esa This project is co-funded by the European Space Agency's Telecommunications Applications Programme

South West Regional Authority

SOUTHWEST BROADBAND

Exploring Satellite Technologies in Business, Education and Public Services

*get*connected
ComReg Annual Conference
2003

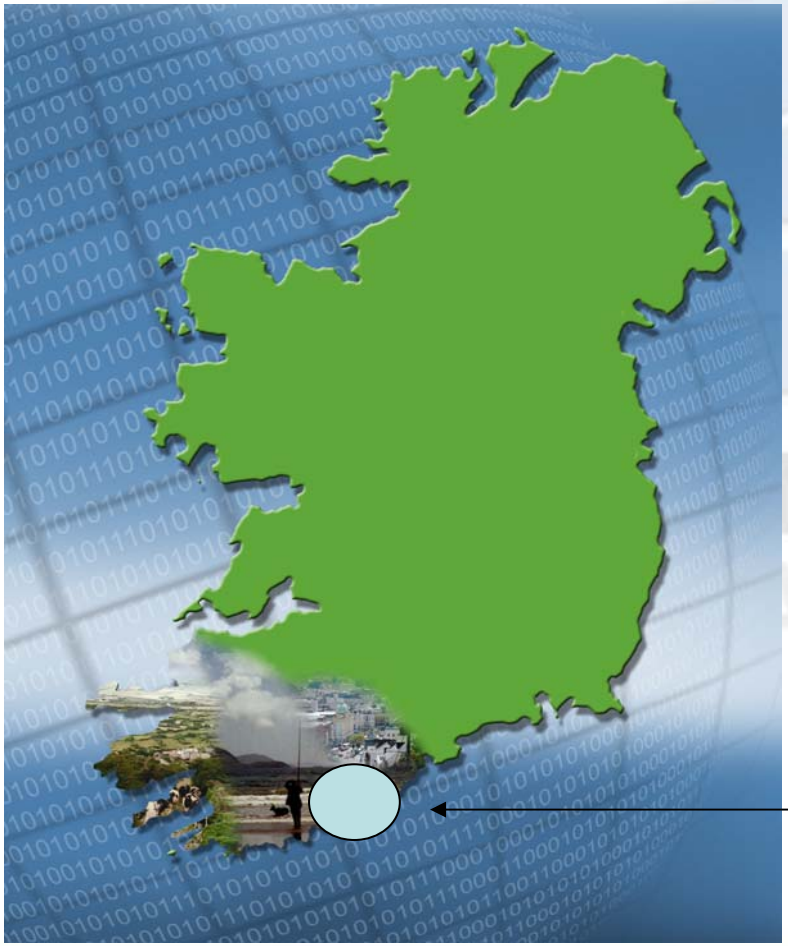
Regional Broadband Development Road Map for Connected Communities South West Broadband Initiative

Sinéad Crowley
Project Manager
South West Regional Authority

- Regional Snapshot
- Why Satellite?
- What is involved in the delivery of Satellite Broadband and wLAN?
- Aims and deliverables fo SWB
- Current state of play
- Lont Term Plans/options?

- Questions?

Peripheral Region with High Growth Economy



- Counties Cork and Kerry - Area 12,100 sq. kms
- Population 580,000
- GDP 120% of European Average
- Very high-technology industrial presence – mainly electronics and chemicals
- Unemployment 3% +
- 25,000 students in Third Level
- Economic activity mainly centralised around Cork City

ICT and Regional Development

"Death of distance" – don't believe it

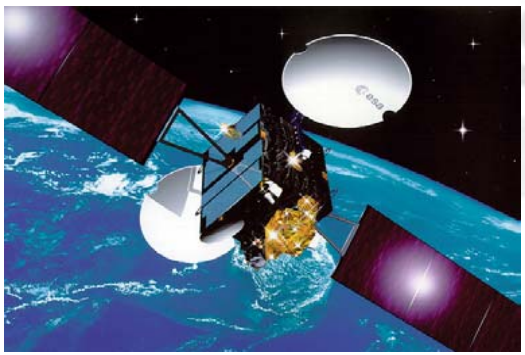
Left to market forces - ICTs have a much higher propensity to become tools of centralisation rather than decentralisation and agents of economic concentration rather than of economic dispersion.

