SHELTER PROJECTS

SHELTER IN EUROPE:
15 Relevant Case Studies

CASE STUDIES OF SHELTER AND SETTLEMENT RESPONSES IN CONTEXTS RELEVANT TO EUROPE

Global Shelter Cluster
ShelterCluster.org
Coordinating Humanitarian Shelter

Shelter Projects - Shelter in Europe: 15 Relevant Case Studies

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All case studies are available online from www.shelterprojects.org

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DISCLAIMER

Approximate prices are given in US Dollars (USD), based on exchange rates around the time of the project.

TABLE OF CONTENTS

Accommodation options for refugees and migrants flowing into Gernany in 2015-2016 included field beds in gymnasiums.

INTRODUCTION

This booklet is a compilation of case studies of humanitarian shelter responses in the European region, compiled from the six past editions of the interagency publication *Shelter Projects*. The series of publications, initially led by IFRC, UNHCR and UN-Habitat, is now a Global Shelter Cluster product and includes contributions from over 300 shelter practitioners from across the world, from over 50 organizations and over 70 countries, including host governments' shelter responses.

The projects described in the case studies and overviews contained in this booklet represent responses to conflict, natural disasters and complex crises, demonstrating some of the implementation and response options available within the European context. These include collective centre upgrade, tents and emergency shelter support, cash-based interventions, housing repairs and winterization, often coupled with technical assistance.

The publication is intended to support learning by highlighting the strengths, weaknesses and some of the lessons that can be learned from different projects, which try to maximize emergency funds to safeguard the health, security and dignity of affected people, whilst – wherever possible – supporting longer-term shelter needs and sustainable recovery.

The target audience is humanitarian managers and shelter programme staff from local, national and international organizations at all levels of experience. *Shelter Projects* is also a useful resource for advocacy purposes, showcasing the work done by the sector, as well as for research and capacity-building activities.

All case studies and overviews contained in this booklet, as well as from all editions of *Shelter Projects*, can be found online at:

www.shelterprojects.org

B.2 Azerbaijan - 1992 - Conflict - People displaced

Case study: Upgrade of collective centres

Project type:
Upgrade of collective centres

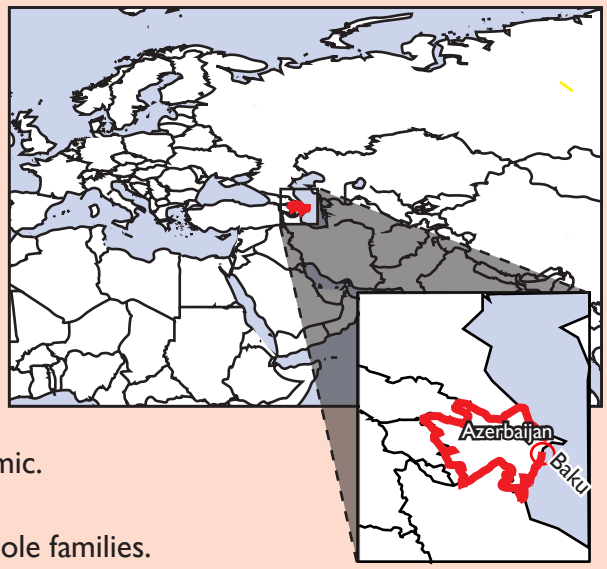
Disaster:
Nagorno Karabakh conflict

No. of people displaced:
700,000 people displaced
40,915 families (169,609 people) came to Baku in 1992-1993

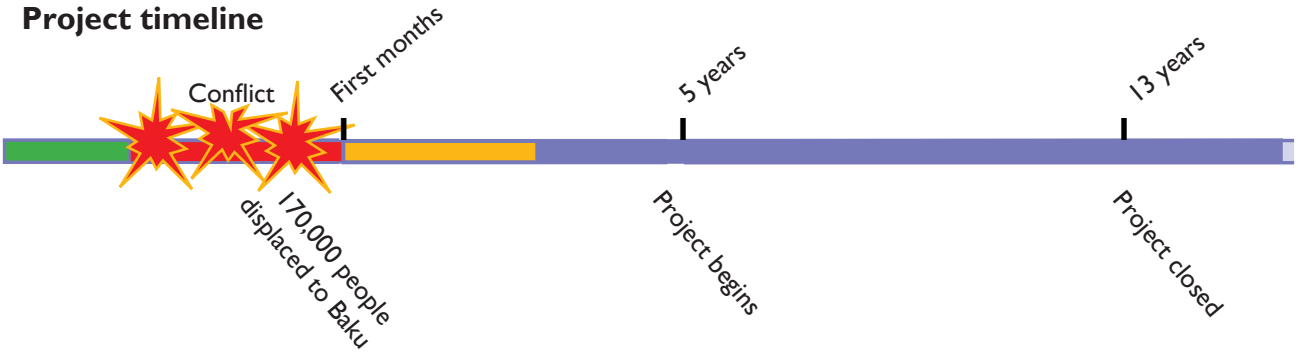
Project target population:
27, 500 people in over 60 buildings over 8 years

Occupancy rate on handover:
No data. Room allocation in the buildings is dynamic.

Shelter size
Variable. Individual rooms are often shared by whole families.



Project timeline



Summary

This programme upgraded and maintained public buildings that people had moved to during the conflict in Nagorno-Karabakh in the early 1990s. The project worked with families who, by the end of the project, had been displaced for over ten years. The way of working evolved over time, starting with contractor-led construction and evolving into direct implementation by the NGO. Although the project closed without a clear exit strategy, aspects of the project were taken up by the government in their housing policies.

Strengths and weaknesses

X This project provided essential maintenance. The buildings were often poor to start with and had further deteriorated with the long-term displacements.

X The project was able to adapt its methods to improve cost effectiveness. The final approach was to directly supervise hired master craftsmen and to use contractors to provide materials.

W The programme did not have a clear exit strategy from the outset. This led to some difficulties when the project was finally closed after eight years.

W Overpopulation, lack of a sense of ownership and high resident turnover reduced the overall durability of both repair and community activism.

W The project could have included closer cooperation with the authorities for further upkeep and maintenance. Success of the rehabilitation largely depended on close cooperation and support from the local authorities, since many problems required intervention outside the public building.

This case study draws heavily on: *Project review report: Public building rehabilitation, Baku, Azerbaijan*, by Bayaz Zeynalova, 2007. (www. reliefweb.int)


Photo: NRC Azerbaijan


Photo: NRC Azerbaijan


Photo: NRC Azerbaijan

Bathrooms before and after upgrade

Context

The conflict in Nagorno-Karabakh between Azerbaijan and Armenia in the early 1990s led to over 500,000 people becoming internally displaced and a further 200,000 becoming refugees. Around half of the internally displaced people moved to urban areas, most of them to the capital, Baku.

In Baku, many people moved into dilapidated, overpopulated public buildings, most of which were originally student residence halls and dormitories. The buildings were designed with rooms intended for one person, not for families of five or more. The kitchens and bathrooms were shared. In some cases the buildings were without water supply or sanitation. This was in the context of a significant growth in wealth in Baku, in part due to the oil industry.

The temporary shelter solutions found following the conflict lasted longer than was expected. Many of those displaced following the conflict had been living in one of twelve camps. The last of these did not close until 2008, after fifteen years. Upon its closure, many of the camp residents were resettled rather than being able to return to their original homes.

The climate in Baku is cool and wet in the winter and hot and dry in the summer, leading to challenges of leaking roofs and poor sanitation.

Selection of buildings

A programme to upgrade the public buildings and schools was adopted.

Criteria for the selection of public buildings for inclusion in the programme were adjusted throughout the project period. However, the main criteria remained unchanged: at least 70% of building inhabitants had to be IDPs; other organisations could not have previously worked in the building; and the building had to be in exceptionally bad condition.

In its first years (1998-1999), the project prioritised hostels located next to each other and that shared a common yard. Such locations made repair works easier and reduced costs. Letters from local or central authorities, as well as applications from the residents, were also considered in the selection process.

The willingness of the building residents to work with the NGO was the decisive factor in the final selection. Inhabitants had to be willing to volunteer to help with repairs, and to clean corridors and shared areas. In some cases, works had to be suspended until the community agreed to fulfil the NGO's conditions.

Not everyone benefited equally from the project. Although similar works were performed in most of the buildings, several of them were only partially rehabilitated (only roof or electricity) for a variety of reasons.


Photo: NRC Azerbaijan

Technical solutions

Inhabitants saw broken sewerage as the greatest problem in the buildings. Other common problems included shortage of water, leaking roofs and dampness. As a result, plastering, floors and ceilings in toilets and bathrooms were damaged in most buildings.

A typical repair of a public building involved:

- rehabilitation of the shared areas - toilets, bathrooms, washing rooms, kitchens and corridors;
- infrastructure repairs - electricity, sewerage, water and sewerage pipes;
- repair of roofs;
- installation of new water heaters, sinks, stoves, faucets, showers, light bulbs, circuit breakers, switchboards, windows and doors;
- installation of electricity transformers (this was not costly but served a large number of IDPs).

The most durable output of the project was the provision of electricity systems (including transformers and switchboards) and new roofs.

The project was not always successful in solving problems with the water supply. A durable solution would have required dealing with the malfunctions outside the building, which was beyond the scope of the project. Cooking stoves and taps in the rehabilitated buildings had short lifespans because many people used them.


Photo: NRC Azerbaijan

Kitchens before and after upgrade

Implementation

An average building took two months to rehabilitate, with the implementation scheme being significantly improved over the years.

In the beginning, contractors were hired to implement the work. In practice, this meant that the NGO purchased construction materials and hired contractors to implement all works. The payment of labourers lacked transparency and important irregularities in the system were found. This led to the dismissal of project staff and the adoption of a new implementation scheme.

After two years of project implementation the NGO hired construction workers directly.

After five years of project implementation the NGO subcontracted a local company to supply construction materials. The supplier was selected on the basis of submitted quotes.

Over time, a good team of core construction workers, most of them IDPs, has been formed. Many of these have subsequently found work on other projects run by the NGO.

The involvement of community members in the work was seen as a key to the successful implementation of the project. The goal of the community programme was to ensure beneficiary buy-in and participation in the project. This was believed to be instrumental in creating a feeling of ownership and in the further maintenance and upkeep of the rehabilitated buildings.

Wiring before upgrade

One of the occupied public buildings in Baku

Occupancy

A survey conducted upon the completion of the project found that all of the buildings were still occupied by IDPs. However, the occupancy of individual rooms changed constantly. Many IDP families moved out of the buildings to an outskirt of Baku. In some cases, the emptied rooms were given to local families or those moving to Baku from other regions, but usually to other IDPs. According to the building superintendents, IDPs sell their rooms to relatives or friends. Yet some also lock their rooms and keep them as a storage space.

Obviously, the families who could afford to leave the public buildings were those who managed to establish some livelihoods and were relatively well off. The remaining occupants of the public buildings are still the most vulnerable of those living in the cities.

'The project was based on learning...We drew conclusions from the previous experience and made improvements every year. The work became more efficient over time'.
- Project staff member

Along with the large-scale construction of new settlements, urban public building rehabilitation became part of the 2004 State Programme on IDPs and Refugees. In many cases the repairs implemented by the State Social Fund for the Development of IDPs have copied this project.

Corridors before and after upgrade

C.23 Yugoslavia (formerly) - 1963 - Earthquake

Case study: Shelter construction

Case study credit: UNDRO 1982

Disaster:
6.9 Richter scale earthquake
Skopje, Yugoslavia

Disaster date:
26 July 1963

Population pre-disaster:
200,000

Number of houses damaged:
30,000

Number of people displaced:
160,000

Value of damage:
1 billion USD (at 1970 value)

Project timeline

- Some people remain in temporary houses
- Some people move into new prefabricated houses
- 5 months – People move into 1,711 temporary houses
- 4 months – Tents stop being used
- 3 weeks – 50,000 women and children leave city
- 24 hours – 5,000 tents provided to 25,000 people
- 26 July 1963 – Earthquake

Emergency shelter

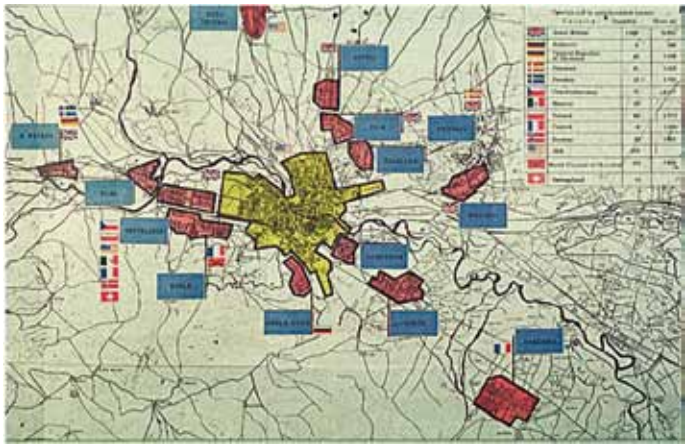
A national preparedness organisation assumed control and implemented an evacuation policy. 150,000 women and children left the city within 3 weeks; 60,000 men were available for cleaning, repairing and erecting housing; 1,900 prefabricated 'temporary' houses were built by international organisations; they were intended for eventual agricultural use.

Reconstruction

A decision was made to requisition land to build 14,000 houses for a total of 70,000 people. Repairs to existing houses were undertaken to provide housing for 80,000. A new town plan was designed and implemented. This included an international competition for the design of the city centre.

Strengths and weaknesses

✓ The emergency organization was highly effective.
✓ The ability to requisition land contributed to the rapid reconstruction of houses. Another contributory factor was the massive aid received from Eastern and Western European sources (82 countries).
✓ Overall there was a balanced, diversified approach to shelter provision which satisfied the needs in spite of the exposure threat of cold weather, which came 3 months after the disaster.
✗ The tents were not all used.
✗ The evacuation policy was only partially effective (all returned within 3-4 months).
✗ Needs of ethnic minority groups (40 per cent of the population) were insufficiently considered by authorities.
- The estimated damage total was US$2,4 billion, while the overall cost of reconstruction was in the order of US$40 billion.
- Much of the damage to property can be attributed to (a) rapid urbanization in the preceding decade; (b) damage to building foundations in the 1962 flood.



Map prepared by authorities (using army engineers) immediately after the earthquake to indicate the sites (in purple) of temporary housing. The temporary housing was built with a 9 month lifetime. These temporary housing sites inevitably became permanent and adversely influenced the layout of the future city development.

**US army Quonset huts built after the earthquake.
Top image: taken in 1974,11 years after the earthquake.
Bottom image: taken in 1987, 25 years after the earthuake. Two of these huts had been elevated and joined together to form a small cinema.**

A.7 Georgia - 2008 - Conflict

Case study: Rural shelter construction

Full case study

Country:
Georgia

Disaster:
Conflict

Disaster date:
8-12 August, 2008

Number of houses damaged:
1,850 families (mainly single-family houses. some multi-unit apartment buildings)

Number of people displaced:
120 000—130 000

Project target population:
Initially 5000 households. Later reduced to 200 households.

Occupancy rate on handover:
Initial occupancy rate 65%. Later increased to over 80%.

Shelter size:
The materials distributed were to repair houses of varying sizes. The transitional shelter cottages were 24m^2.

Materials cost per shelter:
Varied for building repair. 3000 USD for each winter cottage.
Costs were higher for the 'One warm cottage'.

Project timeline

Summary
Support of families whose homes had been damaged or destroyed during the conflict, in order that they could stay in their homes during the first winter. Building repairs and then the provision of a 'one warm cottage' was supplemented by distributions of NFIs and firewood.

Strengths and weaknesses

✓ Support allowed returnee families to stay in their homes during the harvest season, and during the winter.
✓ The number of families having to stay in collective centres was reduced.
✓ Forward preparation was made for full reconstruction after the winter.
✓ The NGO showed great levels of adaptability to changing government policies.
✓ The project made extensive use of beneficiary contribution and input.
✓ 'One warm cottage' provided a long-term solution for those whose homes had suffered the most damage.
✓ Local markets and contractors were engaged.
✓ Cottages were built that would be of use to families evan after they had ceased living in them.
× Constant changes in government policy forced shelter projects to adapt continuously.
× 'One warm cottage' used resources which could have been used for permanent repairs of original houses.
× 'One warm cottage' construction not as adaptable as initial 'one warm room' repair strategy.
× Limited size of 'one warm cottage' was not always able to provide sufficient space for extended families.
× Need for accelerated speed in construction of cottages reduced potential for reconstruction of improved houses and technical knowledge transfer.
- Targeting of the most severe levels of damage ensured that those most in need of shelter were supported, but the increased costs of doing so meant that fewer households could be supported, and almost none whose houses had suffered a mid-range of damage were given support.

The housing strategy shifted from "one warm room" to "one warm cottage." As a result the anticipated scale of the programme was reduced
Photo: Jonathan Puddifoot

Before the conflict

Georgia had a pre-existing displaced population of approximately 200,000 people. Many had been living in collective centres in urban areas since the conflict of 1991-1992.

Apart from a few families living in apartments in the centres of the largest villages, most families lived in stand-alone farm-houses. Often these were shared between many generations of the same family.

