Sample Case Studies

Background on Shannon Development ....................................................... 2

National Technology Park - Master Plan Review ...................................... 3

MasterPlan for the Future of Shannon Free Zone
(Incorporating a ‘GreenPrint’ for sustainability) ....................................... 8

The Knowledge Economy
Creation of a Knowledge Network in Ireland’s Shannon Region ................. 14

Shannon Broadband ................................................................................. 19

Pioneering Innovative Actions in Less Developed Communities
The Shannon Development eTown Project ............................................... 23

New Tourism Product Development
Doonbeg Golf Development, Ireland’s Shannon Region .............................. 28
Background on Shannon Development

Set up by the Irish Government in 1959 to promote Shannon International Airport in the post-jet era, Shannon Development is today, Ireland’s only dedicated regional development company. The Company’s dynamic brief is to generate industry, tourism and rural development in the wider Shannon area, known as the Shannon Region. This covers an area accounting for approximately 10% of the land mass of Ireland and 10% of its population, and includes counties Clare, Limerick, North Tipperary, South Offaly and North Kerry in the West and South West of Ireland. Today the Shannon Region is driven predominantly by the Services sector and has strong manufacturing and construction sectors.

For the past fifty years Shannon Development has worked, singularly and with many different ‘partners’ from the statutory, community and private sectors, to develop the region to its full potential. Its many varied responsibilities include:

- Developing and strengthening the indigenous industry sector in the Shannon Region, which includes building up a venture capital culture and creating awareness of the benefits accruing from the Information Society.
- Developing the Shannon Free Zone as a location for international investment in manufacturing and international traded services.
- Managing and developing the Knowledge Network, a series of modern business parks linked to third level institutes and incorporating incubation, indigenous enterprise and FDI.
- Tourism development in the Shannon Region.
- Delivering EU funding (European Regional Development Fund) to support new tourism product development.
- Managing commercial tourism businesses, e.g. castle banquets and day-visitor attractions, through a subsidiary company - Shannon Castle Banquets & Heritage.
- Promoting the deep water advantages of the Shannon Estuary as an international location for maritime industry.
- Stimulating development at rural and local levels.

With a keen eye to the future, Shannon Development works with the Government, the people of the Region, and the private sector in delivering new projects and initiatives that will address the economic development needs of all parts of the Region and create demand for the Shannon Airport Gateway.

We believe our work will help build a viable counterpole in the broader Atlantic region to the more developed eastern region, in accordance with Ireland’s National Spatial Strategy.

Since its foundation, Shannon Development has been recognised as a practitioner and a pioneer in regional economic development. Many of the initiatives and approaches, which the organisation has engineered in response to the specific challenges it has faced, have in turn been adopted as key strategies in developing countries to support economic growth and business development.

The expertise and experience which the organisation has gained over 50 years has been distilled into a pragmatic approach which can assist countries in designing policies, institutions and frameworks for the promotion of foreign direct investment, tourism, regional development and economic integration.

To date we have completed projects in 60 countries on 4 continents. Our clients and partners include national governments, government and non-government organisations, development assistance agencies, the EU, World Bank, the UN, the European Bank for Reconstruction & Development, and private institutions.

The talent and diversity of our 130 professional staff members is a source of particular pride. With both the professional skills and in-depth knowledge, our approach is to research, evaluate, select and implement preferred solutions by drawing on our core competencies in areas such as economic planning, property and estate design and management, financial administration systems, business analysis, investment project initiation, marketing promotion and development.

Our particular model of regional development is one that continues to be used effectively to assist developing economies in all aspects of economic development. We look forward to sharing our practical experience to achieve an innovative approach to development in other regions around the world.
Introduction
Since its inception in 1984 as Ireland’s first science and technology park, the National Technology Park (NTP) has become home to a growing and influential nucleus of high-technology and knowledge-based companies. With some 80 organisations employing over 3,000 skilled people, the Park has a balanced mix of multinational subsidiaries, Irish technology companies, R&D entities and support services, which occupy more than 30 buildings with a total floor area of approximately 1.5 million square feet.

With the University of Limerick (UL) at its core and with active links to the Limerick Institute of Technology (LIT), the whole thrust of the Park’s development has been to harness the technology resources on the site and particularly those at the University of Limerick campus towards the needs of enterprise and economic development. One of the key strengths of the National Technology Park is its location adjacent to the University of Limerick. The potential for collaboration and synergy is a key attraction for businesses setting up in the NTP and can be capitalised on in the future.

All of the current strategic planning documents and policies recognise the national importance and significance of the National Technology Park and have policies and objectives which support its future development and expansion.

Objective
The Masterplan objective is to present NTP as a leading international location for contemporary businesses representing both indigenous and foreign direct investment. The enabling features are:

- **Flexibility**
  Create a flexible development framework that over time facilitates appropriate commercial responses to changing market conditions.

- **Accessibility**
  Ensure that the NTP is fully accessible to all and that all practical forms of public and private transport can be accommodated on site in a satisfactory, mutually supportive and efficient manner.

- **Efficiency**
  Make efficient use of all available sites, resources and areas, maximising development potential and at the same time ensuring that a high quality environment (landscape, open space, etc.) is maintained.

- **Image**
  Enhance and promote the public and user image of the NTP developing a strong sense of place with unique and memorable features that readily define its character.

- **Legibility**
  Pursue a high standard of design in both the private and the public realms to create a Park environment that is practical and readily understood and appreciated by users and visitors alike.

- **Amenity**
  Create areas of high visual and environmental amenity with water, open space and high quality landscaping that adds value to the surrounding development.
A number of key considerations are important in the continuing development of the NTP. These include; the development of infrastructure generally and broadband and telecommunications in particular; continuing investment in and deepening of research & development programmes; supportive education and the availability of suitable graduates; all of which influence the development potential of the NTP. Accordingly it is vital that the NTP retains flexibility into the future.

Business Sectors

Shannon Development has identified a number of key areas of importance and themes that will be used to guide the development and enhancement of the NTP into the future. They are:

- **Digital Content**
  Digital Content Industry is a new industry from the convergence of previously distinct areas including electronic hardware, media and entertainment and telecommunications.

- **Bio-Engineering/Medical Devices**
  Biotechnology is the use of cellular and molecular processes to solve problems or make useful products and it is an expanding industry.

- **Software**
  There is a strong existing base of software development companies in Ireland with all of the top ten world wide software companies having a presence here.

- **Projects of Scale**
  Shannon Development has identified the need for the NTP to attract a project of scale in order to deliver economic activity commensurate with the objectives of the park.

- **High Potential Start-up Units**
  High Potential Start-up Units (HPSUs) are companies based on technological innovation. HPSUS are defined as companies, which are promoted by a strong management team, and have a knowledge-based product or service for which there is strong export potential.

The physical expansion of the NTP is influenced by a number of factors including geographical constraints and opportunities, evolving economic conditions and, not least, planning considerations.

This Masterplan considered the current context in relation to planning and site issues with a view to developing a strategy for the future viability, consolidation and expansion of the NTP. It then outlined future directions to guide the development of the NTP into the future. The review showed the potential of NTP to cater for up to 12,000 jobs in approximately 2 million square feet of additional space in the Park.

Growth of NTP

The National Technology Park Limerick was formally inaugurated in 1984 as the first Science/Technology Park in Ireland. It is managed and developed by The National Technological Park Plassey Ltd, a wholly owned subsidiary company of Shannon Development. Including the University of Limerick campus, the NTP covers an area of approximately 738 acres (299 Ha).

The Park is currently home to more than 80 separate organisations in a balanced blend of multinational subsidiaries, Irish technology companies, InnovationWorks, research and development companies and support services employing over 3,000 people and occupying more than 25 separate buildings with a floor area in excess of 140,000 sq. meters (1.5 million sq. ft.)

With the University of Limerick at its core and with active links to the Limerick Institute of Technology, the whole thrust of the Park’s development has been to harness the technology resources on the site and particularly those at the University of Limerick campus towards the needs of enterprise and economic development.

Since 1984, there has been significant growth at the National Technology Park and University of Limerick. Shannon Development acts as the Management Company for the NTP providing the technology park concept of property management, encouraging indigenous and foreign direct investment (FDI), encouraging links with the higher education institute at UL and providing an incubation facility.

