Staff development and training in support of the "Network in a Box" solution.
- Set up e-learning and in-class training facilities for IT/ Telecom staff. These can be leveraged to deliver training in other (non-IT) areas.
- Packaged and adaptable solutions that can evolve as requirements change, and are easy to understand by all parties involved, as well as easy to adopt by national societies.

- Cost savings: aim is to save 80% on building and deploying the “Network in a Box” (including resource and equipment donations from Cisco).

A prototype of the equipment has been developed through contributions from Cisco to prove the concept. This development has proved successful, although complex. Pictures of the prototype are given below.



*Prototype components mounted in frame. Note wireless access point.*



*Demonstration of prototype connection to satellite internet device*

The next step is to move the current equipment into a deployable prototype at an estimated cost of CHF 20,000. If this proves successful, the final step is to compare the prototype with other options available and either develop the prototype into a fully deployable solution including documentation and training or adapt other available solutions to Federation requirements. A proposal has been submitted under ECHO thematic funding for the remaining components of this appeal to be funded.

#### **Impact:**

The equipment has not been deployed so no field impact has been achieved. The development of the prototype has advanced thinking, within the Information Systems Department and through contact with specific national societies, in relation to technology possibilities for emergency and non emergency IT and telecoms solutions. The prototype has been demonstrated to a number of National Societies in Geneva.

#### **Constraints:**

The development of this product highlights the complexity of IT networks and the need for highly skilled staff to support deployments. While much of this requirement can be addressed through documenting procedures and

practices, there is a need to consider how third level support can be provided in the long term. The long term support arrangements must be a prime consideration in developing this project.

Further development of this concept is constrained by a lack of funds. As stated above, a small funding injection of CHF 20,000 would allow this device to be deployed in the field. Full funding of the appeal would allow the finalisation of a fully supportable product.

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