Most of the houses were grouped into small villages, and stood alone inside walled gardens. Most families still relied upon agricultural produce for their livelihoods to some degree, and most houses included storage rooms in the bottom storey.

Houses built after the 1970s were more likely to be built in breeze blocks. Almost all of the families in the affected areas were owners of their own homes.

Since 1990 there was a dramatic decline in the local economy. This added to the vulnerability of the housing stock to conflict damage.

Temperatures in the affected zones fall as low as minus 20^0 Celsius in winter. Houses in the area were built under the Soviet regime, when energy was virtually free to users, and as a result many had very poor thermal insulation. For 97% of households firewood is the main fuel for heating and cooking. The average family consumes $7m^3$ of wood during a winter.

Between the 8th and 12th August 2008, South Ossetia was invaded. Russian forces continued 26 kilometres further south. At the ceasefire on 12 August, a 'buffer zone' was declaed at the perimeter of the furthest advance. This zone was occupied until October 2008.

After the conflict

During the first three weeks of the ceasefire armed militia gangs roved the villages inside the buffer zone south of South Ossetia. Once that threat diminished, a greater number of families from the villages in the buffer zone started to return home.

By the second week of September in some villages, 70% of the population were either permanently returning home, or spending at least part of the time back in their homes. The return process coincided with the start of the harvest season.

A relatively small number of houses (only 5% of the total) had been destroyed or heavily damaged. However, up to 2483 houses in the 11 most heavily-damaged villages had suffered sufficiently light damage that the families could stay in the houses over the winter.

In urban areas beyond the buffer zone, greater strains were becoming evident in the ad-hoc collective centres for those who had been displaced and who could not return. There were also competing claims for support from those newly displaced, and the older displaced population from the 1991-2 conflict, as well as those fleeing from South Ossetia for whom return was impossible.

One warm room strategy

Within one month after the disaster, the implementing organisation had developed a 'one warm room' strategy, based upon previous models from the Balkans in the 1990s. The most important element of this strategy was that it would support those families who wanted to return to their houses of origin, and thus relieve pressure upon the collective centres in urban areas like Tbilisi. It aimed to provide support to the families who were seeking to return home in time to salvage their agricultural harvests.

The organisation also continued to support people that were displaced into urban areas through the distribution of firewood and non food items.

"One warm room"

Trained staff would assess the levels of damage, and then engineers would draw up Bills of Quantities for those houses where repairs needed more than plastic sheeting or other minor items. A voucher system would be set up with local suppliers in Gori, the provincial centre just south of the buffer zone. This would support the local economy and ensure that as wide a range as possible of materials was available.

Housing damage was assessed on a scale of 1 to 5, based on similar scales used in the Balkans. For larger houses, there was the possibility of providing sufficient materials to prevent further damage to the rest of the house during the winter.

A cost limit per house was imposed for each category, This was to ensure equitability between households. Whilst this approach would be sufficient for those whose houses had been merely damaged, neither the time nor the budget constraints would have permitted the re-construction of an entire warm room in those houses which had been wholly destroyed.

"One warm cottage"

On October 22nd, initial engagement with the affected communities was underway, the Government of Georgia changed policy: primarily destroyed houses (category 5) would be targeted. These families would be given a 24m^2 cottage, constructed by the NGOs. This solved the issue of how to support those with destroyed houses, but reduced the number of beneficiary households supported by the NGO to 200.

Selection of beneficiaries

Initial surveys had identified the villages which had suffered the most damage. Village leaders were approached, and asked to organise a meeting between the NGO and all members of the community whose houses had been damaged. At the meeting, families were registered, and asked to evaluate the level of damage of their houses.

During the initial 'repair' part of the strategy, support was offered to families according to levels of damage. Extra help for both rubble removal and repairs was offered to those whose vulnerabilities prevented them from doing this work themselves.

When the strategy changed towards the construction of a one-room cottage, criteria changed. All families in the target villages whose houses had been assessed as being Category 5, or completely destroyed, were then included.

Technical solutions

Initially, the proposal was for a supply of materials, based upon individual bills of quantities written by staff engineers. These would provide each family with at least one warm room for the winter in their house of origin, and would be the start of the full reconstruction after the winter.

For those whose houses had suffered minor damage (typically, broken windows or roofing tiles) there would be a direct distribution of plastic sheeting. For higher categories of damage, a voucher scheme was planned, based on a market assessment, the limited logistics resources for direct delivery, and traffic limits in the buffer zone.

After the change in shelter strategy by the government, local contractors were engaged to build the 200 cottages for those families whose houses had been totally destroyed, or damaged beyond repair. The cottages were built using breeze-blocks and timber- and geo-textile roofs. There was little ground insulation. Buildings had a ceiling to improve thermal comfort.

Cottages were sized to respect international standards, whilst still having enough room to actually do the construction in the limited spaces of beneficiaries' gardens.

The government made cash transfers of around 15,000USD to families whose houses had been completely destroyed. However, due to lack of experience and support, much of this money was not spent on rebuilding houses.

Household energy

It was agreed to supply 3m^3 of firewood to support affected families with their heating and cooking needs. The organisation delivered around 24,500m^3 of firewod to around 8,500 Households, over two winters.

The organisation supplied USAID-approved fuel-efficient wood burning stoves to all cottages. It also supplied 5,952 cooking gas cylinders and 600 electric water heaters. Glass fibre insulation was provided to reduce heating costs.

Trials on woodchip briquettes as an alternative fuel found them not to be inappropriate as they were very sensitive to damp.

One of 200 'one warm cottages' built by the programme, Photo: Jonathan Puddifoot

Logistics and materials

Plastic sheeting and firewood were provided using rented trucks.

For the second, 'one warm cottage' strategy, the contractors were responsible for their own materials supply.

To reduce the risk of causing significant deforestation the organisation only bought wood from licensed suppliers, with particular criteria such as diameter and species type. Unfortunately, the large scale purchases distorted the markets. Supply licenses were suddenly revoked by the government and only a very few suppliers were able to obtain certification.

In general, although NGO access into the buffer zone was limited until October 2008, local Georgians were allowed to drive trucks into the area from a much earlier date, and after the ceasefire of 12 August 2008 transport on the national highways and from other countries was relatively unimpeded.

Materials list

Materials for one 'warm cottage' (excluding electrical installation)

Material	Quantity
Cement	3.36MT
Gravel	6.325m^3
Iron bars 12mm	102.4m
Iron bars 6mm	72m
Mineral wool - roll	1
Nails	8Kg
Roofing nails	200 pieces
Plastic boards 12.5cm	22.5m^2
Plastic door block	1.89m^2
Plastic window blocks	3m^2
Roof trim	8m
Roof sheets	25 pieces
Sand	4.6m^3
Small blocks 20x20x40cm	665 pieces
Timber beams and planks	3.5m^3
Wooden skirting	18.4m

OVERVIEW

EUROPE 2015-2016 / REFUGEE CRISIS

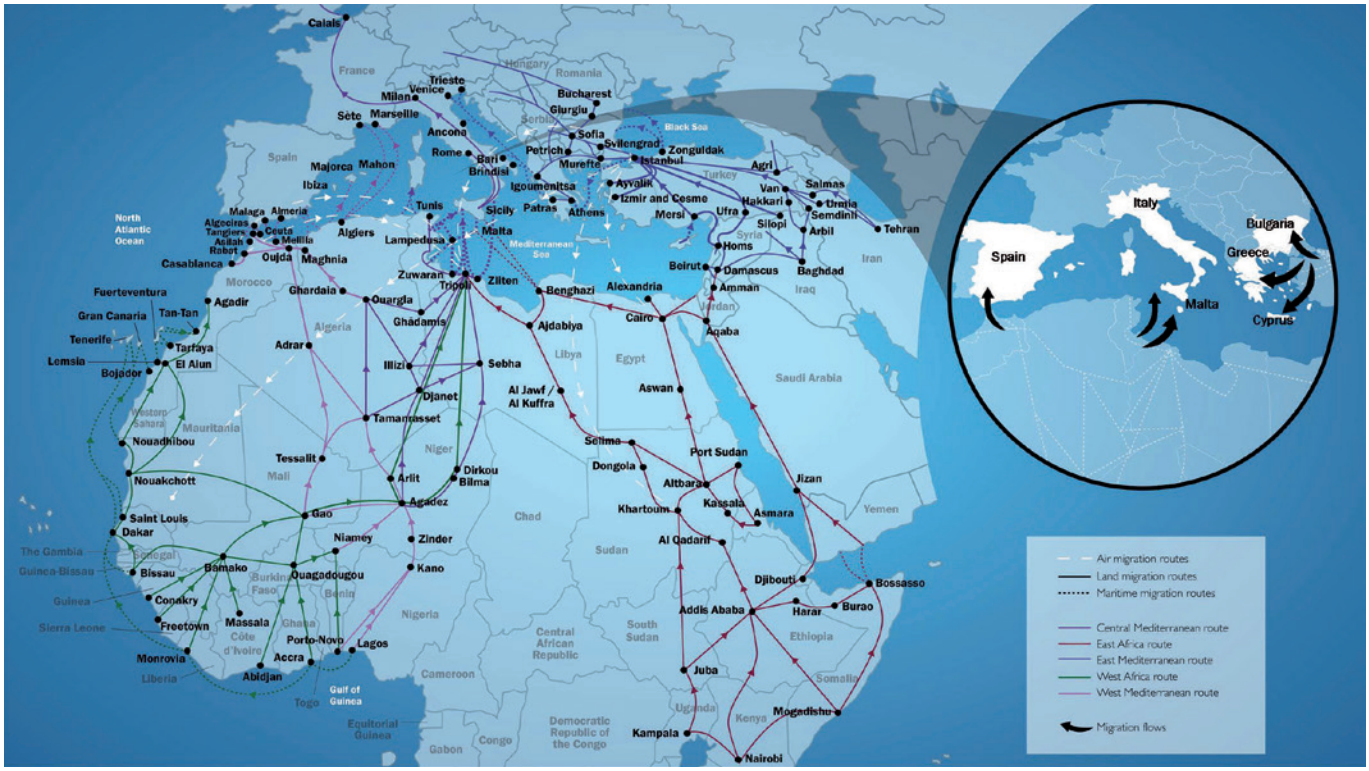
CRISIS	Migrations flows to Europe, 2015-2016
TOTAL ARRIVALS BY LAND AND SEA TO EUROPE[1]	**1,046,599** in 2015 **387,739** in 2016

SUMMARY OF THE RESPONSE

A massive influx of refugees and migrants through South-Eastern European countries resulted in an emergency in transit – as well as destination – countries between 2015 and 2016. However, migration towards Europe was not a new phenomenon. This overview focuses on the shelter coordination and response to this crisis in key locations, primarily Greece, the Balkans and Germany, where the majority of first arrivals to the EU, transit and final arrivals to destination were found.

COUNTRIES OF ARRIVAL IN EUROPE	NUMBER OF PEOPLE ARRIVING (1 Jan 2015 - 31 Dec 2016)[1]	NUMBER OF PEOPLE STRANDED (As of 31 Dec 2016)[2]
Italy	335,278	*Not available*
Greece	1,034,269	62,784
Bulgaria	47,136	5,560
Spain	17,091	*Not available*
COUNTRIES OF TRANSIT IN EUROPE	**NUMBER OF PEOPLE ARRIVING (1 Jan 2015 - 31 Dec 2016)[1]**	**NUMBER OF PEOPLE STRANDED (As of 31 Dec 2016)[2]**
FYROM*	478,004	137
Serbia	678,493	5,633
Hungary	430,690	460
Croatia	659,105	624
Slovenia	477,791	315

** the former Yugoslav Republic of Macedonia.*

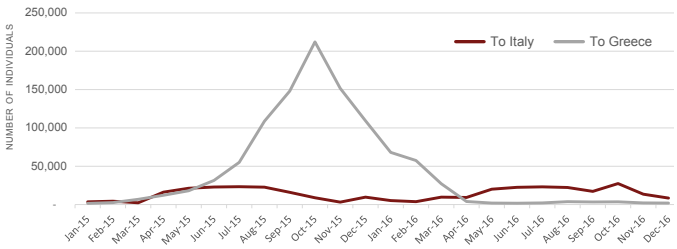


Migrant Routes: Mediterranean 2016 (Source: IOM - http://migration.iom.int/europe/)

TIMELINE

2011: Arab Spring prompts start of increased migration from North and sub-Saharan Africa to Malta and Italy via the Central Mediterranean route. Start of conflict in the Syrian Arab Republic and first population movements into neighbouring countries (Turkey and Lebanon).
2012: Escalating flight of Syrian refugees into neighbouring countries (including Jordan, Iraq and Egypt).
Apr 2015: Start of "Balkan route" migration.
Jun 2015: UNHCR declares internal Level 2 Emergency for Greece, the former Yugoslav Republic of Macedonia and Serbia.
Aug 2015: Start of open borders in Austria and Germany.
Sep 2015: Closure of Hungary's borders; arrivals to Croatia and Slovenia increase
Oct 2015: Peak monthly arrivals to Greece by sea.
Mar 2016: Closure of the migration routes through the Balkans due to re-activation of Schengen border regimes. EU-Turkey deal made to relocate new arrivals.
Nov 2016: 543% increase in stranded migrants in Bulgaria since March 2016[3].

EASTERN AND CENTRAL MEDITERRANEAN - MONTHLY ARRIVALS TO GREECE AND ITALY (2015 - 2016)



[1] IOM, as of 31 December 2016 (http://migration.iom.int/europe). Data collated from national authorities, IOM and UNHCR.
[2] Stranded migrants are those who, for a reason beyond their control, have been unintentionally forced to stay in a country (European Migration Network).
[3] IOM, Mixed Migration Flows in the Mediterranean and Beyond: Compilation of Available Data and Information – No. 30, 1 December 2016.

Many new arrivals to Europe in 2015-16 passed through the Balkans. Often, people were registered at border crossing points (Berkasovo Bapska, Serbia, Oct 2015).

MIGRATION IN 2015

Migration departing from North Africa towards Europe increased since 2011. However, since 2015, attention was focused on the emergency situation caused by large population movements into the Balkans[4] and Northern / Western European countries (via Turkey and Greece). Compared to the 219,000 people who arrived in 2014[5], a 500% increase in total arrivals to Europe was seen in 2015. Ongoing and escalating conflicts were likely to account for the dramatic increase in numbers arriving to Greece, with 47% of arrivals coming from the Syrian Arab Republic, 24% from Afghanistan and 15% from Iraq. During the second part of 2015, arrivals to Greece by sea reached their peak. By the end of the year, 857,363 people arrived in Greece (compared to 153,842 to Italy). Arrivals did not decrease significantly over winter, despite harsh conditions at sea.

MIGRATION IN 2016

Arrivals to Italy in 2016 (total: 181,436[6]) increased 18% from 2015, mostly via the Central Mediterranean route. Migrants and refugees originate from a number of different countries in North Africa, sub-Saharan Africa and the Horn of Africa[7], with a small proportion from the Syrian Arab Republic (less than 1%)[8].

Greece saw a 79% decrease in cumulative arrivals[9], totalling 176,906 in 2016, inverting the trend from 2015. The reactivation of the standard Schengen border arrangements in March 2016 closed the borders of several transit countries, to stem the flow of people. Combined with an agreement between the European Union (EU) and Turkey in March 2016 to return migrants and asylum seekers to Turkey, this led to a significant decline in arrivals by sea to Greece.

As of December 2016, the total number of migrants and refugees stranded in Greece and the Balkans was 75,031. In Greece, all new arrivals were restricted to the islands, until asylum status (or safe relocation to Turkey) could be established.

Note: *It is impossible to adequately provide detailed information on the wide-ranging and varied responses across the region, given the geographic scope of this overview, alongside the political complexities and administrative variances of each country involved. Therefore, the main focus of this overview is the Greece-Balkan-Germany route, as it is more relevant to the context of the publication and the case studies that relate to it – i.e. the set up and evolution of (emergency) humanitarian shelter response – than the more established and longer-term responses in Italy, Malta and Spain, for example.*

COORDINATION AND RESPONSE

Initially, the authorities and humanitarian responders in Greece, the former Yugoslav Republic of Macedonia, Serbia, Hungary, Croatia and Slovenia were **addressing a dynamic situation of populations in transit.** This required temporary accommodation and mobile and lightweight assistance at strategic points, as people continued their journey northwards. Assistance often comprised distribution of NFIs, emergency shelter, establishment of collective shelters in existing buildings or in tents and Rubb Halls, and adaptation of buildings and sites to allow basic services and facilities to be provided in areas of transit.

As border closures and restrictions on movement came into force in early 2016, **longer-term assistance was required to adapt to more static populations** in numerous locations across Greece and countries on the Balkan route. For example, reception centres were consolidated and expanded, to allow the closure of other ad-hoc transit areas, and services and facilities in these sites were improved, through upgrades and rehabilitations, such as the installation of heating, insulation, water networks and sanitation.

[4] Use of the term "Balkans" relates to the geographic peninsula and does not differentiate between EU and non-EU countries. "Balkan route" refers to those countries through which migrants transited (or were attempting to transit), i.e. the former Yugoslav Republic of Macedonia, Serbia, Bulgaria, Croatia, Hungary and Slovenia.

[5] UNHCR, The Sea Route to Europe: The Mediterranean passage in the age of refugees, July 2015.

