

Explorative study into the provision of emergency and rehabilitation assistance by the Dutch Water sector



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SUMMARY

The world is increasingly confronted with disasters of great magnitude. The 2004 tsunami, the earthquake in Haiti in 2010 and the unprecedented floods in Pakistan and Australia in 2010 are its most striking examples. Due to the impacts of climate change and urbanization, the demand for effective emergency humanitarian assistance is likely to increase over the coming years. Although the Dutch water sector has much to offer in the fields of delta technology and water management, the sector plays only a minor role during disaster emergency relief and rehabilitation activities. At the same time, it was felt that the Dutch water sector at large is interested in responding to these needs by taking a more proactive role.

Based on earlier work from 2008/2009, this study aimed at mapping out the potential role of the Dutch water sector in providing emergency and rehabilitation assistance as a response to natural or man-made disasters. Main goal of this study is to get further insights (based on earlier work) in international mechanisms in the field of (water) disaster, emergency relief and rehabilitation, to match this with available expertise and capabilities from the Dutch water sector and to analyze potential for improvement and adding value, thereby giving recommendations on how this could be achieved. The core of this part is a mapping of the existing 'demand' and the assessment of the relevant capabilities (expertise, experience etc) of the Dutch water sector. In addition, the study investigates potential modalities for providing these services and advises on the most suitable model for the Dutch water sector, based on the expressed interest.

In practice, the role of the United Nations (UN) is paramount in how the international community responds to providing relief and rehabilitation support to situations of severe humanitarian crises as a consequence of natural and man-made disasters. Similar to other international clusters, the goal of the WASH cluster is to improve the predictability, timeliness and effectiveness of comprehensive WASH response to humanitarian crises. Related to rehabilitation, there is also a cluster approach, through the Early Recovery Cluster, under leadership of UNDP. The GFDRR (global facility for disaster risk reduction), a global platform set up by the World Bank, usually initiates a PDNA (post disaster needs assessment) to get an overview of damages as losses and the rehabilitation and reconstruction needs for the early recovery phase. Many of the Cluster leads, including UNICEF, have stepped up their responsibilities in leading the cluster, and coordination has improved since the start of the cluster approach.

As one of the results, the study has identified **the current needs and gaps in delivery of emergency aid** or rehabilitation activities and the potential role or activities that the Dutch water sector could take. While for rehabilitation this assessment was quite difficult to make, for emergency aid a relatively clear picture could be established for WASH related services, following an extensive survey. The main actors in the emergency aid sector identified the following services as being in demand and offering possibilities for the Dutch sector to provide added value:

- 1. Emergency WASH in 'urban' environment: provision of basic sanitation and (to a slightly lesser extent) safe water supply in urban environments or 'difficult' terrain (high water table, space-poor environments, etc).
- Surge support to international organisations: provision of human resources capacity to international emergency aid organizations. Such as seconding and lending out of staff for a certain period of time (several weeks up to 6 months) for emergency work, supervised/operated by established organisations

3. Provision of very specialized products or expertise in 'mini-niches', like the provision of solid waste experts, GIS experts, aerial and satellite information data after flooding, or the provision of safe water for drinking purposes or emergency health facilities. Demand for this specialized expertise will probably be ad-hoc and is likely to change according to the unique environments of the different emergencies. A preliminary investigation has revealed the potential of this for several 'mini-niches' but it needs further study and elaboration.

On the most **appropriate model**, the study has identified and compared the three most common modalities that are used for delivering support to emergency aid. These 3 models can be characterized as 1/providing surge support (human resources) to existing aid structures 2/setting up and deployment of own emergency aid teams and 3/ a mix of the previous ones.

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1. INTRODUCTION

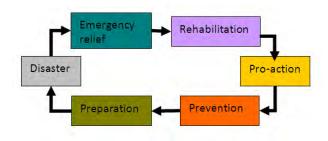
Disasters of great magnitude continue to confront the world: the 2004 tsunami, the earthquake in Haiti in 2010 and the unprecedented floods in Pakistan and Australia in 2010 being the most striking examples. Demands for effective emergency humanitarian assistance are likely to increase over the coming years. Natural disasters are having an increasing impact on populations, particularly those living in marginal areas. The Intergovernmental Panel on Climate Change (IPCC) predicts that global climate change will lead to rising sea levels, more floods and droughts. There are also indications that climate change in temperature and precipitation will cause an increase in infectious diseases, like diarrhoea and cholera.

Increasing urbanization has led to ever larger and more vulnerable populations in urban slums, with local and central governments being unable to deliver the right services, support and security. Climate change combined with chronic poverty leads to increasing frequency and severity of natural disasters. In terms of manmade humanitarian crises, armed conflicts are now understood to be a leading cause of world hunger. Disasters, whether triggered by natural or man-made causes, pose one of the greatest threats to human life and dignity. The increasing frequency and severity of disasters also threatens the development achievements, as well as the attainment of future development goals as defined by the United Nations in the Millennium Development Goals (MDGs).

Although the Dutch water sector has much to offer in the fields of water technology and water management, the sector plays only a minor role in disaster emergency relief and rehabilitation activities. Main goal of this study is to get further insights (based on earlier work) in international mechanisms in the field of (water) disaster, emergency relief and rehabilitation, to match this with Dutch expertise and organization and to analyze potential for improvement and give recommendations on how this could be achieved. The humanitarian objective 'saving lives' is ultimate and is followed up by the 'building-back-better' principle as part of an Disaster Risk Reduction (DRR) strategy. The rationale behind building-back-better is to re-construct the built environment better than the original conditions, in order to reach an improved situation. Other types of improvement initiatives after the occurrence of disasters such as preparedness programmes, contribute to this as well.

Through the Netherlands Water Partnership, and in cooperation with parties from the sector, a feasibility study on the possible increased involvement of the Dutch water sector after water related disasters was done in 2008/2009. It became clear that broad interest from the water sector exists and that there are sufficient grounds for next steps. Late 2010, the Ministry of Foreign Affairs developed the ambition to start a related initiative, which lead to acceleration of development and next steps. In that sense, this work could be seen as a re-assessment of earlier results including updates on international demand, national offer and opportunities for matching and general improvements. Related objectives of the study are: 1/to identify and advise on the best niche for the Dutch water sector in emergency aid and rehabilitation, based on a mapping of the existing 'demand' in these fields and based on an assessment of the capabilities (expertise, experience etc) and position of the Dutch water sector. In addition, the study investigates different potential modalities used by other countries for providing humanitarian assistance and advises on the most suitable model for the Dutch water sector. Reference is made to the WRR report 'less pretention, more ambition' (Scientific Council for Government Policy, 2010) in which an advice is formulated on the future of development aid.

Looking at the safety chain (disaster – disaster emergency relief – rehabilitation (reconstruction) – pro-action – prevention – preparation), the main focus of this study is on initiatives directly related to *disaster emergency relief*, and the consecutive activities in the *rehabilitation* phase. It is acknowledged that the mode of operation and actors in these phases are quite different. However, the need for water related expertise and/or products is present in both phases. Aspects



related to disaster *prevention* will not be directly addressed here as this is outside the agreed scope in the ToR of this study. Additionally, it would stretch the scope of the study to such extent that it would lose focus. However, in an indirect way, the work does relate to preventive actions via the building-back-better principle and possible initiatives based on the outcomes of this study. At this moment, a lot of information is available on the disaster emergency relief phase, but less so about opportunities in the rehabilitation phases, as the latter is not as extensively organized and coordinated.

2. International coordination structures during humanitarian crises

2.1 Introduction

This chapter describes how the international community responds to providing relief and rehabilitation support to situations of severe humanitarian crises as a consequence of natural and man-made disasters. In practice, the role of the United Nations (UN) is paramount.

2.2 Obligation of national states

Humanitarian aid is material or logistical assistance provided for humanitarian purposes, typically in response to humanitarian crisis like natural or man-made disasters. The primary objective of humanitarian aid is to save lives, alleviate suffering, and maintain human dignity. It may therefore be distinguished from development aid and rehabilitation, which often seek to address the underlying socioeconomic factors that may have led to a crisis or emergency.

As required by international Human rights humanitarian and refugee law each State has the responsibility first and foremost to take care of the victims of emergencies occurring on its territory by initiating, organizing, coordinating and implementing humanitarian assistance.

2.3 UN structures during emergencies

When an emergency requires United Nations humanitarian assistance the Under-Secretary-General and Emergency Relief Coordinator (USG/ERC) will be responsible for the oversight and acts as the central focal point for governmental, intergovernmental and non-governmental relief activities. In a country affected by a disaster or conflict, the ERC may appoint a Humanitarian Coordinator (HC) to ensure response efforts are well organized. The HC works with government, international organizations, non-governmental organizations and affected communities. To ensure a multi-sectoral response with participation of a wide range of international humanitarian actors, the cluster approach is used to plan and organize the international response. An Office for the Coordination of Humanitarian Affairs (OCHA) office will be established to support the HC at the field level by coordinating humanitarian action, advocating for the rights of people in need, developing humanitarian policy and analysis, managing humanitarian information systems, and managing humanitarian funds. OCHA often supports HCs through a Country Office and RCs through its Regional Offices. OCHA will ensure coordination between the different clusters but OCHA has no direct role within WASH.

After an emergency the affected Government, the RC or the HC through OCHA can request assistance from the UNDAC team. The United Nations Disaster Assessment and Coordination (UNDAC) is part of the international emergency response system for sudden-onset emergencies. The HC can request the deployment of an UNDAC team to help coordinate relief efforts even if the Government has not requested international assistance (see annex for more information on UN)

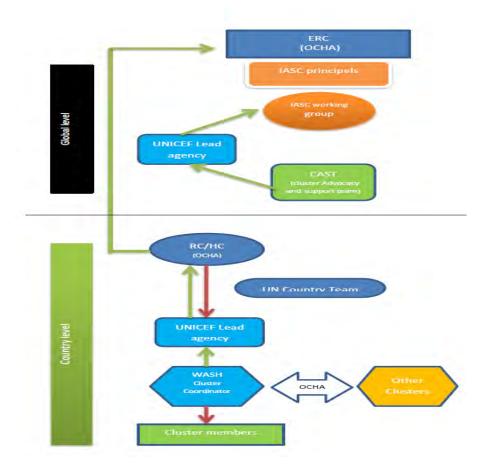


Diagram with typical reporting lines of a cluster

Reporting Coordination

2.4 The Cluster Approach

The cluster approach was introduced in 2005 after an independent Humanitarian Response Review of the global humanitarian system. This review assessed the humanitarian response capacities of the UN, NGOs, and Red Cross/Red Crescent. Following the recommendations of the review, the cluster approach was proposed as a way to address gaps, strengthen predictability, response capacity, coordination, accountability, and partnership in key sectors of humanitarian response. Though not all NGO's have signed up to it, it is now generally accepted as 'the way humanitarian organisations work'.

The Inter-Agency Standing Committee (IASC) has designated 11 clusters and each cluster has a designated lead agency, responsible to the Emergency Relief Coordinator (global level) or Humanitarian Coordinator (country level).

At a global level, the aim is to strengthen preparedness and capacity to respond to emergencies through response teams, training, stockpiles, standard tools and methodologies, and sharing best practice.

At a country level, the aim is to ensure a more coherent and effective response by building on existing coordination mechanisms in partnership with government, and mobilising stakeholders to coordinate, share information, and respond in a strategic manner.

By designating Cluster Lead Agencies (CLAs), the aim is to make the international humanitarian community a better partner for host governments, local authorities, and civil society, and to avoid governments having to deal with hundreds of uncoordinated international actors.

Agriculture FAO

Emergency Shelter UNHCR (IDP's from conflict) and IFRC (disasters) - Convener

WASH UNICEF
Nutrition UNICEF
Health WHO

Education UNICEF & Save the Children UK

Camp coordination / management UNHCR (conflict generated disasters) IOM (Natural disasters)

Early recovery UNDP

Protection UNHCR (IDP's from conflict) UNHCR/OHCHR/UNICEF (natural disasters/civilians

from conflict)

Emergency telecommunication OCHA (process) UNICEF/WFP (service provider)

Logistics WFP

Box 1 Examples of Global Clusters with Lead Agencies

Core Cluster lead responsibility			Other Cluster Lead responsibilities		
 1. 2. 3. 4. 5. 6. 	Inclusion of key humanitarian partners Establishment and maintenance of appropriate humanitarian coordination mechanisms Coordination with national/local authorities, State institutions, local civil society and other relevant actors Provision of assistance or services as a last resort Planning and strategy development Advocacy and resource mobilization	1. 2. 3. 4. 5.	Participatory and community-based approaches Attention to priority cross-cutting issues (e.g. age gender human rights, HIV AID Needs assessment and analysis Emergency preparedness Application of standards Monitoring and reporting		
		7.	Training and capacity building		

Box 2 Cluster lead responsibilities

The main responsibility for WASH in health facilities fall under the HEALTH cluster (WHO) while WASH in refugees camps do falls under the camp coordination cluster (UNHCR).

