



AUSTRALIAN ENGINEERS ASSISTING IN THE WORLD HOT SPOTS

Mr Ray Coughran
RedR Member seconded to United Nations High Commissioner (UNHCR)
for Refugees in Quetta, Pakistan

Paper Summary

RedR Australia (Registered Engineers for Disaster Relief) is a humanitarian organisation which maintains a Register of skilled and experienced technical professionals including engineers, to meet the needs of front-line aid agencies. Its services include site planning and shelter, water supply and sanitation, roads and bridges, logistics and communications, training, financial and project management, and demining

Ray Coughran, a civil engineering consultant from northern NSW has spent 12 months in Chechnya and Ingushetia, and has just returned from a further 6-month spell in Quetta, and Peshawar in Pakistan. His paper at the conference will recount some of his experiences with RedR at these locations.

Introduction

RedR Australia (Registered Engineers for Disaster Relief) is a humanitarian organisation which maintains a Register of skilled and experienced technical professionals including engineers, to meet the needs of front-line aid agencies. Its services include site planning and shelter, water supply and sanitation, roads and bridges,

logistics and communications, training, financial and project management, and demining

Engineers can make a difference

Questions often asked by experienced engineers and other technical personnel are: How can we make available our technical knowledge and experience for the benefit of

disadvantaged people throughout the world? How can we 'make a difference'?

The most conventional route is to become involved in projects sponsored by the World Bank and international aid agencies. These are generally staffed by consultants, and offer little opportunity for engineers in the public works field. Others may become directly involved with the work of non-government organisations (NGO's) such as International Red Cross, World Vision, Peace Corps and similar bodies. These deployments may often be for extended periods, not compatible with a mainstream career.

Let me describe how the work of RedR (Engineers for Disaster Relief) provides this opportunity to career public works engineers in a way which enhances, rather than diminishes, their careers. Let me also describe some of the outstanding humanitarian work performed by persons deployed to the field by RedR.

The need

When disaster strikes, the basic needs are for security, shelter, water, food and sanitation. These are needs that can be provided by engineers and their colleagues, rather than the medical community.

Rapid response is essential – a day in the freezing mountains of northern Iraq, or in the heat of the Ogaden Desert in Ethiopia, can, and often does, kill. Poor sanitation and water supply led to some 50,000 deaths among Rwandan refugees in eastern Zaire in 1994, in just a few short weeks.

Humanitarian relief agencies need to supply a rapid and professional response. Few have the resources to have the necessary skills on standby, nor is there time to recruit and train staff for the crisis. It is exactly to meet this need that RedR was established.

The original concept of RedR was to create a register of carefully selected engineers who could be called on at short notice to work for up to three months with front-line relief agencies on secondment from their regular employer. This concept remains at the heart of RedR to this day.

The Red R engineer or technician is deployed on the request of the front-line agency, when it becomes aware of the need. Some have been deployed within 24 hours of the first call. About 100 agencies have called on RedR for assistance, and there have been up to 200 assignments in any one year. They involve tough, hard living, and can be anywhere in the world where people are suffering.

Deployments are generally for about three months, but may be extended for up to six months by mutual agreement. The important thing is to get the job done. The requesting agency meets all the costs involved, which usually includes a salary component.

Selection and training

It is just as important that a person deployed to a crisis point be able to cope with the cultural, health, security and personal issues they may encounter, as to be able to manage the technical demands. There is no 'second chance'.

To ensure quality, RedR uses a rigorous interview, selection and training procedure. The core of this process is the five-day residential Refugees and Relief Workers program. This is now recognised as the most effective and, in some cases, the only training program for humanitarian NGO workers, and many of the participants are from other NGO's, the military and private organisations proposing to deploy staff on contracts or consultancies. The core RARW program is augmented by a series of associated courses in allied fields such

as security, water/sanitation, public health, site planning and others.

Corporate support

RedR in each country receives strong financial support from the engineering community, particularly consultants and contractors. For some, RedR is their 'charity of choice'. Many also encourage their staff to enrol on the Register, as they see this as a significant benefit in skills development.

The challenge is to maintain and increase this support in the light of increasing demand for RedR services, and to avoid the effects of 'compassion fatigue'. We can never stand still!

The future

It's a tough world out there, but RedR is providing engineers with the opportunity to make a difference. One such assignment was undertaken by Ray Coughran, a civil engineering consultant from northern NSW has spent 12 months in Chechnya and Ingushetia, and has just returned from a further 6-month spell in Quetta, and Peshawar in Pakistan with RedR. Ray has 40 years of local government and managerial experience in rural NSW. Ray left his position as Director of Engineering Services with Narrabri Shire Council in 1999 to establish his consultancy practice. Since 2000, Ray has been involved with RedR on these projects. This paper will recount some of his experiences with RedR at these locations.

