Strategy Paper
County of Osterholz

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1. Introduction

Broadband is of great importance to the development of a municipality's/local authority's own activities and will increase the opportunities to connect geographically divided units. Local administrations are increasingly forced to reduce their resources and to look for possible cost cuts concerning the realisation of tasks. At the same time local administrations are confronted with the necessity to develop a stronger orientation towards services and to guarantee citizens up to date services.

For our regional network is the main part to be on the newest technical standard of Broadband. And mainly the co-operation with other European authorities in rural areas is a great help to get new ideas.

On this background it is necessary that broadband technology will provide every ones needs.
Every citizen and also every partner must know the advantages of the broadband technology. So it is mainly important to get the access to the political plain to inform and support the politicians about this new technology.
For example the "internationalen Niedersächsischen Breitbandtage" in 2006 are the best platform to inform the politicians and to discuss the advantages of this technology.

Our vision is to create a new opinion about this technology, so that anybody got the chance to be part of it and to use the Broadband in every chapter / situation of his life to make it easier. We must clean the gaps and create it without barriers. Because broadband is a very important factor for the economy, create new jobs, and solve a lot of problems (e.g. in the health sector or in the education sector).

2. Inter-communal co-operation and application sharing

Of particular importance is the use of information and communication technologies. The downside of the problem is the fact that especially the smaller local authorities in rural areas do not have the financial possibilities and the critical mass to finance expensive experts'systems for the use in their fields of activities.

It is possible for local authorities to buy jointly such systems by using the so called application sharing. Thus the purchase costs as well as the costs for the maintenance and use of the system can be reduced drastically. By increasing complexity of such experts'systems and the growing quantity of data the availability of economical broadband connection between local authorities and their connected council offices will be an important condition for the implementation of such systems.

2.1. Short term goals:

The project contributes immediately to the transfer of knowledge and technology between the partner regions and supports the capacity building for the participating partners in the regions: Scarce resources on local and sub-regional level make an independent development of technical innovation processes considerably difficult.

The possibility of transnational co-operation contributes to the reduction of the scope of development and makes it possible to learn from the experiences of the other partners.

To show the experiences contributing to the planning and implementation of application sharing:

what conditions for the use of such systems are necessary
what problems appear implementing the application sharing
in what fields of work special saving effects and/or improvements of the service quality can be reached
which economic and technical impacts the availability of broadband capacities for the use of these systems has and
what practical experiences have been gathered through the use of these systems
Documented experiences to various technical aspects of installation and maintenance of inter communal application sharing
Strengthened competences of local ICT specialists in planning and using such services
Test installations as model solutions for know- how transfer to other interested regions

2.2. Vision:

Improvement of the possibilities of co-operation and reduction of ICT costs of local authorities in rural areas
Reduction of costs by the division of labour concerning tests of new possibilities in the field of application sharing
Development of concepts and components for application sharing between county and municipalities
Development of application sharing and inter-communal e-based services between local authorities
Implementation of application sharing models between local authorities.
Tests installation of selected concepts in some regions and transfer of experiences to other regions.
Strengthening of the concept of activities of users in the participating regions
Joint implementation of technical solutions in cooperation of different project partners
Exchange of experiences between the participating partners

3. Citizen Services and e-Government:

Information Technology is a powerful tool for increased availability, insight and effectiveness in public administration. Availability is a prerequisite for an information society for everyone where citizens and enterprises have access to a stable and safe infrastructure with a range of services and freedom of choice. Concerning the improvement of the service quality of public authorities, the increase of transparency in political decision processes and the integration of citizens and economy in public cooperation processes, the use of web supported portals – taking into consideration the keyword e-government – is very importance.

3.1. Action areas:

Particularly in rural areas of low service concentration service portals have a considerable potential for the improvement of public service offers for citizens and the local economy.

It is important to create interactive portal services and enough information to citizens. We need a kind of e-Competence developed for citizens and employees, which is already been able with the help of all different governmental partners. Above all in sparsely populated areas or as support for the less of services through the centralising of council offices and the closure of further service points WEB-supported service portals are the only possibility to maintain not only existing offers but also to create additional offers at the same time and another aspect of service.