2.5 The Global WASH Cluster

Similar to other clusters, the goal of the WASH cluster is to improve the predictability, timeliness and effectiveness of comprehensive WASH response to humanitarian crises. The following response areas are covered by the WASH cluster; hygiene promotion, water supply, excreta disposal, vector control, solid waste management and drainage. The Global WASH Cluster has agreed that its principle guidance for standards and indicators will be those developed by the WASH Sector with the Sphere project; see http://www.sphereproject.org/ for more information.

UNICEF is the WASH Cluster Lead agency at global level and the default Lead at country level. UN agencies, INGOS active in WASH sector emergency response, as well as representatives from the Red Cross and Red Crescent Movement are represented in the Global WASH Cluster1. Currently the Global WASH cluster has meetings around

¹ Current active members of the WASH cluster are; Action Contre la Faim (ACF), CARE, Center for Disease Control (CDC), Concern, Catholic Relief Services (CRS), InterAction, International Centre for Health and Migration (ICHM), International Federation of Red Cross and Red Crescent Societies (IFRC), International Rescue Committee (IRC), Mercy Corps, Norwegian Church Aid (NCA), Oxfam, RedR-IHE, TearFund, UNHCR, UNRWA, WHO, World Vision International (WVI)

twice a year. Dutch NGO's like Cordaid, Oxfam/Novib, Tearfund, the Netherlands Red Cross are present through their international sister organizations, but usually do not send their own representatives. CARE Netherland is leading a Disaster Risk Reduction project for the WASH cluster.

Although rare, actors other than UNICEF can sometimes take the lead role in the WASH cluster at country level. The Cluster Advocacy and Support Team (CAST) with a Global WASH Cluster Coordinator (William Fellows) and the Cluster Coordinator in Geneva (Frank Bouvet) are globally responsible for the WASH cluster within UNICEF. A strategic advisory group was formed by OXFAM, CARE, ACF, WorldVision, UNHCR and UNICEF (not CAST). This international Working Group should advance the work of the cluster between meetings. At regional level the UNICEF Regional Emergency WASH Advisors (REWA'S) are supporting the WASH Cluster. The REWA do report to their regional offices and they are supporting both UNICEF emergency work as well as the WASH

A Rapid Response Team (RRT) was established to support the cluster work in emergencies; members of this RRT were hosted within NGO's (CARE, OXFAM and ACF) and were available during emergencies for the WASH cluster. The RRT members were reporting to the UNICEF Country office of their deployment and to their NGO's. The Global WASH cluster is to extend and increase this arrangement to 6 Rapid Response Team Members and 3 Information Managers. This would be a two year extension of the pilot scale RRT project. Additionally 3 Rapid Assessment Team Members and 6 Regional Emergency Cluster Advisors (RECAs) will be employed. The RECA is seen as complimentary the REWA and should focus on providing a regional support resource to the WASH Cluster at regional and national levels.

In general it is felt that coordination mechanisms have improved in most countries where the cluster approach is used, with national / local agencies involved in the majority of cases. The most important challenge for the Global WASH Cluster is to be able to effectively support country roll-out that is tailored enough to specific country-level. A roster of potential coordinators has been developed and a series of cluster coordinator trainings have taken place. The Global WASH Cluster has been very active in advocating for dedicated cluster coordination capacity and this model has been adopted in several but not all countries at which the cluster approach is officially used.

CAST Gobal WASH Cluster Coordinator/Bill Fellows and Cluster coordinator/Frank Bouvet

SAG current members, OXFAM, ACF, World Vision, UNHCR and UNICEF (not CAST)

REWA, 6 UNICEF Regional emergency WASH Advisorr reports to regional UNICEF office

cluster.

RRT currently with OXFAM, CARE and ACF, reports to UNICEF CO and NGO, planned to increase to 6 members and 3 IM **RAT** planned to have 3 members sit within NGO's/ Redcross and reporting to own organisation. (Interest from CARE, OXFAM, IFRC)

RECA, planned to have 6 members within NGO's and managed by NGO's (likely to be Tear Fund, CARE; ACF, IFRC, CRS)

Box 3 Overview of main building blocks of the Global WASH cluster.

For the years 2011 till 2014, the GWC is planning to focus on a few specific priorities:

1. Sustain capacity for coordination of the GWC

- 2. Sustain and increase capacity for emergency response support (coordination, IM, Rapid Assessment Team/RAT)
- 3. Build key countries capacity for coordination, preparedness and response to emergencies
- 4. Promote accountability of the Cluster members to communities, donors & agencies in relation with major emergencies responses
- 5. Improve the cluster project through lesson learn mechanisms (e.g. former project 7)
- 6. Support the countries in rolling-out the existing "projects", in collaboration with regions
- 7. Ensure the development of specific new projects (and corresponding resources), revise the ones which do not work properly, and finalise on-going ones
- 8. Advocate collectively on humanitarian reform, and especially on the Cluster pillar

International policy dialogue on WASH

International coordination and initiatives related to WASH are strongly based on existing and evolving internationally agreed frameworks and mode of operations. Specifically for the global WASH cluster, work plans and 4-year strategic plans are developed to set priorities and incorporate lessons learned. At this moment, the Global WASH strategic plan 2011 – 2014 is begin developed with input from OCHA and donors such as OFDA, ECHO, Norway and the Netherlands.

Being involved in an international policy dialogue is important to not only be informed on international developments and coordination, but also to be able to contribute to shared vision development, to incorporate structural improvements based on lessons learned, network building and knowledge sharing on WASH emergency relief operations. In that way, also the Netherlands contributes to better WASH cluster operations. Involvement of the Netherlands is primarily by governmental representatives, but through close knowledge networking also the broad Dutch water sector can be connected.

Global Facility for Disaster Reduction and Recovery (GFDRR)

The GFDRR (www.gfdrr.org) is part of the World Bank and was established in 2006 as a response to the Hyogo Framework for Action. The GFDRR presents itself as a global platform in Disaster Reduction and Recovery. It consists of a secretariat controlled by a board and a network of professionals from different disciplines. The GFDRR is a partnership of 36 countries and 6 international organizations committed to helping developing countries reduce their vulnerability to natural hazards and adapt to climate change.

GFDRR has three main so-called business lines to achieve its development objectives at the global, regional and country levels. Global and Regional Partnerships, Mainstreaming Disaster Risk Reduction (DRR) in Development, and Standby Recovery Financing Facility (SRFF) for Accelerated Disaster Recovery.

Together with the affected government and the UNDP, the GFDRR plays an important role in the Post-Disaster Needs Assessment (PDNA). This PDNA is an important tool in the recovery being responsible for providing all actors in the recovery process, including national and local authorities, international agencies and local communities, with a multi-sectoral, technical overview of the damage and loss patterns and the principal rehabilitation and reconstruction needs and priorities to be addressed during post disaster recovery. The GFDRR has its own database with experts to be called upon when PDNA activities start. Multidisciplinary teams are formed in which experts from different backgrounds are brought together; water and sanitation often being one of them. For GFDRR, speed is essential and a 'predictable mobilization mechanism' contributes to finding the right person at the right time. Via pre-arranged partnerships with organizations or national governments, GFDRR works on (temporarily) extending the database and on speeding up PDNA activities. Already the GFDRR did sign agreements with the Norwegian Geotechnical Institute, GTZ and the Italian Civil Defense for surge support.

GFDRR is interested to explore partnerships with Dutch parties or networks. Within the PDNA global tripartite agreement, UNDP is representing the UN system, and thus facilitates the mobilization of UN expertise to contribute to PDNA/RF on the ground. Therefore by nature, the role of UNDP is to use its own expertise as well as external one. Some stand-by partners have been involved in previous PDNA's.

United Nations Development Program (UNDP) and Early Recovery Cluster

Within the UNDP, which is the global cluster lead in early recovery, early recovery is defined as consisting of activities that encompasses the restoration of basic services, livelihoods, shelter, governance, security and the rule of law, environment and social dimensions, including the reintegration of displaced populations. It stabilizes human security and addresses underlying risks that contributed to the crisis. Currently 30 agencies are members of the Cluster Working Group on Early Recovery (CWGER): Most of those are UN organisations but the list also included the International Committee of the Red Cross (ICRC), International Federation of Red Cross and Red Crescent Societies (IFRC). At country level the early recovery cluster should also include government ministries and/or departments relevant to early recovery (especially ministries of planning, public works, disaster coordination bodies), local authorities, global and local NGOs, Community Based Organizations, the International Financial Institutions (IFIs), and the Private Sector. An independent early recovery cluster is not created at all countries. Instead, early recovery effort on the country level is organized through an early recovery "network" model in which each sector has a designated early recovery focal point. Those focal points ensure that early recovery actions are planned in their respective sector and that those activities are implemented in an integrated manner within an overall early recovery strategy.

UNDP may set up and run an independent cluster if it the areas of early recovery are not covered by the other clusters. In practice these areas will vary from context to context and may include for example, livelihoods, reintegration, land and property, infrastructure, governance, and the rule of law. WASH is not a core practice area of the UNDP or the early recovery cluster, only occasionally, UNDP as an agency, can be partner to WASH-related projects within other humanitarian clusters, such as the WASH one.

2.6 Summary

The United Nations (UN) –together with the recipient government of the affected state- as well as the international NGOs play an important role for the "WASH-related" emergency response. The most important functional structure is provided through the Global WASH Cluster, operational since 2005 and under lead responsibility of UNICEF. The Global WASH Cluster appears to have increasing problems to secure funding for some of its support functions; another trend that is evolving is that some of the functions to support the cluster work are taken over by NGO's.

Under this Cluster structure, different dedicated coordination and assessment teams are operational, all in order to provide a fast and adequate response. In a cluster approach, both UN agencies and NGOs work together. Due to the long and timely procedures of recruitment within the UN (often two months or more) the standby agreements with partners and the rapid response team members hosted by NGOs are of high importance for the practical functioning of the clusters. Donor preferences result in funding trends in CAP (Consolidated Appeals) process, and Flash Appeals that typically favor large international organizations over smaller and more local ones.3 A flash appeal covers a 3 to 6 months period and provides an overview of life saving needs and recovery projects. The WASH Cluster coordinator coordinates the information required for the Appeal. Both UN and NGO's are eligible to submit projects under the Flash appeal.

The responsibility for WASH in health facilities is part of the Global Health Cluster (WHO led) while WASH in refugee camps is part of the Camp Coordination Cluster (led by UNHCR). In health facilities, clean water and sanitation are sometimes not properly addressed in a timely matter, due to the Health cluster having few own capacities in this. In the early recovery phase, kicking-off the start of the rehabilitation phase directly after the emergency, the World Bank and UNDP are important actors.

Similarly to the WASH Cluster, there is a cluster approach through the Early Recovery Cluster, under leadership of UNDP. The GFDRR (global facility for disaster risk reduction), a global platform set up by the World Bank, usually initiates a PDNA (post disaster needs assessment) to get an overview of damages as losses and the rehabilitation and reconstruction needs for the early recovery phase. Many of the Cluster leads, including UNICEF, have stepped up their responsibilities in leading the cluster, and coordination has improved since the start of the cluster approach.

3 EU emergency preparedness and response

3.1 Introduction

In this chapter the existing structures and operational mechanisms are described from the perspective of the European Union (EU).

3.2 EU-Monitoring and Information Centre (MIC)

The European Civil Protection Mechanism is activated after a major disaster. The EU's Monitoring and Information Centre (MIC) is based in Brussels in the centre of this European Civil Protection Mechanism.

The EU MIC will collect information on major disasters in the world. The Mechanism can be activated through the MIC by any participating state asking for international assistance following a disaster. A state usually calls on the Mechanism when the negative effects of the disaster cannot be tackled by its own resources. As soon as the MIC receives a request for assistance, the Centre immediately forwards it to the participating states' civil protection authorities.

Each of those organisations can then offer aid and experts to the affected country. The EU MIC continues assistance in financing the relief efforts. To facilitate the coordination, EU MIC developed an Internet forum called CECIS. Each Member State has a CECIS account. As a part of this role, the MIC also disseminates early warning alerts (MIC Daily) on natural disasters and circulates the latest updates on ongoing emergencies and Mechanism interventions as the use of the Mechanism is not restricted to interventions within the European Union, any third country affected by a disaster can appeal for assistance through the MIC. Following a formal request for assistance from a third country, different procedures are applied for the activation of the Mechanism. In such cases, the Commission needs to consult the Presidency of the Council so as to determine the course of action it needs to take. Mechanism interventions in third countries are usually conducted in close collaboration with other actors such as the UN Office for the Coordination of Humanitarian Affairs (OCHA), and the Commission's Humanitarian Aid Department (ECHO)

3.3 EU Civil Protection Modules

In response to the 2004 tsunami in South-Asia, The EU and its member states developed civil protection modules to strengthen the European response to natural and man-made disasters. In June 2005, the European Council endorsed the general concept, calling for the establishment of a EU rapid response capability based upon Member States' civil protection modules.

Currently a technical framework for a total of 13 modules is developed, covering pumping and purification of water, aerial fire-fighting (planes and helicopters), urban search and rescue (heavy and medium), medical assistance including medical evacuation (advanced medical posts, field hospital, aerial evacuation), emergency shelter, CBRN detection and sampling, and search and rescue in CBRN conditions. A total number of 75 modules are registered within CECIS (May 2011). The Netherlands registered a flood rescue module and a urban search and rescue module. The Dutch modules on high capacity pumping and the environmental assessment are not registered within this system, reportedly mainly to keep full ownership over this module and thus to ensure decisions to use the modules will remain within the responsibility of the ministries involved. Normally, the EU supports the modules with training and during its development only.

