CORA

COnnecting Remote Areas with digital infrastructure and services

Diagnostic survey results – first overview

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Introduction survey- general remarks

- Survey about digital infrastructure, skills & services in partner regions, supplied by WP3 & WP4
- Aim: Feed into guiding measures report, develop SSE model & community platform; further outputs
- To take into account: Heterogeneity amongst partners (municipality, university, library)

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Survey results – Infrastructure related (WP3)

CONTEXT

Inhabitants living outside urban areas:

15-100%; differences in defining rural among countries; but also within countries → awareness analyzing results

People/ businesses without NGA connection:

People: 3-100%, average 28%; businesses: 5-100%, average 17%

Surveys conducted among potential users:

Yes, partly commercial, partly by broadband initiatives/ public authorities

Survey results – Infrastructure related (WP3)

GOVERNANCE & POLICY FRAMEWORK

Specific goals for region with regards to internet access:

Predominantly orientated on national or regional agendas

Which goals are set:

Fiber technologies, access for everyone
& mobile coverage improvement; technology neutrality & WiFi hotspots

Actions taken in region to extend NGA:

Support of communities/ community initiatives, founding of community initiatives/ interest groups

some mentioned subsidies for market players & national funding

Local communities involvement in NGA extension process:

Diverse picture: directly or indirectly

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Survey results - Infrastructure related

FINANCE/ BUSINESS MODELS

Stakeholder involvement in NGA extension; leaders:

Always local government, often providers, businesses, citizen groups & national government; leaders most often municipalities and (utility) providers; also others

Organization cooperation structure between various stakeholders:

Often formal

Organization NGA extension more precisely described:

Operator subsidy model 🇳🇴 🇳🇱 🇩🇰 **community broadband model** 🇸🇪 🇳🇴 🇳🇱

public-run municipal network model 🇬🇧 🇩🇪 🇸🇪 **privately-run** 🇬🇧

passive infrastructure provided 🇩🇰 **market-complementary measures** 🇸🇪

demand stimulation 🇩🇰

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FINANCE/ BUSINESS MODELS

By whom is/was NGA extension financed:

Most often by national government, citizens & providers

Measures to minimize cost of broadband deployment:

Various: Demand stimulation, passive infrastructure, co-digging, voluntary time, extensive mapping/ consider spread, regular meetings

Is/was that successful:

Most often yes, measures were successful

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Survey results – infrastructure related

SUPPORTIVE REGULATION

Policies in place and used for the NGA extension:

Funding schemes **digital agendas**

shareholder constructions **demand subsidies**

No support by stakeholders/ unsuccessful applications:

EU/national funding schemes unattractive for providers (e.g. open network requirement), regional government

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Survey results – infrastructure related

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CONNECTING REMOTE AREAS

IN GENERAL ISSUES REGARDING NGA EXTENSION

- Various barriers affecting broadband extension in planning phase, some in construction phase, less in uptake phase, physical barriers
- Some target groups hard to reach, especially old people (laggards);

→ Effort to reach these groups:

Diverse: communication strategy for target groups, meetings/events, writing articles bulk mails, personal addressing successful , young people as mentors for elderly , national level initiative , support by broadband coordinator as intermediary

Kind of training wished for NGA extension:

Skills: Advice & selling training, design of training for citizens & businesses (old people & mobile education)

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Survey results - infrastructure related

FUTURE-PROOF TECHNOLOGIES

Technology used in current NGA extension projects:

All countries fiber, some wireless MAN and coax cable

Availability of cable system:

At least partly publicly available , not publicly available/ commercial concern , national web service for infrastructure

Contact with service providers & network owners, info about coverage & prices:

Good connection with providers & information , central database with prices/ coverage , annual open market reviews, fairly well informed , Municipality meetings before public procurement process

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WP3 Reflection

DISCUSSION

5 minutes within your group/ with your neighbour:

- **Concerning your own or other region's situations: What surprised you so far?**
- **Have you already got some inspiration/ ideas & who might be the right addressee to discuss these with?**

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Survey results - infrastructure and skills/services (WP3/4)

