



# Beyond the Net Impact Report



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## Introduction

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When people get access to the Internet amazing things can happen. We can do things like share ideas, build communities, make tools we haven't even dreamed of, help kids stay in school, and the list goes on.

Kathy Brown  
President and CEO  
Internet Society

At the Internet Society we truly believe in an open, global and secure Internet for everyone. We believe the Internet is a force for good. But it's up to each of us to keep it that way. Only by working together can we catalyze change on a large scale and build the Internet of Opportunity. It is time to act.

With over **100,000** global members, **150** organization members, and **130** Chapters, we can make lasting change.

Our Chapters and the work they do with local communities on the ground are crucial to solving local issues and empowering communities. They are at the heart of what the Internet can be. They are vehicles of change.

The Chapter members are also just like you and me. They have a vision and a passion for what the Internet can bring, and together they are turning their ideas into action and helping us achieve the **Sustainable Development Goals** (SDGs) adopted by the United Nations and its members in 2015.

Through the **Beyond the Net Funding Programme** the Chapters are finding exciting and innovative ways to solve some of the world's biggest challenges. We have some great examples of how the Internet can have a positive impact. By building community networks in **Africa** and **Europe**, improving Internet connections in **North America** or ensuring people can trust their connection in **Asia**, we're contributing to things like closing the gender gap, building partnerships, and helping kids stay in school.

In 2016, we took a huge step forward to consolidate the Beyond the Net Programme. When we see how the Internet can improve the life of hundreds of farmers in **Latin America** or how children can develop new skills by learning how to use the Internet in the **Middle East**, the aim of the program and of our organization becomes crystal clear. The numbers and the stories behind them are a good reminder that the Internet was built as a force for good.

The projects highlighted in this report serve as a critical reminder that as long as humanity is at the center of tomorrow's Internet, its future is ours to shape for the next generation. However, as our 2017 Global Internet Report shows, there is still much more to do. We believe that the Beyond the Net Programme can play a part in making all the difference, but we can't do it alone. Change on a large scale requires the efforts of all of us.

Join us. Apply for a Beyond the Net grant. Help shape a digital future that puts people first.

**Raúl Echeberría**  
Vice President, Global Engagement  
Internet Society



# Internet of Opportunity

There are many ways of tackling issues like ensuring inclusive and quality education for all, gender equality and empowerment of women and girls, sustainable economic growth, and fostering innovation through the development of infrastructure, and the Internet is a powerful tool for change. People from all around the globe are taking advantage of the opportunities that the Internet is giving them with the help of the Internet Society's **Beyond the Net** Programme.

## Opportunities for students, parents, and teachers

Students and teachers in **Paraguay** are now using new computers to access the Internet and in **Senegal** children have the chance to access a computer lab when classes are not running. In **Yemen**, students are using the Internet thanks to specially designed training booklets written in Arabic, and in **Spain**, parents and their children are being trained to navigate online safely.

## Opportunities for communities in rural areas

In **Nicaragua**, farmers, villagers, and families living in isolated remote communities have the chance to sell their products online. In **Nepal**, local communities are now benefiting from the vast potential of the Internet, for example, by using e-government and e-commerce services. The availability of online content in **Uganda's** most widely spoken local language creates something more than just local material: it creates a wealth of new opportunities. In the **United States**, a rural community's mobile broadband is being tested and made more reliable, bringing new possibilities to farmers and precision agriculture.

## Opportunities for connecting the unconnected

The Internet of Opportunity also means connecting those who are not connected. **Senegal** and **South Africa** have their own community networks in order to offer low-cost communication. In the **United States**, having community-owned networks are allowing more people to use the Internet in a city where prices are a huge barrier to access. In **Europe**, the creation of a set of "capacity building materials about community networking infrastructures" is giving authentic opportunities for people.

