European Commission

Broadband Good Practices

European Broadband Awards

2018

Introduction

This brochure presents the winners of the European Broadband Awards 2018.

Through the European Broadband Awards, the European Commission wishes to highlight good practices in European broadband projects that show innovative ways of achieving the Gigabit Society objectives. The aim of this competition is to identify, give recognition to, and share good practices in planning, management and implementation of high-capacity networks in Europe.

In this annual competition, the European Commission selects the most successful broadband projects applying from across the EU. The Awards are open to all types of projects regardless of the size, location or technologies used. The competition targets national, regional and local public authorities, as well as large and small privately funded projects, that adopt innovative models of investment, business or financing structure, such as financial instruments.

Candidate projects apply each year and are assessed by a jury composed of five experts in broadband. Five projects are selected as winners in each of five Award categories. The winners are announced and given their awards by the Commissioners for Digital Economy and Society, for Agriculture and Rural Development, and for Regional Policy, at the award ceremony held in Brussels.

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Commissioners' words

> To bring tangible benefits to both citizens and business, top-notch infrastructure is essential and is at the centre of our Digital Single Market: digitisation of our economy and society could not be accomplished without high-speed connectivity. To this end, we are supporting numerous broadband initiatives to foster the development of high-speed safe and intelligent networks through private and public investment.

Mariya Gabriel
Commissioner
Digital Economy
and Society

> Despite progress in recent years, the digital divide is still one of the main challenges facing rural areas in the EU today.
>
> Access to fast and reliable broadband is one of the preconditions for keeping rural communities strong and sustainable.

Phil Hogan
Commissioner
Agriculture and
Rural Development

> A mother sees her working abroad son with ease, a teenager follows top-notch classes online to follow her dreams, an entrepreneur has more time for developing a business thanks to online tax payments.
>
> These are real life stories that cohesion policy enables across Europe, improving people's lives with each investment signed. We are glad to see the Broadband Awards showcasing it.

Corina Crețu
Commissioner
Regional Policy

Meet the jury

Ivančica Urh works as Head of the Electronic Communications Department at the Croatian Ministry of the Sea, Transport and Infrastructure. She holds an M.E.E. degree from the Faculty of Electrical Engineering and Computing of University of Zagreb and Univ. Spec. degree for electronic communications market regulation. Her career in the telecommunications industry started in 1991 at Croatian Telekom as a senior specialist for mobile communications and as international roaming manager. In the past thirteen years, she worked on improving the electronic communications legal and regulatory framework. As the Head of Department, she is also responsible for the development and implementation of the national NGN plan, Broadband Strategy and the coordination of the national framework programmes for broadband infrastructure deployment in the Republic of Croatia. Ivančica Urh is the President of the Croatian Post Supervisory Board.

Cllr Michael Murphy is President of the Irish Delegation to the EU Committee of the Regions (CoR). He is a member of the Broadband Platform established by the CoR together with the European Commission to contribute to the deployment of faster, better and sustainable high-speed broadband in all European regions, particularly in rural and sparsely populated areas. The Platform works towards eliminating the digital divide due to geographical location and/or market failure. He is also the CoR's Rapporteur on the Commission's most recent report on Competition Policy. Michael Murphy continues to work in the private sector, with almost 30 years' experience as a senior executive for a medium-sized enterprise.

Dr Fiona Ashmore is an expert in rural broadband development, having focused her academic career on community broadband movements and the impact technology has in the rural landscape. She has recently joined the University of Lincoln to work with the CORA project, 'Connecting Remote Areas' with digital infrastructure and services, a project co-funded under the Interreg IV B North Sea Region Programme (2014-2020). At Lincoln, her current research focusses on the development of technology hubs as spaces for digital innovation in rural areas. Dr Ashmore is a regular attendee and contributor to conferences and seminars and is often published in peer-reviewed academic journals.