Today all governmental authorities, municipalities and county councils have a web side with information and e-Services accessible to their consistments via the internet. But you need also
partners who will offer portal-based services in different fields. One main focus will be the installation of regional economic portals including services for enterprises in the corresponding regions. Aspects of these fields are:

The shortening of ways in the administrative and approval procedures
E-Procurement,
Support of billing and management models
Virtual co-operation of enterprises in the region (virtual B2B co-operation forum)
Promotion of e-business and regional products in the frame of regional marketing processes

Another main part refers to the improvement of services for the citizens. Thematic aspects are e.g.

Development and implementation of public information portal systems
Further development of citizen related services and WEB-based information
Piloting centralised applications and database services in public administration
Further development of news and service portal
Set up of an online platform for enterprises and job-seekers
Concept development and pilot implementation of information system on local decision-making

3.2. SWOT-analysis:

E-Government means a change in authorities' processes, routines, knowledge base and organization. It is important to create a greater degree of cooperation between various authorities, because e-government and e-services offer much strength.

3.3. Stocktaking – Present situation:

All governmental authorities, municipalities and county councils have a web side today with information and e-Services accessible to their consistments via the internet. But it is necessary to get one platform.

At this platform all important offers can be found in clear and minimized survey. No user has to click through hundreds of pages to find the information he wants. The guide to authorities e.g. is limited to the general important information (subject, partners, opening times, document masters, e-mail- and phone number).

3.4. Short term goals:

We created a concept for a regional internet portal which will be presented to the policy makers concerning a potential decision making. The concept deals with some possible services for the citizens e.g.

Documented experiences to various technical and content-related aspects of setting-up and running service-oriented portal solutions
Strengthened competences of local ICT specialists in planning and using such services
Better citizen and business related services in all participating regions
Test installations as model solutions for know-how transfer to other interested regions

3.5. Vision:

A vision of standardization and cooperation of e-Services in some areas of e-Government where it makes sense, e.g. we have already experiences in the area of application-sharing.

For example we have already the possibility to start up a digital archives and a fully electronically application sharing with PROSOZ and OS.5/ECM e.g. for the region of Osterholz and the border regions. So we can use the workflow, reduce the costs of copies and work together at the same time with 9 regions.

The aim is to reach an increased number of households connected to the existing broadband network

4. Broadband use in the education sector:

Fast Internet access is becoming more and more important to the educational system. Besides the qualification of teachers, fast Internet access is the most important condition for the introduction of new media at schools and to meeting the requirements of the information society facing the institutionalised educational system facing. In recent years there has been a groundswell of interest in how computers and the Internet can best be harnessed to improve the efficiency and effectiveness of education at all levels and in both formal and non-formal settings.

ICTs stand for information and communication technologies and are defined, for the purposes of this primer, as a “diverse set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information.”
And that’s the reason why the so called broadband use in the education sector is so mainly important to create a new kind of easier living.
Broadband based education will give individuals increased opportunities for developing knowledge.

Facing the central importance for computer- and net-competence in our emerging information-society, educational institutions particularly schools today meet with the challenge to integrate Information- and Communication-Technology as part of a culture of learning and teaching.

Central issues of that culture are media-competence, networked thinking and acting, teamwork, interdisciplinary and lifelong learning. In this respect a bigger part of present emerging employment-possibilities are to be found in the information- and knowledge-field.

An absent or a lack of qualification in this field may cause a serious restraint of professional prospects and chances of social participation.
In series, it is a matter of the development of learning-ability as equal key qualification next to the intermediation of factual knowledge, social competence and creativity.

While previous and present initiatives of education minister, school institutions and private investors as well as development programmes of N21 have seriously improved the IT- equipment at schools in the past three years, the demand for a professional, sustainable and affordable IT-operation stays open up to now.

The central idea is the establishment of a support- and media centre with fix and durable human resources. Through potential integration of the “rental centre for educational films, Osterholz-Scharmbeck” it is possible, next to realisation of an IT-operation in schools, to expand keenly the supply spectrum in ability to deliver online-media (Audio/Video).
Aim is to minimise the existing, extensive on-site-service in schools by simultaneous raise of service activity, quality, cost-transparency and planning reliability.