## Opportunities for people's security

To take full advantage of these opportunities, it is key to build trust and security. In **Kazakhstan**, the Computer Security Incidents Response Team (CSIRT) is supporting people in case of breaches. By using drones to act as wireless relays and data aggregators in disaster zones in the **Philippines**, the Internet is a great way for workers and families to communicate with each other.

Everyone has a part to play. No matter where you are or who you are, we have found a common language in the UN Sustainable Development Goals. Together we will build a better world where no one is left behind and the Internet is a platform for hope and opportunity.

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I spent most of my youth working hard in the mines. I didn't know that you could get a little bit of money without having to go outside of the community.  
This is the future I want for my children.

Davide Lukhozi  
Zenzeleni Networks Board Member

## Zenzeleni Networks: Connecting the Unconnected



### How a rural community in South Africa became a telecommunication operator

In the rural community of Mankosi most of the **3,500 residents** live on less than \$2 per day. In order to support their families, men have to migrate to work in the mines and the large farms. As a result, households spend 22 % of their salaries on communication to get in touch with their dearest.

The **South Africa Gauteng Chapter** in collaboration with the **University of Western Cape** are upgrading the existing “Zenzeleni Networks-Mankosi” infrastructure to build a telecommunications co-operative model that allows the most disadvantaged rural areas to self-provide affordable communications at a fraction of the cost offered by other operators.

**1,000 users** are now connected to the network with a **20 times cheaper connection**. The project is also opening new opportunities for young people, providing **computer labs** in primary and secondary schools and **30 trained teachers**. The success of the project is also contributing to the development of the Chapter, growing the membership and strengthening collaborative partnerships with academic, civil society and the private sector.

In January 2017, Zenzeleni have made it into the semi-finals of **Mozilla’s “Equal Rating Innovation Challenge”**, a global competition that seeks innovative ideas to bridge the digital divide across the world. In September 2017, the project was awarded the **Best Innovation with Social Impact** by the Department of Science and Technology at the **“Innovation Bridge”** event in Midrand, Johannesburg.

It is also worth mentioning that the project is aligned with the goal of the Government’s National Development Plan: to have all South Africans connected and using the Internet by the year 2020.

## Supporting Our Chapters, Bringing Projects to Life

Eleven years ago, we felt that the possibility to turn great ideas into realities was in our hands. We launched the **Community Grants Program**, the first funding program of the Internet Society with a clear aim: supporting projects from our community.

Over eleven years we supported hundreds of initiatives in over **70 countries**.

Most projects are still active and continue to provide benefits to their communities. We estimate that through Community Grants projects:

**More than 305,000 people** increased their awareness of Internet Governance issues.

**Over 103,000 people** gained access to the Internet.

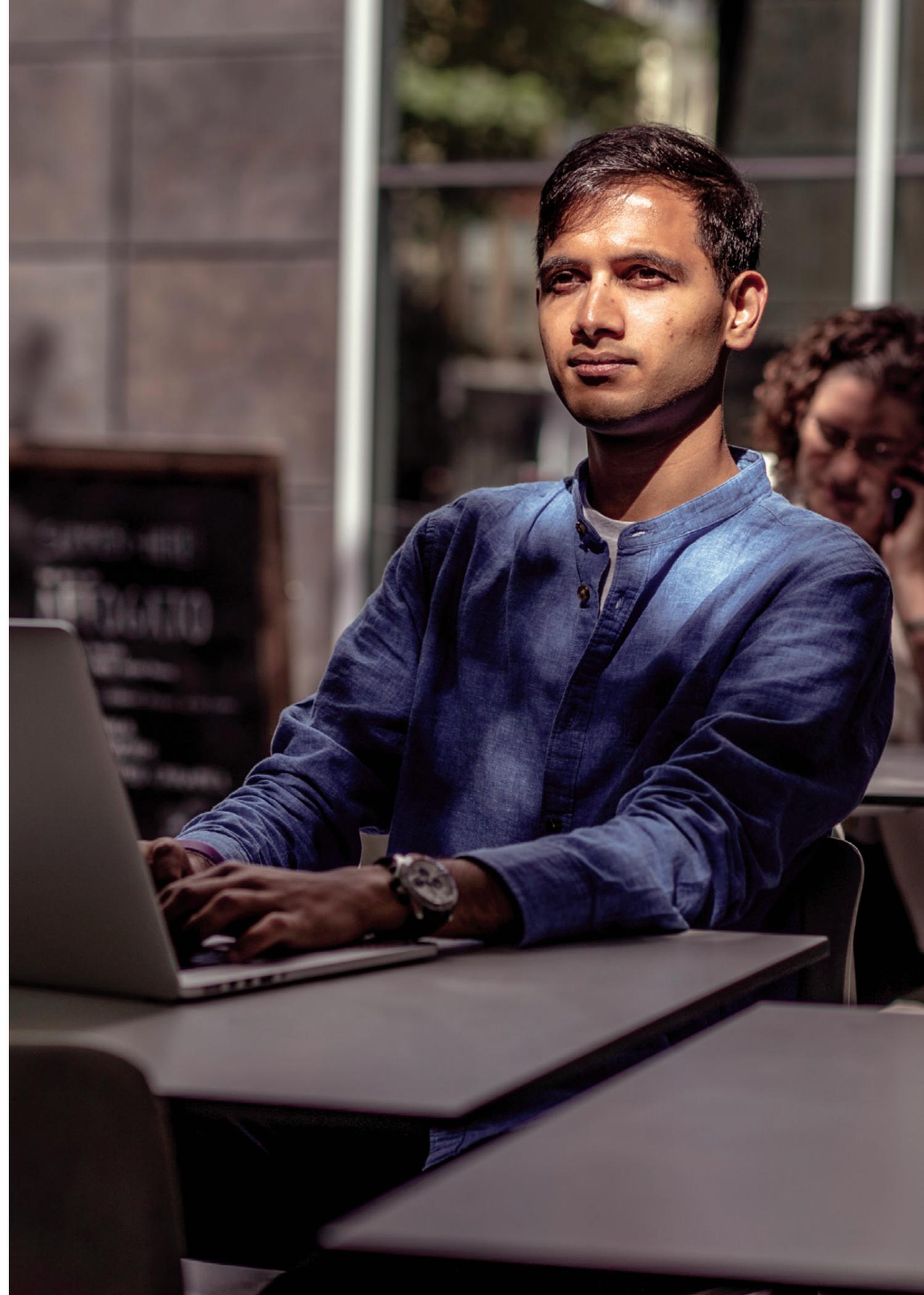
At the very least **31,000 Women and Girls** were empowered through the use of the Internet.

Well **over 35,000 people** were trained on how to use the Internet.

At least **12,700 disabled people** gained Internet skills to improve their quality of life.

