COMMISSION ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT (CSTD)

Seventeenth Session Geneva, 12 to 16 May 2014

# Submissions from entities in the United Nations system and elsewhere on their efforts in 2013 to implement the outcome of the WSIS

Submission by

#### Telefonica

This submission was prepared as an input to the report of the UN Secretary-General on "Progress made in the implementation of and follow-up to the outcomes of the World Summit on the Information Society at the regional and international levels" (to the 17<sup>th</sup> session of the CSTD), in response to the request by the Economic and Social Council, in its resolution 2006/46, to the UN Secretary-General to inform the Commission on Science and Technology for Development on the implementation of the outcomes of the WSIS as part of his annual reporting to the Commission.

DISCLAIMER: The views presented here are the contributors' and do not necessarily reflect the views and position of the United Nations or the United Nations Conference on Trade and Development.



# Comments and input for the UN Commission on Science and Technology for Development (CSTD) and its Report on WSIS implementation for its 17<sup>th</sup> session, May 2014

# Telefónica's initiatives furthering WSIS action lines and goals

As requested in the letter by UNCTAD's Secretary-General from Oct. 11 2013, we include in the follow some specific examples of Telefónica's initiatives in which we are helping to implement the WSIS action lines and goals.

All of them are classified according to the different WSIS Action Lines (ALs). In some cases they are included under several ALs as they cover more than one area.

# C3 Action Line: Access to information and knowledge

#### Access to remote areas

In 2012, Telefónica Peru announced the second edition of "**ConectaRSE para crecer**" ("Connect in order to grow"), a competition to identify the best initiatives developed in rural areas of the country which have had social and economic impact on their communities, using ICT as their basis. A total of 102 initiatives participated in this edition. "ConectaRSE para crecer" aims to become a platform to generate and promote the exchange of information about, and experience of the use of, ICT in rural areas.

#### Intégrame (Peru)

In addition, during 2012, the program "**Intégrame** de Telefónica Perú" (make me part of Telefónica Peru), managed to provide telephone, Internet access and satellite digital TV in rural areas with high levels of poverty in 11 regions, 19 provinces, with 103,617 people benefiting.

This is a social interest project set up by Telefónica and local governments for rural areas, aimed at reducing poverty and accelerating their development. Through these



public-private alliances, integrated telecommunications services reach thousands of inhabitants in the most remote areas.

#### Fono Ya Programme in Peru

Movistar created the "Fono Ya" programme in Peru at the end of 2009. It is an innovative fixed wireless telephone service aimed at urban households from low socioeconomic segments, who cannot install fixed telephones in their homes but have wireless coverage.

"Fono Ya" works on Telefónica's mobile network, so that it can reach these households at a price they can afford. Through this service, more than 560,000 households are connected at a price of 1 sol a day (\$0.30). In 2009, this project won the "Business Creativity" award in the public service section from the Peruvian University of Applied Sciences (UPC).

#### **Economic inclusion**

Two-thirds of the world's population earns less than \$2,000 a year. In economic, these people form part of what is known as the 'base of the pyramid'. In Latin America alone, close to half of the population of close to 700 million falls into this category, with 25% of the total below the poverty line (implying daily expenditure of just \$2). However, poverty is not just a Latin American issue. According to a report titled 'Social exclusion and development, 2012' prepared by Fundación FOESSA and Cáritas, the Catholic Church's NGO, the percentage of Spanish households living below the poverty line is almost 22%, with another 25% classified as 'at-risk'. ICTs are an ideal tool for forging social and economic inclusion in low-income communities. Services such as mobile banking present a very real opportunity for promoting financial inclusion across low-income communities, while speeding up delivery of the UN Millennium Development Goals. The most noteworthy initiatives sponsored in this field in 2012 were:

#### Porta a Porta programme in Brazil

In Brazil, Vivo set up a sales force at the end of 2009 to market the installation of fixed communication services in the low-income segments of the Piratininga neighbourhood in the outskirts of São Paulo. What started out as a pilot test is currently being rolled out in other low-income communities in Brazil. This initiative, called "Porta a Porta" (door-to-door), currently provides jobs directly to some 1,000 people. The sales people are hired from the communities the service is targeted at; as a result, in addition to generating economic wealth, the initiative has a social impact by the creation of direct employment. And because the salespeople are locals, they inspire greater trust among the potential customers targeted. Today, Vivo has more than two dozen different initiatives tailored for low-income customers. They are primarily based on a pre-paid payas- you-go model. Customers do not pay monthly rental fees and credit can be used for any either fixed or mobile connectivity.