Orientated on the offer of big support-provider could get high-quality of different support-packages. The service-quality of those packages has a direct impact on pricing of a nevertheless required on-site-service.
The more precious the selected package, the more unnecessary on-site services are becoming and the more favourable those packages can be provided.
A modular approach enables to allocate those services in schools outside of the institutions.

By realisation it must be pointed out, that through application of technology the educational and pedagogic decision-making and responsibility of teaching staff is not being impaired.
On this account it is recommended to involve those duly, in order of considering and generating accurate concepts for using respectively the application of IT at school.

A necessary basis-measure for the further advancement is a reorganisation of the internal school- and administration-networks as well as the installation of a broadband network, which connect schools among each other.
For implementation of this requirement the formulation of a detailed IT-operating concept is recommended.

4.1. Action areas:

About 550 computers including periphery is operated in the 13 schools of Osterholz-Scharmbeck.
The operation of the IT-infrastructure is realised by IT-authorised teachers of the particular school, and also by two external service provider.
In every school the operational procedure for installation and maintenance is regulated differently. Each carrier, independent on teacher or IT- service provider, acts on the best of one's knowledge.

Even the approach and the knowledge of the IT- service supplier among each other are quite different and is orientated on customary standards.
There are no or only sporadic documentation-approaches, which enable an overview about configuration or topology of the respective school- or administration networks. The existing documents are distributed on schools, institutions, facility management or computing- divisions of the county and IT- service provider.

In March an IT-framework-concept was adopted by school and schools institutions, which regularises some minimum-standards like minimum-equipment, purchase, data security- but does not involve operating policies in terms of an IT-operation.
Attendant to the above mentioned IT- framework concept the ISERV Software has been introduced.

This software-platform acts in the first instance as communication-platform for teacher and scholars and can be understood as approach integrating new media in the general school-lessons.

The often associated aspect with the above mentioned platform of remote maintenance does definitely not belong to the functional range or central idea of the software.

For that reason a Helpdesk with the aid of the „Baltic Rural Broadband Project“ and school institutions was implemented (quote wide attachment).

This system shall help to coordinate the upcoming support-sequences.
School institutions and schools as well as IT-service provide have access to that Helpdesk.
An access for further faculties or institutions is possible at any time.
The software is in the frame of the project-runtime in a pilot-phase.
Each school possess over at a minimum one internet-access.

Education and E-Learning can be used for various types of learning within companies, municipalities, schools, universities, colleges and also by consumers. Fast internet and e-learning can therefore contribute to the equal opportunities of children and young people in rural areas by offering learn material which normally is only provided in conurbations. So they contribute to diminish the incline between cities and rural areas regarding the variety and the quality of educational offers and to increase the attractiveness of the rural area as living space. Beside sufficient broadband connections in many regions the operating safety and technical reliability of the ICT equipment at schools is a further important obstacle for the increased use of ICT in classes.

In most countries the local authorities are responsible for the provision of hardware at schools. Due to deficient financial resources it is normally impossible to guarantee professionally the administration of ICT equipment. A central

administration of school networks via centrally connected staff is possibly realisable in an urban context, yet in rural areas such concepts are not realisable because of the time to be spent on travelling.

So it is necessary to create effective education information and control system, to develop electronic teaching materials/programs and to train the teachers.

4.2. Stocktaking – Present situation:

Facing the central importance for computer- and net-competence in our emerging information-society, educational institutions particularly schools today meet with the challenge to integrate Information- and Communication-Technology as part of a culture of learning and teaching.
In this respect a bigger part of present emerging employment-possibilities are to be found in the information- and knowledge-field. An absent or a lack of qualification in this field may cause a serious restraint of professional prospects and chances of social participation.
In series, it is a matter of the development of learning-ability as equal key qualification next to the intermediation of factual knowledge, social competence and creativity.

While previous and present initiatives of education minister, school institutions and private investors as well as development programmes of N21 have seriously improved the IT- equipment at schools in the past three years, the demand for a professional, sustainable and affordable IT-operation stays open up to now. The costs for such an IT-operation are quite high compared with the purchase costs of IT-equipment. They are caused predominantly by the essential employment of staff, which arises by installation, maintenance and operation of information-technology. It is necessary to check in what extent financing models, like sponsoring, development association, public-private-partnerships or even leasing-models reference to its applicability are qualified and on what scale the cooperation between communes, municipals and counties are feasible for using synergies and generating an added value.