Elsewhere in the mid-west region, Shannon Development has been developing the Knowledge Network – a network of leading edge technology business locations with direct linkages to third level educational institutions. The network includes the National Technology Park in Limerick, Kerry Technology Park in Tralee, Tipperary Technology Park in Thurles, Birr Technology Centre in Offaly, and Information Age Park Ennis in Clare.
Sites
In terms of positioning NTP for future growth, the required physical attributes in attracting investment include:

- Sites ranging from 20+ acres
- Adequate electricity water and gas supplies
- Available supply of accommodation for rental or purchase
- Sites as small as 0.5 acres available

Shannon Development is also responsible for a number of other parks in the area including:

- Raheen Business Park, which primarily caters for manufacturing enterprises.
- Shannon Free Zone which is a multi-sector park incorporating aerospace, IT, International services and logistics.

Business Environment and Sector Considerations
In the coming years Ireland’s success will be fundamentally dependent on its ability to achieve an environment where research and knowledge, high level skills and expertise, high quality infrastructure and business services, are combined in a flexible and creative way. Many of these attributes are already available within the National Technology Park but they need to be continually enhanced and developed to ensure the NTP remains competitive in a globalised, knowledge based world economy.

Therefore, there is the need to create a more balanced portfolio of industry sectors at the NTP with a high value added product. This will help to spread the exposure to any one particular industry sector. In choosing industry sectors to attract to the park, there are a number of characteristics which are important to Shannon Development, including:

- Common Technology Platforms e.g. Biotechnology, software, wireless, embedded technology
- Convergence – software, technology, industrial technologies
- Cross-over Technologies – sciences, IT, software.
- Core Competence

There are a number of important factors that help inform the development of new business sectors at the National Technology Park including:

- The importance of defining a number of contemporary, niche sectors.
- Linkages to 4th level education, i.e., post graduate, PhD, and Masters Research Institutions.

Composition of Target Sectors

Digital Content
Digital Content Industry is a new industry from the convergence of previously distinct areas:

- Traditional content
- Electronic Hardware
- Media and entertainment
- Telecommunications
- Software/Multimedia

Digital Content is highly reliant on links to educational facilities such as UL and Limerick Institute of Technology and therefore the NTP is ideally located for firms engaged in these enterprises.

Bio-Engineering/ Medical Devices
Biotechnology is the use of cellular and molecular processes to solve problems or make useful products and it is an expanding industry. The Bio-Engineering/Medical Devices sector represents a significant opportunity for the development of the NTP into the future, particularly because of the level of activity undertaken at the University of Limerick.
UL has various bioengineering activities taking place such as:

- Dental biomaterials & technology
- Polymers for biomedical applications
- Cardiovascular tissues & biomaterials
- Bioceramics
- Biosensors
- Bone cements
- Bone tissue engineering & drug delivery
- Orthopaedic cell & tissue engineering

The NTP is an ideal location for the further development of bioengineering and medical devices because it can offer:

- Established University with competence in the Sector
- Government funding for Product Development / R&D
- Skilled relevant graduates available
- Established companies are relatively secure (having been through seed capital & product regulation phases)
- Common Technology Platforms & Cross-over

**Software**

There is a strong existing base of software development companies in Ireland.

The Software sector is a key employer/exporter within the Irish economy.

Ireland is among the largest exporters of software in the world. Eight of the top ten software suppliers in the world have operations in Ireland and it continues to be a leading European location for technology companies. Companies generally in the sector now have multifunctional operations in Ireland that contribute to Ireland’s reputation as a location for high value, high skilled knowledge based activities.

**Projects of Scale**

Shannon Development has identified the need for the NTP to attract a project of scale in order to deliver economic activity commensurate with the objectives of the park. It is envisaged that such a project would be in a complementary field such as software and biotechnology.

**High Potential Start-up Units**

The availability of a thriving on-site Incubator, branded as InnovationWorks, is a key magnet for new company formation. High Potential Start-up Units (HPSUs) are companies based on technological innovation. HPSUs are defined as companies, which are promoted by a strong management team, have a knowledge-based product or service for which there is strong export potential. The location of the University of Limerick and LIT adjacent to the NTP offers a superb opportunity to create a synergy between HPSUs in the NTP and activities in the University of Limerick and LIT. It is an area that Shannon Development is keen to target and the NTP is strongly placed to attract the development of HPSUs.
Telecommunications

A full range of digital telecommunications services can be made available on demand by utilising / extending the existing network in the area. Limerick City is well served with a state-of-the-art Metropolitan Area Network (MAN), providing broadband capabilities. This network runs through the Park. This MAN also links into the University of Limerick.

The availability of this digital network facilitates the Park’s firms in exploiting the immense opportunities, which exist, to develop and expand their firms by embracing the potentials of e-business.

Future Development Directions

The National Technology Park needs to cater for a number of existing and future needs at the Park. Shannon Development and the InnovationWorks strongly supports and encourages the development of small Startup enterprises at the Park, which are closely associated with the University. A number of very successful companies have started at the InnovationWorks and grown considerably. It is a key objective that this type of growth would continue to flourish.

Bearing in mind the full potential for development, the NTP is well serviced for water supply, effluent disposal, power supply, gas supply and telecommunications connectivity with no internal upgrades required for the foreseeable future.

SWOT Appraisal - A summary of the key issues

Strengths

- Established science and technology park with an international reputation.
- Synergy links with the University of Limerick and LIT
- Excellent transport access to the campus.
- Easy access to other knowledge centres
- Readily available highly skilled workforce
- High quality landscaping
- Large campus with ability to facilitate future expansion
- Large population centre within easy reach
- Availability of broadband
- Location in a gateway city

Weaknesses

- Lack of gateway/entrance development
- Poor cycling facilities

Opportunities

- Riverside development opportunity
- Expansion to the north in association with the already expanded University of Limerick
- Growing life sciences sectors
- opportunity to build on UL and LITs reputation e.g software engineering

Threats

- Possible re-alignment of the road network through the campus.
**Profile of Shannon Free Zone (SFZ)**

Shannon Free Zone was established in 1959 through the practical implementation of the concept of creating the world’s first duty free manufacturing zone in modern times. It is still today a highly successful location for international business. This success is built on creativity and innovation and on the embedding of a continuous flow of new approaches and concepts. Now at its 50th Anniversary, it is highly appropriate that the current competitiveness of Shannon Free Zone continues to represent leadership in both the physical infrastructure and sector orientation relevant to winning the best in contemporary investment. A masterplan with a vision and an implementation framework that will assure Shannon Free Zone’s leadership position in the coming decades is necessary in a fast changing world.

**A new MasterPlan**

Shannon Development’s objective in implementing the new masterplan is to present a sustainable model for new levels of investment. The company has a very exciting and comprehensive physical masterplan which will provide a blueprint for a highly sustainable world class built environment. Our success will be projected on the twin pillars of competitiveness and sustainability.

Shannon Free Zone (SFZ) occupies land in two adjacent areas known respectively as Shannon Free Zone West and Shannon Free Zone East.

The Masterplan takes full cognisance of the current international emphasis on sustainability and incorporates an environmentally friendly “GreenPrint” methodology which is further explained in the relevant section below.
The Challenge

Every business park needs to ensure it continues to be relevant to the needs of contemporary industry. For the Shannon Free Zone, which has been in existence for 50 years, the challenge is to position this large and successful Business Park so that it continues to be recognised as a ‘must see’ location for the best mobile investment available.

Shannon Free Zone (SFZ)

Shannon Free Zone (SFZ) is divided into two key areas, Shannon free Zone West and Shannon Free Zone East:

Shannon Free Zone West

SFZ West has an area of approximately 300 acres and is about 80% built out with a building footprint of approximately 4 million sq ft, of which about 50% is owned by Shannon Development and 50% by the private sector. The initial infrastructure was installed and the first buildings were erected on SFZ West in 1958/59.

The area has undergone continuous development and improvement with the result that facilities now include the most modern stand alone office complexes, advanced manufacturing and warehouses. Currently demand from contemporary enterprise in older buildings is quite limited. Many of these buildings are referred to as “Northlight” and, in particular, have limitations in respect of internal roof height and overall natural lighting. This reality is recognised by Shannon Development as one of the fundamental issues to be addressed in the masterplan through the development of appropriate regeneration and/or brownfield solutions.

Shannon Free Zone East

SFZ East consists of approximately 300 acres of Greenfield land and to date approximately 25% of the land has been utilised for stand alone office and advanced manufacturing premises and approximately 220 acres remain available for strategic Greenfield development.