DIGITAL HUBS

Digital hubs operating:

50% yes, 50% no

Types of hubs:

Often internet access point; also ICT training space, business networking space, technology demonstration and/ or material production space

Survey results - infrastructure and skills/services (WP3/4)

DIGITAL HUBS

Stakeholders involved (also in development):

Local government, mostly citizen groups & businesses, others

By whom financed:

Most often local government, furthermore EU, national government & other governments

Interest in developing new digital hubs:

Often yes, reasons: Reach rural areas/ places without good coverage; e.g. VR centre

No: Need is questioned (soon NGA access) or concentrating on existing

Survey results – skills and services (WP4)

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CONNECTING REMOTE AREAS

STATUS QUO

Current take up situation in region:
Basic broadband: 85%-95%, NGA: 50-97%, FTTx: 32- 67% (not all available)

Statistical information take up related to socio-economic groups in rural:
Most often none or only national statistics

Assessment level of digital literacy in rural areas:
Half basic internet skills & above basics (online interactions)

Awareness local authorities regarding the need of superfast internet services:
High awareness of all; wish for common strategy

Status in terms of digitally enabled enterprises:

Communication with public bodies online , digital sector/ICT clusters in region

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Survey results – skills and services (WP4)

STATUS QUO

Types of digital public services provided for rural citizen:

Often: Most services available digitally, while offline (on demand) still available, aiming for high level of digitalization, provision regional/local services (e.g. one main platform)

Situation in using public digital services in rural areas:

Often: Use of many digital services widespread, includes rural areas, can be less in the rural (e.g. more elderly)

Types of digital services provided to local enterprises:

Some: Majority of interaction between enterprises & public authorities through digital portals, apply for exemption possible if reasons for it , digital business portal (without personal login), tax application , technology hubs/training events & digital Tech Health Check

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Survey results – skills and services (WP4)

CHALLENGES

Main barriers for local authorities, enterprises & citizens to take up possibilities of NGA:

Lack of knowledge/ skills, affordability, accessibility, sometimes low level of services, lack of knowledge about availability, staffed physical location demanded, lack of knowledge about needs, legal barriers (digital documents), resources local authorities, lack of digital policy, lack of potential awareness & imagination

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Survey results – skills and services (WP4)

EXISTING FUTURE PLANS

Plans to improve uptake in rural areas:

- National/ local agendas, enhance awareness of authorities, train local public institutions
- Advertise availability, digital hubs, business support advisers & digital academy, office community, joint organizations (for ICT), digital health check tool for businesses
- Project addressing different target groups, offer courses, available services/applications, information center, every citizen access to documents via website, home automatization project, (fablab) projects in school

Conclusions

- NGA connectivity varies largely among rural places
- Sometimes demand not exactly known by local authorities (precise numbers missing)
- Focus on fiber, but wireless/ mobile solutions for very remote areas
- Different business models in use
- Some recommendations how to minimize the costs
- Support of deployment by funding schemes & digital agendas
- Various barriers especially in initial stage
- Some groups & businesses hard to reach, no precise numbers → different efforts to reach them
- Main issue: Train citizens & businesses, reach various groups
- Different kind of hubs in place

→ Many ideas/ projects introduced; partly very different approaches

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Outlook & discussion

Outlook:

- If something still missing/wrong (contribute to survey), please contact me
- In the end of the various region projects: More recommendations and issues to share
- In the meantime, small survey specific about hubs may, if applicable, reach you

Discussion:

- What do you think about these first results, is there something you would like to add?
- Important goal CORA: Support other rural areas struggling with same issues: What is crucial to share with them?