#### Helping SMEs in Colombia

The "Empresarios Pymedia" program for SME entrepreneurs was set up in Colombia in 2009. The application of ICTs in small and medium sized companies is crucial to



increasing the productivity and competitiveness in a global economy. To this end, and taking advantage of technology installed by Telefónica under the Compartel initiative, Telefónica, in collaboration with several Colombian universities, helps local SMEs to adopt ICTs as a means to boosting business competitiveness. The purpose of the programme is to bring students and graduates of communication and advertising degree courses together to counsel SMEs on implementation strategies and the creation of online advertising campaigns in order to increase their chances to tapping new customers. In short, to create the ideal ecosystem for students and business owners. The fourth edition of this programme took place in the first half of 2011 and was structured around the "E-volution Ideas" concept. Fifteen universities from seven cities took part, as did 447 companies. The winning company was Guianza Express and the winning university students were two students from Jorge Tadeo Lozano University in Cartagena. The idea for the next editions of this initiative is to entrench the programme at participating universities in order to reach more students; this will also enable Telefónica to increase its SME customer base. Another aim is to create a virtual community of SME businesses owners and to bring in new strategic partners with a view to ensuring the project's sustainability.

#### Wanda, Financial Inclusion in Latin America

In 2012, Telefónica launched Wanda, the company created jointly with MasterCard to develop mobile payments in Latin America Wanda will offer mobile payment solutions to over 87 million Movistar customers in the12 countries of the region where Telefónica operates. Wanda is mainly aimed at people with few resources who, while they have a mobile, do not have access to a bank checking account. Its deployment and use will favor the economic and social inclusion of these groups.

#### **Movistar Remesas**

Movistar launched 'Movistar Wire Remittances' in 2010 by which customers can send money quickly and safely to families and friends using more than 200,000 points of sale located across over 190 countries. A business partnership has made it possible to send money from any Movistar Remesas point, Authorised payment entity, to MoneyGram's international network, with offices worldwide.

More specifically, our customers can make transfers through 207,000 centres in more than 190 countries. Senders and beneficiaries receive details of their operations and an associated code (PIN) on their mobile phone, perceived by users as an appropriate tool for carrying out financial operations, as they consider it a convenient, secure and personal instrument.

Money can currently be sent through Movistar Remesas from Spain to other destinations.

#### **M-Inclusion:**



M-Inclusion is a project jointly financed by the European Commission and developed by a consortium led by Telefónica (and also made up of Econet, Futura Networks Colombia, Innovation Engineering, Nokia Technology Institute of Brazil, the Peruvian Cayetano Heredia University and the Universidad Politécnica de Valencia in Spain), which will embark on the first platform for mobile solutions to problems of social inclusion in Europe and Latin America (www.m-inclusion.eu).

The project started in 2011 and is envisaged to last for two years, during which it will create a framework for cooperation among developers of mobile solutions in Europe and Latin America, and among different entities and organizations. It will define the road map for the needs of mobile inclusion, promoting user-oriented innovation and the development of affordable mobile solutions.

At the moment, from a web platform created as point of encounter for organizations of end-users and developers, registered users can discuss and participate in the project and access the different services offered, such as a marketplace for mobile applications or open innovation services, or look for financing and partners to develop services. In 2012, we organized the first edition of the competition "Apps4Change", set up to recognize the best mobile solution that encourages social inclusion. There were 120 applicants from 15 countries, and the competition was won by 26-year-old Byron Llerena of Ecuador for his "Blanco y Negro" ("Black and white") project, consisting of novel software for Android for those with a visual disability.

Moreover, in November 2012, the 1st Open International Forum was held, which took place under the auspices of the MovilForum event organized by Telefónica in Barcelona. It was attended by over 100 people. International experts, developers, entrepreneurs and final beneficiaries explored the possibilities which mobile technologies offer in daily life, especially for those groups with special needs or at risk of exclusion. Specifically, in this first international forum, services like mHealth, mLearning, accessibility and applications related to the economy were discussed in depth. M-Inclusion has been awarded the 2013 prize for best project, for its social and environmental commitment, by AUTELSI (the Spanish telecoms and IT services users' association).