Why Satellite and wLANs?

- Large territory with dispersed population
- Very high costs associated with fibre-laying
- Difficult to make business case to Telcos, especially small towns (600 – 1200 pp), and lower levels of economic activity

- Failing to get a Teleco prepared to provide broadband in many towns we decided to adopt a self help approach
- We viewed Satellite, clever caching hardware combined with wireless as an optimum approach

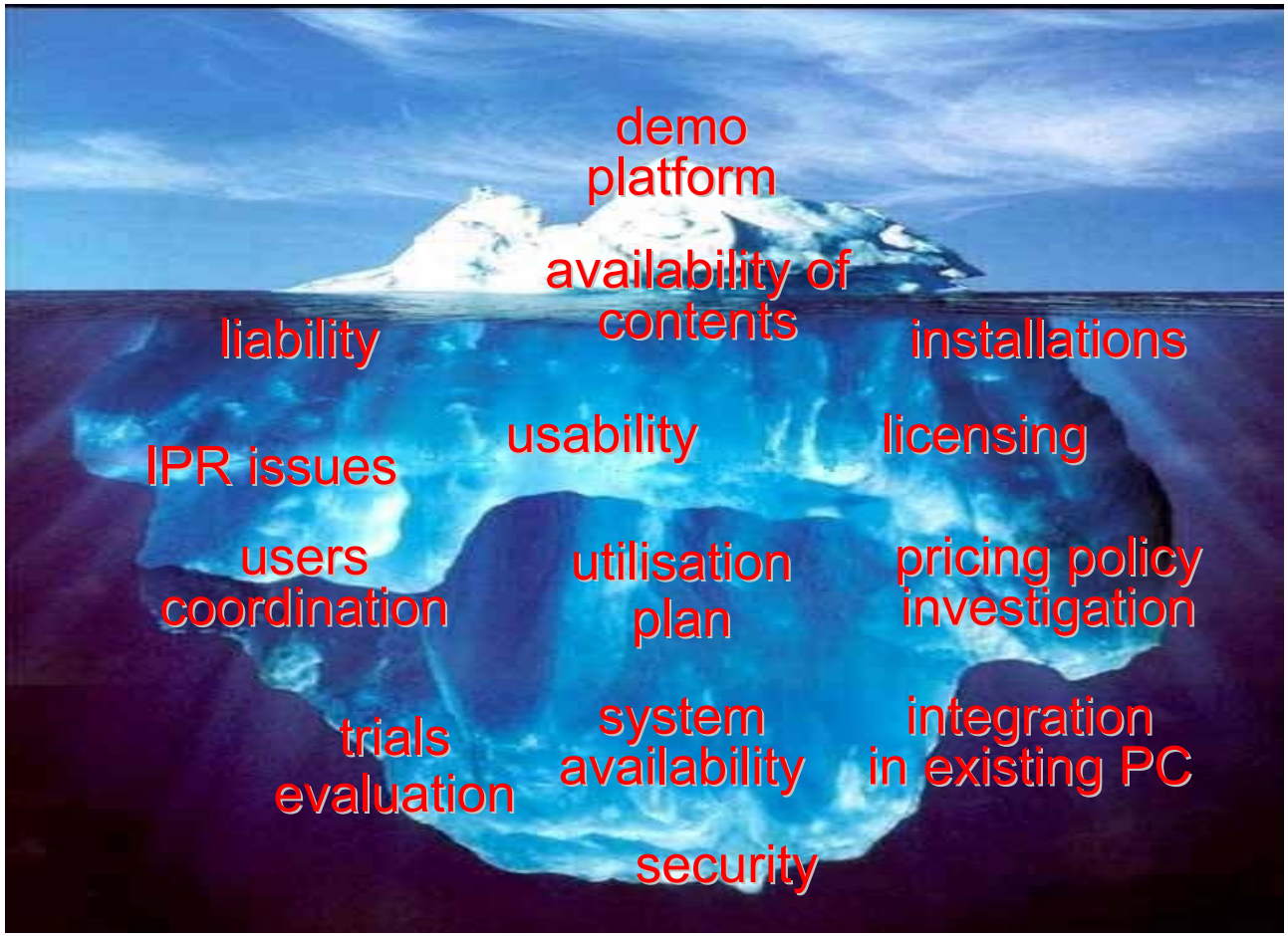
Aims of the SWB Initiative



* Picture courtesy of ESA website

- To research and demonstrate satellite technology as a means of delivering broadband to rural and peripheral areas
- To evaluate its usability, cost-effectiveness and reliability, and
- To disseminate the outcomes and experience of the initiative throughout Ireland and across Europe
- A key element of the SWB will be to support and sustain innovation in technology, and future business development by Irish and European SMEs - in areas of applications and technology development

Feasibility v Sustainability



Slide courtesy of ESA

SWB Partners

SWB Steering Committee

Lead Partner - South West Regional Authority

John McAleer, Sinead Crowley, Eoghan Allen

Consortium Partners

Kerry County Council

Cork County Council

Údarás na Gaeltachta

West Cork Adult Education Service (County Cork VEC)

Post Graduate Medical and Dental Board, Cork University Dental School and Hospital

ICS Skills (incorporating ECDL Ireland)

Technical Manager	Evaluator	Associate Partner
Ildana Teo	National Micro Electronics Centre	Enterprise Ireland

Industry Partners

- Confirmed Industry Partners
  - ✓ Raytheon
  - ✓ iDirect
  - ✓ Satlynx/ Gilat/ Media Satellite
  - ✓ Hughes/ Educom/ Orbitlink
  - ✓ Tachyon
  - ✓ Europe*star
  - ✓ Netdish (Italy)
  - ✓ UrElectronics
  - ✓ Intel
  - ✓ DCM Group
  - ✓ Duolog
  - ✓ 3Com
- Satellites
  - ✓ Eutelsat W3
  - ✓ Telstar 12
  - ✓ Europe*Star 2

