

In 2010, Superfast Cornwall set out to transform lives by creating the world's biggest rural fibre broadband network.

This is our story.



Not every project can justifiably claim to have transformed its community. But now Superfast Cornwall is complete, the facts speak for themselves.

Over 95% of Cornwall now has access to fibre broadband – far beyond the project’s initial 80% target. And with some of the fastest takeup rates in the UK, there are already parts of Cornwall where homes and businesses without a superfast connection are in the minority.

More than 12,000 businesses use superfast connections every day – competing on a world stage, and creating literally thousands of new jobs.

At home, life’s better connected. More convenient. More fun. Learning’s easier, and public services are finding new ways to serve people in far-flung areas, and reduce costs.

Superfast Cornwall started with aspirations, challenges and ambitious goals that had never been attempted before. But five years later, the independent evidence is clear: we’ve kept every promise, and exceeded every target.

We’ve won a host of national and international awards – but more importantly, we’ve made a lasting difference to the way Cornwall works, plays and lives.

Here's how.

“This project shows how the public and private sectors can work together to deliver local solutions to local problems... thanks to Cornwall Council’s vision, European funding and BT’s investment and expertise.”

Ed Vaizey MP
Digital Economy Minister



Working on the
Big Build
www.superfastcornwall.org

From concept to reality

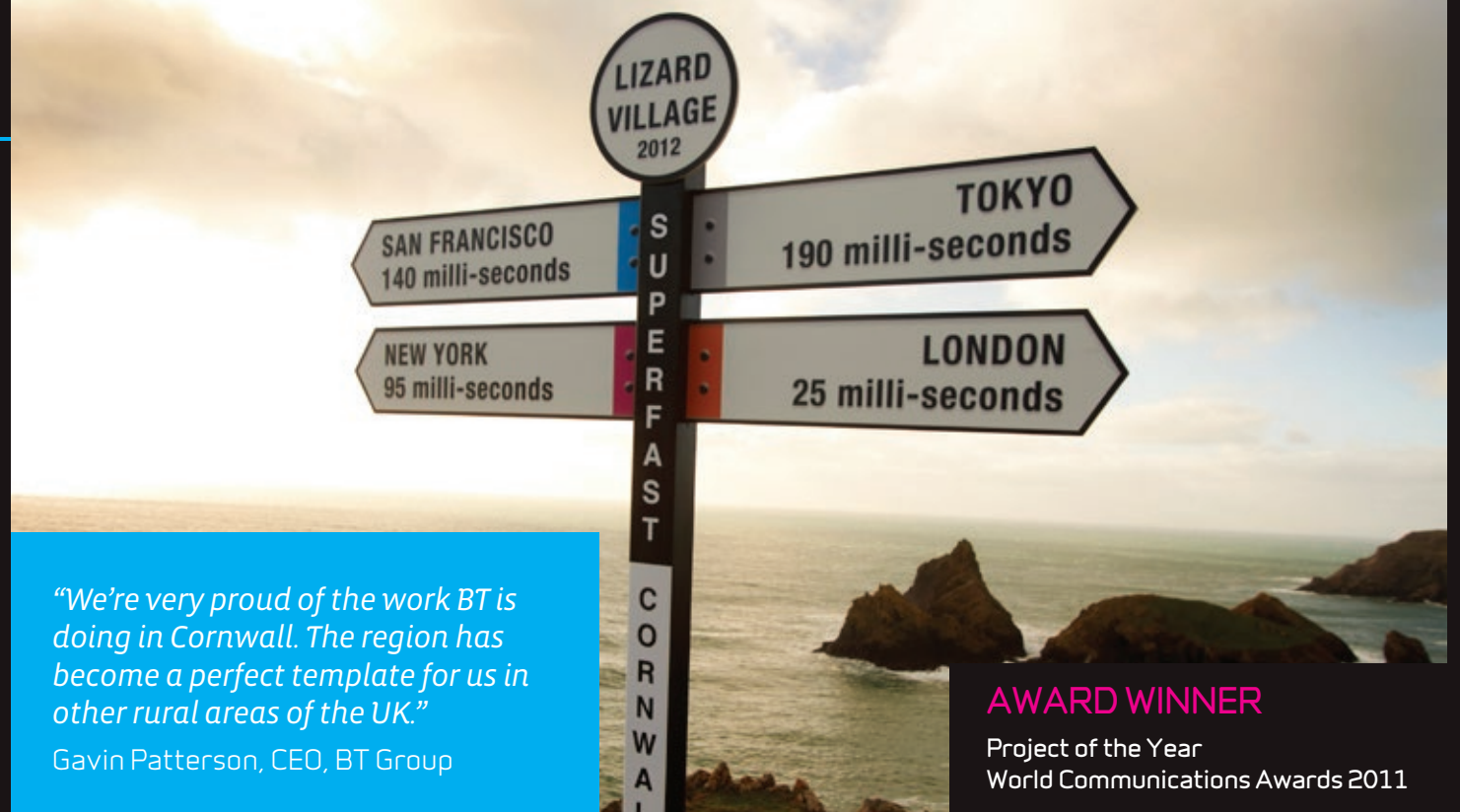
Bringing Next Generation Access to so many premises, over such a wide and challenging area, took an unprecedented engineering partnership.