# 'Fishing with Nets' in Brazil

Programme that fosters digital and social inclusion of isolated people who work in the fishing and mariculture sector in the Bahia region of Brazil.

The initiative is developed by Qualcomm along with Telefónica/Vivo, the United States Agency for International Development USAID, ZTE, Santa Cruz Cabrália town hall through the Secretary's Office of Agriculture and Fisheries and the Instituto Ambiental Brasil Sustentável (IABS).

Through 'Fishing with 3G Nets', fishermen have mobile devices with credit to directly connect from the coast to consumers and partners on land via voice and data over Vivo's 3G HSUPA wireless network. They also have personalised software applications with navigation, climate, marketing, direct sales, data collection and technical support features. Furthermore, they receive training on how to use these features.



The technology provides safety to the fishermen when they are navigating through realtime localisation and weather forecasting services; it helps them to develop a marketing strategy and allows direct sales of the day's catch in an online market.

The data collected also allows statistics to be generated to support government initiatives in favour of sustainable fishing.

In this way, "Fishing with 3G Nets" contributes to the economic development of the area.

#### People with disabilities

For the last few years, Telefónica has been working alongside the principal national and international associations for the disabled to promote the incorporation of disabled people into society via Information and Communications Technologies (ICT).

In 2012, Telefónica, together with L'Oreal, the Italian Ministry of Labor and the ONCE Foundation, launched the European Disability Network (CSR+D), whose objective is to promote awareness and integration of disability within the political and business agendas of Corporate Social Responsibility (CSR), with the ultimate aim of favoring inclusion of disabled people socially and in the workforce, in Europe.

In 2012, and following the launch of the second edition of the Telefónica Ability Awards, the Company continues to work together with the other bodies that comprise Club Ability to generate an ecosystem which encourages the incorporation of disabled people into society and the entities that make it up. With the track record which the prizes and Club Ability have generated for Telefónica, at the end of 2012 a collaboration agreement to internationalize the awards and Club Ability from 2013 was signed.

#### **Customer orientation**

In order to learn more about our disabled customers, Telefónica carries out market research to get to know their needs. The results of these studies and collaboration with the network of associations for the disabled are the basis for the introduction of accessible products and services by the Company.

In 2012, the following simple terminals were launched: in Spain, the Alcatel 282 easy terminal; in Telefónica O2 United Kingdom, the Doro 612; and, in Telefónica O2 Czech Republic, the Swissvoice SV39, MP50 and Winner WG11, WG8.

Furthermore, Telefónica continues to push forward the development of support services to guarantee accompaniment to disabled people and their dependents. One example is "Teleasistencia de Nueva Generación", consisting of an assistance service both within and outside the home, immediate and at any time, which can satisfy and mobilize the resources required should situations of need or emergency arise 24 hours a day, 365 days a year. It is also a social assistance service which can send reminders about taking medicine or a doctor's appointment, etc.

Another example is the launch by Telefónica in 2012 of the "Aquí estoy de Movistar" service aimed at dependents of the disabled, whose objective is that they look after those most important to them.



In Spain, Telefónica continues to collaborate with Cestel and the CNSE (the confederation of associations for the deaf) on the sign language video interpretation service using the platform Svisual (http://www.svisual.org/). Also, in Argentina, Telefónica is developing an intermediation service for persons of impaired hearing or speech. Customers can access this service by calling 126, 125 or by means of a special chat facility. In 2012, there were more than 5,000 calls. In addition, in Brazil, Telefónica is aiming to launch ProDeaf, an application permitting communication between a hearing person and one with hearing difficulties by means of Brazilian sign language. This type of service can also be found in the Czech Republic through the webpage http://www.myslimena.cz/en/, whose functionality is aimed at customer service for the hearing-impaired. Furthermore, on the same website, disabled customers can apply for different discounts, order one of the accessible terminals available, or request billing in Braille. Thanks to this work carried out in the Czech Republic, Telefónica was placed first in "TOP Responsible Company 2012", the country's most important awards for Corporate Responsibility, in the category of "Best product and responsible marketing", for its strategy of making available products and services accesible to the disabled.

#### Avatar

Avatar in 3D which provides simultaneous translation of sentences and speeches into Spanish sign language (SSL). Thanks to it, people with hearing problems can take part in a videoconference or watch the TV.

