chapter 7

Economic Infrastructure Priority

CHAPTER 7

Economic Infrastructure Priority

Investment under the Economic Infrastructure Priority of NDP 2007-2013 is indicatively estimated at €54.7 billion. This investment will be spread across the following Programme areas:

Economic Infrastructure Priority

Programme	All figures in € million current prices					
	Exchequer	PPP	Local Auth.	State Bodies	Other	Total
Transport	19,858	7,035	0	2,221	3,800	32,914
Energy	276	0	0	8,250	0	8,526
Environmental Services	4,156	271	1,219	0	125	5,772
Communications and Broadband	435	0	0	0	0	435
Govt. Infrastructure	1,222	191	0	0	0	1,413
Local Authority Development Contributions	0	0	2,100	0	0	2,100
Unallocated Capital Reserve	1,534	1,966	0	0	0	3,500
Economic Infrastructure Total	27,482	9,463	3,319	10,471	3,925	54,660

The key objectives under this Priority will be:

- To create a road network, in line with the timetable in *Transport 21*, that will see the completion of the major inter-urban routes and will upgrade links generally between the National Spatial Strategy Gateway Centres and improve the non-national road network;
- To deliver a radically upgraded public transport system in line with the timetable in *Transport 21* especially in the Greater Dublin Area (GDA), but with significant impacts in other areas;
- To promote North/South co-operation in infrastructure planning and delivery to develop integrated all-island infrastructure for the benefit of all on the island;
- To improve the infrastructure of the 3 State Airports and provide support for investment in the regional airports;
- To better equip the ports sector to meet national and regional capacity and service needs;
- To further enhance the water and waste-water infrastructure thereby facilitating residential and commercial development throughout the regions whilst also improving the quality of the environment;
- To significantly improve the capacity and environmental sustainability of waste infrastructure;
- To promote the availability of competitive broadband services and to achieve nationwide broadband coverage by the end of the Plan period;
- To promote security of energy supply, which is competitively priced, in the long term and implement a significant programme of energy diversification with beneficial environmental effects; and
- To progress the decentralisation programme.

Role of Economic Infrastructure

Investment in Economic Infrastructure is a key element in the promotion of competitiveness and the generation of sustainable economic growth and employment. It also contributes to regional development and assists environmental sustainability. Notwithstanding the excellent progress made under Plan 2000-2006, high levels of investment will be necessary under this Plan in the areas of Transport, Energy, Communications and Environmental Services to bridge the deficits which Ireland still faces under these headings. The level of investment proposed under this Priority reflects its key role.

It is important that investment in Economic Infrastructure is delivered in an efficient and Value for Money way and that investment under the various headings complement each other as far as possible. Accordingly, the principles and frameworks set out in Chapter 13 will be applied as appropriate. In addition it will be important that the economic infrastructure aspects of the investment strategy at Gateway level set out in Chapter 3 are delivered in an integrated way.

Transport Programme

Total investment under the Transport Programme of this plan will be some €32.9 billion.

The Transport Programme will comprise the following Sub-Programmes:

- Roads Sub-Programme — €17.6 billion;
- Public Transport Sub-Programme — €13.0 billion;
- Air Transport Sub-Programme — €1.9 billion; and
- Ports Sub-Programme — €481 million.

€26.9 billion of the €32.9 billion to be invested in transport will be funded by Exchequer and PPP resources. This comprises investment over the seven years of:

- Almost €13.3 billion in national roads including additional toll based PPP investment of €1.865 billion;
- Just under €12.9 billion in public transport;
- €484 million in non-national roads;
- €96 million in regional airports and city of Derry Airport;
- €90 million in the Rural Transport Initiative; and
- €31 million in regional harbours.

In addition, approximately:

- €1.8 billion will be invested in the State airports; and approx. €450 million in the commercial ports from the resources of the companies concerned.

Strategic Context

A major investment in transport infrastructure has taken place under Plan 2000-2006. This progress must now be built on and accelerated. A common theme in the Plan consultation process, confirmed by the ESRI evaluation of investment priorities, was the need for a continued high level of investment in transport. The key strategic objective of the Transport Programme, consistent with the policy goals set out in *Transport 21* Programme launched in November 2005, is the creation of a road network that will promote regional, national and international competitiveness and the delivery of a radically upgraded and more integrated public transport system, especially in the Greater Dublin Area. Also crucial to Ireland's future economic competitiveness will be the development of world-class airports and ports. The overall objective is a further massive enhancement in the transport network by 2013.

A good transport infrastructure is crucial to the promotion of national competitiveness and sustainable development. It is critical that enterprises are able to efficiently move goods both internally and to and from external markets. It is also vital that the workforce has access to reliable and efficient means of transport which is environmentally sustainable. International passenger access to Ireland is also of key importance to the business, industry and tourism sectors.

98.3% of internal merchandise trade is carried on the road network and this underlines the need for a world-class roads system, especially between the major urban centres. It is not, however, sustainable to promote road and car transport as the major long-term mode of passenger transport, especially in urban areas. The growth in population and in employment, in tandem with the environmental imperative to reduce carbon emissions, requires a major modal switch in passenger transport from car to public transport. This underlines the importance of the investment in transport for environmental sustainability. Whilst the environmental benefits from a major switch to public transport are clear, the major investment in roads will also improve traffic flows, reduce congestion and thus result in lower rates of traffic related emissions.

Current economic and demographic trends highlight the imperative for significant investment in the area of transport. A brief review of the principal statistical indicators clearly shows the transport investment challenge which needs to be addressed over the period of the Plan:

- Over the past decade the economy has grown by approximately 6% per annum and is forecast to continue at about 4-4½% per annum over the period of the Plan. In the absence of any measures to manage demand, traffic tends to increase broadly in line with economic growth;
- The population has increased by 17% between 1996 and 2006 to 4.2 million and may be over 5 million in 2021;
- Most of the population growth is taking place in the urban hinterlands, although other areas have also experienced population increases. The preliminary report of Census 2006 indicated that the fastest growing counties since Census 2002 were Fingal, Meath and Kildare. Indeed, that report states that those same local authority areas account for 29% of the 609,000 growth in population at State level between 1996 and 2006. This places additional pressure on the transport system and on the environment because it results in longer distance commuting. According to the 2002 Census, the average distance travelled to work doubled over the previous decade;
- Average household size continues to fall (from 3.14 in 1996 to 2.94 in 2002 and to a forecast 2.65 by 2020);
- Employment grew from 1.1 million in 1991 to just under 2 million in 2006 and our current 4.4% unemployment rate is one of the lowest in the EU. Total employment is forecast to grow to 2.4 million in 2016, an increase of 23%;
- Car ownership per thousand population grew by 55% between 1991 and 2004. This trend is expected to continue as our ownership rate is still well below the average for the EU15. In 2005 Ireland had an estimated 406 cars per thousand population compared with 491 for the EU 15;
- According to the 2002 Census, 62% of people used the private car to get to work compared with 47% in 1991;
- Freight throughput at our ports increased by 31% between 1998 and 2005. In 2005 Dublin Port alone accounted for 37% of all port tonnage in the country; and
- Passenger traffic at the three State Airports increased by 37% in the five years up to end-2005 Projected growth rates to 2010 for Dublin, Cork and Shannon airports are 34%, 15% and 20% respectively. Dublin Airport accounts for about 80% of this traffic.

