INTERCAI MONDIALE WORKING FOR LOCAL AUTHORITIES IN BROADBAND

Does your authority wish to promote broadband in your county or district?

Are there community groups and possible suppliers but little momentum to move forward?

Are there mixed messages from the area regarding community schemes and support for commercial offers?

Intercai Mondiale can help you to implement broadband networks in your area. The diagram shows some of the main areas of activity where we have been involved.

Supply availability. Local authorities and communities need to understand the supply of broadband and other telecommunications services at a local level to identify gaps in service provision and make best use of available resources.

Demand estimation. The level of demand will determine the feasibility or otherwise of the scheme and is therefore of critical importance to prospective suppliers when constructing their commercial model.
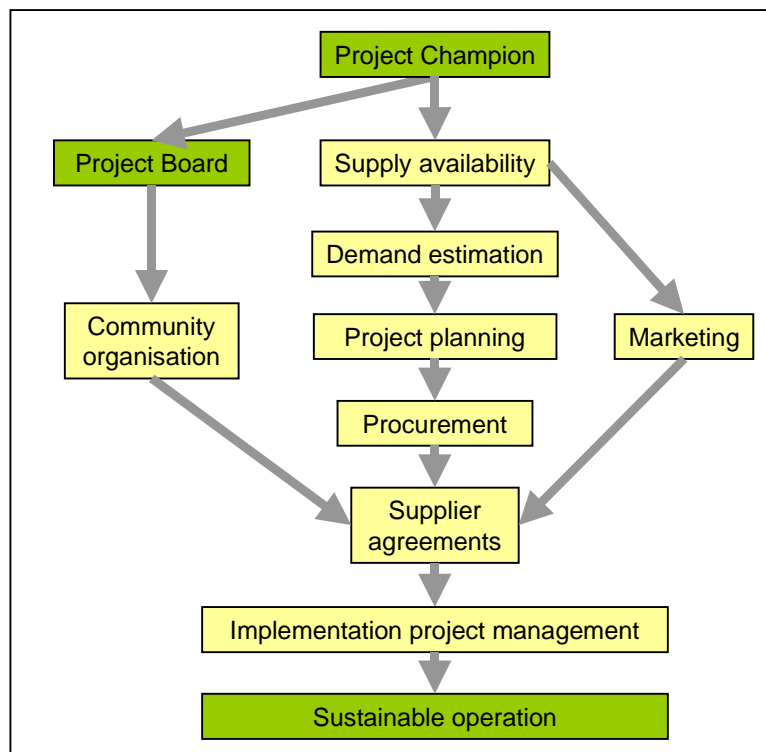

Community organisation. The local authority may wish to support community broadband schemes. In such cases, the project champion and other interested parties will need to set up a formal community organisation to manage the procurement or to deliver service.

Project planning. A project plan will indicate what tasks to carry out, the likely costs of service provision, and how those costs compare with potential revenue. A project plan and a commercial model will be needed to demonstrate feasibility and any short or longer term funding requirement.

Marketing. Publicity, together with a means of registering interest, is absolutely essential from early on in a project. Registered users will demonstrate demand to prospective suppliers.

Supplier agreements. The selection of suppliers will be a key issue for the community. It will need to prepare a reasonably detailed procurement specification and some indication of the amount of demand that the supplier should expect. Formal tenders will need to be evaluated and agreements reached with a supplier.
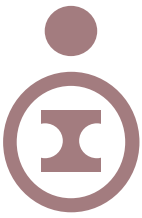
Implementation project management. Implementation will need to be managed on behalf of the community to ensure that the service is delivered to the specification required.
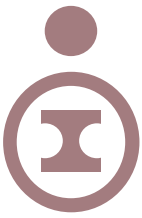
Intercai Mondiale support

Intercai Mondiale provides services to support individual communities and facilitators working across a number of communities. The services that we provide include those shown in the table below.