Pedro Ferreira is an expert in telecom regulation with 25 years of experience. He was Head of the Legal Department of Postal Services and Telecommunications in Macao until 1999, when he joined ANACOM (National Authority of Communications, Portugal), as senior specialist. Since 2004, Pedro Ferreira heads the area of European Affairs at ANACOM and has been involved in a number of initiatives at EU level including the national representation in EU committees (COCOM, CEF-Telecom), as a coordinator for telecoms affairs during the PT EU presidency (2007), BEREC CN Chair (2015), negotiation of the EU legislation in the Council Telecom working party (telecom Code, roaming regulation, Net Neutrality) and responsible for promoting the WiFi4EU initiative in Portugal (2018).

Applications

All types of projects, irrespective of size, location or technologies, led by public or private organisations, are encouraged to apply. The competition's target groups are public entities such as municipalities, regions and Member State administrations, as well as communities, private actors such as network and service operators, utilities and other project promoters that are actively involved in building high-capacity infrastructure. At the time the application is submitted, at least 80% of the project must be completed.

Assessment

Projects are assessed according to:

- The effectiveness and innovation of the models of financing, business and investment applied.

- The type of measures adopted to exploit the synergies between different infrastructures and to establish cooperation between relevant stakeholders in terms of building and investing in high capacity infrastructure. The scalability, robustness, resilience and easy maintenance of the infrastructure; and the quality of the service provided (download and upload speed, jitter, latency etc.).

- The impact on territorial cohesion of rural and remote areas, sustainable territorial development, competitiveness and better connectivity of territories.

- The direct and indirect socio-economic impacts attained by the project including the impact on the affordability of services for end-users taking into consideration the quality of services offered (e.g.: price / quality; price / speed).

- The degree of openness of the infrastructure (level playing field) built and the resulting level of competition among retail suppliers.

Award categories

Candidates apply for one of five award categories:

1. Innovative models of financing, business and investment

2. Cost reduction and co-investment in a future proof infrastructure

3. Territorial cohesion in rural and remote areas

4. Socio-economic impact and affordability

5. Openness and competition

Who selects the finalists and winners ?

The jury assesses all projects and selects the finalists and winners. The jury is composed of five experts in broadband with different professional backgrounds and from different Member States. The jury selects three finalists from each of the five award categories. The finalists are informed and announced on the European Commission's Broadband Europe portal and newsletter.

Announcement of winners and award ceremony

The winners are announced at the Award Ceremony. The finalists and the winners will be featured in the European Commission's website, newsletters and good practices database.

How and when to apply?

Once the call for applications opens, candidates:
- download the application form from the European Broadband Awards webpage
- submit their applications by email by the deadline
- receive an email confirmation

The dates are communicated in the lead-up to the call for applications.

Michaelston-y-Fedw Internet Community Interest Company

Innovative models of financing, business and investment

Michaelston-y-Fedw Internet Community Interest Company (CIC) is the first community-built project to install 1 Gbps upload and download FTTP in Wales. The works for implementing the project were carried out with the support of local contractors and volunteers. Working with a budget of € 300,000, they have achieved massive cost savings because the local community worked together to roll-out ducting, install chambers, blow fibre, carry out fusion and splicing, and fit out the hub.

Working towards a common goal and being so directly involved has brought the community much closer together. In order to future proof the internet service, two fibres per property were installed. The current capacity provides 10 Gbps, whilst in the future, with some updates to equipment, there will be the capacity for 100 Gbps and beyond. The project gained start-up capital from the local community, which they then used to apply for a seed enterprise scheme to pursue their broadband development plans. This project provides broadband to a small region, comprising 70 properties; the impact felt by those 70 properties, however, is immense.

The 10 Gbps fibre feed has been brought to the hub via a shared ducting arrangement with Openreach and Hub Network Services. Farmers and land owners granted wayleaves for free. Volunteers carrying out many of the tasks and activities have ensured that costs were reduced by hundreds of thousands of euros. Ongoing maintenance will be carried out by volunteers, thus ensuring further cost reduction for the project.