Transport 21

Transport 21, announced in November 2005, sets out a 10-year transport investment framework costing just over €34 billion from 2006 to 2015 and covering Exchequer and PPP capital investment in national roads, public transport and regional airports. Whilst the *Transport 21* investment programme extends beyond this NDP, the transport investments set out in this Chapter are derived from, and form part of, the overall investment framework under *Transport 21*.

Transport 21 takes account of the major economic, social and demographic changes in Ireland over the past decade, the impact of these changes on transport demand, the strategic policies developed for areas relating to and impacting on transport, the National Spatial Strategy (NSS) and the need to provide a modern transport network for the future.

A core aspect of the approach is the enhancement of connectivity at national, regional and local levels. The availability of an efficient, predictable and sustainable national transport network is a key factor underpinning economic growth and competitiveness and in improving quality of life. All the projects included in *Transport 21* must comply with the Department of Finance Capital Appraisal and Value for Money Guidelines, as outlined in Chapter 12 of this Plan.

Roads Sub-Programme

Under the Roads Sub-Programme, some €13.3 billion will be invested in national roads and €4.3 billion in non-national roads. The principal objectives of the Roads Sub-Programme will be the:

- Completion by 2010 of the major inter-urban routes linking Dublin with Belfast, Cork, Galway, Limerick and Waterford;
- The upgrade of the M50 by 2010 which will convert to barrier free tolling in 2008;
- Improvement of road links between the main NSS Gateways;
- Ongoing development of the Atlantic Road Corridor from Letterkenny through Sligo, Galway, Limerick, Cork and Waterford;
- Continued upgrading of road links to Northern Ireland;
- Targeted improvements of a number of key national secondary routes;
- Improvement and maintenance of the non-national roads network; and
- Investment in strategic non-national roads which will complement the national roads investment.

As set out in Chapter 3, investment in national roads will be utilised to implement the objectives of the National Spatial Strategy. Particular focus will therefore be on investment in road routes which link the Gateways, including a major upgrading of the Atlantic Road Corridor, which links many of the Gateways outside Dublin. Among the national secondary routes to be prioritised will be routes between the Gateways outside Dublin including upgrading roads linking the Midlands Gateway centres of Athlone, Tullamore and Mullingar. In combination with the Sub-Programme on Non-National Roads there will also be a significant investment in key routes impacting on NSS Gateways, Hubs and County Towns.

Dublin Outer Orbital Road/Eastern Bypass

At the launch of *Transport 21* in 2005, the Minister for Transport indicated that feasibility and planning work would be undertaken on the proposed Dublin Outer Orbital Road and the Eastern Bypass. This work is currently being pursued by the National Roads Authority.

Non-National Roads

Non-national roads play an important economic role in Ireland because of:

- The relatively dispersed nature of the population and economic activity;
- The importance of tourism and agriculture as generators of wealth and employment; and
- The priority attaching to rural development and urban regeneration.

Ireland has a very extensive non-national (regional and local) road network. There are 11,630 kilometres of regional roads and 78,972 kilometres of local roads. The extensive road network, in comparison with other European States, has historical links to past dispersed settlement patterns, low population density and the traditionally agriculture-based economy, particularly in rural regions. Recent decades have seen increased urbanisation, regional population growth and moves away from agriculture. Nonetheless the network of non-national roads is still necessary to provide accessibility within and between local economies especially in rural areas and provides vital links to the strategic national road network and ports and airports which are our links to the wider international economy.

Over the period of the Plan, some €4.3 billion will be invested by the Exchequer and the Local Government Fund in the non-national roads network. This will be primarily aimed at improvement and maintenance of the non-national road network and investment in strategic non-national roads. The re-opening of the remaining cross-border roads closed during the Troubles will also be pursued over the period of the Plan.

Strategic Non National Roads

NDP 2000-2006 saw major investment in key strategic non national roads, especially in urban areas. This investment will be built upon in the new Plan with a particular focus on roads in NSS Gateway areas.

Public Transport Sub-Programme

Under the Public Transport Sub-Programme, just under €13.0 billion will be invested over the period of the Plan.

The NDP 2000-2006 saw the first concentrated investment programme in public transport. It has led to a significant increase in public transport capacity including enhanced DART and Rail capacity as well as the new LUAS light rail system in Dublin. It has also funded the complete renewal of our national rail network and the upgrading and expansion of our bus fleets. A major further step-up in public transport investment is required in this plan. Accordingly, a massive increase in public transport investment is the centrepiece of *Transport 21.* The objective is to promote a switch from car usage to public transport. This is necessary to promote efficiency, quality of life, competitiveness and environmental sustainability. A particular focus of the monitoring arrangements referred to in Chapter 13 will be to measure the increase in public transport capacity, use and changes in modal split.

Greater Dublin Area (GDA)

The bulk of the public transport investment will be in the Greater Dublin Area. Projections show that there will be in the order of 300,000 more people living in the Dublin area by 2011. Already the city is suffering from bad congestion at peak times. It is simply unsustainable environmentally and otherwise to rely on the car and the bus network alone to provide the answer.

What is required is a complete transformation in the public transport network in the GDA. Accordingly, over the period of Plan 2007-2013, the following projects will be advanced in line with the timetable in *Transport 21:*

- Completion of the Metro North line from city centre to Swords via Dublin Airport;

- Phased development of the Metro West line;
- Enhancement and extension of the LUAS network;
- Expansion of the capacity of the suburban rail network through city-centre resignalling, quadrupling of track on the Kildare line and re-opening of the Dublin to Navan rail link;
- Commencement of the Heuston Docklands Interconnector and the electrification of section of the Dublin suburban rail network;
- Significant expansion of the bus fleet and bus priority;
- the introduction in the Plan of a fully integrated, customer-friendly, smart card ticketing system in the GDA, facilitating the use of different transport modes (bus, LUAS, DART, Irish Rail etc) in single journeys;
- Construction of additional park and ride facilities;
- The mainstreaming of accessibility across all modes of public transport, in line with the Department of Transport's Sectoral Plan under the Disability Act, 2006; and
- Development of enhanced cycling and walking facilities.

A significant element of the Plan investment in GDA public transport will be funded by PPPs. This will involve additional current spending by the Exchequer over the long term as the costs of the PPP funding are recouped to the PPP provider. This additional cost should, however, be fully justified as the capital city will have an integrated public transport network which will enhance its competitiveness and help ensure its position as a leading international urban metropolis.