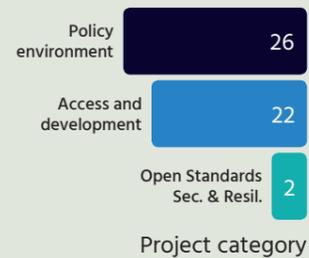
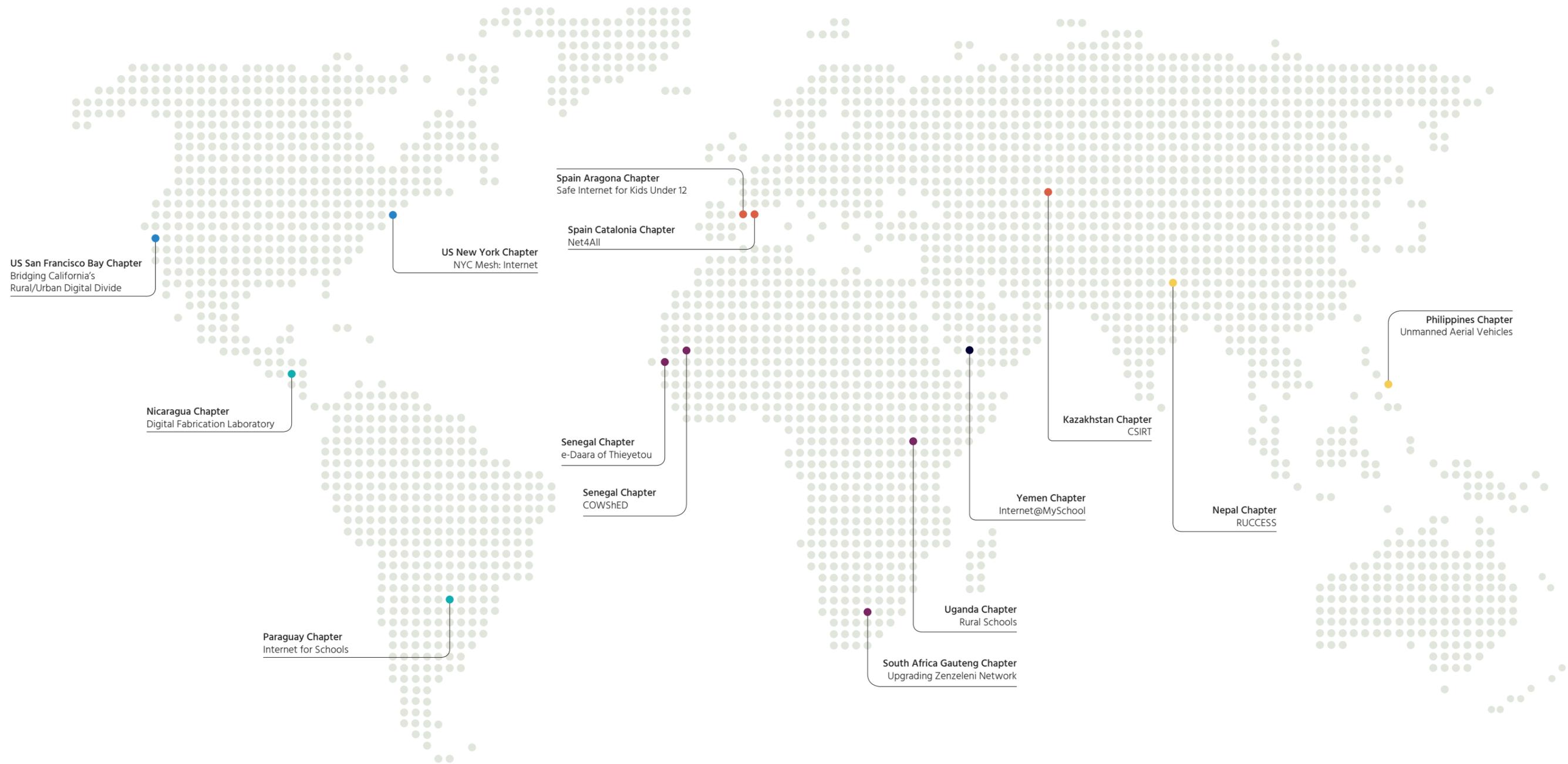
Inspired by these results, and by the tireless commitment and dedication of our Chapters, we started a new journey: the **Beyond the Net Funding Programme**. Since its beginning in 2015, Beyond the Net has continued the valuable work already started, strengthened and reinforced the positive impacts, and consolidated our funding efforts so that we may better support the initiatives of our communities.

Each year, the program grows and we feel more and more proud of the work of our communities. In 2016, we expanded our support to 14 medium and large projects and 50 small initiatives. We also launched the **Chapterthon**, a marathon where the Chapters work together to achieve a common goal.



# Funding 2016

In 2016, **50 Chapter events** and small projects in as many countries and **14 community projects** around the world received a total of **\$ 415,989 in funding** through Beyond the Net Funding Programme.



