The Dutch Coalition for Humanitarian Innovation (DCHI) strives to increase the impact and reduce the cost of emergency action through innovation with public and private partners in the Netherlands.

You only need to look to Syria, Congo, Yemen or South Sudan to see that the needs of humanitarian aid in today’s world have changed and grown. More than 134 million people across the world need humanitarian assistance and protection, and more funding than ever before is required to help them. In order to ensure the response is attuned to the needs of those we are trying to help, the humanitarian sector needs to adapt to the changing circumstances.

The humanitarian sector cannot face this challenge alone. Cooperation between NGOs, the private sector, and knowledge institutes is needed to become more effective and bring humanitarian aid to the next level. There are numerous smart innovations already developed by businesses, start-ups, and knowledge institutes. Humanitarian organizations can benefit by combining their needs with these innovations and bringing these solutions to a humanitarian setting.

Our firm belief in the synergy of these crossovers is the reason why the Dutch Coalition for Humanitarian Innovation (DCHI) was founded. DCHI is a coalition of over 300 parties, which stimulates cross-sectoral cooperation and organizes events and accelerators that will lead to innovative solutions for humanitarian aid and ultimately strengthens all parties involved.

The theme of our 2018 event is therefore ‘Opening up: Growing by Working Together’. At our Annual Event, we will experience how we can benefit from each other’s knowledge and experiences, and how we can work and grow together to further improve the aid given to those who need it most.

As Chair of the DCHI Board, I am proud of the projects and innovations we have helped develop in the past few years. Our global impact is real and tangible, as you can read from the various examples in this magazine. With the growth of our coalition, new innovations will continue to improve our ability to assist and protect those in need. I hope that you will join us on our humanitarian mission.

Suzanne Laszlo
Chair of the DCHI Board
Director of Unicef Netherlands
DCHI AWARD FOR BEST HUMANITARIAN INNOVATION

The following 8 projects have been nominated for the DCHI Award for Best Humanitarian Innovation 2018, which rewards the best innovative concepts that can help the most vulnerable people impacted by humanitarian or natural crises. These innovations are life-saving or life-improving and engage the private sector and/or involve input from affected communities using data. The award is organised in collaboration with The Spindle.

The projects are also in the running for the PUBLIC AWARD. During the DCHI Annual Event, you will have the opportunity to get to know these projects better and vote for your favorite.

Quotidian Early Warning Solutions / Oxfam India

In South Asia, poor early warning dissemination is one of the major reasons for high casualties in disasters. Alert towers are an expensive solution that do not guarantee 100% coverage. Oxfam India has developed a low-cost solution that integrates the early warning system with pre-existing infrastructures and home appliances, making affordable and widespread outreach possible. The innovative solutions are: lifeboxes - converting TV set top boxes into siren alerts, and lifetowers - converting street lights into warning systems. Both will be controlled by VNMS, a decision support system that is also designed for last mile coordination and provides access to critical information on development schemes.

Words of Relief / Translators without borders

Many vulnerable people lack the means to communicate their needs or access vital information in the right language when they need it. Translators Without Borders created Words of Relief in 2013. It has reduced information barriers, improved use of technology in marginalised languages, increased humanitarian commitment to language, and helped to improve programming for vulnerable individuals. In the coming year, machine translation engines will be built and used in marginalised languages, enabling faster, self-directed communication. It will make response more effective and accountable by enabling two-way communication and content delivery, online and offline.

Optimus / World Food Programme

WFP feeds more than 90 million people in over 80 countries annually. This involves an extremely complex global supply chain. Optimus is a web application developed by WFP to optimise its food assistance programmes. It looks at the design of the food basket as well as the sourcing and delivery plan to maximise beneficiary outcomes given the various operational constraints. Using advanced analytics, Optimus combines data from dozens of sources and helps WFP explore alternatives, identify their impact, and make evidence-based decisions. So far, Optimus has been a game changer for WFP.

People responding together / HumanSurge

Organizations responding to disasters are often unable to quickly find qualified and available humanitarian professionals, leading to inefficiencies and delays. HumanSurge is an open-platform solution that transfers verified skills, work-experiences, and endorsements into a shared trust network amongst aid workers and organizations to improve the quality and time-effectiveness of humanitarian responses. Additionally, HumanSurge is committed to localisation and increasing the local response capacity. HumanSurge has recently partnered with the Turkish NGO “Support To Life,” a founding member of the NEAR Network.