> « *A core team of 40 volunteers from the local community have generously given their time and effort in all activities, saving a significant amount of the project's budget.* »

Unique characteristics

Michaelston-y-Fedw is the first rural, community-built 1 Gbps upload and download FTTP broadband network in Wales. The network already fulfils the EU Gigabit Society targets for 2025. The project achieved 90% market penetration, which is the maximum that can be achieved given that some properties are vacant and some residents are very elderly and do not own a computer or other internet devices.

All new customers who signed up in the early stages to Michaelston-y-Fedw Internet were offered free service for the first 12 months and a subscription of €33 per month thereafter, with a minimum commitment to 24 months, which is a lower rate than any commercial company offers. Any profits generated are re-invested in the service and infrastructure itself, or in further community projects that are voted on by the shareholders of the community interest company.

Results and impact

Both residents and businesses have benefitted by having much improved internet access and speeds. The project has increased efficiency, improved communications and significantly raised community spirit. Local businesses can now operate more efficiently and effectively from anywhere in the service area, with the ability to send and receive large files, use video conferencing and cloud storage with ease. Moreover, the younger generation are more likely to stay within the community because having world class broadband opens many more opportunities to them.

Michaelston-y-Fedw Internet CIC

Further information:
www.myfi.wales

WINNER

Welcoming Sunne to the Network of the Future

Cost reduction and co-investment in a future proof infrastructure

Sunne is a rural municipality in west Sweden with sparsely distributed households. The municipality and the Swedish Internet Service Provider Telia signed a letter of collaboration in order to digitalise the area and make Sunne the first Swedish municipality with a future proof digital infrastructure. The old copper network will be fully replaced with fibre and mobile networks by 31 January 2019. This will give Sunne a digital infrastructure that is ready for the ever-increasing demand for speed and capacity.
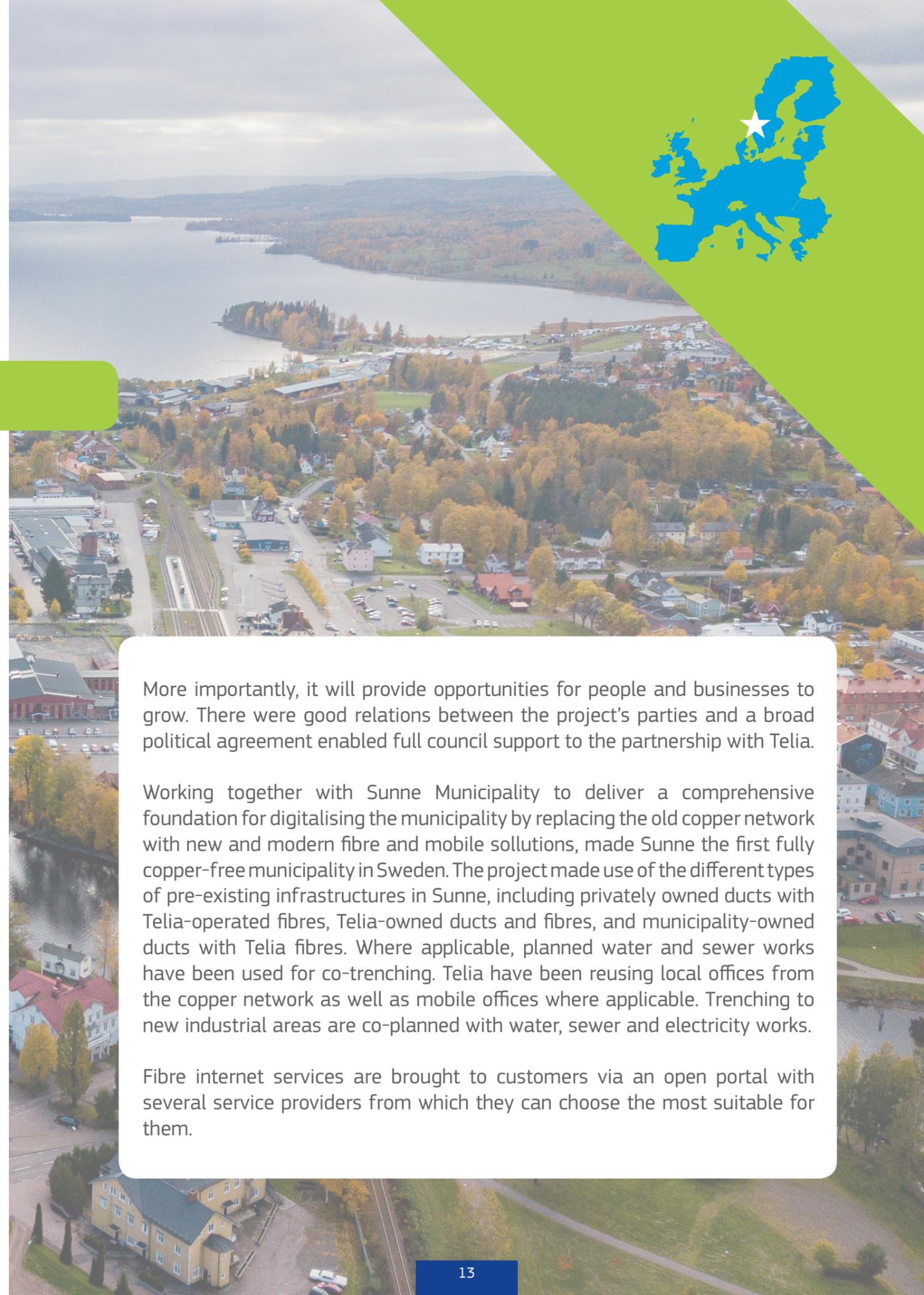
More importantly, it will provide opportunities for people and businesses to grow. There were good relations between the project's parties and a broad political agreement enabled full council support to the partnership with Telia.