Field trails

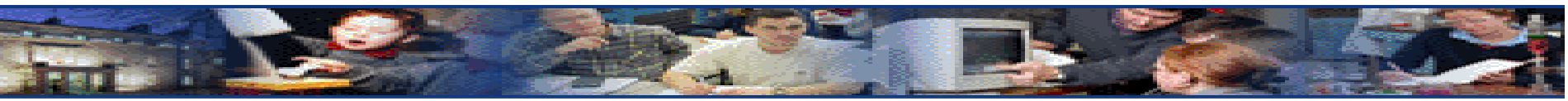
SME Development

eGovernment

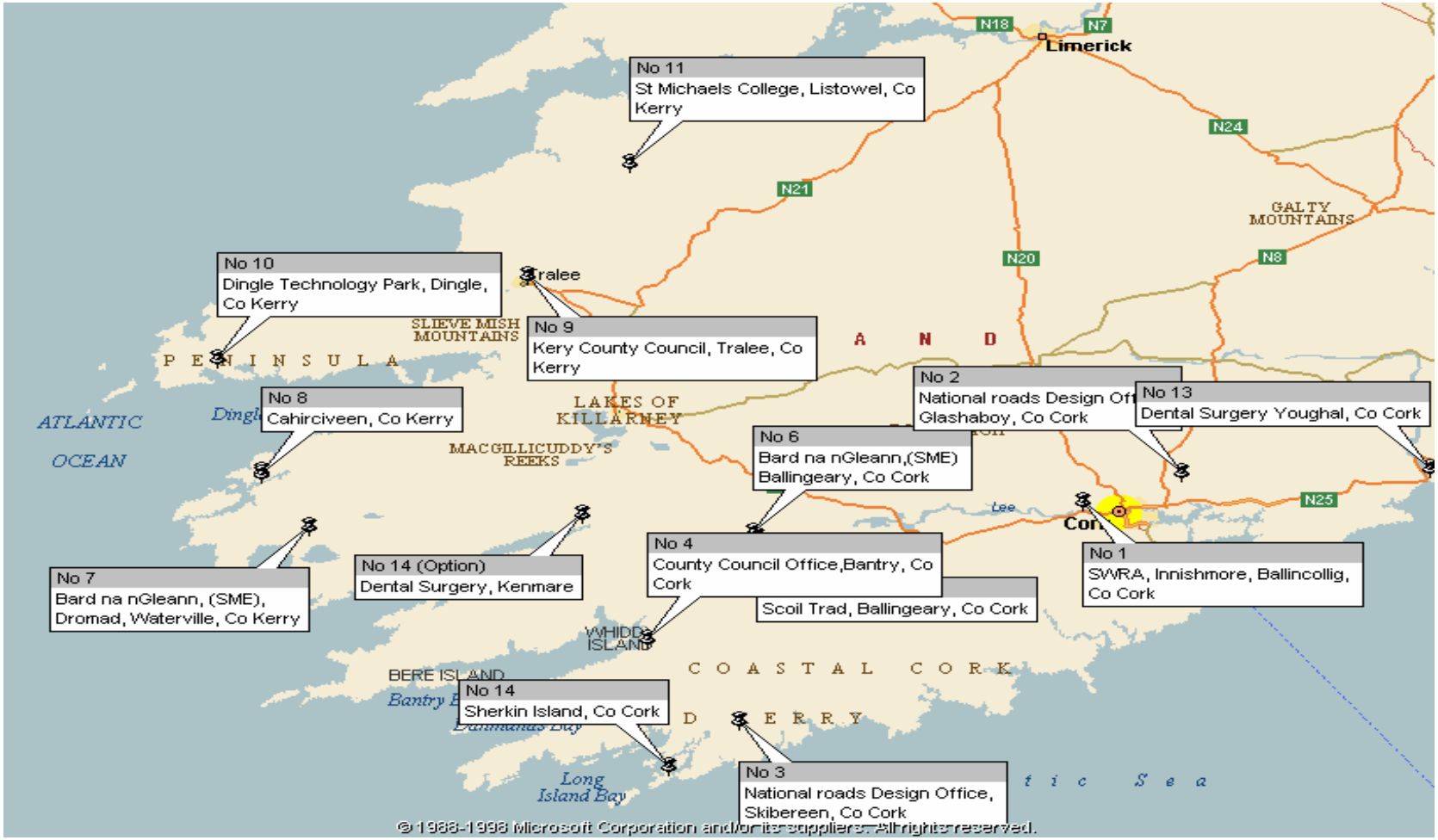
Health delivery

Distance Education

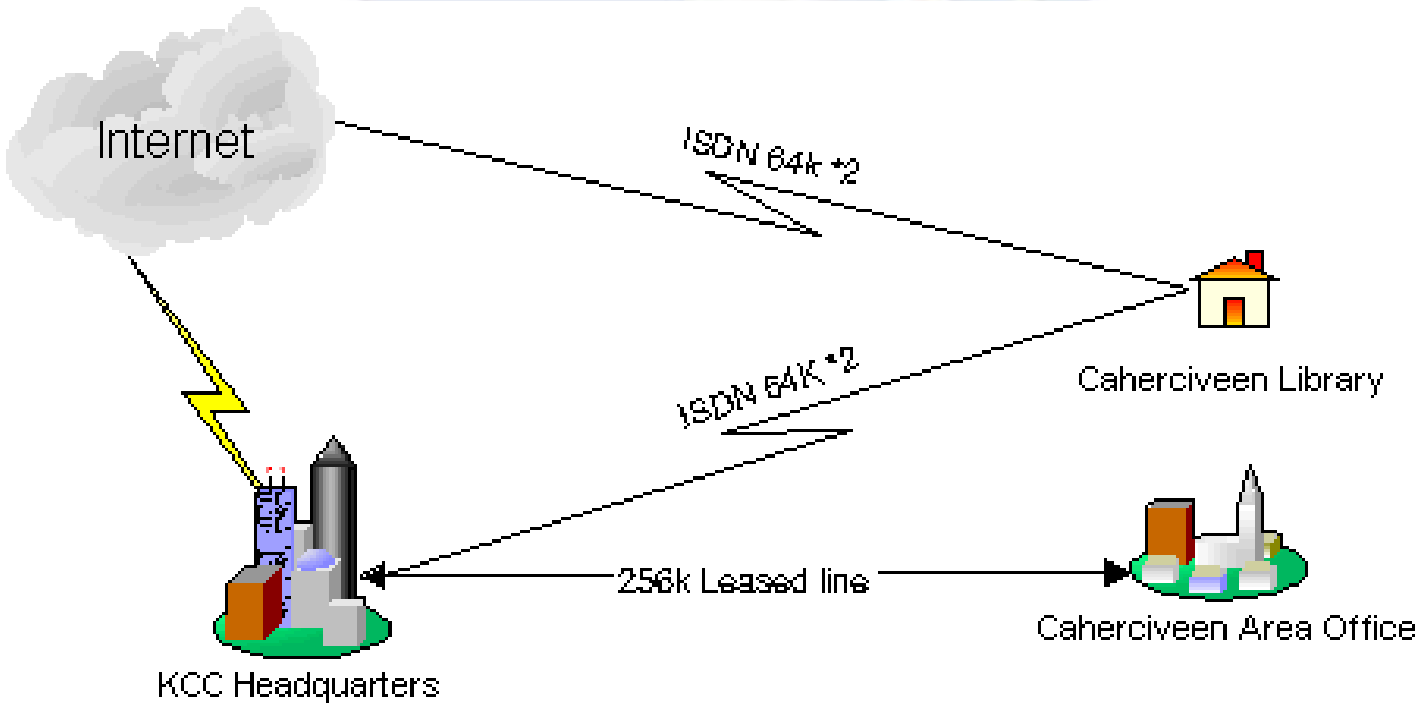
Wireless Local Area Networks



Field Trial Locations

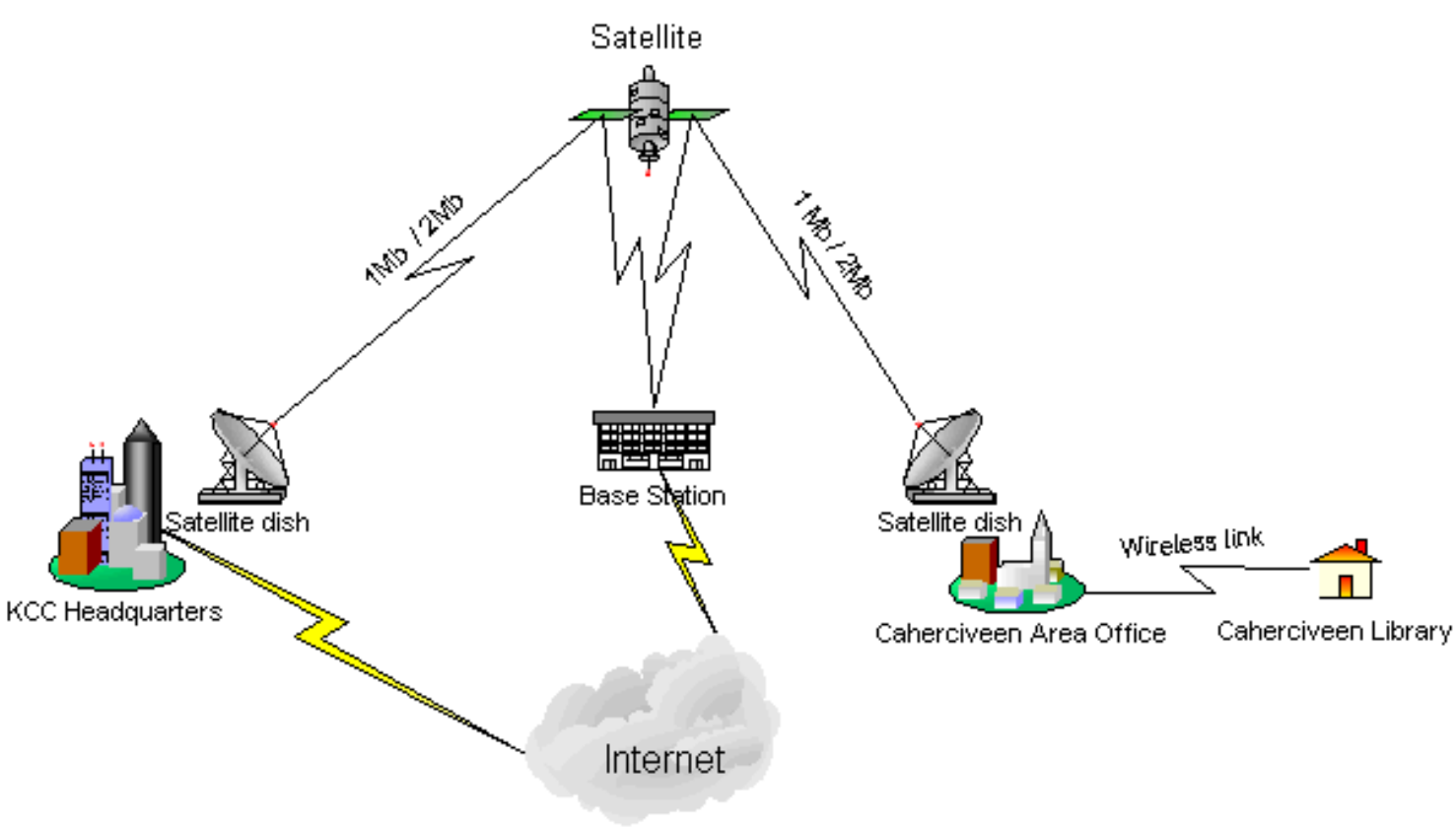


Non-Satellite broadband – if you can afford it!



Graphic Courtesy of Kerry County Council

Satellite broadband and wLAN



Graphic Courtesy of Kerry County Council

Wireless LANS

- Satellite to wireless- 802.11b/g LANs are the most exciting development of the SWB project.
- Supported by on-site web and mail servers
- Such LANs are not expensive to install
- Not expensive to operate if bandwidth, administartion and technical costs are built into subscription
- Very efficient and effective
- Users experience very fast speeds -11 Mbits/sec per second
- Installed and operational within days

