



**TÉLÉCOMS  
SANS FRONTIÈRES**

Annual Report 2018

*communications for life*

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# Message from the President



“ *In a world in which technological advancements bring unprecedented opportunities, TSF remains at the forefront of the telecommunications for emergency sector, ready to always break new ground to design and implement innovative technical solutions to help the most vulnerable and hardest to reach people not lose their hopes.* ”

Jean-François Cazenave  
President of Télécoms Sans Frontières

During the past 20 years, millions of people around the world have seen their lives devastated by natural or human-made disasters. Due to rapid-onset emergencies or long-term humanitarian crises, families have been separated, children deprived of their right to education, vulnerable groups have been enduring the consequences of situations of prolonged instability and millions of people have been forced to leave their home countries in the pursuit of a brighter future.

In the aftermath of earthquakes, typhoons or tsunamis, in conflict affected areas or during massive population displacements, since its foundation in 1998, Télécoms Sans Frontières (TSF) has been working to provide hope and relief to the affected populations through technologies and telecommunications.

When a disaster strikes, communication is essential. It supports the humanitarian response, by allowing relief workers to effectively coordinate and carry out their operations on the ground. It brings hope to isolated populations by allowing them to regain contact with their loved ones and to hear familiar voices, which can be of paramount importance when everything around is devastated or dangerous. Through satellite connections and humanitarian calling operations, TSF has been bringing glimmers of hope where human or natural disasters took it away through the power of communication and innovation. We have been bringing communications for life, anytime, anywhere, when it's needed and where it's needed.

During the last few years, the humanitarian aid landscape has been changing and our beneficiaries' needs evolving. In order to always ensure the deployment of the most suitable solutions for our beneficiaries and thanks to the support our partners, supporters and volunteers, over the years we have been adapting cutting-edge technological solutions to meet these needs. We have been constantly working to realise our common vision; a world in which technologies and telecommunications will continue to allow the most vulnerable people to find hope and dignity.

In 2018, TSF provided support in major humanitarian crises, from massive population displacements in Central America, Europe and Latin America to the several natural disasters hitting South-East Asia. In parallel we reaffirmed our solid presence in support of the most vulnerable groups, children and women in particular, affected by long-term crises such as the Syrian conflict or the food crises in Central America, and continued to develop our multi-sectoral information technology centres in Madagascar and Burkina Faso.

In a world in which technological advancements bring unprecedented opportunities, TSF remains at the forefront of the telecommunications for emergency sector, ready to always break new ground to design and implement innovative technical solutions to help the most vulnerable and hardest to reach people not to lose their hope.



Who we are

# THE FIRST EMERGENCY TECHNOLOGY NGO



Télécoms Sans Frontières was founded 20 years ago as the world's first NGO focusing on emergency-response technologies.

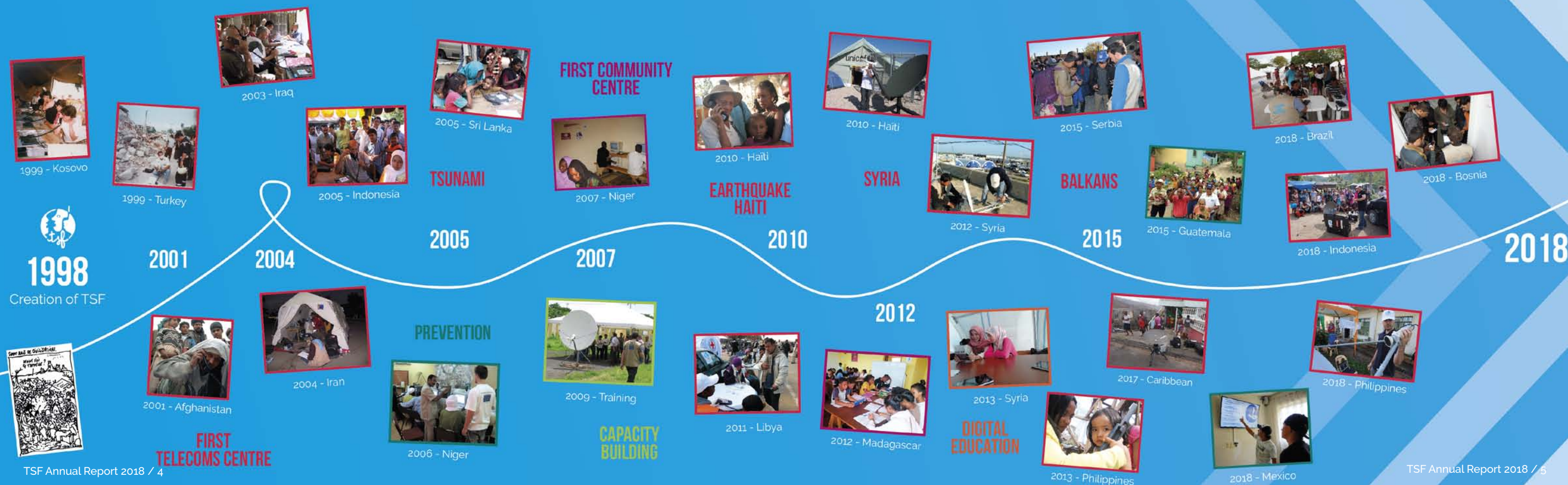
We empower populations and responders in humanitarian crises by delivering reliable connectivity when and where it is needed most. We give affected people the possibility to contact their loved ones and begin to regain control of their lives, and we build rapid-response communications centres for local and international responders.

Thanks to 20 years of experience in the field, complemented by field teams with high-level technical skills, TSF can rapidly adapt its response to different crises and beneficiaries' needs. In its early days, TSF focused on the first stage of the emergencies. This culture of emergency response missions is core to TSF's identity, but we have grown and changed as the role of technologies in emergencies has expanded.

Today, we continue with this core activity, but we also develop, adapt, and make available innovative and cost-effective solutions to support migrants, refugees, and displaced people; foster educational opportunities for unconnected or underconnected communities to promote autonomy and sustainable development; and empower other NGOs, UN agencies, and local governments to advance healthcare, women's rights, and food security through digital tools.

TSF is recognised around the world as leader in emergency technologies and telecommunications. We are a member of the United Nations Emergency Telecommunications Cluster (UNETC), a partner of the Office for the Coordination of Humanitarian Affairs (UNOCHA) and the Association of Southeast Asian Nations (ASEAN), and a member of the US State Department's Advisory Committee on International Communications and Information Policy.

Since its creation in 1998, TSF has responded to over 140 crises in more than 70 countries, providing communication means to over 20 million people and nearly 1,000 NGOs.







# An interview with Télécoms Sans Frontières' co-founders Monique Lanne-Petit and Jean-François Cazenave on the highs and lows of the organisation's 20 year history

## Tell us about how it all started

"Télécoms Sans Frontières has always been a human scale organisation. We started our operations from a real need we identified in the field, with nothing but our passion for giving a voice to people silenced by humanitarian disasters. Throughout the years, technologies and telecommunications evolved, and we evolved with them, but the same passion, shared by the whole team, remained unchanged. Seeing that we are still making a difference in the lives of people in need is invaluable. Our work as humanitarians began back in 1991. At the time we both had full-time jobs in the public and private sector and we would use our spare time to provide aid in Eastern Europe and the Middle East. We had actually founded two other organisations before TSF - Solidarité Pyrénéenne and S.O.S. Action Humanitaire."

## So, how did these two organisations morph into what we know today as Télécoms Sans Frontières?

"We never tire from telling this story. The observation was simple – when we were in the field providing general humanitarian aid, people would approach us gingerly. In their hand was a slither of crinkled paper that they would remove from inside their shoe. Holding out the weathered paper, they would point to the number that was written on it and say, "When you get back home, promise me you will call this number. Promise me you will call my wife, my daughter, my mother, father, friends and neighbours, and let them know where I am, that I am alive and well". Such instances became less and less isolated, and as the need for exposed and vulnerable people to communicate became more and more apparent, we created Télécoms Sans Frontières."

## How did you go on to turn what was essentially a group of people with a satellite phone into a fully-fledged NGO?

"The needs on the ground were unmistakeable. The issue we had was finding the necessary financial support in order to help us grow. We signed our first partnership with a private-sector company in 2000, and from that moment onwards we were able not only to purchase more equipment, but also employ our first staff members, open our first offices and brush up our image. We then went on to sign several more partnerships with the private sector and continue to grow and develop our organisation."

## We get the impression that the partnership with the private sector is something that is particularly important to you?