Can’t Wait to Learn / War Child

Millions of children worldwide miss out on education. Affected by war and conflict, multiple barriers prevent them from unlocking their potential. Can’t Wait to Learn delivers tailored education through immediate, research-driven, curriculum-based interventions that use gaming technology on tablet computers. Uniquely, the games are co-created by children to be culturally, contextually, and curricula appropriate. So far, the model has demonstrated improved and faster learning outcomes at a lower cost than other approaches: children learn, and they learn fast. By scaling up to different settings, we can bring education to millions of children.

AidInnov / Delalune Consulting

Innovation is seen as the solution for the humanitarian sector, where needs are rising and resources are limited. But innovations are springing up all over the place, and collaborations are not the norm. AidInnov is a forthcoming online platform for responsible innovation in the humanitarian sector. It will include smart lookup and search functionalities and the possibility to give feedback, discuss particular solutions, or find new collaborators. AidInnov will be the one-stop shop for any solution/tool/innovation/product in aid, for donors, humanitarians, entrepreneurs, and researchers. It will facilitate true collaborations and partnerships.

Social mapping in an emergency response / Médecins Sans Frontières

Isolated places, such as Nsanje district in Malawi, are often not covered by Google or other satellite map, making it very difficult to access the people and help them. In the 2014 floods, there was almost no geographic information for aid organizations to plan their interventions. In order to prevent this from happening again, MSF is using social mapping in combination with geographical information systems to map the country. A comprehensive analysis of the situation is created, enabling better decision making and efficient utilisation of resources. In previous MSF programs, social mapping has improved the quality of the data because it leverages the local knowledge and experience, and empowers local communities.

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U Matter / Upinion

Aid can only be efficient when you include the beneficiaries you want to reach and support. So far, these populations have not been engaged sufficiently or systematically. Upinion - U Matter wants to change this with the first research platform that uses social messaging to build communities that help organizations get insights from their beneficiaries. It enables organizations to contact and monitor thousands of respondents at the same time, have personal conversations to gain a deeper understanding, and reach people in remote or dangerous areas. All at a fraction of the cost of current needs assessments. By empowering the beneficiaries, humanitarians can provide tailor-made services to achieve maximum impact.

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121 is a groundbreaking cash transfer platform designed to effectively connect donors with beneficiaries in crisis situations. The platform is powered by open source software and utilises blockchain technology to provide rapid cash transfers. 121 can be adopted in a variety of emergency contexts and allows for more efficient, effective, and transparent provision of cash support to people in need.

**THE INNOVATION**

The development of 121 was started by the Red Cross - 510 team and their technical partner Tykn. Dorcas joined the development and brought Tearfund, Help a Child, and Disburse on board with their fund management platform. Several universities and PWC are also involved with their specific research and compliance expertise.

The core of the system is a sophisticated kernel system that handles the registration of beneficiaries and validation of needs, assigns digital identities, and allocates cash using vulnerability and cash allocation algorithmics. The kernel system is connected to context-specific first and last mile solutions. They handle donation possibilities and the ways beneficiaries can redeem digital cash or spend it directly on goods and services.

The result is two-fold: beneficiaries receive support closely connected to their needs while retaining their anonymity, and donors and humanitarian organizations are able to better coordinate and allocate cash transfers to those who need them most. The addition of integrated protection measures and context-specific donation and payment options gives 121 the ability to transform the supply chain: cutting out intermediaries and ultimately helping communities recover more quickly.

Supported by DCHI, 121 is creating new roles for local actors who will take the lead in validating identities and needs. The innovation, which brings together partners from within and outside the humanitarian sector, has an open-source license, which enables our ambition to scale up and replicate rapidly. The platform will be piloted in Malawi and Iraq in 2019/2020.
Where does the current need for innovation come from and how is it organised in the Netherlands Armed Forces?

The world in which the Netherlands Armed Forces operates is more dynamic and versatile than ever before. The geopolitical landscape is changing, our economies are increasingly interdependent, and technology is developing at an unprecedented pace, exponentially even, potentially with disrupting effects. These developments make it increasingly clear that we cannot afford to develop slowly; we must innovate and renew continuously in order to be able to respond decisively to the threats of today and tomorrow.

Each of the branches of the Netherlands Armed Forces has a unique approach to innovation. Concept Development & Experimentation (CD&E) is the driving organization for innovation in the Royal Netherlands Army. Its mission is to guarantee that the operational units within the army will continue to be dominant and relevant during their missions and operations. In order to achieve this, CD&E conducts experiments with military, commercial, and humanitarian partners.