The scale of Exchequer investment in *Transport 21* requires revised structural arrangements to give more effective, efficient, coherent and integrated transport in the Greater Dublin Area (GDA). The preparation of legislation to establish a Dublin Transport Authority with overall responsibility for surface transport in the GDA is at an advanced stage.

Public Transport Investment outside the GDA

The rest of the country also has a substantial need for upgrading of public transport infrastructure. The Plan will, therefore, also encompass:

- A major focus on the provision of enhanced rail services, including either hourly/two hourly services on the principal intercity routes serviced by modern rolling stock;
- The phased re-opening of the Western Rail Corridor from Ennis to Claremorris;
- €90 million for the Rural Transport Initiative;
- New commuter rail services in Cork and Galway; and
- Upgrading public transport services in provincial cities and in the regions, including additional buses, new bus priority measures and new park and ride sites.

Investment in public transport will also take account of the particular needs of rural and more isolated parts of the country. Over the period of the Plan, the Rural Transport Initiative (RTI) will be mainstreamed and ultimately expanded to areas where there remain unmet transport needs. Its funding will be doubled in 2007 and then increased steadily over the period of the Plan. Public transport investment will also bring other benefits, including:

- Ensuring the accessibility of the public transport system to people with disabilities, including fully accessible city buses and enhancing the accessibility of bus and railway stations in line with the Department of Transport Sectoral Plan under the Disability Act 2005; and

- Promoting sustainable transport solutions, including clean urban public transport modes, clean vehicle technologies and fuels, more fuel-efficient driving techniques and walking and cycling.

Air Transport Sub-Programme

Under the Air Transport Sub-Programme, some €1.9 billion will be invested over the period of the Plan.

State Airports

In parallel with the investments in national roads and public transport, significant capital investment will be made in the State Airports of Dublin, Cork and Shannon over the period of the Plan. The State Aiports operate under the aegis of the Dublin Airport Authority (DAA). The DAA operates under a commercial mandate and this investment will be funded from its own internal resources. The three State Airports at Dublin, Cork and Shannon and the associated air services are a key element of the overall transport system, providing internal transport services and vital international access to and from the island of Ireland. Over the period of the Plan some €1.8 million will be invested in improving the infrastructure of these airports.

The three airports currently account for 96% of all air traffic in Ireland. All three airports have the scope and capacity to expand to cater for future growth in national and international air traffic for the foreseeable future. The main Government policy objective for the State Airports over the period of the Plan is to ensure that they put in place sufficient infrastructure capacity to meet the growing air traffic demand.

Ensuring that infrastructural capacity increases in line with the growth in air services is particularly important for Dublin Airport because of its international gateway status for a capital city. A new Pier D, which will have a capacity for an additional 14 departure gates, is scheduled to come into operation by end-2007. Work on the second terminal is due to commence in the first half of 2007. When the terminal, pier and related works are completed, the airport will have an overall capacity to cater for in excess of 30 million passengers. Along with a new associated pier (Pier E), the terminal is scheduled to be completed by end-2009. In addition, the provision of a second runway at Dublin Airport, which is currently at the physical planning stage, will be progressed over the period of the Plan.

Further additional terminal capacity at Dublin Airport is likely to be required by the middle of the next decade and planning will commence during the Plan period on how best to facilitate this. The national and regional benefits of expanded services at Dublin Airport will be enhanced by the development of the road network in the environs of the airport and improved public transport connections to the Greater Dublin Area (particularly the Metro North connection from the Airport to the City Centre).

Shannon and Cork Airports are key infrastructure in their respective NSS Gateway Centres. They are close to significant population bases and will continue to have an important role in the future by facilitating direct air services to as many commercially viable international locations as possible, as well as linkages to Dublin. Both are therefore important instruments in the development of their respective regional economies. The challenge for both Airports is to continue to meet their regional transport needs and to respond to the growth of their regional economies. Both Airports have experienced significant passenger growth in recent years and there is the potential for further growth. Significant investment has been made in developing passenger facilities at Shannon in recent years.

A new terminal, and associated infrastructural facilities, was opened in Cork Airport in August 2006. The new terminal has the capacity to handle up to 3 million passengers per annum and this can be expanded to 5 million if necessary. In 2006, Cork Airport will see throughput of some 2.9 million passengers.

Regional Airports

The six regional airports in the State — South East Regional Airport Waterford, Farranfore Airport Kerry, Ireland West Airport Knock, Sligo, Galway and Donegal, which are all in private ownership, are eligible to apply for State assistance under the Transport Programme. In addition, the Government has committed €7.5 million to the development of the City of Derry Airport which will benefit citizens throughout the North West region. The key role of regional airports is to complement that of the State Airports and to help promote regional development. A provision of €96.5 million of capital funding will be available under this heading over the period of the Plan. The purpose of the funding is two-fold. Firstly, it will fund existing and future essential safety/security requirements of the regional airports. Secondly, there will be Exchequer support for capital investment in developmental projects at these airports up to 2010, where sustainable demand for additional air services can be demonstrated and where an economic case can be made to justify increased investment.

In addition to capital funding, subventions are provided to the regional airports for core operational expenditure and to airlines operating public service obligation routes. This is an important regional development intervention and the scheme will continue to operate subject to periodic review. In principle, the objective should be to promote, as far as possible, commercially viable routes from and between the regional airports.

In the past, support for the development of Ireland West Airport Knock has also been provided under the CLÁR Programme and the Western Investment Fund operated through the Department of Community, Rural and Gaeltacht Affairs. The provision of additional support under these programmes which are encompassed by the Rural Social and Economic Development Programme of the Enterprise, Science and Innovation Priority will be kept under consideration.

Ports Sub-Programme

Ireland's commercial seaports are vital transport arteries, carrying 99% by volume of the island's external trade. Their critical importance to economic prosperity is demonstrated by the fact that the value of this trade in the Republic was approximately €130 billion for 2005, compared to a figure of €14 billion through our airports. Additional external trade benefiting the economy is carried through seaports in Northern Ireland.

The table below shows the substantial port traffic growth over the period of the previous NDP:

Category of Traffic	2000*	2005*	% Increase
Total Goods Handled	45,273	52,146	15%
Lift On/Lift Off (LoLo)	6,262	7,803	25%
Roll On/Roll Off (RoRo)	8,947	11,816	32%

*'000 tonnes

Planned investment by the commercial ports over the period of this Plan will support the strategic policy objectives in the Government's Ports Policy Statement published in January 2005, which sets out a framework to ensure that capacity needs are identified, planned and progressed in a coordinated manner. This policy aims to better equip the port sector and its stakeholders to meet national and regional capacity and service needs including the provision of adequate and timely port capacity for unitised trade.

