

Introduction & Overview of A-BARD

Broadband for rural Development



Sixth Framework Programme
Scientific Support to Policies

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- **A-BARD**
 - Analysing **Broadband Access** for **Rural Development**

- **A 2 year EU Coordination Action project (2005-2006)**
 - Researching **rural broadband provision** and **use**
 - Part of the Scientific Support to Policies (SSP) in the EU Sixth Framework Programme

- **Conducted by 7 Partners from 6 European countries:**

1. National Microelectronics Application Centre Ltd (MAC)	Ireland
2. Ceske Centrum Pro Strategicka Studia (CCSS)	Czech Rep.
3. Institute of Comms & Info Technologies Ltd (ITTI)	Poland
4. Mainstrat (MSTR)	Spain
5. Cybermoor (CYBM)	UK
6. North West Labs Ltd (NWLabs)	Ireland
7. Power Lake AB (PLAB)	Sweden



Analysing Broadband Access for Rural Development

- **A-BARD aims to**
 - Focus & enhance awareness & understanding of the benefits of broadband applications & services deployment in rural areas.
 - Facilitate the exchange of experience & best practice to rural stakeholders & interests
 - Identify the institutional & policy frameworks that are delaying roll-out
 - Identify areas where further RTD is needed to provide universal solutions



What is Broadband ?

Broadband is

- about **Digital Inclusion** for all rural areas
- an **aspiration** to accessible, affordable, convenient, always on, fully interactive connectivity, use of ICT to overcome the Digital Divide and achieve a level playing pitch with all urban users.
- **dynamic & constantly evolving** over time.
- Rural areas definition taken by A-BARD – OECD/Digital divide definition.



Broadband – is very dynamic

As broadband is a very dynamic area,
with technology, applications and services moving very fast:

- **A-BARD provides information on rural broadband provision,**
 - Continuous monitoring, reporting and analysis of current trends and recent developments
 - Access and use in the rural areas across Europe
 - **What is happening**
 - **What needs to be done**



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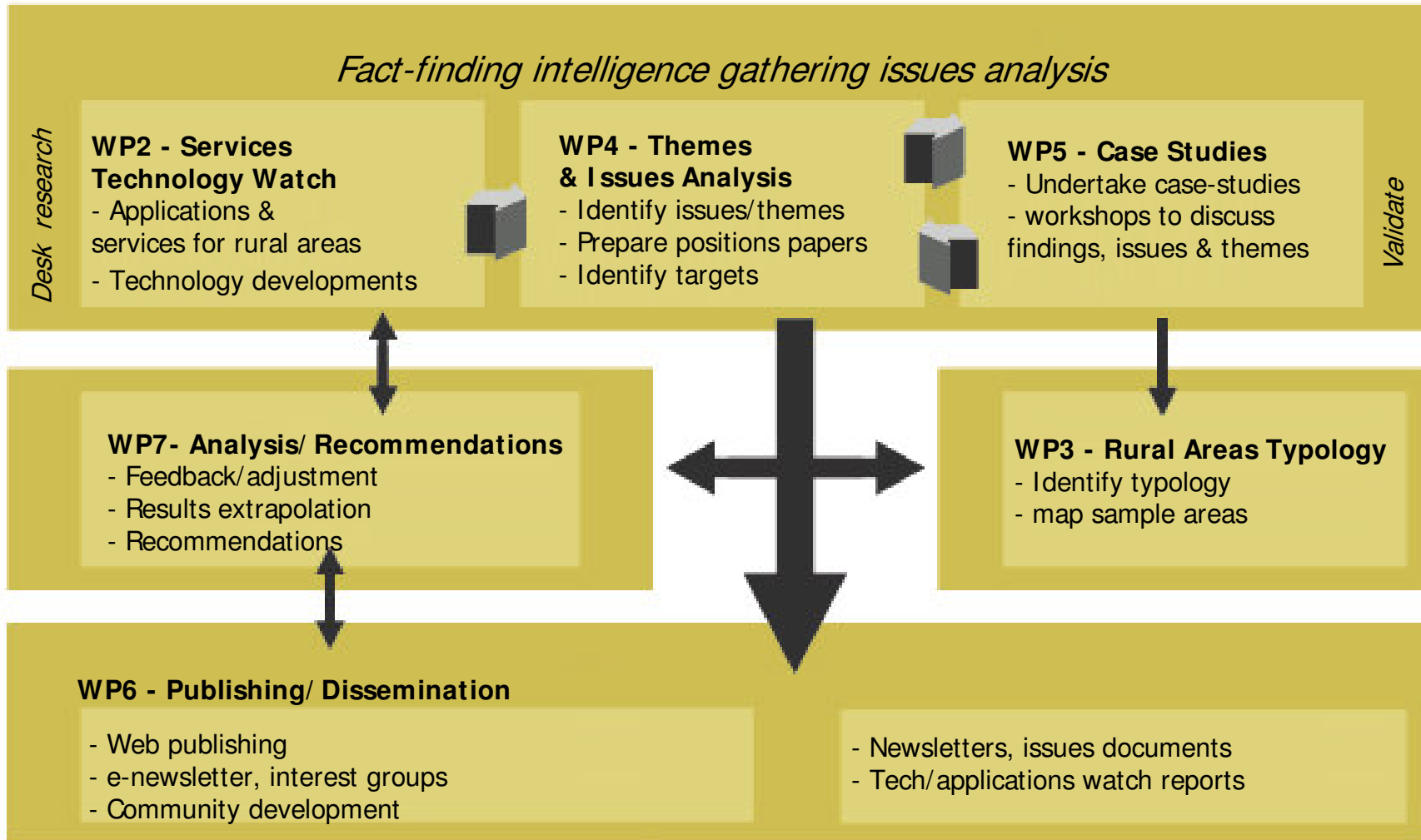
- **A-BARD is useful for ...**
 - Rural groups, communities, local authorities looking for information on broadband issues / implementations for rural areas
 - Actors engaged in initiatives & programmes relating to broadband
 - Policy Makers involved in the broadband area
 - **Local and Regional authorities**
 - **National governments**
 - **European Commission**



