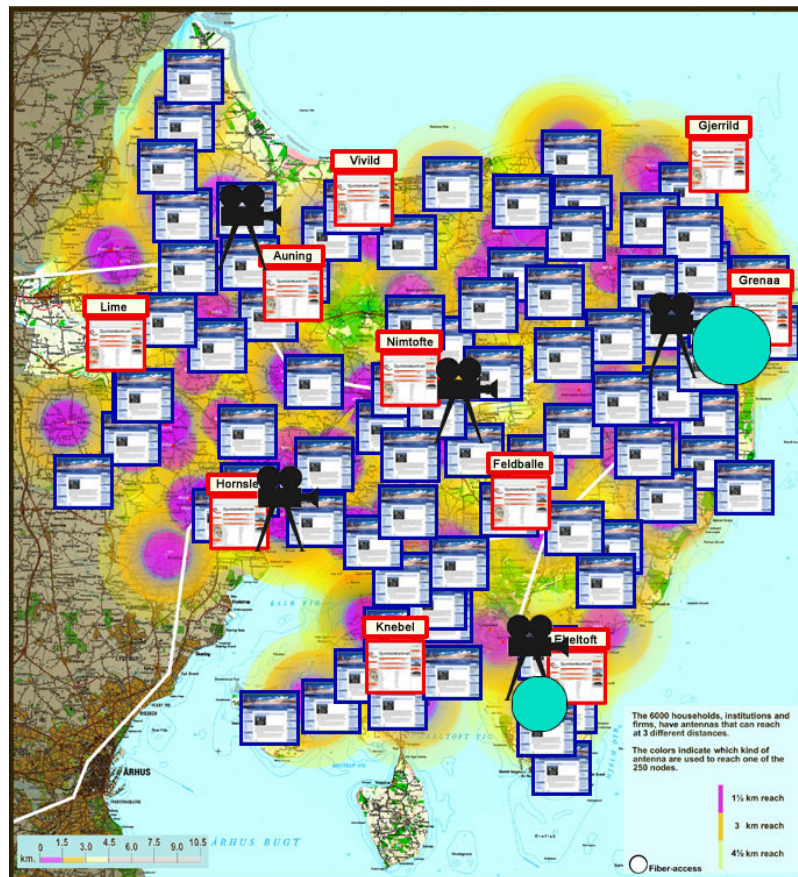


**Best Practice 2:**  
**Networking Djursland**  
*- lessons learned from developing ICT-society on rural Djursland -*

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## 1. Summary

The Networking Djursland project has with its 16 partial and synergetic ICT-projects, covering all the necessary aspects of ICT in a rural context, been of vital importance for the ongoing development of the rural society on the peninsula Djursland into a mature E-community, facilitating its inhabitants to do well in the global ICT-society, on equal terms with people in big cities.

## 2. Background and conditions

When the Computer-Support-community on Djursland by the end of 2004 had given birth to the DjurslandS.net and its 10 wireless area networks, (see about this in Best Practice 1 from DIIRWB), it became very clear that all the boards of the wireless area networks were so occupied with the processes of establishing, extending and running the infrastructure of the wireless landscapenets and connecting new users, that there was a need to form a project on what else was necessary concerning ITC, to create a well functioning rural ICT-society on Djursland.

### 2.1. Geographic

#### Facts of Djursland:

Area in miles:	30 * 40 miles
Area in kilometres:	50 * 60 km
Total area in square miles:	576
Total area in km <sup>2</sup> :	1491
Population of Djursland:	82420
Population a square mile:	143
Population a km <sup>2</sup> :	58

### 2.2. Social

In the Danish reality Djursland is a sparsely populated rural area and as such comparably underserved. At the time in the year 2000 where Bjarke Nielsen as the founder of the then 8 year old Computer-Support-community of Djursland took the initiative to establish the DjurslandS.net, the social and cultural level had for many years degraded and this reality had not changed yet by the end of 2004. The daily newspaper "Djursland" had been closed. The regional hospital closed. The ferry to Sealand to reach the capital Copenhagen was also closed. A diverse industry was taken over by different kinds of foreign capital and closed, and the retail markets were vanishing from the village level. The educational level and the income level were low. Sure indicators of the collective social deroute were that the house prices were the lowest in the county and unemployment was the highest.

The plans of the telemarket for roll out of broadband were not considering 25 % of the rural households on Djursland. Djursland as a whole were not invited to be part of the modern society, - a very dangerous situation for the people of Djursland, which establishment of the DjurslandS.net were the first



step to counteract, - but more steps would have to be taken to secure the ICT-competences of the population of Djursland and development of participation in an E-community for the region.