50



14



With two million children out of school due to conflicts, connecting schools to the Internet in Yemen will have a long-term positive impact. The Internet will help students to study online and compensate the lack of school books.

Sadam Al-Adwar  
Global Youth Ambassador from Yemen

## Improving Education by Connecting Youth to the Internet



### Internet@MySchool: the Internet is a glimmer of hope for Yemeni youth and for the future

The launch of Saudi-led coalition airstrikes in March 2015 and the ensuing eruption of conflicts between different armed groups created a devastating effect on Yemen's education system. A little known fact, the salaries of Yemeni teachers stopped shortly after, but they stoutly go on teaching.

Due to the continuation of conflicts, the educational process in Yemen is facing many challenges: financial cuts, rehabilitation of partially damaged schools and printing new textbooks to replace those destroyed. Currently, 2 million school-age children are out of school and more than 1,600 schools are currently unfit for use due to conflict-related damage, IDP Hosting Site, or occupation by armed groups.

The **Yemen Chapter** strongly believes that connecting schools to the Internet will have a long-term positive impact. With the project **Internet@MySchool**, they built a network infrastructure and installed the Internet in four secondary schools in Sana'a and Aden. The team also provided training and booklets available in Arabic to ensure that students and teachers use the Internet services effectively. More than **120 students** have been trained (50% female) and **3,000 copies** of the illustrated booklet, "How to use the Internet" have been distributed.

The project also launched a website with login authorization that allows students to share their own experiences, photos and ask questions. Students are encouraged to use the site to communicate with their teachers and colleagues, to discuss and share educational resources or materials.

The four schools are a pilot project that will confidently be replicated across regions. In a country waiting for a glimmer of hope, Yemen's young people are the brightest.

# Africa

**4 projects** supported in Senegal, Uganda, and South Africa and **5 SDGs** addressed.



## Senegal Chapter

### e-Daara of Thieyetou

Connecting a school in rural Senegal and bringing the Internet to the community

Access and Development

4, 9

270 pupils and 71 family members are accessing the Internet for the first time

4 teachers are regularly using online resources

5 villages are willing to participate in a similar collaboration

## Senegal Chapter

### COWShED Communication within White Spots for brEeDers

Provide a real-time low-cost communication system for breeders in areas without cellular coverage

Access Rural Areas

2, 8, 9

10 villages in the Ferlo region have been involved in tests

30 breeders will be equipped with smartphone and mobile personal relay

## Uganda Chapter

### Boosting Local Content to Rural Schools in Uganda

Developing and translating online content in Uganda's most commonly understood language

Access and Development

4, 10

150 Wikipedia articles translated into Luganda

2 high schools and 4 universities involved in training

## South Africa Gauteng Chapter

### Upgrading Zenzeleni Network

Upgrading the WiFi infrastructure in Mankosi's primary and secondary schools to allow for Internet surfing, specifically youth and children of the community, and providing computer literacy training for teachers

Access Rural Areas

4, 8, 9

1,000 users are connected to the network

20 times more affordable connection than with existing operators

30 teachers are receiving training

# Europe

3 projects supported in Spain and Kazakhstan and 2 SDGs addressed.

## Spain Catalonia Chapter

### e-Net4All

Create a set of capacity building materials about deploying and operating network infrastructure as a common good

Access

4, 9

Community networks in Africa, Mexico and India are planning to **adopt this model**  
Project presented at various conferences around the world

## Spain Aragon Chapter

### Safe Internet for Kids Under 12

Raising awareness of online security for teachers and parents

Trust

4

500 schools participated in a survey about security on the Internet for children  
The **Surfkids.academy** website was created

## Kazakhstan Chapter

### CSIRT for Educational and Academic Institutions in Kazakhstan

Build a Computer Security Incidents Response Team (CSIRT) for the academic community

Trust

9

15 university students trained as security experts  
5 universities receiving CSIRT service



“

Listening to Radio MENQ's "Toward Independence" while in France, I got very interested in self-development methods mentioned in the program. Back in Armenia I asked the team to teach me how to move independently. The training changed my life for the better.