[6] IOM, as of 31 December 2016: http://migration.iom.int/europe.

[7] The majority originate from Nigeria, Eritrea and Gambia, Guinea, Sudan and Ivory Coast – UNHCR, Dec 2016.

[8] UNHCR, December 2016.

[9] Up to 31 December 2016. From IOM, Mixed Migration Flows in the Mediterranean and Beyond: Compilation of Available Data and Information – Reporting period 1 December 2016 – 11 January 2017.

In Greece, many refugees were accommodated in tented camps. In summer, tents had to be shaded, also by building metal-framed structures (Elliniko, Athens).

Many refugee camps in Greece were either upgraded from tents or built from the start with containers (Left: Kara Tepe camp, Lesvos. Right: Eleonas, Athens).

GREECE

Emergency support needs in Greece remained high in 2016. Formal and informal settlements, including refugee camps, were negotiated and established, with other accommodation and shelter options being explored. There was a high level of technical capacity already present, as well as a desire from Greek civil society to be at the forefront of the response[10]. Pre-registration of arrivals occurs in Reception and Identification Centres (formerly called "hotspots") on the islands of Lesvos, Chios, Samos, Leros and Kos, rather than direct transferral to the mainland. Surveys indicate that people prefer to be transferred to alternative accommodation in urban centres, such as Athens or Thessaloniki. During the first-wave of arrivals, refugees and migrants with greater financial means attempted to leave Greece quickly, while more vulnerable populations had to remain, mainly in urban areas[11]. Those with financial resources chose to improve their shelter situation by finding alternative private accommodation, for instance. **In 2016, occupancy far outstripped capacity on the islands**[12] and, towards the end of the year, capacity to absorb arrivals became **limited also on the mainland.** Approximately 51,000 places were available in various forms of accommodation in December 2016, leaving a shortfall of 11,000 places.

In 2016, Greece therefore evolved from a transit country into a longer-term hosting location. The majority of sites on the mainland were government-built, emergency, tented settlements, intended for temporary use. They soon went over capacity, with limited services that did not meet minimum standards and were located away from urban centres[13], increasing dependency on multisector assistance. **While the government took on the primary duty of providing shelter and services to camps, gaps in service provision emerged** – particularly for persons with specific needs and vulnerabilities. At the time of writing, additional and expanded sites were being planned, with the evacuation of spontaneous settlements in public parks and squares foreseen.

By the end of 2016, 21,057 **reception places were created in Greece for relocation candidates** to other EU countries, when the capacity in 2015 was about 1,200[14]. During 2016, this programme was expanded to other people seeking asylum in Greece, prioritizing the most vulnerable and embracing other forms of accommodation than formal camps, including apartments, hotels and "matchmaking" refugees with host families. The provision of this type of accommodation included service delivery in compliance with applicable Greek laws and regulations. **Local NGOs and community-based organizations also engaged in alternative shelter support** to refugees and migrants. These organizations either rented a hotel, which provided the services, or a building and rehabilitated or adapted it, with services provided by the residents themselves, or the organization's volunteers.

The sector also started identifying **opportunities for mid- to long-term shelter solutions within the existing building stock,** including the use of public-private and market-based initiatives. For example, the use of holiday homes and apartments (approx. 30% of buildings in Athens are vacant), or renovations to older buildings. Another idea was the conversion of public and commercial buildings to residential accommodation, with expedited procedures to obtain permission for a change of use and negotiations over rent.

A Shelter-NFI Sector Working Group was established in March 2016 in Greece, to facilitate inter-agency coordination of response activities for refugees and migrants. The main activities were:

1) Coordinating with relevant government bodies and all other sectors.

2) Validating, promoting and monitoring of the use of technical guidance and minimum standards, across all shelter and NFI interventions.

3) Building local and national capacity to understand humanitarian needs with regard to shelter and NFIs.

4) Exploring appropriate shelter and site planning designs for longer-term solutions within sites.

5) Pursuing an integrated urban shelter strategy to promote alternatives to camps, by capitalizing on existing building stock.

At the regional field level, there were two hubs: Attica / Central Greece and Thessaloniki. Each of the five main reception islands had their own working group hub. **The Working Group developed a number of technical guidance documents,** including minimum standards and procedures on shelter shading structures, NFIs and distributions, heating solutions, site planning standards, shelter upgrading and communal kitchens.

By the end of 2016, at national level, the coordination structure was modified, to better reflect the operational needs of the refugees and migrants and to facilitate stronger communication with relevant governmental counterparts. Thus, Shelter merged with WASH, while NFI split to standalone as one working group. The intention for 2017 was for NFI, cash and food to merge as

[10] Greece Mainland Needs Assessment Report, NRC, March 2016.
[11] CRS, Refugee and Migrant Emergency in Europe: City of Athens Shelter Analysis, June 2016.
[12] NRC Rapid Assessment for out-of-camp housing and education, July 2016.
[13] CRS, Refugee and Migrant Emergency in Europe: City of Athens Shelter Analysis, June 2016.
[14] UNHCR Greece: Weekly Accommodation and Relocation Update 3 January 2017.

a "Basic Assistance" Working Group, while shelter and WASH would remain combined at all coordination levels[15].

THE BALKAN ROUTE

With the sealing of Hungary's borders in September 2015, increasing numbers of migrants arrived in Croatia and Slovenia from Serbia. **Transit and reception centres started to be established at the multiple entry, transit and exit points.** Available facilities at these crossing points were put to temporary use as registration points and accommodation, but conditions were very basic, providing only protection against the elements, NFIs, food distribution and emergency medical services. As these camp-like sites were mostly not suitable for winter conditions, **alternative transit areas had to be developed** to provide registration and other services, such as medical assistance, psychosocial support, family reunification, food, separate showers, mother-baby centres and child friendly areas, alongside meeting other minimum standards, such as covered space and WASH. **Changing transport arrangements for incoming populations** (from train to buses) succeeded in reducing the need for such numerous and dispersed facilities. In urban centres, some of the migrant population were living in unofficial sites, such as abandoned buildings, or sleeping rough.

However, the number of people transiting through the Balkans was under-estimated, as many did not register. The majority aimed to travel through the former Yugoslav Republic of Macedonia and Serbia, onwards to Hungary, Croatia and Slovenia. Shelter needs in 2015 were for safe, temporary shelter along transit routes, particularly at border crossings, boat crossings and registration sites, where bottlenecks would form and people would remain stranded for significant periods of time. A major challenge in 2016 remained ensuring protection from the severe winter weather in the region, as well as the provision of more suitable overall conditions for longer-term accommodation and integration.

GERMANY

At the end of August 2015, Germany opened its doors to Syrian asylum seekers, no matter in which EU country they had set foot before. There were up to 60,000 new arrivals per week in September 2015 (figures decreased to 21,000 in January 2016 and plummeted to 700 in August 2016[16]), most of whom travelled through Austria and entered Germany in the state of Bavaria.

Once in Germany[17], populations on the move were received at reception centres at border towns, typically for only a few days before being relocated to mid-term accommodation. Before the opening of reception centres, first accommodation for newly arriving refugees and migrants was ad hoc, ranging from sports halls and unused buildings, but also including people sleeping in train stations, or even in the open.

In order to provide adequate shelter for almost one million refugees and migrants who arrived during 2015, a number of interventions were mobilized:

- Winterizing existing accommodation;
- Re-purposing of existing buildings as collective centres;
- Construction of Rubb Halls / large tents as collective centres;
- Erection of family-sized tents;
- Installation of infrastructure and communal facilities;

[15] 2017 Regional Refugee and Migrant Response Plan (RRMRP)
[16] German Federal Office for Migration and Refugees, http://www.bamf.de/EN
[17] This overview focuses on Germany, as it was the main destination country and because the following case study A.42 deals with the set-up and operation of a reception centre near the Austrian border. Other destination countries include Sweden, Austria, the Netherlands and Norway.

Along the Balkans route, migrants and refugees were assisted with transport to and between transit or registration centres (Croatia, October 2015).

These evolved into mid-term accommodation sites run by a number of organizations, in order to provide support during the asylum application process. Long-term accommodation for accepted asylum seekers was ideally seen as a general social housing scheme. The government emphasized integrating the refugees as soon as possible, instead of risking the creation of "refugee ghettos". Therefore, long-neglected social housing programmes were reactivated, funded by the communes and the federal government. Since there had been a shortage of affordable housing in most of major German cities for years, the aim was to benefit both the refugees and the hosting communes.

LOOKING FORWARD / CHALLENGES

In early 2017, short-, mid- and long-term accommodation options in Greece, countries along the Balkan route and in destination countries were being explored, through a scaling-up of construction, upgrading and expansion of facilities and sites. However, the attainment of suitable, durable, solutions for those already in Europe and those that continued to arrive – both in terms of legal status and more immediate basic needs – remained a higher-level political issue, which usually takes time to resolve in each hosting country and within the EU.

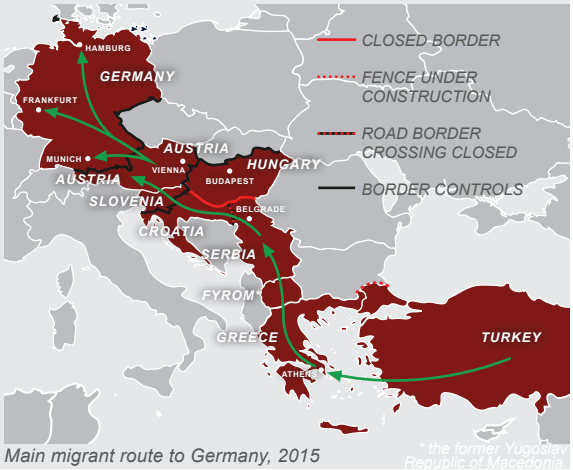
Advocacy for clear, coordinated and consistent long-term strategies to address the needs of migrants, refugees and host populations continued. However, the challenges faced across Europe were rising, as **intended temporary shelters became a longer-term** norm for many people. **Tensions** between some host communities and migrants, refugees and asylum seekers, **escalated in many countries** in Europe, occasionally resulting in violence and destruction of shelters and settlements. Frustration was also felt for the long registration waiting times and the deterioration of living conditions. While camp-like solutions often seemed to be preferred, sites varied greatly in service-provision, standards and conditions. Some governments were slow in assigning sites and expanding capacity in alternative locations, to enable a transition to mid-term accommodation, while asylum or relocation procedures are underway. In addition, **lack of coordination and resources** led to gaps in service provision, such as winterized accommodation and safe cooking provision.

CASE STUDY

GERMANY 2015-2016 / REFUGEE CRISIS

KEYWORDS: Emergency shelter, NFI distribution, Site planning, Infrastructure, Short-term reception centre

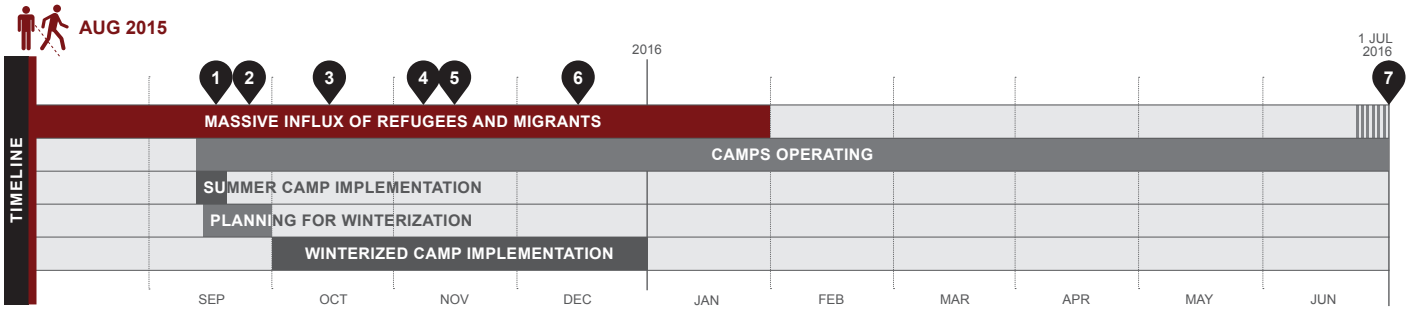
CRISIS	**European migrant and refugee crisis** (multiple countries of origin)
TOTAL PEOPLE AFFECTED	**1,047,162** total arrivals to Europe in 2015. **382,687** total arrivals to Europe in 2016. **476,649** Asylum Requests in Germany in 2015.
PROJECT LOCATIONS	**Feldkirchen and Erding, Bavaria, Germany.**
BENEFICIARIES	**170,000+** individuals (across both sites).
OUTPUTS	**Feldkirchen:** accommodation for up to **3,200** individuals. **Erding:** accommodation for up to **5,000** individuals.
SHELTER SIZE	Varies from **single-family tents** (18m²). to **pre-fabricated shared structures** (2,500m²).
SHELTER DENSITY	Varies from **3m² per person (family tent) to 8m² per person in larger halls.** Note: more than 90% of the people spent less than 24 hours in the facilities.



Main migrant route to Germany, 2015

PROJECT SUMMARY

Two short-term reception centres were set up in the state of Bavaria to provide temporary accommodation for thousands of migrants and refugees entering Germany at the peak of the migration crisis in 2015. One site was set up in the summer and then winterized in phases, while the other opened as a winterized camp after a longer construction period.



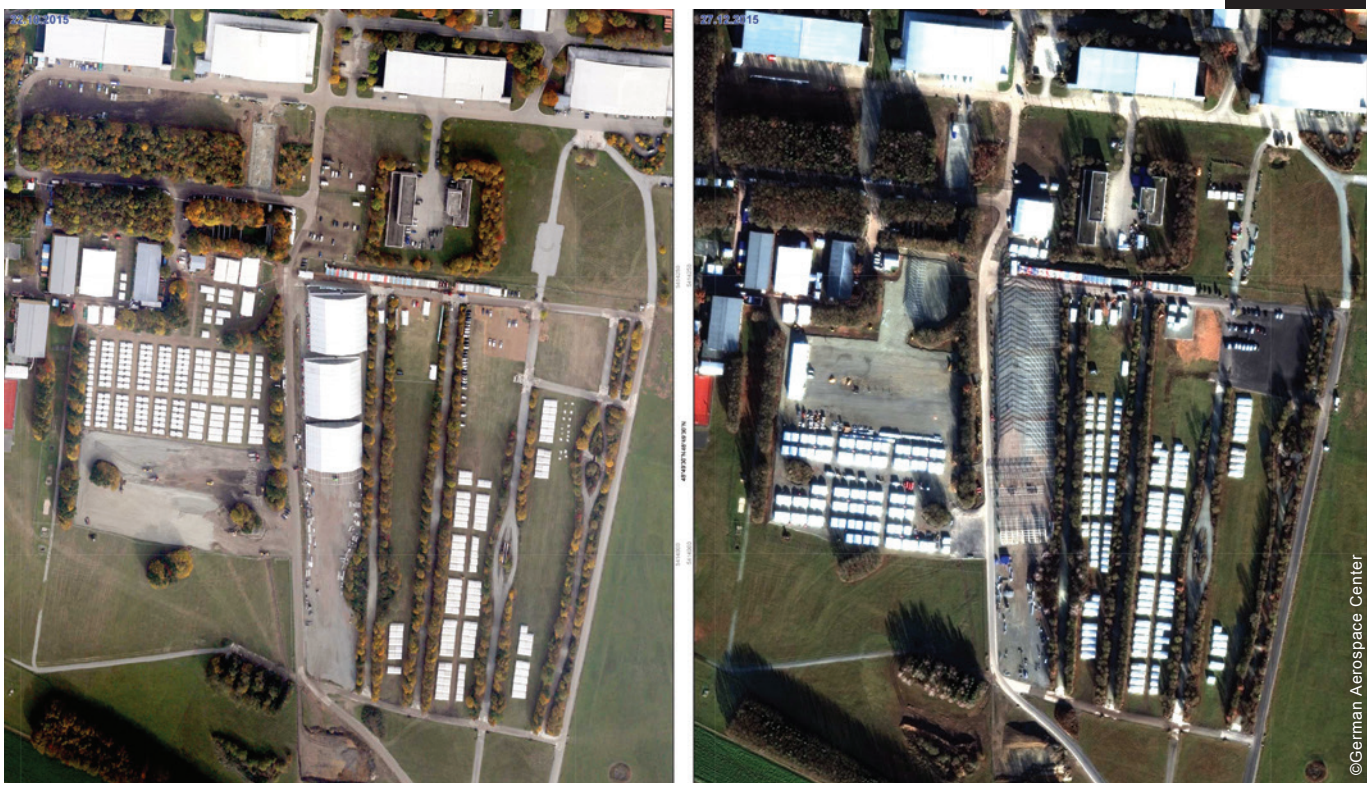
1. 18 Sep 2015: **Non-winterized accommodation for up to 3,000 people**
2. 25 Sept. 2015: **Ground preparation for collective structures**
3. 15 Oct 2015: **Start of set-up of four large, pre-fab, light-weight, collective hall structures**
4. Nov 2015: **Start of works for dismantling summer tents and ground preparation for semi-permanent winter tents. Installation of drainage and sanitation**
5. 15 Nov 2015: **Replacement of administration tents with modular winterized containers**
6. Dec 2015: **Start of works for dismantling collective halls and replacement with wooden structures, with higher snow-bearing capacity**
7. 1 Jul 2016: **Stand-by mode for both sites** (arrivals have ended)

STRENGTHS

+ Rapid involvement of local volunteers at scale.
+ Support and engagement of the armed forces.
+ Positive partnership with civil protection and armed forces.
+ Very fast, flexible and coordinated approach to set up the camp.
+ Quick availability of essential items thanks to the organization's network.

