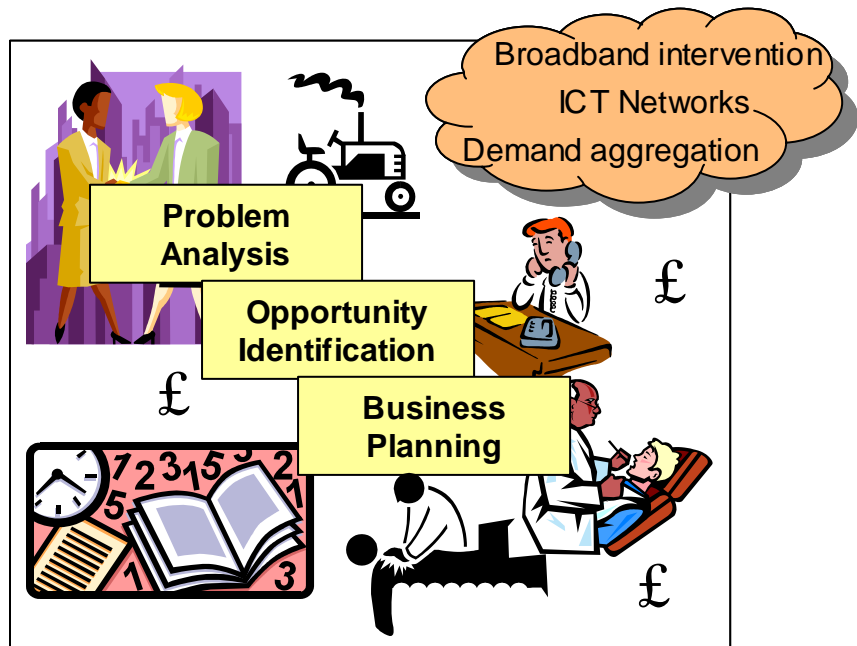


## TELECOMMUNICATIONS ASSISTANCE FOR LOCAL GOVERNMENT AND REGIONAL AGENCIES

Regional agencies and local government are facing a variety of challenges and opportunities from rapidly changing ICT performance, availability and cost. Broadband market stimulation and the availability of broadband supply have been key issues for at least the last two years. There is some evidence that availability of broadband stimulates economic development particularly when supported by demand stimulation activity. While availability is now generally good, many rural areas remain unserved.

The lack of affordable broadband has affected the ability of local government, the NHS and others to deliver ICT services to schools, libraries, doctors' surgeries and other community-based facilities. Various schemes have been considered for extending availability of service for these users through aggregation of demand. Regional Aggregation Boards are now in place to stimulate such aggregation.



Intercai has been involved across the UK in broadband stimulation, the improvement of supply of broadband services, and in early aggregation schemes. We have worked with District and County Councils and RDAs in developing policy, assessing need, defining and evaluating options, and preparing budgets and action plans. We have also worked with service providers in the development of broadband network architectures and designs. We have designed national networks and provided specialist expertise to service providers in the areas of cost reduction, Quality of Service standards and Service Level Agreements for telecommunications networks.

Our support for regional and local government addresses these telecommunications related challenges. We have developed tools and techniques for the analysis of problems, identification of opportunities and development of realistic plans for public sector related or stimulated telecommunications service delivery. We can help regional and local government make the most effective use of telecommunications technology and services and help local government and regional agencies to stimulate demand and availability of supply for the private sector.

### *Broadband intervention*

Over a number of projects, for County Councils and RDAs, we have identified and costed particular projects to bring broadband to clusters of businesses. While the precise work has varied from project to project, our most recent projects have involved:

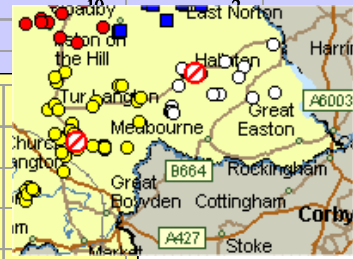
- Identifying areas, defined by postcodes that have yet to get broadband and are unlikely to have broadband by 2006.



- Finding clusters of such unserved postcodes with significant numbers of businesses within them.
- Estimating the revenue opportunity and costs of service delivery by ADSL and wireless to these clusters.
- Estimating the subsidy required to stimulate the supply of broadband to the clusters.
- Estimating the economic impact of the provision of broadband service to the clusters.

Postcode	Exchange	Town	Houses	Businesses	Employees
TL12RT	Owthorpe	Owthorpe	5	0	0
TL34KJ	Trawshed	Trawshed	15	3	18
TL35LK	Trawshed	Trawshed			13
TL40MT	Menbridge	Trawshed			25

	2004	2005	
Revenue	534,436	565,644	
Cost	485,777	525,656	
Subsidy	65,677	65,656	
Margin	16.67	17.87	18.36



We have developed a number of mathematical techniques and models to assist us in this work. As well as application to business clusters, these tools have application to the aggregation of public sector broadband and telecommunications demand, particularly combinations of local authority, education and NHS buildings and sites.

#### *Demand aggregation*

At a regional aggregation level, we have worked with regional development agencies and suppliers of telecommunications services. In Northern Ireland, we worked with a major ICT supplier on the design of the Classroom 2000, a network to provide broadband services to schools, modelled the reliability of the network, and calculated exposure to credit payments arising from poor performance. We also developed a commercial and business model associated with a service proposition that offered value added services over the broadband infrastructure to schools and the broader community in Northern Ireland.