Activity	Intercai Mondiale support
Community organisation	• In conjunction with a partner organisation, Intercai Mondiale can provide documents required to set up a community organisation limited by guarantee or as an Industrial and Provident Society
Supply availability	An automated tool for identifying broadband availability by postcode for BT and cable operators including postcodes: • Where speed is restricted • That are out of range of service • Where the exchange has a trigger level but no service
Demand estimation	Broadband demand forecasting tool associated with a ward based demographic database. The database includes population, households, SMEs and public sector organisations by ward, and ward based socio-economic data. The demand forecasting tool provides a forecast of take up by ward using historical take up information, market estimates for final penetration levels adjusted for ward level socio-economic factors. A cluster analysis tool to identify clusters of postcodes that meet particular demand criteria; depending on the criteria used. Demand criteria can be set to take account of characteristics of different technologies or service revenue and cost targets.
Project definition and planning	Cost and revenue model for a broadband service covering villages, business parks and towns using broadband technologies: LLU with ADSL, satellite, analogue circuits with ADSL, Wifi, Fibre and Powerline. The cost and revenue model can be used for estimating the budgetary costs of providing a service in different types of location using different types of technology. If used by a community organisation, it can be used to estimate the funding that a service provider is likely to require. If used by a service provider, it will give a rough estimate of the total costs of providing service in an area. If used by a local authority or other facilitator, it will determine feasibility of a particular scheme.
Marketing	Proforma broadband registration web site and database application available at low cost for community organisations – see http://www.faberhouse.net Proforma pamphlets and articles about broadband
Procurement	Consultancy support in preparing procurement specifications and subsequent supplier evaluation.
Supplier agreements	Expertise in the preparation of telecommunications supplier agreements and service level agreements.
Project management	Register of telecommunications project managers and others able to support community organisations

Intercai Mondiale's broadband related project work

Intercai Mondiale has carried a significant number of projects for government and local authorities as well as for commercial service providers in the UK and internationally.

Broadband Mapping and Policy Preparation

For Leicestershire County Council we surveyed the availability of broadband services at a postcode level. BT and NTL provide broadband services in many parts of Leicestershire. However, many rural areas are un-served, or have restricted broadband capacity. We characterised the availability of broadband for every postcode in the County according to whether BT or NTL provided service, and if BT provided service at what speed. For postcodes where BT was not providing service, we identified whether the postcode was served by an exchange for which BT had established a 'trigger level' for registrations of interest. Leicestershire County Council published maps containing this data on its public graphical information system. We have subsequently used this information in a related project to determine the economic case for broadband supply and demand stimulation in the County.

In addition we prepared a broadband policy statement that was published on the County's web site.

Broadband Intervention

Following on from work we undertook to determine the availability of broadband across Leicestershire, Leicester Shire Economic Partnership asked us to undertake an analysis of demand for broadband services across the County, to identify clusters of businesses, and to advise on an intervention programme. This advice included the development of a generic business case framework for stimulating supply to identified clusters and working through a number of specific business cases. While undertaking the cluster analysis, we identified characteristics of clusters that pointed to the use of particular broadband technologies. We therefore revised our cluster analysis approach to identify macro-clusters suited to an infrastructure approach such as ADSL enablement of an exchange or mesh radio, and to identify micro-clusters suited to spot radio or local cabling solutions. The business case framework considered the costs and revenues associated with the provision of broadband to a cluster, but also considered the economic impact on the County in terms of change in employment, inward investment, use of ICT and enhancement of ICT skills,and change in teleworking.

Classroom 2000

Intercai Mondiale was retained by a major IT brand, a bidder for the Classroom 2000 project in Northern Ireland. The project involves the delivery of broadband to all educational establishments in NI. The bidder was working with NTL, which had committed to building a fibre network in support of the project. Intercai Mondiale carried out business modelling and strategic assessment work. We also carried out a detailed review of the network design, resulting in significant simplification and cost reduction and a more structured approach to the way in which services were offered. We modelled the reliability of the network and calculated the exposure to service credit payments arising from poor performance.