Smithstown Business Park is a separate complementary park located immediately adjacent to Shannon Free Zone East which was originally developed by Shannon Development as a location for subcontract and service activities supporting companies located on Shannon Free Zone. Smithstown is now home to about 150 firms across many sectors. Practically all of Smithstown Business Park is constructed, with a building footprint of approximately 800,000 sq.ft. of which about 90% is owned by the private sector and 10% is owned by Shannon Development.

Why a new MasterPlan?

The primary objectives of this Masterplan have been as follows:

1. To support the revitalisation of Shannon Free Zone as a premier 21st century Business & Technology Park and to reaffirm its international market leader reputation for innovation and excellence.
2. To define a programme for the continued development and physical regeneration of Shannon Free Zone, Smithstown Business Park and the neighbouring environment, to support Shannon’s further enhancement as one of Ireland’s premier locations for modern internationally traded manufacturing and international services.
3. To promote the continuous sustainable improvement of the competitiveness of Shannon Free Zone in the short, medium and long term through cost effective improvement in the design and quality of the existing and new buildings and of the infrastructure.
4. To create a framework that will lead to Shannon Free Zone becoming a showcase for environmentally sustainable approaches and achieving recognition as a “people friendly” environment.
5. To enhance Shannon Free Zone’s competitiveness through the incorporation of energy and environmentally sustainable approaches through the development of principles for highly sustainable buildings and building complexes and the encouragement of eco-friendly approaches throughout the Zone.
6. To support the cultivation of a people friendly environment by enhancing Shannon Free Zone as a living, thriving community whose ongoing development will be characterised by the incorporation and development of buildings, infrastructure, public spaces, facilities and amenities which will improve the environment
for its workforce and create a welcoming and attractive space for the wider community.

7. To ensure that the future design and management of the buildings and the external environments considers the diverse needs of our society including ease of access, safety and use of the buildings. The Masterplan will demonstrate best practice in relation to disability awareness including adherence to the principle of Universal Accessibility to ensure equality and inclusiveness for everyone.

8. To incorporate proposals for demonstrator projects, iconic buildings and features that will exemplify Shannon Free Zone’s modernisation and competitiveness and demonstrate its business environment as eco-sensitive and people centred.

9. To initiate the creation of a learning environment in Shannon Free Zone, and in its partner organisations and in the wider community. This will facilitate the incorporation of the concepts and approaches developed during the masterplanning process.

10. To develop a new or enhanced image for Shannon Free Zone. The Masterplan outlines a vision and proposals for the physical development of the Zone.

The first assessment, based on the commitments contained in the Masterplan, has yielded an ‘Exemplar’ rating, which is the highest rating available in the ‘GreenPrint’ rating system. The Shannon Free Zone GreenPrint sets out clear, understandable sustainability objectives and benchmarks under eight key categories covering a range of social, economic and environmental issues:

- **Climate Change** - Ensures developments mitigate, and are appropriately adapted to, present and future climate change impacts.
- **Transport** - Ensures transport hierarchy issues are fully addressed and catered for within the development.
- **Placemaking** - Ensures the design process, site layout and form provides a development that is appropriate to the local context.
- **Resources** - Promotes the sustainable use of resources including energy, water and materials and promotes the reduction of waste, both in the construction and operational phases.
- **Ecology** - Ensures the ecological value of the site is conserved and enhanced.
- **Business** - Ensures that the development contributes to the sustainable economic vitality of the local area and the region.
- **Community** - Ensures the development supports a vibrant, diverse and inclusive business community that integrates with and supports the surrounding area.
- **Buildings** - Ensures that the design of individual buildings does not undermine the sustainability of the overall development.

How to create an environmentally-friendly approach - GreenPrint for Sustainability

The ‘GreenPrint’ for the Shannon Free Zone is a brand new sustainability assessment process which has been developed by the Building Research Establishment (BRE) in collaboration with Shannon Development and the Masterplan Design Team. It takes full account of local planning policy and sustainability guidance, as well as other issues relevant to the SFZ site, and if used throughout the planning and design stages will ensure the delivery of a truly sustainable development.

Shannon Free Zone is the first business and technology park worldwide which has a Masterplan based on the comprehensive sustainability principles of GreenPrint, and which will be assessed throughout the implementation period by an independent highly reputable environmental standards organisation.
**The Master Planning process - Building Assessments**

As part of the Masterplan development, a major survey of building quality and condition was carried out throughout Shannon Free Zone. A more extensive survey of Shannon Free Zone West was conducted on the basis that many of the traditional buildings which dominate SFZ West are now more than 30 years old, thus requiring more particular assessment to determine viable future lifespan and use.

In summary, many of these older buildings no longer provide the level of accommodation required for modern business. Further investment in refurbishment of these buildings is likely to prove uneconomical particularly in the context of compliance with current Building Regulations. Accordingly, the long term strategy for Shannon Free Zone West will focus on a phased and structured replacement of older (north light) buildings as opposed to any strategy that would seek to refurbish or rehabilitate.

3. The blocks of land released through the phased demolition of these buildings will be zoned for either office activity or advanced manufacturing.

4. The replacement of older (north light) buildings will require a high level of strategic planning and management. Fundamental to this process will be a desire for minimum disruption to existing enterprise clients. Provision is made for attractive short, medium and long term options for business accommodation (temporary and permanent) to encourage participation in the process by existing business owners and tenants.

5. Long established large scale manufacturing facilities within SFZ West remain the cornerstone of the park and capacity for their future growth and expansion will be accommodated in the Masterplan.

6. Innovative new developments by the private sector that meet the principles of the Masterplan will be encouraged and facilitated as far as possible.

7. Facilities will be provided to promote new airside aviation-based developments.

**Shannon Free Zone East & Smithstown**

1. The significant Greenfield land banks in Shannon Free Zone East will be reserved for strategic projects, specifically Foreign Direct Investment opportunities that arise on an ad hoc basis. The Masterplan will be flexible to accommodate a range of project types and sizes, typically from 5 acres upwards.

2. A limited amount of space will be reserved adjacent to Smithstown for new small scale modern light industrial units.

3. New and established advanced manufacturing and 3rd generation offices within SFZ East and the eastern side of Smithstown remain the cornerstone of SFZ East and capacity for their future growth and expansion will be accommodated in the Masterplan.

**Implementation Strategy**

Implementations of the proposals contained in the Masterplan is likely to span a period of several years. As such, it is critical that a realistic and achievable implementation strategy is in place to underpin the process and achieve the stated objectives in relation to implementation i.e.:

1. To define a programme for the continued development and physical regeneration of Shannon Free Zone, Smithstown Business Park and its neighbouring environment, in support of its further enhancement as one of Ireland’s premier locations for modern internationally traded manufacturing and international services.
2. To promote the continuous sustainable improvement of the competitiveness of Shannon Free Zone in the short, medium and long term through cost effective investment in the design and delivery of new quality buildings and access and utilities infrastructure. The strategy to deliver the key elements of this Masterplan over several years requires specific focus on the primary development and redevelopment targets for each geographic area within the plan.

**Masterplan Overarching Strategy**

A cornerstone for the implementation of the recommendations of the Masterplan is the promotion of environmental sustainability to the highest international standards throughout the lifetime of the plan.

**Shannon Free Zone West**

The implementation strategy for SFZ West is focused on a phased redevelopment and regeneration of the older north light blocks which currently occupy approximately 50% of the total SFZ West land bank. Internal improvements in terms of vehicular, pedestrian and cyclist access and the creation of a people friendly environment are paramount to the successful regeneration of SFZ West.

**Shannon Free Zone East**

The implementation strategy for SFZ East is focused on exploiting the extensive and important Greenfield opportunities that exist for new development of advanced manufacturing facilities and international services. Similar infrastructural improvements, particularly in relation to access, will be required to sustain the long term development of this important land bank.

**Smithstown**

The designation of a limited amount of additional land to support the expansion of light industry will see Smithstown reach its physical capacity in the short term.

The short to medium term focus in relation to Smithstown will be to initiate a phased upgrade of the streetscapes and environment including significant access and landscaping improvements to optimise the function and aesthetic of the business park.

**Phasing Strategy**

As outlined above there are clearly and distinctly different objectives for the Eastern and Western components of SFZ. While the focus in SFZ West is a programme of regeneration for the creation of strategic Brownfield site opportunities, the targets in SFZ East relate to maximising the opportunity for strategic medium to large scale advanced manufacturing development in a largely greenfield environment.