"Absolutely! We are incredibly lucky to have a portfolio of loyal, understanding and committed partners. They are all global leaders in their domain, principally from the satellite and mobile communications sector. They provide us with the necessary means to be as nimble, flexible and rapid as we can, in order for us to deploy whenever and wherever in under 24 hours and help spare lives in the immediate aftermath of a disaster. Beyond the support we receive from the private sector, TSF also has developed a strong relationship with the public sector and can benefit from, among others, European funding for specific missions or projects."

## Has this support allowed you to branch out and respond to a wider range of humanitarian issues?

"It has. Whilst our core mission remains unchanged, the ways in which we provide communications aid today has somewhat evolved and continues to do so with every mission that we undertake. We are required to respond to all types of communications trends, from social media to communications apps such as Messenger and WhatsApp, whilst taking into account the evolving usage habits of the humanitarian community – Cloud sharing and VoIP services for example. All of that requires higher bandwidth capacities and a heavier involvement of our technical teams. Whatever we do and whichever service we provide, the beneficiary always remains at the heart of our work and we do everything to ensure that his or her needs are met. Beyond emergencies we now apply technology to a range of pressing humanitarian issues, from education to food security."

## What are your highlights from the past two decades?

"One thing that stands out the most and one thing that we are both particularly proud of is that fact that TSF has been present in all major disasters. We have covered over 70 countries and countless beneficiaries. The missions that stand out for us are our ongoing response to the Syria Crisis, our key involvement in the aftermath of hurricane Irma in the Antilles in 2017, the Libyan conflict in 2011, the Haiti earthquake in 2010 that mobilised TSF in its entirety for weeks on end, and the Tsunami in 2004 where we covered the three affected countries simultaneously. All of our missions are of utmost importance to us, whether they last 6 years like in Syria, or just two weeks. The most important thing for us is to ensure that the requirements are covered, and for this, we need to be on the ground, interacting with our beneficiaries."



## What would you say was the biggest hurdle you have faced?

"Twenty years ago the idea of using technologies and telecommunications in the humanitarian field was seen as controversial and untested. It is now firmly established. Largely as a result of TSF's efforts, public, private, and NGO actors no longer see technologies and telecommunications as a luxury in emergency response and humanitarian action—they understand them to be an essential priority. In overcoming this obstacle, we enabled engineers, technicians and programmers to become part of the humanitarian world and that is something we are particularly proud of. Despite these obstacles and the scepticism of many, we have always remained committed to our core mission since our foundation: to give people a voice, to allow them to make the right decisions to get through humanitarian crises and to provide reliable telecommunications for a more effective humanitarian response."

## We can see that Télécoms Sans Frontières has branched out quite a lot since its initial calling operations 20 years ago. How do you see the future of the NGO?

"Since its creation, TSF has been committed to constantly innovate in order to address a changing technological and humanitarian landscape. Being on the ground quickly, effectively, and consistently makes TSF different from any other technology-oriented NGO, and allows us to demonstrate how technologies and telecommunications alleviate families' pain, improve the operations of other first responders, and save lives. Relentless innovators, TSF teams work hard to adapt innovative technologies to our beneficiaries' needs. They experiment on how to integrate the latest new commercial developments into our field work and they collaborate directly with manufacturers and service providers so they can maximise the effectiveness of their products in emergency situations. When off-the-shelf commercial products are not available or do not fit with field requirements, our teams also work on the development of in-house solutions. The result, is the ability to meet our beneficiaries' needs in a wide range of humanitarian contexts through tailored solutions. TSF is a human-scale organisation. We continue to adapt our response to the needs of the field, depending on each context as well as on the available innovative tools; always committed to a responsible use of these technologies."



# TSF ACTIONS

Leveraging the advantages of the latest technologies and telecommunications to respond to the emerging needs of the humanitarian field.



## DISASTER RESPONSE

Emergency interventions following natural or man-made disaster are TSF's core field of intervention. Our team can deploy anywhere in the world in less than 24 hours to help the local population as well as give support to other humanitarian actors present in the field.

Humanitarian calling operations, ambulant Wi-Fi, TSF Emergency call centre (TECC), Support to humanitarian coordination...



## CAPACITY BUILDING

Training workshops for NGOs and governments on the use of technologies for humanitarian response.

UNDAC & ASEAN Coordination and assessment, ICT trainings for relief workers, Post-emergency trainings, Enhanced Response Capacity Building...



## PROTECTION & ASSISTANCE

Tailor innovative tools to humanitarian contexts and to the constraints of the field, in order to respond to specific needs and to empower communities.

Humanitarian Information Display System, Mobile Information System, VoIP, High Density Wi-Fi Services...



## EDUCATION

Educational projects supported by ICT tools to help boost schooling in emergency contexts.

mLearning Kit, extra curricular activities, Introduction to computer, digital educational classroom, Technical Clubs, Skills Belts...



## BRIDGING THE DIGITAL DIVIDE

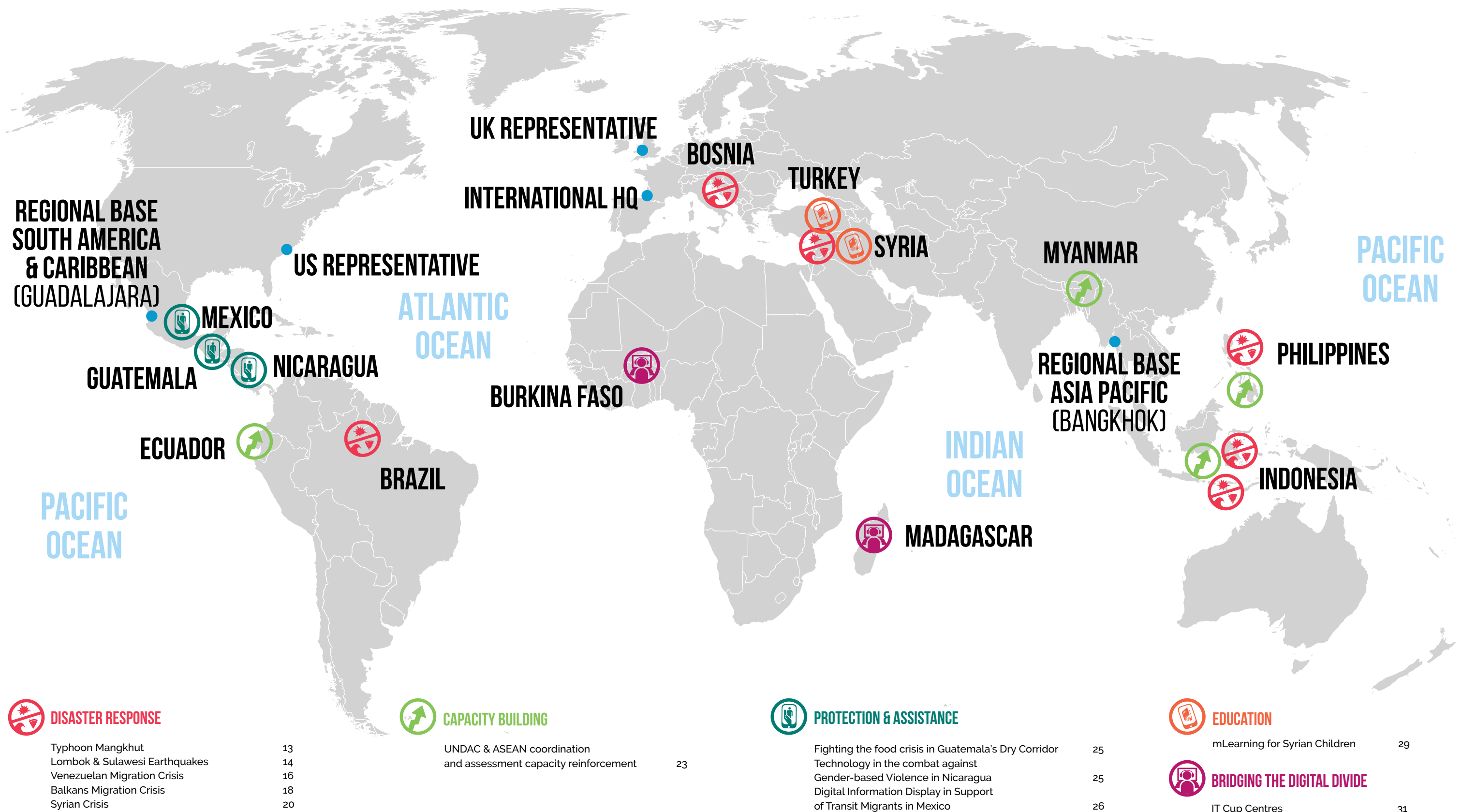
Supporting isolated communities with the use of ICT tools as a motor for local development.