RedR in Russia, June 2000 to July 2001

During the conflict between Russian Federation military forces and Chechen separatists in 1999, up to a quarter of a million Chechens fled to the relative safety of the neighbouring Republic of Ingushetia. As both Chechnya and Ingushetia are subjects of the Russian Federation, these people are classified as Internally Displaced Persons (IDP's). The number of Chechen IDP's in

Ingushetia stabilised at around 160,000. There are another 160,000 Chechen IDP's within Chechnya.

In the sectors of Shelter and Water/Sanitation, UNHCR has the role of coordinating the humanitarian efforts of 20 UN, International and Non-Government Agencies operating in Ingushetia and Chechnya. During the period covered by this report two professional engineers were assigned by RedR Australia to UNHCR to perform the coordination role, and to provide technical input for UNHCR's own operations. Robert Crigan filled the position of Shelter Coordinator from June to December 2000. His work in the Shelter sector was summarised in EESS Mission Report 00/21/N. Ray Coughran, the author filled the position of Water/Sanitation Coordinator, from June to December 2000. Ray Coughran filled the position of Technical Coordinator, responsible for both sectors, from January 2001 to July 2001.

The Technical Coordinator provided a mechanism for the coordination of humanitarian agencies through regular fortnightly meetings in Nazran, Ingushetia, and through active contact with agency representatives. During the period, UNHCR undertook many initiatives, addressing the most serious deficiencies in the living conditions of the IDP's. Significant achievements in Ingushetia included Stage 1 of the rehabilitation of the Ingushetia Water Supply, the construction of two new camps accommodating 10,000 IDP's enabling all IDP's to be moved out of railway wagons, and the winterization and improvement of 400 IDP settlements. Due to the security situation, it is more difficult for UNHCR to operate inside Chechnya, however a dry warm room project was undertaken to assist up to 4,000 families, and assistance, including the supply of 135 prefabricated living units, was made available through local administrations

During these assignments Ray Coughran's official duty station was UNHCR Sub-office, Stavropol, Russian Federation. However in practice, he was based in Vladikavkaz, North Ossetia, and lived there most of the time. In the role of Water/Sanitation Coordinator, he spent most days in the field in Ingushetia, travelling to camps, settlements and water supply facilities. In the later role of Technical Coordinator, his time was divided between Field-office office Nazran, Ingushetia, Sub-office Stavropol and Field-office Vladikavkaz.

The objectives of these positions is set out below:

Water/Sanitation Coordinator

Ensure that all materials to be supplied for Stage 1 of the rehabilitation of the Ingushetia Water supply are procured and delivered in the current year 2000.

Ensure that a MOU is prepared and executed for Stage 2 of the rehabilitation of the Ingushetia Water supply.

Ensure that implementing partner IRC carry out water/sanitation work under their agreement to a satisfactory standard.

Ensure, as far as it is within the control of the Water/Sanitation Coordinator, that the immediate water and sanitation needs of IDP's are met, and there is no justifiable criticism of UNHCR from media or agencies regarding the water or sanitation conditions for IDP's in Ingushetia

Technical Coordinator

Coordinate the activities of all agencies (UN, NGO, GOV) operating in the shelter and water/sanitation sector in the North Caucasus.

Ensure that materials to be supplied for Stage 2 of the rehabilitation of the Ingushetia Water supply are procured and delivered in the current year 2001.

Ensure that a new MOU is prepared and executed for Stage 2 of the rehabilitation of the Ingushetia Water Supply

Ensure that UNHCR's implementing partners carry out shelter and water/sanitation work under their agreements to a satisfactory standard.

Ensure that UNHCR shelter and water/sanitation activities carried out by direct implementation meet program objectives.

Ensure, as far as it is within the control of the Technical Coordinator, that the immediate shelter and watsan needs of IDP's are met, and there is no justifiable criticism of UNHCR from media or agencies regarding the shelter and water/sanitation conditions for IDP's in Ingushetia.

RedR In Pakistan

Following the events of Sept. 11, the retaliatory action in Afghanistan against the Taliban led to a refugee crisis in Pakistan and adjacent region. The following weekly reports detail some of the activities Ray were involved with on then assignment in Pakistan near the Afghanistan border.