WEAKNESSES

- Lack of available space and stricter regulations, due to poor site location.
- Complex coordination structures, which diverted resources and energy
- Lack of experienced staff at field and HQ levels.



Two short-term accommodation sites for new arrivals were set up and upgraded in phases before the winter. Here, Feldkirchen in October (left) and December (right).

CONTEXT

See overview A.41 for more information on the migration/refugee crisis in Europe in 2015-2016.

ACCOMMODATION FOR ASYLUM SEEKERS

All asylum seekers in Germany were first received in the closest reception facilities of the Federal Land in question. Such a facility could be responsible for temporary, as well as longer-term, accommodation. Depending on the country of origin, asylum seekers could be accommodated in reception facilities for up to six months, or until their application was decided on. They could also be allocated to another facility during this period, under certain circumstances, for instance for family reunification[1].

New arrivals had to be distributed evenly across the different states and communes in Germany, based upon the size and capacity of each individual community. The government granted waivers to town- and country-planning codes, in order to accelerate the set-up of accommodation facilities for asylum seekers.

There were three accommodation types: 1) short-term, first reception centres, intended for registration and very short stay (up to three days); 2) mid-term, secondary reception centres (up to three months); and 3) long-term, collective centres (though individual apartments were the preferred option in the long run). Given the emergency situation, most short-term accommodations, such as schools and gymnasiums, were used for longer periods of time. While at first short-term centres received people both at day and night, once transport by trains and buses was established at border towns, the migrants were taken directly to mid-term reception centres all over the country, where they stayed until a decision was taken about their asylum application. Most people arrived at the short-term reception centres at night, when transport to other parts of the country was not operating.

[1] Federal Office for Migration and Refugees: Stages of the German Asylum Procedure, http://bit.ly/2jrU58D.

PROJECT GOALS

The organization was asked to provide **mass accommodation for short-term use** close to the Austrian border, where the majority of migrants and refugees entered. Two sites (Feldkirchen and Erding) were set up for this purpose. These first reception centres needed to cover basic needs, whilst at the same time the official government registration process was starting. **The project used a holistic approach,** aimed at providing warm and safe shelter, food, essential NFIs, family-member tracking and medical services to the newly arrived refugees and migrants, with priority to unaccompanied minors, sick and traumatized people. An official registration centre on site allowed the start of the legal process to apply for asylum, as well as providing information and counselling about the asylum processes in Germany and the EU.

PROJECT LOCATIONS

Different sites, belonging to the German army and municipalities in lower Bavaria, were assessed for a possible location to set up a camp for up to 5,000 people in a very short time frame. Feldkirchen, one of the two chosen sites, is located about 100km away from Passau (the main border-crossing point from Austria) and is outside the boundaries of a military base. The proximity to the base ensured access to infrastructure (electricity, water and sewerage grids), ready-to-use facilities such as gyms (in Feldkirchen) and hangars (in Erding), manpower provided by the federal army, as well as equipment and machinery for a quick set-up. Although the organization worked on both sites, this case study focuses primarily on Feldkirchen.

PROJECT IMPLEMENTATION

The camp in Feldkirchen had to be opened just after one week of construction, in order to release the pressure from the immediate border towns and to prevent big numbers of refugees heading to Munich, where the Oktoberfest was ongoing. It started as a summer-camp, using gymnasiums and family tents as accommodation facilities. Step by step, it was scaled up to a winterized camp, with works carried out during

The reception centres were upgraded/winterized, while in operation, through several steps between October and December (e.g., by adding a layer of gravel).

normal camp operations by temporarily reducing the capacity. The site in Erding opened already as a winterized camp, after a longer construction period.

The project was implemented in a joint effort of multiple partners, including the implementing organization at the national and local levels, the civil protection, the armed forces and relevant local authorities. Three gymnasiums could be used for collective centres immediately, with enough space around to set up hundreds of family tents.

Besides active support in the set-up, the armed forces (the Helfende Hände / helping-hands sector) were also used for the registration process. The civil protection's huge network of highly skilled volunteers was well equipped with heavy machinery and tools to be used in case of emergencies. Within one week, a camp to accommodate up to 3,000 people was set up.

In a second step, a better planned camp, with proper infrastructure and sufficient winterized accommodations, was to be built on the former airfield of the base. However, due to environmental protection issues, the preferred location was finally not available. The winterized accommodation facilities (3,200 in Feldkirchen, 5,000 in Erding) were set up on the same site, using a variety of different shelter interventions: re-purposing of existing buildings and construction of large tents as collective centres; deployment of family tents; installation of infrastructure and structures for communal facilities. At peak, Feldkirchen was accepting up to 25 buses (with approximately 1,400 new arrivals) per night.

All those who passed through the reception centres of Feldkirchen and Erding, moved to longer-term accommodation elsewhere in Germany through a series of steps, or tried to reach another European country to apply for asylum.

After June 2016, due the decrease in arrivals, the two sites were put in stand-by mode. Within 72 hours, Feldkirchen could accommodate up to 1,000 people, and after 14 days it could reach full capacity. Erding could be back to full capacity within a notice of 30 days.

COORDINATION

New arrivals to the state of Bavaria who could not be distributed to other states, or were caught by the border police, were sent by buses to Feldkirchen. The capacity of the camp was communicated on a daily basis to the refugee coordination centres in Passau and Munich, in order to decide how many refugees would be distributed between the different reception centres.

Within the camp, there were two complex layers of coordination for the project. Both daily camp management and longer term modifications of the camp had to be coordinated with a wide range of actors. Bi-weekly coordination meetings aimed to solve all issues as they arose, which was normal for a project under such extreme time pressure.

MAIN CHALLENGES

The major challenge was turning the summer camp into a winterized camp, because the works had to be conducted on the same site, while it was operating. Scaling-up was done by sectors, causing a temporary reduction of accommodation capacities. The sector that was to be scaled up had to be separated by fences from the main camp, the summer tents were removed and the ground was prepared, before the winterized structures could be installed in each sector. There was a significant drop in numbers of refugees in November and December 2015, which made this process easier.

Without the waivers to normal planning codes, granted by the government for the emergency situation, this project would not have been possible in the given time frame. Still, **it was challenging to implement such a project with authorities who were used to very clear laws and responsibilities**, which were not always applicable for the camp construction. Administrative levels and requirements changed during the set-up period, causing some inconsistencies. For example, several rows of winterized tents (that had already been installed) had to be moved to provide wider escape alleys in case of fire or panic, although the set-up had previously been agreed. Fire prevention was the most difficult and controversial part, due to different interpretations of safety. In Feldkirchen, for instance, bunk beds were not allowed in collective halls (due to fire risk), whilst there were no problems in Erding. Although at the national level there was consent to prioritize action over bureaucracy, at field level it was not always clear how flexible rules were. As a result, the project would sometimes make a brave step forward followed by two steps back.

WIDER IMPACTS OF THE PROJECT

There was **great interest in this project within the hosting community** and many volunteers supported the camp operations in different ways: with in-kind donations, during the welcome of new arrivals, or playing with the children. A local night club organized charity concerts to support the camp. The entrance fee was a pair of warm socks, shoes or other winter clothes, which were all urgently needed for the camp residents.

The camp also attracted local businesses. Soon, private taxis were waiting in front of the camp to take customers from the camp to the next train station, though this was not encouraged. Local suppliers also provided other services to run the camp, such as heating fuel, catering and laundry.

STRENGTHS, WEAKNESSES AND LESSONS LEARNED

STRENGTHS

+ Involvement of local volunteers through the local branch was rapid and at scale. Volunteers were interviewed and deployed within a few weeks, according to their capacities and interests. Several people from the organization and its local branch were deployed just to coordinate the volunteers.

+ The armed forces were supportive and engaged throughout the process.

+ Positive partnership with civil protection and armed forces, due to the ad-hoc availability of skilled manpower and professional technical equipment.

+ Very fast and coordinated approach to set up the camp. All partners were strongly committed to provide the best support possible to the refugees. There was flexibility to start with a quick-and-dirty solution to provide urgently needed relief, and then to scale up, step by step.

+ Quick availability of huge numbers of essential items, like tents, field beds and blankets, was possible through combined donations of the organization's partner societies.

WEAKNESSES

- Lack of available space and strict regulations, due to poor site location. The site was situated between military barracks, a water protection area and the breeding ground of a protected bird, so there was no space for expansion or relocation during the winterization phase. Additionally, strict regulations were applied on handling fuel for heating and power generators, because of the direct proximity to the environmental protection area.

- Complex coordination structures to plan the winterized camp, with changes in levels of authorities, diverted resources and energy from daily activities.

- Lack of experienced staff at field, as well as Headquarters, levels caused stress and misunderstandings. Rapid deployment of experienced people, who could run such a camp 24/7, turned out to be very challenging. International partner societies stepped in, but staff still needed to work very long hours, and there was high turnover.

- Insufficient strategic approach to the recruitment of national staff in all positions, but in particular those with translation capacities.

- No real link to mid- or long-term accommodation, since no one knew where people would be hosted next.

The site in Erding between October (left) and December 2015 (right).

Accommodation options varied greatly in the two sites. From individual family tents, to large collective tents or field beds in gymnasiums.

LEARNINGS

- **Include an expert on environmental issues** in the assessment team tasked with choosing the site.
- **Have all relevant authorities on board from the beginning.** In this case, such a project was new to the authorities and the legal implications not always clear. The local fire brigade seemed to be one of the most important partners.
- **Include a shelter expert in the planning process** from the very beginning.
- **The multi sectoral approach was essential to the success of this project.** Shelter, food, medical screening and treatment (also important to protect others in mass accommodation), NFIs and restoring family links were all key components, which would not have worked if done independently.

B.8 Russia, Ingushetia - 1999 - Conflict - People displaced

Case Study: Cash for shelter - host families

Project type:

Cash grants to assist host families to shelter displaced people in private households

Disaster:

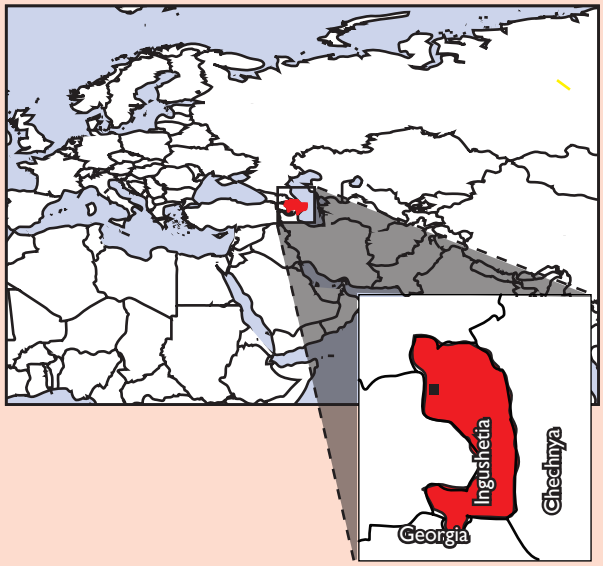
Internal displacement of civilians following 2nd armed conflict in Chechnya,1999

No. of people displaced:

At the peak of the crisis, 213,000 people fled to neighbouring Ingushetia. Up to 150,000 people were privately accommodated by host families.

Project target population:

Winter 2000/01 – 15,000 Ingush host families.
Winter 2001/02 – 11,000 Ingush host families.



Occupancy rate on handover:

100% of the host families accommodated on average of five IDPs from Chechnya (subject to corruption, which was carefully screened out).

Shelter size

The cash grant was equivalent to an average of one month's salary in Ingushetia.
A 21m^2 minimum net floor area was strongly recommended. The shelter consisted of two rooms, one corridor and an external latrine.

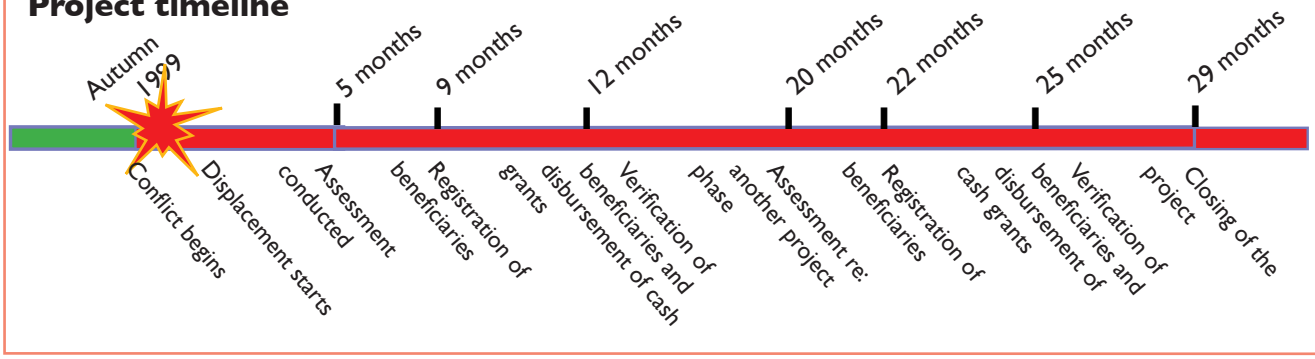
Summary

An international donor, in close cooperation with the international leading agency for shelter assistance in Ingushetia, provided cash grants to every family that hosted displaced people from the conflict in neighbouring Chechnya. The project goal was to prevent IDPs, who were being accommodated by host families, from being evicted during winter. This was achieved though the provision of cash grants to all registered host families in Ingushetia.

A one-off cash grant, roughly equivalent to one month's income, was given with no restrictions to each host family. The programme was implemented by the donor in close cooperation with the government of Ingushetia. The Ingush branch of the Russian postal service made the cash payments.

After a successful implementation during the winter of 2000/01, it was decided to implement a second phase, since the situation for displaced people in Ingushetia had not improved.

Project timeline



Strengthsandweaknesses

X No eviction of IDPs during the winter months of 2000/01 and 2001/02 were reported.
X No abuse during cash distribution or any security incidents occurred despite a rather tense security situation.
X The programme's level of transparency achieved high acceptance among beneficiaries and local authorities.
X Professional cooperation with the Russian postal service (Ingush branch) allowed for a timely and accurate cash disbursement.
X The significant influx of liquid cash supported the local economy.

W The high number of beneficiaries in different databases required an intensive verification process.
W Implementation of the 2nd phase during the following winter was exposed to severe fraud attempts, as some individuals had manipulated official documents in order meet the eligibility criteria. However, the fraudulant cases were sorted out and expelled from the beneficiary lists before payment was released.
W In view of the scope of the project (the entire Republic of Ingushetia) an evaluation of the project was recommended to reveal detailed information about its effects and impact.

The project worked with host families.

Context

The conflict in Chechnya started in 1999, forcing 213,000 people to move to the Republic of Ingushetia. At one stage in early 2000, there was one displaced person from Chechnya for every Ingush citizen.

Almost two-thirds of the IDPs were accommodated by Ingush host families. This was possible because of close family and religious ties between the two countries.

In the spring of 2000, there was some evidence that IDPs had been evicted from private accommodation. This was commonly as a result of financial pressures on families, many of whom had been hosting the IDPs for more than one year.

This project recognised that staying with host families was psychologically better for IDPs than living in camps. It also sought to encourage the solidarity effort of the Ingush population. As a result, the project aimed to support host families with economic incentives to encourage them to continue hosting the IDPs.

Assessments were conducted in the spring of 2000. These confirmed:

- the appropriateness of the cash for shelter approach;
- acceptance among potential beneficiaries and authorities; and
- the readiness of partner organisations to provide security and logistics.

Eligibility criteria

A host family was eligible for the cash grant when they:

- presented official registration documents proving that they an Ingush resident; and
- presented a Chechen IDP's temporary registration document with the same address and a registration date within a given time period.

Implementation

Registration - The registration of beneficiaries was based on United Nations and the Federal Migration Service lists. The two lists were combined and filtered. The resulting beneficiary lists were cleared.

Verification - To ensure that the registered beneficiaries were hosting

By supporting host families with one off cash grants, the project aimed to avoid evictions.

IDPs, monitoring teams were sent to the registered beneficiaries' address.

Public information - The intention to implement a cash project was initially announced to the Russian federal government as well as to the Ingush government and the humanitarian aid community. Regular reports on local television kept the population updated on the programme and its progress. Detailed information on eligibility and lists of beneficiaries were posted at post offices and on the premises of local administrations.

Complaints - A complaints process involving the project management was originally not foreseen. Complainants were asked to refer to the Ingush government, which determined that 680 cases (out of 1,200) were eligible for compensation.

During the second phase in the winter of 2001/02, 6,100 faked documents were identified (out of 7,800 submitted). This was resolved as a result of close cooperation with the Ministry of Interior.