Working together with Sunne Municipality to deliver a comprehensive foundation for digitalising the municipality by replacing the old copper network with new and modern fibre and mobile sollutions, made Sunne the first fully copper-free municipality in Sweden. The project made use of the different types of pre-existing infrastructures in Sunne, including privately owned ducts with Telia-operated fibres, Telia-owned ducts and fibres, and municipality-owned ducts with Telia fibres. Where applicable, planned water and sewer works have been used for co-trenching. Telia have been reusing local offices from the copper network as well as mobile offices where applicable. Trenching to new industrial areas are co-planned with water, sewer and electricity works.

Fibre internet services are brought to customers via an open portal with several service providers from which they can choose the most suitable for them.

*During 'More Digital',
12-year-olds taught older people
how to access the digital world. The
concept was premiered in Sunne
as part of the journey to make
it the first digitally future proof
municipality in Sweden.*

Unique characteristics

In total, 400,000 older people in Sweden live their lives completely offline. This is a huge challenge for Swedish society as a whole, as more and more welfare services are expected to be digital in the very near future. The project recognised the need to address the risk of the older population not engaging and benefitting from the new high-speed broadband services. It therefore piloted a community training concept in which 12-year-olds taught older people how to become 'More Digital'.

The concept was premiered in Sunne as part of the journey to make it the first digitally future proof municipality. The project seeks to limit digital exclusion to ensure that everyone - young and old - can take advantage of the opportunities and benefits that digitalisation brings.

Results and impact

Since Telia and Sunne started working together to advance the fibre roll-out in the municipality in 2011, the percentage of households connected with fibre will have increased from 0.5% to 76.8% by the end of 2018. There will be 0% copper customers on 31 January 2019, and 100% of customers adapted to modern solutions (FTTH/LTE) through Telia or another operator.