A study on the identification of the gaps in the capacity of the Community Civil Protection Mechanism to provide assistance in major disasters done by ECORYS Netherlands in 2009, identified the limited capacity in water purification units (currently two modules) as one of the major gaps².

Strengthening the EU capacity to respond to disasters: Identification of the gaps in the capacity of the Community Civil Protection Mechanism to provide assistance in major disasters and options to fill the gaps – A scenario-based approach, 2009, by ECORYS Nederland BV, K Rademaekers et all.

3.4 ECHO

The European Union's relief operations are handled by ECHO, the humanitarian aid office. Its average annual budget has been around €700 million in recent years. ECHO does not have its own rescue and relief teams but will support in funding and coordination of relief efforts, and support its humanitarian partners – non-governmental organisations (NGOs), the UN specialised agencies and the international Red Cross – to deliver food and equipment and handle emergency programmes. ECHO has an extensive presence on the ground that enabled the organisation to build a solid reputation for its in-depth involvement in humanitarian response and clear focus on core humanitarian principles.

3.5 Summary

The two pillars of the EU's relief response are ECHO and the Civil Protection Mechanism. ECHO is the humanitarian aid office of the EU. ECHO does not have its own rescue and relief teams but will support in funding and coordination of relief efforts, and support its humanitarian partners – NGOs, the UN-agencies and the international Red Cross – to deliver food and equipment and handle emergency programmes.

The Civil Protection Mechanism can be called upon by affected states (within or outside the EU) in dire situations. The MIC (monitoring and information centre) plays an important role in this Mechanism, by alerting, communicating and facilitating the deployment of support related to emergencies. Under the Mechanism, Civil Protection Modules have been developed, classified and registered by EU member states, as part of the EU capacity for providing a rapid response.

Especially for disasters taking place in Europe, the EU-MIC is likely to play a far more leading role than in other areas of the world. The "EU-MIC modules" like the water-treatment modules of GTZ or the module WaterSave are not very well known within the Global WASH Cluster members and few modules are actively engaging with the clusters. Logistical cost of the EU-MIC modules are likely to be relatively high compared to the utilization of NGO's, by nature of the severe logistics and HR requirements for maintaining the modules.

4. Emergency assistance related to the Netherlands

4.1 Introduction

In this chapter, the response mechanisms from the Netherlands are described in cases of emergency and reconstruction assistance. The main focus of section 4.2 is on the existing structures and main components, with section 4.3 dealing with the more forward-look from the Dutch water sector.

4.2 Existing response structures in the Netherlands

4.2.1 Policy of the Netherlands

The Netherlands' government will consider giving humanitarian aid to countries affected by a natural or man-made disaster when this country makes an official request for assistance with the United Nations or a when this country makes a direct bilateral request. For the Dutch government it is important to connect to UN-structures for humanitarian aid coordination such as ECHO, to avoid complexities of responsibilities (which is already difficult in disaster situations) and actions. The Ministry of Foreign Affairs (MoFA) is responsible for providing and organizing humanitarian aid, following a request from the UN.

Common conditions for assistances are:

- a life-threatening situation;
- 2. alleviating the suffering of (vulnerable) people;
- 3. assistance as needed (no more, no less);
- 4. impartial assistance (i.e. regardless of race, religion, political opinion or gender);
- 5. adaptation to local conditions and customs

Humanitarian aid by the Netherlands is mostly given through international partners such as the United Nations (UN) or the International Red Cross or NGOs; it concerns un-earmarked funds such as the contribution to CERF - the Central Emergency Response Fund from the UN which invests in humanitarian relief activities. The Dutch government is with \$ 55 million in 2011 the fifth largest donor. Also funds can be made available for specific activities of donors directly. The Ministry of Foreign Affairs has access to a network of experts (such as Rijkswaterstaat) that could be asked to join in relief operations on ad hoc basis.

4.2.2 Existing response structures through the Netherlands' ministries

In The Netherlands, in a case of an international emergency assistance request, several ministries can be involved. As the below description will show, the engagement of the Dutch Ministeries will depend a lot on the type of relief support needed, determined by the nature of the disaster. With some generalisation it can be stated that in situations of flood-related support, the Dutch ministeries and embassies play a relatively bigger role, with a focus on the recovery and rehabilitation phase, generating spin-off activities for preventive action. Especially the Ministries of Infrastructure and Environment (Minl&M), the Ministry of Security and Justice (MinVenJ) and the Ministry of Foreign Affairs (MoFA) play a key role. In other situations, the coordination of the response is mainly done by the UN structures, with the Netherlands contributing through the MoFA and through international NGOs and the Red Cross.

An important contact point for organizing emergency assistance is the Netherlands Embassy in the country affected. Embassies fulfill a diplomatic role. However, in terms of coordination of assistance, the embassies can contribute significantly in contact with (governmental) authorities and in presenting a 'joint proposal' of possible Dutch expertise. Embassies (or consulates) have the potential to play a pivotal role in the support chain, but the extent to

which (and the way in which) they become active differs. Depending on the nature of the disaster (earthquake, flooding, drought), the urgency of assistance (relief, rehabilitation, prevention) and the development level of the affected country (Japan, Indonesia or Haiti) the engagement of the Embassy will vary.

For example, as it may happen in practice after receiving a request for assistance, the Ministry of Infrastructure and Environment (Minl&M) will offer experts and equipment that might be deployed to fight the disaster. Within this ministry the National Operational Coordination Center (LOCC) can make inventory of supplies available in the Netherlands. Additionally, the LOCC has a number of (EU) trained experts at hand who can help to coordinate operations in the disaster area. It is within the mandate of the Ministry of Foreign Affairs to evaluate the diplomatic aspects of possible assistance and to confirm whether financial assistance can be provided. The National Crisis Centre (NCC) under the Ministry of Security and Justice (MinVenJ) is in the centre of the whole process of responding to the disaster. The NCC ensures that the final goods and experts will be offered through the EU-MIC to the affected country. These actions can all be taken within one day after the disaster.

A key point is that embassies have first contacts with national and local authorities in the country they work in, and often have a good, up-to-date overview on the local situation, including assistance capabilities. In cases of disaster, usually some form of contact/communication starts between the Dutch Embassy and the government of the disaster-stricken country (eg via the Ministry of Foreign Affairs). It needs to be remarked that embassies do not always have the capacity to fulfill such tasks, immediately following a disaster. Based on recent experiences, it can be said that most of the embassies' attention will be on recovery and rehabilitation activities as this has a more structural nature, can be linked to other activities of the Netherlands in the country and can contribute to fostering and strengthening bilateral relations.

Some recent examples: emergency assistance to Australia, Colombia, Japan

Although each of these cases has its own setting, in a general way some insights can be shared in how embassies (or consulates) can fulfill a role based on recent experiences. The flooding events in Australia (December 2010), Colombia (May 2011) and Japan (March 2011, following the tsunami) heavily impacted the respective societies, claiming many lives and huge losses and damages. The Netherlands embassies in these situations played an important information role through daily contact with governmental representatives and communications with Dutch society. In all three cases, the Dutch support was limited related to the emergency relief phase, acknowledging the in-country capabilities and internationally coordinated responses. At the same time, quite soon after the emergency relief phase, the embassies started taking initiatives to reduce impacts and recovery – with a focus on the rehabilitation phase. They helped matching 'demand' for assistance (via embassies' contacts) and 'interest' from Dutch parties (sometimes via NWP's network, sometimes through direct contacts), often resulting in exploration or identification missions. This often resulted –through the embassies support- in a physical meeting to get both sides around the table to start discussion about more preventive actions like master planning, water and safety issues, governance etc, all to be able to 'build back better'.

As said, the extent to which (and the way) the embassies become active differs based on capacity, level of interaction with authorities, and potential to start a dialogue or concrete activities. A good view on what happens in the country they are based in, should be complemented by an overview of what the Netherlands 'has to offer'. Presently, the Dutch 'offer' is collected via different sources: sometimes via personal contacts, via ministries (of Foreign Affairs, Infrastructure & Environment and/or Economic Affairs, Agriculture & Innovation) or umbrella organizations such as VEWIN, Union of Waterboards, NLEngineers or NWP.

Currently no pre-arranged protocol exists on the way Dutch (water related) expertise and products can be brought together or registered and bundled. Through the ministry of Economic Affairs, Agriculture & Innovation (MinEL&I), the current approach is to establish a 'counter' within the EVD where Dutch companies or organizations could register. Is has to be remarked that this not necessarily means that such companies can apply for tenders

immediately. Companies need to be pre-registered with Worldbank or IFI procurement agencies in advance and such applications may take several months.

Explorations and contact between ministries are on-going, on the idea of establishing a kind of database and on making a protocol. This database functions as the 'pool' of what the Netherlands could offer (perhaps even broader than only water related expertise). The protocol is still in the development phase; next steps should be to seek cross-ministerial coordination. The EVD also has its own contacts within the IFI's such as the Worldbank/UN. There is potential to improve the current ad-hoc or fragmented character and to link up with relevant coordinative activities in the field of disaster relief and rehabilitation.

4.2.3 Other Dutch response mechanisms and initiatives

There are other Dutch mechanisms and initiatives, active in this field of providing international relief and recovery assistance. These will be described in this section.

Globally, the Netherlands is known for its capacities in large water pumps and the expertise on flooding prevention and water management. This expertise was put to use in many countries, like Poland (2010) and New Orleans (2005) when flooding had happened: pumps and pump-operators where sent for providing recovery help.

SHO (Samenwerkende Hulp Organisaties)

SHO is a foundation of 10 Dutch organizations that jointly raise funds to support victims after major humanitarian disasters. From 1987 to 2010 thirty projects were implemented which together yielded about 680 million euros (including Haiti). Especially the appeals in 2005, raising for the victims of the tsunami Southeast Asia (208 million euro) and the earthquake disaster Pakistan (45 million euros) were successful.

The board of the SHO foundation, which consists of directors of the participating organizations, determines policy and the daily routine of the foundation. The Supervisory Board oversees a proper implementation of policies and general affairs of the SHO. In case of a major humanitarian disaster the organizations that are part of the SHO work together in raising money to organize emergency assistance.

The participants of the SHO are: Cordaid/Mensen in Nood, ICCO & Kerk in Actie, Dutch Red Cross, Oxfam, Save the Children, Stichting vluchteling, Tear, Terre des Hommes, UNICEF Netherlands and World Vision.

Other NGO's, not being a member of the SHO, can participate in specific appeals based on their record and expected contribution to the relief efforts in the disaster area. In relation to the Haiti appeal, six guest participants were invited to participate: Dorcas, Plan Netherlands, Care Netherlands, Habitat for Humanity, Association of Dutch Municipalities (VNG) and the Salvation Army.

Presently there is no national platform in relation to emergency aid in the Netherlands (comparable to PARTOS for the international development cooperation sector), making the role of SHO more prominent from the NGO perspective.

USAR (Urban Search And Rescue)

The 1999 earthquake in Turkey and the fireworks explosion in Enschede in 2000 have prompted the Netherlands to set up a specialist search and rescue support team (USAR) that can be deployed in the Netherlands and in any other place in the world. USAR can help after earthquakes, tsunamis landslides etc. USAR has been deployed to Haiti (2010), Pakistan (2005) and Morocco (2004) to search for victims buried under the rubble.

Normally, an USAR team will spend up to 10 days at a location carrying out this work and is completely self supporting (water, food etc). The Ministry of the Interior and Kingdom Relations finances the operations of USAR (management, training, day-to-day running costs, etc) and bears ultimate responsibility for the organisation. The costs of deployment abroad will be recouped through the Ministry of Foreign Affairs.

WaterSave

WaterSave is an International Water Search and Rescue Team based on cooperation between The Netherlands, (Veiligheidsregio Haaglanden), United Kingdom and Czech Republic. It received funding by European Union for a two-year period, as a pilot project to help people in flooded areas in the EU and anywhere else. The overall objective of the project is to contribute to the strengthening of EU civil protection response capabilities in the field of water search and rescue. WaterSave has been operational since Nov 2010 and has not yet been deployed. WaterSave will initially only focus on rescue, and has access to some equipment for water purification for its own team members.

Environmental Assessment Module (EAM)

The EAM can be used to assess effects of environmental disasters. It will mainly be deployed in countries that lack the specialist knowledge or capacity needed to deal with environmental disasters. The development of the EAM was a joint initiative of the Netherlands' Ministry of Housing, Spatial Planning and the Environment (VROM) and the Ministry of Foreign Affairs, Its development and deployment over a five-year period involves a commitment by the Netherlands of €1 million. The National Institute of Public Health and the Environment (RIVM) is responsible for managing and using the EAM.

The Environmental Assessment Module can be deployed at the request of the UN, other international organisations or through countries asking the Netherlands directly. A primary client of the EAM will be the Joint UNEP/OCHA Environment Unit (JEU), a collaborative effort between two UN bodies – the UN Environment Programme (UNEP) and the Office for the Coordination of Humanitarian Affairs (OCHA). The decision whether to deploy the EAM rests with the two involved ministries in the Netherlands jointly. The UN is expected to call on the services of an EAM team twice a year on average. Recently the EAM was deployed in Nigeria.