The initiative, bringing together the EU, BT and Cornwall Council, is proof that public and private sectors can work together to achieve common goals.

This programme wasn't delivered from afar. The combined team immersed itself in Cornwall – meeting, listening and learning with local people and businesses every day.

The Big Build at a glance

- 95% coverage (258,000 premises): exceeding our target by 38,000 addresses (Truro, Camborne, Pool and Redruth combined).
- One third Fibre to the Premises (FTTP) connections – bringing speeds up to 330 Mbps – the highest proportion in the UK.
- The world's biggest rural fibre network: far larger than anything attempted before.
- 130,000km of optical fibre: enough to circle the earth three times.
- £132 million investment: £53.5 from the European Regional Development Fund, and £78.5 million from BT.



“We're very proud of the work BT is doing in Cornwall. The region has become a perfect template for us in other rural areas of the UK.”

Gavin Patterson, CEO, BT Group

AWARD WINNER

Project of the Year
World Communications Awards 2011

Truly world class

To fully understand what Superfast Cornwall has achieved, it's helpful to make a few comparisons:

- Europe's fibre broadband coverage is 55%. Across the UK, it's close to 80% (82.5%). In Cornwall and the Isles of Scilly... 95%, ahead of most European cities.
- Among benchmarked countries, only Japan (96%) has better coverage.
- Two fifths of all Britain's FTTP connections are in Cornwall.
- No rural area in Europe of Cornwall's size comes close to matching our ultrafast FTTP connectivity.

In short, Cornwall's fibre connectivity now rivals the most advanced nations in the world.

(Source: Analysys Mason, March 2015)

Becoming the blueprint

The UK Government's £1 billion Broadband Delivery UK nationwide rollout is modelled on Superfast Cornwall's approach... and officials from countries across Europe and beyond have visited, to learn from our success.



AWARD WINNER

Best Wholesale Service Innovation
Global Telecom Business Awards 2012

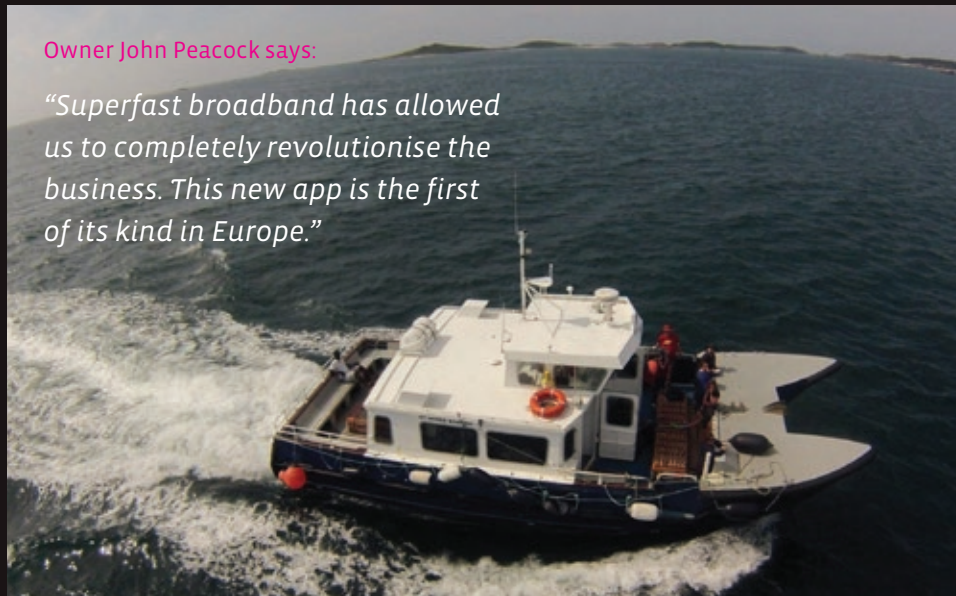
Profile: St Agnes Boating

On the farthest-flung of all Scilly's inhabited islands, with a population of just 72, the local boating company is leading Europe with its fibre-based technology.