The avatar was developed by the Technological Innovation team of Telefónica in Spain, in collaboration with the Autonomous University of Madrid (UAM) and the CNSE (Spanish National Confederation of Deaf People).

In a first phase, the system for translation from voice to SSL has been integrated into the ISABEL videoconference platform, which was developed by the Polytechnic University of Madrid.

#### Sign language platform

Video conferencing service with a built-in call centre that allows deaf people to communicate though remote sign language interpreters. In this way, deaf people can carry out any operation with the Public Administration, for example.

The service uses the Teleinterpretation Centre for Deaf People created by Telefónica I+D in its centre in Granada and has the collaboration of the Andalusian Federation of Associations for the Deaf (FAAS), an entity that is a member of the National Confederation of Deaf People (CNSE). In the future, Telefónica and CNSE will join forces to work on a new generation of video interpretation platforms on which Telefónica will offer its capabilities to develop and provide advanced services based on cloud computing models and high speed networks.

# ATAM



Social project involving 35 companies in the Telefónica Group and nearly 55,000 members linked to them. The project is based on the solidarity of the ATAM members with those who suffer the consequences of disability and dependence. Telefónica and its partners contributed over 14 million euros to the project in 2012, which represented 81% of the total income of the association. In 2012 more than 10,000 people all over Spain benefited from the work carried out by ATAM.

The association centers its efforts on responding globally to the social needs of people with disabilities and their families. It carries out its activity based on the international paradigms, standards and precepts which look after and guarantee the rights of those with disabilities, so that they can participate in their community on an equal footing and have a full and dignified life.

ATAM thus works through two basic lines of action: assistance to families and workplace integration.

#### Access to education

The world of information and communication technology opens up a host of ways for educators and students to broaden and enhance their work, helping in this way to facilitate access to education and raising education standards, crucial to personal development and community welfare. Against this backdrop, Telefónica invests in upgrading the technology skills of groups at risk of exclusion.

#### Technology in childhood

Together with Foro Generaciones Interactivas and Pantallas Amigas, Telefónica launched a new online educational platform last year, Infancia y Tecnología, targeted at boys and girls aged between 6 and 11 and their parents and teachers. By means of three cartoons, the platform tackles issues related to the safe and healthy use of internet, videogames and mobile phones. The purpose of the website is to provide children with criteria for using all this technology wisely and safely while they have fun and to give adults a close-up and positive view of what this technology can do. The cartoons are intended to teach kids in an entertaining environment while the educational guides are targeted at parents and teachers. Users can also download the cartoons onto mobile handsets. One of the new developments pursued last year in terms of specifically protecting children and fostering the safe use of internet related to the negotiations concluded in Colombia for the development and launch (during the first half of 2012) of the first hotline in Latin America following the Inhope guidelines.

#### **Universal Service**

Universal service is a guarantee of service to the whole population, with basic quality at affordable prices. These services, and the conditions under which they are provided, as well as the operators which take on this responsibility, are specified by the regulator in each of the countries which decide to establish them.

The objective of Universal Service Fund (USF) is to establish appropriate funding mechanisms capable of underwriting projects related to the extension of telecommunications services to the whole of the population under the specified conditions of quality and affordability.



Telefónica offers this service in Argentina, Brazil, Colombia, Spain, Peru, the Czech Republic, Venezuela and Ecuador.

# C10 Action Line: Ethical dimensions of the Information Society C4 Action line: Capacity Building

# Social entrepreneurs with technological basis – UEIA social project

UEIA is the first European accelerator of social entrepreneurs with technological basis. In its first edition Ueia has chosen 12 technological projects with social impact in different areas. After the selection of these 12 projects, it has started a period of training for getting the follower accelerator.

Ueia social is divided into three phases which Ueia accelerator is the last one, after Ueia generation (projects reception), and Ueia ignition (projects analysis and selection). The 12 projects have been selected from more than 120 presented in the first phase.

In 2012, Telefónica signed an agreement with Ueia to promote alliances with public and private entities and the third sector to develop ICT solutions linked with social innovation.

According to this, Telefónica offers its technology, tools and financing to social entrepreneurs and identifies new applications and ICT services in this field. Telefónica also gives mentoring through its internal experts to each of the entrepreneurs.