Payments - Payments were made by the Ingush branch of the Russian postal service. The postal service received a 1.5% commission for all transactions and personal invitations for beneficiaries. The cooperation was excellent in terms of reliability of payment procedures.

Cash for shelter collection point

Assistance provided - Each family received the equivalent of US$ 100 – the equivalent of an average monthly salary.

This project was accompanied by 32 small projects, such as equipment for computer classes and support to soup kitchens. The objective of this was to acknowledge the goodwill of the local community.

Staffing - The team consisted of two expatriate staff (a programme manager and a deputy programme manager), four local employees, two drivers and up to 24 part-time monitors and drivers. The staff were based out of two offices, one in Ingushetia and one in North Osetia.

Security - Movement was heavily restricted as a result of security restrictions on international staff. Small projects were visited by local staff.

Impacts - Although there were some signs of eviction reported among the international humanitarian aid community, no eviction of IDPs during the winter months of 2000/01 and 2001/02 was officially reported.

According to unofficial surveys, the cash grant was mainly used for daily needs as well as for the payment of electricity bills.

Due to the significant size of the two project phases, a total amount over US$ 2 million was indirectly invested in the local economy.

B.12 Italy - 2009 - Earthquake

Overview

Summary

The earthquake of April 6th 2009 was the deadliest to hit Italy since 1980, and the first major earthquake in 300 years to hit the Abruzzo region. The town of L'Aquila was severely affected and is a historic town known for its university and the arts.

In the immediate aftermath of the earthquake, people moved into tents, hotels, or slept in holiday homes, with families or in their cars.

The government established a very prescriptive processes for sheltering affected families. Within one year, new apartment blocks and modular housing units were built to house families for 3 years. Cash grants were also provided for minor repairs.

Disaster overview

First assessments were that 55% of the buildings in L'Aquila were usable, 15% were usable with simple repairs, 20% were not usable, and the rest required further study. 50,000 buildings, including public buildings, offices and factories, were affected.

For search and rescue and subsequent operations, the civil protection were able to mobilise 12,000 volunteers after the earthquake. In addition, 2,300 firemen were mobilised.

A building damage assessment was conducted by 500-600 experts in teams of 2-3 people. Each team assessed 4-10 buildings per day, a total of 1000-1500 buildings every day. 50,000 buildings were assessed within two months.

In the immediate aftermath of the earthquake, the whole centre of L'Aquila was evacuated.

Sheltering policy

About 35,000 people moved into tents, 30,000 people moved into hotels made available on the coast, others moved into second homes or slept in their cars. It was estimated that up to 100,000 people were sleeping outside of their homes.

The aim of subsequent responses was to return as many people as possible back to their own homes as soon as possible.

To shelter families for the first three years, two types of building were developed:

- appartment blocks (185 buildings containing 4500 flats were built in the first year, housing 15,000 people)
- modular housing units (3475 were built in the first year housing 8500 people)
- cash grants for minor repairs and rental for families with agreed levels of building damage.

Buildings and housing schemes were designed to reduce seismic risks. They also included schemes to reduce energy consumption. Many included solar and photovoltaic panels, rainwater harvesting, and thermal and sound insulation

Left: tent camps,
Centre: modular housiung units
Right: apartment blocks
Photos: Dipartimento Protezione Civile
Croce Rossa Italiana

B.13 Italy - 2009 - Earthquake

Case study: Shelter construction

Full case study

Country:
Italy

Disaster:
Earthquake in Abruzzo region.

Disaster date:
April 6th 2009

Number of houses damaged:
23.500 classified as E to F, in other words, uninhabitable.

Number of people displaced:
70.000 homeless.

Project target population:
100 families in one fully destroyed village
Later developed into a 5 million Euro scheme

Occupancy rate on handover:
100% occupancy on completion. Will be occupied until original houses are rebuilt/ repaired.
The shelters have a 3 years use agreement but a 'life cycle' of 30 years.

Shelter size:
1-2 people (type A) 45 m^2,
3-4 people (type B) 52 m^2,
5-6 people (type C) 74 m^2.

Materials cost per shelter:
Total cost: 450 a 800 €/m^2.

Project timeline

- 12 months – Completion of administrative procedures
- 7 months – All camps closed
- 5 months – Handover to families
- 5 months – Site construction complete
- 2 months – Project start
- April 2009 – Earthquake

Summary

The organisation used contractors to build three different sizes and designs of shelter for 100 families affected by the earthquake. This was a pilot programme, from which the government designed a programme to house an additional 3475 families. The government led the overall shelter process limiting the inputs of the disaster affected families, whilst the organisation, facilitated discussions to encourage involvement of the earthquake affectees.

Strengths and weaknesses

✓ There was strong cooperation between local / municipal authorities, local contractors and beneficiaries to define and develop the project.
✓ The first shelters with a design lifetime of 30 years were constructed within months
✓ Three different shelter designs were built and allocated based on the family composition.
✓ The organisation was able to act as a facilitator between the affected families and the authorities
✓ The pilot project was followed by the government's construction of 3475 additional units using a similar programme approach.
✓ The government provided all service infrastructre.
× Most of the decisions were government-led within a very prescriptive legal framework. This limited inputs by the affected population to suggesting preferences but not to take decisions.
× The project was limited to 100 families. This was due to limitations in the funds available combined with the high construction costs of the shelters. However the project did cover 100% of the community of Onna.
- There was very strong media pressure to deliver.

Modular housing units under construction
Photo: Fabio Torretta, Croce Rossa Italiana

Occupied modular housing units
Photo: Agostino Pacciani (IFRC/CRI)

Modular housing units

The organisation undertook a pilot programme to build 100 modular housing units. These units were fully serviced with fitted kitchens, bathrooms and electricity. The government was responsible for all services including roads.

Beneficiary selection

Onna was chosen because it had become the 'symbol' of the Abruzzi Earthquake. It is a village near l'Aquila home to 120 families, particularly affected by the earthquake. 80% of the houses were damaged and 20% of the houses were uninhabitable.

The funding, the identification of the resettlement areas, the project approval process and disbursement mechanisms were all agreed with the national civil protection authority and with the municipal authority.

The organisation working with a local non-governmental organisation set up by the inhabitants of Onna after the earthquake. Together, using criteria established by the government, they formed a list of who should receive the shelters. The list was delivered to the municipal authorities.

The local authorities of Onna were directly responsible for the selection of beneficiaries and their registration. The definitive official list fully respected the list that the international organisation had drawn up with the local organisation and the town's inhabitants.

The organisation facilitated for all of the affected families to have adequate housing, as they were entitled to by law. Criteria and measurable 'indicators' were established to ensure accountability.

Technical solutions

The decision to use timber framed prefabricated shelters was made for the following reasons:

- relatively high budgets were available as the disaster was in an industrialised country
- relatively high cost of labour for other types of construction
- an existing regional industry making prefabicated shelters
- The temporary shelters were prefabricated in the north of Italy, in the province of Trento, where there is a traditional in the construction of wooden homes.
- time pressures: although starting two months after the earthquake, the construction programme needed to be completed within three months (90 working days), before the autumn/winter season.

Three sizes of shelter unit were developed. These were

- 1-2 person units 45m^2
- 3-4 person units 52m^2
- 5-6 person units 72m^2

The total cost of the project for 100 households was five million euros. This included construction, provision of services and infrastructure.

Implementation

The organisation was fully aware that it had no adequate technical expertise to construct shelter to the scale and speed required. As a result it identified an implementing company to construct the shelters.

The organisation needed to ensure that quality standards were achieved, that administrative and legal procedure were correctly followed and that the programme was coherent. A staff of ten people were employed for the monitoring process. They supervised and monitored the programme by:

- Providing continuous technical assistance to anticipate arising problems and overcome bottlenecks that would cause delays.
- Regular visual checks and field visits and by 'remote control' though information management at the central office.

In addition to the construction, the organisation, working with the authorities, ran a public information campaign. This campaign was focussed towards donors to raise awareness on the construction programme. It accompanied activities with web-based updates. The campaign was based on press, media and events. The communication Service, working through the press office, led all the public information programme.

On completion, ownership of the shelters was handed over to the

authorities with the agreement that families would be able to occupy them rent free for three years.

Although the long term for the shelters was not finalised, it was anticipated that the reconstruction and restoration of the historic centre of Onna would take many years. When families do eventually return, these emergency shelters could be re-used as state housing. Alternatively, as L'Aquila has a strong identity as a university town, they could also be used as accommodation for students.

Top and left: occupied housing units
Bottom right: Units came with fitted kitchens
Photo: Agostino Pacciani (IFRC/CRI)

A.27 Portugal – 1755 – Earthquake

Historical

Keywords: Emergency shelter; Core housing / progressive shelter; Site planning; Infrastructure.

Emergency: 1755 Earthquake, Tsunami and Fire, Portugal.

Date: 1st November 1755.

Damage: Approximately 17,000 destroyed (85% of the housing stock).

People affected: 50,000 died, majority of Lisbon population affected.

Project location: Lisbon.

Outputs: City centre largely rebuilt within 30 years.

Project description:

Following the destruction of most of the housing stock in Lisbon by an earthquake and related tsunami and fire, a complete re-design and reconstruction of the city was undertaken. The new city was designed to include large public spaces, modern infrastructure, and new, anti-seismic building designs.

This historical case study was researched and written by Pedro Clarke and Charles Parrack.

Emergency timeline:

[a] November 1755: earthquake followed by tsunami and 6-day fire.

Project timeline (number of months):

[1] November 1755: survey of damage.
[2] December 1755: Five recovery options considered. Law prohibits construction outside city walls.
[5] March 1756: First reconstruction plans.
[6] April 1756: Number of wooden shelters reaches 9,000.
[2yrs 6m] May-June 1758: Plans authorised, construction begins.
[3yrs] 1759: "Pombaline Cage" design approved.
[30yrs] 1785: Main city completed, population numbers return to pre-earthquake levels.
[83yrs] 1838: Final elements of reconstruction completed.

Situation before the disaster

Despite being the capital of a powerful empire, Lisbon in 1755 had significant levels of poverty, worse than many other European capitals, and was known for problems with violence.

Downtown Lisbon was a densely-populated collection of multi-storey, weakly-built houses with narrow streets. Houses were predominantly masonry structures with timber floors and partitions (Paice 2008, Mata dos Santos 2008).

Impact of the disaster

On the 1st of November 1755, Lisbon was shaken for 10 minutes by an earthquake measuring 8.7 in moment magnitude, and the after-shocks were felt for months. The earthquake triggered a tsunami, with an estimated height of 20 metres, which devastated Lisbon's downtown area. Finally, a fire raged through the city for six days incinerating many of the buildings that were still standing.

As the downtown buildings were built on soft soils and surrounded by steep hills, once the earthquake struck the whole area folded in on itself (Mullin 1992).

Estimates vary, but according to an amalgamation of accounts by British Merchants and the local authorities the total number of deaths was estimated to be around 50,000, the majority of which lived in the city. This means that one in seven of its inhabitants perished (Paice 2008).

In terms of material losses, an estimated 85% of the buildings of the city were destroyed. This included 17,000 out of 20,000 houses. Of Lisbon's 40 parishes only five were

Following the earthquake, Lisbon was hit by a tidal wave and then a fire that burned for six days. Many in the clergy believed that people were being punished for their sins. Image: 1755 German copperplate image, "The Ruins of Lisbon" Wikimedia Commons, public domain

Portrait of Marquês of Pombal (1699-1782) by Van Loo (1707-1771), Museu da Cidade, Lisbon. Image: Wikimedia Commons, public domain

able to continue with the rituals and celebration of mass and the sacraments: the others were burnt or destroyed.

Situation after the disaster

Although news quickly reached other countries, the UK aid package agreed in parliament two weeks after the disaster did not arrive in port until February due to transportation and customs issues. Spain and France also sent aid, but the initial relief operation was in the hands of the Marquês of Pombal (Paice 2008). Pombal was the then Minister of State and Foreign Affairs and was considering the reconstruction operation at the same time as the emergency response.

The Church provided a great deal of support and the level of cooperation between Church and State was good considering ongoing tensions between the two. Some religious leaders claimed that the city had been punished by God due to its lack of faith (Paice 2008) while many working in government had embraced Enlightenment thinking, and wished to reduce the influence of the Church.

It appears that despite the magnitude of the disaster and the level of need following it, no-one died of hunger. Those whose properties were still intact assisted those in need, housing people in their homes and on their farms (Francisco 2006) and food in granaries belonging to the King, the Church and the nobility, was distributed.

By royal order, a monastery was set up as a hospital for wounded civilians, while a convent was converted into a military hospital (Francisco 2006). Priests set up local infirmaries in tents and distributed medicine, food and sangria (diluted wine).

Not much information survives on how people coped in the aftermath of the disaster, though the poorest experienced the worst conditions.

Those that had lost their homes camped in the squares, on land owned by convents, and on the beaches. The king ordered a distribution of canvas from the large stockpiles in the royal warehouses, so many people erected makeshift tents. Some supplies were donated by merchants and traders (Francisco 2006).

In the first six months after the quake, it has been estimated that 9,000 wooden buildings were constructed, with settlements developing on the east and west sides of the city. As timber was scarce, much of the lumber had to be brought in from outside (Kendrick, 1956).

Many of the wooden huts were erected as part of government initiatives, others by the church and others by wealthy individuals sheltering those they had immediate responsibility for (Paice 2008). The most famous inhabitants of these wooden huts was the Royal Family who were sheltered in Royal wooden barracks.

Despite control measures to prevent citizens from leaving it was not until the 1780s that the city's population returned to pre-earthquake levels.

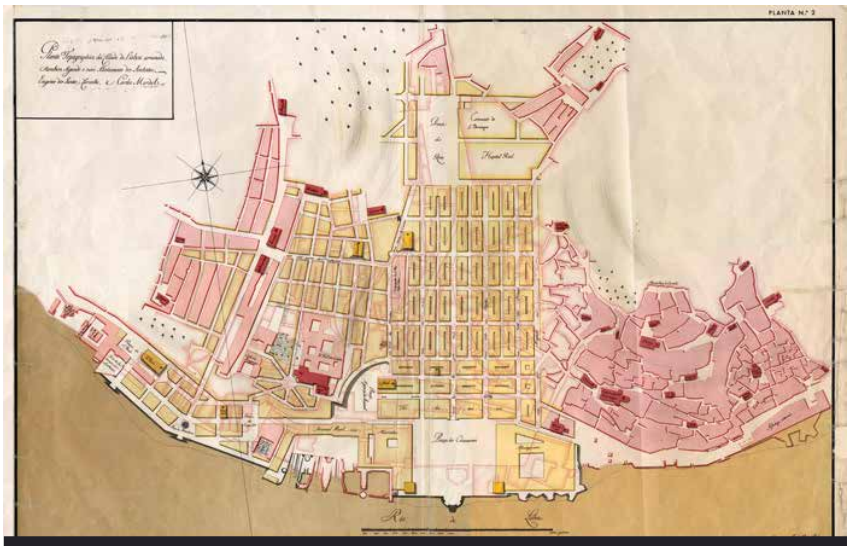
Shelter strategy

Decision-making power was concentrated in the hands of the Marquês de Pombal, whose management of the recovery has been described as "despotic planning" (Mullin 1992).

Pombal immediately passed a series of laws, announcing the death penalty for looting and forbidding people from deserting the city or settling in unplanned camps.

By the end of November 1755, Pombal had commissioned a survey of the damage, and of land ownership, to avoid later disputes over land tenancy (Paice 2008). In December he passed two construction laws, banning construction outside of the city walls or in unaffected areas to prevent unlawful land occupation and low-standard reconstruction. The army was employed to patrol the city and enforce the regulations.

Any temporary building was prohibited until all the debris was cleared and plans for rebuilding were completed. To prevent inflation, construction salaries, rents and the prices of construction materials were all frozen.



Pombaline Baixa, Lisbon, rebuilding plan after the 1755 earthquake. Drawn by Eugénio dos Santos (1711-1760) and Carlos Mardel (1696-1763). Image: Wikimedia Commons, public domain

Reconstruction planning started in parallel with the relief operation and on the 4th of December 1755 the Chief Engineer, Manuel da Maia, presented a concept paper outlining five broad strategies (Paice 2008):

- Rebuild the city as it was.
- Rebuild the city as it was, but with wider roads.
- Rebuild the city with the same layout but restrict buildings to two storeys.
- Move the city to a new location.
- Demolish the remaining buildings and build a new, modern city.

Pombal opted for the last option even though, or perhaps because, it would involve completely redrawing the map of land ownership in the city. The city would be planned following the progressive spirit of the European Enlightenment and the citizen, rather than the Crown, was to be put at the centre of a modern city.

Land within the Baixa (downtown area) was immediately appropriated by the state and re-allocated, with preference given to existing landowners, or to the administrators who represented the nobles, the church or the crown. Compensation was based only on site area, and not the post-earthquake building condition, and the medieval property rules and conditions were discarded.

On receiving the deeds, landowners had to agree to complete redevelopment within five years, preventing property and land speculation.

As the new plan for Lisbon involved larger public spaces, some landowners had to be compensated. The compensation plan involved reducing all land lots by a proportional percentage and dividing the Baixa into different zones of value, with a premium being placed on land adjoining public squares.