PSO

PSO is an association of Dutch NGOs, with a membership of around sixty Dutch development organisations. The association focuses on capacity development at civil society organisations in developing countries. Humanitarian aid is an area of attention for PSO. Humanitarian aid aims at sustainably improving the capacity of social organisations in the South to provide efficient, effective (humanitarian) aid to their target groups. PSO has over twenty years of experience in sending people to developing countries. Over those years PSO has developed a tailor-made package in view of the specific situation in developing countries and the labor rights of Dutch workers. PSO is also contracting expatriates working in emergencies for organisations like CORDAID or the Netherlands Red-Cross. Currently the future of PSO is uncertain. The general membership meeting in June 2011 should clarify the long term position of PSO.

Knowledge development

Within the Netherlands, at Wageningen University, several disaster-related studies are being provided. These studies are focusing on socio-economic, cultural and political processes surrounding vulnerability of communities, with a focus on the early phases of prevention, mitigation and disaster preparation. To a lesser extent they deal with technical and organizational aspects of emergency work.

Delft University is interested in emergency work and willing to support students in their final thesis on subjects related to emergency work. Presently, Delft University has no curriculum, directly focusing on emergency and/or rehabilitation work.

Within the Dutch WASH sector, only a few NGOs are active in emergency or reconstruction assistance. Presently, VNG and WASTE are doing a project in Haiti, focusing on reconstructing urban sanitation services. WASTE and Practica, under EU FP7 funding, are developing sanitation kits for emergencies. These projects build on the reputation of Dutch NGOS in the development and application of appropriate technologies. For instance, the Practica Foundation has a global reputation for manual drilling and other technologies around household water treatment, like the ceramic pot filter.

Internationally, several known universities have developed a curriculum in relation to WASH in emergencies; for instance the Loughborough and Cranfield Universities in the United Kingdom, and Bioforce in France. Within the UK, ELRHA (enhancing learning and research for humanitarian assistance) was founded as a collaborative network dedicated to supporting partnerships between higher education institutions and humanitarian organisations and partners around the world.

4.3 Ideas and plans for the future

In terms of future engagement by the Dutch water sector, it can be stated that there is a growing interest from many constituencies of the Dutch water sector: NGOs, drinking water companies, water boards, private sector, knowledge institutes and governmental authorities. Through stakeholder workshops, bilateral interviews and information search the interest of the Dutch water sector and the different constituencies was explored (see also Annex 2 for the list of persons and organisations involved). While this exploration cannot claim to be thorough and complete in view of the ToR for this study, the outcomes of the exploration provide a solid and converging picture, worth summarizing here in more detail, per constituency.

4.3.1 Drinking water companies and water boards

Under the widened parliamentary mandates for water companies and water boards (Moties Koppejan & Wiegman), the water companies and water boards have increased their international activities. Humanitarian aid is rarely included in their portfolio but during this study we found interesting developments:

both water companies and water boards are interested in developing a role in emergency and
reconstruction assistance although policies have not been determined in this respect. They seem to
perceive this type of work as a natural and conjunctive part of their water portfolio and in line with their
corporate social responsibility.

"It is our licence to operate in the country where we are already active", the CEO of Vitens Evides International (VEI), Gerhard van den Top, remarked on their first concrete support to providing drinking water in a refugee camp in Ghana in 2011.

2. Many Dutch water companies have been involved in the emergency and reconstruction activities after the disasters in Indonesia (the Tsunami of 2004) in Haiti (2010) and some during the cholera epidemic in Zimbabwe (2009). These activities but also partnerships some water companies have around the world with urban water providers (eg , Malawi, Rwanda) generated a lot of important experiences and valuable knowledge: on partnerships, technologies and approaches. Building on these experiences, several water companies have developed an interest to explore a deeper engagement in post-disaster reconstruction activities.

4.3.2 Governmental authorities (national, provincial and municipal level)

From the Ministry of Economic Affairs (MinELI), we received a positive signal on their interest in the post-disaster reconstruction 'market'. In line with new cabinet's policy for international cooperation, the MinELI would like to see a stronger role of Dutch private sector in post-emergency reconstruction activities. The Ministry is exploring ways to streamline and facilitate existing desks and support tools, to increase the engagement of Dutch private sector. As a special project of interest, the MInELI has been making several missions to Haiti, to explore in more detail possibilities for Dutch private sector in the (re-)construction phase there.

Apart from specific recommendations for engagement in the Haiti reconstruction phase by the Dutch water sector, the mission also came home with a better understanding of the connections between the emergency assistance phase and the reconstruction phase thereafter. As a preliminary conclusion, engagement in the emergency phase seems to improve prospects for the reconstruction phase, albeit under specific conditions (like compliance with agreed procedures and standards and timely preparedness). This hypothesis seems to hold for both products (like stand-alone treatment units) and expertise (experts, human resources). The MinELI has expressed interest for the

outcome and follow-up of this study, suggesting further cross-ministerial coordination to develop a coherent policy and practical procedures (like a inter-departmental protocol and information desk for private parties).

Also the municipal authorities, represented by VNG International (VNG-I), have become active in this field of work. Using the similar example as above (Haiti), the VNG-I is now active –together with Dutch water boards and NGOs and with other international partners- in the reconstruction phase of Haiti. The focus on the VNG activities has been on local management and governance, creating the conditions for local 'ownership' and long-term sustainability.

In terms of mobilizing rescue teams, several provincial or regional authorities have taken a strategic interest in providing emergency support for typical Dutch circumstances (flooding situations, densely populated areas etc). They have expressed interest for new initiatives (Haaglanden-WaterSave, Rijnmond-REA) with a European or international dimension.

4.3.3 Knowledge institutes

There is interest with several international institutes (Deltares, Delft University, UNESCO-IHE) in developing more specific knowledge and experience in emergency assistance and reconstruction activities related to providing WASH services and safety from flooding or other disasters. Most of these institutes already have a role in other components of the safety chain (prevention, preparedness, master planning, etc). Some of them are attached to the new initiatives mentioned before in this study, some of them have expressed general interest. While not specifically investigated, the interviews and workshops suggest that these institutes see their interest in emergency and reconstruction phases as part of a modern interpretation of providing a comprehensive portfolio of knowledge and experience over the whole 'water portfolio'.

4.3.4 NGOs

Within the Dutch NGO's there seems to be an increasing interest in WASH emergency work. OXFAM/NOVIB recently employed a roving water engineer who should be deployed to emergencies. WASTE foundation recently organized an international workshop around emergency sanitation and kit development in which many of the global WASH cluster members participated. Additionally, WASTE is involved in several initiatives around the development of emergency sanitation kits. Practica Foundation and WASTE -together with a Belgium partner from the textile industry- are also involved in a EU initiative around emergency KIT development.

4.3.5 Private sector

From the many interviews and occasional workshop, there appeared clear interest from private companies (consultants, suppliers, contractors) in engagement in emergency and reconstruction work.

Rotterdam The Hague Emergency Airport (REA)

A new concept to develop an international expert and quick response centre for rescue & relief, located at Rotterdam The Hague Airport is currently developed by a consortium of private and public parties: it is called Rotterdam-The Hague Emergency Airport (REA). Organizations involved in this concept are amongst others Dura Vermeer, DHV, PWN, NWP, Rotterdam Municipality and Rotterdam The Hague Airport.

The project aims at:

- 1) Securing key infrastructure against flooding by providing a safe shelter in the Randstad.
- 2) The storage and availability of high-deployable emergency equipment for rescue and relief
- 3) Strengthening the prominent position of the Netherlands in the market for rescue and relief for direct (emergency response) and recovery.

Possible activities included in the concept are: constructing a shelter and storage unit for emergency situations in the Rotterdam area, developing an operational centre for coordinating emergency operations in the Netherlands and worldwide, developing a training facility for rescue teams (USAR, WaterSave) and the provision of courses on

humanitarian assistance work (international); developing a help desk and establishing an incubator centre for innovation.

Dutch Advise & Assistance Team on Flood Risk Management

As a private initiative, a small group of flood and disaster management experts are developing a new service to strengthen community resilience by improving disaster preparedness. The service, in the form of advice and assistance missions, is based on experiences in Dutch local and regional communities. It was observed that, following a water-related disaster, the preventive measures for new flooding take years to be effective (the making of plans, design and physical construction work). In the mean time communities are still at risk. Through a programme of community based awareness activities, like for example risk zoning (identifying and disseminating information about most vulnerable areas), an improved level of community resilience can be achieved to bridge this 'time" gap.

4.4 Summary

The study has learnt that there are many, very diverse initiatives and activities on-going in emergency and reconstruction work, related to natural or man-made disasters. There are differences in the way the Dutch sector is engaged in WASH emergency responses (a large role for MoFA and the UN system) or in non-WASH responses (a bigger role for embassies and the 'wider' water sector) and in the engagement in the different phases (in reconstruction phase having more fragmentation).

It is striking that many of the parties involved are unaware of each other's role or intentions and that some have little hands on field experience in emergencies; consequently there are few connections and synergies. Overall, there seems to be a growth in the number of parties involved and activities taken up; suggesting a gradually growing sector in a natural, 'bottom-up' and heterogeneous way. The growth seems to come from new services being developed and new entrants, while the 'usual suspects' in development work seem to be extending their portfolio as well (for instance the NGOs, the utilities and water boards).

The flip-side of this rather fragmented picture, is that many opportunity costs seem to be made, valuable information and experience is not shared or utilized and synergies or added value is not generated. This picture seems to hold for the emergency phase and the reconstruction phase, acknowledging that the different parties have different roles in these two phases.

It is also noteworthy that many interviewed private parties, while showing interest in this work, seem to be driven more by a social agenda (for instance CSR reasons, licence to operate, doing good etc) or human resource motives (staff work satisfaction, staff retention etc) rather than motivated by commercial motives. As an illustration of this, International organisation like Veolia and Procter and Gamble do both report that their international work in relation to emergency is indeed contributing to staff work satisfaction.

After initial disappointing sales of the PUR water purifier, Procter and Gamble (P&G) considered in 2004 cancelling the PUR product. P&G then decided to market PUR (often used in emergencies) through a non-profit model. PUR has now built up a strong reputation with staff and with important partners, more than it ever could through commercial sales. The PUR website and tweets are now the most visited amongst the P&G staff (*Greg Allgood*, *June 2011*)

5. International support models

5.1 Introduction

Through an investigation of existing modalities and structures for organizing a governmental, three models have been selected for consideration. Each of them will be briefly introduced and described here. In addition, in this chapter, other non-governmental response modalities are presented, like responses from multi-nationals and the use of standby arrangements.

5.2 Models of Governmental Agencies working in WASH and Emergency Aid

Several countries have created rapid intervention teams or other support organizations related to emergency Aid with staff. Examples of the different activities of governmental organizations operating in field of humanitarian aid are:

- Governmental and nongovernmental organisations that are recruiting and seconding staff to the UN are thus not implementing their own projects in the field. Examples are CANADEM, Irish Aid, and RedR Australia.
- 2. Governmental or nongovernmental organisations that are seconding staff to the UN, like the Red-Cross or I-NGO's, and that are sometimes also directly operational under their own flag. Examples are Swedish Civil Contingencies Agency (MSB). The Swiss Agency for Development and Cooperation/Swiss Humanitarian Aid Unit, Austcare, Danish Refugee Council (DRC) Norwegian Church Aid (NCA) British Government's Department for International Development (DFID).
- 3. Governmental organisations that are directly operational in the field during emergencies, they are not seconding staff to the UN or others.eg is German Federal Agency for Technical Relief, (THW)

Model 1 (Surge support: seconding staff to others)

Many UN organisations but also some NGO's working in the humanitarian field, have standby arrangements with national organizations that provide them with free surge support during emergencies. Additional professional staff can be provided quickly through simplified procedures. Within UNICEF it is felt that arrangements are increasingly strengthening humanitarian action on the ground. This is evident from the greater number of seconded personnel being used by country and regional offices.

CANADEM (Canada's civilian reserve) is one of the organisations that are supporting humanitarian actors working in the field by seconding staff. CANADEM is a non-profit agency dedicated to advancing international peace and security through the rostering, rapid mobilization, and mission management of experts. CANADEM keeps a large roster of Canadians (Canada's Civilian Reserve) and internationals. Their main clients are the UN and the Canadian government, but also other governments and non-governmental organizations make use of their service. CANADEM holds MOUs with several UN organisations amongst them UNICEF, UNHCR, UNOCHA, WFP. CANADEM has funding through the Canadian International Development Agency (CIDA) through this so-called Rapid Onset Humanitarian Emergency Experts Fund (RAP-Fund) from 2007 till 2011; nearly 100 experts have been seconded to UN missions.

For RedR Australia the MOU with UN organisations is similar to that of CANADEM. Residents of Australia and New Zealand registered on RedR Australia can be seconded to some UN organisations or the WASH cluster for up to six months at no cost for the receiving agency.