Access to digital tools in community centres, Cybercafés, Introduction to computers, Digital holiday activities, Data collection



# TSF'S PRESENCE IN 2018

In 2018 TSF deployed across  
**13 countries**







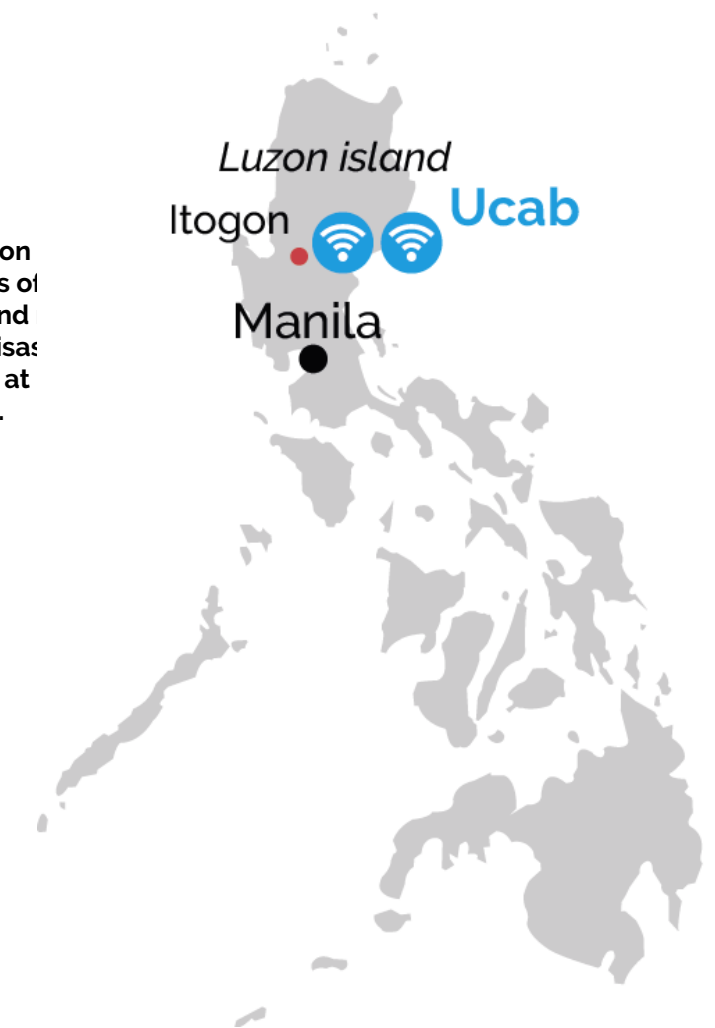
# Disaster Response

In the direct aftermath of sudden-onset disasters and humanitarian crises, a country's terrestrial network can be entirely or severely damaged, leaving entire regions completely isolated. Our rapid response teams deploy in less than 24 hours to any crisis zone to provide satellite communication means via internet or telephone to the affected populations, whilst ensuring that the humanitarian community is supported by the necessary communication means to secure the efficiency of their operations.



# Typhoon Mangkhut

On September 15, the north of the Philippines archipelago was hit by the most powerful typhoon year 2018. Torrential rains accompanied by gusts of wind caused floods, landslides, power lines torn off and cut. The National Disaster Risk Reduction and Disaster Management Council (NDRRMC) estimated that at 5.2 million people were affected by the typhoon.



## General Information

**Context:** Typhoon  
**Start date:** 14/09/2018  
**End date:** 19/10/2018  
**Areas of intervention:**

- Luzon Island
- Batan Island

**Activities:**

- Support to coordination
- Connectivity for population

## Key figures

**4 Internet centres**  
**20 organisations** supported  
**1,300 beneficiaries**



On September 17, TSF teams deployed to two sites: Itogon Municipality in the Cordillera Administrative Region (CAR) northwest of Luzon, and Batan Island in the Cagayan region. In the meantime, TSF transferred a VSAT to the municipality of Vintar and then remotely supervised its installation and functioning.

In the municipality of Itogon, in the village of Ucab, about 60 miners and their families were buried under a mudslide following the collapse of a mountainside. To enable hundreds of rescuers and volunteers to increase the efficiency of their research, TSF installed a VSAT connection providing free Wi-Fi access in the Rescue Centre located near the affected area. A second connection was set up in the village of Tuding, a few kilometres away, in a school and gymnasium transformed into a Coordination Centre and shelter.

A second team went to Batan Island to ensure free satellite connectivity following the complete shutdown of the local network. A Global Xpress was installed at the Basco Town Hall allowing the mayor, the governor and local employees to use the Internet and thus to communicate with the national authorities.

In these two sites, the connection didn't only support humanitarian actors, but also the affected populations, by allowing them to contact their relatives and seek for help when needed. In the town of Basco on the island of Batan, the 8,500 inhabitants found themselves totally isolated and cut off from the world. They were able to benefit from the free Wi-Fi covering an area of nearly 3,000m<sup>2</sup> around the town hall.

2018 has been Indonesia's deadliest year in a decade. Over 4,000 people died or were declared missing during the over 2,000 natural disasters across the archipelago.

The earthquakes which hit the islands of Lombok and Sulawesi, in August and September respectively, have been the deadliest disasters. Over 2,000 people died and hundreds of thousands were displaced.

On both occasions, TSF was among the first NGOs to arrive to the affected areas to support the local population and the rescue operations through satellite communication means.

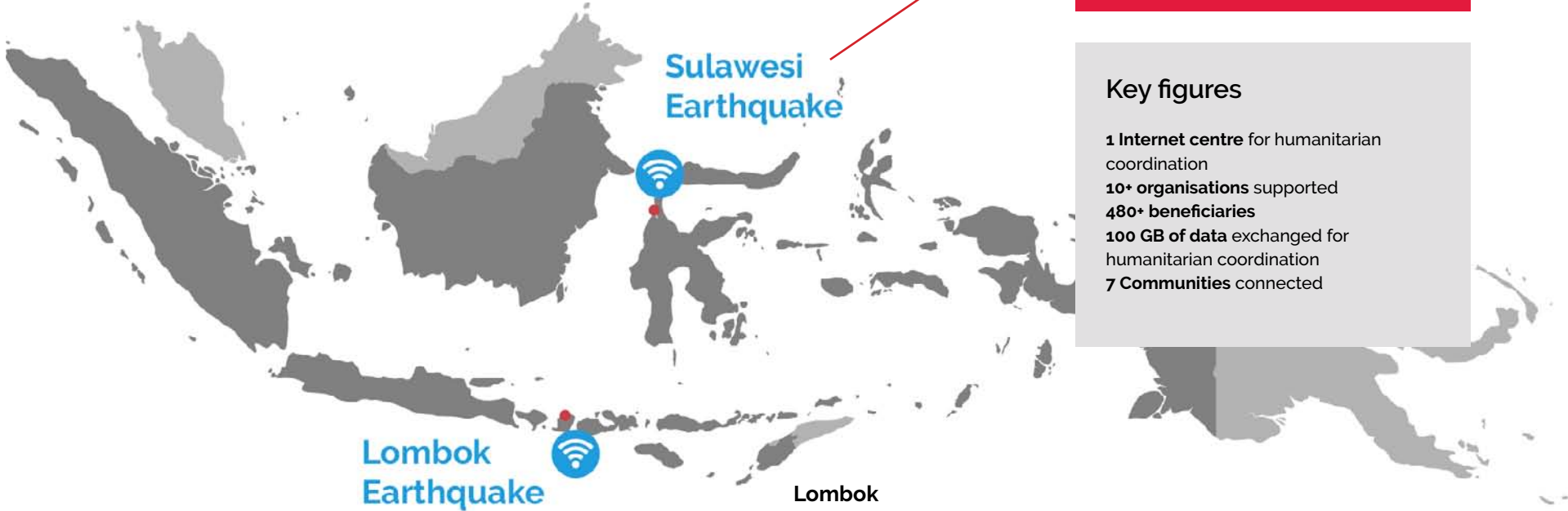


Rihanna, 26 years old.  
Teacher in a primary school.  
Victim of Sulawesi Earthquake - Sept. 2018

Thanks to the mobile connection that TSF set up in her village she was able to contact her colleagues on WhatsApp to know if they were safe, if her school was damaged and when it would reopen.