For Advantage West Midlands, we developed a pricing policy for an aggregation network covering secondary and tertiary education, with the potential for provision of telecommunications services to other public services. We identified options for cost-based, value based and market based pricing together with a financial model of the business to determine the impact of price on business performance. We also considered the value chain associated with the delivery of telecommunications services to determine where proportionately value was created, taking account of backhaul, regional distribution, and access to community PoPs. This value chain analysis gave clear indications of approaches that could be used to sell services beyond the initial public sector base as far as this would be allowed under state aid and other rules.

We were involved in the design and implementation of the SuperJANET4 national academic network. Working to the service provider, MCI, Intercai led the design team and was responsible for the technical specification and costing. During the implementation, we were responsible for engineering planning, network management, system implementation and process definition.

We have been responsible for major government networks including the Government Data Network and the Camelot network built for the National Lottery.



### *Procurement*

We have assisted local government in the establishment of broadband networks through the definition of requirements, identification of candidate service providers, devising the invitations to tender and providing the selection methodology for the supplier.

### *Telecommunications policy and strategy*

We have tools and expertise to address market, business planning, organisational and technical issues associated with provision of telecommunications services, nationally, regionally or locally. The skills that we apply are founded on our work for telecommunications service providers in the UK and elsewhere.

Through this work, we have provided the information for and written policy documents for local government and RDAs. The policy has been of a practical nature where the issues affecting the area have been spelt out, the priorities indicated and the action plan given to address the situation. Residential, business and public sector communities have benefited from a clear understanding of what the local authority is doing and how they can get involved.

### **Client Project Profiles**

In addition to the projects given above, the following examples are given here of projects for government and local authorities as well as for commercial service providers in the UK and internationally.

*Broadband in Rural Areas - Countryside Agency* - We undertook a Best Practice Study of twelve broadband projects in rural areas.

*Broadband intervention programmes* - over the last two years, we have worked with a number of county and district councils across four regions in the development of broadband intervention programmes to stimulate supply and demand.

*Enterprise Hubs / Broadband – SEEDA* - We determined the requirements of a number of Enterprise Hub tenants, developed a generic technical architecture and prepared business cases for funding by SEEDA.

*Corporate Network Redesign* - The merger of two utilities to create a £multi-billion organisation involved a strategic review of their IT operations. Intercai was responsible for the WAN aspects of this that involved some 500 locations throughout the UK and an annual budget running into £10 millions. We advised on a redesign that reduced two data and two voice networks to a single network. This provided a significantly higher level of service and resilience and provided cost savings of £several-millions.

Intercai also assisted a major systems integrator preparing to outsource the IT operations of a large multinational financial institution. We were responsible for the Wide Area Network design review and the Service Level Agreements. We ensured that the WAN provided the services required by the IT infrastructure and that the development plans of all parties were consistent. We also advised on the contractual and mathematical aspects of the SLAs during the negotiation of the contract.

*Wireless Local Loop* - Intercai Mondiale was asked to develop an outline business model that explored the viability of a WLL service in Ireland. We estimated the market in each of the 12 regions to be addressed by the licensee, assessing the coverage required and the number of base stations needed. Equipment offerings from two manufacturers were reviewed and costs were estimated for the deployment of the network and the delivery of the service.

*Internet via Satellite*- This study reviewed business planning issues associated with the provision of Internet services over a mobile satellite network. It covered areas such as the addressable market, customer acquisition and distribution of services, partnerships with ISPs and others, staffing and costs for a number of business propositions.



## About Intercai Mondiale

Intercai Mondiale provides strategic and operational consultancy services for organisations that are building businesses around information technology, telecommunications and media products and services.

We support organisations that finance, develop and implement new products and services. Working with them, we use our solid industry experience, market and technical knowledge, business planning and modelling capability to determine the feasibility and value of their new enterprise, and to document that in a business plan. We then support these organisations in implementing their plans by taking on a variety of project management, marketing and technical roles. We also support some of our clients in selling and implementing their products at their customers' sites.

Our clients are often keen to use ebusiness and other technology products and services to transform their businesses. We support these clients by helping them to understand the opportunities that are open to them from these emerging technologies, by evaluating their current facilities, by defining strategic and operational plans, and by supporting them through their implementation. We run workshops and evaluate the costs and benefits of change. We redefine their processes and support them in implementation.

Intercai brings specialist skills in mobile telecommunications, fixed telecommunications, ebusiness, Internet, satellite, cable services and IT systems.

Our consultants often have considerable directly relevant experience gained from senior management positions within the sectors that they serve. Our approach is to work closely and interactively with our clients to develop pragmatic solutions that are matched to their needs and capabilities. Our aim is for our clients to realise their opportunities.

Intercai Mondiale uses its strong industry expertise to serve clients ranging from major blue chip companies to start-ups. Representative clients are listed in the box.

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## *Clients*

Alcatel  
Advantage West Midlands  
Apax Partners  
BT  
Cable & Wireless  
Commerce One  
Countryside Agency  
e-Plus  
East Sussex County Council  
Eircom  
Energis  
Equant  
Fluor Daniel  
Kingdom of Bahrain  
Government of South Africa  
Government of Jordan  
Guernsey Board of Industry  
HP  
Hyder  
Inmarsat  
Intel  
Kent County Council  
KPN  
Leicestershire County Council  
MCI  
Neosnetworks  
Nortel Networks  
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