From the about 70.000 computer in Lower-Saxony schools about 550 computers including
Periphery is operated in the 13 schools of Osterholz-Scharmbeck. Additionally there are also eight providers of schools with 57 schools of different school-forms in the administrative district Osterholz. These are equipped with networking computers for educational and administrative purposes.

There are different kinds of schools available in the administrative district Osterholz:

Primary Schools:	32
Secondary Schools:	14
Grammar Schools:	04
Special Schools:	04
Vocational Schools:	03

13 of the 57 schools are in the educational authority of the city „Osterholz-Scharmbeck“in general. The educational authority for the primary schools is dedicated to the municipalities. All other schools are associated with the administrative district of Osterholz and townships in the region.

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Further educational institutions in the administrative district are:

Schools for educational training in the administrative district Osterholz
Adult Education Centre Osterholz, Lilienthal
Educational Institution OHZ (registered society)
Institution for Vocational Training
ABÖE e. V.,
Association Vocational Training and Local Development (registered society)
Educational Institution of Old People's Welfare
Educational Department of the County Hospital
Salino e. V., Educational Help (registered society)

4.3. SWOT analysis:

The greatest strength within e-Learning is that the internet provides the freedom and the possibilities for the individual himself to determine the place of education and for the instructors / teachers to reach new target audiences / groups.

The weaknesses are that municipalities are often too small, and there are no standards that describe an education for adults for example.

An analysis of the above mentioned actual state shows deficiencies in the following sectors,
whereas the following numeration shall not give any conclusions about prioritisation.

Operation& Process- description

There is a general lack on defined technical workflows in the areas maintenance, installation, corrective maintenance of hard- and software.
The involved persons are acting to the best of one's knowledge, like they think it is right.
Through the very different, widespread Know-How it leads to a very unequal output-quality, what concerns the frictionless operation of the IT-infrastructure?

Network infrastructure

The existing net-work infrastructure is not available in the same quality in every school.
Partly it is not even possible to send emails from the administration-network or to receive.
Structured wirings are only present in schools, which has been refurbished and equipped with new IT-infrastructure in the past two years.
In reference to the effective implementation of ISERV, particularly in large schools it leads to failures and access-bottle necks, when scholars and teachers access to the server from home, like it is planned in the using-concept of ISERV.
It originates, that DSL enables a fast data-download, but a data upload (e.g. by an access from home) is only possible at a fraction of the download-speed (asynchronous transmission path).

Documentation

There are hardly documentations, which give information about net-work topology, PC installation, licenses or wirings.
By fault it is to count with an equal, temporal additional work and expenses, before an accurate analysis of failures can be started.
The same applies to planning activities.

Inventory- summary & life cycle of a product
As Wächterkarten are termed hard-ware solutions, which restores a computer to a predefined status after a reboot. So a teacher can reverse all conducted modifications by reboot.

Wächterkarten are problematically, if computer are supported automatically by updates of security- or antivirus-software, because these updates are deleted through the reboot.

There are no automated or daily-up-to-date summaries about the technical inventory.
Inventory-lists have to be written manually in every school.
Through this elapsed life cycle of products are probably not realised timely and new acquisitions or replace investments are not planned betimes.

Human- resources
Despite of increasing, qualitative demands for the application of new media in schools, there a no sustainable specific resources, which are responsible for a professional, future-proof and demand-suitable realisation of an IT-operation.
As orientation a customary rule of thump can be determined: “1 administrator per 100 processors”.
In the reverse currently these activities for four and a half full time jobs are managed by two IT- service providers with converted about 25 hours per week.

High on-site effort
All above mentioned points causes a very high on-site effort. From 50 purchased hours per week for support by external service-providers, about 90% are bonded on-site.
Further troubleshooting-demands by other schools can not be solved at that time.
Arrival and departure have to be regarded as time-critical as well.
A practicable access per remote maintenance is nonexistent presently.

Licence-management
There is no established licence-management. The use of pirate-copies on school-computer cannot be excluded and is in all probability.