*“The electricity was off due to the earthquake. The whole city was dark. A lot of buildings were destroyed. The people were running and shouting in the street in panic. Parents were looking for their children; children for their parents. It was terrible.”*

# Lombok & Sulawesi Earthquakes



## General Information

**Context:** Earthquake  
**Start date:** 28/09/2018  
**End date:** 19/10/2018  
**Areas of intervention:** Sulawesi Island  
**Activities:**

- Support to coordination
- Humanitarian calling operations
- Ambulant Wi-Fi

## Key figures

**1 Internet centre** for humanitarian coordination  
**10+ organisations** supported  
**480+ beneficiaries**  
**100 GB of data** exchanged for humanitarian coordination  
**7 Communities** connected

## General Information

**Context:** Earthquake  
**Start date:** 06/08/2018  
**End date:** 19/09/2018  
**Areas of intervention:**

- Lombok Island
- Gangga Sub-district

**Activities:**

- Telecoms assessment
- Humanitarian calling operations
- Connectivity for medical coordination

## Key figures

**3 villages** covered  
**15,000** beneficiaries  
**1 medical NGO** supported

## Lombok

With its long-standing local partner, the NGO Airputih, mobile calling operations were conducted in the most remote villages. In the absence of internet, alternatives such as Facebook or WhatsApp could not be used and despite a partial recovery of mobile networks, it remained difficult to call abroad because of the high blow of communications. Hence, the few calls made abroad were essential for local people to report on the community needs and to seek financial assistance.

TSF teams also provided the necessary materials for high-speed Internet access and trained Airputih teams to deploy it in a medical centre and coordination point set up by the NGO KUN Humanity System. Hence, the center was able to benefit from a reliable connection for its medical coordination activities. The medical team carried out itinerant operations in the Gangga sub-district area. This area is inhabited by more than 14,500 people and is relatively extensive, forested and difficult to access. Because of its isolation, this first care evaluation was necessary before any referral to a hospital. TSF's connection allowed the clinic to transmit its reports to the Ministry of Health and an essential consolidation of data at the island level.

## Sulawesi

TSF was solicited by the Association of Southeast Asian Nations (ASEAN) to reinforce the support of their emergency response and evaluation teams (ERAT) to the Indonesian National Agency for Disaster Management (BNPB) and local authorities. As soon as they arrived in Palu, TSF engineers installed an Internet connection for the ERAT humanitarian coordination centre which facilitated the work of humanitarian actors who were able to send their reports and transmit information on humanitarian needs. This connection was also important for the logistics organisation from Jakarta and Makassar.

In parallel, TSF teams carried out mobile humanitarian calling operations and provided temporary internet access in isolated communities in the south and north of Palu. These operations enabled the affected population to contact their relatives, connect to their social networks and instant messaging platforms and communicate via voice or video.



2018 has been a year of severe migration crises worldwide. In South America, an estimated 2.3 million people left Venezuela, while in Europe, over 20,000 people from North Africa and the Greater Middle East registered their arrival in Bosnia.

In the heart of these tragic crises, TSF provided every day thousands of people with a means of communication, in line with its motto, indeed, "Communications for life".

**"I don't have a phone.**

*Thanks to TSF, I can call my kids to let them know when I send them money so that they can buy food. "*

Carola, 20 years old.  
Venezuelan migrant in Brazil - Apr. 2018

Carola left her kids in Venezuela. She went to Brazil to work and send them money, but she misses them and wants to bring them in Brazil as soon as possible.



## General Information

**Context:** Migration crisis

**Start date:** 03/04/2018

**End date:** Ongoing

**Areas of intervention:**

- Boa Vista
- Pacaraima
- Manaus

**Activities:**

- Humanitarian calling operations

## Key figures

**2** permanent humanitarian call centres

**10** shelters and 6 centres supported by **4** mobile teams

**185,000** beneficiaries of calling operations

**450** free calls / day

**45** hours of free calls / day

# Venezuelan Migration Crisis

From January 2017 to May 2018, an estimated 52,000 Venezuelans have entered Brazil and approximately 500 continued to cross the border each day. They fled the economic and social collapse that has led to runaway inflation (+2,600% in 2017 and an estimated +13,000% in 2018 according to the IMF) and deficiency in several major social sectors such as health and education. In February 2018, the Brazilian government announced a "state of social emergency" in the State of Roraima and the creation of a federal emergency assistance committee to support refugees.

On April 5, TSF was among the first international NGOs to deploy to Brazil in response to the latest and largest migration crisis in South American history. TSF's objective was to offer priority calls to the thousands of Venezuelan refugees in the border towns of Boa Vista and Pacaraima, not only to enable them to communicate with their relatives but also to carry out the administrative tasks necessary for the regularisation of their situation.

TSF provided assistance to Venezuelan refugees in Boa Vista, Pacaraima and Manaus, allowing them to contact their relatives, often for the first time since their departure, through the use of an IP (Internet Protocol) telephony solution specifically designed by TSF and adapted to contexts of humanitarian crises.

In close alliance with the UNHCR, TSF covered a total of 18 centres: 2 permanent humanitarian call centres and 16 migrant shelters where the service was provided 2-3 times per week by 4 TSF mobile teams.





# Balkans Migration Crisis

Over 21,000 people from the Greater Middle East and North Africa have registered their arrival in Bosnia in 2018. That compares to just 464 arrivals for all of 2017. While migrants and refugees tried to reach their destinations by crossing the Bosnia's north-western border to enter Croatia, the Croatian police increased its controls and expulsions towards Bosnia. Since September 2018, thousands of migrants and refugees were stuck in the city of Bihać. In October 2018, the International Organisation for Migrations (IOM) opened a centre in the Bira factory in Bihać, to offer them better conditions for their stay in the city, especially considering the coming winter.

After an assessment conducted by our ICT experts in September 2018, TSF started its collaboration with IOM for a one-year project to provide humanitarian communication means to the migrants and refugees hosted at the Bira premises and to the humanitarian community working in the shelter to offer them assistance.

This project consisted in improving the co-existence of migrants, refugees and local communities, by offering free Internet connectivity with Wi-Fi access to allow migrants and refugees hosted in a 20,000m<sup>2</sup> factory to maintain frequent contacts with their relatives. This setup will also benefit 50 international and local humanitarian actors from different organisations including IOM, the United Nations Agency for Refugees (UNHCR), Médecins Sans Frontières (MSF), Jesuit Refugee Service (JRS) and the Red Cross.

## General Information

**Context:** Migration crisis

**Start date:** 01/11/2018

**End date:** ongoing

**Areas of intervention:**

- Bihać
- Velika Kladusa

**Activities:**

- Connectivity for population
- Support to humanitarian coordination

## Key figures

**4,100+ devices connected** since November 2018

**Over 23.47 TB of data** exchanged / month

**10+ organisations** supported

**50+ humanitarian actors** supported

**20,000 m<sup>2</sup> covered** with internet connectivity and WI-FI access



“One of the first questions migrants ask in the camps is if there is Wi-Fi access and where they can charge their phones.”

Amira Almakzomy, project assistant for IOM, explains why TSF's connection is so important not only for migrants and refugees but also for humanitarian actors working on the ground.

“Internet is pertinent in data collection, which is essential for humanitarian organisations.”

“One of the first questions migrants ask in the camps is if there is Wi-Fi access and where they can charge their phones.” Says Amira Almakzomy, project assistant for IOM in Bosnia. “Moreover, internet is their gateway to information, and to a range of services like the asylum procedures, as well as connection with the responsible person for the assisted voluntary return and reintegration (AVRR).” She continues.

She then explains how TSF's connection helps not only migrants and refugees, but also humanitarian organisations, like in the transit centres of Bihać and Velika Kladusa, two towns about 50 km away and near the border with Croatia.

“Internet is also pertinent in data collection which is essential for humanitarian organisations. For instance, we collect information with online surveys on the beneficiaries' satisfaction with regards to assistance given. In addition, social media is a great source of information for communities, and it is a useful way to get in touch with other aid agencies and hold them to account.”





# Syrian Crisis

8 years of war in Syria have been causing several difficulties to the population. More than half has been uprooted: 5.5 million Syrian became refugees in other countries and 6.6 million internally displaced.

The day-to-day life of the local population is marked by lack of access to medical assistance; an estimated 492 attacks on medical facilities have been reported since the beginning of the war.

14 medical centres, 12 of which in the Idlib region, have been connected thanks to TSF's operations, enhancing the impact and facilitating the coordination of the medical teams' interventions. TSF also provided 5 satellite phones to the centres to improve the safety of the mobile clinics. In 2018, the medical centres connected by TSF were able to welcome over 530,000 beneficiaries with more than 800,000 consultations. In this period over 8 TB of data were exchanged, reaching a total of 38 TB since the beginning of the project.