A pioneering, cloud-based booking application aggregates demand for the company's two boats – letting people share charters, and dynamically recalculate the cost when another passenger joins the trip.

Owner John Peacock says:

“Superfast broadband has allowed us to completely revolutionise the business. This new app is the first of its kind in Europe.”



Isles of Scilly transformed

28 miles offshore, the Isles of Scilly are among the most remote communities in Europe – further from the British mainland than Ireland or France.

But even here, fibre broadband coverage is almost 100%.

In a challenging feat of engineering, the 12,184-tonne cable ship, CS Resolute, cut and diverted a section of unused subsea cable to connect Porthcressa beach and Lands End.

The new, high-speed connection – a world first for a community of this kind – replaces a much slower radio broadband link to the mainland.

In a place that's often cut off physically, islanders now have a constant, digital link to the world. No wonder take-up rates on all five inhabited islands are among the fastest in the UK.

“Superfast Cornwall has real international significance because it starts to vindicate what we've said all along – that fibre broadband will energise our economy, generate jobs, and save public money.”

Commissioner Neelie Kroes,
European Commission
Vice-President,

January 2014



AWARD WINNER

Rural Broadband Deployment
Frost and Sullivan Growth Leadership Awards 2012



Foundations for the future

As technology advances, one thing is certain. Today's Next Generation Access is tomorrow's baseline standard.

Speeds will continue to rise. Demands will increase. New uses – relying on rapid, reliable coverage – will become commonplace.

But with speeds up to 330 Mbps now, and the potential for multi-gigabit speeds in the future, FTTP connections mean Cornwall is ready. Not just for today, but for the long term too.

No fewer than 85,000 premises in Cornwall now have access to FTTP – that's 30% of the network: coverage to rival anywhere in the UK.

And crucially, 40% of those ultrafast FTTP addresses are rural.

Rural premises in Cornwall are 20 times more likely to have access to the fastest Internet speeds than the rest of the UK.

It means our network is one of the fairest in the world... and that will be important in years to come, as a fast connection becomes a basic part of everyday life.

Protecting our environment

The future brings other challenges, too. And by 2020, superfast broadband will have reduced Cornwall's carbon footprint by half a million tonnes.

On average, each Superfast Cornwall connection will save one tonne of CO₂ per year – a 10% reduction for the average person – as people and businesses:

- Get more of their post and goods, like books and music, in digital not physical form.
- Choose online services instead of travelling in person.
- Work from home more often (in Cornwall, the average commute is 24 miles).
- Use videoconferencing to spend less on business travel.
- Install less technology, and use efficient cloud-based servers.

As well as reducing carbon, this all means less packaging, less waste, and less traffic – helping Cornwall stay clean and green for years to come.



Capturing Cornwall's imagination

World-class Internet connectivity won't transform Cornwall on its own; local people and businesses need to seize the opportunity.

With 50/50 match funding from Cornwall Council and BT, and ambitious connection targets to meet, Superfast Cornwall worked hard to show people what fibre broadband can do:

- Striking outdoor posters, bus advertising and a mobile billboard targeted local areas at the right time.
- 400,000 direct mail pieces alerted people when they could order.
- More than 15,000 people signed up for the programme's email newsletter.
- Online videos telling our story have been viewed 80,000 times (and counting).
- 1.2 million visitors came to our website, and made 200,000 line checks.

The campaign proved so successful that it's being replicated across the UK, and at locations around the world.

AWARD WINNER

Marketing Excellence: Public Sector
Chartered Institute of Marketing 2013



Unlocking tomorrow

Cornwall's fibre network gives us the perfect platform for future growth.

Superfast Cornwall Labs have shown current speeds can be boosted to a whole new level... while fibre-enabled base stations are ready for future generations of mobile access too.

Tomorrow's digital services are being pioneered now – so having tomorrow's network makes Cornwall an attractive place to invest.

“Cornwall and the Isles of Scilly are blazing a trail which many other areas want to follow. They are leading Europe with this pioneering initiative.”

Bill Murphy, Managing Director, Next Generation Broadband, BT

Connecting communities

Isolated, rural communities are where superfast broadband has its biggest impact.

But a fast connection is just the start; people need skills – and confidence – to use it.

Superfast Cornwall's Digital Inclusion Programme saw BT collaborate with Citizens Online to develop Get IT Together: a programme that started in Cornwall and delivered digital skills across the UK.