A-BARD MISSION

- A-BARD addresses the following questions
 - What **applications & services** exist, what is emerging?
 - When will they be **accessible & affordable in rural areas**?
 - What **socio-economic aspects** need to be considered to ensure applications and services development & implementation take place in rural areas?
- & input to policy documents
 - **Usability & acceptability** issues critical to the deployment & use of ICT in rural areas to **understand the impact of IT as an external driver of change**

a-bard work structure



- Monitoring tells us a lot of Technology progress but very little that is focus on rural areas
- New solutions/ applications are appearing eg Fiber to the home, Triple play, but they all seem to target the already provided for areas: ie urban

- 3G, where available, offers relatively good connection speeds & a low cost of connection to an operator's existing network. However, ongoing charges are high.
- Mobility can greatly benefit rural dwellers' life style ambient intelligence services and Location aware services are being developed but coverage and access issues means they are not yet showing their potential as BB take up drivers for rural areas

Broadband Technologies are available but except wireless none making impact in rural areas



A-BARD technology agnostic approach and looked at all type of solutions:

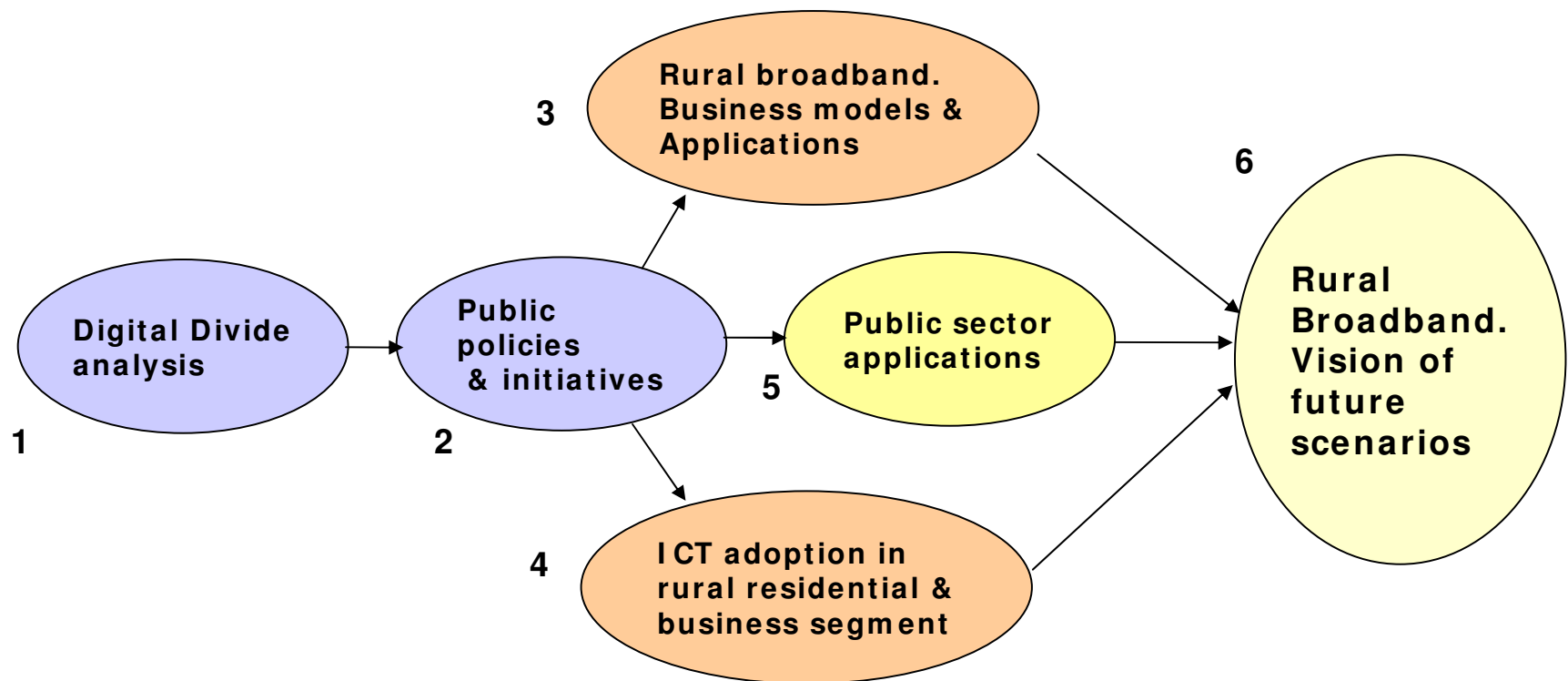
- Wired solutions (Fibre, ADSL)
- Wireless (Wifi- Wimax)
- Broadcasting solutions (HDTV, Aerial, Satellite, etc)
- Last miles solution eg PLT

The past 2 years has been frustrating:

- wimax taking more time than anticipated to roll out
- Wimax may provide a lot of the answers but deployment will require financial support to offset equipment costs