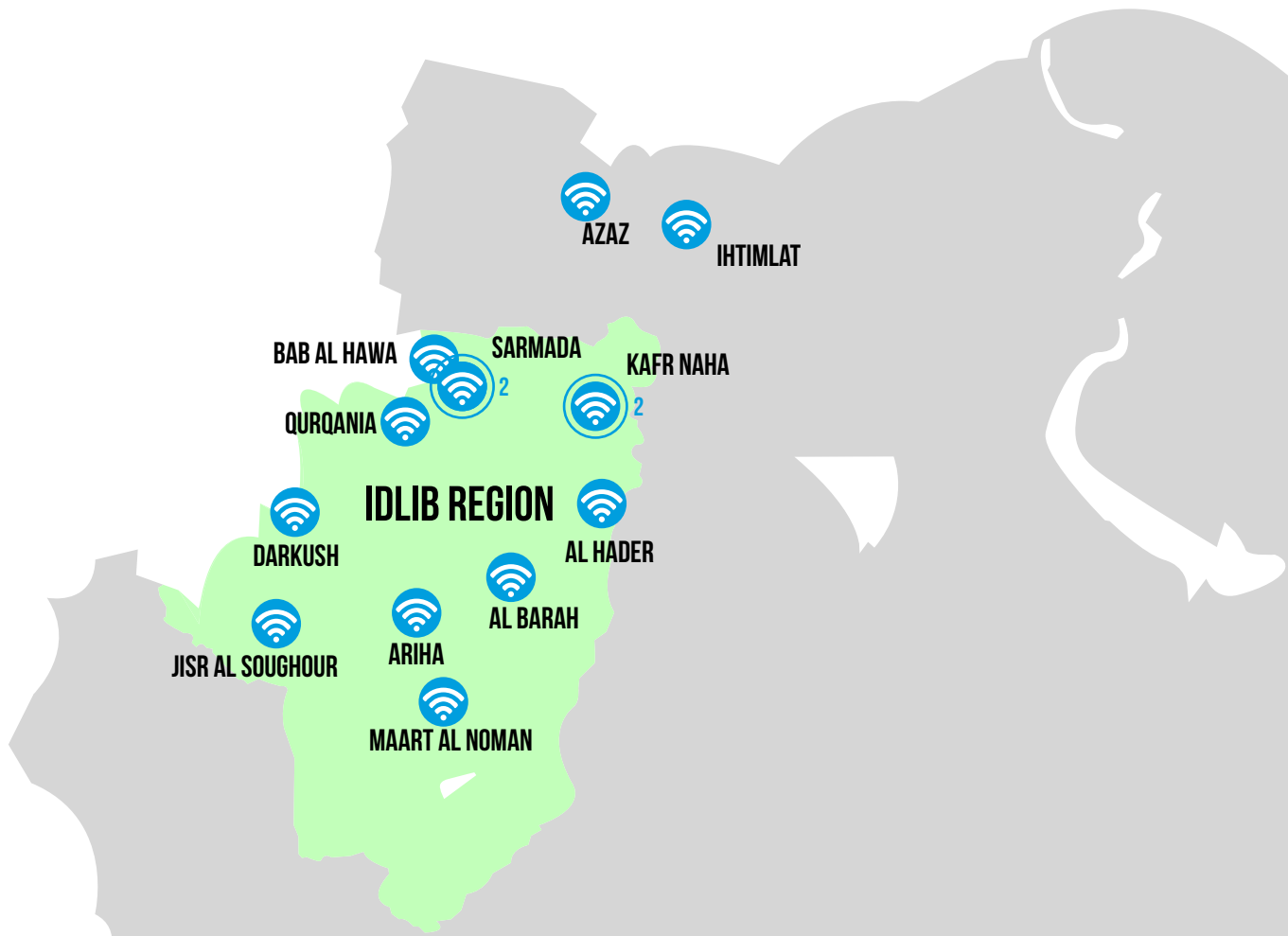
Since 2012 TSF has been supporting medical actions through satellite connections in partnership with the Union of Medical Care and Relief Organisations (UOSSM).

## General Information

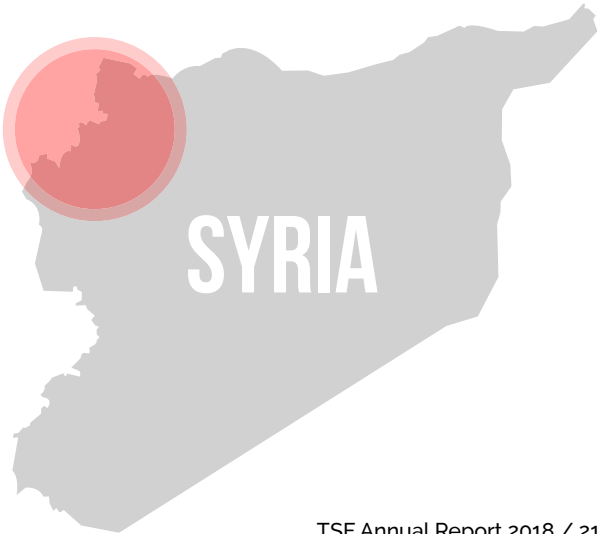
- Context:** Conflict  
**Start date:** 19/03/2012  
**End date:** Ongoing  
**Areas of intervention:**
- Northern Syria
- Activities:**
- Connectivity for humanitarian actors

## Key figures

- 8.8 TB of medical data** transferred in 2018  
**29.3 TB transferred** since 2012  
**53 medical centres** assisted since 2012  
**3.2 million patients** treated in centres connected by TSF since the beginning of the war



CONNECTED  
MEDICAL CENTRES





# Capacity Building

It is crucial that emergency responders know how to use and troubleshoot telecom equipment and are capable of setting up reliable telecom connections in emergency situations. TSF technology and telecommunications specialists lead workshops across the world to build the self-sufficiency of local government agencies, INGOs and international bodies to train them in the application of technologies for several aspects of rapid response. These trainings are also the opportunity to showcase the latest technological solutions used in emergency response.

*“The benefit goes beyond disaster response. The teams we train are composed of government and NGO staff. During our trainings they learn new skills and get awareness of technologies and practices to take back to their home country and use in their current and future projects.”*

Sebastien Latouille,  
Delegate of TSF for Asia and TSF Trainer.



## UNDAC & ASEAN coordination and assessment capacity reinforcement

### Nay Pyi Taw, Myanmar: The 9th ASEAN-ERAT Induction Course March 2018

31 participants from nine ASEAN Member States attended this training. It included, among other activities, a non-stop, 48-hour simulation exercise focused on rapid damage, needs assessment and on-site coordination activities in the aftermath of an earthquake.

### Quito, Ecuador: Introductory Course for New UNDAC Members November 2018

Our ICT experts showed UNDAC members how to technically and financially optimise the latest telecommunications technologies and how to adapt them to the contingencies of the field so that they best meet humanitarian needs. The training also included a simulation exercise where they taught how to set up and use satellite connections.

### Bogor, Indonesia: Refresher course on the importance of emergency telecoms for AHA Center staff members November 2018

Two-day simulation training organised for the Emergency Response and Evaluation Teams (ERAT) of the ASEAN Coordinating Centre for Humanitarian Assistance (AHA Centre) aimed to support them in the deployment of their ICT equipment in emergencies.

#### Beneficiaries:

Map Action, White Helmets, America Support Team, United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA), the International Red Cross/Crescent Societies (IFRC), Myanmar Red Cross..



### Manila, Philippines: UKSA IPP Programme

April 2017 – April 2019

TSF, under funding from the U.K. Space agency, is training government staff from the Philippines on the latest satellite technologies.

The project spans from April 2017 to April 2019 and aims at equipping and training responders from the Department of Social Welfare and Development (DSWD) on the use of BGAN and GlobalXpress.





# Protection & Assistance

Our society currently faces a number of challenges: climate change and its devastating impacts, long-term conflicts leading to population displacements, but also social issues such as gender-based violence and health are all matters that can plague communities and cripple vulnerable populations. From mHealth to food security programs, information systems and data collection, TSF developed and implemented, in collaboration with local actors, different innovative solutions to assist the victims of these phenomena.



## Fighting the food crisis in Guatemala's Dry Corridor

Guatemala's Dry Corridor, in the centre of the country, is characterised by cyclical droughts. From 2006 until 2014, poverty in the area increased from 51% to 59.3% and extreme poverty from 15.3% to 23.4%, whilst chronic malnutrition affected one out of two children under the age of five. In order to respond to this humanitarian crisis, TSF joined a consortium of international organisations funded by the European Civil Protection and Humanitarian Aid Operations (ECHO) and led by Acción Contra el Hambre (ACH).

The consortium implemented a project to financially support families in situation of extreme vulnerability and high nutritional and dietary needs. TSF provided the consortium with a technological solution, based on open source systems, for the data collection, management and monitoring of the beneficiaries' situation over time. TSF's tool had several advantages: it helped interviewers to collect data and send them in real-time, generate automatic reports at the end of the assessment, make the selection process more transparent, follow the information flow in real-time and share publicly the relevant information collected through interactive maps.