### 2.3. Political

Knowing from the years of developing the DjurslandS.net (see Best Practice 1 from DIIRWB) how little results involvement with the national, regional and local political life - as well as with the business life - produced, the board of the Computer-Support-community turned to other partnerships. On the one hand the Computer-Support-community on invitation partnered with projects in rural areas in the Baltic Sea Region in a common Baltic Rural Broadband Project. On the other hand the Computer-Support-community formed a multi-branched local project for ICT-development of Djursland and invited institutions on Djursland to partner in the practical realisation of these goals:

- 1) IT-, support- and self-help workshops and resource centres, with the needed ICT facilities and Internet café.
- 2) Providing cheap computer gear and passing on renovated recycled hardware.
- 3) Training in use of PC and Internet for children, adults, elderly and professionals.
- 4) Internet corners in homes for elderly and training of the staff to be able to help.
- 5) Training in building and running an ICT-infrastructure and its E-community services.
- 6) Providing cheap radio-, antenna- and net gear and providing innovative cheap local solutions.
- 7) Internet-access via fibre, or satellite, from relevant central point for the rural area.
- 8) Wireless backbone-links from the central fibre access to rural central points.
- 9) Wireless point to point links from rural central points to remote central points. and wireless access from households, institutions and firms to the relevant central points.
- 10) High speed Wireless links from remote business areas to relevant central points.
- 11) Community news- and service portal with daily local news, free e-mail and free homepages.
- 12) Extra portal-service 1: Web-platform linking all local homepages.
- 13) Extra portal-service 2: E-learning platform for the area's households, institutions and firms.
- 14) Extra portal-service 3: Free VoIP + Video-phony + Local TV - within the community net.
- 15) Extra portal-service 4: Web-platform with cooperative tools for the businesses of the area.
- 16) Nesting facilities for new ICT-businesses, developing services for the rural E-community, - like documentation of the history of the rural community.



## **2.4. Attitude**

During the project period from summer 2005 until the end of 2007 in all 25 top-level institutions supported and partnered with the Computer-Support-community to realize the above objectives for the Djursland community. Grenaa Technical School even involved itself economically, as its leadership for years have been very supportive to the initiatives of Computer-Support-community.

The general attitude was that we to care for Djursland's crucial future participation in the global ICT-society, would – in our own interest - have to stop waiting for others to show responsibility and organise the ICT-development ourselves; - just start doing the actual development ourselves, of our own rural ICT-community, - by our own powers, minds and actions, - like people in old days countryside had to and were used to do by themselves what ever they wanted done, because they had no other options.

## **2.5. Availability of Knowledge**

Almost all the needed knowledge to realize the above plan was available within the partner-group and what was not there were to be developed within the partial projects by the experience from working with the tasks.

The partner-group:

- 01) The Grenaa Technical School
- 02) CV2
- 03) The Grenaa Business School
- 04) The Labour Market Education Centre Djursland
- 05) The Adult Education Centre Djursland
- 06) The Djurslands Development Council (all mayors)
- 07) The Djursland Business Council
- 08) Innovation Djursland
- 09) The experimental village Friland
- 10) The Fuglsoecentre
- 11) Stenvadcentret
- 12) The Noerre Djurs Municipality
- 13) DjurslandS.net
- 14) EbeltoftS.net
- 15) E9S.net
- 16) GrenaaS.net
- 17) RougsoeS.net
- 18) The Djurs Business Net
- 19) Grenaa Antenne forening
- 20) Jobcenter Djursland
- 21) NRGi Fibernet
- 22) Den Europæiske Filmhøjskole, Ebeltoft
- 23) Viden.dk
- 24) Destination Djursland
- 25) Powerline



### **3. How decisions are taken?**

#### **3.1. Decision makers**

The democratically elected board of the Computer-Support-community on Djursland decided the definition of the project according to knowledge of the need and appointed a project leader for each of the above mentioned partial projects, and a working group for each were formed with relevant representatives from the partners, to realize each of the projects. Decisions were taken within each working group on how to proceed towards the goal.

#### **3.2. Why was the decision taken**

As the rural Djursland community was endangered by the fact that a large portion of our population would not be involved with ICT (see explanations in Best Practice 1 from DIIRWB) the Computer-Support-community on Djursland would secure development of a high concentration of ICT-competences on Djursland, not only by its former and very successful initiative to provide cheap broadband access all over Djursland through the DjurslandS.net, but also by involving lots of institutions in realizing all of the above mentioned synergetic projects to secure fulfilment of the following 10 goals:

- 1) Maintain and improve the quality of life of the inhabitants.
- 2) Retain the resident population and attract further settlement.
- 3) Retain and extend the competitiveness of business life.
- 4) Maintain existing businesses and attract new ones from outside.
- 5) Create the foundation that enables the inhabitants to establish new businesses by their own abilities, - e.g. based on teleworking etc.
- 6) Avoid young "emigration" by creation of competitive conditions and possibilities for a living.
- 7) Retain the current tourists and attract new ones.
- 8) Create a good place to live also for pensioners and for individuals in a difficult life situation.
- 9) Avoid a long-term decline, - a "segregated" poverty-zone consisting mainly of pensioners and social clients on very low income.
- 10) Care for our part in handing over to the coming generations a Denmark which is in front as ICT-society.