A critical aspect to the success of the plan is that the priorities of the two Zones are maintained and progressed in tandem.

Implementation will be balanced. For example, there is no doubt that some FDI clients will continue to seek and acquire the greenfield sites within SFZ East, and this will be encouraged and supported as it is presently. However, Shannon Development recognises it is also fundamentally important that the more difficult regeneration strategy for SFZ West is not delayed or postponed, in preference to concentrating on exploiting the easier Greenfield development strategy.

Accordingly, the regeneration of SFZ West will have a clearly defined path and programme that will be fundamental to the success of the plan and indeed the long term future of SFZ.

The overall phasing strategy for the SFZ Masterplan therefore sets out a specific programme of work to be undertaken in SFZ West over the initial 5 year term of the plan. Furthermore, a detailed scope of work to be undertaken within the first 2 years of the plan is also put forward.

In relation to new sector opportunities, SFZ East will receive critical infrastructure to anticipate future FDI opportunities.

Overall, three development phases / terms have been identified for the implementation of the Masterplan across the entire SFZ. These are defined as follows:

- **Short Term 0 – 5 years**
- **Medium Term 0 – 10 years**
- **Long Term 0 – 20 years**

The plan also identifies some elements which could extend beyond the 20 year timeframe.

**Expected Benefits**

The Shannon Free Zone is one of Europe’s most recognizable locations for international mobile investment. Since its establishment in 1959, SFZ has been home to a leading concentration of international investment in the west of Ireland. With more than 100 businesses representing 7 sectors, the development of SFZ has been a case study in regional economic development and a powerhouse of blended investment from both Manufacturing and Internationally Traded Services.

The new MasterPlan will set the framework for the development of SFZ for the next 20 years and will position the Park as a ‘must see’ location for contemporary mobile investment seeking a location in Western Europe.
**Financial Provisions**

It is estimated that a substantial initial investment will be required to deliver the projects identified for the Phase 1 implementation.

While it is likely that much of the internal infrastructural upgrades and improvements will be undertaken and funded directly by Shannon Development, other models for alternative funding will also be pursued for the delivery of the early office, advanced manufacturing and amenity building projects proposed within the first 5 years of the plan. These could range from direct funding by Shannon Development, private sector investment, Public Private Partnership or Joint Ventures.

Successful implementation of all of the projects identified within a 20 year timeframe is likely to involve investment in excess of €1 billion.

---

**Summary**

The Masterplan sets out a clear strategic vision for the future development of Shannon Free Zone over the next 20 years and beyond. The Masterplan has been prepared as a dynamic process that will be reviewed and updated at regular intervals during the course of its implementation. It is fundamental to the success of the plan that the objectives and targets can be reviewed in response to changes in market demands and other social, energy, economic, physical and environmental factors. A minimum review cycle of 2 years will be observed to ensure the maintenance of an ‘exemplar’ rating for sustainability.
The Knowledge Economy.
Creation of a Knowledge Network in Ireland’s Shannon Region

Introduction – Guiding Factors

With substantial experience in the creation and development of progressive platforms for regional economic development, in the early 1980s, Shannon Development recognised the need for a new model to facilitate the integration of Business, Education and Innovation in the creation of a Knowledge Network.

From the late 1950’s Shannon Development had created new approaches to economic development in the establishment, for example, of the world’s first export processing zone at an airport location – the Shannon Free Zone.

Why a Knowledge Network?

With an increasing emphasis on the need for more robust indigenous industry development, it made sense to consider the creation of modern business infrastructure aimed at facilitating indigenous companies, FDI, and incorporating approaches around incubation and research. These considerations generated a new methodology to further utilise key regional locations for economic development. One key corporate approach involved the creation of a series of business parks relevant to these needs. The overall initiative was subsequently branded as the Shannon Development Knowledge Network (SDKN).

The first location in the Network was the National Technology Park, which shares its substantial campus with the University of Limerick at the heart of Ireland’s Shannon Region.

The Knowledge Network is a key flagship project initiated by Shannon Development and intended to create clusters of knowledge based enterprises, both indigenous and foreign in the Shannon Region. It represents one of the largest single investments by Shannon Development, and in addition to the core location of the National Technology Park, other member parks of the Network operate as significant catalysts for spatial development in non-core locations in the Region.

The Policy Background

The Knowledge Network product was developed against a backdrop of the emerging:

- EU Policy – “The Lisbon Strategy”
- The Irish National Development Plan and National Spatial Strategy
- Local County Development Plans
- Shannon Development’s own Corporate Plan
- Strategic relationships with 3rd level partners

Current Locations

The Knowledge Network currently comprises 5 “World Class” technology locations - the National Technology Park Limerick; Kerry Technology Park in Tralee; Tipperary Technology Park in Thurles, Birr Technology Centre and Information Age Park Ennis.

Each Knowledge Network location brings together three key elements - business, education and innovation to create dynamic and exciting world-class locations for living and working in the knowledge age.

Further information can be obtained at www.ShannonDevelopment.ie/Consultancy
**The Knowledge Network Model**

The Knowledge Network has been carefully developed to provide a product offering that is unique in the context of Ireland, which includes world class infrastructure, ready-to-go business incubation and office accommodation and direct links to 3rd level education. The presence of these key elements along with the strong lifestyle influences of the individual locations helps to differentiate the Knowledge Network from other business locations nationally and internationally.

The Knowledge Network has been further underpinned by its own unique branding system, which acknowledges that each location is autonomous, yet linked to the network as a whole.

The responsibilities common to all Knowledge Network locations are illustrated below. In essence, each Knowledge Network location operates as an independent entity, carrying out similar business processes to all other locations across the network.

**What problem did we set out to solve?**

**The Objectives of the Knowledge Network**

The main objectives driven by an integrated business development framework for the Knowledge Network can be summarised as follows:

- Win new investment and achieve expansion of existing firms
- Maintain a network of locations that remain relevant, competitive, innovative and attractive to the main target markets
- Maintain and develop a technology park model that will not be confused with other investment locations
- Position the Knowledge Network as a “must see” location for Mobile Irish and FDI investment
- Significantly grow the creation of new enterprises, expand the number of established companies, and advance economic activity and employment
- Develop advanced accommodation solutions appropriate to contemporary enterprise needs
- Identify new ways for existing 3rd level partners to impact on new investment across the network
- Integrate 3rd level campuses into Knowledge Network locations
- Maintain a long term business incubation process

Currently the Shannon Development Knowledge Network facilitates a combination of indigenous High Potential Start-Up companies, Foreign Direct Investment, primarily from technology and International services sectors, and mobile Irish investment.

**Funding**

The first location in the Knowledge Network is the National Technology Park (NTP), which shares a substantial campus with the University of Limerick, at the heart of the Shannon region.

The first building to be completed at NTP in 1984 was a business incubator, which was directly financed from Shannon Development’s capital budget with assistance from the State. The land for the Park was already in Shannon Development ownership, and a Master Plan was developed and initial services such as internal roads, power and ancillary services delivered.

As the concept was new, the private sector did not invest in the Park’s development in the early stages, but became enthusiastic investors as the concept advanced. As evidence of private sector participation, today buildings owned by Shannon
Development at NTP account for approximately 10% of total built accommodation at the Park.

Income for continuing development is generated through rent from leases and capital sales of sites to industry.

The NTP model has been applied in the development of the other four locations in the Knowledge Network, with the campus shared with the relevant local third level education institution where possible and joint funding agreed towards shared services.

**Obstacles Encountered**

As with any new concept, the early stage issues are usually quite different from those encountered when the concept has been developed.

With the Knowledge Network, and particularly the National Technology Park as its first location, some early stage considerations included physical and engineering, and the establishment of an appropriate management entity. The original Master Plan served as an initial framework for development and incorporated physical zoning linked to industry sectors as a blueprint for development, which in turn facilitated promotion of the Park.

Success in attracting significant FDI projects positioned NTP for future growth, but setbacks such as the ICT downturn in the early 2000’s, and subsequent consolidation, led to business closures and down sizings. To some extent this was countered with encouraging levels of indigenous company start-ups, particularly High Potential Start-Ups (HPSUs). A Master Plan revision, initiated in 2005, and again linked to business sectors helped to refresh the Park for the future.