Progress to date

- 9 months into project
- Enormous industry support from space and ground sector operators
- Clearly satellite is a key technology in broadband rollout
- Importantly the technology is already beginning to deliver jobs in our region
- Both Satellite and wLAN - Many issues addressed – contention ratio, VPN, public access (caching, email servers, domain names, key, username, password…)
- Scalable satellite broadband means that you can increase your service levels to meet increasing demands

Awareness/ Dissemination

- Oireachtas Joint Committee CMNR
- Dept. of An Taoiseach and ISF, Dept. Finance
- Pan-EU exchange
- Workshops 16/17 October 2003 at Cahersiveen , Co. Kerry
- International Conference on Broadband, Cork in April 2004

Conclusions

- By using satellite, local Communities can very easily and economically provide broadband for themselves – Not-for-profit but self-sustaining model - to be managed as robust and quality serice though (not ‘second best’)
- Bypass your Teleco - if it is not prepared to run fibre or provide DSL- **do it yourself.**
- National Intervention - Bulk buy space segment and resell /redeploy it strategically into disconnected towns and communities across the country!

eEurope

- The European Commission wants to achieve a large increase in broadband rollout by end of next year-

- **If smaller towns and other peripheral areas are to be included , I very seriously suggest that Satellite broadband will have a key role to play**

Please contact us

The South West Regional Authority and our partners in the South West Broadband project, will be happy to provide information on all aspects of our work –

Thank you for your attention.

Contact details
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