More recently *Irish Aid* started a similar arrangement with the introduction of its Rapid Response Initiative (RRI). Within this RRI, Irish Aid developed a register of individuals, from the public and private sectors, including the Defence Forces, for deployment at short notice to assist in an emergency relief effort. Irish Aid is seconding staff to several UN organisations and to a number of Irish NGO's like Concern, Trocaire and Goal. Maximum deployment is usually 6 Months. Apart from the register the RRI also focusses on the pre-positioning and transportation of humanitarian supplies to disaster areas though the UN Humanitarian Response Depots (UNHRD) in Brindisi, Italy,

Dubai, UAE and Accra, Ghana and funding for strengthened emergency response capacity within the UN, Red Cross and NGO's.

Model 2, (Direct implementation and seconding staff to others)

A number of National organisations are providing free surge support to the UN and some NGO's and also implementing activities in the field. The Swedish Civil Contingencies Agency (MSB), the Norwegian Emergency Preparedness System (NOREPS) and the Danish Refugee Council are examples of governmental agencies that are both direct implementing in the field as well as supporting others by seconding staff. Since 2006, MSB has been tasked by the Swedish Government to contribute to international operations aimed at emergency preparedness and early recovery. The MSB contributes to reducing risks and vulnerabilities in Sweden, but also globally by participating in international aid work. MSB contributes with resources to strengthen the capacities of affected countries to prevent, anticipate, and deal with difficult events. Normally the MSB runs 50–60 international operations simultaneously –primarily in Africa, Asia and Europe. The organisation provides assistance, to, among others, the EU, UN, and the Red Cross (Mainly Swedish Red Cross). MSB amongst others also has a self-sufficient search and rescue team (Swedish International Fast Response Team). This team can provide base camps for relief workers (accommodation, offices, communications, and kitchen facilities) and a water, sanitation and the hygiene team can support in Water purification, latrines, and waste management.

NOREPS provides relief supplies and personnel and in some cases financing to the UN system and other international organizations working in disaster areas. NOREPS was established in 1991. NOREPS is a partnership between the Norwegian Ministry of Foreign Affairs, the Directorate for Civil Protection and Emergency Planning, the Norwegian Red Cross, Norwegian NGOs like CARE Norway and Norwegian Church Aid and some Norwegian suppliers of relief goods. NOREPS is jointly financed by its partners and the Norwegian Ministry of Foreign Affairs. Innovation Norway, a public entity under the Norwegian Ministry of Trade and Industry, is the administrator for the NOREPS system.

It responds to international emergency needs through a combination of standby personnel (NORCAP), and ready-to-deploy stocks of relief goods including WASH items, and logistic. NOREPS goods can be airborne within 24 hours NOREPS partners maintain stocks of essential products at a warehouse in Oslo (Norway) and at depots run by the UN, the Red Cross and NGOs. The standby force NORCAP is operated by the Norwegian Refugee Council (NRC) and consists of NORSTAFF and NOROBS.

NORSTAFF is the largest single component of NOREPS in financial terms (47% of the total expenditures of 638 million NOK between 2003 and 2006) it has 300 Norwegian professionals who are trained and ready for deployment in the field within 72 hours. NOROBS is roster of personnel for observation/monitoring of peace agreement etc. Approximately 100 personnel are on assignment at any given time. Between 1991 and 2009, more than 3000 personnel have been deployed in more than 50 countries worldwide. Deployment expenses, including salary and allowances, are mainly funded by the Norwegian Ministry of Foreign Affairs. Personnel recruited to the standby forces go through a 4 days basic training program and the "UN Security in the field" course before they are deployed.

As an emergency resource, DRC and NORSTAFF/NRC staffs are usually deployed up to six months generally being on leave of absence from their regular jobs. NORSTAFF/NRC and DRC staff will only be deployed if it has been established that urgent staffing requirements cannot be met from other internal (UN) sources.

DFID similar to DRC/MSB/NORTSTAFF is keeping a roster of staff that can be seconded to the UN; it also maintains a number of support modules including: airfield-handling packages, convoy management including mobile workshop, international transport, mobile offices, and accommodation packages. DFID also maintains a stockpile of non-food items: Including Shelter material and cooking equipment. Duration of personnel deployments will not normally exceed three months. DFID has set aside a funding grant for this arrangement and will contract staff and pay all costs apart from local travel. Salaries and DSA are paid according to DFID rates.

Model 3 (Direct implementation)

The German Federal Agency for Technical Relief (THW) THW is part of the German Home Office and represents an integral part of the German disaster control system. THW provides technical relief in the sectors of civil defence, disaster relief and international humanitarian assistance. The main fields of activity are rescue, salvage and rehabilitation of infrastructure (water, electricity, sewage). THW registers over 76,000 people (mainly volunteers) throughout Germany. THW works with Technical Groups with focus on recovery, electricity, drinking water supply, communication, bridge building, infrastructure, water, logistics, and oil damage.

THW developed some special units; the SEEBA (Rapid Deployment Unit Search and Rescue) and SEEWA (Rapid Deployment Unit Water Supply and Treatment (http://www.seewa.de/).

SEEWA is a unit for international operations related to drinking water supply. The unit responsibilities include assessments, mobile water purification, water analysis, technical advice and repair and maintenance work for damaged water supply networks. THW does not have any standby agreement with UN organizations.

5.3 Corporate partnerships (Veolia Foundation)

Veolia Environment Foundation (VE) was created in May 2004, as part of the Veolia Environment Group's non-profit activities. Its two core activities are:

- 1. Financial contribution to development projects, supported by an employee of the VE Group. This activity unit is granted an annual budget of 3.2 million Euros by VE Group.
- 2. Contribution of expertise for emergency and development projects through official partnerships with NGOs, public institutions and international organisations. VE Foundation partners are UNICEF, the French Red Cross, and various NGOs: Action against Hunger, Première Urgence, Solidarités International, and Caritas. This activity known as "Veoliaforce" is granted an annual budget of 4 million Euros to provide the partners with specific resources (specialised equipment and human resources).

UNICEF has a corporate partnership agreement with Veolia since 2007. UNICEF and VE Foundation have intervened together in 5 emergency operations, 1 post-emergency mission and 2 development projects. VE volunteers were deployed to UNICEF Country Offices 25 times between 2007 and 2010.

In total, VE Foundation has contributed with 391 days of deployment, the average number of days being 18 days for one deployment.

Partnering with VE provides UNICEF the low cost and functional expertise that VE could deploy during emergencies and eventually in development activities. Simultaneously through this partnership VE can bring input to WASH cluster field activities of the International humanitarian communities.

VE brings 'innovation' in humanitarian projects with fresh expertise and specific equipment and systems. Partnering with UNICEF sends out a positive image of VE which -in turn- reinforces motivation and commitment of its employees thereby retaining its staff and its talent. VE employees show a keen interest to involve in humanitarian actions by signing up as volunteers in the Foundation's roster. Volunteers are extremely proud to be sent to the field and to participate in humanitarian actions

5.4 Standby arrangements concerning UN and the WASH Cluster

Obviously the most effective first response in any emergency is the use of staff, supplies and cash already available within the country. Unfortunately in some emergencies surge support from outside resources is needed. To strengthen this surge capacity at the onset of a humanitarian crisis many UN organizations have developed standby partnership arrangements. Those standby arrangements are made mainly to deploy personnel for field-based response. In most cases partner organisations sign the contract with the deployed. Standby agreements compensate UN bureaucracy, avoiding time-consuming administrative work previous to a deployment, which allows a process of quick responses and decision-making. The conditions for deployment are set in the standby agreement.

When deployed to the UN, roster members are often required to sign an Undertaking that will outline their responsibilities towards UNHCR. This will bind the deployed to the same rules and regulations applicable to UN staff.

Although the standby arrangements were originally established to help fill critical, temporary staffing gaps at the field level, the partnerships themselves have brought about stronger collaboration on strategic advocacy, complementary planning. By the end of 2009, 17 organizations were included on UNICEF's standby roster and 128 technical personnel had been seconded to emergency settings through standby partnerships³. As this represents more than 17,000 working days of staff support time in short term deployments providing the best response possible during the first days following an emergency⁴. OCHA developed standby partnerships with 8 organisations⁵, while UNHCR in 2008 had standby partnerships with 18 organisations⁶. Also some other organisations like the French Red Cross, and NGO's like Action Contre la Faim, and Solidarité have standby corporate partnership agreements with Veolia foundation environment.

UNDP has a standby agreement; like with other UN organisations, UNDP's standby agreements are framed by corporate MOUs and then used to fulfil mutual satisfactory needs. UNDP has the global lead agency for early recovery, and chair of CWGER and is looking to widen the scope and opportunities of such partnerships and secondments.

5.5 Summary

The three most common models used by governments for responding to emergencies are based on two different starting-points: the establishment of own rescue teams and the needed own response infrastructure ('direct implementation') or the lending out of staff to existing international structures ('surge support'). These starting points make two options for a model, with the third model being a combination of the other two. A comparison shows that these three models are all in use by other countries, each model having different pro's and con's.

Stand-by arrangements are an effective way of being able to provide swiftly critical resources to the field in cases of an emergency; these pre-emptive arrangements are normally made between the cluster coordinator and the organisations or the governments that are wiling to respond when needed.

Includes non-governmental organizations such as Action Against Hunger, Austcare, CANADEM, CARE International, the Danish Refugee Council, Norwegian Church Aid, the Norwegian Refugee Council, Oxfam UK, RedR Australia and Télécoms Sans Frontières; public institutions such as the Icelandic Crisis Response Unit, Irish Aid, the Swedish Rescue Services Agency (MSB), the Swiss Agency for Development Cooperation and the UK Department for International Development (DFID); and corporate partners such as Ericsson and Veolia Environment.

⁴ HAR mid-Year Review report 2010 UNICEF

⁵ Austcare; Canadem; UK Department for International Development (DFID); Danish Refugee Council (DRC);Irish Aid; Norwegian Refugee Council (NRC); RedR Australia; and Swedish Rescue Services Agency (SRSA/MSB)

⁶ Austcare, CDC Centers for Disease Control and Prevention, DCPEP - The Directorate for Civil Protection and Emergency Planning of Norway, DRC - Danish Refugee Council, EMERCOM of Russia - Ministry of the Russian Federation for Civil Defense, Emergencies and the Elimination of Consequences of Natural Disasters, ICMC - International Catholic Migration Commission, ILO - International Labour Organization, IRC -International Rescue Committee, Irish Aid, NRC - Norwegian Refugee Council, OXFAM GB, ProCap NRC/OCHA (Interagency: UNHCR, OHCHR & UNICEF), RedR Australia - Registered Engineers for Disaster Relief, Australia, RSD Project Deployment, SCN/SCS - Save the Children Norway and Sweden, SDC/SHA - The Swiss Agency for Development and Cooperation/Swiss Humanitarian Aid Unit, SRSA - Swedish Rescue Services Agency (MSB), UNV - United Nations Volunteers.

6. Identified needs within WASH CLUSTER response

6.1 Introduction

To find out more about 1/ the current perceived needs for support in emergency and rehabilitation and 2/ experiences with organisation models like MSB (Sweden, seconding surge staff to others) and THW (Germany, direct implementation) more than 25 international and Dutch organisations working in emergency relief were contacted from which currently 20 completed the full questionnaire. These findings, illustrated with quotes from the filled questionnaires, are presented here.

6.2 Findings of the survey

The organisations contacted were members of the Global WASH cluster, and the organisations partnering in the SHO (Stichting Samenwerkende Hulp Organisaties). Within the WASH cluster members we contacted the individuals participating in the Global Cluster meetings and often working as (Emergency) Global WASH Advisor.

The following organisations contacted responded written feedback on the questionnaires:

- 1 UN: UNHCR, UNICEF, UNICEF (Global WASH Cluster), WHO, UNISDR.
- 2 GFDRR (global Facility for Disaster Reduction and Recovery)
- Dutch organisations: CARE NI, CORDAID, MSF-OCA (Artsen Zonder Grenzen operational centre Amsterdam), Netherlands Red Cross Oxfam Novib, and ZOA Vluchtelingenzorg.

 (ICCO, Save the Children, Terre Des Hommes, Tear, Stichting Vluchteling: they all considered that within their Dutch offices they did not have sufficient WASH capacity to discuss international WASH needs during emergencies.)
- 4 International NGOs and Red Cross: CARE International, CRS, GOAL, NCA, OXFAM GB, TEARFUND, IFRC and Save the Children Fund.
- 5 Donors; ECHO

Findings

Nearly all contacted organisations would welcome increased surge capacity through an additional Dutch initiative or organisation. This was an important message coming from the survey.

All UN contacted individuals had experience with organisations like MSB, SDC, and RedR Australia. Most of this experience is related to the provision of or access to surge capacity and was generally found useful. Secondees from these agencies are often pro-bono, quick to deploy and usually come with significant added value. As downside, respondents mentioned that persons with sufficient experience could not always be available. Sometimes secondees may have a tendency to flag fly for their home agency. NGOs and the IFRC maintain their own roster and some, like the IFRC and MSF, train their own roster members to prepare for assignments.

"We sense that extra surge resources to meet the demand in WASH emergencies are needed and welcome, as long as they are well coordinated with the global WASH community (humanitarian and civil protection) in order to improve synergies and avoid overlaps." (ECHO staff member)

Rapid Response team

80% indicated strong support and perceived added value in the creation of an additional rapid response team from the Dutch water sector. A Dutch rapid response team would be most appropriate when focusing on Urban WASH.

