



Broadband project planning

The Broadband planning section, along with the Broadband investment guide aids municipalities and other entities in their planning of successful broadband development projects.



The goal of the Broadband investment guide, available in 22 languages, is to assist public authorities in formulating the important questions and to provide the conceptual framework and the information needed to make the right decisions meeting their needs. The idea is not to provide ready-to-apply recipes but to present a tool box in all thematic fields to be considered when investing in broadband.

Broadband Plan

A sound broadband plan is a politically supported document containing an analysis of the current situation, the goals to be achieved, the financial support to be gained and a mechanism on how to implement it.

Four key strategic choices

The guide presents four key strategy choices that need to be made in order to achieve the goals defined in the broadband plan:

Choosing the right infrastructure type

Is it necessary to deploy a new future-proof broadband infrastructure or would it be sufficient to

upgrade the existing infrastructure?

When planning a broadband project it is important to understand the different technical levels of infrastructure, technologies and network designs in order to make a choice over the right infrastructure type for your regional broadband network. The decision over infrastructure depends on a number of factors including:

- the implications concerning the physical fundamental properties of the infrastructure (i.e. the medium);
- the level of ambition in the region considering the types and number of services planned;
- considerations about effects on the attractiveness and competitiveness of the area;
- the topography, population density and future development plans.

Choosing the right investment model

What is the role of the public authority with respect to the implementation, operation, ownership and management of the infrastructure in order to choose the right investment model?

The choice made here will greatly affect the role of a municipality or a region and thus define the influence of the public authority on the broadband infrastructure project. Four major investment models are suitable for broadband investment:

- direct investment through a publicly-run municipal network model
- indirect investment through a privately-run municipal network model
- the community broadband model
- operator subsidy model (gap-funding)

Choosing the right business model

Should the public authority opt for a vertically integrated or an open-access network model? Which business model is most likely to maximise broadband coverage and penetration, the financial sustainability of the project, competition and the socio-economic development of the community?

The business model describes the roles of the different actors in a broadband infrastructure project that are active on different network layers: passive infrastructure, active infrastructure and services. Respective actors or carriers will be matched according to the needs of the municipality or region. This can result in different business models: open networks with public and private actors in different roles or in vertically integrated models with only one (mostly incumbent) actor for all three network layers. Sometimes the choice of the model is limited due to regulations.

Choosing the right financing tools

How can the public authority ensure an adequate financial coverage for building and operating the infrastructure with the right financial tools? What can it contribute in terms of capital, expenditure and assets?

The different financing tools and models available for public and private investment in a broadband project need to be considered for the fourth key strategic choice. A sustainable financing concept should ensure an adequate financial coverage for building and operating the infrastructure.

Revenue based financing for running projects, private capital, bank loans and bonds, public funds and community financing are amongst the main financing tools. Moreover, private investments can lead to financial stability and an improvement of credit rating of the project. In areas where the market

fails to invest due to unprofitability, state aid can be used following the specific conditions set within the EU State Aid Guidelines.

Action plan

Once these choices are made, an action plan needs to be defined and executed that specifies and checks on all the different activities. The process must be closely monitored to ensure the achievement of the previously defined goals.

Follow the latest progress and learn more about getting involved.

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Big Picture

Support for Broadband rollout

Increasing broadband network coverage is key for reaching the EU's Gigabit Society objectives. EU businesses, project managers, as well as local and regional authorities can find information on broadband best practices, financing tools, technological and business solutions, as...

Dig deeper

Broadband: Financing public-private and private-run deployments

In cooperations between private actors owning existing infrastructure and public authorities implementing a public- or private-run network, the investment efforts are partly supported by the private actor.

Broadband: Carrier models

Municipalities, municipal companies, joint ventures, and private companies can be involved in one, two or all three stages of broadband development.

Broadband: Actors in the value chain

The basic roles of Physical Infrastructure Provider (PIP), Network Provider (NP) and Service Provider (SP) can be taken by different actors.

Broadband: Access to infrastructure & service-based competition

A broadband network consists of different geographical elements and is divided into network layers. Access to the broadband infrastructure is possible via different network nodes on the infrastructure and application level. The two

Broadband: Plan definition

The key to successful regional broadband development lies in defining a plan that includes goals, collaborations, and specific needs and stakeholders.

Broadband: Action plan

Broadband project plans help you map infrastructure needs, plan financing and deployment, monitor progress, find stakeholders, make the right choices and more.

Broadband: Technology overview

An overview of different wired, wireless and upcoming broadband technologies and a description of their advantages, disadvantages and sustainability.

Broadband: Basic business models

Choosing the right business model depends on the roles of the market actors in the broadband value chain.

Broadband: Investment models

Investment models present interesting involvement opportunities for a public authority that engages in regional broadband development.

Broadband: Main financing tools

The European Commission has a range of financing tools for high-speed broadband development projects across the EU.

Broadband: State aid

State aid for broadband may be necessary in some places where the market does not provide the necessary infrastructure investment.

Broadband: Network and topology

A broadband network consists of geographical parts. The topology of a network describes how the different parts of a network are connected. The most relevant topologies for the backbone and area networks are tree topologies, ring topologies and meshed topologies. For the first...

Broadband: value chain, actors & business models

Different business models are available to public authorities and other market actors in broadband development.

Broadband: Choice of infrastructure

Broadband networks require different infrastructure types based on different logistic, economic or demographic conditions. Use the questions to help choose.

Broadband: Technology comparison

A comparison of broadband technologies presents features of each solution and helps decisions on the best solution for different regions.

See Also

Broadband in EU countries

Find current information on broadband development in each country, as well as national strategies and policies for developing broadband.

Broadband Glossary

This a non-exhaustive list of relevant terms relevant to broadband.

European Broadband Awards: broadband deployment projects

The European Broadband Awards is an event that recognises outstanding broadband deployment projects in Europe and highlights successful infrastructures.

EU rules to reduce cost of high-speed broadband deployment

To make high-speed broadband quickly available, the EU established a set of harmonised measures to lower the cost of rolling out broadband, through the Broadband Cost Reduction Directive.

Broadband Competence Offices (BCOs) Network

The European Broadband Competence Offices Network supports EU countries in reaching the Gigabit society objectives and rolling out broadband.

Source URL: <https://digital-strategy.ec.europa.eu/policies/broadband-planning>