# Fundación Telefónica

Fundación Telefónica's mission is to invest in communities and culture in a way that is both effective and transformative, focusing on broadening access to knowledge through an innovative and global approach. To do this, it works through its own social innovation programmes, which make use of new technologies and cooperative networks to help children and young people in particular. The Fundación works in all the main countries where Telefónica is active and its principal social aims are: the eradication of child labour in Latin America, improving the quality of education and knowledge through ICTs and sharing knowledge through all sections of society. It is also manages the Group's multicultural network of volunteers, supporting the development of charity work by employees in partnership with other institutions. When picking projects to support, Fundación Telefónica's strategy is to focus on those that promote broader access to education and knowledge and the use of information and communication technologies (ICTs). In this way it seeks to foster equal opportunities in the societies where it works, boosting access to education and knowledge as a route to improving people's wellbeing.

# Childhood



**Proniño** is a social action programme that contributes to eradicating child labour, which violates the rights of boys, girls and teenagers in Latin America.

On 2012, Proniño had more than 337.000 beneficiaries; boys, girls and teenagers who have left child labour and can aspire to a better future thanks to a high quality education. It is the main initiative developed by a private company in this respect and is managed by Fundación Telefónica.

Since 1998, the programme has supported networking by bringing together public policies, the private sector and the tertiary sector in order to strengthen institutions and provide the tools needed to systemize and spread good practices and collaborative knowledge. Proniño has aligned its targets with the regional targets of the International Labour Organisation (ILO) and has firmly backed implementation of the roadmap. Both initiatives seek to eradicate the worst forms of child labour before 2015 and 2019, respectively.

This initiative provides children with opportunities so that they can develop a life project. To do this, they stress quality of education, fostering innovation and participative work in the school through access to and promotion of new technologies and collaborative work of the players involved.

# Aulas Fundación Telefónica

This is a project that began with the modest goal of introducing ICTs to improve educational quality and, consequently, to assist with the retention of children benefited by the Proniño programme. Today it is also a laboratory for experiences that reflects the learning achieved in this network of centres that covers: 13 countries, 467 educational institutions, a network of over 15,000 people, mostly teachers, and 8,000 computers as educational tools, with connection to the Internet and each other. Through the Telefónica Foundation Classrooms, teachers are able to share their experiences among themselves and with the expert panel on orientation and training that leads the project.

# **Escuelas Amigas (Friend Schools)**

Escuelas Amigas is a project for cultural connection and exchange over the internet between schoolchildren in Spain and Latin America. The Latin American students come from schools where some are direct or indirect beneficiaries of the Proniño project. The project has three participants: the students, the teachers and the Telefónica volunteers, who act as enablers for the activities. The starting point for Escuelas Amigas is the use of ICTs in the learning process as a means of breaking down geographical and cultural barriers.

# EducaRed

The EducaRed website is home to an online cross-cultural learning community and is an international benchmark for the analysis of educational innovation. It promotes interaction between teachers, students, parents and teaching centers to share



educational values across cultures. In 2011, we had 220,711 teachers registered in virtual communities and ran 34,747 online training sessions. Fundación Telefónica sponsors the EducaRed International Awards for teachers from across the globe who have helped to improve education via ICTs.

#### **Teaching art**

Fundación Telefónica has developed a series of educational programmes for schoolage children, families and adults and other groups, tailored to the needs and interests of each audience. These programmes aim to create a space for dialogue, exchange, observation, analysis and critical reflection that enriches and opens the eyes of our visitors. The Fundación also carries out research, stages conferences and seminars with respected international artists and promotes contemporary artistic creation where it overlaps with technology via international competitions and an ambitious exhibition programme.

# C5 Action Line: Building confidence and security in the use of ICTs

# ICT principles of the ICT Coalition for a Safer Internet for Children and Young People

Telefónica is one of the 25 European ICT companies that have created the very first Principles to improve the security of children and young people on Internet, in such a way as to enable them to avail themselves of its advantages without exposing themselves to other possible uses which so concern their parents. Launched in January 2012, the ICT Principles are a guide for the deployment of products and services aimed at improving the online security of minors, based on key themes such as content, parental control, management of abuse or improper use, child pornography content, privacy control, education and awareness. The difference between this initiative and others on the market is that it offers a long-term agenda which guarantees secure development and covers all aspects of access and use of the Internet and its services. The signatories pledged to: Develop innovative ways of enhancing online safety and encouraging responsible use of the Internet and Internet access devices by children and young people; Empower parents and careers to engage with and help protect their children; Provide easily accessible, clear and transparent information about online safety and behavior; Raise awareness of how - and to whom - to report abuse and concerns