Further information:
www.telia.se/Sunne

Poland enters Gigabit Society

Territorial cohesion in rural and remote areas

This project covers the entire Polish territory, including white spots of broadband coverage. The project's main aim is focused on territorial cohesion in rural and remote areas. Digital Poland Project Centre organised calls for proposals and 83 projects were selected. As a result, telecommunication operators will connect all schools located in the projects' areas (11,612) and more than 1,7 million households, which is more than 13% of all households and 50% of all white areas in Poland. Previously excluded areas, without any prior broadband internet access or poor services, will be provided with high-speed networks.

Within the project **11 612** public schools which is 1/2 of all public schools in Poland will be connected to broadband network.

The project provides new opportunities for work, communication, education and culture for citizens living in remote regions. The fact that this project is part of a national e-education programme will also promote equal opportunities for all children in Poland and will allow a new quality and style of school education.

To fulfil the project's targets, it is estimated that 99,004 km of fibre networks will be built in excluded areas, providing ways for further development. Operational Programme Digital Poland is a complex programme designed to improve socio-economic development in less developed areas. The national e-education network will also stimulate exploitation of networks built within the project.

Most of **1 777 816** households which will be connected to broadband network within the project are situated in polish towns where less than 5000 habitants live.

« More than 11,000 schools and over 1,7 million households will be connected. The project provides new opportunities for work, communication, education and culture for citizens living in remote regions. »
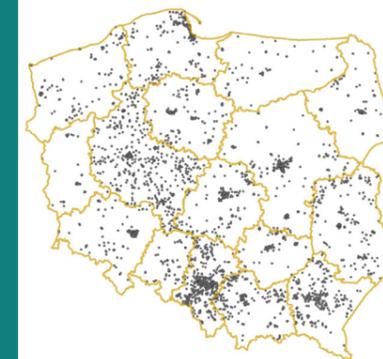
Schools connected to broadband network **before** project implementation
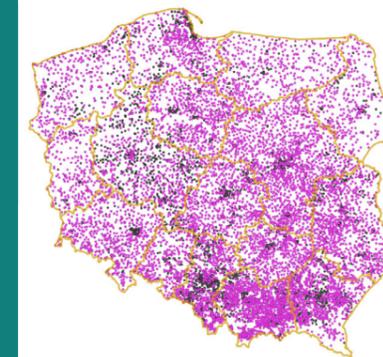
Schools connected to broadband network **after** project implementation

Unique characteristics

In a very short time (14 months), more than 5,000 schools were connected to high-speed internet, with the rest supposed to be connected by the end of 2019. Unique financial criteria for the selection of individual projects were established in the call for proposals, and as a result the public contribution was reduced from a planned 85% to 58%. The project is expected to also stimulate private investments in these areas, as telecommunication operators are obliged to provide open access for all third parties to the network created by the project.

Results and impact

According to the Fibre to the Home Council Europe in Poland, in February 2016, only 1 million households were covered by FTTH/B networks. As a result of this project, this number will be increased by 170%. The investments will be conducted mostly in rural and remote areas, which are currently deprived of the benefits of high-speed internet access.

According to the rules of the contest, service providers will be obliged to set up the retail prices for schools approved by the national regulation body. Service providers are also obliged to inform the national regulation body about prices proposed for households, and the regulator will be entitled to contest these.

CENTRUM PROJEKTÓW POLSKA CYFROWA

Further information:
www.cppc.gov.pl

Broadband for Mandø – connecting the UNESCO world heritage Wadden Sea

Socio-economic impact and affordability

Mandø is a small island off Denmark located in the UNESCO world heritage area, Wadden Sea. As the island is relatively small and mostly rural, the possibilities for commercial operators to find it an attractive investment were very low. On top of this, the island required a new fibre connection to the mainland, so it has long been considered outside the scope for high-speed broadband coverage.

Local community volunteers gathered support for the project among other inhabitants of the island, and, together with the customer owned utility, SE/Stofa, managed to deploy the project without being part of the Danish broadband State aid scheme.