A number of different port capacity projects are currently being progressed by the commercial ports. In 2005, as part of an all-island capacity study, submissions were sought on key projects identified by the commercial ports as essential to deal with the anticipated capacity requirement for unitised trade to 2014 and beyond. The broad conclusions of the study, which were published in October 2006, demonstrate that the projects being progressed by the ports sector have the potential to deliver adequate capacity for the island going forward.

The Ports Policy Statement makes clear that the State-owned commercial port companies should fund their operations and infrastructural requirements without recourse to the Exchequer, either from their own resources or by other avenues such as efficiencies, increased charges, disposal of non-core assets, borrowing or private sector investment. The precise projects and expenditure will be decided by the individual port companies and their boards, subject to the required capital appraisal and statutory Ministerial approvals. The capital appraisal and Ministerial approval will be informed by the high level strategic goals of this Plan, including the maintenance of national competitiveness and the promotion of regional development. It is estimated that the projects that may be completed in the lifetime of NDP 2007-2013 will cost between €300 million and €600 million (€450 million has been used in the table of figures). The final figure will be determined by the ultimate combination of projects that the port companies proceed with over the period.

Dublin Port

The Government proposes to undertake a comprehensive study of the role of Dublin Port, taking account of locational considerations, in the context of overall ports policy on the island of Ireland, wider transport policy, urban development policy, the National Spatial Strategy and national economic policy. This review will take account of the findings of the study on the role of Dublin Bay and the Dublin Port Area commissioned by Dublin City Council.

Regional Harbours

Some €31 million has been included in the Plan for investment in Regional Harbours. Following the establishment of the commercial port companies, under the Harbours Act 1996, there remained 13 regional harbour authorities operating under the Harbours Act 1946. The Ports Policy Statement stipulates that these regional harbours would best achieve their potential through transfer to local authority or port company control. Sligo Harbour was transferred by Ministerial Order to Sligo County Council in June 2006. In order to prepare the remaining harbours for their proposed transfer, a programme of remedial works will continue to be funded, as appropriate, under this NDP. Exchequer funding has been allocated for these remedial works over the period 2006-2009. These will be prioritised on the basis of the protection of the fabric of the harbours. This expenditure is designed to ensure that any undue financial burden is not placed on local authorities or ports companies arising from the transfer of harbours. As part of the NDP mid-term review in 2010 the issue of further funding for these harbours over the remainder of the Plan will be considered.

Energy Programme

The Energy Programme will encompass some €8.5 billion in investment in energy over the period of the Plan. This will be funded in part by the Exchequer and by the Energy State Sponsored Bodies. The overall strategic objective of the Energy Programme will be to ensure security of energy supply nationally and regionally, which is competitively priced, in the long term while meeting a high level of environmental standards. The Programme will consist of the following three Sub-Programmes:

- Strategic Energy Infrastructure Sub-Programme — €1.2 billion;
- Sustainable Energy Sub-Programme — €276 million; and
- State Energy Companies Sub-Programme — €7.0 billion.

Strategic Context

The ability of the economy to perform successfully depends critically on the supply of adequate, affordable and environmentally sustainable energy. Security of supply is of paramount importance to ensuring the continued economic development of the country and the spending under this Plan will help ensure that objective. Without an expectation and delivery of a secure supply of energy, investment and output of the economy will suffer. Therefore, during the Plan period, there will be significant investment in crucial infrastructure.

Ensuring the efficient operation of a competitive energy market will be critical to the success of the economy. Ireland's growing dependence on imported fossil fuels (with the consequent growth in greenhouse gas emissions) highlights the need to mitigate the economic, social and environmental risks through new policy approaches. Security of supply, and lessening the dependence on any one source of energy or fuel type, will be a key challenge. Efficiency in the use of energy must also be improved.

Over the period 2005-2010, energy demand is projected to increase by 1.6% per annum. This level of increase can be expected to be maintained to 2013. Within this overall growth figure, annual electricity demand is expected to grow by 3.1% and gas demand by 6.5%. Managing our demand for energy in a sustainable way will therefore be extremely important.

The Government has recently published its energy policy Green Paper, ***Towards A Sustainable Energy Future for Ireland.*** Energy policy formulation is taking place against the background of volatile energy prices, concerns about security of supply and enhanced environmental standards and obligations. The Green Paper sets out the three pillars of energy policy as follows: (a) security of supply; (b) sustainability; and (c) competitiveness. Investment under this Plan will underpin many of the actions and targets listed in the Green Paper. The sustainability pillar is underpinned by various measures in the Sustainable Energy Sub-Programme while the Strategic Energy Infrastructure Sub-Programme is designed to provide for several significant security of supply projects, with a significant complementary competitiveness dimension resulting from price impacts. The Government will shortly publish a White Paper on Energy Policy which will further expand on the strategies and targets for implementation of these key principles.

Strategic Energy Infrastructure Sub-Programme

A number of large-scale public good energy infrastructure projects are included in this Plan to meet the need for timely investment at national strategic level to address the security of supply imperative. The infrastructure investments required and/or planned in the energy sector are of critical national strategic importance. They will help the sector's ability to manage costs and ensure security of energy supply and overall economic sustainability. Investments of over €1.2 billion in the life of the NDP in this area are required in the short to medium term to bring strategic energy infrastructure up-to-date and foster continued economic and regional development. Greater interconnection with the North and with Great Britain and the move towards establishing a Single Electricity Market for the island will also help to ensure security of supply and generate benefits for businesses and consumers from all parts of the island.

The projects envisaged will support priority energy investment needs, to deliver over the period of the Plan:

- Interconnection;
- Market integration;
- Network extension; and
- Storage for greater security of supply.

Key strategic projects include:

- East/West Electricity Interconnector, including the associated reinforcement costs of existing networks;
- Strengthening the Ireland/Scotland gas link;
- Second North/South Electricity Interconnector, to underpin the all-island electricity market;
- Strategic Oil Storage project, to maximise stocks held in Ireland having regard to storage availability on the island and value for money; and
- Construction of a strategic gas storage reserve on an all-island basis.

The cost of strategic energy infrastructure has traditionally been borne by the utilities and the State companies will continue to invest significantly in essential energy infrastructure under their capital programmes. Non-public sources of funding for certain strategic energy infrastructure will be pursued, where suitable and appropriate, having regard to the overall goals of energy policy. Because of the scale, strategic importance and immediacy of Ireland's energy needs, consideration will be given over the period of the Plan to the possibility of an Exchequer contribution to the cost of such investment.

Energy Regulation

The Commission for Energy Regulation (CER) was established under the Electricity Regulation Act, 1999 to promote an open, transparent and accountable regulatory process for the electricity industry in Ireland. The Gas (Interim) (Regulation) Act 2002 expanded the CER's jurisdiction to include the natural gas industry.

