

# FIBRE NETWORKS IN SWEDEN



# AN INTRODUCTION

#### **ALTERNATIVE TO THE INCUMBENT**

Some Local Fibre Networks started already 20 years ago. Today there are Local Fibre Networks in 67 % of all municipalities in Sweden. They stands together for more than 50 % of the fibre coverage towards households and companies. In most cases the Local Fibre Network is owned by the municipal, but that is not necessary. The main advantage is that there is a local or regional engagement to take care of the unique local development. In some years a lot of the social welfare will be produced via the Local Fibre Networks.

# HUNDREDS OF DIFFERENT SERVICE PROVIDERS

Because of the Local Fibre Networks there is an open market for new entrants. All service levels in the "value chain" are for hire and therefore both big and small operators can choose if they need to install their own equipment for infrastructure or not. You can see hundreds of new service providers the last ten years, from local to domestic. It's about telephony-services, Internet service, alarm services or cloud services.

#### **MORE THAN 40% CAN CHOOSE FIBRE**

More than 40 % can today choose fibre for broadband access. 1, 25 million household has already make that choice, that is 27 % of the total in Sweden. This had not happen if not the Local Fibre Networks had challenged the former incumbent. We can now see a quite big churn from xDSL-services and CableTV-services and the customers have a real demand for fibre because of the speed and possibility to choose more freely between different service providers.



#### INCREASED EMPLOYMENT AND POSITI-VE DEVELOPMENT FOR THE CITIZENS

According to Acreo Swedish ICT, a science and development institute, who have made several studies around fibre broadband and its effect on society, they can point out several positive things. For instance with 10 % increase in FTTH subscribers, already in two and a half year it gives a positive change in employment up to 0,2 %.

#### **LOWERING CONSUMER PRICES**

The Swedish Regulator (PTS) stated in Dec, 2012 that 100 Mb broadband subscriptions are in general offered at prices below the domestic average in areas with local fibre networks where several service providers act. In the report PTS says that prices are often 20 - 30 % lower.

# THE BROADBAND FACTORY

**OUR TOOLBOX** 

#### **COMMON PURCHASING PROCESSES**

The broadband factory was established to simplify the procurement process for network owners and enable efficient business.

When the opportunity to deliver broadband services over fibre networks occurred, it became a possibility to create a greater range of sophisticated services to Local Fibre Networks and its end customers. The end customer expects more from each service provider and the fibre network. They also expect a greater range of service providers to choose from. An open network is therefore the only option for many municipals and service providers today.

#### MORE EFFECTIVE SMALL ACTORS

When the service provider and the operator hire connections and ports on equal basis with their clients, it becomes cost efficient to build, operate and manage. That is how today's model of the open network looks. Network owners need to control both the passive and the active networks to be effective and it often lead to high costs for the individual network owner to operate the networks.

#### STANDARDIZED SERVICE LEVEL AGRE-EMENT

The way to keep the costs down is either by increasing the number of customers in the networks or to streamline procurement. At Swedish Local Fibre Alliance we believe that the solution partly is about a national coordination. In order to increase the number of customers in the networks and create more cost-effective operations, the features for business and a national standardization for both service level agreements as for peripheral systems and interfaces needs to be coordinated nationally.

#### **COMMON INTERFACE**

As more and more services are delivered via the Internet, the need for high capacity – regionally and locally, increases significantly. This in turn will increase the need for coordination.



# **CESAR**Common web based broker system for fibre and capacity

CESAR is designed for the members of Swedish Local Fibre Alliance and is a marketplace for connections based on fibre. The members of Swedish Local Fibre Association, especially operators, use CESAR for hire fibre connections, capacity, local products and accesses in Local Fibre Networks. CESAR is completely platform independent. This means you can use CESAR in both PC and Mac environments or in your phone or tablet.

A SUCCESS!

### THE SWEDISH MODEL

START A LOCAL FIBRE NETWORK



#### IT IS NOT SO DIFFICULT AS IT SEEMS

A lot of services and products are today standardized and industrialized. Of course there are still much to think about and plan. In Sweden we have been building and developing Local Fibre Networks for twenty years.

Swedish Local Fibre Alliance is an organization with 280 members. Therefore we have a bank of different skilled employees, consultants and companies that can help in various situations. People with different knowledge and skill depending what you need help with.

#### **BUSINESS PLAN AND ROLL OUT**

Building a Local Fibre Network is a long term investment. In Sweden more than 180 have started up during the years. In several cases our member consultants have been involved in the producing and preparing of a Business plan.

#### **FINANCIAL SOLUTIONS**

Your main challenge will probably be to find the financing. The vital thing is to be able to understand the business and describe the market. Investment funds and Banks are more and more willing to provide capital. We can show how.

#### **ORGANIZATION AND OPERATION**

To have a Local Fibre Network is not the same as you need to have your own personnel, it can

be hired, or it can be a strategic issue have your own. What kind of resources is anyway a key matter, our consultants can help you. If you need temporary resources to start up, there are available people in Sweden to help.

#### **PROCUREMENT**

Being a Local Fibre Network can be seen as a small actor with limited capability. With a cooperation with other similar actors you can get out the best from suppliers and others. Swedish Local Fibre Association has created "The Broadband Factory" with the processes and agreements that can be adopted to several countries.

#### **SWEDISH LOCAL FIBRE ALLIANCE -**

A NON PROFIT ORGANIZATION WITH THE VISION TO CREATE AN OPEN ICT INFRASTRUCTURE WHICH CONTRIBUTES TO A SUSTAINABLE DEVELOPMENT OF THE SOCIETY

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