**Lessons Learned - Growing the Shannon Development Knowledge Network**

The development of the Knowledge Network continues as a successful project for Shannon Development and for the people of the Shannon Region. It has created more than 4,000 Knowledge Economy jobs in 170 enterprises, both indigenous and FDI, and contributes substantially to the Region’s and Ireland’s export growth. In all cases, Shannon Development’s initial investment to ‘prime the pump’ has been leveraged into hundreds of millions of Euros in total investment. As part of an overall strategy in developing business and Science & technology Parks for contemporary industry, the Knowledge Network continues to ensure that the Shannon Region is recognised nationally and internationally as a leader in the development of world class business and technology locations, with strong links to third level institutions.

The Network represents a long-term investment providing facilities and support systems required by entrepreneurs. For example, in the past 12 months, the Network has seen substantial growth, with 24 new client companies being facilitated by Shannon Development. In addition, a further 14 companies, already established, expanded into new accommodation.

**A Brief Profile of Knowledge Network Locations**

Shannon Development continues to work with national economic development agencies in providing key property solutions for a range of enterprises at the Company’s National Technology Park. For example, a number of major expansions and investments were announced for this Park in 2008, resulting in over 380 new jobs. In the medical technology sector, Cook Medical announced 200 new jobs and an investment of €25 million over the next 5 years; Vistakon Inc, a division of Johnson & Johnson announced an investment of €100 million and 60 new jobs bringing total employment in the company to 660; US digital technology company DTS, will locate their EU headquarters in the Park resulting in 50 high quality jobs.
Over the course of 2008, Shannon Development saw a number of incubation companies at Birr Technology Centre graduate to expanded premises. For example, an Archaeology Company which has grown to over 40 archaeologists working on several sites around the country graduated in July 2008 and relocated to other offices in Birr, creating available space at the Park for new enterprises. During 2008, five new clients provided additional jobs in Birr Technology Centre. Since Birr Technology Centre was opened in 2004, companies that have chosen it as a start up or expansion location for their business have been responsible for the creation of approximately 150 jobs in Birr.

Several knowledge intensive companies at Kerry Technology Park in Tralee expanded during 2008, and as a result total employment increased to over 300 people. Business levels in the existing buildings are high with 80% occupancy. A planned new building at the Park will provide an additional 30,000 sq.ft. for some of those rapidly growing companies and will also attract new businesses to the area.

To enable future expansion, Shannon Development and the Institute of Technology Tralee completed a joint infrastructure project at a central core area within the Park.

Tipperary Technology Park in Thurles continued to progress in 2008 with over 140 people employed at the Park generating significant local economic impact. Both the original building and the 20,000 sq.ft. signature building are fully occupied, and a planned third building (currently in construction) will be an additional asset to the area.

Launched in 2005, the objective of Information Age Park Ennis is to create a location primarily for international service companies generally requiring office type accommodation. Shannon Development’s office space at the Park currently accommodates 16 client companies. During the 2008, four new companies expanded into larger office suites at the Park. Existing client profile includes software and software development, international services, communications systems, internet services, back office support and publishing. Negotiations are ongoing with a number of clients to purchase sites on the Park for the development of individual premises.
Summary

Based on the success of the National Technology Park in Limerick, the Shannon Development Knowledge Network concept was developed in 2001. This unique initiative comprises of five world-class technology locations for business and life, developed specifically to support the development and growth of technology driven enterprise in the Shannon Region.

Shannon Development identified strategic partnership as the critical driving force for regional innovation. This partnership embraced the private sector, development agencies and third-level colleges. The Network was embraced by third level educational institutes across the region. This has helped to generate critical mass in support of innovators through collaboration by the partners. Major building blocks of the network include:

- Investment in technology infrastructure at each of the locations accommodating higher education institutions.
- A strengthened programme of technology transfer from the institutions to SMEs, and outreach innovation supports to SMEs, assisted by the EU Innovative Actions Programme.
- Sectoral actions are undertaken in specific areas, such as design and software development.

Each location is dedicated to providing the resources and environment in which ideas and knowledge-based businesses develop and prosper.

Each has an incubator branded as “InnovationWorks”. These are “smart” buildings, incorporating state of the art telecoms, and managed facilities specifically focused on generating new high growth knowledge intensive business.

Based on the key components of the Knowledge Network brand, each location is an ideas dynamo comprising Business, Education, and Innovation. This combination and the ability of each location to create synergies with one another, makes the Shannon Development Knowledge Network a unique proposition in regional economic development.
Background
Transportation infrastructure has always played an important role in supporting the economic development of communities. For example, waterways, railways, motorways and international airports have all contributed to the evolving traditional transportation infrastructure for moving people, materials and goods from place to place. For many years, Shannon Airport has shown how a community’s relative proximity or access to traditional transportation infrastructure could mean the extreme difference between economic prosperity and growth, or isolation and economic decay.

In a modern competitive global economy, traditional communications infrastructure must also evolve to accommodate changing needs. In the context of Ireland’s transition to a Knowledge economy, it was important that contemporary broadband and telecommunications infrastructure were available throughout the region to ensure that information and other content could be effectively and efficiently transacted.

In 2001 Shannon Development conducted independent research and analysis and identified that broadband deficits in the Shannon Region posed a significant threat to the continuing economic and social development of the area.

The Shannon Region
The Shannon Region covers an area of some 10,000 square kilometres spanning counties Clare, Limerick, North Tipperary, South Offaly and North Kerry, which collectively have a population of over 407,000 people.

Based on independent research and analysis undertaken by Shannon Development, the region, like others in Ireland, was seen as disadvantaged in terms of broadband communications infrastructure and services.

What problem did we set out to solve?
It was clear that a community's access to telecommunications infrastructure would impact on economic development and growth. It was for this reason that the rollout of broadband telecommunications infrastructure was deemed critical to the development of the Shannon Region, both in facilitating the information society and underpinning enterprise development initiatives.

Continued investment in Broadband, and in particular accelerated investment in next generation broadband infrastructure and content, was seen as crucial to underpinning the Smart Economy and to enable Irish companies compete globally. This was recognised at both European and national levels.

Broadband Status in 2001
A number of critical deficits prevented businesses and individuals from realising the opportunities offered by the Smart Economy. These included:

- Lack of Next Generation Network (NGN) infrastructure or joined up planning.
- Lack of Municipal Area Networks (MANs) in key population centres.
- Lack of Direct International Connectivity to the region, which was seen as a major deficit.
- Large coverage gaps for even a minimum specification of broadband – with large portions of the region without basic broadband infrastructure.
The need to distinguish between the marketing messages of existing service providers, who insisted there was sufficient capacity and the reality on the ground across the Region. Shannon Development highlighted the actual position and articulated the rationale to address the very real gaps in infrastructure.

Shannon Development was convinced that in the prevailing economic environment, public intervention was crucial to address critical deficits.

The Strategic Response

Responding to research findings and ‘voice of the customer’ surveys of its enterprise clients, in 2002 Shannon Development devised a strategy for the establishment of a regional telecommunications infrastructure that would position the Shannon region as a premier e-Business location, both nationally and internationally.

This strategy provided a platform on which a solution to broadband deficits in the Shannon Region could be addressed. The strategy involved a number of key actions, many of which needed to be addressed simultaneously and on a partnership basis between public and private sector parties. It is only when implemented together in an integrated fashion that the actions would provide a comprehensive solution to the key issues.

The focus of this regional strategy was to attract new carriers, infrastructure and services into the Shannon region. This was to be achieved through a four-strand approach, namely:

1. Encourage the roll-out and use of new carrier-neutral infrastructure on a route from the regional capital, Limerick to the nation’s capital, Dublin;
2. Encourage a global carrier to establish a Point of Presence (PoP) in the region;
3. Adopt a “node and spoke” approach to broadband connectivity, with Limerick/Shannon at the centre and the other regional demand nodes clustered (via a regional ducting network) to boost the overall case and leverage maximum investment into the region.
4. Facilitate “last mile” initiatives to connect individual premises to broadband networks.

The Delivery Vehicle - Shannon Broadband Ltd.

Having developed the strategy, Shannon Development began a process of engagement with the several local authorities in the region to advance this strategy. This led to a decision to jointly participate in a new partnership company – Shannon Broadband Ltd – in late 2002.