Community venues, the Cornwall Library Service, Job Centre Plus and the Cornwall Rural Community Charity all played an important role in delivering life-changing beginners' IT sessions:

- More than 3,000 people were given a first taste of the Internet.
- People learned how to keep in touch with family, save money online, research interests and find work.
- One participant saved over £700 on their annual energy bill.
- A network of digital volunteers will ensure this vital work continues.



AWARD WINNER

Broadband Changing Lives
Broadband World Forum Infovision Awards 2012



Learning changes lives

Local beginners' IT courses have helped all sorts of people to overcome exclusion.

For example, Gwen – who at 87 years young is a constant carer for her husband, and has found online shopping, Skype and email are great ways to keep in touch with the outside world.

She finds the social element of the classes a great release, and has even used her new skills to choose a new laptop online.

Transforming Cornwall's economy

With 12,000 firms finding markets, working smarter and cutting costs, Cornwall is the world's biggest test case for fibre broadband's impact on rural business.

Independent research by SERIO at Plymouth University and Buckman Associates show the benefit to small companies in more detail than ever.

The results are dramatic. Already, superfast connections have benefitted Cornwall's economy by £186.1 million.

- On average, firms with fibre see 400% more turnover growth than those without.
- 4,493 jobs have been created, or safeguarded, thanks to superfast broadband.
- After 12 months, 79% of companies are saving time and money now they're connected.
- Start-up firms gave Cornwall a £30 million boost, and dozens more moved here.

By June 2016, the research predicts there'll be 6,000 more jobs in Cornwall – worth £250 million – as a result of superfast broadband.

“Working with Superfast Cornwall has enabled CRCC to gain further access to rurally isolated communities, to help people build their digital skills and learn about saving money online.”

Jane Morgan, Project Worker,
Cornwall Rural Community
Charity

Tailored support

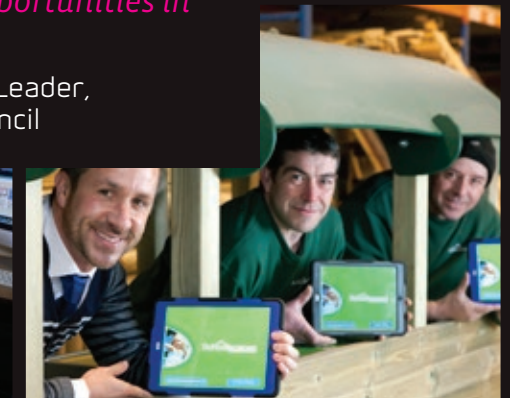
Better communication and collaboration, low-cost cloud computing, remote working and faster website updates... it all gives firms a crucial edge. And we've helped them to use it.

Meanwhile, the Superfast Cornwall Skills programme worked with local training providers to ensure local businesses have the skills to harness the technology, and compete on a national and international stage.



“The availability of broadband in Cornwall has the potential to transform business opportunities in the county.”

John Pollard, Leader,
Cornwall Council





Actors from Miracle Theatre perform Shakespeare's 'The Tempest' in conjunction with VConnect

— Breaking new ground

Superfast Cornwall Labs brought together businesses and universities to understand more about how broadband's used, push the boundaries of what's possible and glimpse the future.

In particular, a world first demonstration of XG-PON fibre technology attracted global attention when it set a new world record for broadband speeds (10 Gbps) – over the same fibres our customers use.

Meanwhile, we worked closely with academics and students at Falmouth University, Plymouth University and the University of Aberdeen to understand the potential for real-life communities, from online craft businesses to residential care homes and isolated village halls.

Other partnership work included:

- Working with Cornwall Council to design more efficient public services using superfast connections.
- Testing new technology like our 4G wireless trial – the first in the UK.
- VConnect took superfast video technology beyond teleconferencing into performance – with artists collaborating online in real time.
- A total of ten research projects and three PhDs, undertaken through the Superfast Cornwall Labs programme.