The fibre connection with the mainland alone accounted for 50% of the cost of the project. The works on the island were impeded by the tide, which flooded the only access to the island twice a day. SE/Stofa owns and operates the network. SE/Stofa has opened its network at wholesale level for resale activities.

The objective was to establish FTTP infrastructure on Mand-ø, connect all houses and provide broadband services to more than 60% of the houses. This goal was superseded, with the penetration rate of the project reaching 86%. All 110 houses on the island are now connected and 95 of them are provided with broadband services. The infrastructure is open, according to the cost reduction directive; is future proof, robust and scaleable; and indeed meets the EU Gigabit Society targets for 2025.

European Broadband Award 2018 WINNER

> « *The project would not have been possible without the high commitment of the local volunteers. As an UNESCO world heritage area, the tourist industry of the island will be able to improve its services significantly.* »
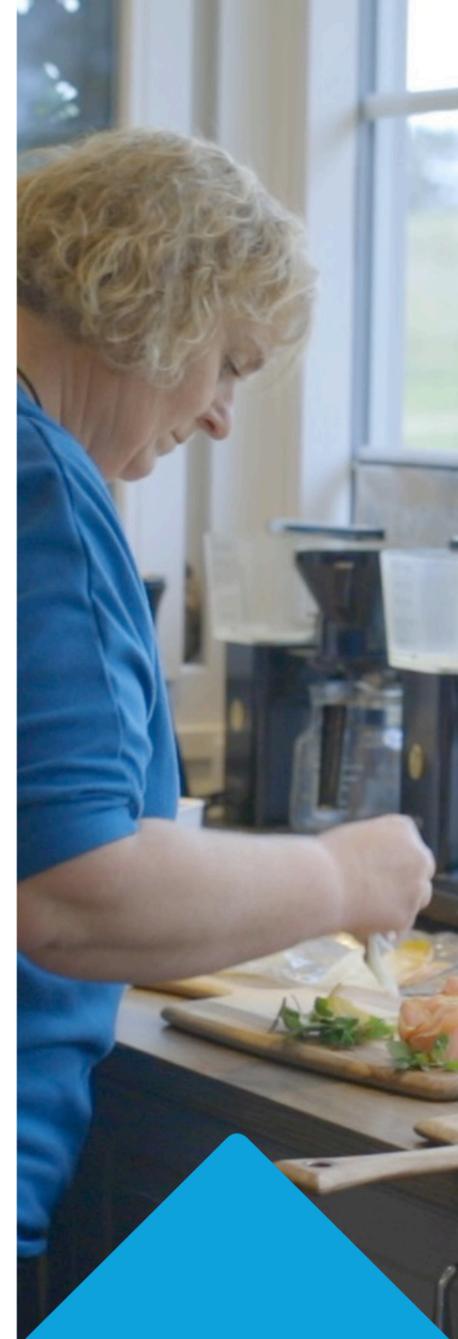
Unique characteristics

The project would not have been possible without the high commitment of the local volunteers, the Joint Council of Mandø, who managed to gather support from an overwhelming proportion of residents and owners of summer houses on the island.

As a UNESCO world heritage area, the tourist industry now enjoys much better conditions for serving visitors. It is expected that the number of tourists will increase, and with it, the general economic activity on the island.

Results and impact

Most houses on the island now enjoy high-speed broadband. The number of tourists visiting (c. 120,000 per year prior to the project) is expected to increase, and with it, the general economic activity on the island. Improved broadband connectivity has already resulted in the establishment of online booking systems for bed and breakfasts, transport to the island, guided tours, and so on. Also connected to this improved connectivity is the planned opening of a local store supported by an online shop, which will focus on selling local products such as wool and meat. For the first time, products from Mand-ø island will be available nationwide.