# Tuenti

Tuenti a synonym of privacy, safety and trust Our platform for web and mobile communication began operating in 2006 in Spain. In 2012, apart from launching the virtual mobile operator "Tuenti Móvil", it embarked on its internationalization by the worldwide launch (in beta) of its multiplatform application available in 12 languages. By December 2012, it had 15 million registered users, more than 10 million active users1 and over 6 million unique users of its mobile apps every month.

In the current context, what matters most is the positioning of Tuenti as the most private and secure social network on the market, offering the user maximum control over their



personal data and in particular not selling it to third parties. Reflecting this commitment, Tuenti has introduced different measures to improve privacy and has carried out awareness-raising efforts in collaboration with a wide variety of organizations. As a result of this, the number of incidents involving profiles and photos in Tuenti has gone down by 52% in the last two years.

#### Interactive Generations Forum

At the moment, the forum works in 10 countries. Argentina, Brazil, Colombia, Chile, Ecuador, Spain, Guatemala, Peru, Mexico and Venezuela. Throughout 2012, Interactive Generations trained more than 10,100 minors, parents and teachers about responsible use of ICT in Spain and Latin America thanks to sessions taught by volunteers from the organization, who now number 55. In addition, two educational books: "Y tu kners? (Who r u?)" and "La Gran Decisión de Digipato (Digipato's Big Decision)", and various training workshops, were launched.

In 2013, Telefónica will create a joint resource center with the Forum, which shall become available in stages in all the European countries in which we are present, starting with Spain, the United Kingdom and Ireland, with the aim of offering training and educational tools for all users of new technologies.

# C7 Action line: ICT applications - benefits in all aspects of life C e-learning:

### Aula 365

Aula 365 is a free educational support service with multimedia content for the whole family. This portal facilitates advanced Web 2.0 tools so that children learn, improving the academic performance of students of all ages, with the support of a virtual teacher to clarify points and answer questions.

All this is within a safe environment in which children cannot offer personal data or photographs, and always moderated so that minors can never access inadequate content.

# Curalia

Curalia is a Fundación Telefónica's website devoted to "cure" didactic content with high ICT component. Its main objective is to investigate, filter, select and organize exclusive, valuable and updated material. Basically, the goal is to find out the vision and trends that national and international education leaders propose in this area and to assist teachers on how to enter at the teaching 2.0

Curalia is aimed to professionals, student teachers in training and those responsible of educational environments that require innovative incorporate ICT in school centers.

# Talentum



Initiative based on a simple idea: betting on young people and technology as the future of Europe. Talentum does this by creating job and digital learning opportunities for thousands of young people and university graduates.

The initiative has formally launched in Spain, and will roll out across Telefónica's other European regions in the coming months.

The programme has a number of elements: a start-up stream which matches the best young digital talent from Europe's best universities to Wayra start-up businesses; recruitment of thousands of talented young apprentices, interns and graduates into jobs in Telefonica; and programmes to teach younger children (4-12 years) digital skills for the future.

By 2015 we will have an additional 6,000 young people in our business through graduate programmes, internships and apprenticeships via Talentum.

Talentum is part of Telefónica Thing Big, collection of initiatives to encourage innovative thinking, entrepreneurship and digital technology to stimulate young ideas, and new young business across Europe.

# F e-environment:

Examples of Green ICT services Telefónica's Green ICT services are focused on optimizing the use of resources such as energy and managing environmental issues such as water, waste, climate change etc.

# Green applications for sustainable energy

The Green ICT Application Challenge, launched by the ITU and Telefónica, rewards ICT applications which impulse sustainability. Andreas Kamilaris, doctoral student and employee at the Networks Research Laboratory of the University of Cyprus, won this second edition with *SocialElectricity*. This app allows sharing and comparison through Facebook of sustainable ideas and practices to improve energy efficiency. He presented it at ITU Green Standards Week held in París in September 2012 and he received a prize of 3,000 dollars to develop it. In February 2012, Telefónica and the ITU held a Hackathon, with the support of Nokia, SAP and Movistar Spain, to promote this 2nd Challenge. The winner was the app *Bicing Gamification*, by the Spaniard Asier Arranz. In this case, the objective is to help users of so-called "bicing" - urban bicycle rental services - toleave bikes at the most appropriate point for their distribution in the network to be optimal. Through a geolocation system, it offers various options and as an incentive, proposes micropayments to be credited against users' annual subscriptions..