The effect of the land re-allocation and compensation was to reduce ownership by the nobility and the clergy and increase ownership by merchants, whose investments were in part financing the reconstruction.

This significantly contributed to the increase in economic power of the middle classes, increasing upward social mobility.

The new city

Within a matter of weeks following the disaster, the Marquês had assembled a team of military architects and engineers, led by the country's Chief Engineer, Manuel da Maia, to start discussing plans for the city's reconstruction.

Once the decision had been taken to completely redesign the city, six designs were drawn up and presented in March 1756 (Mata dos Santos 2008).

The chosen plan featured wide avenues connecting two main squares and a restriction of building height to 3 or 4 storeys (considered to be more resistant against collapse). In further iterations of the plan, city infrastructure was to be greatly improved, with a modern water supply for the general public. Building components and construction processes were standardised in order to increase the efficiency of the reconstruction process and houses were designed to be earthquake-resistant.

In May 1758 the plan was officially approved and the reconstruction began.

The modernisation of the city created a robust rental market (Do Couto da Silva, 2012). The house designs allocated the ground-floor space to shops and workshops, the middle storeys to the middle classes whilst the lower-standard attic-floors were reserved for servants and the working classes (Wall Gago 2007). This is one of the first modern examples of people from different social classes living in the same buildings (Cornelio da Silva, 2006).

Reconstruction of the city centre took around 30 years from the 1750s, but other parts of the city were not completed until as late as 1838, still following the original plan. By 1780 the number of dwellings had surpassed the pre-earthquake numbers (Pereira 2006.)

Disaster Risk Reduction (DRR)

Part of the plan was that all buildings should be built to the latest in anti-seismic design, and Pombal ordered the destruction of any houses not meeting the specifications (Mullin 1992).

The new anti-seismic design by Carlos Mardel included an internal timber-frame with an embedded post-and-beam construction with high levels of bracing. The frame was filled with rubble and then plastered to add protection against fire. The design became known as the "Pombaline Cage" and the first building began in 1759, a year after

A model showing the Pombaline cage design. The design is said to have been tested by getting the army to walk up and down on the roof of a full-size model.

Photo: Galinhola, 2008. wikipedia.org/wiki/File:Gaiola_pombalina.jpg

the initiation of the reconstruction process.

The design was apparently tested by running a stress-test on a full-scale model in the city's main square. The military were ordered to march in uncoordinated, uneven rhythms on top of the building to simulate the tremor conditions of an earthquake (Mata dos Santos 2008).

Issues today

Recent studies by some Portuguese engineers (Cardoso, Lopes and Bento 2004, and Ramos, Lourenço 2000) suggest that many of Pombaline Cage buildings in the Baixa have been profoundly altered, driven mainly by commercial interests and changes in building use. This would suggest that some parts of the city might now be more vulnerable than they were 200 years ago.

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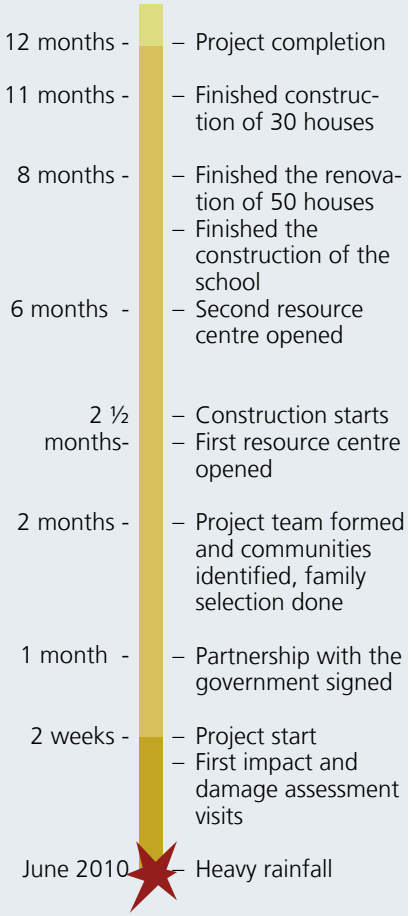
A.27 Romania - 2010 - Floods

Case study:

Country:
Romania
Disaster:
Heavy rain and flooding in 24 counties of Romania
Disaster date:
June, July 2010
No. of houses damaged:
Over 800 houses completely destroyed
More than 7,000 houses damaged
No. of people displaced:
15,000
Project target population:
400 households and 3 school
Occupancy rate on handover:
100%
Shelter size:
60 m²
Materials Cost per house:
Average 2,500 USD
Project cost per house:
Average 3,000 USD

Project timeline



Project description
This project mobilised 497 volunteers to help build and repair half of the homes damaged by the floods. It also built or repaired three schools. It managed to use donated materials and supplied families with materials and technical assistance to support self-help home repairs and renovations.

Strengths and weaknesses

✓ Beneficiaries contributed their time and labour towards construction of their new homes.
✓ Business partners were fast in reacting and providing much needed materials and financial resources.
✓ Partners mobilised their workers to volunteer at the construction site.
✓ The municipality was involved from the start which helped the project to proceed quickly.
✓ The government endorsement of the campaign helped generate needed resources and partnerships.
✓ Assistance was offered not only in reconstructing homes, but also in supplying and distributing construction materials through the resource centres. This allowed families whose houses were not severely affected to quickly renovate them with their own resources.

× Government delays in delivering on promises for materials.
× Logistics not adapted for acting in multiple locations (10 different locations at the same time).
× Difficulty in engaging the beneficiaries selected for relocation.
× Delay in developing the infrastructure for the plot of land selected for relocation of the new homes.
× The weak involvement of local volunteers interested in renovation activities.
× Severe weather conditions in winter and spring (-10C in April) delayed construction and prevented more local volunteers from taking part in the project as planned.
× Lack of sufficient local capacity in terms of skilled people available for running more resource centres.

Floods destroyed 800 over homes.
Photos: Ovidiu Micsik and Mihai Grigorean, Habitat for Humanity Romania

Before the floods

Heavy rainfalls in June 2010 led to flooding in Romania. Over 800 homes were completely destroyed, more than 7,000 damaged, and over 15,000 people were displaced.

Many of the people most affected by the floods were from low income households, mainly old people or families with young children from rural communities. Two-thirds of Romania's poor live in rural areas. In times of disasters, these are the most vulnerable groups, as many of them find it hard to recover without additional support after losing all possessions and homes.

After the floods

The first stage of the campaign "Now, more than ever!" focused on fund raising. At least 60 companies and over 20,000 individuals raised 650,000 USD in cash and 290,000 USD in construction materials.

Later stages of the response dealt with logistics and implementation. The first resource centre assisted 80 families to rebuild their houses.

Later, the second resource centre was established, and it focused on the distribution of materials in the area. In total, it assisted 240 families with timber for roof, aerated thermal blocks, sand, cement and plasticiser for external and internal walls, polystyrene stucco plaster for insulation and external finishes.

The project also mobilised local volunteers from the business community. 34 teams consisting of 497 volunteers were hosted by the community. These volunteers worked more than 3,200 hours over 54 days.

Implementation

The city hall allocated a new plot of land for the construction of new houses along with the needed infrastructure: running water, electricity, sewage and access roads. All 30 allotments were in one area.

A warehouse was set up close to the main construction site to receive and store in-kind donations and materials, later distributed throughout the resource centre. It also disbursed materials for the construction of new houses. Two local companies were subcontracted to perform core/specialised work both with new constructions and renovations.

A local project team was formed to manage the project. It included a public relations specialist, a volunteer coordinator, a family support officer, and a construction site manager.

Selection of beneficiaries

A selection committee was composed of two representatives from the organization, a town hall representative, and a community representative. Public information meetings were held in the camp for flood victims in August 2010 to explain the housing project, eligibility criteria, conditions for participation and future obligations towards the project.

At the same time, social surveys were conducted for each family on the official victims list of the municipality. Through this process, 43 families were initially selected for the renovation project and 17 families for the construction of new homes during the first phase of the project. The 340 other beneficiaries were selected in the second phase of the project after the project staff team was strengthened and was able to perform an initial needs assessment.

General selection criteria took into account the vulnerability of the family, the urgency of the housing need, willingness to relocate and volunteer. For the renovations, single parent families and families with at least one minor child were prioritised.

The major problem for the selection process was that the number of beneficiaries kept changing, especially for the new builds project. This was mainly caused by that fact that some of the families finally refused to relocate. Other families did not perform the required number of working hours on the construction which was one

Interior of a repaired house. The project mobilised volunteers to build and repair flood damaged houses.
Photo: Ovidiu Micsik and Mihai Grigorean, Habitat for Humanity Romania

of the main conditions for participating in the project. This problem was solved when the town hall approved a final official list that could not be amended.

To encourage families to work equally on all new constructions, the beneficiaries were not assigned a home until the very end of the project.

Technical solutions

For the new builds, the aerated thermal blocks were chosen as a solution due to availability and climate conditions, the type of in-kind donations and related construction costs. All 30 new houses were built on the same plot of land, making it easier to develop the logistics and organise the production and supply chain management.

The houses were finished using standard quality materials for interiors, including drywall, laminate parquetry, stoves or tiles. The bathroom and kitchen were equipped with basic amenities; sinks and showers.

For the renovations of the partially affected houses, the solution was selected on a case by case basis. The bulk of work was on restoring walls, insulation, reinforcing foundations, replacing flooring and internal finishes.

Technical assistance was provided to a large number of families via the resource centres. Families received materials for their own work. Transport from the warehouse to each location was organised and offered to each family.

Construction workers were deployed to provide families with design and technical support in construction, and the use of tools and equipment, house to house in order to ensure the quality of construction and health and safety requirements.

Materials list for 400 houses

Materials	Quantity
Aerated thermal blocks	9,800 m^3
Timber	380 m^3
Windows	120
Cement	250,000 kg
Iron	30,900 kg
Parquetry (flooring)	1,800 m^2
Doors	210
Polystyrene	875 m^3

Using volunteers, the project rebuilt half of the houses destroyed by the rain and flooding in Romania. Many of the volunteers were from outside Romania.
Photo: Ovidiu Micsik and Mihai Grigorean, Habitat for Humanity Romania

C.19 Turkey, Caldiran - 1976 - Earthquake

Case study: Shelter construction

Case study credit: UNDRO 1982

Disaster:
Earthquake Caldiran (Van)
Turkey

Disaster date:
24 November 1976

Number of houses damaged or destroyed:
14,450

Number of people displaced:
51,000

Value of damage:
3.2 billion USD

Value of assistance:
17.4 billion USD for relief and reconstruction from external sources. Monetary value of assistance from inside Turkey unknown, but considerable in terms of prefabricated housing alone.

Occupancy:
95% occupancy for winterised tents; low for other tents
100% occupancy for self built and improvised shelters

Project timeline

April to November 1977 – 10,000 asbestos prefabricated houses constructed

2 months – Approximately 200 families evacuated

6 weeks – Tents, including winterized models, were provided

24 November 1975 – Earthquake

Emergency

Survivors were encouraged by the government to move away from the affected area. One designated area was the Aegean coast. Prefabricated frame houses built with asbestos panels and timber were constructed after winter.

Tents were provided to accommodate families during the harsh winter conditions until prefabricated housing could commence in April 1977. Building work was not possible during the winter. There were difficulties in obtaining winterized tents, as the entire world stockpile was inadequate.

Reconstruction

The Ministry of Reconstruction and Settlement provided prefabricated housing for all families.made homeless by rockfalls. The housing policy was to provide prefabricated homes, and not to rebuild in local building tradition. The town of Lice was planned for an eventual population of 20,000, twice the pre-earthquake total. Some of the housing assistance from external sources, notably Libya, incorporated employment provision and shelter for animal shelters.

Strengths and weaknesses

× Advice was not provided for the improvement of traditional adobe or masonry dwellings.

× The government policy of relocating families in other parts of Turkey was interpreted by some critics as politically motivated. Few families took up the offer of removal costs, or provision of new land and livestock.

- In the worst winter earthquake in Turkey for 40 years, authorities feared that vast numbers of survivors would die of exposure to the harsh climate. Winterized tents, with heating and insulation were requested from world-wide sources. The assumed need was probably incorrect, as is evidenced by the resourcefulness of surviving families, who improvised by half submerging makeshift shelters in the ground.

- The Government (as in Lice in 1975, page 112), adopted a policy to provide prefabricated housing, with plans to build 10000 units. No attempt was made to provide resources to train local builders in antiseismic construction of traditional buildings.

- The prefabricated housing policy was underpinned by the extensive aid provided by donor governments, with particular emphasis on aid from Arab countries.

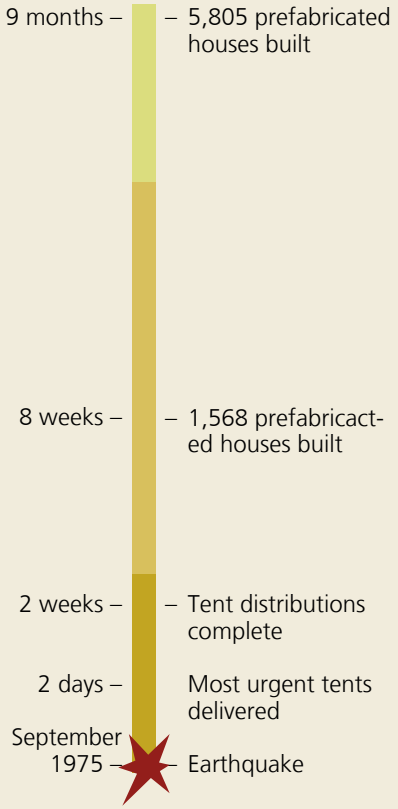
C.20 Turkey, Lice - 1975 - Earthquake

Case study: Town relocation

Case study credit: UNDRO 1982

Disaster:
Earthquake
Location:
Lice, Turkey-September 1975
Population Pre-disaster:
50,000 (8,100 in Lice town)
number of people Homeless:
5,000
Number of houses damaged or destroyed
16,160
Occupancy:
90% of tents.
10% of 463 Polyurethane igloos were occupied
Value of damage:
Estimated between 17 million USD and 34 million USD.
Value of assistance:
$34 million (internal sources)
$15.7 million (external sources).

Project timeline



summary

The emergency shelter policy was to provide over 3600 tents through the Turkish Red Crescent, and to accelerate reconstruction. Voluntary Agencies followed their own policies, e.g. the Oxfam built 463 igloos.

The Ministry of Reconstruction and Resettlement moved the town of Lice 2 km to the south due to the risk of rockfalls at the old site.

The housing policy was to provide prefabricated homes, not to rebuild in local building tradition. The town of Lice was planned for an eventual population of 20,000, which was twice the pre-earthquake total.

Some of the housing assistance from external sources, notably Libya, incorporated employment provision, animal shelters, and other benfits

Strengths and weaknesses

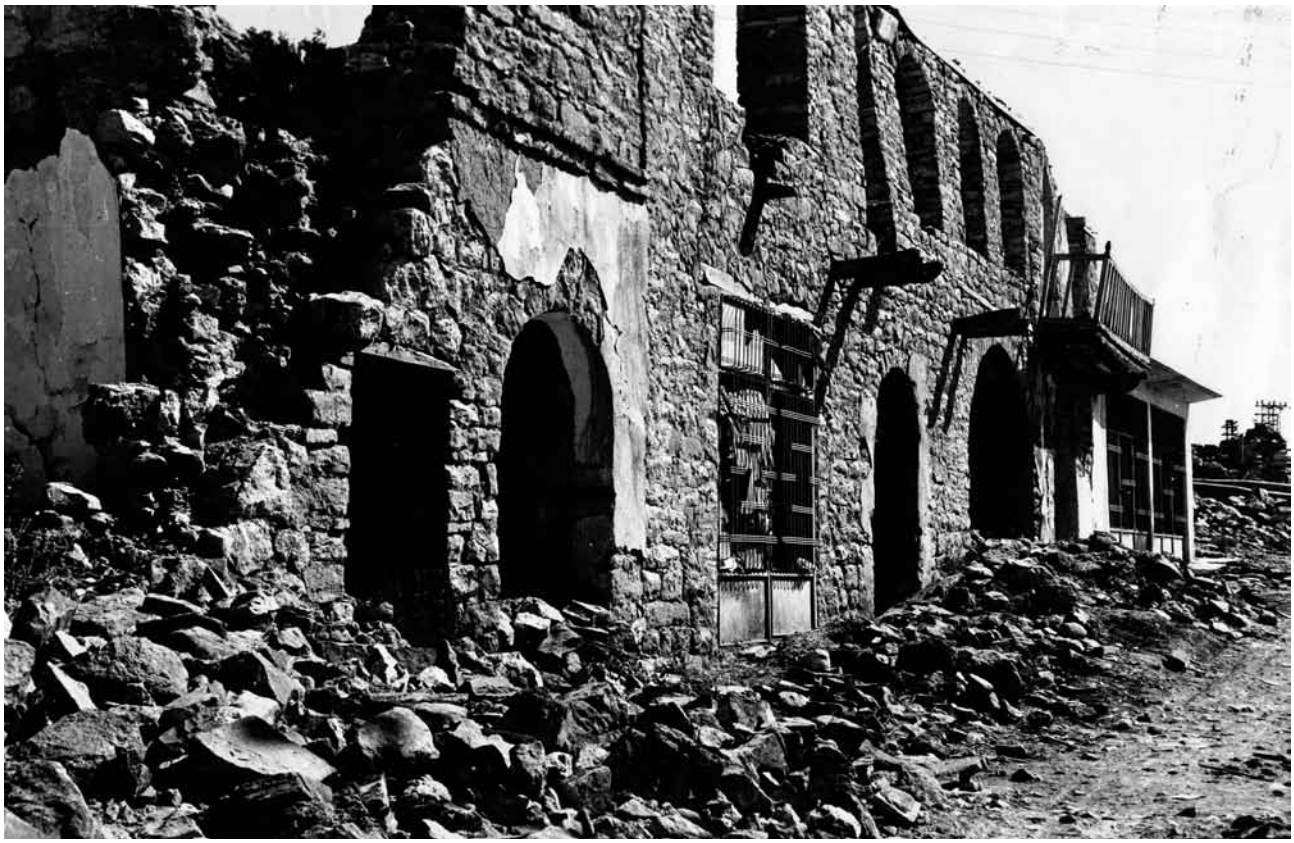
✓ Tents effectively met short-term needs. A particular quality of Red Crescent policy was to ask surviving families to make new tents to replenish the stockpile while using their own tents.