The CER facilitates competition in the energy sector by authorising the construction of certain energy infrastructure and licensing energy undertakings. The CER has a regulatory role in relation to the operation, maintenance and licensing of the transmission and distribution networks. It approves terms and conditions (including tariffs) for third party access to electricity and gas networks and facilities. Under EU and national law, these charges must be cost reflective. The costs of energy infrastructural investment have traditionally been passed on to energy consumers. The CER also has the key responsibility for regulating prices charged to customers by ESB as Public Electricity Supplier (PES) and Bord Gáis Eireann. The CER is also working with the Northern Ireland Authority for Energy Regulation (NIAER) in Northern Ireland to develop an all-island electricity market.

Sustainable Energy Sub-Programme

It is intended to build on the progress made under the NDP 2000-2006 by investing some €276 million under the Sustainable Energy Sub-Programme over the period 2007-2013.

The NDP 2000-2006 saw a significant momentum in Ireland's commitment to renewable energy and energy efficiency. In achieving its target of an additional 500MW of renewable energy in electricity supply, it has driven innovation, system and rules adaptation and has facilitated the emergence of new industry players in energy supply and generation. In the case of electricity generation there are now more than 50 wind farms connected to the electricity network. In all, there are 940 megawatts (MW) of renewable capacity connected to the national grid which includes biomass, hydro and wind-powered technologies. In 2005, the Government, with the Northern Ireland authorities, launched ''2020 Vision'', an all-island consultation on sustainability in energy supplies, with a particular focus on renewable electricity and are committed to working together to maximise the contribution of renewable and sustainable energy to the future energy needs of the island.

In addition to renewable electricity, the renewable heat and transport sectors, and in particular the bio-energy sector are now emerging as areas in which there will be increased policy focus over the lifetime of the new Plan. A target of 15% contribution by renewable energy to electricity generation by 2010 has been set. A 2020 target for the share of electricity produced from renewable energy sources and targets for renewable heat and transport sectors, including bio-energy, will be finalised in the context of the Energy Policy White Paper and in the light of EU developments.

Investment in the sustainable energy sector during the 2007-2013 period will encompass the following:

- Renewable energy measures will focus on achieving Government targets for renewable energy production and meeting policy goals with regard to competitiveness, environment, security of supply, R&D and the development of a sustainable All-Island energy market. The primary focus will be on the large-scale deployment of wind, the emerging potential and deployment of biomass and bio-fuels, preparatory action on ocean energy and deployment of other technologies such as solar and geothermal technologies. Deployment will be delivered through a range of supports including taxation, direct grant aid and other funding or support mechanisms;
- Energy efficiency measures aimed at establishing and maintaining an effective market structure, informing and empowering consumers to make strong energy efficiency choices. The overall objective of the proposed programme will be the achievement of an annual saving of at least 1% of energy use across the economy over the lifetime of the Plan. Increased energy efficiency will mitigate energy demand growth, reduce import dependence, contribute to carbon reductions and mitigate growth in the energy bill, for the economy and for the individual; and
- Integration and innovation measures will focus on integrating sustainable energy practices and structures into public policies and the development of regional and national infrastructures. There will be two sets of activities: the integration of national sustainable energy policy measures at a regional and city level, and the smaller-scale piloting and evaluation of sustainable energy technology options, including those in the renewable energy, energy efficiency and urban transport areas.

State Energy Companies Sub-Programme

The 2000-2006 period saw substantial investment in natural gas and electricity networks and in both new and modernised power generation. The State companies intend to build on the progress made under the last NDP by investing in the region of €7.0 billion under the State Energy Companies Sub-Programme over the period 2007-2013. This investment will enhance security of supply and also contribute to regional development.

The various projects will be funded by the relevant state energy company in the normal way — either through borrowing, own resources or joint ventures. Details, in summary form, regarding the various State energy companies' investment plans are set out below.

Bord Gáis Éireann (BGE)

BGE's proposed capital expenditure of €1.97 billion relates to:

- Upgrading and renewing the existing gas transmission and distribution networks, including reinforcement of the system for security of supply reasons;
- Developing and expanding the gas transmission and distribution networks; and
- Construction of a 400MW gas-fired electricity generating station at Whitegate in Cork.

Electricity Supply Board (ESB)

Capital expenditure by the Electricity Supply Board (ESB) between 2007-2013 is projected to be in the region of €4.0 billion (excluding €770 million on transmission, which is dealt with under the EirGrid heading below). Among the elements of the projected programme as approved by the CER for the period 2006 to 2010 are the following:

- Completion of refurbishment of the remainder of the medium voltage networks;
- 500km of the 38kv network to be refurbished;
- Approximately 100 new substations planned;
- 50km of 38kv underground cable to be replaced;
- Significant capital expenditure on the distribution networks for the years 2006-2010; and
- Approximately 350,000 new connections over that period.

The investment will in particular address regional deficiencies in the networks where such exist. Post 2010, the ESB will continue to have an extensive investment programme both in relation to refurbishment and new plant.

EirGrid

EirGrid plc. is the independent electricity Transmission System Operator (TSO) in Ireland and the Market Operator of the wholesale electricity trading system.

During the period 2007-2013, the main focus of investment by EirGrid will entail improvement of the transmission network for electricity to accommodate increased usage and enhance security of supply, to allow increased connection of sustainable and renewable energy sources to the network and to support greater interconnection with Northern Ireland and Great Britain. Expenditure of some €770 million is envisaged on the transmission system over the period of the Plan. Such work on the transmission system will be undertaken by ESB (as asset owner) and will be carried out in accordance with EirGrid's Development Plan, as approved in advance by the CER. Ownership of the East-West Interconnector, for completion in 2012, will be vested in EirGrid.

Bord na Móna

Bord na Móna's proposed capital expenditure of €270 million over the period of the NDP relates to the development of wind farms in Mayo and the Midlands and the development of a waste management facility, which may include a waste-to-energy function. These projects will contribute to the security of energy supply and will also have a positive environmental impact in terms of helping to meet Ireland's target of 15% of electricity from renewable sources by 2010. However, the projects are dependent on obtaining connection to the national electricity grid.

Environmental Services Programme

Total indicative investment under the Environmental Services Programme under the Plan will be €5.8 billion. This will be broken down between the following Sub-Programmes:

- Water Services Sub-Programme — €4.75 billion;
- Waste Management Sub-Programme — €753 million; and
- Climate Change Sub-Programme — €270 million.

The key strategic objective of the Environmental Services Programme will be to mainstream the integration of environmental considerations into relevant policy formulation, put in place environmental infrastructure which represents best practice internationally and Value for Money, which seeks to better ensure environmental protection and supports regional development in line with the National Spatial Strategy.