Levon Karapetyan  
Famous blind pianist

## Armenian radio MENQ: creating opportunities for people with disabilities



### The voice of the visually impaired of Armenia

Radio MENQ was founded from the idea that an Internet radio station would be the greatest opportunity to help the blind and visually impaired. Its first recording took place in March 2016 and was national news in Armenia.

The **Armenia Chapter** created the radio station to raise awareness about how an appropriate environment can increase the ability of a person with disabilities to work independently and add value to society. The programming covers practical and psychological matters. Many famous artists and scientists with disabilities were invited as guests to share their lived experiences.

Radio MENQ has been promoted through mass media, social networks and public events with the involvement of the Ministry of Labor and Social Affairs of the Republic of Armenia. **2,000 visually impaired listeners** are empowered through the radio every day. The blog is getting up to **2,800 visits monthly**, and a mobile application to reach a wider audience is in the pipeline.

Radio MENQ was able to show the power of the Internet in creating innovation and was selected as a **World Summit on the Information Society (WSIS) Prizes 2017 Champion**. The project was one of **345 initiatives** nominated. Only **90 nominees** were selected as Champions, and of the **1.1 million ballots cast**, Radio MENQ was among the top five most voted-for media projects.

Radio MENQ has been awarded with a **Champion certificate from the United Nations' International Telecommunication Union**.

# Asia Pacific

2 projects supported in the Philippines and Nepal and 4 SDGs addressed.

## Philippines Chapter

### Unmanned Aerial Vehicles for Post-Disaster Resilient Communications

The project is using UAVs (drones) to act as wireless relays and data aggregators in disaster zones

Access

3, 9, 11

530 community participants were involved in a 3-day disaster preparedness drill  
 100 square kms were covered by flight experiments  
 5 presentations/papers at local and international conferences

## Nepal Chapter

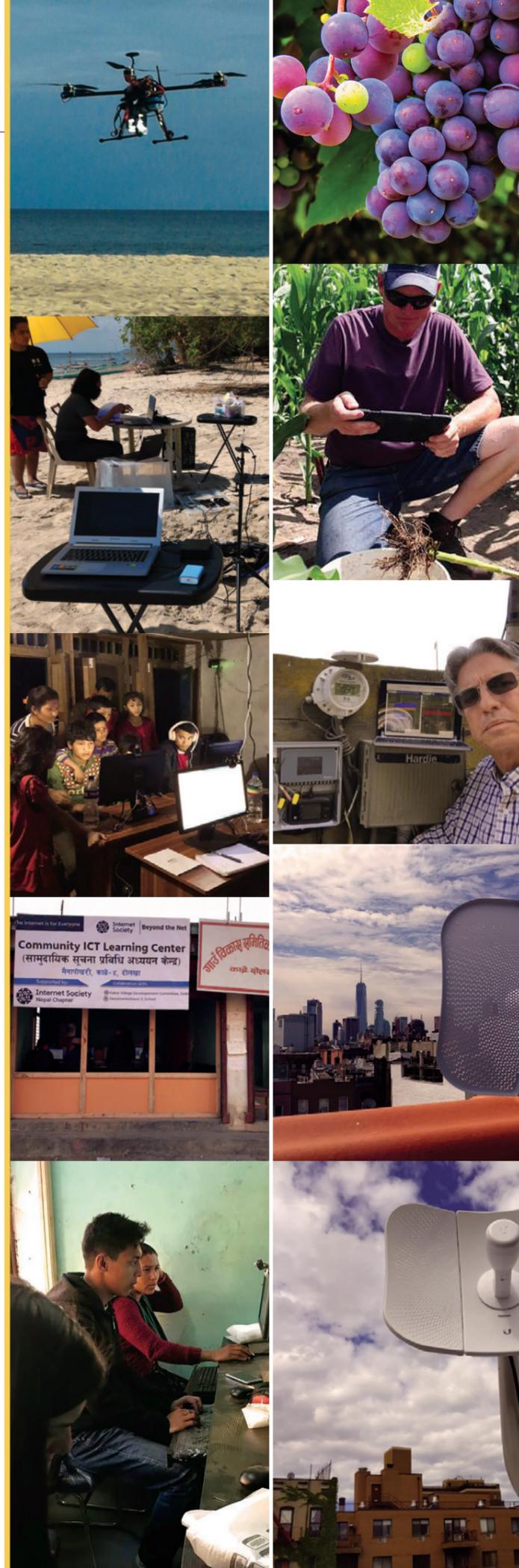
### Rural Communities Access to Information Society (RUCCESS)