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Literature findings

CONTEXT

- Relevant findings shall be used within CORA project, e.g. platform
- Full working document can be found on LINA

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Literature findings

COUNTRY SPECIFIC TARGETS

Country	Target
Belgium	“Digital Belgium – Plan for Ultrafast Internet in Belgium 2015-2020“: 2020 at least half of the connections in Belgium must achieve Internet speeds of 1 Gbps
Denmark	100 Mbps download and 30 Mbps upload speeds available for all households and businesses by 2020
Germany	Broadband strategy: 100% 50Mbps by end 2018, until 2025 gigabit-capable infrastructure in Germany
Norway	90% of all households shall have 2020 access to at least 100Mbps
Sweden	98% of all households and businesses should have access to broadband at a minimum speed of 1 Gbps by 2025; 90% 100Mbps by 2020
The Netherlands	Digital agenda for the Netherlands: 100% 30Mbps by 2020, 50% 100Mbps by 2020
UK	At least 100Mbps for nearly all UK premises (no date), 95% coverage with 24Mbps until 2017

Literature findings

GENERAL POLICY RECOMMENDATIONS

- **Policy makers: Respect specific conditions, possibility for local policy to adapt**

  →Ability for local & regional authorities to intervene to a certain extent in broadband provision
- **Exchange of local & national stakeholders**
- **Guidance for communities willing to engage in broadband extension**
- **Empowerment & protection of local initiatives & definition of their specific role**
- **Financial support for alternative technologies**
- **Tackle digital exclusion together with social exclusion**

Literature findings

PROMOTION OF INTERNET BROADBAND ADOPTION

- (In-)formal publicly arranged educational programs including all members of society recommended
- Financial support for the needy/ lowering access costs
- Support in broadband adoption focused on: Elderly, unemployed, lower educated & disabled persons
- Improvement opportunities in education & on labor market
- Community ICT programs include different user needs & aim at their skills
- Utilization of physical structures providing multiple services for community ICT programs

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Literature findings

RECOMMENDATION FOR INFRASTRUCTURAL NEGLECTED REGIONS & LOCAL INITIATIVES

- Non-fixed/ wireless connections for final few
- Technical developments (e.g. progressive suppressing) usable for slow connections
- Funds for local initiatives could be provided
- Local initiatives could improve their networking

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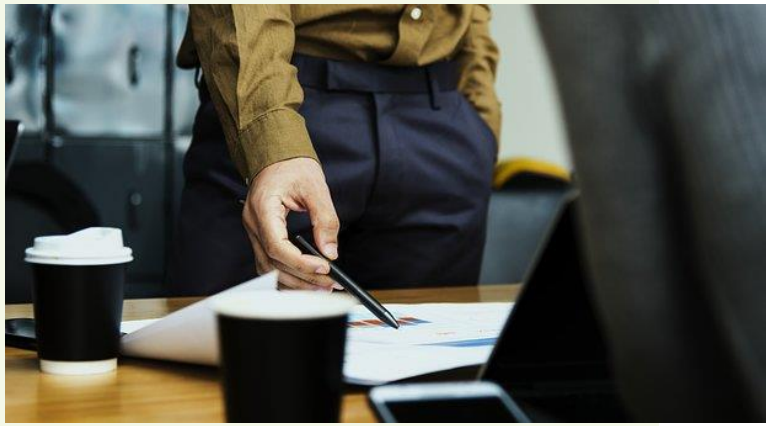
Literature findings

TRAINING FOR SPECIFIC TARGET GROUPS- SMES

- adoption of broadband infrastructure by rural companies often lower; but positive influence on local economy (employment rate)
- Technology uptake nowadays essential
- Training & informing SMEs crucial (also funding)
- many SMEs with broadband connection → miss user possibilities e.g. change practices/ enhance productivity; save money → introduction by vendors, industry associations or the government
- Businesses convinced by friends to adopt certain ICT services or tools/ private knowledge
- Networking platform for rural businesses; proactive & agent-based



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Literature findings

TRAINING FOR SPECIFIC TARGET GROUPS- OLDER PERSONS

- ICTs opportunity for older people to stay longer at home
- Reduces loneliness, improve health & wellbeing → promote (e.g. mobility, independency, new opportunities)
- Stigmatize assistive technologies/ do not see advantage; low usage
- cognitive & physical problems, negative mindset towards ICT
- Most important influence: Cost and usability
- Financial support by national governments for ICT information & projects, adapted to the needs
- centers with computer training courses/ use established centres
- devices adaptable to customer needs (modular), training, continuous support

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Thank you for the attention!

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