A further fundamental objective of the Water Services Sub-Programme during the 2007-2013 period will centre on ensuring that adequate infrastructure is in place to meet demands from continuing growth and development in the economy and from a rapidly expanding population. The major emphasis of the previous NDP was on the provision of waste-water facilities to meet statutory requirements. New waste-water treatment infrastructure required in Dublin, Cork, Limerick, Galway, etc., is now in place. The emerging needs for significant water supply improvements will mean that there will be greater equilibrium between investment in water and waste-water infrastructure under the new NDP than in the past. The priority will be to ensure that the timing and scale of infrastructure provision acts to facilitate, and not to constrain, commercial, housing or other development while ensuring that environmental sustainability objectives are achieved.

In recognition of the centrality and scale of the programme and its ambitious objectives as outlined below, the funding provisions necessary to meet identified and emerging needs will be kept under ongoing review and the Government will respond to any appropriate funding adjustments that are required.

Strategic Context

Investment in environmental infrastructure under NDP 2000-2006 has greatly improved environmental quality and performance. It has also played a key role in facilitating enterprise development and the record housing output of over 500,000 new houses since 1999. In environmental terms, new infrastructure put in place since 2000 has generated additional waste-water treatment capacity equivalent to the needs of a population of 3.1 million. As a result, the pollutant load discharged into rivers, lakes and seas from our cities and towns has been reduced by 45,000 tonnes per annum in a period of unprecedented economic and population growth. Over the same period, water treatment capacity has been increased by an amount sufficient to meet the needs of a population equivalent of 666,000 people.

Further major investment will be necessary in Plan 2007-2013 to enhance environmental quality, assist economic growth and meet household needs. Protecting the natural environment is integral to the economic and social well-being of the country. Despite the high quality of our environment, Ireland faces significant environmental challenges in the coming years:

- Meeting international obligations related to climate change;
- Meeting the requirements of the EU Water Framework Directive;
- Achieving a comprehensive system of waste management; and
- Implementing balanced regional development and sustainable settlements in both urban and rural areas.

The National Spatial Strategy will be a key factor in project selection across the three Sub-Programmes. Specific projects will also address infrastructural deficits in small rural towns, supporting development and combating rural depopulation. Continuing substantial investment in Rural Water under the Water Services Sub-Programme will address deficiencies in water and wastewater systems in rural areas generally.

The Water Services Bill, when enacted, will provide the legislative framework for strengthened and improved structures to facilitate effective planning and delivery of waste-water infrastructure. Implementation of EU Directives will exert an increasing influence on environment related infrastructure provision over the Plan period. The EU Water Framework Directive (WFD) requires the quality of all waters to be protected and improvements to be made, where necessary, to achieve at least ‘‘good status’’ by 2015. More stringent requirements in relation to discharges to waters under the EU Dangerous Substances Directives will also impact on all sectors whose actions influence water quality. The progress made in increasing overall compliance levels under the EU Urban Wastewater Treatment Directive from 25% to 90% during the NDP 2000-2006 means that the discharges from an extensive range of municipal wastewater treatment facilities are already being treated to a high standard. The Government's commitment to the provision of secondary wastewater treatment for all population centres over 1,000 will also be advanced towards completion.

Water Services Sub-Programme

It is intended to build on the progress made under the NDP 2000-2006 by investing €4.75 billion under the Water Services Sub-Programme in upgrading and expanding water and wastewater treatment capacity to meet the needs of a growing population and expanding economy, improving drinking water quality to meet National and EU drinking water standards, treating wastewater to achieve the highest level of environmental protection and compliance with national and EU requirements.

The main focus of the investment during the 2007-2013 period will be on:

- Ensuring good quality drinking water is available to all consumers of public and group water supplies in compliance with national and EU drinking water standards, including any infrastructural improvements required to meet the 2013 parameter for the presence of lead in drinking water;
- Enhancement of the Rural Water Programme which provides a well-planned and structured strategy for resolving drinking water quality deficiencies in rural areas. The main focus of the Programme is on providing water treatment and disinfection equipment for group water schemes with private sources, having these schemes taken over by local authorities if the groups so wish or giving the groups connections to public mains where water quality is of a high standard. The Programme will also continue to improve the standard of wastewater infrastructure in smaller towns and villages;
- Increasing the availability of serviced sites to support residential development under the Serviced Land Initiative. Under the previous NDP, 83,000 sites (both water supply and wastewater) were provided and the target under this Plan is 175,000;
- Expanding infrastructural water conservation activity, particularly by rehabilitation and reinforcement of existing water networks, prioritised by reference to asset management studies to be undertaken by local authorities;
- Prioritising, in particular, the water supply requirements of Gateways and Hubs under the National Spatial Strategy together with other locations where services need to be enhanced;
- The remaining infrastructure needed to provide secondary wastewater treatment in compliance with the requirements of the EU Urban Wastewater Treatment Directive and the Government's commitment to provide secondary wastewater treatment for all agglomerations over 1,000;
- Rehabilitation and reinforcement of existing wastewater networks, prioritised by reference to asset management studies to be undertaken by local authorities; and
- Works to address specific environmental issues identified by River Basin Districts Management Plans under the EU Water Framework Directive and/or associated with the introduction of licensing of municipal wastewater treatment plants to improve operating performance standards.

Waste Management Sub-Programme

Under the Waste Management Sub-Programme, some €753 million will be invested in dealing with the problem of legacy landfills and in supporting the recycling and recovery effort.

Policy

Waste management policy is largely negotiated at EU level and a significant body of legislation has been developed since the adoption of the first Waste Framework Directive in 1977. Ireland has adopted and implemented a large variety of waste legislation with significant success and generally high levels of public support, over the past decade. In addition to this, a number of innovative strategies were introduced, including, in particular, the internationally acclaimed plastic bag levy, and the landfill levy. Receipts from these levies are paid into the ring-fenced Environment Fund, which is reserved for environmental expenditure.

Strategic Context

Investment in waste management elements under NDP 2000-2006 has enabled the delivery by local authorities of enhanced recycling facilities throughout the State, contributing significantly to the dramatic rise in recycling rates in the same period. Significant funding from the Environment Fund was used to support both the development and the operation of such activities. In addition, local authority direct investment over the period of the previous Plan included significant investment in heavy waste infrastructure. The changing nature of the waste management industry in Ireland means that the private sector has been initiating waste infrastructure projects to a degree unforeseen in 1999; although it was expected that over the period of the previous Plan many projects would proceed through PPP arrangements, only a small number are now proceeding in this way with full private funding being the principal model. Much of the expenditure on these projects will take place over the period of the new Plan.

Competition in Waste Management

With increasing environmental awareness and regulation and the rolling out of the legislative framework, it is perhaps unsurprising that the last decade has seen remarkable growth in the waste management industry at every level. Whereas most municipal waste management services and infrastructure used to be provided by local authorities, there are now private sector participants at all levels in the market, from collection to provision of large scale highly engineered landfills. The availability of a range of high quality waste management solutions is important for national competitiveness and balanced regional development and in particular for business in terms of costs and choice of investment location.