## Technology in the combat against Gender-based Violence in Nicaragua

In the department of Chinandega, in north-western Nicaragua, over 50% of women reported having suffered physical, sexual or psychological violence. TSF supported the action of the Chinandega Women's Movement Association (MMCH) with a mobile early warning and prevention system to combat such violence.

The objective of this programme was to allow each woman victim or witness of violence to send a SMS with a predefined keyword to send the alert to MMCH. Once this SMS was received, the team could intervene quickly and call upon immediate assistance or in some cases, the police. MMCH then offered beneficiaries legal and psychological support to help guide them through their ordeal.

Thanks to the system set up by TSF, the headquarters of the association was also able to collect structured statistical data on the constant aggressions against women and the assistance the association provided to victims. One of the major benefits of this system was to make it possible to identify warning signs and thus to have an anticipatory approach to GBV prevention. An online map where cases were publically reported in real time was used as an awareness and advocacy tool by MMCH social support workers.

GUATEMALA

NICARAGUA

### General Information

**Context:** Gender-Based Violence (GBV)  
**Start date:** 01/10/2012  
**End date:** 31/12/2018  
**Zones of intervention:** 13 municipalities in the Chinandega department  
**Activities:**

- SMS alert system
- Data collection

### Key figures

**1,261 beneficiaries** since 2012  
**650 actors** against gender-based violence supported  
**13 cities** helped

### General Information

**Context:** Food crisis  
**Start date:** 28/05/2015  
**End date:** Ongoing  
**Areas of intervention:** 7 departments

- Chiquimula
- Baja Verapaz
- Quiché
- Sololá
- Quezaltenango
- Huehuetenango
- Zacapa

**Activities:**

- Digitisation of collection tools
- Analysis and visualisation of data

### Key figures

**270 communities**  
**9,097 families**, representing **46,066 individual beneficiaries** of food aid  
**68 data collectors** since 2015



# Digital Information Display in Support of Transit Migrants in Mexico



## Migrants in transit...



TSF has been active in the Central American migratory context since 2012. In view of the worsening situation in the area, due to the political context, high rates of violence and increasingly frequent natural disasters, TSF decided to strengthen its activities in the region by starting a one-year pilot project in October 2017 to improve access to essential information for migrants travelling the route from Central to North America. The objective of the project was two-fold: create a digital information system to remotely share key information for migrants and formally assess migrants' information and communication needs.



### General Information

**Context:** Migration crisis  
**Start date:** 15/10/2017  
**End date:** Ongoing  
**Areas of intervention:** 5 centres for refugees

- Guadalajara
- Guadalupe
- Nogales
- Arriaga
- Palenque

**Activities:** Information diffusion  
**Operational Partner:**

- UNHCR
- FM4 Paso Libre

### Key figures

5 centres for refugees equipped  
 2,000 migrant beneficiaries per month  
 5 organisations supported

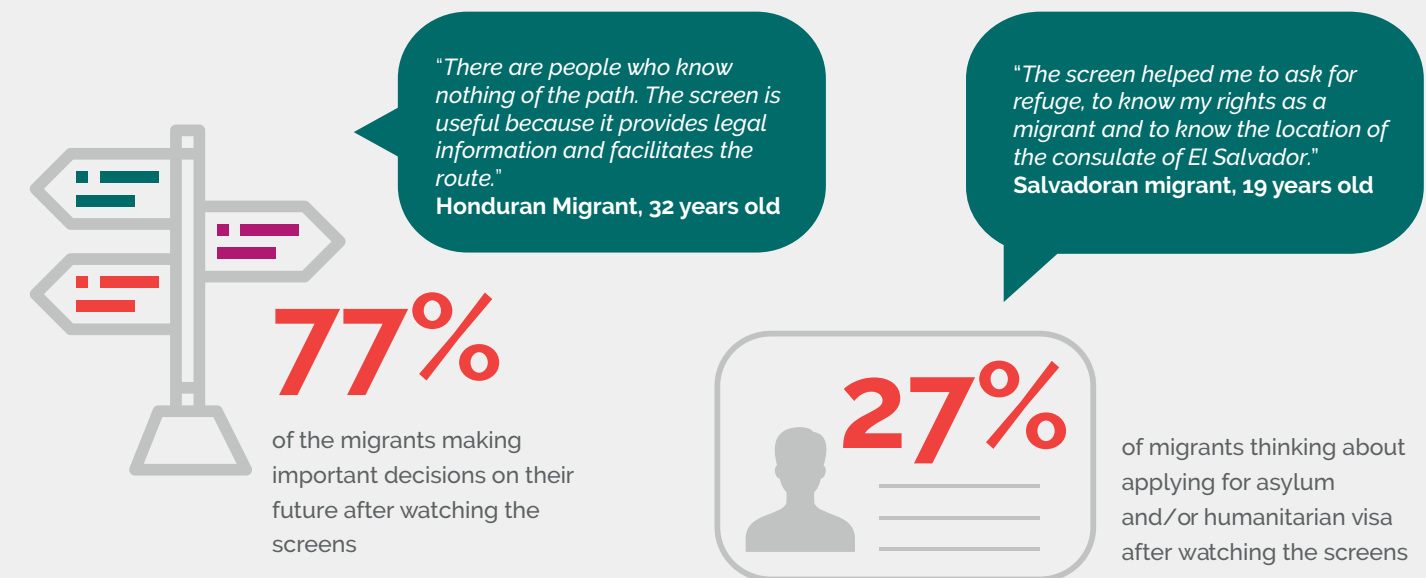
The pilot project was implemented in five migrant shelters in Mexico, with six months of preparation and installation from October 2017 to March 2018 and six months of actual implementation from March to September 2018. The results achieved have been encouraging. An estimated 15,000 migrants benefited from the project, with an average of 77% making important decisions after watching the screens. In view of the positive results TSF has extended it to three new shelters and it's enhancing the capacity of the technical solution.

## The solution



The solution adopted was a reliable, low-bandwidth system that can run even without connectivity and can be easily managed remotely by one central administrator, making it very flexible and suitable even for large scale deployments. A screen connected to a server through a microcomputer was strategically located in migrant shelters along the migratory route and provided migrants with reliable information received from trusted sources (including UNHCR, ICRC and Médecins du Monde among others). The topics included: migrants' rights, information for asylum seekers, self-care advice, contact information of consulates, embassies and organisations supporting migrants, security, news and alerts. The information was transmitted to the devices in real time and was constantly updated on a weekly basis or when urgently required.

## After watching the screens...







# Education

In times of crises and conflicts, access to education is a priority, and yet the lack of available resources and local capacity deprives populations of this fundamental aspect of life. At TSF, we are dedicated to underpinning local educational structures through digital technologies in order to assist them in providing quality schooling, thus helping to reduce the impact of humanitarian crises. Technology and internet access allow children to get their hands on the necessary educational resources to open them up to the rest of the world.



# mLearning for Syrian Children

Syrian children have been living in very difficult conditions since the beginning of the war. Displaced in Syria or refugees in the neighbouring countries, they had their life as children in some way stolen: families separated, deaths, recurring displacements, precarious living conditions, sometimes work, and sporadic educational opportunities.

Since 2013, TSF aims to use new technologies to contribute to the development of welcoming learning environments and stability for children to regain the willingness to discover and to attend school again.

In Syria, 2 Child Friendly Spaces have been equipped with digital educational resources, in partnership with World Vision in the Alsalama and Alnour camps. These resources were also available in some Women's Empowerment Centres. 723 displaced or refugee children have benefited from interactive classes supported by digital technologies in Arabic, Maths and English, while different creative activities have been organised. In parallel, 90 girls and women participated in different workshops which included literacy, languages and basic computer science. In total, 820 people benefited from the project in Syria.

TSF supports also the centre "Alanwar in Turkey, in partnership with the Syrian NGO Minber Alsham. In this centre, digital resources allow children to recover before enrolling in the Turkish formal education system. Arabic courses are also organised so that children can learn their mother tongue despite their displacement in a foreign environment, which is sometimes the only one they have known.

150 children attend regularly the centre Alanwar. Every year around 50 children manage to start again standard education.