- Still not a lot of wimax services available
- PLT or Aerial solutions still being trialled,
- There seems to be lost opportunities to couple Broadband with the expansion of broadcasting mediums (cable, DTT,HDTV) with possible exception of MMDS
- No new approach providing cost and capacity effective solutions.



A-BARD Reports - Themes & Issues



WP4 – Development Scenarios

Development Scenarios

Rural digital communities

Private operators + Public support

Public Private Partnerships (PPP)

Key influences

- 1. Foster competitive market conditions**
- 2. Overall Information Society strategy**
- 3. Regional and local leadership**
- 4. Promoting the creation of community networks**
- 5. Allocate adequate Public Funding in areas of market failure**
- 6. Public demand aggregation**
- 7. Stimulate demand and take up**
- 8. EU funding of R&D of cheaper broadband access technologies infrastructure**
- 9. Flexible and innovative regulatory framework**

Lessons to be learned from case studies

From broadband deployment in Sörmland county

- Have a clear **vision**
- Make a **strategy plan** before work and procurement is started
- Make use of **PPP** in deployment
- Don't leave the last **10-15%** of the population behind in the coverage race (they live in the rural part in Sweden)
- Be **careful when procuring** so the providers are there when development starts

- 2 reports on eCommunities & Business services show the importance of providing adequate content and services for rural smes, farmers but also citizens
- There are some very good examples of how agricultures/farmers can benefit from portal/online market/ agritourism.
 - Communities can get regenerated by the use of forums, digitalisation of local content and videoing of local events