The remarkably rapid evolution of this market, while resulting in higher service levels and bringing more consistent expertise to infrastructure provision, has had other unanticipated effects. In particular, the degree to which major private sector operators are initiating infrastructure projects, consistent with the applicable regional waste management plans, is far greater than could have been anticipated at the beginning of NDP 2000-2006 and may only be expected to increase.

Other issues arising in relation to the emergence of a dynamic private sector in all aspects of municipal waste management relate primarily to the competitive structure of the market. Local authorities have a dual role in many areas, as service or infrastructure provider and as regulator of collectors and certain infrastructure operators who may be in direct competition. Issues such as these make it advisable now to consider what future regulatory arrangements might give greater assurance to all market participants while maximising service quality, competitive pricing and environmental outcomes. The Government has published a consultation paper on this issue and is now considering the responses which were received.

Central Government Investment Priorities

Legacy Landfills

Although the legal and policy frameworks now rival those of the top European environmental performers, there remains a ‘‘legacy’’ issue in relation to waste management activities before the introduction of the Waste Management Act, 1996. Municipal waste infrastructure consisted almost entirely of landfills, which were generally not engineered and operated to standards that would now be considered acceptable. Further, such landfills were not subject to the type of restoration and aftercare plans now considered the norm, and remediation activities were often minimal. Some of these landfills have been brought within the purview of the licensing process but quite a number closed before the licensing regime mandated under the Waste Framework Directive took effect.

As part of an integrated and comprehensive response to address and close off the ‘‘legacy’’ issues and to address other legal obligations in this area, the Plan will fund rehabilitation of certain local authority landfills under the Waste Management Sub-Programme.

Recycling and Recovery

Since 2002, the Department of the Environment, Heritage and Local Government has operated a recycling and recovery capital grants programme, which has ensured delivery of much enhanced recycling and recovery facilities that enable the public to increase recycling rates and maximise the value of the recyclable materials. This has lead to a dramatic improvement in the recycling rate from 9% in 1998 to 35% in 2004. This will continue to be a priority.

The publication of the National Strategy on Biodegradable Waste establishes further recycling priorities for the next programming period. The challenge of meeting the Landfill Directive targets will be significant; maximising production of high value compost through biological treatment of biodegradable waste has been identified as a priority in seeking to achieve these targets.

It is intended to provide funding under this Sub-Programme for recycling and recovery services to continue to roll out publicly available recycling centres to increase and enhance the availability of high-quality biological treatment facilities.

Thermal Treatment

There is a need to continue to reduce reliance on landfill as a method of waste disposal. From an environmental perspective, landfill has many disadvantages, and to reach the diversion from landfill targets required by the EU Landfill Directive. In line with national policy on the integrated approach to waste management, thermal treatment with energy recovery will be the preferred option for dealing with residual waste after achieving ambitious targets in respect of waste prevention, recycling and recovery. This is reflected in the regional waste management plans for which the local authorities have statutory responsibility. These waste to energy plants will be provided as entirely private sector developments or by way of public private partnership. In the case of the Dublin Region, the relevant authorities are proceeding by way of a public private partnership for which the necessary regulatory approvals are being sought. Other Regions are at earlier stages in the process.

Climate Change Sub-Programme

The Climate Change Sub-Programme will invest a projected €270 million over the period of the Plan, specifically for the purchase of carbon allowances.

Strategic Context

Ireland in common with all EU Member States has ratified the Kyoto Protocol, and the European Union has undertaken to reduce greenhouse gas emissions to 8% below 1990 levels in the five-year commitment period 2008-2012. The Protocol came into effect in February 2005 and the Union’s emission reduction target is now legally binding. Under an EU burden-sharing agreement, Ireland has agreed to limit growth in emissions, to 13% above 1990 levels.

As part of an overall approach to the national target, the Government has agreed to purchase up to 18 million carbon allowances, i.e. 3.6 million allowances in respect of each year of the five-year commitment period. The purchase of carbon allowances by Parties to meet their commitments under the Kyoto Protocol is provided for through the Protocol’s flexible mechanisms — the Clean Development Mechanism, International Emissions Trading and Joint Implementation — which allow Parties to meet their commitments in the most cost effective manner available to them. The amount of allowances to be purchased is influenced by the extent to which emission reductions can be identified in areas of the economy other than the sectors involved in emissions trading under the EU emissions trading scheme.

The Minister for Finance in his Budget 2006 statement announced the establishment of a Carbon Fund, to be financed on a multi-annual basis, to enable the State to purchase carbon allowances. The Minister also announced that the National Treasury Management Agency (NTMA) would be the Carbon Credit purchasing agent for the State.

Based on an estimate of €15 per allowance (this may vary) a commitment to purchase 18.0 million allowances is projected to cost €270 million over the period 2007-2013[1]. While the State will not need to use allowances before the commencement of the Kyoto Commitment Period in 2008, the commencement of purchasing through the Carbon Fund at this point in time will enable the NTMA to purchase allowances if it considers that this could represent Value for Money. Precise funding commitments will depend on the purchase programme to be developed by the NTMA. As such, it is not possible to definitively determine at this point in time when spending commitment is likely to arise.

The purchase of carbon allowances is just one part of the overall strategy to reduce greenhouse gas emissions in line with Ireland's Kyoto Protocol obligations. More detail in this regard is set out in Chapter 6 dealing with Environmental Sustainability.

Communications and Broadband Programme

Total indicative investment under the Communications and Broadband Programme over the period 2007-2013 will be €435 million.

Strategic Context

Recent economic data confirms the central role of Information and Communications Technology (ICT) for achieving the EU Lisbon target for faster growth. The ICT sector remains a fast growing innovative sector and the ICT sector continues to drive about half the productivity gains in the EU. Recognising that the communications sector is an important factor in determining long-term national economic competitiveness, the key strategic objectives of this Programme are to promote the availability of competitive broadband services on a nationwide basis by the end of the Plan period, and to position Ireland with a telecommunications infrastructure that will meet future requirements in terms of technical capacity and the delivery of new innovative competitive based telecommunications services.

Ireland's expenditure on ICT is close to the EU15 average. Irish enterprise broadband take-up has increased from 19% in 2003 to 48% in 2005. The aim is to build on that towards the levels of leading countries where 80% is more the norm.

Despite the delay in the delivery of competitive, affordable broadband by private broadband service providers, broadband take-up in Ireland is running at twice the average EU rate. Consequently, 410,000 subscribers had broadband in September 2006 and it is expected to be close to 500,000 by the end of 2006.