× Of the 463 Oxfam igloos, 44 were damaged, and it is probable that fewer than 50 were used. They failed on grounds of high cost, timing, fire risk and cultural issues. After the experience in Lice, Oxfam abandoned the system.

× The decision to relocate Lice has been very unpopular with its residents, and was made without their participation. The new site did not possess climatic shelter from the hillside, took valuable agricultural land out of use, and was initially without water supply. The new choice of a flat site may have been influenced by the requirements of the prefabricated houses.

× The capacity of the Turkish Government to build prefabricated houses so rapidly (1,568 units in 54 days) was an achievement. However the houses had many deficiencies: climatic and cultural unsuitability; no provision for animals; they were too small; and they did little to generate local work. Essentially, they reflected an urban middle class set of values, in sharp contrast to rural values and priorities.

- Lice was the second major disaster to attract extensive financial aid from the Arab world, contributing of 11 million USD out of 15.7 million USD of external aid received, resulting in an imaginative project by Libya.



Traditional masonry housing in Lice in eastern turkey that was damaged in the earthquake of September 1975. The old town of Lice was sited on a steep hillside (vulnerable to rock falls in any future earthquake.) The government decided to move the settlement to a new safe location, in a plain at the foot of the slope. However, this land was prime agricultural land. Further the hillside provided better protection from northerly winds than the new exposed site.
Photo: Ian Davis

A family added this porch to their new prefabricated home. It is an example of the need for protection for an animal, and also some protection for the door.
Photo: Ian Davis

C.21 Turkey, Gediz - 1970 - Earthquake

Case study: Overview

Case study credit:
UNDRO 1982

Disaster:
7.2 magnitude earthquake Gediz Turkey

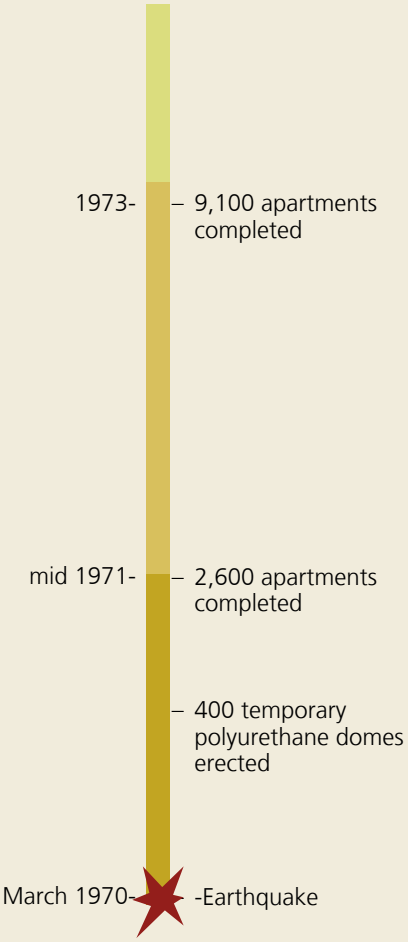
Disaster date:
28 March 1970

Number of houses damaged:
20,000

Number of people displaced:
90,000

Value of damage:
23 million UsD (at 1970 value)

Project timeline



Summary

In Gediz temporary shelter was used only for a very short period. in Ackaalan 400 polyeurythane domes were built and occupiedt. Imported labour was used for the clearing rubble.

The Government decided to rebuild Gediz 5 km to the south of the destroyed town. The town of Ackaalan was rebuilt on the original site. The government built 9100 apartments in three years.

Strengths and weaknesses

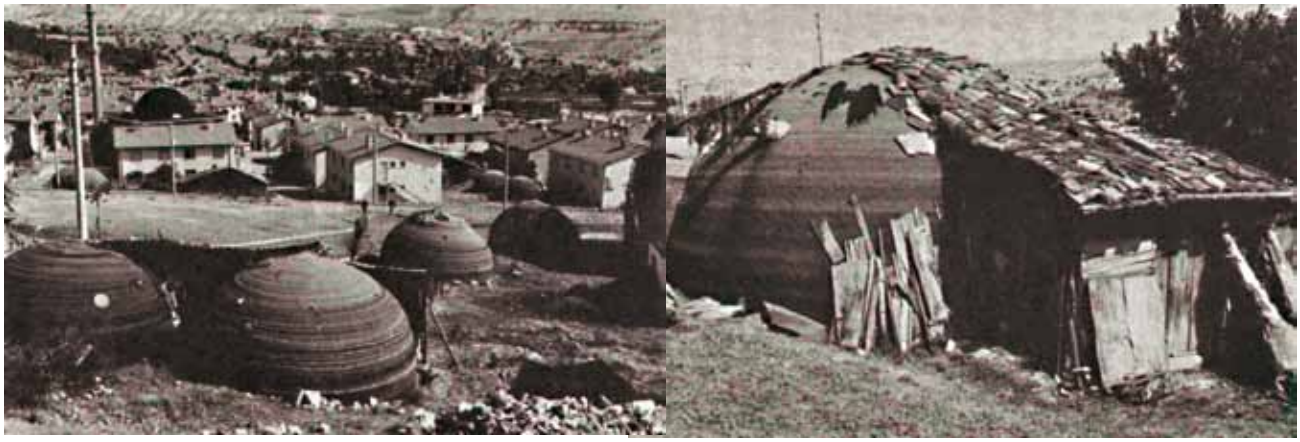
✓ Residents of Ackaalan argue that a longer period in temporary accommodation gave rise to better construction of permanent homes due to increased time available for construction.

× The relocation of Gedez has created long-term problems, occupants still maintaining close links with the old town.

× Coordination between village communities and Government planning officers was not satisfactory.

× The very swift reconstruction of buildings created many problems. Local residents believed that more time could have been devoted to the planning process with long-term benefits.

Maps of a neighbourhood of the resettlement village of new Muhipler drawn 13 years apart. Left 1971, Right 1984
Illustration: Housing and Culture after Earthquakes / Yasemin Aysan / Paul Oliver / Ian Davis



Polyurethane 'igloos' were deployed. An experiment that was discontinued after the 1975 Lice earthquake
Photos: Housing and Culture after Earthquakes / Yasemin Aysan / Paul Oliver

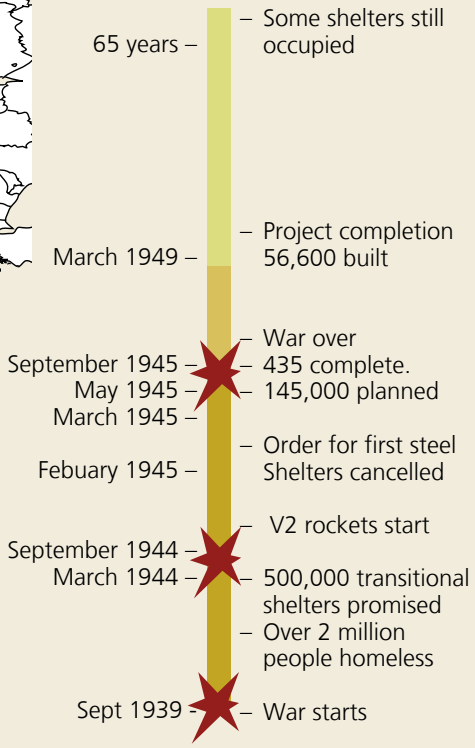
C.22 UK - 1945 - Post conflict

Case study: 1940s Transitional shelter

Case study credit:
Ged Robinson

Country:
UK
Disaster:
World War 2
Disaster date:
1939-1945
Project target population:
Over 2,750,000
Families supported:
156,600 houses built between 1945 and 1948
Occupancy rate on handover:
High; many still occupied 65 years later.
Shelter size:
57m². living room, two bedrooms, kitchen, bathroom, WC and shed.
Materials Cost per shelter:
1,300 GBP (1945 prices) to 1,600 GBP
Compared to 1000 GBP for a brick house with three bedrooms

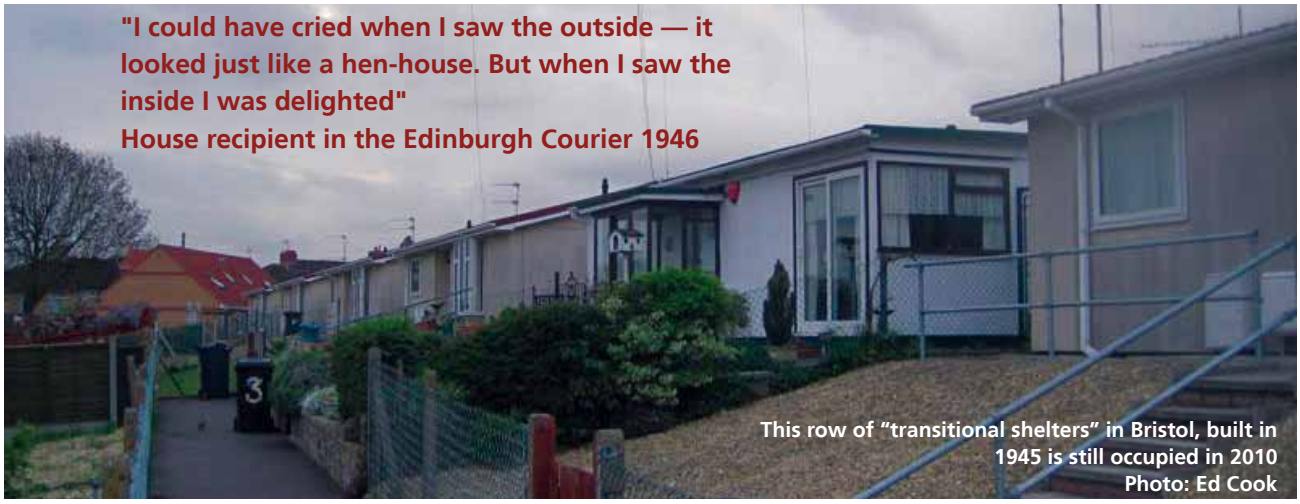
Project timeline



Summary
To meet the housing crisis of 1945 at the end of the second world war, the British government built 156,600 prefabricated houses as a temporary measure over the space of three years. 65 years later, many of these houses are still occupied. However the houses were comparatively expensive, and the programme failed to address the underlying issues of land ownership.

Strengths and weaknesses

✓ Large number of houses built in three years
✓ Many have remained in use, housing people for over 65 years
✓ Many owners preferred them to later housing schemes, especially multi-story projects, in later years.
✓ Houses came fitted with luxury modern conveniences such as fridges.
× Houses cost approximately twice the price of a traditional brick masonry house. Units costs were high.
× Due to multiple designs adopted, economies of scale, that were anticiapted through mass production, were not made.
× Underlying issues of land ownership were not addressed in the housing policy.
× Detached bungalows, designed with the long side facing the road, required large building plots and excessive amounts of land.
× A steel prototype was rapidly developed by the government to fulfil a political need. Howeveer it was later abandoned and as a result, significant funds were wasted.
× Use of asbestos later led to safety challenges when miaintaining or demolishing houses.
× Production was much lower than originally expected.
× Funds were used for temporary rather than permanent housing.
× Temporary housing sites still needed the same infrastructure investment as permanent housing would have done.
- Land for the houses was allocated for 10 years. However many remin in use, 65 years later.
- The Ministry of Health (with key responsibility for housing) was against the provision of large-scale temporary housing, fearing shanty towns would be created.



This row of "transitional shelters" in Bristol, built in 1945 is still occupied in 2010
Photo: Ed Cook

Background

Heavy bombing from August 1940 onwards left two and a quarter million people homeless in the UK. The deployment of V2 rockets left another 500,000 people homeless.

As an emergency measure after rocket damage, the government supplied UniSeco temporary huts and Orlit asbestos cement Nissen huts to provide emergency cover. Latrines were provided in blocks of two. An additional 8500 prefabricated houses were donated by USA in 1945. The cost of these temporary solutions quadrupled during the war.

Following the bombardments of 1941, and throughout the war, the housing shortage lead to people having difficulties in finding houses, and landlords demanding large amounts of 'key money' before renting properties. The majority of people who had lost their houses were hosted by family members. Other people squatted disused buildings. At the end of the war homeless people illegally appropriated redundant army huts.

During the war, the post-war housing programmes had been delayed, due to strong opposition from landowners over the compulsory purchase of land that would be required. Land usage issues exposed the party political tensions within the coalition. Sidelining these issues meant that a housing policy was not in place at the end of the war.

When the war ended, large numbers of troops returned and a general election was also due; the housing crisis became a critical issue on the political agenda.

Politically, the situation regarding housing was complicated by the involvement of different line ministries. In England housing was primarily the responsibility of the Ministry of Health, but additionally the Ministry of Public Works, the Ministry of Town and Country Planning, the Ministry of Supply, the Ministry of Production and the Secretary of State for Scotland all had responsibilities.

Land ownership

Discussions over land prevented a housing reconstruction policy from being agreed in the aftermath of the war. As no political party in the government had a clear majority, discussions were held up between wealthier landowners and those wishing for a more equitable distribution of land.

The government wished to fix compensation for land at 1939 values. This was in a context of rapidly rising land prices and property speculation with the end of the war, and disagreement over betterment (betterment is when the price of land goes up after it has been granted of planning permission).

Transitional houses

Prefabricated houses initially appeared to be a politically perfect solution. They would be owned by the government, mass produced in redundant war-time factories and could be erected on bombed sites, avoiding some of the challenges for land acquisition.

A fact-finding mission was sent to United States of America to learn from the production of prefabricated shelters. In America, there was an existing industry building prefabricated mobile homes. This industry had grown significantly during the war.

The prefabricated shelters in America included permanent, temporary or demountable shelters, and portable trailer caravans, whose wheels would be removed once they were in place. Such houses were owned by the United States government with local government acting as owner representatives. Factories were producing over 2000 trailers per month.

In England however, there was no such industry, and a major investment in equipment would be required.

The approach chosen was to provide prefabricated structures with prefabricated fittings, including kitchen and bathroom units and plumbing systems.

Beneficiary selection

Selection criteria for which families would be prioritised to live in the prefabricated houses were not clear.

First prototype – the Portal House:

The first prototype developed in secrecy was a prefabricated single-storey house with two layer steel walls. There was an aluminium foil lining between interior and exterior walls. The houses were built on a concrete slab and had fitted steel furniture.

In cold weather, the steel prototype suffered severely from condensation. Boiling a kettle would cause condensation to run down the walls. In low temperatures, the condensation would freeze inside the walls. It also caused mould to form on items stored inside the kitchen furniture.

Despite initial commitments to build 500,000 of these shelters, It was discovered that production would enable a maximum of only 50,000 units in 3 years. An unexpected cost of 100 steel rolling machines that had to be imported was discovered after the Government had approved the first funds for the programme. A rising cost of coal also caused the price of steel to rise, and hence the total cost of these houses. As a result, production of this model was cancelled, in total at least 750,000 GBP had been lost with the programme.

Later models

Following the failure of the first steel prototype shelter, four main types of house were later selected, which accounted for 90% of the final houses constructed:

- Arcon – concrete base, steel frame and asbestos cement exterior cladding. The walls were insulated with glass fibre and the walls and ceiling were covered with plasterboard. Nearly 40,000 were built.
- Pheonix and the UNI-Seco – based on a military design for an office. The frame was made of plywood and timber, with asbestos wall sections. Nearly 30,000 were built.
- Tarran - a wooden framed bungalow with precast concrete panel walls. Over 19,000 were built.
- Aluminium bungalow, including the Airoh – all alumnium construction. Over 50,000 were built. The aluminium bungalow was the most expensive to produce at £1610.

What happened next?

156,600 prefabricated houses were produced between 1945 and 1949, with an anticipated lifetime of 10 years. Each house was built on its own plot, a significant amount of land.

Of the prefabricated houses built, some have remained in use over 65 years, although many now fail the government's 'Decent Homes Standard'. In general there is now a policy of replacing prefabs, although this is moving into redevelopment of sites as it is cheaper to demolish and rebuild rather than continue to repair them.