# Free cooling in Uruguay



In the period 2002-2012, Telefónica Uruguay installed free air cooling technology in 85% of its indoor base stations and mobile switching sites. Thanks to this technology, Telefónica is able to take advantage of outside cold air to keep its equipment cool. Thus, when the outside temperature is sufficiently low, the equipment temperature can be controlled without using air conditioning. More recently, refrigeration technology based on free water cooling was installed in mobile switching sites, and where the humidity and air quality are monitored. This system is based on ventilators which use outside air to chill water and so reduce the use and energy consumption of the chillers. This new technology is more reliable and efficient as it avoids problems related to filter maintenance, humidity or air pollution.

# Fleet management

During 2012, we have installed an M2M solution based on geolocation of the fleet of vehicles of Telefónica in Spain. Thanks to this, it is possible to monitor in real time the position and speed of the vehicles, and obtain activity reports. Among functionality highlights are route management and analysis of efficient driving, which permit optimization of journey times. And reduce consumption of fuel. Apart from improving efficiency, this gives better service to customers, increased safety for drivers and a reduction of costs in general. The solution is adapted to the current and future needs of our fleet.

# **Smart cities**

In 2012, the Spanish Smart Cities Network (RECI) and Telefónica signed an agreement to promote urban modernisation and sustainability projects in 25 cities.

Telefónica, as a promoter and architect of the most important Smart Cities initiatives in Spain, contributes its experience as an integrated ICT operator, as well as a series of technologies that have been found to serve as the essential engine behind new production models and a key instrument for the optimal management of a city's services.

The agreement will provide Telefónica with the support of RECI as a test laboratory to measure the environmental impact of the Smart Cities services, especially in regard to resources savings. It will also facilitate extension of the best practices of this Network to all of the countries in which it operates, as part of its global Smart Cities model.

# **Smart buildings: Inmotics**



Inmotics allow the remote and centralised management of the automatic devices of a company's facilities. Thanks to the monitoring of temperature, lighting, etc., with the corresponding smart control and the implementation of alerts based on specific parameters, energy consumption can be reduced.

Thanks to the Energy Efficiency Inmotics service provided by Telefónica in Spain, some 30 bank and department store clients have reduced their annual energy consumption by 35%. Since 2009, Telefónica de España has generated approximately 4.8 million euros in revenue through the implementation of this service.

# **Climate Monitoring**

Telefónica is working on the development of Green ICT services to monitor climate at the worldwide level, using automatic systems to gather data such as precipitation or temperature based on M2M technology.

In 2012, Telefónica Brazil installed "Vivo Clima", a weather monitoring system that operates based on the installation of precipitation gauges and an M2M unit on the mobile telephony antennas of Telefónica-Vivo. The system was put into operation in Brazil last year and provides real-time information on precipitation levels in several regions. This process operates on the M2M platform of Telefónica Brazil, which has an interface connected to the climate monitoring systems of the government and the civil defence entities. It provides information via text message to communities in regard to weather phenomena in communities located in environmental risk zones.

# D e-health:

# Telemonitoring

Modular service that provides remote specialised care, allowing telemonitoring of the main vital signs and includes tools to support education on prevention and self-care support.

Therefore, for example, patients with heart problems have kits that include a connected tablet and devices that allow health data with the readings to be sent to a server accessed by medical staff and the patient.

These tools allow the trends to be viewed, the patient's schedule to be managed, personalised warnings to be scheduled in case certain thresholds are exceeded and specific messages to be sent, such as recommended doses of medicine in a specific context. The patient can contact the doctor through a voice chat and online.



Therefore, eHealth technologies improve management of chronic illnesses, making the lives of people with reduced mobility and of those who live far away from health centres more convenient, while helping control health expenses.

# C1 - C4 - C7 - C8 - C9 - C11

#### Support for new ideas

#### Wayra

It seeks to be an incubator to develop future 'Silicon Valleys' in the countries where Telefónica operates. Therefore, its mission is to help turn technological start-ups into commercially viable and scalable businesses. By doing this, it helps young innovators who are forced to leave their place of origin to get their projects off the ground.