IT-safety
Given that in schools safety-software-products are hardly ever used, a virus-infection can disperse rapidly also outside the schools.
In fact many computers are equipped with Wächterkarten, these do not protect against virus infection or a further dispersion
Sensitive data on the administration-processor is secured timely.

Software installation & Configuration
The installation of software-products, updates and safety-patches, etc… is currently possible only on-site for each computer.
The transmission of installation via Image is only possible on schools with identical hardware.

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In that place, where Wächterkarten are applied, the creation of Images is very time-consuming.

4.4. Short term goals:

The use of e-Learning at schools is to increase the sensitivity for this topic and strengthen the competences through the exchange of experiences of the partners participating in the project. It does not deal with questions of pedagogy or consent as there are relevant funding programmes of the EU.
In recent years much has transpired in terms of e-learning and universities and also colleges have increasing frequency between campus and distance. Individuals want more mobility, the choice in order to study when and where.
There is a new aspect to combine work, leisure, family life in an effective manner.
But this all are reasons and also at the same time possibilities to make education easier.

Know-how transfer regarding the implementation and support strategies of e-learning on local respectively sub-regional level
Strengthening of the e-learning competence in the participating regions
Test installation of selected technological concepts in single regions and transfer of the exchange of experiences to other regions
Documentation of the added value of broadband connection at schools as a condition for multimedia learning and the requirements of the information age
Developed an economic concept for the distance maintenance of computer networks at schools.

4.5. Vision and solution:

Value-added centralisation
For guarantee of a regulated IT-operation the implementation of a central support-centre is considered as very reasonable.
An intersection for all IT-relevant aspects (planning, purchasing, maintenance, installation, development) would be realised for a maximum-feasible transparency in reference to decision making and responsibility, efficiency, quality and planning reliability.
Furthermore this support-centre shall serve as important consulting-instance, adverse to schools and accordingly to teachers, for evaluating the technical feasibility of pedagogic concepts.
A real added value can result by an integration of the “rental centre for educational films, Osterholz-Scharmbeck” to expand the centre in the sector media.
Present resources can long-term induce an intensification of required IT-resources by qualification-measures.

The service-spectrum of such a media- and support-centre can appear as follows:

Media allocation
Online access to film- and audio-material (A&V) by a streaming-server of “rental centre for educational films” added by existing manual lending-offers for film- and audio-media.

Equipment-rental
Equipment, card-material and illustrative material can be reserved online and allocated by "rental centre for educational films".

eLearning
Scholars and teachers participate in pedagogic contents, which are allocated by broad-band technology.
Experts can give lecture on pointed themes independent on location.
The same technology can be used for cooperation of schools among each other.

Helpdesk & Hotline
Quickly support by technical problems by allocating of a central Hotline-number as well as a web based Helpdesk.

Remote maintenance
Technical problems can be solved professional per remote-administrator directly.
No loss of time through necessary arrival.
No double personal-binding, because the problem can be solved without attendant teachers or caretaker.

On-site-service
Individual support for complex interferences, hardware-exchanges, or for equipment, which cannot be maintained by remote maintenance.

Allocation of programs
Wide spread programs and services can be allocated by central server in form of terminal-services.
Through diminishment of system requirements of school-computer investment costs for new hardware could be reduced by using of so-called Thin-Clients1.
And old equipment could be used longer.
The binding of human-resources is going to be reduced, because the individual administration is displaced in aid of a central administration.
Pre-condition for that is the development of a central "server-territory" to reduce the network impacts and to guarantee an adequate using-rate.
For such a model investigation in form of additional hard- and software are necessary.

The development of that operation-model can be effected phased in single schools.

Central purchase
The central over-view of IT-operations in school enables an optimal planning of net investments.
By an improved package of purchasing-procedures can gained better prices on the market.

Automatic inventory
Via encrypted lines and a direct access to the separate school net-works an analysis of the technical inventory is possible at any time.
Thereby an essential exchange of equipment can be recognized and planned duly.
The residual values can also be determined.

Media-pedagogic labour
In a trusted area teachers could test on the market available pedagogic software.
Licence for test-intentions need not be purchased for several schools.
Teachers are participating by a common interchange of ideas.
A technical support can occur on site.
Several new pedagogic concepts can be validated technically.