#### **3.3. What was the main impact for the region**

The main impact of the Networking Djursland project has been multi-fold:

- 1) Due to an original dominance from city mentality the Grenaa and Ebeltoft areas - with the two biggest cities on Djursland - didn't evolve along with the other more rural areas in the DjurslandS.net project, in the first place. The net-oriented project parts of the Networking Djursland managed to develop the backbone and the needed wireless infrastructure in these areas, making connectivity available for almost everyone in and around these big cities. Based on this the GrenaaS.net and the EbeltoftS.net has up to now connected about 750 households, institutions and businesses to the Internet, providing about two thousand individuals with broadband.



- 2) Hundreds of mainly grown up rural people who had given up on IT have been taught at rural classes - at 7 remote locations each semester in the project period - how to handle computers, IT and Internet.
- 3) Several remote business areas and institutions have got their future existence secured as they have been wirelessly connected, and they act now as role-models for business areas and institutions in similar situations.
- 4) Recycled gear from among others DjurslandS.net has been renovated and used for landscapenet projects in poor rural areas in Ghana and in Laos, and more will follow.
- 5) Volunteers from other parts of the world, other parts of Denmark and locals, have been trained in setting up and running landscapenets the Djursland-way.
- 6) All kind of ICT-related problems are cared for in the computer-support workshops around Djursland.
- 7) Cheaper network gear, running at higher speed, functioning more stable, has been found, to the benefit of all wireless landscapenets.
- 8) This has developed the basis of a coming local Net-TV service.
- 9) The regional and local news-service on the Djursland-portal has been developed, and different relevant services for the inhabitants of Djursland are in the process of being evolved and added.
- 10) The Djursland International Institute of Rural Wireless Broadband has come to life. Their staffs are deeply involved in the development of the E-community on Djursland, and based on this they are very competently projecting experience and knowledge from this as solutions to other people around the world with similar problems as the rural Djursland-community.

### 3.4. What are/were problems

The main problems were in the partnership relations. Locally more involvement from other partners could have produced even stronger results than described above. But without budgeted salaries for involvement partners only participate in the interesting parts and not in the difficult parts. Internationally a lot of differing in opinion on priorities between the German leading partner's focus on administrative matters and reports and the local people's focus on real results – and also very long delays in the EU-refunding, eventually lead to dissolution of the participation of the Computer-Support-community in the Baltic Rural Broadband Project a few months before it was planned to end.

## 4. Model of financing

The Baltic Sea Region Interreg IIIB EU-fund would after every half-yearly report refund 50 % of the investments done in accordance with the prior approved project-budget. In other words the two economically involved Danish project-partners Grenaa Technical School and the Computer-Support-community on Djursland had to invest 100 % of the needed money or volunteer work (which could be considered as a kind of money) and



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produce the planned results. In praxis often up to a year later we might get up to 50 % refunded by EU through the leading partner in Germany if the leading partner could understand our investments - the whole construction caused very bad liquidity for a economically vulnerable organisation like the Computer-Support-community, who as small and idealistic non-commercial organisation never worked to accumulate money. Without generated capital for long refund-delays the result is other time-consuming work to stay "alive".

### 4.1. Investment

Grenaa Technical School relayed primarily on Danish states funding to teaching and the Computer-Support-community relayed on funding from the local municipality, on funding especially to the development of DIIRWB from the regional development fund at the county, and funding from own activities as well as a lot of voluntarily work.

### 4.2. Operational model or sustainability

The staffs of the computer-Support-community were the main force in the daily work behind realizing each of the partial projects, and the process was designed to result in educating these staffs to become the staffs of the Djursland International Institute of Rural Wireless Broadband, which in turn is meant to provide sustainability for all of the projects after the end of the project period, as the staff believes in the objectives of the project for the Djursland-community, and not in the temporary funding.

## 5. Work process (implementation)

A crew of about 12 daily working people, halftime and fulltime, where only a few were paid by the project, have been striving to fulfil the project objectives, together with a lot more volunteers, who only participated when they had the needed time and interest.

## 6. Highlights/other interesting things not direct linked

The project has given birth to new projects along the same intention to further develop the Djursland ICT-community, and applications which steps on have been sent to the national level, the regional level and the local level of administration.

## 7. Recommendations

Our multi-faced approach involving lots of people in lots of tasks is hard to coordinate, but necessary to be able to generate results of the magnitude needed to bridge the broadband gap, - if we don't want to manage such a change to the better of the objective level of reality in the rural areas, we might as well just mind our own business, as it will be of no particular help.



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## 9. Contact:

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