Within the six Dutch respondents, two organisations 2 did not see an added value in setting up own teams. Several Organisations supportive for rapid response teams mentioned that this initiative should be linked to the Global WASH Cluster and should support existing Global WASH Cluster RRT⁷.

Some organisations did not see an added value in a Dutch based rapid response team. According to these organisations it would be more appropriate to supplement existing providers and give technical support to agencies that have all the necessary operational structures (logistics, security, HR) and experience to function in emergencies.

A Dutch rapid response team would be most appropriate when focussing on Urban WASH. This opinion was shared by those agencies that saw little added value in the proposal. Large-scale rapid emergencies like the flooding and general assessments were mentioned repeatedly as areas of possible focus. CRS suggested to look for functions currently weak within traditional responders such as working exclusively with and mentoring the respective local water authority to develop an effective relationship with responders and generally improve understanding within the government authority of what the UN, NGOs are trying to achieve and how they function.

Gaps identified through the questionnaires

Subject	Consen-	% *	Comments
Urban Sanitation	Major gap	100%	"we don't have enough in the way of technical solutions to address this issue" (CARE staff member); "[there is] woefully inadequate capacity and knowledge [within current actors]" (UNICEF staff member); "Few sewage treatment systems in developing countries (i.e. the major target for international response) are actually fully functional. In most cases they are antiquated and cannot handle the population growth - so they are a partial solution whilst the remainder is dumped. The question humanitarian agencies have to ask themselves - is what the value in spending time repairing a poor system that cannot handle the full load." (UNICEF staff member)
Urban water supply	Major gap	90%	"There is a general lack of technical capacity in Urban Water Supply as many of our WASH professionals do not have an extensive grounding in complex pumping or sophisticated understanding of water treatment processes or commercial equipment. This makes NGOs not very useful when the main water supply need is to repair municipal water treatment and distribution systems involving specialised pumps, chemical feeding equipment, electronic controls and automated systems." (CARE staff member), "Generally speaking, the humanitarian community has less experience in urban environments and the Red Cross is no exception. Also generally speaking, we have more expertise in water supply than sanitation." (IFRC staff member).
Sewage water treatment	Mayor gap	76%	"Very low level of expertise within the NGO community" (CARE staff member) "Especially relevant in urban settings due to limited sanitation options and the need to deal with the sludge in a responsible and decisive manner (the problem cannot be displaced or postponed" (NL RC staff member)
Mass hygiene education	gap	47%	"I think the humanitarian community has the knowledge here but being able to put sufficient, experienced people in the field quickly enough is a challenge. HP is good as you can start quickly to provide some protection for public health. However, you need a large team to make any significant impact." (CARE staff member) "OK but marketing support is always welcome" (OXFAM GB staff member) "Generally OK, but at times 'too soft'. Rather than participatory methods at times

⁷ Rapid Response Team – deployable within 48 hours in support of coordination, information management and rapid assessment within a WASH humanitarian response

Explorative study into the provision of emergency and rehabilitation assistance by the Dutch Water sector Draft Final Report, 14 September 2011

			there may be a need to opt for directive hygiene measures (lifesaving), for example when washing hands after visiting defecation fields or trench latrines" (NL RC staff member)
Assessments of	. Con	67%	"Tools are not 'urbanised' " (NLRC staff member).
Urban WASH	Чар	07%	"inadequate in capacity but probably adequate knowledge (i.e. the principles are
systems			simple) - we find that we only collect sufficient data to initiate a response (with
			many assumptions) and only later start to generate a complete / holistic picture of
C	C	F20/	the problem / priorities" (UNICEF staff member)
Groundwater	Gap	52%	"This is an area where I consider the NGO and Unicef community to be quite
abstraction			strong. Unicef and most of the INGOs have extensive development programmes
			which normally include significant WASH components. Groundwater abstraction is
			common and certainly in CARE we have a good supply of capable people in the
			development side. There is always an issue to get these people freed-up to
			respond to an emergency but the groundwater side seems to be better covered
			than most." (CARE staff member)
Water	Mayor	76%	"Generally speaking, the humanitarian community has less experience in urban
treatment	gap		environments and the Red Cross is no exception. Also generally speaking, we have
Urban setting			more expertise in water supply than sanitation." (IFRC staff member)
			"Insufficient - especially treatment for Chemical contaminants" (Oxfam GB staff
			member)
			"Generally sufficient knowledge on options. However, insufficient linkage with pre-
			disaster systems and exploitation of/ collaboration with these (see Port-Au-Prince
			as example)" (NL RC staff member)
			"timely availability of qualified emergency WASH experts (mostly for coordination
			& assessment purposes) continues to be the biggest bottleneck when a major
			disaster strikes" (ECHO staff member)
Water quality	Not a gap	14%	"None of us do as much of this as we should with the possible exception of
testing			Oxfam. There is a bit of a gap in this area but it is not a serious as some of the
			other areas." (CARE staff member).
			"Adequate knowledge and capacity if it is prioritised we tend to run on a
			blanket treatment and assumption that this generates the safety being sought"
			(UNICEF staff member)
			"In my view not the first priority in emergency response, at least not elaborate
			testing. However, there is a gap when acute emergencies turn into longer-term
			situations". (RC NL staff member)
			"Since WHO is also lead on drinking water quality monitoring, it would be also very
			good to deploy some expertise with a Lab able to do water quality control" (WHO

^{* %} of people responding that on specific field there is insufficient knowledge and or work experience.

staff member)

Other areas not mentioned in the questionnaire but brought in by several individuals as being a gap are; solid waste management, vector control, sanitation in high water table, WASH cholera response and hydro(geo)-logists/ GIS experts able to rapidly appraise potential for water supplies (mainly in support of info needs other agencies), especially in drought scenarios.

"It always strikes me to see how little organisations are used to making the most of new technology (GIS and Remote Sensing) to help them in their work. The applications of GIS in WASH are considerable, and to me they must not be overlooked. They are relevant at all stages of a response and more generally within project cycle management" (UNISDR Staff member)

WASH cluster

Assessments, coordination, Information Management, urban WASH, Disaster Risk Reduction, solid waste are all areas in which the WASH Cluster lead could possibly use additional support. This in addition to the general shortfall in experienced WASH personnel across all agencies.

The WASH cluster agencies are currently working on a strategy (2011-2013) that should help to overcome some of the identified gaps and prioritize the work to be undertaken by the collective. Some initiatives that were proposed are: a team working on assessments (rapid assessment team, RAT) and an expanded team working on Response (Rapid response team) which will now include dedicated coordinators and information management officers. The current RRT members are hosted by NGOs and have been deployed to support coordination in many different emergencies since the pilot commenced in 2009.

Recovery phase

Several respondents were of the opinion that organizations involved in acute emergency phase may not have the capacity nor the competency to undertake what is needed in the recovery phase. The recovery phase –those persons claim- requires a view in the long term and sustainable options.

Quotes from the field.....

- "Moving from real emergency into a long term approach, the actors are usually not the same". (WHO staff member),
- "The question ultimately is if NGOs should even get involved in larger infrastructure projects? From my experience in NCA the answer is no or only as a last resort." (NCA staff member)
- "A sustainable exit plan that hands over to local government or organisations are often not made. Many
 organisations feel that planning for recovery is generally not done in a structured way. The economic aspects of
 water-and sanitation systems are often overlooked/not considered as the result the operation and
 maintenance frequently fail." (UNHCR staff member)
- "In the rehabilitation or recovery phase, one of the most frequent weaknesses is quality control. Whether it is rehabilitation or new construction, so often, the final link in the chain is weak a poorly supervised and/or inexperienced/inappropriate contractor/implementer, resulting in infrastructure which lasts for 6 months to 2 years (if at all) instead of 20+ years. There is a huge need for consistent rigour in quality control (right down to the final detail in the field) to ensure that beneficiaries receive the highest quality –however simple the intervention, so that it may serve the population for as long as possible and even act as a foundation for development actions to build upon in the future. (ECHO staff member)

WASH Equipment

On the question *if organisations would be open for any donations of WASH equipment during emergencies*, most organisations replied positively. Adding the qualification that only those items that they would have otherwise procured from the open market and to the same specifications, is welcomed by the respondents. Donation of WASH equipment that is not requested and unusual nonstandard specifications often causes problems. Items approved by the cluster, such as latrine slabs, but also specific material like mechanical diggers, truck mounted de-sludgers, and water tankers can be useful. (Mentioned by both MSF-OCA and OXFAM GB) Unsolicited donations in kind are actively discouraged by many organizations inter alia UNICEF. These organisations require a cash contribution to cover transportation and use / distribution and monitoring plus a 7% cash recovery of the total contribution value as mandated by their Executive Board. The IFRC generally does not accept donations in kind in emergencies. Their equipment is standardized so IFRC staff can use it immediately.

"The sorts of things we would find useful are the usual you would expect; buckets, hygiene kits, bladders, tap stands, latrine slabs, small pumps, small trash pumps etc. We don't have any difficulty getting water treatment plants". (CARE International staff member)

Surge support

Understandably with their different mandates, all organisations mention different surge support requirements. But on the open question in which field they would welcome surge support, most individuals responding mentioned sanitation (43%) and well qualified emergency WASH staff/field staff/generalist (29%) or Urban WASH specialist (29%). RedR who sometimes help to recruit WASH staff for some agencies mentions that people generally ask for generalists. Coordinators and high level WASH managers are asked for, also sometimes hydro geologists. The WHO staff member indicates they would welcome experts able to do a quick risk assessment and urgently fix to ensure that health care facilities can still operate with a water supply and basic sanitation and hygiene. Other areas mentioned more than once are; Information managers, Ground Water surveys, Drilling experts, and assessment specialist and hygiene managers.

Note that demand [for WASH staff, red] is high at the moment for the Horn of Africa, but also Cote d'Ivoire, Liberia, Yemen, Libya etc. So capacity of the partners might be stretched. (email communication Julian Temple, manager emergency surge capacity, UNICEF, July 2011.

Previous studies

The IASC in its Final Strategy for Meeting Humanitarian Challenges in Urban Areas (2010) came with similar findings as the above mentioned. In recent emergencies in post-earthquake Haiti, Kenya and Pakistan it identified the inadequacy of urban expertise and technical skills among first responders. This inadequacy contributed to the reduced effectiveness of relief assistance. Gaps identified included:

- Technical Knowledge Gaps: Identification of land for temporary shelter, urban WASH, land ownership and tenure issues, urban food and nutrition security, rubble removal and similar urban shelter, land, infrastructure and protection challenges. Getting strategies, humanitarian responses and early recovery strategies right from the start require that these skills be part among first responders.
- 2. Slow deployment of sufficient numbers of experienced staff with appropriate technical skills.

Within project 4 of the Global WASH cluster a survey was placed on the internet in 2008. More than 300 people with a great deal of emergency experiences completed the survey.

The study found that in terms of WASH staffing the worst gap occurs in the first week of the response. Respondents also indicated that staffing can be a problem in the second year of a response (during the recovery phase).

The top four skills gaps at the start of an emergency response were identified as:

- hygiene managers;
- 2. specialist technical advisors (such as hydrogeologists, vector control specialists etc.);
- 3. sanitation engineers and managers;
- 4. social advisors (such as sociologists and anthropologists)

6.3 Summary

The executed survey approved to be very helpful in identifying needs and gaps in the provision of services during emergencies. Overall a clear picture emerged from the responses, which can be summarized as follows. First of all, there is a need for extra surge support capacity. In doing so, the following expertise fields are important: assessments, coordination, Information Management, urban WASH, Disaster Risk Reduction and solid waste. Secondly, 80% indicated strong support and perceived added value in the creation of an additional rapid response team from the Dutch water sector. A Dutch rapid response team would be most appropriate when focussing on Urban WASH. Thirdly, there is room for donations of WASH equipment, with the qualification that only those items that they would have otherwise procured from the open market and to the same specifications. Last but not least, a comparative study of 2010 came with similar findings as the above mentioned.

7. Analysis of study findings

Opportunities for the Dutch sector

In brief, the study has identified potential opportunities for the Dutch water sector in the provision of assistance for emergency work or engagement in rehabilitation activities. These come from the combination and matching of the following findings of this study:

- There is clear and expressed demand from this field, especially in WASH for emergency
- There is an identified gap in the present delivery of the demanded services, not being provided (yet) by others
- There is widespread interest and commitment from the Dutch sector at large, covering the diversity of the Dutch sector. This is needed to develop more expertise (from a relatively low base level), and secure this experience through training, capacity development and international engagement
- There is room for creating synergies and securing greater impact –both internationally and in the Netherlands- by providing a better policy and coordination framework. More coordination of the great number of different activities, in combination with the present growth, may provide significant benefits.

Demand side

The study has been able to identify the main research topics at the 'demand' side: the perceived need for support by the international emergency actors; if so, the nature of the demand and an inventory of the roles that other countries play in this respect. The executed survey has helped to map out the different parties that are active, the way of working and their needs.

Within the Global WASH Cluster, the most important mechanism for coordination in the WASH area, there is a great demand for surge staff. Especially WASH experts, all-round experts and niche-area specialists are needed. In other clusters, there is far less need for this. UNOCHA and the UNDP - who are leading the early recovery cluster- have far less demand for WASH expertise. Occasionally, they are looking for expertise to support in the PDNA. Yet, both would welcome to widen the scope and opportunities of partnerships and secondments through standby partners, like from the Netherlands.