How did you experience the cooperation with other parties during the response to the hurricane on St. Martin?

I believe that the answer to today’s challenges – and also security challenges – can be increasingly found outside the armed forces. After the devastating hurricane Irma, we used this idea during the 2017 Startup Fest to challenge all sorts of organizations and enterprises not only to rebuild Saint Martin, but to do so in a hurricane-proof fashion. This helped increase the resilience of the Saint Martin society, including the organizations that play an important role in the disaster relief.

How can innovation help to tackle such disasters more effectively?

The scale, unpredictability, and complexity of disasters like a hurricane can make it difficult to respond effectively. Innovation can help us communicate more effectively, provide better tools and hardware, and develop more effective response strategies. In sum: to increase resilience.

Can you tell us about the Whiteflag Project and the partners involved?

Through the Whiteflag project, we believe we can prevent the loss of lives in disaster and conflict areas around the globe, that may occur due to a lack of information. This can be achieved by providing a reliable and fully neutral means to digitally communicate pre-defined signs and signals using blockchain technology, for both combatant and neutral parties in conflict zones. The blockchain ensures that no single party can control or manipulate the Whiteflag protocol. All persons and organizations that contributed to the initial development of the Whiteflag Protocol did so disinterestedly. The protocol will be dedicated to the public domain, so anyone is free to implement and use Whiteflag.

What is the significance of DCHI for the Netherlands Ministry of Defense?

The humanitarian sector and the Netherlands Armed Forces share a number of common interests and as a result, improving cooperation becomes mutually beneficial for all parties involved. By innovating together, we can share valuable experiences and perspectives so that we can cooperate more effectively during future operations. DCHI provides us with a unique coalition that facilitates this type of cooperation. And we provide DCHI with a tool and way of thinking by translating a requirement for innovation into a tangible solution, for instance through experimentation or a prototype. Connecting networks and organizations is key when it comes to innovation.
Because of innovation and cooperation, The Hague is one of the most important cities in the world in the area of Peace, Justice, and Security in the 21st century. DCHI facilitates and stimulates both.

SaskiaBruines
Deputy Mayor of The Hague

DCHI has challenged us to utilise our data science skills for the humanitarian sector. This new context requires us to adapt existing technologies in ways we would not have otherwise envisioned.

Arpad Rozsas
CEO PNGK
(Propelled by Need Guided by Knowledge)

We believe Dutch NGOs should be at the forefront of delivering change and developing new, innovative solutions in the humanitarian sector. Our DRA Innovation Call (DIF) is aimed at making the work we do more efficient - in close cooperation with other organizations, private and knowledge partners. By joining forces, we can contribute to a better and more just world.

Nok van de Langenberg
Chair Dutch Relief Alliance (DRA)

Through our partnership with DCHI, the TU Delft Global Initiative and the Humanitarian Technology Lab seek to use science and technology for finding concrete solutions for problems faced by people in developing countries and humanitarian organizations responding to crises worldwide.

Prof. dr. B.A. (Bartel) Van de Walle
Faculty of Technology, Policy and Management at TU Delft

Cross-sectoral cooperation can make a huge difference when it comes to using innovation effectively in the humanitarian sector. DCHI plays an important role as a broker in this regard.

Hans de Boer
Chair VNO-NCW

Never has innovation in humanitarian aid been so relevant, for a record number of vulnerable people are depending on relief. We therefore need to make substantial steps in the use of new technologies and ways we work. Bringing governments, business, NGOs and scientists together is the way forward. To do things better and faster, to make a greater impact. So that every person in need has access to sufficient support.

Sigrid Kaag, Minister for Foreign Trade and Development Cooperation of the Netherlands
The colossal gap between humanitarian needs and available funding is an enduring problem in the NGO sector. For this reason alone, it is crucial that funding is directed towards the right programmes - cost-effective interventions that have the biggest impact on the most people. Whilst there is no shortage of motivation to find cost-effective ways to deliver assistance, a critical gap exists: methods used to estimate value for money (VfM) are not consistent across agencies or programmes.