Our work involved developing a commercial and business model and service proposition for a service provision business offering value added services over a broadband infrastructure to schools and the broader community in Northern Ireland. A key objective was to create additional value through leveraging the network infrastructure to fund additional services for the schools and the
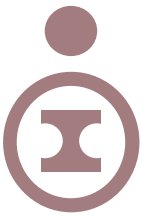
community. This involved developing a proposition to provide access and value added services to private businesses and community, the profit contribution from which could be sued to provide additional services or reduce the cost of services as a means of delivering value to citizens and achieving socio-economic goals such improving the accessibility in terms its affordability and coverage. The work included developing the business model; that is defining what activities the business would perform and how it would create value, how it would be funded and managed.

Having defined the high level model we then determined the kinds of services that could be offered to various groups of users including businesses, schools and pupils, community groups and citizens. This included developing Life long education services based on the distribution available content. The long list of services was rationalised. Finally the market opportunity was sized based on demographic information and potential uptake of services within demand pools. A high level costing for the services was also developed covering areas such as hosting, content management, applications and operations. This was used as the basis of a business case.

The bidder has now been selected as the preferred bidder and Intercai Mondiale has been asked to assist with the implementation of the performance measurement and reporting system on the back of the design work already carried out.

Countryside Agency

Intercai Mondiale was appointed by the Countryside Agency to undertake a Best Practice Study of Broadband projects in rural areas.

Recent research for the Government indicates that a large proportion of rural England cannot expect to gain affordable access to broadband in the next few years. The Government has acknowledged the rural problem and has developed some policies which seek to facilitate broadband rollout in rural areas, in particular through infrastructure sharing, facilitating deployment of satellite and fixed wireless broadband and by encouraging the aggregation of public sector demand.

There are currently a number of pilot projects being carried out which seek to demonstrate how broadband can be delivered in rural areas. This study for the Countryside Agency was intended to undertake the necessary research and analysis and to draw general lessons that can be applied elsewhere to help ensure that the benefits from the pilot projects are maximised.

Kent and East Sussex County Councils

For Kent and East Sussex County Councils we are currently identifying actions that can be taken to stimulate supply and demand of broadband services within the two Counties. This research and action planning project was concerned to assist Kent and East Sussex County Councils to understand the inhibitors (commercial and technical) to roll out of broadband services in the two Counties and to develop action plans that would stimulate the supply and demand of broadband services. Many areas in Kent and East Sussex have no access to broadband services. This study considered the demand profile from public and private sector market segments on a ward by ward basis. Telecommunications service providers and other organisations that may have an interest in supplying broadband services were identified and the key issues that they faced in deciding to provide services identified. Organisations and best practice associated with demand stimulation was also determined. The analysis then prepared a series of actions to be taken to encourage suppliers and stimulate demand within the two Counties.
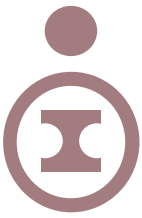
South East England Development Agency

For SEEDA concerned with the provision of broadband services to the tenants of Enterprise Hubs, multi-occupancy buildings supported by the RDA. We conducted 11 small projects to determine the requirements of the Enterprise Hub tenants, to make technical proposals, using work that had already been undertaken by the Enterprise Hub and a generic technical architecture that we developed, and to prepare a business case for funding by SEEDA. Some of the Enterprise Hubs were stand alone buildings but others were in business parks including Sittingbourne in Kent. We interviewed at least one representative of each Enterprise Hub and agreed our conclusions with them prior to preparing our final report for SEEDA. The projects are now being funded for implementation over the next quarter.

Advantage West Midlands (AWM)

AWM were creating a not for profit company to provide managed broadband access to universities and local authorities in the West Midlands. Intercai were engaged by AWM to develop a pricing policy for services including options for cost-based, value-based or market-based pricing models together with a financial model of the business including a pricing module as the basis of setting prices.