Reduce the digital divide between urban population and rural by establishing three Community Learning Hubs in localities of rural Nepal that had previously inadequate or no connection to the Internet

Access Rural Areas

4, 9

3 Information and Communications Technology (ICT) Community Learning Hubs established in three rural communities  
 Each Hub is being visited 100/day  
 1500 more people are accessing the Internet  
 6 ICT operators trained



# North America

2 projects supported in the United States and 2 SDGs addressed.

## US San Francisco Bay Chapter

### Bridging California's Rural/Urban Digital Divide with Mobile Broadband

Testing mobile broadband speeds to ensure reliable technologies for agriculture in rural California

Access Rural Areas

2, 9

155 tests were conducted in the rural areas of Yolo County  
 6 farms are being analyzed in-depth

## US New York

### NYC Mesh: Internet

Expand NYC Mesh, NYC's largest community network to underserved areas

Access Infrastructure

9

50 nodes have been installed around 3 neighborhoods, providing an affordable alternative to current providers  
 Completed first large sector antenna with a gigabit connection

# Latin America & Caribbean

2 projects supported in Paraguay and Nicaragua and 4 SDGs addressed.

## Paraguay Chapter

### Internet for Schools

Connect a low-income school in Lambare with fixed broadband access and a classroom equipped with computers

Access Education

4, 9

35 computers in the school connected to the Internet  
590 students and 25 teachers trained  
Paraguay will participate in UNESCO "International Olympiad in Informatics" for the first time

## Nicaragua Chapter

### Digital Fabrication Laboratory

A radio-telecommunication network and digital fabrication center, which enables access to information and communication to foster best practices and e-commerce in agricultural and farming through technology in Caribbean Miskito communities of Nicaragua

Access to Rural Areas

2, 4, 8, 9

80 families of farmers are connected  
30 people were trained to use the radio base station



# Middle East

1 project supported in Yemen and 2 SDGs addressed.

## Yemen Chapter

### Internet@MySchool

Setting up Internet access hotspots and providing training through a booklet and workshops

Access Education

4, 9

4 schools connected to the Internet  
120 students have been trained (50% female)  
3,000 copies of the Arabic booklet, "How to use the Internet" have been distributed  
Interest in replicating the project from other local schools

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Now tourists are able to book accommodations and make online payments. We are so excited that finally we are able to offer a wide range of activities and sell our products.

Los Nevados  
Venezuelan Andes Community

## The Venezuelan Andes: Empowering Rural Communities



### “Los Nevados” on the Roof of the Venezuelan Andes

Reaching **Los Nevados**, a tiny village located in the Sierra Nevada National Park at 2,711 m above sea level, can be a real adventure. The scary and dangerous cliff road leading to the town is one of the world’s most spectacular and dangerous. No less ambitious was bringing **Internet access to 2,000 inhabitants** living in this remote area. The **Venezuela Chapter** took on the challenge to develop a wireless architecture to provide Los Nevados with Internet services and reduce their isolation.