Refugees weaving carpets, Zar Karez Camp, Loralai

A Weekly Report in June 2002

Provision of Water

Seven new water tankers of 9 cubic metre capacity have been commissioned. Two are in service with WESS in Mohamed Kheil, and five are with IFRC in the Chaman area. These units, which supplement the privately hired tankers, have provided a significant boost to the tankering system. One of the units in the Chaman area is also fitted with a crane attachment. Water supply in the camps has been maintained at Sphere guideline levels of 15 litres/person/day. Water supply in the waiting area has

been maintained at 10 litres/person/day.

Provision of Sanitation

Concern/Guardian are carrying out a programme of latrine construction in Dara 1, Dara 2 and the waiting area. To 5 June, 260 latrines have been constructed in the waiting area. Concern/Guardian also have eight teams carrying out hygiene promotion. As a result, improvements were noted in Dara 1 camp.

Khuzdar Way Station

Design layouts were prepared for the Khuzdar way station, and arrangements made with CAR for civil works to be carried out.

Weatherhaven

Following a security review, it was necessary to identify an alternative site on Government land for the Weatherhaven hardship duty station at Chaman. A preferred site has been identified, and design layouts are being prepared.

Provision of Water

Tenders for supply and delivery of water to camps in the Chaman area have been evaluated, and recommendations formulated. It is recommended that one Chaman-based supplier be awarded the contract for supply and delivery to Roghani and Dara 2 camps. UNHCR tankers, operated by IFRC will deliver water to Dara 1 camp. The tenders received for supply and delivery of water to the waiting area were not competitive and it is proposed to extend the current tripartite agreement with the Killi Faizo contractor. The competitive tendering process has been highly successful, and will result in improved continuity of supply, and a saving over the six-month contract period, of Pakistani rupees 2.25 million (USD38,000).

Water to camps has continued to meet SPHERE guidelines of 15 litres/person/day. Water supply in the

waiting area has been maintained at 10 litres/person/day.

Water Tanks at Roghani Refugee Camp,
Chaman

Provision of Sanitation

Concern/Guardian are carrying out a programme of latrine construction in Dara 1, Dara 2 and the waiting area. To 26 July, latrines have been constructed as follows:

Dara1 550

Dara 2 680

Roghani 400

Landi Karez 580

Waiting area 480

Concern/Guardian are also planning to improve the taps in the waiting to alleviate the excessive wastage caused by faulty or missing taps.

Provision of Shelter

WESS are nearing completion of health amenities in Mohd Kheil and Latif Abad camps.

In Mohd Kheil, the Central Health Unit (CHU), and Basic Health Unit (BHU) No2 are due for completion on 29 July. BHU No 1 is due for completion in one week. In Latif Abad, the BHU is due for completion in 3 weeks.

Erecting accomodation units at Hardship
Duty Station, Chaman

Weatherhaven

Site preparation work is continuing on the alternative site on Government land for the Weatherhaven hardship duty station at Chaman. Clearing, levelling and construction of brick walls is in progress.

A Weekly Report in August 2002

Technical Staff

Andrew Kagoda, (Watsan Engineer) returned from leave on 21 August. Val Tarasov, (Civil Engineer) was on duty in Chaman. John Saad, (Site Planner) was in his fifth week on mission as Weatherhaven site manager in Chaman. Ray Coughran (Technical Coordinator) was on mission to Chaman Field House for two days, and Loralai field house for two days.

Water/Sanitation Programmes

Water/sanitation programmes proceeded normally in all camps.

Water was provided to Chaman area camps as follows:

Camp	Indicator	SPHERE Guideline	Performance
Landi Karez	Litres/person/day	15	22
Roghani	Litres/person/day	15	20
Dara 1	Litres/person/day	15	16
Dara 2	Litres/person/day	15	15

There was a single reported case of cholera in the Waiting Area on Saturday 17 Aug, however no further cases were reported. The Waiting Area is well serviced with adequate potable water at 15 litres/person/day, and 570 new cluster latrines have been completed recently.

Weatherhaven Hardship Duty Station

Demolition, clearing and levelling are complete, and the site is secure and ready for the installation of the portable offices and accommodation units. Erection of brick walls is complete. The building construction phase will commence when the Weatherhaven installer arrives on 28 August.

Ray setting out a UNHCR 50 person Hardship Duty Station, Chaman

Author Biography

Ray has 40 years' experience in Local Government engineering culminating as the Director of engineering at Narrabri Shire Council. Ray left Narrabri Shire Council in 1999 to start up a consultancy on the North Coast of NSW. Ray developed an interest in RedR Australia and has taken on two projects in Russia and has just finished a six-month stint in Pakistan. Ray has a degree in Civil engineering and has completed a post graduate MBA.

Postal Address: 71 Broken Head Road, Newrybar NSW 2479