Given the significance of the broadband issue for the region, a strong united public sector consortium was established to advance the strategy and implement a solution. This consortium consisted of Shannon Development as the lead partner and also comprised the five local authorities of Limerick City Council, Limerick County Council, Clare County Council, North Tipperary County Council, and Offaly County Council. The Consortium was supported by the Mid West Regional Authority. Together, these organisations formed a new company, Shannon Broadband Ltd., to advance the strategy.

The Board of Shannon Broadband Ltd was made up of senior representatives of these organisations and was chaired by Shannon Development.

The First Broadband Project - Limerick Metropolitan Area Network (MAN)

The first project undertaken by the Consortium involved the deployment of sub-ducting and dark fibre infrastructure around Limerick, the region’s capital, and across the Shannon Region. These networks interconnected with, and complemented, all existing and planned carrier and carrier-neutral national networks that pass through the region.

The infrastructure was made available to all carriers at attractive rates.

To advance this project, the consortium made a funding submission to the Irish Government, through the Department of Communications, for the Limerick Metropolitan Area Network (MAN).

The Limerick MAN Project involved the construction of a 44km metropolitan dark fibre and ducting network around Limerick City that incorporated all of the main business and technology parks, as well as community sites such as educational institutions, hospitals and libraries.
The network included the establishment of a Co-Location facility in Limerick City that acts as a Point of Presence (PoP) and Interconnect point for national and global carriers.

The total cost associated with the roll-out of the Limerick MAN was just over €6m. This figure included a fixed price construction contract along with additional costs associated with design, advanced works, project management and a contingency budget. The Department of Communications provided 90% funding for this project, requiring the consortium to provide the remaining 10%.

Other MANs

Shannon Broadband subsequently delivered Metropolitan Area Networks in eight additional towns throughout the region.

“In today’s knowledge-based economy and society, the availability of high speed, competitively priced Broadband is critical. This new network will send a message to any investor that these Shannon Region towns are at the cutting edge in terms of internet access and willingness to embrace the information economy.”

The Benefits

The successful implementation of this project has contributed to:-

- Enticing new carriers to the region through open access to a ready infrastructure at attractive rates;
- Improved selection and quality of broadband services for end-users;
- Competitive pricing for end-users;
- The achievement of connectivity to global carriers and international markets, supporting regional development;
- The achievement of social inclusion and regional balance;
- Encouraging the delivery of cost effective broadband services to the community;
- Increased socio-economic benefits through the retention of existing business and the attraction of new direct investment;
- Minimal disruption to the public during construction by laying just one network around Limerick City and its environs to carry all the fibre optic cables, Instead of different telecoms providers separately undertaking underground digging to lay their own cables, the broadband network would be made available to all Service Providers at attractive rates.

Who managed the MANs following their completion?

The Irish Government appointed a Management Services Entity (MSE) to take full operational control of the Limerick and other MANs. This ensured a consistent national framework for the technical standardisation and subsequent operation, marketing and maintenance of MANs.

MANs serve centres of population - but what about Rural areas?

In a regional economy made up of key population centres and a large rural hinterland, it was an important principle that no part of the region would be left behind.

Shannon Broadband Ltd. in partnership with volunteer organisations and the National Broadband Scheme facilitated the extension of broadband coverage to rural areas of the region not yet served by telecommunication carriers. In addition and where possible, the towers and high points owned by local authority partners were leased to wireless providers as base locations for their antennae to facilitate the extension of wireless broadband service to sparsely populated areas.
One notable achievement in rural broadband development was the implementation of a successful community activation plan across the region in 2005 culminating in twenty nine wireless-based Group Broadband Scheme (GBS) proposals being approved for funding by Department of Communications.

Similarly, connectivity support was provided for other regional flagship development projects such as eTowns, a live-work initiative to foster renewed economic development in smaller communities.

**Fit with European and National Strategy**

The approach implemented by Shannon Broadband was informed by the EU’s strategy for Europe: “to transform it into the most competitive and dynamic knowledge-based economy in the world.”

This was consistent with the Irish Government’s strategy: “to develop a sustainable, balanced and inclusive knowledge economy”, enabling Ireland to make a real contribution to the European agenda.

Shannon Development’s strategy for the Shannon Region is linked to both European and national goals. Our goal is to ‘to make this region competitive on a global stage’; to create a region synonymous with quality - having a quality environment, quality physical fabric, quality of life, and quality recreation and leisure facilities.

The achievement of these goals requires both physical connections and knowledge connectivity in terms of high-speed telecoms and broadband access. To build a globally competitive, knowledge-based regional economy, businesses must be able to move people, goods, and information at the right speed and at the right price.

**Conclusion – What did Shannon Broadband Achieve?**

As the regional development agency, Shannon Development sought to articulate and provide leadership on the delivery of broadband infrastructure and services in the Shannon Region.

Its actions to form Shannon Broadband Ltd as a consortium with the local authorities of the region created an entity to deliver broadband.

Since it’s formation in 2002, Shannon Broadband has served the region well. Key achievements since 2002 have included:

- The development of a strategy to enhance competitiveness by the provision of e-infrastructure in the Region.
- Delivery of a set of regional broadband planning guidelines to support the wider deployment of Next Generation Network (NGN) infrastructure.
- Delivery of a series of Metropolitan Area Networks
- Active participation in the deployment of rural broadband including a pilot GPS Tourism project
- Coordinated focus on the importance of Data Centres for the storage, management and dissemination of data and other content. Described as ‘the place where the internet lives’, data centres will house tens of thousands of servers providing information and web-based applications to internet users worldwide and lead to a new generation of knowledge economy investment.
- Encouragement of creative industries in the development of new content and applications.
Pioneering Innovative Actions in Less Developed Communities
The Shannon Development eTown Project

Summary:
eTowns is a Shannon Development flagship initiative to develop in partnership with relevant Local Authorities and Communities a “21st century model” for the ongoing and future development of a number of smaller towns and villages in the Shannon Region. Its primary aim is to help disperse economic activity and job creation to smaller towns/villages that may not otherwise benefit from State-supported new business investment. eTowns parallels and enhances other state supported economic development strategies including Indigenous Industry, Foreign Direct Investment and Tourism development. The project encompasses:

- Best practice for physical town renewal and development including the retention of heritage/architecture and the application of environmental best practice
- Stimulation of new and incremental investment and enterprise
- Improvement of telecommunications connectivity

At the eTowns project's centre is a physical “Courtyard” encompassing workspace and residential accommodation.

The typical complex model consists of 5 detached homes and a combination of 10 townhouses and apartments. In close proximity is 10,000 sq.ft. of "wired" office accommodation.

The residential and workspace accommodation are available for sale and targeted specifically at micro businesses within the traded services sector e.g. graphic design, consultancy, web services, publishing and other professional services. Each eTown location has the potential to create 50+ new jobs.

Supporting elements within the eTowns programme include:

- Development of a town or Local Area Plan
- Community Web Development and Training
- Improvement of Telecommunications Access
- Partnership (with the Local Authority/Community and Shannon Development)

One town in each county throughout the Shannon Region was selected initially in consultation with the local communities and the Local Authorities. These were selected for a number of reasons:

- They have a population of 1000+
- They are each approximately 32 kilometres from an urban centre
- They have active community development associations with the capability to assist in the implementation of the eTowns programme

Each site is convenient to the town centre to facilitate an eTown and in some cases have existing buildings which can be incorporated into the overall development. In the case of Milltown Malbay, Co. Clare where the entire development is new build, the design is in keeping with existing and original town facades.
A new approach to economic development in small communities - Shannon Development’s Vision for eTowns

Shannon Development’s vision for Ireland’s Shannon Region is that its people, investors and visitors will live, learn and play in one of the most forward thinking exciting places in the world.

As a regional development company – Shannon Development’s role is to ensure that all parts of the region are developed to their optimal potential. Over the years they have developed products tailored to the needs of specific towns and communities. For example – the Knowledge Network project has delivered technology parks and InnovationWorks incubators in 5 large urban locations in the region. These were developed to create an environment where multinational and Irish-owned technology companies would flourish.

Development of the concept

Having devised a product at this level for key population areas within the region, Shannon Development then turned its attention to the smaller rural towns in the region (populations of 1000+). These towns also need enterprise activity but are unlikely to attract foreign direct investment or large indigenous enterprise.

A small town in each county in the region was selected as a locus for proactive creation of an enterprise culture. Shannon Development started by asking – what do these towns need to attract investment, given their ‘rural’ status and given that business now operates in an era of technological advancement?