## General Information

**Context:** Conflict  
**Start date:** 10/05/2013  
**End date:** Ongoing  
**Intervention areas:**

- Azaz district, Syria
- City of Gaziantep, Turkey

**Activities:**

- mLearning

## Key figures

**4 centres** for refugee children equipped (2 Child Friendly Spaces (CFS) + 2 Children Centres)  
**2 women centres** supported  
**860 children** in 2018

## Skills belts

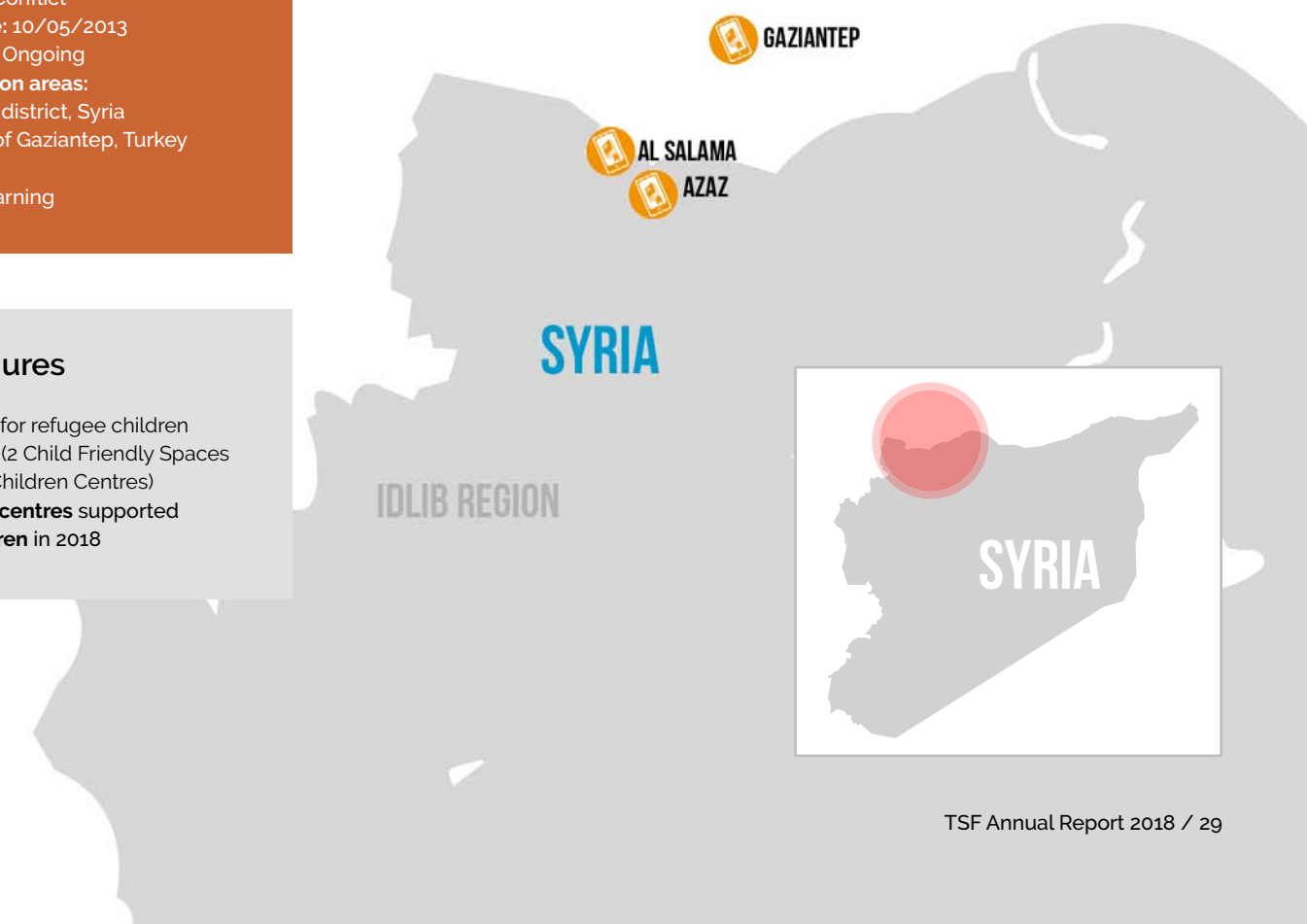
The learning process is different for each child, because it depends on all the challenges and difficulties faced by their family since the beginning of the war. For this reason, TSF decided to use a specific and personalised pedagogical approach, which allows children to progress at their own pace and depending on their level.

Thanks to the skills belts, the progress of each student is assessed in a benevolent manner. Each child's motivation is encouraged giving them increased autonomy on the organisation of their learning activity.

In addition, the interactions between students are encouraged: work groups, creative activities with the tablets etc.

## Technical Club

In order to transmit the passion of TSF's engineers, a technical club has been created; during its activities, children can learn basic programming concepts in an entertaining way. The tools used include Scratch and the mBot robot, which both work with the block-based programming language nowadays very well known. Thanks to different challenges with increasing difficulty levels, children progress and learn how to use creativity to solve a problem, and even to create their own challenges.







# Bridging the Digital Divide

Over half of the global population is online, but the other half is not. Large disparities in access to information and communication technologies (ICTs) still exist between different parts of the world, and even those who have access don't necessarily have the skills to maximise their potential. ICTs are becoming part of our everyday life in many sectors and have significant potential to improve our lives, but not everyone is ready to harness it. At TSF we implement different activities providing ICT access and training to ensure isolated communities can fully reap the benefits of the digital economy.



## IT Cup Centres Madagascar and Burkina Faso

**In 2018, TSF continued its activities in two IT Cup Centres, located in the city of Miaraminivo (Madagascar) and Guié (Burkina Faso). These multi-sectoral centres are aimed to be a vector of social links facilitated by digital technologies and focused on different topics relevant to the local population with a sustainable development perspective.**

In 2011, Mirarinarivo had no access to public Internet and TSF set up an internet access point with the funds collected by IT Cup the previous year. Partner since 2006, the IT Cup is an NGO organising a charity football tournament for companies in the IT sector. The internet café was the first activity set up at the IT Cup Centre as soon as it was opened. It offered the inhabitants of Miaraminivo direct access to computer equipment and an internet connection, while having the necessary tools like printer, scanner, etc. to carry out personal work.

Several training activities are organised for young people as well as other specific groups. This year, for example, 40 farmers member of agricultural associations benefited from an introductory course on computer science and Excel in partnership with Agrisud, aimed in particular at facilitating invoice processing. In addition, 200 students benefit every year from an introductory computer science course at the IT Cup centre which is part of their school curriculum.

Located 60km from the capital Ouagadougou, Guié is part of a group of particularly isolated municipalities. Until January 2010, the inhabitants had no internet access. The funds raised during the 6th edition of the IT CUP tournament allowed TSF to open the 4th IT CUP community centre on 25th March 2010 in Guié. The TSF/IT CUP "Community Telecentre" provided an internet connection, telephone lines for national and international calls and all modern computer and office equipment, such as printers and scanners. It also offered computer training tailored to the needs of each beneficiary.

### Journalism Club

**In 2018, the IT Cup Centre in Miaraminivo launched the Journalism Club: a weekly activity targeting students between 14 and 22 years old. This club aimed to give them the opportunity to improve their writing skills and learn the basics on how to produce different editorial contents. Theoretical classes complemented by practical workshops, and individual projects, provided participants with the knowledge, means, and skills to take their first steps in the field they like. Outside the club hours they even conducted interviews, reports and investigations in the area. All of this thanks to digital technologies. They had tablets they could use to prepare their reports, record their interviews or take pictures for their articles. They also used the computers available at the center to conduct further research and fine-tune the content of their pieces.**

The centre also organised regular interactive discussions with professional journalists where students could ask questions and learn more about this fascinating world. Through these meetings, students had the opportunity to learn more about essential concepts of quality journalism such as the right to use images as well as how to recognize and verify the quality of the sources used. This strong focus on the quality and reliability of the information gathered and reported was particularly relevant in a context in which students used mainly social media as source of information.



### Extracurricular activities

The IT Cup centre in Miaraminivo offers different activities for all the children in the city. Some of them have the general objective of introducing them in an entertaining way to the digital world; the creative activities and the board games. During these sessions, children create colouring pictures in augmented reality with Quiver or can create digital cartoons with Comic Strip it.

The Malagasy tales take advantage of digital tools to help children discover video tales in Malagasy. The Blink Book allows students to even stage their own tales in a digital environment.

Thanks to weekly after-school sessions, 150 children have access to a quiet place where they can study and use selected free digital resources available at the centre: Khan Academy, Canopé and Wikidia among others. 3 professors supervise the activity and provide personalised advice.

Finally, the technical club is aimed at introducing children to programming in an entertaining manner.



# Advancing Emergency-Response Best Practices

## TSF speaking on Emergency Communications 10th AIDF Global Summit Washington Sept. 2018



*Excerpt of remarks of Paul Margie,  
our representative in the US*

### ➤ What's new with TSF? What are you seeing in the field?

The humanitarian landscape is rapidly evolving and so are the needs of our beneficiaries. TSF is focused on staying flexible and on adapting cutting-edge technological solutions to these constantly changing situations.

