

This project demonstrates how a local authority succeeded in attracting dominant telecommunications operators through the support of a local cooperative in charge of both deploying the network and aggregating demand in a remote rural province.

It demonstrates how the constraint of rurality can be overcome by a solid organisational approach that involves intense fieldwork such as public information, individual counselling and aggregation of demand.

Source
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Fryslân Ring Netherlands

The Friesland Province in the Netherlands is a remote area where businesses and citizens have a real need for high-speed connectivity in order to thrive. The biggest challenge was to interest the dominant market operators in a rural peripheral province with an extremely low population density and low potential for business.

As an agricultural province with a strong dairy industry, cooperative associations of farmers have always been an important part of Fryslân. As a result, the province took this approach to address the issue of connectivity, setting up a non-profit association in 2006 with support from the regional and local authorities: the Friesland Ring UA Cooperative Society – or 'Fryslân Ring'.

The Fryslân Ring cooperative drove affordable broadband access for the province for over a decade, supporting fibre optic initiatives on industrial estates and in the outlying rural area, as well as advising companies and institutions to optimise their business processes with smart ICT solutions.

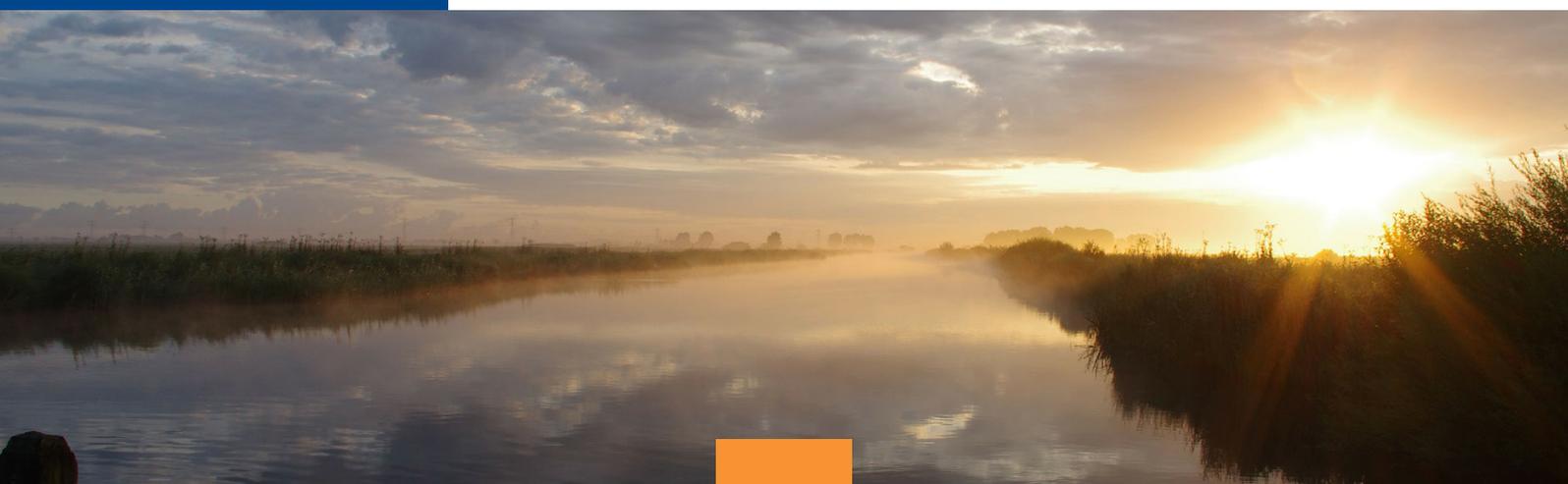
Fryslân Ring's objectives, according to its statutes, include developing and maintaining a fibre optic network that is "open to everyone", with a wide range of premium providers and "the best possible prices for the use of infrastructure and ICT services."¹ Fryslân Ring works with local stakeholders in order to drive support for the project. These include municipalities, entrepreneur associations, food and agricultural organisations and coordinating bodies, as well as educational institutions.

Businesses, institutions and private consumers that have been connected join the cooperative as members. The aim is for the members themselves to become the owners of the network, with Fryslân Ring supporting them upon request for matters such as exploitation and management. As an organisation, Fryslân Ring is self-supporting, with all expenses being covered by membership fees, commercially charged IT consultancy assignments by companies and institutions, as well as mediation fees paid by suppliers and service providers.

Fryslân Ring made an official agreement with the major network operators supporting the aims and objectives of the cooperative and, in 2015, the first open fibre networks were laid down, with their activation and technical administration ensured by those operators. The project uses an "open approach", where competition from independent operators leads to multiple choices of actors providing services.

A critical success factor was the project's step-by-step approach: Fryslân Ring first connected the business parks and then the rural areas. Fryslân Ring provided public information, individual counselling for entrepreneurs and aggregation of demand on business parks in order to drive the demand for connections and catch the interest of market agents. This resulted in the deployment of fibre optic networks in business parks across 23 out of the 24 Fryslân municipalities over the course of a few years.

¹ <https://www.fryslanring.nl/data/uploads/editor/file/Documenten%20FR/20060929%20Statuten%20FR.pdf>





Different methods of financing were applied in the business parks and rural areas. Deploying networks in business parks usually took place after demand aggregation by the cooperative, with implementation undertaken by the network operator with the best offer to the cooperative. The cooperative in these cases remains the owner and the network is either fully or partly privately financed with the local entrepreneurs.

The rural consumer networks were financed through a combination of grants from regional authorities, loans provided by the BNG Bank (Bank Nederlandse Gemeenten) and an additional contribution from the owners of the houses being connected. As a result of Fryslân Ring's good reputation and its collaboration with Netherlands' largest network operators, BNG Bank minimised the risk and, in so doing, ensured optimal financing conditions.

Good practices in project planning

- ✓ Taking into account the scalability, robustness, resilience and easy maintenance of the infrastructure
- ✓ Deep involvement of the inhabitants, investing in local projects, stimulating/aggregating demand for high-speed connectivity
- ✓ Producing scale economies through the aggregation of territories
- ✓ Getting in touch with service providers as soon as possible and understand their interests in new network deployment
- ✓ Getting/empowering the local market operators interested in peripheral and rural areas. There is a growing number of challenger companies that specialise in rural fibre and wireless network deployment

Leading organisation

Fryslân Ring (Coöperatieve Vereniging Fryslân Ring)

Business parks

With the cooperative as owner, privately financed either:

- fully (local entrepreneurs)
- or partly (entrepreneurs and the cooperative)

Financing

Rural consumers

Financed through a combination of:

- grants by the regional authorities
- loans provided by the BNG Bank (Bank Nederlandse Gemeenten)
- contributions from the home owners

Speed / Performance

≥100 Mbps (Megabits per second)

Technology

All homes have been connected point-to-point and with use of a fibre pair.

The network

Fibre optic networks deployed in business parks in 23 out of the 24 Fryslân municipalities