In addition, also the topic of establishing a rapid response team, focusing on specific fields like urban WASH, flooding and or assessments was investigated; with a positive outcome. In terms of products and materials, a need was identified for the development of new materials in the field of sanitation, although at the same time, the expressed demand from the organisations working in emergencies was not high. Some organisations discourage donations in kind while others will only accept donations according to their specific qualifications.

As presented earlier, the survey's focus lies mainly on the recovery phase (both demand and supply side) as this is by far better organized as compared to the recovery phase. It is therefore easier to get a comprehensive albeit complex picture of actors, initiatives and modes of operation. When emergency assistance is downscaled, recovery initiatives start and other actors and coordinators become involved. Exemplary GFDRR, assessments will be carried out to list needs and demands for recovery activities, but there can be others as well. This makes it difficult to give a clear outline on procedures and coordination in the recovery phase. However, it has been stressed that it is beneficial for parties to be active in emergency relief as well as recovery operations, as networks on the ground remain.

Supply side

Looking at the existing capabilities in the Netherlands' water sector (the 'supply' side of the analysis), the study has been able to assess the specific expertise and ambition of the different parties.

In general, one can state that the expertise and the capacities of the Dutch sector for emergencies are relatively low but quickly growing and evolving. Secondly, there is a growing interest of Dutch parties, both in emergency and in rehabilitation work. At the same time, there is lot of diversity and fragmentation in the different initiatives, leading to opportunity costs and missed synergies. The diversity is also visible in the parties identified: NGOs, governmental

authorities, utilities and private companies. In terms of ambition, there was also widespread resonance on the preliminary idea of stronger involvement and steering from the Dutch water sector.

Striking observations were that many private initiatives are being developed, with private sector organisations feeling especially motivated by corporate social responsibility and staff satisfaction. At the same time it is observed that several national authorities (Ministeries) and regional authorities (provincial, municipal) are working rather independently and disconnected from each other.

On the implementation models

In the study, also the advantages and disadvantages of the three compared models were assessed, the below tables provide the details of this comparison. A hard recommendation for the best suitable model in the Netherlands cannot be made yet from this explorative study but should be made in conjunction once the policy and strategy have been chosen. Both in emergency aid and in rehabilitation work, the compared models can give added value, also for a possible Dutch situation.

Model 1 (Surge support: seconding staff to others)

Advantage	Disadvantage		
Will cover a direct need specially when focussing on some key areas like Urban WASH.	Demand might vary over years,		
Relatively easy to organise (no need for logistical support as this will be done by receiving agency)	Difficult to ensure learning and experiences are kept within the organisation		
When organised well and working against a clear TOR it is	As this will have a relatively low profile it might be		
likely to be low cost high impact.	difficult to get contributions from the private and public sectors		
Can be fast and can improve speed form other	You will lose some control over the staff member once		
organisations (UN often takes more than 3 months to recruit staff)	seconded, difficult to ensure their time will be well spend		
Welcomed by the WASH cluster	Can we indeed provide the profile of staff requested in		
	the time frame needed and for the periods needed.		
Individuals are likely to gain different types of experiences	Will require administrative and technical support, (MOU		
so possibility to connect broader with the emergency	with private sector to second staff, willingness from		
sector	donor to cover some of the costs of secondment,		
	technical support from someone who knows the sector to		
	build links with the sector and ensure right person is send		
	to the right place)		
Can raise interest within the wider Dutch water sector in	Seconding staff to UN or NGO's is only likely to work		
emergency work	when this can be offered for free (no salary to be paid by		
	receiving agency)		
	Should probably be accompanied by training program, as		
	few potential candidates will have international		
	emergency experience		
	More involvement of universities and or high-schools is		
	probably needed to secure a pool of suitable candidates.		

Model 2, (Direct implementation and seconding staff to others)

Advantage	Disadvantage
scope so when using those facilities it will be easy to	Bringing all activities (secondment and implementation) within one organisation might be complicated, specially
	when building on existing Dutch initiatives. As above (model 1)
learned to water sector	
High profile will be ensured, but also bigger impact when you can indeed bring highly demanded experts to the sector	As below (model 3) but engagement with WASH cluster is likely and broader involvement of Dutch Water sector possible
Engagement with the Cluster likely.	

Remarks: might only be realistic when set up around EU- civil protection modules system, or when capacity and network of existing initiatives (like USAR and/or WaterSave) are used.

Model 3 (Direct implementation only)

Advantage	Disadvantage
High profile in the Netherlands, (but maybe not within the WASH cluster)	Expensive to run and maintain (cost efficiency)
Could possibly build on existing structures and capacities within USAR and WaterSave.so probably easy to organise.	Impact might be relatively low as small teams will have little coverage unless they will work with the sector and local structures and under UN Coordination
Likely to gain support and interest from private sector	Not welcomed by the whole WASH cluster unless it is focussing on eg Urban WASH only. (or example WASH in Health facilities that will require high quality WASH and this falls under the WASH cluster which has little direct WASH implementation capacity)
Everything is within your own organisation and thus your own control	To become more effective missions will probably be longer than what USAR and WaterSave are currently used to
	Interest in emergency work might rest with only the few people directly connected to the rapid intervention teams Unlikely to get engagement with the WASH cluster

8. Conclusions

Large parts of the Dutch water sector are willing and interested to get increasingly involved in emergency assistance and rehabilitation services in WASH (water supply, sanitation and hygiene). The interest from the Dutch water sector is largely related to corporate social responsibility and far less market related or showing commercial interest. Looking at the experiences of Veolia foundation it is indeed realistic not to expect large business from humanitarian response activities. A more positive corporate image of companies involved which in turn reinforces motivation and commitment of its employees thereby retaining its staff and its talent, our more likely outputs.

Interest and willingness to support possible initiatives around a possible increased involvement in the humanitarian sector was found within the private sector as well as the public water companies and the knowledge centres. Likely support that one can expect for a possible Dutch initiative from the private sector will be the provision of human recourses for short time frames for free or not-for-profit fees.

A number of Dutch organisations working in the water sector are interested in developing a EU type module on mobile water treatment. Those mobile water treatment modules could be added to already existing modules like WaterSave and USAR, and could thus offer a more complete package for survival. The need for additional water treatment capacity was also identified by a previous study done by ECORYS Netherlands in 2009 into the identification of the gaps in the capacity of the Community Civil Protection Mechanism.

The study assessed that currently few Dutch NGO's, working in emergency and relief, have a strong emergency WASH capacity at national headquarters level. Dutch actors generally lack a direct involvement with the UN coordinated global WASH cluster. At the same time, within the Dutch sector, practical knowledge as well as availability of relevant WASH equipment can be found, (inter alia manual drilling, rainwater-harvesting, Peepoo-bag, household treatment systems etc).

The Global WASH Cluster is having an important international role in the coordination and delivery of emergency assistance. The current Global WASH cluster members are indicating the area of Urban Sanitation and Water supply as the first priority for support. A capacity that would either support existing organisations in Urban WASH or a new independent capacity would be welcomed by all. Additionally the global WASH cluster and its members did already identify the need for additional Global Rapid Response Team members and Rapid Assessment Team members. Funding has not yet been received for all positions.

Within the Netherlands capacity and possible interest to support on urban water supply exists. Capacity on urban sanitation is less available. The Stoutenberg conference around emergency sanitation organised by WASTE, identified a number of priority areas to be developed around emergency sanitation. This initiative has the potential to become a start for a wider involvement of the Dutch sanitation sector with the humanitarian sector.

For rehabilitation services, the mapping of 'supply' and 'demand' was harder to make. In general, it seems that in rehabilitation services there are more possibilities for promoting the use of Dutch products and expertise but the heterogeneity and the nature of this 'market' make it hard to find entry points and ask for a concerted approach. Further study seems necessary before more concrete recommendations can be made.

Annex 1. Literature

- Global WASH Cluster Strategy 2011-2013, Strategic Advisory Group (OXFAM, CARE, ACF, WV, UNHCR, UNICEF 2010)
- 2. Global WASH Cluster Strategic Plan 2011-2014
- 3. Standby Arrangements Guidelines on external staff in emergencies, UNICEF 2006
- 4. Cluster Approach Evaluation 2 Synthesis Report, APRIL 2010, Julia Steets, François Grünewald et al
- 5. OXFAM RESEARCH REPORT, The WASH Factor, Oxfam's experiences with humanitarian coordination for water, sanitation, and health, Aimee Ansari and Bethan Montague-Brown, 24 February 2010
- 6. Checklist for RCs and HCs on Emergency Preparedness and Response, Inter-Agency Standing Committee (IASC), 2010.
- 7. Handbook for RCs and HCs on Emergency Preparedness and Response, Inter-Agency Standing Committee (IASC) 2010
- 8. OPERATIONAL GUIDANCE ON THE CONCEPT OF 'PROVIDER OF LAST RESORT', Inter-Agency Standing Committee (IASC) 2008
- 9. FINAL STRATEGY FOR MEETING HUMANITARIAN CHALLENGES IN URBAN AREAS, Inter-Agency Standing Committee (IASC) 2010
- 10. A Guide to UNHCR's Emergency Standby Partners and External Deployment Arrangements, UNHCR 2008
- 11. Evaluation of Sida's Humanitarian Assistance Final Synthesis Report, Tasneem Mowjee, Judith Randel, 2010
- 12. Strengthening the EU capacity to respond to disasters: Identification of the gaps in the capacity of the Community Civil Protection Mechanism to provide assistance in major disasters and options to fill the gaps A scenario-based approach, by ECORYS Nederland BV, K Rademaekers et all.
- 13. WASH Cluster Coordinator handbook, January 2009 RedR
- 14. COMMISSION DECISION of 29 July 2010 amending Decision 2004/277/EC, Euratom as regards rules for the implementation of Council Decision 2007/779/EC, Euratom establishing a Community civil protection mechanism
- 15. Earthquake PDNA: Assessment of damage, losses, general and sectoral needs, PDNA assessment team,
- 16. *UK Multilateral Aid Review*, Oxfam GB, August 2010
- 17. Early Recovery Coordination Lessons Learned Exercise Report 10/10/2010 Cluster Working Group on Early Recovery (CWGER)
- 18. *CATALOGUE OF Emergency Response Resources*, EPRS Emergency Preparedness and Response Section ESS Emergency and Security Service, UNHCR
- 19. Evaluation of Secondments from MSB, March 2011, Lars Oscar Consulting AB
- 20. *Guidance note on Early Recovery Oct 2007* Cluster Working Group on Early Recovery in cooperation with the UNDG-ECHA Working Group on Transition
- 21. Urban disasters lessons from Haiti Study of member agencies' responses to the earthquake in Port au *Prince,* Haiti, January 2010

ANNEX 2. List of people interviewed

Knowledge Centers

Thea Hilhorst Professor of humanitarian aid and reconstruction Wageningen University, Disaster Studies **Bas van Vliet,** Assistant Professor at Environmental Policy Group, Social Sciences Group Wageningen University **Luuk Rietveld,** Professor Urban Water Cycle Technology Civil Engineering and Geosciences, Delft Univesity of Technology

Rutger Verkerk, Senior Progam Officer, IRC

Joep Verhagen Team Leader Southern Asia and Latin America, IRC

UN organisations

Pierre Bessuges, Senior Advisor, Inter-Agency / Early Recovery UNDP

Franck Bouvet, Global WASH cluster advisor UNICEF

Yves Chartier Department for Public Health and Environment WHO

Jesper Holmer Lund, Humanitarian Affairs Officer OCHA

Dominique Porteaud, Senior Watsan officer UNHCR

Andrew Collin Parker, Senior Emergency WASH advisor (global) UNICEF

Edward Turvill, Consultant UNISDR Regional Office Africa

NGO's within the Netherlands

Michel Becks, Advisor Water and Sanitation Netherlands Red Cross

Gert de Bruijne Senior Adviser / Sanitation Advisers on Urban Environment and Development, WASTE

Rixt Bode, Programmamedewerker Humanitaire Unit (ZAZ, HOA)

Evert van Bodegom, Coordinator Disaster Management at ICCO and Kerk in Actie

Paul Borsboom, Senior Programme Officer Emergency Aid at Cordaid

John Buijs, ZOA Vluchtelingenzorg Deskofficer emergency relief

Jeff Fesselet, WatSan unit Coordinator MSF-OCA

Goossen Hoenders, Programma Manager Afdeling Programma's Save the Children Fund Netherlands

Eric Rottier, (DRR advisor) CARE Netherlands

Tom de Veer, director Connect International

International NGO,s

Andy Bastable, Engineering team Leader OXFAM GB

Adam Berthoud Head of Emergencies Technical Unit (interim), Save the Children UK

Murray Burt, Programme Manager Water Supply, Sanitation, Hygiene, Tearfund Disaster Management Team

William Carter Senior Officer, Water, Sanitation and Emergency Health Unit (WatSan/EH) International Federation of Red Cross and Red Crescent Societies (IFRC)