The ultimate goal of the SCAN tool is to increase impact. An increase in the volume and quality of VfM evidence will enable organizations with limited funds to achieve greater impact for beneficiaries.
INSIGHTS AND ENERGY AFTER THE ENERGY MEET-UP

In collaboration with the Ministry of Defense and RVO (Netherlands Enterprise Agency), DCHI organised an Energy Meet-Up in the summer of 2018. The goal was to inform, inspire, and create opportunities to support the energy transition in the humanitarian sector, so that both crisis-affected people and humanitarian organizations can have access to energy in ways that are safe, cost-efficient, healthy, and sustainable.

With the lessons from Edwin, Derk, Rob, and Martijn in mind, the audience discussed sustainable energy solutions in humanitarian efforts. That this is by no means an exercise that humanitarian organizations have to go at alone, became clear from the many participants from companies and centers of expertise. As part of an innovation market, companies and innovators presented themselves, including Africa Clean Energy, Simgas, Alfen, IbisPower, Think Innovation, Rural Spark, Offgrid Box, Power2Aid/Alliander, Independent Energy, and Bredenoord.

The participants came to the conclusion that collecting and sharing of evidence for the business case, the different solution models, and lessons learned from other sectors is crucial for making this transition a success. Furthermore, joint advocacy for integration of this issue in humanitarian programming, and finding funding in order to cover the high initial investment, are also needed and will have the greatest impact when done together.

The extensive networking that continued afterwards proved that there are many opportunities for collaboration for humanitarian organizations, the private sector, government institutes, and knowledge institutes. DCHI supports the energy transitions in the humanitarian sector by bringing together different parties and facilitating discussion and collaboration. Only through a joint effort can we ensure that the solutions are sustainable and have real impact.
The need for clean drinking water and hygienic sanitation is not only a ‘humanitarian’ challenge. The European Space Agency (ESA) is doing research into solutions for long-term space missions and founded project MELiSSA in the 1990s to translate the space solutions, research, and technologies into solutions and innovations that counteract global challenges such as waste recycling, water provision, and food production in harsh environmental circumstances. MELiSSA’s mission is to recycle every waste stream in order to create necessities for life.

THE INNOVATION

By offering access and support to the space technologies and their application and deployment in current day challenges, new opportunities arise. For example, the space technology developed to create closed loops in water systems and treat wastewater could be used to provide cost-efficient solutions with little to no environmental impacts to process human urine and faeces, and produce water and essential nutrients.

From this, the spinout ‘SEMiLLA Sanitation Hubs’ has been developed in prototype by MELiSSA (ESA), HAS, and University of Ghent. It is an off-grid working modular closed wastewater treatment unit that can convert sanitary wastewater into clean water and nutrients for food production in remote settings. The innovation of SEMILLA Sanitation Hubs contributes to the mission of MELiSSA: it creates closed loops. ESA ultimately wants its projects and programs to create a more sustainable world.

SEMiLLA Sanitation Hubs has reached out to DCHI in order to find partners within the humanitarian sector who are willing and able to test the system, so that it can be compared to other WASH solutions and can be further developed in order to fit the right context.

The expected impact is in cost efficiency (life necessities are made out of waste), improved hygiene, increased water accessibility, and new business opportunities for residents as the nutrients and compost can be used for food production.
In today’s world, many innovations are being developed by companies and knowledge institutes which can be used for different settings. Humanitarian organizations can benefit by combining their needs with these innovations and adapting these innovation to humanitarian action.

DCHI shows that by bringing parties from different sectors together, more impact can be made. The coalition stimulates cross-sectoral cooperation and organises events and programs that will lead to innovative solutions for humanitarian aid with a global impact. DCHI is recognised as the driving force in the Netherlands for effective humanitarian innovation.

Join our mailing list via dchi.nl/contact or follow us on Twitter and LinkedIn to stay on top of the latest news, events, accelerators, and grant programs.

HISTORY

12-2-2015
At the Dutch Humanitarian Summit, a call for public-private partnership and joint innovation of emergency action to face the global humanitarian challenges is made by VNO-NCW, The Netherlands Red Cross, and the Ministry of Foreign Affairs.

23-3-2016
DCHI is launched. The Netherlands Red Cross, Unicef Netherlands, Care Netherlands, VNO-NCW, the Ministry of Foreign Affairs, and the Municipality of The Hague join the DCHI board because they believe cross-sectoral cooperation is necessary for the humanitarian challenges at hand.

1-6-2017
The DCHI Summer Event 2017 takes place and the Ministry of Defense joins the DCHI board.

15-2-2018

21-6-2018

2-10-2018
DCHI Annual Event 2018

ABOUT DCHI

Join our community

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