AWARD WINNER

Fixed Network Infrastructure Innovation
Global Telecom Business Awards 2013

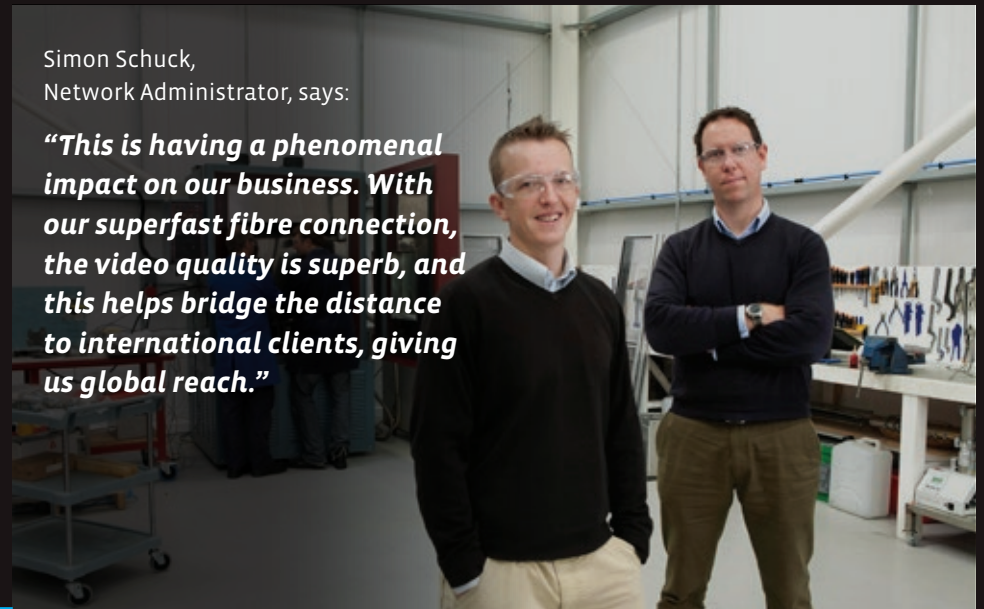
Profile: Severn Subsea Technologies

Selling subsea valves, cameras and systems to a worldwide market, Severn Subsea Technologies relies on its Internet connection daily.

A FTTP connection enables face-to-face contact with oil and gas clients from Norway to China... without leaving Redruth.

Simon Schuck,
Network Administrator, says:

“This is having a phenomenal impact on our business. With our superfast fibre connection, the video quality is superb, and this helps bridge the distance to international clients, giving us global reach.”



An aerial photograph of a coastal town, likely in Cornwall, UK. The town is built on a hillside overlooking a sandy beach and turquoise water. In the foreground, a large boat is moving through the water, leaving a white wake. Several smaller boats are scattered in the water. The background shows more of the town and the sea under a clear blue sky.

This is just the beginning

The transformation goes on.

Every month, another thousand Cornish premises make the leap to a superfast connection. More homes, more businesses, more lives changed.

Further afield, we've become the blueprint for bringing broadband to the one third of the UK where commercial forces alone won't work. Once again, Cornwall's ingenuity is leading the way.

Cornwall and the Isles of Scilly are ready for a bright future, based on world-leading connectivity. We're proud to have played our part.

"This is the largest investment of its kind supported by European funds in the EU and I'm sure will serve as inspiration for other regions."

Johannes Hahn, European
Commissioner for Regional Policy

CORNWALL'S RURAL TRANSFORMATION THROUGH SUPERFAST FIBRE INVESTMENT: 2010-2015

£200m
of transformed
public services

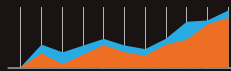
c.£200m
of economic
impact

1st deployment of
4G in the UK

Projected save of
0.5 million tonnes
of CO₂ between
2011-2020

95%
coverage achieved
plans for **99%**

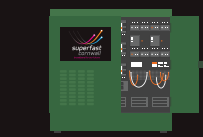
12,100+
businesses connected



4,686
businesses with
improved performance



c. 1 tonne CO₂
saved per
connection
(2020)



700
fibre cabinets installed

10 ground-breaking research projects



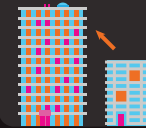
New products trialled
fibre on demand



79% of SMEs
making savings



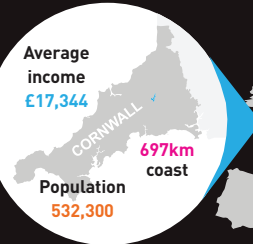
50% of
businesses
growing



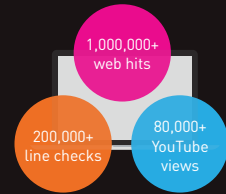
71% of businesses
working
flexibly



73% of SMEs
increasing digital
collaboration



42%
of SMEs
connected



£30m+
Start-up GVA

3,000+
people online for the first time



Isles of Scilly
45km offshore
nearly 100% coverage

4,500
jobs created
or safeguarded

1.2m
engineering hours

67,000+
connections
via 60 ISPs



132,000km
of optical fibre



Enough to loop
around the planet
3 times

30% Ultrafast FTTP
world's best rural coverage



330 Mbps
speeds



6
prestigious international
awards

World
record for
broadband
speed
10 Gbps
Nov 2012

Pioneering public-private partnership – copied worldwide

3
sponsored
PhDs