The pricing needed to recover the costs of providing the service and running the business as a not-for-profit organisation. The pricing policy was required to cover the breadth of services and potential users of services, and varied with the value propositions and pricing objectives on offer. For example for certain user groups pricing was based on the cost of provision, for others that were highly differentiated they based on value. The policy needed to be sufficiently generic to cover the contract period of 3 years, and provide the basis for foreseeable changes and additions.

Establishing pricing levels involved determining what competitive offerings were available as the basis of market pricing, articulating the costing methodology and best practice as the basis for cost orientated pricing and calculating the value proposition of the offerings vis a vis alternative sources of supply. Part of the business model was to determine the opportunity for offering services to other public sector customers, and potentially private businesses. The market opportunity was determined by considering potential demand from these markets and developing a model of the market to apply market share and penetration assumptions. This exercise involved understanding and applying EU state rules, and international competition law to understand what the boundaries were for government involvement in funding enterprises that provided public services in competition to private sector providers.

Wychavon District Council

For Wychavon District Council we assessed the options for providing broadband services to remote communities, known as the Bredon Hill villages, and a business park in the Vale of Evesham. The objectives for this project were a close match to the Kent and East Sussex requirements – an action plan covering principles and guidelines for support of broadband telecommunications services was the prime deliverable. As part of this plan, the opportunities for businesses to support the local development of broadband services and specific project projects to enable methods of delivering broadband services in the district to be evaluated were both recommended.   We used the tools and techniques developed in the studies for the North West Region to undertake some of the analysis for villages and the business park.

This Bredon Hill villages project was funded by AWM and the RDA has now been adopted as a broadband delivery project. The business park is now scheduled to be extended and the provision

of high quality broadband and an IT showcase on the site are being investigated. Intercai is responsible for developing the business case for this project.

Cheshire, Lancashire and Merseyside

For Cheshire, Lancashire and Merseyside through the Northwest Regional Development Agency we worked with a partner to:

➢ determine the requirement for services throughout the counties – this required us to develop a model of different kinds of communities to be supported by broadband: rural – large village with smaller villages and communities surrounding, market towns, business parks, and conurbations; each type of community was characterised in terms of the number of each type of organisation present, the demand for broadband services from each type of organisation;

➢ develop a traffic model based on the community model;

➢ evaluate the suitability of alternative last mile technologies;

➢ develop an outline business model for servicing each type of community, using each type of last mile technology and alternative backhaul technologies;

➢ evaluate the feasibility of each kind of last mile technology based on the cost of delivering service in each kind of community;

➢ assess the feasibility of a regional network to carry aggregated public and private sector traffic.

Market analysis

For a major global chip manufacturer, we undertook a comprehensive review of the xDSL market in Western Europe. The client used the result for planning the OEMs and Operators to target to understand what broadband access products and services they should develop to support xDSL distribution.

Market Development Strategy

A major telecommunications operator commissioned us to review its 'core' plan for the fixed residential market. We developed an alternative view of the market, analysed the supply cost structures, reviewed pricing strategy and estimated the impact of market share changes. The sectors analysed included: cable, fixed wireless, mobile, satellite, TV and multimedia, service provision, indirect connection, inter-connect.

Wireless local loop bid

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 mobile satellite

Intercai Mondiale was asked by a LEO satellite operator to determine the feasibility of offering broadband Internet services over its infrastructure. We investigated the commercial issues associated with such an offer, including the addressable market for such services, pricing, market positioning, service distribution, alliance formation, staffing and costs for a number of business propositions. We also investigated the infrastructure necessary to enable roaming between terrestrial and satellite based services.

Market for multimedia and broadband services

Intercai Mondiale prepared a briefing paper for a major satellite operator, which reviewed the world market for multimedia and broadband services, developments in applications, services and technologies, and the position of satellite operators in the multimedia and broadband market.

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.

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