The response was to develop a new product – a new model for enterprise development in the smaller communities in the Shannon Region. The project would bring 21st Century technology and best practice in urban and town renewal to bear in creating an alternative enterprise culture within small regional towns and villages. It would also meet each town’s specific need for creating an attractive living environment as well as sustainable economic activity, including the creation of new jobs.

The process, which was supplemented by market research on the growing “Live/Work” preference among micro enterprises, was undertaken in a consultative and participative way with the local authorities and local communities in each of the 4 initially selected towns.

Pilot location - Miltown Malbay

Miltown Malbay was the pilot location for the creation of the first eTown in the Shannon Region. Fifty years ago, Miltown Malbay had a diversity of businesses. By the turn of this century this was no longer the case. Local people had been forced to establish their careers elsewhere – often out of economic necessity, with the result that the remaining businesses in the area are now in some way connected to tourism as there were very limited opportunities in non tourism related sectors.

eTowns set out to redress this imbalance. The intention of this programme was that when complete, the Miltown Malbay eTown would provide an environment where enterprises in the traded services sector could operate, not just at local or national level, but on a global scale.

eTowns would provide an environment where residents are afforded a work-life balance. Work-life balance is about getting the productivity-flexibility balance right – deciding how much time to spend at home and work so that both benefit equally. Doing this in an environment where the two can interconnect yet retain their separateness, thus reducing stress would be an added bonus.

The eTown development process

In developing eTowns, Shannon Development set out to create infrastructure ahead of demand at a time when the work-life issue was not quite so high on the popular agenda. Shannon Development adopted a view, based on research, that the live-work concept would soon be a reality in many other parts of the world.

The importance of the eTowns project was reflected in its positioning with the Shannon Development corporate plan as a “Flagship Project”.

In support of this approach, Shannon Development determined that there was a need and indeed an opportunity to develop a 21st century strategy for the ongoing and future development of a number of villages/small towns in the Shannon Region.

In order to advance the concept, contain risk and learn through action, the decision was taken to develop a pilot project.

**Project Elements – (1) Physical**

The objective was to develop a mechanism to promote economic dispersal that would encompass:

- 21st Century model of best practice for the development of rural eTowns
- Applicable across the region
- Broadband technology
- Retaining heritage/architecture
- Applying environmental best practice

From inception, Shannon Development’s physical development strategy was to be the project leader – facilitating and developing the partnership process, delivering the range of knowledge supports and identifying the site. While it was desirable that the private sector would deliver the physical “Courtyard”, Shannon Development decided that it would fund the first eTowns project directly from its own resources. This was to ensure that the integrity of the concept in the pilot location would be faithfully executed consistent with the design specification, which would act as a demonstration site for private sector parties in the development of future eTown locations.

The eTowns project incorporates a number of strands that, when combined, can provide a catalyst for the development of an alternative enterprise culture in a community. At its centre is the physical strand of the project called the “Courtyard”, a multi-tenant work/live complex to provide facilities for up to 12 knowledge based (owner managed) micro businesses that would be encouraged to expand and migrate from major national and international urban centres. The other project strands are partnership with the community and relevant local authority, town planning, broadband connectivity and community training.

**Project Elements – (2) Knowledge Supports**

While the physical product is the most visible manifestation of the eTowns concept, there are also other vital supports essential to the support of the programme. For example, the delivery of the eTown product was dependent on the implementation of other key components such as the Town Plan; Community training, and Connectivity, all of which have been built in from the start.

**Town Plans** - normally address and highlight issues related to infrastructure, zoning and planning. They provide the framework for future development. Incorporation of the eTown into the respective Town Plans was a critical requirement of the eTowns programme.

**Technology** - plays a key role in an eTown. It is the catalyst that would attract new businesses to each area. Huge emphasis was placed on getting this element of the project right. While broadband was being rolled out nationwide and Shannon Development, through its subsidiary company Shannon Broadband, was part of this process, the initial concentration had been on urban centres. The smaller, more rural towns, with less than 200 subscribers were slower to benefit.

For this reason Shannon Development commissioned a local information services provider to manage the process of identifying telecommunications service solutions for the pilot eTowns project in Miltown Malbay and for all other future locations. As a result of their research, commercial, scalable broadband services were delivered to Miltown Malbay using Fixed Wireless Access for residential and small business users; and Satellite for businesses who are heavy users of the Internet or who wished to have a dedicated, leased-line type service.

**Community Training** - The local community had been actively involved in the Miltown Malbay project since its initiation and would continue to play a key role in its success going forward. To ensure that they would have the technology skills to complement the ethos of the project, community training, including web development was built into project delivery.

In each eTown, a number of community representatives were selected to undergo technology training to acquire new technical and training skills.
In Miltown Malbay, twelve members of the community (a range of ages) completed 6-month courses in Web Authoring and as Community trainers. These courses were specifically designed by County Clare Vocational Educational Committee for the eTown project. On completion, the participants received formal nationally recognised certification in Web Authoring and Training and Development.

This ensured that the Community could play a real and active part in all technology aspects of the project.

The eTowns Strategic Approach

Shannon Development’s strategic objectives for the eTown project can be summarised as follows:

- Deliver a model for economic development in the less developed parts of the Shannon Region
- Focus on locations where an eTown project would have a significant impact on the local economy.
- Engage with the Community and the local Authority in the site selection process and involve the community representatives and local authority in the decision making process.
- Deliver on the elements of the eTowns project not already available in the community.
- Offer supports that are quantifiable and that add value – e.g. partnerships, town planning, training and broadband.
- Encourage the private sector and third parties to engage with the project
- Generate new or incremental economic activity in the local area
- Emphasise new investment in the community, rather than relocating existing businesses – unless a specific need has been identified.

Ireland’s First eTown at Miltown Malbay

With many commuters facing reduced quality of life due to the ever lengthening commute times to work, Shannon Development saw the need to generate a new 21st century solution to this growing problem. They have now launched their first pilot eTown in Miltown Malbay in an ideal seaside location in which to live, work and raise a family. The location features stunning scenery, top local amenities and a superb quality of life.

As part of the Miltown Malbay eTowns project, people who wish to work from home have the option of work units either attached or adjacent to each house on the two acre high-tech courtyard site. Developed as either detached, three story and/or town houses, the units are wired for broadband with office space. They are designed to complement the existing townsapes. The house sizes average 2,000 sq.ft., with business units ranging from 750 to 1,000 sq.ft.

The development is designed for people who currently have long commutes to work each day and could easily work from home. It ideally suits micro businesses in the traded services sector, or businesses such as graphic design, consultancy, web design, publishing and professional services. It is also ideal for people who have already set up a business from home but find their current home is no longer suitable for their growing business needs.

Based on the level of interest expressed in the pilot project model, a further eTown is currently in an advanced development stage in another location in Ireland’s Shannon Region.

Funding the Project

Funding for the project came from a variety of sources. For example, the partners committed to the pilot project included:

- Shannon Development
- Local Authorities
- Vocational Education Committees
- EU – through the Southern & Eastern Region Innovative Actions Programme, with specific funding for training and connectivity.

The delivery of the physical project at the pilot location, consisting of the 12 units and associated workspace, was funded directly from Shannon Development’s capital budget. Financial return is based on sales or lease income from these units.

This novel response to generating economic activity and job creation in less populated parts of the region has the potential to be replicated in other parts of the world.

For future locations, funding for the physical development of the actual “Courtyards” will be sought from the private sector under a Public Private Partnership.

Further information can be obtained at www.ShannonDevelopment.ie/Consultancy
Obstacles Encountered

Securing land for the eTowns development adjacent to the town centre was an initial obstacle, but the partnership approach with local community and local Authority was a major advantage in identifying a solution.

The eTowns project has been the subject of two national conferences held in the Shannon Region, and a significant pipeline of interesting projects has been developed. However, the global recession and its impact on property markets has temporarily discouraged prospective investors. To overcome this obstacle, Shannon Development has examined alternative possibilities to ensure success of the project. These include deferred purchase, lease, and rent to purchase.

As a pioneer in economic development, Shannon development believes that the informed provision of infrastructure is a real responsibility in forging new approaches and products. We act where there is private sector failure in advancing new initiatives in the expectation, based on research and analysis, that economic development in smaller communities will be stimulated through measures such as eTowns. In this way, these communities will be prepared to take advantage of the coming economic upturn.