Wayra's commitment to these young people does not stop at providing funding, but it also accompanies them in their initial steps, identifying their needs and helping them to cover them: administrative support, legal advice, training in different areas of business and first-level technical support, through our R&D team.

To promote the projects, we have created in Barcelona, Bogota, Buenos Aires, Caracas, Dublin, Lima, London (Wayra and the start-up accelerator Wayra UnLtd), Madrid, Mexico City, Munich, Sao Paulo, Santiago de Chile and Prague, Wayra Academies, meeting and work spaces with access to the best technology and mentoring, where they can interact with other projects and with resources to connect to the rest of the countries where Wayra is present.

More than 22.550 ideas and projects have been received, turning us into one of the world's largest accelerator programmes and a trend spotter. This is more than one project per hour since Wayra was launched.

Wayra has so far invested 8.9 million euros from 297 innovative projects in over 12 countries, with a consequent positive impact on employment. If we add the external funding, which reached 19.2 million, the global accelerator has achieved around 29 million euros for investment in all start-ups that have accelerated.

#### The Social Entrepreneurship Lab: social innovation from the University

Universities are a great source of qualified talent and creativity. The Social Entrepreneurship Lab is an instrument that aims to promote social entrepreneurship at the University.

Telefónica Chairs Network is currently made up by 30 university chairs located in principal Spanish universities. Its objective is to work together, universities and Telefónica, and to foster creativity and innovation. Telefónica Chairs Network supports the Social Entrepreneurship Lab with the aim to identify talent at the University and to promote entrepreneurship and social innovation.



The Lab is also a source of creative ideas and projects for social innovation accelerators as UEIA. Project proposals are received, selected and developed in the Lab to get a higher degree of maturity before reaching UEIA.

Social Entrepreneurship Lab objectives are therefore two: 1. Bring new talent from the university to social innovation programs, and 2. Incorporate projects with a higher degree of maturity to social projects accelerators as UEIA.

# Think Big

Programme that gives young people a chance to turn their own ideas into successful social projects.

The Telefónica Think Big Youth programme is already active in the UK, Germany, Ireland, Slovakia, Czech Republic and Spain. It is led by the Telefonica Foundation, accessing its world class expertise on social and cultural action and, in particular, youth social action.

With a broad network of leading youth NGO partners across six countries, Telefónica Think Big Youth has more than 3,700 projects launched by young social entrepreneurs.

By 2015 the initiative will back over 15,000 social projects led by young people with up to 1 million more young people benefitting from the programme. Through its work with schools, will also give an additional 50,000 young people the chance to develop their digital and entrepreneurial skills.

Telefónica Think Big Youth is part of Telefónica Thing Big, collection of initiatives to encourage innovative thinking, entrepreneurship and digital technology to stimulate young ideas, and new young business across Europe.

# C10 Action Line: Ethical dimensions of the Information Society

# Industry Dialogue

In an ever more connected world, the rights to privacy and freedom of expression become even more relevant, and especially for companies in the telecom sector. Likewise, the UN's International Council on Human Rights recognized at its July 2012 meeting that these rights should be promoted and protected both physically and digitally.

Along these lines, Telefónica, along with other operators and manufacturers in the sector, formulated the Industry Dialogue in 2011, with the aim of dealing jointly with the facets of freedom of expression and privacy in the context of telecommunications.

On March 12, 2013 the Industry Dialogue group published the Guiding Principles on Freedom of Expression and Privacy in the telecom sector. These Principles, based on internationally recognized human rights laws and standards, and within the scope of the "protect, respect and remedy" framework of the UN, deal specifically with the interaction (and its scope) between the duty of the State to protect human rights and the social responsibility of telecom companies to respect them.

The Dialogue group, made up of Alcatel-Lucent, France Telecom-Orange, Millicom,



Nokia Siemens Networks, Telefónica, TeliaSonera, Telenor, and Vodafone, has formalized in a memorandum the working process to follow after the ratification of these Principles, to maximize awareness of them. With the aim of maximizing awareness, and to have the support of a leading organization in this field, the Group has also signed an agreement with GNI. By this agreement, GNI will house the work of the Group, as well as provide a common platform for the exchange of best practices.