Virtual classroom
here is the possibility of offering a vertical class-room for all schools.
Respectable personages with practical experience would give lectures on topic themes via video and audio-transfer.
These lectures will be transfer online in real time into schools.

Scholars and teachers can act interactively and interchange.
Such a model is offered free of charge by a south-German project-team.
It could be used, if schools would possess an adequate broadband-connection.

Solution-period
To come up to the complexity of this theme a step-by-step realisation within five years can be recommended.

In general

Documented experiences to various technical aspects of e-learning, distance maintenance of ICT networks in schools and share of multimedia content between schools
Strengthened competences of local school administrators in planning and using ICTs in the regional schools
Basic e-learning installations as model solutions for further investment according to the technical status of each participating region
Availability of a transferable concept for distance maintenance of computer networks in schools
Aroused awareness about the necessity and options of real broadband access to schools.
Technical documentation prepared for download in a technical solutions library on the main project WEB-page "Baltic Rural Broadband Forum"

The aim is to meet the needs of the society and the labour market with educated citizens and skilled workers. And to create a clear strategy for the educational sector.

5. E-solutions for businesses:

Increased use of Information Technology can contribute to innovations and growth, and small enterprises can profit from the use of IT. Furthermore, the implementation of wireless broadband connections offers a considerable potential for new jobs or the setting up of new enterprises and broadband based businesses. Broadband is a determining factor for economy and innovation of the country. In the sector of the electronic communication a powerful internet-connection presents an important issue for location for settling of enterprises. Therefore firm in non-provided areas are disadvantaged in their competitiveness.

The availability and use of fast broadband connection makes the implementation of a variety of new business ideas at developed locations possible. Other potential business fields are the development of internet-supported mobile visitor leaders (via PDA-technology), the development of multimedia services or specific offers for further education. Also the implementation of wireless broadband connection offers a considerable potential for new jobs or the set-up of new enterprises as in this field are only few qualified workers available in relation to the requirement. Such set-ups concentrate currently on metropolitan regions particularly on University locations. The availability of broadband connection and the developmental environment of the projects though also make the implementation and settlement in rural areas possible.

Another example is to create a regional IP TV, which turns Television into an internet platform for all county citizens and border regions. It allows the user a quick and extensive summary of the county's infrastructure refers to additional interactive offers in the county and is portal for the regionally produced internet TV.

To achieve that this regional IP TV becomes a multimedia Communicator for town and region. In doing so the key for success is uncomplicated guidance and easy finding of understandable information.
All important offers can be found in clear and minimized survey. No user has to click through hundreds of pages to find the information he wants. The guide to authorities e.g. is limited to the general important information (subject, partners, opening times, document masters, e-mail- and phone number)

The regional IP TV is a service portal and not a link collection. Who wants to have additional, extensive information can have this from the related location in the internet. With this idea it's rather about effective, useful information but extensive self presentation. For extensive information there is a link available.

A decisive trend standing out clearly over the last years has been the trend from global to local use of internet. Increasingly more internet user prefers the local use of internet. The trend is underlined by local search engines in the web. The same trend can be recognised with TV-Media. While years ago local TV could not be operated profitably many local TV- Providers today make profits.

With locality, special features, production subsidies from pressure groups and sponsoring of broadcasting trunk-lines (breakfast TV presented by XY) local TV cannot just be financed but is also profitable. The big TV stations in Germany are aware about that. No mayor channel renounces local reporting. However TV programs until now have only broadcasted information from all over Germany. Therefore many communes are hardly or not at all represented in reporting. This is the starting point and strategy of our regional IP TV. We are exactly serving the citizens' local information needs.

It is an Internet-TV-channel, which breaks down the Internet-DSL/VDSL-TV-Service on local level. It offers information from local / regional area and is not only limited on a single segment but is a dynamically growing program supply. By sponsoring any area of interest can be bound into the program of this IP TV. This way a homogeneous and locally oriented Triple Play offer is created for the user. Aim of the IP TV is to become local information leader and to give each citizen possibility to make use of the offer with a television. Additionally the regional IP TV shall serve as a provider for other TV-Programs on offer.

It is the ultimate Info-portal in the county. Here user oriented information is the only selection criteria to be included by link application. The info-layout is standard for all partners. Based on restrictive menu guidance the IP TV provides maximum information flow resulting in most possible user value. There are more multi-media offers in the portal to be reached exclusively by direct links. The motto of our IP TV has got to be: Don't search but find!