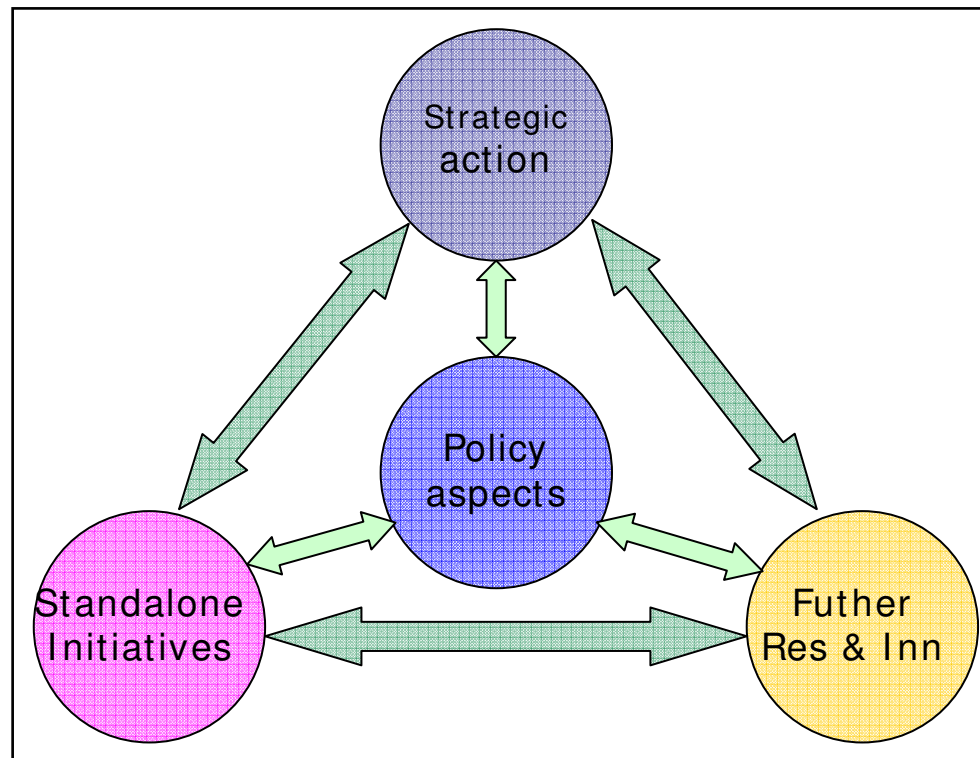
- More research needs to go towards finding cost effective but also capacity tolerant solutions for rural areas
- Content & services need to be developed that will drive the uptake, this is also crucial for delivery through wireless and mobile connections
- Entertainment and children are likely to drive the take up in rural areas provided there is infrastructure

- 1. Policies,**
- 2. Strategic actions,**
- 3. Initiatives, and**
- 4. further Research & Innovation**

balancing Top-down & Bottom-up approaches



A BARD RECOMMENDATIONS



A-BARD Recommendations

- 1. Define an ambitious European Rural Broadband Strategy as an integral part of Sustainable Rural Development Policy**
 - Allocate public funding where there is “market failure”
 - i2010 & FP7 – specific infrastructure, ICT use & RTDI initiatives.
- 2. Stimulate business & technical competition in the Rural Broadband Market**
 - Every user should have a choice of at least 2 or more broadband providers
 - Public Sector Demand aggregation.
- 3. Develop sustainable Connected Rural eCommunities to stimulate demand & broadband take up**
 - Enhance Regional Leadership & Local Champions
 - Awareness (“*know what*”) & Training (“*know how*”)
- 4. Provide services & content that rural users want**
 - Local content as well as eBusiness, eLearning, eHealth, eGovernment - “*Killer Apps*”?
 - eWork & eClustering – more competitive ways of working & SME clustering







Broadband for Rural Development



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Analysing Broadband Access for Rural Development (A-BARD) is a 24 month Coordination Action started in January 2005 to research rural broadband provision and use, as part of the Scientific Support to Policies (SSP) in the EU Sixth Framework Programme.

A-BARD aims to continuously identify views on the issues and barriers to widespread broadband provision and the extent to which broadband can act as an external driver of change in rural economies.

Targeted to the needs of rural communities A-BARD addresses questions close to eRural actors such as:

- Rural broadband deployment in rural Europe: issues, models, best practices, affordability and accessibility?
- Broadband Applications and Services: what is emerging and can some of those applications and services directly address the digital divide?



Thank You

Broadband for rural Development



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