Luke Dokter, Water and Sanitation advisor, Norwegian Church Aid

Toby Gould, Membership Manager, RedR

Graziella itto Pelegrie, Global WASH advisor, Goal

Cheryl Mc Donalds Cluster project Coordinator, RedR

Julian Parker, Senior Technical Advisor, Environmental Health, IRC

Paul Shanagan, Water Sanitation Hygiene Senior Sector Specialist, CARE International

Ross Tomlinson, Global WASH advisor, Catholic Relief Service (CRS)

Private sector

Wilfried ten Brinke, Rob Smit & Ruurd Reitsma, Dutch Advise & Assistance Team on Managing Flood Risks

Marco Eijer, project manager environment & safety, Oranjewoud

Stephan Jansen, Watertreatment & Contractmanagement Afdelingshoofd Engineering DHV

Peter Minnema, Hans van Leeuwen, Rotterdam The Hague Emrgency Airport (REA)

Machiel de Rooij, Public Affairs & Communications, PWN Technologies & REA Jos de Sonneville, manager business development, Deltares Cor-Jan Vermeulen, senior adviseur calamiteitenmanagement en informatiebeheer, HKV Mark van Zanten, hoofd adviesgroep kust & rivieren Rotterdam, Royal Haskoning

Dutch governmental related

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P. (Peter) Glerum plv.hoofd/clusterhoofd brandweer Landelijk Operationeel Coördinatie Centrum (LOCC) DGV/directie Nationale Veiligheid, Ministerie van Veiligheid en Justitie, projectmanager WaterSave, Veiligheidsregio Haaglanden (VRH)

Roy Hans, Senior Policy Officer, Humanitarian Aid Division at Ministry of Foreign Affairs

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Jane Nyokabi Aerts, Adviseur VN, NL EVD Internationaal Agentschap NL, Ministerie van Economische Zaken, Landbouw en Innovatie

Taco Westerhuis, Sr. Advisor Water, Climate Change and Media Sectors, Ministerie van Economische Zaken, Landbouw en Innovatie

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Denis Heidebroek, Senior WASH expert Sector Support Team European Commission Humanitarian Aid Office (ECHO) **Robin Lloyd**, Regional Water, Sanitation & Hygiene Support European Commission Directorate-General for Humanitarian Aid & Civil Protection - ECHO Regional Support Office Central, Eastern and Southern Africa **Antonín Petr** Seconded National Expert European Commission DG ECHO - Directorate General for Humanitarian Aid and Civil Protection

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Sjef Ernes, Director, Aqua for All
Sophie Herrman, Disaster Risk Management Specialist (GFDRR)
Hanna Sundström, Programme officer Operations Section Swedish Civil Contingencies Agency (MSB)
Gisele Brinkman, Coordinator International projects, Wereld Waternet
Gerhard van der Top, Director Vitens-Evides International

Annex 3. UN emergency coordination

Emergency Relief Coordinator (ERC)

When an emergency requires UNITED NATIONS humanitarian assistance the Under-Secretary-General and **Emergency Relief Coordinator** (USG/ERC) will be responsible for the oversight and acts as the central focal point for governmental, intergovernmental and non-governmental relief activities.

The **ERC** has three primary tasks: humanitarian policy development and coordination; advocacy of humanitarian issues and provision of guidance and direction to UN Resident Coordinators (RC) and Humanitarian Coordinators (HC); and coordination of international humanitarian response

The ERC also chairs the Inter-Agency Standing Committee (IASC), a unique inter-agency forum for coordination, policy development and decision-making involving the key UN and non-UN humanitarian partners, including United Nations agencies, the International Red Cross and Red Crescent Movement, the International Organization for Migration, non-governmental organizations (NGOs), NGO consortia, and the World Bank. The IASC was established in June 1992 in response to resolution 46/182. General Assembly resolution 48/57 affirmed the IASC's role as the primary mechanism for the inter-agency coordination of humanitarian assistance.

Humanitarian Coordinator (HC)

In a country affected by a disaster or conflict, the ERC may appoint a Humanitarian Coordinator (HC) to ensure response efforts are well organized. The HC works with government, international organizations, non-governmental organizations and affected communities. An OCHA office will be established to support the HC.

The **HC** is the senior-most United Nations official in a country experiencing a humanitarian emergency. In most cases, the function is performed by Resident Coordinator who is usually also the Resident Representative of the United Nations Development Programme. At country level, while the primary responsibility for coordinating humanitarian assistance rests with national states, if international humanitarian assistance is required the **HC** or the **RC** – is responsible for leading and coordinating the preparedness and response efforts of humanitarian organizations (both UN and non-UN), whenever possible in support of and in coordination with national and local authorities.

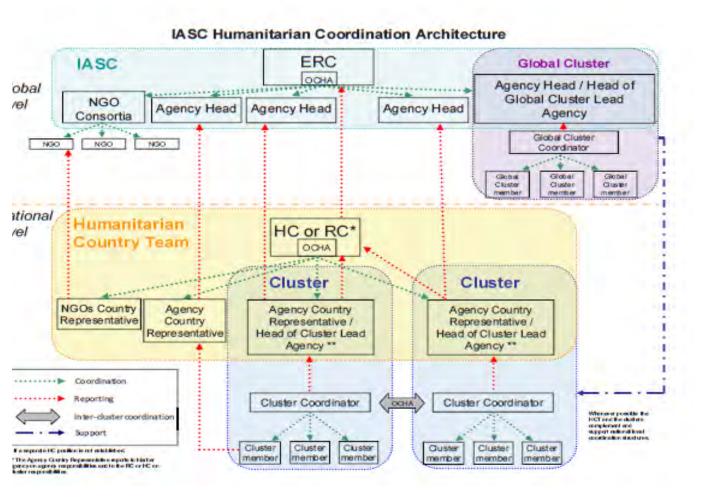
Clusters

Clusters are IASC-designated groupings of humanitarian organizations (both UN and non-UN) in each of the main sectors of humanitarian action. They operate at both global and country level. At the global level they are responsible for strengthening system-wide preparedness and coordinating technical capacity to respond to humanitarian emergencies in their respective sector. At the country level clusters ensure that activities of humanitarian organizations are coordinated; serve as a first point of call for the Government and the RC or HC, and as a provider of last resort in their respective sector.

Office for the Coordination of Humanitarian Affairs (OCHA)

The Office for the Coordination of Humanitarian Affairs (OCHA) is a Department of the UN Secretariat that supports the ERC at the global level and RCs and HCs at the field level by coordinating humanitarian action, advocating for the rights of people in need, developing humanitarian policy and analysis, managing humanitarian information systems, and managing humanitarian pooled funds. OCHA often supports HCs through a Country Office and RCs through its Regional Offices.

The **Humanitarian Country Team (HCT)**, chaired by the RC or HC, is an operational decision-making forum composed of operationally relevant humanitarian organizations (both UN and non-UN) and focus



From Handbook for RC and HC on emergency preparedness and response (IASC 2010)

INTERNET Information on emergencies

Global Disaster and Alert Coordination System (GDACS)

This web-based platform alerts the international community of major sudden-onset disasters and facilitates the coordination of international response. It contains preliminary disaster information and electronically calculated loss and impact estimations. GDACS can be accessed at http://www.gdacs.org

ReliefWeb

This is an online gateway to timely, reliable and relevant information (documents and maps) on humanitarian emergencies and disasters. ReliefWeb can be accessed at http://www.reliefweb.int

UN Disaster Assessment and Coordination (UNDAC) Team

After an emergency the affected Government, the RC or the HC through OCHA can request assistance from the UNDAC team The United Nations Disaster Assessment and Coordination (UNDAC) is part of the international emergency response system for sudden-onset emergencies. The HC can request the deployment of an UNDAC team to help coordinate relief efforts even if the Government has not requested international assistance UNDAC was created in 1993. It is designed to help the United Nations and governments of disaster-affected countries during the first phase of a sudden-onset emergency. UNDAC also assists in the coordination of incoming international relief at national level and/or at the site of the emergency.

UNDAC teams can deploy at short notice (12-48 hours) anywhere in the world. They are provided free of charge to the disaster-affected country, and deployed upon the request of the United Nations Resident or Humanitarian Coordinator and/or the affected Government. Team members are funded through pre-arranged agreements with UNDAC member agencies and Governments. The team normally stays in the affected area for the initial emergency response phase (two to four weeks). The Netherlands is a member country of UNDAC and it has a partnership with UNDAC through the International Humanitarian Partnership.

Assessment, coordination and information management are UNDAC's core mandates in an emergency response mission. Specifically in response to earthquakes, UNDAC teams set up and manage the On-Site Operations Coordination Centre (OSOCC) to help coordinate international Urban Search and Rescue (USAR) teams responding to the disaster - essential if USAR assistance is to function effectively. This concept was strongly endorsed in United Nations General Assembly resolution 57/150 of 16 December 2002, on "Strengthening the effectiveness and coordination of international urban search and rescue assistance".

Provider of last resort principal

The 'provider of last resort' concept is critical to the cluster approach, and without it the element of predictability is lost. Cluster Lead Agencies are responsible for addressing critical lifesaving needs in circumstances where no other agency is able to do so. This provider of last resort principal is subject to preconditions that affect any framework for humanitarian action, like unimpeded access, security, and availability of funding.

Annex 4. WASH cluster annual workplan and strategy 2006/2008

The Global WASH Cluster workplan 2006/8 has been formulated into five strategic areas, covering outstanding capacity gaps identified by the WASH cluster working group. The five strategic areas where increased capacity is required are:

- 1 WASH Sector Co-ordination and Advocacy
- 2 Information Management and Standards Policy
- 3 WASH Sector Capacity for Humanitarian Response
- **4 WASH Sector Preparedness**
- 5 WASH Sector Best Practice and Learning

Within those 5 strategic areas the global WASH cluster initiated a number of 15 so called projects; most of those projects were led by different NGO's.

- Project 1 Cluster Coordination (main output is the WASH Cluster coordinator Handbook)
- Project 2 Information Management (main outputs include tools as standard assessment and reporting formats)
- **Project 3 Hygiene Promotion** (Main output includes standard trainings e.g. for hygiene promoters trainings and visual aid library)
- Project 4 Capacity Mapping (output includes Capacity mapping tools and a Global Survey of Gaps in WASH Capacities for Emergencies (English) and Result Report Sep. 2008)
- Project 5 Emergency WASH Materials (output Proposed WASH Cluster Stockpile by individual kit specification)
- Project 6 Training for Capacity Building (output includes, technical training material)
- Project 7 Learning (outputs includes WASH cluster lessons learned and WASH response to rural and urban floods)
 Project 8(a) Right to Water and Sanitation in Emergencies (outputs include handbook Human rights to water and sanitation in emergencies)
- Project 8(b) Advocacy (outputs includes WASH Cluster Advocacy in Emergencies Issues and Mapping paper)
- Project 8(c) Resource Mobilization (output draft recourse mobilization handbook)
- **Project 9 Technical Support Services** (aim of developing a strategic framework for Technical Support Services (TSS). The TSS here refer to relevant, accurate and practical technical advice (e.g. information, data, and short term deployment of experts) to WASH practitioners in the front line during a humanitarian emergency.
- **Project 10 Best Practice and Guidance**
- **Project 11 Environment**
- Project 12 Early Recovery (output paper; WASH Cluster Early recovery setting parameters)
- Project 13 Disaster Risk Reduction (outputs DRR main-steaming guidelines and tools)
- Project 14 Accountability (outputs includes checklist and roles and accountability matrix with some of the other clusters)
- Project 15 Rapid Response Team (output operational rapid response team)

Annex 5. RRT deployment 2008-2010

Country	Position	Duty Station	Seconding Agency	Date deployed	Duration
				EDA	(days)
Zimbabwe	WASH cluster Coordinator	Harare	ACF	2-Dec-08	72
Occupied Palestinian Territory	WASH cluster Coordinator	Jerusalem	OXFAM	12-Jan-09	59
Occupied Palestinian Territory	WASH cluster Peer Review	Jerusalem	OXFAM	December 09	10
Myanmar	WASH cluster Coordinator	Rangoon	CARE	22-Feb-09	56
Sudan	WASH cluster Support	Khartoum	ACF	5-Apr-09	106
Bangladesh	WASH cluster Support	Dhaka	OXFAM	18-Jun-09	61
Yemen	WASH cluster Advisor	Saana	Care	22-Aug-09	43
Philippines	WASH cluster Coordinator	Manila	OXFAM	4-Oct-09	60
Indonesia	WASH cluster Support	Padang	Care	10-Oct-09	56
El Salvador	WASH cluster Coordinator	El Salvador	CARE	28-Nov-09	20
Haiti	WASH cluster Coordinator	Port au Prince	ACF	14-Jan-10	57
Dominican Republic	WASH cluster Coordinator	Santo Domingo	OXFAM	16-Jan-10	31
Haiti	WASH cluster Sanitation Coordinator	Port au Prince	OXFAM	16-Feb-10	24
Haiti	WASH Sub-National cluster Coordinator	Port au Prince	CARE	9-Feb-10	36
Pakistan	WASH cluster Support	Islamabad	OXFAM	9-Aug-10	61
Pakistan	WASH cluster Coordinator	Islamabad	ACF	22-Aug-10	56
Benin	WASH cluster Coordinator	Cotonou	ACF	3-Nov-10	30