20 years ago, TSF's mission was only related to calling operations, because that's what people asked for and what the technology was able to deliver in the field. Today, affected populations and aid workers have their own devices and expect any of them to work on an emergency network.

Connectivity expectations are also different, for example we're now opening data connectivity services to much larger groups of simultaneous users. The technical challenge is considerable, especially in locations where telecoms infrastructures have been damaged or overloaded.

Fortunately, technology has evolved as well. So we constantly work on adapting the newest technologies to each type of crises and population.

### ➤ What kind of coordination do you need to successfully deploy in an emergency?

Coordination is essential at different levels. We need to coordinate with host governments, sister NGOs, and international organizations and consortia to ensure effective and rapid response. We also need coordination at the policy level to improve the foundations for successful rapid response in different countries. This means, for example, being able to easily get into the affected area with our teams and equipment.

*By participating in events like the  
AIDF Global Summit, TSF wants to  
create opportunities with experts  
from diverse organisations and  
countries to discuss and identify  
solutions to common humanitarian  
challenges.*

### ➤ The title of this panel is **Devising Fit for Purpose Emergency Communications Systems. What "systems" do you see as being critical to preparing for successful response?**

At TSF we work to build and maintain two interlocked types of "systems." The first is our human/personnel system and the second is our technology system. Both are critical for successful deployments.

The human system means having teams trained, who understand not only the technology, but the humanitarian ethic, the emergency context, and how to collaborate with the other responders. It also means working to build local systems in countries where the emergencies strike most often, or training local teams in long-term emergencies, because this is more efficient and effective compared with international response.

The technology system is critical as well. It means that TSF is constantly working to devise better solutions to the real-world problems we find in the field. This includes both using commercial off-the-shelf solutions and building our own when needed. It also means taking a flexible be-prepared-for-anything approach in the field so we can apply the right technology solution to what we find because every emergency is different.

However there is no technology that is a silver bullet. We don't know what we're going to find in an emergency, or how variables like population sizes, power availability, landline connectivity, terrain, or transportation will play out. So this is where the human and technology systems come together. The teams have to be comfortable with a wide array of technologies, develop the judgement to know when to use each one, and then be able to build something new when it doesn't yet exist.



Nepal - Gorkha Earthquake - 2015

### About Paul Margie

Paul Margie is the U.S. Representative for TSF since 2008.

Paul is also a partner with the law firm of Harris, Wiltshire & Grannis LLP, where he focuses on telecommunications and technology law. Previously, he led the Vodafone Foundation-United Nations Foundation partnership to use mobile technology for public health and emergency response. Prior to that, Paul served as Legal Advisor to U.S. Federal Communications Commission Commissioner Michael J. Copps, and as Legislative Counsel and then Senior Commerce Counsel for U.S. Senator John D. Rockefeller IV. He is a member of the U.S. Department of State's Advisory Committee on International Communications and Information Policy, and its Sub-Committee on International Disaster Response.

From 2008-2011 he served as the Co-Chair of the U.S. Advisory Committee on the World Radiocommunication Conference (WRC).

He previously served as an Adjunct Professor of Law at Georgetown University for ten years, Co-Chair of the Federal Communications Bar Association's Wireless Communications Committee, and the U.S. member of the International Telecommunications Satellite Organization (ITSO) Panel of Legal Experts.

Paul has deployed with TSF to Haiti, the Philippines, and Nepal.



Haiti - Earthquake - 2010



Philippines - Typhon Haiyan - 2013



# TSF PARTNERS

Together, we represent what  
“Communications for life” is all about

At TSF we have been doing our best to bring communications for life to the most isolated and vulnerable people during the past 20 years. We strive for a world in which all people, including, and especially, the most vulnerable, isolated and hardest to reach groups, have access to information and telecommunications, anywhere, anytime. A world in which those who have lost everything can always find hope in the voice of their loved ones. A world in which the potential offered by technologies and telecommunications is made available to the benefit of those who need it most. A world in which no matter how serious a humanitarian crisis is, there's always a way to smile again.

What makes TSF's activities so special, is that we share this vision with all our partners, volunteers and supporters, who make all our activities possible. Partners who don't just provide financial support, but strongly believe in TSF's vision and actions and do their best to enhance TSF's impact through technical collaborations and new ideas.

When you work together, then you can really make a difference. It's this solid and powerful collaboration that, throughout these 20 years, has enabled thousands of humanitarian actors to enhance the impact of their actions in emergency contexts and brought hope to populations living in conflict affected areas, families isolated after natural disasters and parents and children separated due to humanitarian crises.

## Financial Partners



## Operational Partners



"Our partnership with TSF is of exceptional importance to us all at Inmarsat. As an organisation, we were born out of the need to help save lives at sea and in TSF we recognised a shared ethos. **After almost two decades as their partner, the courage and selfless dedication of TSF team members in bringing life-saving communications to people devastated by disaster remains a source of immense pride and inspiration.**"

Rupert Pearce  
CEO, Inmarsat



"TSF is made up of exceptionally selfless men and women, gifted with incomparable field experience, ready to intervene anywhere in the world in less than 24 hours. For Eutelsat, it was obvious for us to put our fleet of satellites at TSF's service, meaning that our technology helps respond to the primary needs of both populations in distress, and the humanitarian community. **When TSF deploys to the field, our entire company is behind them.** It is for all of these reasons that we were particularly proud to celebrate our 10th anniversary of partnership in 2017."

Michel Chabrol  
Senior Vice President New TV Formats, Eutelsat SA



"**Vodafone Foundation is extremely proud of partnering with TSF for more than 15 years.** When disaster strikes, TSF teams are often among the first on the ground to provide life-saving communications to aid workers and victims. Our Connecting for Good programme and long-lasting partnership with TSF are a testimony that technology is aid and more important than ever in times of distress. Today, victims can call to give news to their loved ones, search for information on how and where to get help or even transfer money; aid workers can better coordinate and ultimately save more lives. We admire the dedication and bravery of TSF's team members to help those in need, even in the most challenging environments, and are delighted to celebrate TSF's 20th anniversary together in 2018."

Andrew Dunnett  
Director, Vodafone GROUP Foundation



"I'm very proud of AT&T's work with TSF, and of TSF's efforts to quickly provide vital connectivity in times of crisis all over the world. Since 2003, AT&T and the AT&T Foundation have contributed to fund the mission of TSF. Like AT&T, TSF has been committed to advancing education, strengthening communities, and improving lives in communities around the world. **On any given day, you may find the dedicated TSF workers and volunteers providing vital communications to a migrant family, promoting online education, or bringing information to natural disaster first-responders.** They've deployed rapidly and made a meaningful difference to thousands of grateful people in more than 70 countries on 5 continents."

Eric Loeb  
Senior Vice President, International External and Regulatory Affairs, AT&T



"We are proud of our partnership with TSF, which we have had since 2014. When there is a disaster or emergency somewhere in the world, the dedicated teams from TSF run towards, rather than away from the danger. **They provide a critical and valuable service in re-connecting loved ones and providing much-needed connections for other emergency responders.** That we can in our small way help, by promoting and supporting the selfless work of TSF, is something we celebrate and of which we are extremely proud."

Ros Irving  
CEO, Capacity Media



"TSF is a key partner for OCHA. It provides critical communications, both voice and data satellite, to support our operations. And that's everything from strategic decision making or me being able to share information with my team. **In operations where hundreds of people are working on the international end of the response, if I can't communicate and we can't communicate, nothing works.** What TSF does to provide a facility, but not only to us, it also supports government, local government, and of course they set up a calling service for the affected people, so that people separated from their families have that facility and TSF does all of that. Very small footprint, very big service."

Sebastian Rhodes Stampá  
Deputy Humanitarian Coordinator, UNOCHA





# TÉLÉCOMS SANS FRONTIÈRES

Communications for life

**Télécoms Sans Frontières (TSF) was founded 20 years ago as the world's first NGO focusing on emergency-response technologies.**

We empower populations and responders in humanitarian crises by delivering reliable connectivity when and where it is needed most. We give affected people the possibility to contact their loved ones and begin to regain control of their lives, and we build rapid-response communications centres for local and international responders.

Since its creation in 1998, TSF has responded to over 140 crises in more than 70 countries, providing communication means to over 20 million people and nearly 1,000 NGOs.

**TSF Europe Headquarters**  
**communication@tsfi.org**  
**Tél: +33 (0) 5 59 84 43 60**

TSF Americas - [americas@tsfi.org](mailto:americas@tsfi.org)  
TSF USA - [usa@tsfi.org](mailto:usa@tsfi.org)  
TSF Asia - [asia@tsfi.org](mailto:asia@tsfi.org)  
TSF UK - [uk@tsfi.org](mailto:uk@tsfi.org)

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communications for life