Conclusion

Shannon Development has recently opened the door to Ireland's first eTown house in Miltown Malbay Co. Clare. The €4 million eTown project at Miltown Malbay is the first of its kind in Ireland, and will facilitate allow people wishing to work from home, thereby enjoying a more balanced live/work experience. This unique integrated development combines living and office space with high-tech broadband access.

In delivering eTowns, Shannon Development offers a new methodology for encouraging enterprise development in rural communities in the Shannon Region. They offer people the opportunity to live and work in aesthetically pleasing environments.

This innovative concept introduces new vibrancy to these rural areas.

This is a new concept which will lead to economic development in smaller communities hitherto untried in the Shannon region.
New Tourism Product Development
Doonbeg Golf Development, Ireland’s Shannon Region
An international Public Private Partnership
maximising local and regional development impact using EU structural funds as an investment lever.

Summary
In 1997 following extensive research and feasibility studies, Shannon Development (the RDA) decided to use ERDF Structural Funds to secure a major international tourism investment project for the region. This case study outlines the background to the project and the role played by the RDA and the local Community Council in realising the project. It also outlines the criteria on which the process was based and the regional and local impact achieved. Ultimately an investment of over €50 million was secured for this small rural coastal community, which up to this point had no industry, few SMEs and its main economic activity, agriculture, like many such small communities was under social and economic threat.

Introduction
In Ireland today Public Private Partnerships (PPPs) are recognised as an important means of providing additional revenues for key national projects, additional implementation capacity and increased value for money (VFM). The Irish Ministry of Finance has set up a special department to promote, advise and provide training to encourage more PPPs. The main areas where PPPs have been applied in Ireland to date, include road and transport infrastructure, education provision, water and waste management and public housing. This case study is one of the few successful examples, where public funds in the form of EU ERDF funds has been deployed to lever major investment in the tourism and leisure sector with major local and regional economic impacts.

EU Structural Funds in the Shannon Region
Up to 1999 Shannon Development was one of the implementing agencies for EU structural funds in the Shannon Region. This project was supported under the ERDF Operational Programme for Tourism 1994 to 1999. Under this programme over 68 projects were supported with grants of over €20m being issued. Overall these projects attracted investment in the region’s tourism industry of over €100m, between 1994 and 1999. In this project €3 million of public funds was applied to yield additional international investment of almost €50 million.

After a strategic review of the previous Tourism Operational Programme 1989 – 1993, it was established that there was a need for a stronger mix of major large scale integrated tourism projects, which would have a higher regional impact in terms of investment, and attract an increased level of international visitors. Detailed market research studies on a number of possible sectors of importance for the region were conducted, such as cruising, music, fishing and golf.

Following detailed cost benefit and sectoral analysis, golf was selected as the sector with the most potential to yield significant results against key regional criteria such as:

- Additional employment
- Alternative employment in an economically weak rural area
- International investment,
- Tourist traffic via Shannon airport
- Increased image / media potential
- Increased visitor spend
Seasonality – strong spring and autumn demand, as golf is not heavily dependent on peak tourism months of June to August.

Statistics from the annual Irish Visitor Survey confirmed golf as a key activity for visitors to Ireland.

The Shannon Region Golf Product:

Between 1990 and 2000 there was significant new private investment in major new international golf centres like the K-Club in Kildare and Mount Juliet in Kilkenny on the east coast of Ireland. In total the Shannon Region has over 25 18-hole golf courses, most of which are open to visitors, but are owned by club members. In addition, two regional leading luxury hotels in the region - Dromoland Castle and Adare Manor - also developed new international standard courses which created a strong critical mass at the upper end of the marker. Two of Ireland’s most internationally well known links courses are located with the Region – Ballybunion GC and Lahinch GC.

Both of these famous links courses were developed within coastal sand dunes along the Atlantic shoreline, which adds to the unique playing challenge. These courses attract thousands of international golfers each year who pay expensive green fees and add significantly to the regional economy. A disadvantage of these clubs is that they are both privately owned by the members, who often have first preference to tee times. To ensure availability of peak tee-off times for visiting golfers, it is preferable to have full control, and this is a major attraction of resort type golf developments.

Golf Courses in the Shannon Region

The Product Challenge:

Having selected the golf sector as the activity with most potential, the next challenge for Shannon Development was to identify a golf links location on which a new international course and allied facilities could be developed. Such locations within Europe today are very rare and the possibility to access it and secure it for this purpose would be been more remote.

Doonbeg

Doonbeg, a small coastal village located on the west coast of county Clare, with a population of less than 150 persons, had no industry of any kind, few SMEs, and up to this point no major tourism attraction. It was dependent on agriculture, where incomes have been under severe threat for several years. The village, however, is located in the midst of one of Ireland’s most popular tourist regions, adjacent to a long unspoilt beach, behind magnificent high sand dunes. These sand dunes, owned by four local farmers, offered the basic potential for the development of a new links golf course.

The local Community Council saw the need for development in their community and approach Shannon Development for assistance in developing the project. This local support was essential to the eventual success of the project as it helped to reduce local sensitivities around the project.

The Development Promotion Process:

Having identified the opportunity, the Shannon Tourism Investment and Product Development team, prepared a strategic development plan to realise the project. In summary this aimed to:

- Identify a project of regional strategic importance with international appeal
- Get concept support from stakeholders
- Secure property options on site
- Develop a commercially viable project
- Ensure the project qualified for ERDF funds
• Prepare an attractive investment prospectus
• Undertake a promotional campaign to the World’s top 10 golf developers
• Support with an advertising campaign
• Attend key golf exhibitions and shows in USA and Europe

Project Implementation
Following the investment promotion campaign, interest was received from a number of sources and eventually a short list of three was drawn up, two from the USA and one from the UK. Negotiations commenced with all and in the end, Landmark Developments from Columbus Ohio, USA were selected as the preferred developer. ERDF grant approval was secured for €3m at a rate of 50% of qualifying expenditure for the course elements. The hotel and clubhouse would not have been considered qualifying expenditure.

The Doonbeg Information Investment Promotion Brochure
As a further boost to the project, Greg Norman, the world famous golf celebrity, was appointed as the designer for the course, which attracted much strong early international publicity. At a later development point, Landmark Developments were absorbed by Kiawah Development Partners one of the world’s leading golf resort development companies, which added further investment confidence and potential global marketing linkages for Doonbeg.

Project Summary – Regional and Local Benefits;
To justify such a major investment, a wider concept than just a stand alone golf course was required. The final product package included:
• World Class Links Golf Courses
• Fully equipped clubhouse / restaurant
• Driving range and practice facilities
• Golf instruction facilities
• Luxury Hotel lodge
• Health Spa and Leisure facilities
• Holiday homes and luxury apartments.

Construction commenced in December 1999 and the course officially opened in July 2002, with an international competition known as the Palmer Cup, for young American College Golfers. By the summer of 2004 the new Clubhouse was opened and the construction of the first phase of the luxury Lodge Hotel was nearing completion.

The course had already received a number of impressive endorsements such as the award of Best New International Course, by the US International Golf Magazine.

In addition to the value of product itself, local and regional benefits include:
• Significant employment opportunities in the construction / development phase.
• Up to 200 jobs in course operation and hospitality service provision when fully operational
• Major positive international media exposure
• Major improvements in the environment and the local qualify of life.
• Increased local and regional spend on other services and products
• Increased passenger traffic via Shannon airport sustaining existing services.

Key Learning Points:
Golf may not be an obvious new tourism product for every country, but in reality most countries and regions have potential for the development of a number of other major tourism and leisure products with significant regional investment.
potential. This case study illustrates the important role of the local RDA in leading and being the catalyst for such opportunities.

It also demonstrates the important strategic use of public funds to lever a major investment into a small rural community on Ireland’s west coast. The local Community Development Council, made up of local residents, was an important support base in this case and eased the local path for development.

Finally it highlights the point that major regional projects are usually achieved over medium 3 to 5 year time horizon, which requires public commitment and support over a sustained period, usually from a strong RDA or implementing agency.

**Points to consider:**

- What regional economic development projects in countries and regions could benefit from a PPP investment approach?
- What should the role of the RDAs be in linking public and private investment?
- What is the importance of strong RDA capacity to realise major regional investment projects?
- Why is this integrated regional development type project?
- What function did negotiation skills, teamwork and leadership play in achieving this project?
- What was the link between regional strategy and selecting the project?
- What was the critical role of the local community council?

---

Doonbeg 10 years ago

Doonbeg today