BROADBAND FOR
MANDØ

Val d'Oise Ultra-Fast Broadband project carried through two Public Initiative Networks: Debitex and Vortex

Openness and competition

The Val d'Oise Ultra-Fast Broadband project, based on public funding, ensures that all houses, businesses and public sites in the Val d'Oise department of France will have access to ultra-fast broadband services. The Val d'Oise department comprises approximatively 548,000 houses and businesses. The project will close the digital divide in the department, connecting citizens and businesses in its lower density (123,000 premises) and higher density areas (425,000 premises).

The lower density area part of the project aims to provide FTTH and FTTO broadband through two Public Initiative Networks (PINs), Debitex and Vortex. These PINs provide wholesale services on a neutral basis which allow all Internet Service Providers to make their retail services available.

The project also aims to ensure that all public authorities in the department can benefit from dedicated and secure fibre networks. For example, all the primary and secondary schools of the department are being interconnected with a dedicated fibre network, allowing the sharing of educational resources. These types of networks are also being implemented for health sites and public administration, among others.

Connectivity in the higher density areas of the department will be assured by private operators that have committed to deploying FTTH networks without public subsidies. In this way, all citizens and businesses of Val d'Oise will be able to benefit equally, closing the digital divide in the department by ensuring that the most remote areas will not be left behind.

> *Two private partners provide wholesale services to retail operators. The project contributes to eliminating the digital divide in the Val d'Oise department by enabling those living in rural areas to have access to the same ultra-fast broadband offers as those in denser areas.*

Unique characteristics

The project has been defined not only to provide ultra-fast broadband offers to houses and businesses, but also to be able to propose tailored offers. The capillarity and the capacity of the networks allow for the proposal of dedicated fibre networks to groups of public authorities with common interests, like e-administration, e-health and e-education.

So far, uptake has already reached 35% after four years of operation for Debitex and two years for Vortex. It is expected to reach a minimum of 80%, and probably more as these networks will be the only way to access FTTH services.

Results and impact

Through this project, 123,000 houses, businesses and public sites will have access to speeds of up to 1 Gbps, whereas so far, through ADSL and the copper network, they have had access to an average of 8 Mbps. This project allows businesses and public services to have access to ultra-fast broadband services at lower costs than without this public initiative, because the wholesale services offered by Debitex and Vortex allow operators to provide fibre connections with a high quality of service at a lower price than seen in areas without public initiative networks (30% lower on average).

The project is making the area of Val d'Oise more attractive for tourism, residents and business, and is ensuring long-term socio-economic benefits for the area.

Further information:
http://www.valdoise.fr
/1827-numerique.htm

Broadband initiative
of the District of Calw

DE

Superfast internet for all homes
and businesses in the rural area
of Noordoostpolder

NL

Aller Valley,
Asturias – FTTH
Network in a rural area

ES

FTTx Broadband in Region
Lower Lusatia – Lusatian
Lake District – Brandenburg

DE

PEBA Basque Country – Ultrafast
broadband services extension in areas
of economic activity and rural Zones

ES

Croatian Multi
Gigabit Islands –
Examples of Rab and Cres

HR

Support for
broadband infrastructure
(stage II) – PRIP2

LT

EmiliaRomagnaWiFi

IT

Fibre optic network
in the village Ilvesjoen

FI

Next Generation Networks for
rural territories in Latvia

LV

Broadband Competence Offices Network and Support Facility

The Broadband Competence Offices Network and Support Facility is a European Commission funded project aiming to contribute to the implementation of the EU Digital Agenda targets on broadband roll-out. It provides information and guidance to national and regional stakeholders in charge of broadband deployment. It also aims to promote the setting-up of the BCOs in the EU Member States.

The project began in January 2017, and works closely with DG Agriculture and Rural Development, DG Communications Networks, Content and Technology and DG for Regional and Urban Policy.

Further information

The European BCO Network:
www.bconetwork.eu

European broadband policy:
http://ec.europa.eu/digital-single-market/broadband-europe

Broadband in Member States:
www.broadband-europe.eu

Don't forget to submit your project for the European Broadband Awards 2019