The regional IP TV creates an extendable platform making it local competence leader. This way it gains decisive advantage to global players who are trying to break down their offers on local level. With formats like IP TV-eBay, or IP TV-dating from global players envisaged markets are already occupied at an early stage. Additionally the opportunity arises together with other cable providers to build up a local internet-TV nationwide.

In order to be able to establish as information leader in the market Osterholz-Scharmbeck and the foreign regions the program reception must be possible for everybody. To ensure this every user needs to have a VDSL-Connection. This provides a free of loss reception of the IP TV and the portal's additional offers.

Against this background, in the administrative district of Osterholz setting up of business are planned to be promoted and additional workplaces to be provided. In addition to this, a developmental concept as well as a business model are to be worked out and corresponding set-ups to be supported.

5.1. Stocktaking – Present situation

In the county of Osterholz are altogether allocated 42 Broadband-Access- Provider with different technology. The actual availability is keenly depending on location. Powerline, cable and fiber connections are not available for public use. In the „Gewerbepark A27"there is also a WLAN network for the local small and medium business enterprises available.

5.2. Short term goals:

Creation of new fields of employment resulting from the availability of broadband connection
Strengthening of ICT and broadband competences and services in the participating regions
Exchange of experiences between the participating partners
Create a regional IP TV, which turns Television into an internet platform for all county citizens and border regions and also as a platform for e-Services

5.3. Vision:

Concepts for the set-ups of business in the field of broadband-related services
Creation of additional workplaces in new broadband-based activities
Strengthening of the participating region by the implementation of new ICT competences
Development and implementation of a concept to foster broadband based entrepreneurship
Information services, business start-up
e-Services for businesses/enterprises; within businesses/enterprises, between businesses/enterprises, and between businesses/enterprises and public sector
e-Competence development in businesses/enterprises
IP TV as a information leader for the regions

The project contributes directly to the transfer of knowledge and technology between the partner regions and supports the economic development in the regions by concentration on the development of new possibilities of employment. The possibility of transnational cooperation contributes to the reduction of the developmental work and makes it possible to learn from the experiences of the other partners participating in the project.

To increase the availability of broadband- connections to a full-supply, a Lower Saxony Broadband- initiative will be established. The implementation of a Lower Saxony Broadband Competence Centre is essential to guarantee the sustainability of this technical as well as economical challenging task. Furthermore such a Broadband-initiative is according to the aims of the Lissabon strategy and to the e-Europe 2005 campaign as well as to the new EU-initiative e-Europe 2010.

It will prepare a fundamental step for admission of Lower Saxony to the knowledge- and information society.

6. Broadband uses in the health sector:

Health care is the prevention, treatment, and management of illness and the preservation of mental and physical well-being through the services offered by the medical, nursing, and allied health professions.

A broadband use in the so called health sector is the possibility to support the development of a more effective and safer health care. It is necessary to show relevant information in a suitable way be communicated electronically between different responsible authorities and health hierarchies within the health sector. Furthermore to set up WEB based services in the health sector

For our regions is a great aim to introduce and create a health-service network as part of the town-innovation-network resulting in improvement of treatment quality and extension of performance range in consideration of following aspects:
-Close cooperation with the out-patient medical supply in town and region
-Integration of external competence and partners
-Cooperation with geriatric care and nursing but also with complementary health- and wellness offers
-Recording and exchange of health-data from patients who live on their own but their mobility however is permanently restricted or their condition requires intensive observation cycle

-Central data filing, nursing documentation systems and corresponding interfaces for purchase order processing e.g. in medication
-Emergency call systems with new possibility of direct interaction, communication improvement i.e. audio-and video broadcastings for a better assessment of acute situations
-Comprehensive course- and further educational offers for the population.
-Professional training in own nursing school

6.1. Action areas*:*

Developed health care and caretaking (through, for example, a national patient overview with joint health information and the development of a national e-ID and homogenous guidelines for communication).
Increased coordination (increases opportunities for resource sharing and improved health supply, cooperation between health units both within geographic areas and within disciplines/specialties).
Knowledge and competence in using e-Health solutions preventing diseases and sickness in rural areas

The quality of life in rural areas also depends to a high extend on the quality of the regional medicare. For the improvement of medical services and the safeguard of adequate offers and structures the internet and electronic services are particular importance.