The prefabricated shelters were expensive to build and required large plots of land. After 65 years of use, many are now being demolished as they are too expensive to maintain. Photo Ed Cook

OVERVIEW

UKRAINE 2014-2016 / CONFLICT

CRISIS	Conflict, 2014-onwards
PEOPLE AFFECTED[1]	4.4 million (2.6 million for Shelter-NFI)
PEOPLE IN NEED OF HUMANITARIAN ASSISTANCE[1]	3.8 million (0.6 million for Shelter-NFI)
PEOPLE SUPPORTED BY THE RESPONSE (as of November 2016)[2]	20,526 houses repaired 109,937 individuals received emergency assistance 438,882 individuals received NFIs

SUMMARY OF THE RESPONSE

Political unrest in Eastern Ukraine led to a humanitarian crisis, since the start of hostilities in early 2014. After three years, shelter-NFI needs remain high for IDPs, non-displaced populations with damaged dwellings, host communities and returnees. Along with covering immediate needs, the Shelter-NFI Cluster has promoted preparedness and durable solutions, especially focusing on winterization activities.

1. Nov 2013: **Protests commence in Kyiv**; President Yanukovych flees in February 2014.
2. Mar 2014: **Crimea crisis erupts;** declaration of autonomous regions in Donetsk and Luhansk.
3. Apr 2014: **Armed groups take control of the eastern Donbas region.**
4. Jul 2014: **Shelter sector activated and strategy developed.**
5. Aug 2014: **Preliminary Response Plan launched.**
6. Dec 2014: **Shelter Cluster activated.**
7. Jan 2015: **Debaltsevo crisis – third wave of displacement.**
8. Feb 2015: **Humanitarian Response Plan (HRP) launched.**
9. Sep 2015: **First Winterization Guidelines produced focusing on Northern Donbass.**
10. Feb 2016: **Government suspends social payments to IDPs.**
11. Mar 2016: **Shelter-NFI Cluster rolls out Damage Database per address in Government Controlled Areas (GCAs).**
12. Apr 2016: **Subnational Cluster begins implementing a cooperation agreement with Donetsk and Luhansk authorities in GCAs to discuss transition options.**
13. Jul 2016: **Shelter Cluster Transition Plan is drafted.**
14. Aug 2016: **Second Winterization Guidelines produced focusing on North and South Donbass and on Non-Government Controlled Areas (NGCAs).**

CONTEXT

Eastern Ukraine experiences long, harsh, winters. Average temperatures drop below 0°C from the end of November to mid-March, with an average low of -10°C and -20°C in the colder areas. Rainfall is consistent throughout the year. Rural villages, especially those with already restricted access, are at risk of being cut off during periods of heavy snowfall.

Following the Government of Ukraine's decision to abandon talks that would bring the country closer to EU membership in 2013, political unrest led to a destabilizing humanitarian crisis. In March 2014, a **first wave of displacement** took place from Crimea, following its declaration as an Autonomous Republic, while violence escalated in Donbas region in the east, where it continued for two years. In 2016, shelling was concentrated in specific – rather than diffuse – areas.

The political unrest has affected households in preparing adequately for the winter. Homes damaged by shelling urgently needed to be repaired in time for winter, while the internally displaced and non-displaced alike struggled to meet basic needs, such as purchasing winter clothing and household items, or being able to pay for the rising costs of utilities.

[1] From Humanitarian Needs Overview (HNO) 2017.
[2] Pre-Conflict Housing in Ukraine: Real Estate Markets and Tenure Dynamics. Shelter Cluster Ukraine, November 2016.

A focus of the Shelter-NFI response in Ukraine has been preparing for the harsh winter conditions. This included the distribution of firewood in the affected areas.

SITUATION BEFORE THE CRISIS

After the process of mass privatization in the housing sector following 1991, access to adequate housing became limited and communal residential infrastructure and services – that had previously been maintained by the state – started decaying. The economic crisis of 2008 resulted in a reduction in foreign investment, leading to neglect of existing buildings and a halt of new construction. Inadequacies in social housing and housing policy failed to address the housing needs of low-income households (1.39 million people in 2013)[2].

SITUATION AFTER THE CRISIS

Just before the start of the conflict, 93.7% of the housing stock was privately owned, with 3.4% living in private-rental housing and 2.9% in communal housing. Individual houses outside major cities sustained shrapnel punctures to roofing, damaged windows, and in 3% of cases full destruction. With the escalation of hostilities in 2014, people fled the contact-line areas of Donetsk and Luhansk Oblasts (provinces), taking refuge in collective centres and apartments, or being hosted by relatives. Properties and income were left behind, with displaced families relying on their savings to meet basic needs. 93% of the houses that sustained damage in the Government-Controlled Areas (GCA) of Donetsk and Luhansk were privately owned, the extent of which was exacerbated by historical lack of maintenance and care[2]. 18,500 of these houses were in the GCA, while a similar scale of damage was estimated in the Non-Government Controlled Areas (NGCA)[3].

As the conflict has continued for three years, resources and coping mechanisms have been seriously depleted. The situation was compounded by the suspension of social payments to IDPs, making pensioners the primary breadwinners, for 38% of affected families in the GCA and 60% in the NGCA[4].

Returns were noted in 2016, both voluntary and involuntary (e.g. those forced to return home having depleted all their resources, or been evicted). Across the country, 59% of IDPs have stated a preference to return home because of their private property, highlighting the importance of private houses as a main source of capital[5]. Significant differences exist in the adequacy of shelter and access to basic items, services and utilities, between urban and rural contexts[6]. Groups with specific needs include IDPs, non-displaced populations with damaged dwellings, host communities, households experiencing multiple displacement, and returnees (sustainable return; formerly displaced, dwelling uncertain)[7].

SHELTER CLUSTER STRATEGY

The Shelter-NFI Cluster in Ukraine was established in December 2014, to respond to **urgent humanitarian needs** for shelter and NFIs during the sudden onset of the crisis, initially through unconditional cash grants. This has transitioned into **preparedness activities,** to enable vulnerable and affected households to better cope with protracted displacement, in often inadequate conditions – particularly in **dealing with the extreme winter,** as access to items, fuel and heating became increasingly restricted by dwindling household resources. Shelter actors have begun mainstreaming winterization preparedness into all repair works, prioritizing the creation of “one warm room”, before upgrading and insulating other areas of the house.

While continuing to coordinate the emergency and winterization response, the Shelter-NFI Cluster **promoted durable solutions** for IDPs and conflict-affected populations, through emergency assistance, transitional solutions, and the facilitation of longer-term shelter, until the minimum criteria for cluster deactivation would be met. This included a **transition of responsibility from the Cluster to national actors,** particularly the Oblasts of Donetsk and Luhansk, who have taken a primary role in the emergency response[8].

[3] Due to limited humanitarian access in the NGCA, the figures are estimated through various sources.
[4] HNO 2017.
[5] From IOM NMS Round 4, Sep 2016, cited in Pre-Conflict Housing in Ukraine: Real Estate Markets and Tenure Dynamics.
[6] Shelter-NFI Needs Assessment Report: Ukraine, Aug 2015, REACH / UNHCR.
[7] Shelter-NFI Cluster Strategy, June 2015.
[8] Draft Shelter Cluster Transitional Plan, July 2016.

TABLE 1 - WINTERIZATION ACTIVITIES*		
RESPONSE OPTION	**DESCRIPTION**	**VALUE / COST**
Winterization cash grant	Injection of a one-off, unconditional cash grant for utilities, NFI and clothes through bank transfer or vouchers	USD 100 per individual
Collective centre winterization	Basic repairs and NFI provision for collective centres sheltering people with specific needs (e.g. institutions, retirement homes, orphanages, accommodation for people with disabilities, etc.)	Up to USD 600 per individual
Solid fuel and heater	Distribution of heating items	USD 110 per household without heater; USD 200 per household with heater
NFI Clothing Set	In-kind provision of warm clothes, jackets, thermal underwear and shoes	USD 80-100 per person

* Source: Shelter-NFI Cluster Activity Matrix, HRP 2017.

SHELTER-NFI RESPONSES

83% of Shelter-NFI assistance has been provided in-kind. Monetized assistance in NGCA was not considered a viable option due to limited access to financing and markets for communities along the contact line. While **unconditional cash** was used prevalently in 2015, **restricted cash** has always been used as a modality for shelter repairs. Starting in 2016, as shelter partners moved into **heavy repairs and reconstruction works**, mixed modality (a combination of delivery of materials, provision of construction support and transfer of cash to finish repair works) was increasingly used by shelter partners. In 2016, closer links were developed with government authorities to coordinate the delivery of assistance with the coverage of heating and utility subsidies. A major focus of shelter and NFI activities have been in **preparing for and mitigating the effects of low temperatures** (*see table 1*). Other shelter activities, such as repairs, were an important feature of winterization activities, to achieve adequate shelter conditions and protection of vulnerable populations (*see table 2*). Other activities included the provision of **permanent social housing** for IDPs and vulnerable groups (in need of housing) who did not wish to return to areas of hot conflict, but lacked adequate accommodation. **Contingency plastic sheeting** was also provided.

The Cluster has **developed a series of tools** to support partners in the implementation of activities. These included the collection of a database of damaged houses in partnership with local authorities in the GCA; the development of winterization guidelines, drawing on lessons learned during the response in 2014-2015[9]; a referral database focusing on winterization, as well as other needs, to keep organizations updated[10]; and preliminary feasibility assessments for a profiling exercise, to identify durable solutions for the most vulnerable IDPs[11].

Interventions included housing repairs (Starohnativka, Dec 2015).

[9] Available at http://bit.ly/2juGgT2 and http://bit.ly/2kFoTRe.
[10] For more information on the referral system, visit http://bit.ly/2kj0qUp.
[11] More information can be found on the Profiling Technical Working Group page: http://bit.ly/2kj0HXr.

TABLE 2 – MAIN SHELTER AND NFI ACTIVITIES*		
RESPONSE OPTION	**DESCRIPTION**	**VALUE / COST**
Cash for rent or other shelter-linked monetized solutions	Securing adequate and to-standard shelter. As a response for potential eviction. Possibility to decommission Collective Centres.	USD 600-700 per year per household for rural and urban areas (this varied by city)
Acute emergency repairs	In areas where active conflict damaged houses or where conflict has restarted. Plastic sheeting, wooden battens for quick repairs of openings and roofs, cement and in some special cases sand.	USD 40-80
Light and medium repairs	Roofing materials and glazing to stabilize living conditions.	USD 400-500 for light repairs; Up to USD 1,000 for medium repairs
Structural (heavy) repairs	Partial reconstruction of one or several walls. Full concrete ring beam and retrofitting for the structure. Partial flooring and partial opening (warm room). Full roofing. Partial insulation. Basic sanitation and heating system.	Up to USD 4,000 per household of two persons; USD 500 per extra person
Essential utilities, network repairs and connections	Conditional on other works being implemented in the community, and repairs are complementary to other general activities.	USD 100-250 per household
Reconstruction	Reconstruction on existing foundations of a new, structurally sound small house. Average 10 to 12m^2 per person (gross surface area), insulated, with basic furniture (bed), heating system, and sanitation. May include possibility of future expansion.	USD 8,000 per household (two persons) plus USD 1,000 per extra person
NFI (general)	Essential household item provision, e.g. kitchen kit, hygiene kit (if not covered by WASH sector); bed and mattresses if needed.	USD 200 per household
NFI (bedding set)	In-kind provision of bed linen, pillowcase, blankets.	USD 16 per linen set; USD 8 per blanket

Some projects aimed at re-building completely destroyed houses (Sloviansk).

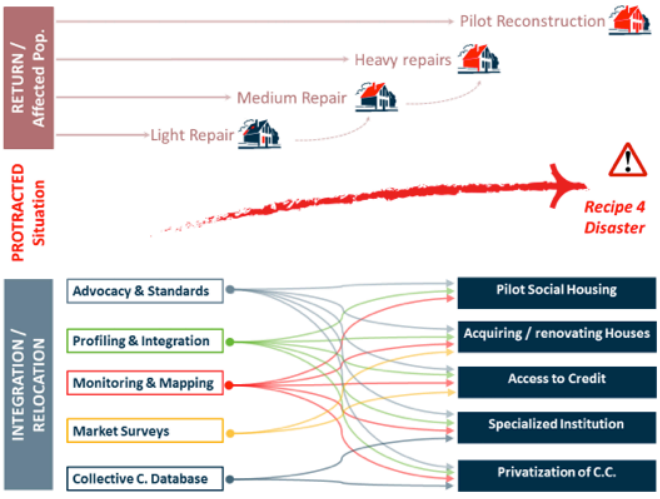
Multistorey buildings (top) and houses (bottom) in conflict zones sustained significant damage due to shrapnel punctures, and required urgent repairs.

CHALLENGES

The lack of access in NGCA severely restricted humanitarian coverage. Regular liaison with local authorities and creating opportunities to work with local organizations on the ground remained essential. Advocacy efforts have been key to meet the humanitarian needs, though **poor information sharing** between stakeholders severely constrained the informing of good advocacy. **Lack of early recovery programming** destabilized the population and forced them into worsening humanitarian conditions, or secondary displacement. There was also a **lack of technical resources**, particularly in the NGCA. While communities close to the front line have not experienced shelling for over a year, traditional development donors would not fund any reconstruction or access-to-housing projects in these communities, due to the **continued and unpredictable instability**[12].

LOOKING FORWARD

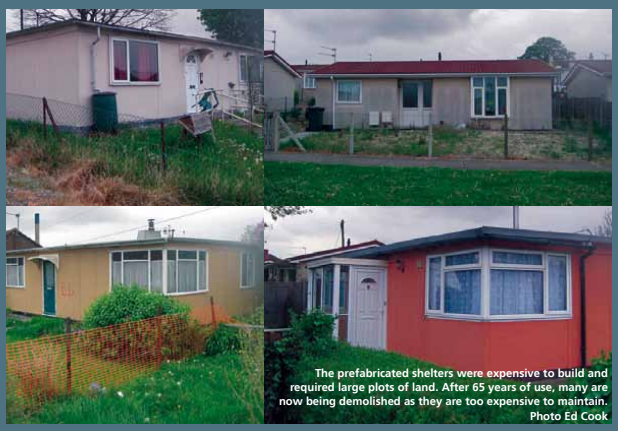
- By the end of 2016, **short-term humanitarian needs of IDPs remained high,** as the conflict prolonged and resources depleted. The most vulnerable non-displaced populations, mostly residing near the contact line, required continuous support, due to ongoing damage to shelter and infrastructure, alongside access to markets for fuel and NFIs.
- **Self-ownership of housing** in Ukraine presented an opportunity for resilience and recovery, being an asset of economic stability.
- **Topping up acute and primary repairs** through larger-scale structural and reconstruction activities was an integrated part of the early recovery process, and included the revitalization of basic infrastructure. As part of this effort, the Shelter-NFI Cluster began **cooperating with the Education and Health Clusters,** in order to create a database of damage and repair for schools and hospitals.
- Given the neglect of common premises, infrastructure and utilities in residential buildings following privatization, it was proposed that programmes include social **programming, specialized institutions (such as elderly care facilities), or access to credit** to facilitate renting and acquisition of housing.
- In 2016, the Cluster initiated discussions with development donors, to **provide guidance on vulnerability profiling**, in order to come up with specific policies for better targeting of needs.
- **Compensation programming for damage and losses** might secure the rights of citizens who lost assets and family members.
- The **Housing, Land and Property Technical Working Group** was established, between the Protection and Shelter Clusters.
- **Recovery programming also had to consider the "ghost-town effect"** of settlements along the contact line to mitigate the likelihood of displacement or secondary displacement. These areas were characterized by damaged houses or lack of adequate housing, unemployment, low wages, lack of available transportation, lack of social services, poor road conditions, and lack of medical and educational services.
- **Next steps to foster peaceful co-existence** could include managing absorption capacity of the housing sector, developing social housing initiatives, supporting proper urban development, stimulating community support, and engaging various stakeholders (including the private sector, humanitarian actors and local authorities).



This diagram was used to orientate actors in a conflict setting, and to come up with possible solutions to facilitate a longer-term path towards recovery.

[12] Draft Shelter Cluster Transitional Plan, July 2016.

NOTES



The prefabricated shelters were expensive to build and required large plots of land. After 65 years of use, many are now being demolished as they are too expensive to maintain. Photo Ed Cook

This booklet is a compilation of case studies of humanitarian shelter responses relecant to the European context, compiled across the six past editions of the interagency publication *Shelter Projects*.

The projects described in the case studies and overviews contained in this booklet represent responses to conflict, natural disasters and complex crises, implemented by national and international organizations, as well as host governments, and demonstrating some of the implementation and response options available.

The publication is intended to support learning by highlighting the strengths, weaknesses and some of the lessons that can be learned from different projects, which try to maximize emergency funds to safeguard the health, security and dignity of affected people, whilst – wherever possible – supporting longer-term shelter needs and sustainable recovery.

The target audience is humanitarian managers and shelter programme staff from local, national and international organizations at all levels of experience. *Shelter Projects* is also a useful resource for advocacy purposes, showcasing the work done by the sector, as well as for research and capacity-building activities.

All case studies and overviews contained in this booklet, as well as from all editions of *Shelter Projects*, can be found online at:

www.shelterprojects.org

Global Shelter Cluster
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