This Plan, which will facilitate continued growth in the telecommunications sector, will coincide with dynamic changes in the sector. Significant drivers of change will include advances in existing technologies, the development and deployment of new technologies to underpin Next Generation Networks, the changing role of market players and changes in consumer expectations. These changes will increase the availability of broadband and will make it an even more essential and powerful tool than it is today, for both business

[1] While the Kyoto Protocol commitment period is 2008-2012, credits may continue to be purchased in 2013, to allow the Parties to the Protocol to fulfil their commitments.

and residential consumers. This will lead to the creation and availability of richer content in terms of eLearning, eGovernment and entertainment. At the same time, convergence between fixed, mobile and broadcasting technologies will substantially change the communications and entertainment choices available to people.

Plan Investment

The drivers of most of these changes will arise, in part, from international developments and from investments by private sector players in the Irish communications market. Government has a role in adopting the correct regulatory approach to facilitate the rollout of new technologies and the provision of new services. In addition, where it is clear market failure exists in the communications sector, Government financial support will be made available to support access to the range of telecommunications services that a modern economy should deliver. Telecommunications broadband infrastructure is very important in attracting investment for the Gateways and Hubs identified in the National Spatial Strategy. To date, all the Gateways have already had open-access high-speed fibre networks constructed in their towns under the Metropolitan Area Networks (MANs) Programme and further investment will take place over the new Plan period to extend these facilities and to better position Ireland's telecommunications infrastructure to serve the needs of tomorrow.

Broadband

Over the period of the Plan it is intended to build on the success of the NDP 2000-2006 which has supported the funding of private sector infrastructure and the construction of State-owned, open access MANs in 120 towns and cities nationwide in association with the local and regional authorities.

The MANs consist of high-speed, fibre-optic rings linking the main business districts to a co-location centre which houses the telecoms operators' telecommunications equipment. By making these MANs available to all operators on an open access carrier neutral basis, they are stimulating competition by removing the need for service providers to build their own networks. In addition, through the Group Broadband Scheme (GBS), the provision of capital grants to allow smaller towns and rural communities to become self-sufficient in broadband has been funded.

To date 27 MANs have been constructed and approximately 90 networks are due to be completed during 2007/08. Over 160 GBS projects have been approved. The funding has also enabled the construction of a third fibre-optic backbone network by the ESB Telecom and the upgrading of over 50 exchanges to permit DSL broadband delivery.

Over the 2007-2013 period, the current phase of the MANs programme will be completed. Consideration will be given to a further phase of MANs once the effectiveness of spending under the first phase has been addressed. Project selection under this Programme will be directly targeted to assist the implementation of the National Spatial Strategy.

A scheme to deliver broadband to areas of the country that would not be reached by the MANs programme or by the GBS scheme is also being developed for implementation over the period of the Plan. The objective of the scheme will be to deliver a broadband service to the limited number of areas where it is currently uneconomic for the private sector to do so.

Communications Regulator

The Commission for Communications Regulation (ComReg) is the statutory body responsible for the regulation of the electronic communications (telecommunications, radio communications and broadcasting transmission) and the postal sectors. ComReg is the national regulatory authority for these sectors in accordance with EU and Irish laws.

ComReg has a range of functions and objectives in relation to the provision of electronic communications networks, electronic communications services and associated facilities and post. These include:

- Ensuring compliance with obligations;
- To promote competition;
- To contribute to the development of the internal market;
- To promote the interests of users within the European Community;
- To ensure efficient management and use of the radio frequency spectrum and numbers from the national numbering scheme; and
- To promote the development of the postal sector, in particular, the availability of a universal service within, to and from the State at an affordable price for the benefit of all users, including disabled users.

Legislation will be brought forward to strengthen the powers of ComReg, including provisions to promote faster Local Loop Unbundling (LLU) which has been a very important factor in accelerating broadband take-up in other countries.

Digital Terrestrial Television

Currently in Ireland the analogue terrestrial ''free to air'' network carries RTE, TG4 and TV3. Throughout Europe, traditional analogue platforms are already being shut down and new digital platforms are being developed. In this regard, the EU has indicated that they expect all member States to have reached analogue switch off by 2012. This is a target Ireland will seek to meet, possibly in advance of 2012. In order to ensure that ''free to air'' reception of Irish broadcasting services continues in the future, it is envisaged that Ireland's analogue network will be replaced by a digital terrestrial television (DTT) network. DTT can offer viewer benefits including higher quality, additional channels, interactive services and DTT uses spectrum more efficiently than analogue terrestrial broadcasting. The Department of Communications, Marine and Natural Resources is currently running a DTT pilot which is due to finish in 2008. The pilot, which involves an investment of €4 million under the Plan, will inform Irish broadcasters, transmission companies and the Irish viewer about the potential benefits of DTT rollout.

Government Infrastructure Programme

The plan provides for expenditure of €1.4 billion on Government infrastructure, consisting of office and specialist accommodation for Government Departments.

Government Sites and Buildings Sub-Programme

Investment under this Sub-Programme will amount to some €580 million. The Government is committed to the provision of good quality office accommodation which provides a suitable environment for both staff and visitors. In aiming for high quality buildings, requirements such as sustainability, universal access and compliance with building and health and safety regulations need to be adhered to. The whole-life costs of accommodation must also be considered, including, for example, the importance of efficient space utilisation and fit-out standards, ongoing energy and maintenance costs, and flexibility in meeting changing/future accommodation needs.

Decentralisation Sub-Programme

€833 million will be invested in the Decentralisation Sub-Programme. This will be expended on the provision of new buildings for the Departments/Offices affected. The Programme involves the relocation of over

10,300 public servants to 58 towns outside of Dublin. It involves the relocation of over 50 organisations including the Ministerial Offices and Headquarters of eight Government Departments.

Decentralisation will provide high-quality jobs for the regions and in this way will help in securing a better regional balance. It will help the economic and social development of the chosen centres and their catchment areas.

The implementation of the Decentralisation Programme is proceeding steadily. Over 10,500 civil and public servants have applied to relocate under the Programme. The Central Applications Facility remains open and continues to receive applications. It is anticipated that interest will increase further as building and movement timetables firm up. The Decentralisation Implementation Group (DIG), which is driving the implementation of the programme forward, has set out a phased timetable for movement of the civil service organisations included in the programme.

Local Authority Development Contributions Programme

Receipts from development contributions are also available as a local contribution to part-fund infrastructure. Based on projected rates of new development over the course of the Plan, local authorities will recoup an estimated €2.1 billion in development contributions to help fund services at a local level. These contributions recoup some of the costs incurred by local authorities for the basic services that are needed for development to take place and are the principal way of recovering some of the gain that private developers get when land is serviced. Contributions towards the capital cost to local authorities of providing infrastructure and facilities benefiting development in the area are levied on planning permissions under a Development Contribution Scheme adopted under section 48 of the Planning and Development Act 2000. Local authorities can adopt a supplementary development contribution scheme for a specific area, to help fund a particular public infrastructure service or project that facilitates new and higher density development, such as LUAS line extensions or the railway to Midleton. Contributions are also used to support local amenity or community works which contribute towards a better quality of life and to building more sustainable communities.