6.2. Stocktaking – Present situation:

Today it is mainly necessary to handle all information that deals with health care in one project.
That also means time savings for health care personnel and the wish to have more e-services in this part. When it comes to the development of health care information many services and projects are organized in order to communicate electronically. For example, tools are needed for finding various people, rules and positions in a same system.

6.3. SWOT – Analysis:

experts can be consulted via distance
information needs only to be registered in one place
cooperation easier
training and informing personnel in time-consuming
Broadband makes increased service and coordinated health care

6.4. Short term goals:

Aim is the extension of cooperation in a network of treatment giving and attending cooperation partners within the region particularly with out-patients who are temporarily or permanently in an instable situation. This results in increased safety- and support needs. IKT-Solutions can support status- saving and checking and make contemporary, quick and precise help possible in acute situations without coordination losses. Useful is the combination of existing solutions, e.g. analogue emergency systems with new possibilities in direct interaction for better

communication e.g. by video-and audio performance to better understand acute situations and this way being able to introduce precise measures.
Another example is the recording and exchange of health-data on patients, who live independently, but their mobility is permanently restricted or their well-being requires an intensive observation cycle.
Furthermore:

Test installation of selected technological concepts in the field of e-health
Transfer of experiences in other regions
Improvement of the medical service in the participating regions
Presenting the added value of broadband connections for the health care
Joint implementation of technical solutions
Exchange of experiences between the participating partners
Reduction of costs by test installation of new concepts

6.5. Vision:

The vision is to reach a development and test installation of e-health services in the hole regions and although with the help of the singularly partners. For example to introduce an information system for doctors and hospitals in the region with the possibility of networking with experts on national level. Documented experiences to various technical aspects of installation and maintenance of local wireless broadband networks. A more sensitive way for all partners to reinforce the insertion of e-health applications. Sensitisation of stakeholders for the increased use in the field of health care, strengthened competences of local ICT specialists in planning and using e-health solutions and a basic test installation as model solutions for further adaptation in other regions.

The vision for the part of creating a health-serving network is:
Central data filing, nursing-documentation systems and corresponding interfaces for purchase order processing e.g. medication or video-plug-in, emergency call equipment or graphics applications need to be determined for single application areas and developed as far as not available in the market. Basically simplified visual- and auditory communication tools are have to be made manageable. An IP-Telephony device e.g. can be dialled over a central emergency number and decide intelligently with preset rules on the nearest emergency doctor on duty. He can have the basic data transmitted on the navigation system and eventually retrieve a case history. Further services like embedding in an intelligent house need to be developed successively. Possibly the building of a health network as part of town-innovations – network incl. status assessment or simply making contact and implementation.
Central services e.g. public calendars suitable for the booking of special equipment like e.g. pressurized cabins by outside doctors need to be implemented.
Requirement is that contents-suppliers receive media-equipment, which allows quick and easy contents generation. Further on special single measures could be:
-Documentary management system with workflow and history function (region-Innovations network)
-Nursing documentation systems open via terminal server (KHH has a PD)
-Multi-Cast-Units for video conferences (central net service)
-Special cameras with microphone / speaking function for mobile operation (after support, high solution, colour intensifying if necessary) - could be solved by mobile phone in appropriate quality – Possibly and in addition a Push Service for the emergency area.

-Red list data base – A data base providing the so called red list open for doctors and pharmacists in the net, medication labelled with a barcode on packaging to be linked with the electronic red list for prompt information in order to simplify the added value chain between customer, doctor and pharmacist e.g. in purchase order processing.
-Scanner for X-rays images or/ and extension modules for existing special technology.
-Server with increased security guidelines in the Intranet (Building of a health and nursing network) to be called e.g. by the emergency doctor or by the family doctor to examine and comment on the X-ray image. Access can be gained by etoken (password changes e.g. every 10 seconds or biometric scanner or electronic health card (PKI-System – however is not yet finally known if the card can be extended, otherwise a second supportive media had to be added.)
So everybody get the chance to be part in a very fast and good system – a health-service network.