Although it seemed impossible at first to overcome the technical difficulties, the team members never lost sight of the dream to connect this remote place to the rest of the world. Their efforts exceeded all expectations.

**Winner of the Chapterthon 2016**, this project is helping Los Nevados overcome their physical and cultural isolation. New educational opportunities are being offered to the local students through access to relevant content and remote learning. The “Village Radio Station” is using streaming technology to share real-time world news. Los Nevados is also taking pride in publishing stories and photos about their community in an effort to preserve their traditions.

Locals and visitors are both taking advantage of the Internet. Although the location is so difficult to reach, about 500 people per month visit the village. Hikers use it as a base for climbing Pico Bolivar, the highest mountain in Venezuela (4,978 m). When there was no Internet connection all payments were only in cash, and people were not aware of it until they arrived at the site. The Internet has become an essential tool to do business in one of the most isolated place in the world.

# International Recognition of Award-Winning Beyond the Net Projects



Internet Society's community and the **Beyond the Net** grantees are a group of talented and devoted people committed to working on critical issues in their home region using the Internet to bring innovation in their communities. The changes they are creating have already boasted high levels of public recognition.

During the summer of 2016, **Nighat Dad**, leader of **Hamara Internet**, received the **Atlantic Council Digital Freedom Award** and the Dutch government's **Human Rights Tulip Award**. 500 Pakistani women were empowered through digital violence awareness training and many more supported online.

In December 2016, **Tifolibros**, a digital library for the blind and visually impaired funded in Argentina, received the **UNESCO Prize for Digital Empowerment of Persons with Disabilities**. Over 52,000 e-books in Spanish are now available all over the world.

In January 2017, **Zenzeleni Network** have made it into the semi-finals of **Mozilla's "Equal Rating Innovation Challenge"**. In September 2017, the project was awarded the **Best Innovation with Social Impact** by the Department of Science and Technology at the "Innovation Bridge" event in Midrand, Johannesburg.

In June 2017, **Radio Menq** has been awarded with a **Champion certificate** (WSIS Prizes) from the **United Nations' International Telecommunication Union**. 2,000 Armenian visually impaired listeners are empowered through the radio every day.

If you want to become involved and help shape the Future of Internet, Join us.

Beyond the Net Funding Programme Provides:

**Medium and Large projects funding** for initiatives that harness the power of the Internet to change lives. They work in partnership with local organisations to empower people in their communities.

**Small projects funding** are granted to improve awareness on Internet topics of interest for the local community, and strengthen and grow Chapter membership.

**Chapterthon funding** for a marathon where all Internet Society Chapters work together within a specific timeline and budget to achieve a common goal for the development of the Internet.

[www.internetsociety.org/beyondthenet](http://www.internetsociety.org/beyondthenet)



## Thank you

A special thank you to all Internet Society Chapters and volunteers involved in the various Community Grant projects and Beyond the Net Funding Programme projects around the world.

You are our champions of the Internet as a force for good. It is through your tireless efforts and dedication that we are closer to realizing our fundamental goal of bringing an Internet that is open, global and secure to everyone, everywhere.

An Internet that promises social development, economic prosperity and new technologies that can amplify the best of humanity. You are all making a difference and changing people's lives.

Thank you to the Selection Committees over the past ten years, who have had the difficult task of selecting projects among the hundreds of applications received.

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Internet Society / Yemen Chapter

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Founded by Internet pioneers, the Internet Society (ISOC) is a non-profit organization dedicated to ensuring the open development, evolution, and use of the Internet.

Working through a global community of Chapters and members, the Internet Society collaborates with a broad range of groups to promote the technologies that keep the Internet safe and secure, and advocates for policies that enable universal access.

The Internet Society is also the organizational home of the Internet Engineering Task Force (IETF).

Learn more [www.internetsociety.org](http://www.internetsociety.org)