

Assessment of Port Services Issues for Enterprise

January 2009

Executive Summary

Port services are critically important for enterprise in getting product to market. This study assesses a number of ports related efficiency and operational issues, including the comparative performance for freight services of the Irish ports, the adequacy of internal road and rail access and the changing enterprise needs for port services.

Key Findings

The main findings of this assessment of ports services issues for enterprise are:

- Overall, the needs of importers and exporters are currently well served along the supply chain from the ports to the shipping lines to the logistics providers. Costs are relatively competitive and the range and frequency of routes served is good.
- Internal access remains a concern for enterprise in getting their goods to market, particularly the congestion in the Greater Dublin Area and the poor access from the west to ports outside of Dublin.
- Rail access plays a limited role in the movement of freight within the State. A recent study of the European rail freight market found that rail freight transportation is only a viable alternative to road over distances longer than 150km.
- Air freight is becoming more important for high value exporting sectors like ICT and pharmaceuticals but because the volumes involved are small, it has had little impact on the demand for seaport services, which are volume driven.
- Rising fuel costs are likely to lead to larger ships in the medium term on lo-lo services that operate in and out of the island of Ireland. This will require deeper water facilities at Irish ports to handle the larger vessels.

Key Policy Priorities

The key policy priorities identified by the analysis are outlined below.

- *Improving internal access:* For exporters and importers, the entire chain from their premises to the customer is important for the effective movement of goods in and out of the country. In particular, the timely completion of the M50 upgrade and the delivery of the Atlantic Road Corridor (Galway to Waterford) need to be prioritised to improve Irish enterprise's ease of access to overseas markets. The timely upgrade of the N28 (Cork to Ringaskiddy) and the N11 (Dublin to Rosslare) is also required. A recent An Bord Pleanála decision refusing an application for a significant port capacity project at Ringaskiddy cited the absence of a rail link as one of the main reasons for refusal. This highlights the need for an integrated approach to transport policy across all modes (road, rail, seaports and airports).
- *Improving the use of ICT:* While by and large the quality of service offered to enterprise today by ports on the island of Ireland is good, potential exists to enhance it through greater use of information and communications technologies (ICT). For example, the Port Authority of Marseilles has developed an electronic information system (AP+) that manages the physical,

administrative, commercial and customs follow-up of goods, so that import and export procedures are reliable, while the transit time of goods through the port is shortened. Ports on the island of Ireland need to embrace such technological advances to ensure that the services offered to Irish traders continue to be on a par with those in other countries.

- *Provision of deeper water facilities:* The increasing international shipping trend toward larger vessels has clear potential to impact on the ability of Irish ports to continue to offer the current range and frequency of services unless adequate deeper water facilities are provided. If deeper water facilities are not provided in the medium term, this will lead to a reduction in the number of routes and services to and from ports on the island of Ireland, and an increase in costs because of the reduced capacity. A number of Irish ports, including Dublin, do have the potential to provide deeper water services. The proposed development by the Port of Cork at Ringaskiddy has the type of deeper water levels that will be required to accommodate larger ships; and
- *Certainty regarding future of the Port of Dublin:* Uncertainty around the future of the Port of Dublin and in particular the possible move of the port from its current location will hinder much needed investment in the port's facilities over the medium term. In view of the importance of the Port of Dublin, Government must ensure that a decision on the future of the port is taken as quickly as possible especially given the long lead time for the delivery of port infrastructure and facilities.

1. Introduction

National and international connectivity is critically important in an increasingly globalised economy. In light of Ireland's geographic location and our dependence on export markets, Ireland's commercial seaports and the services they provide are vital to the competitiveness of the productive sector of the economy and to the country's prosperity. The seaports handle 99 percent of the State's international merchandise trade in volume terms and 75 percent in value terms. It is therefore essential that port infrastructure and services provision facilitate the effective and efficient movement of goods in and out of the country.

This study assesses a number of ports related efficiency and operational issues, including the comparative performance for freight services of the Irish ports, the adequacy of internal road and rail access and the changing enterprise needs for port services. This study focuses on unitised services (ro-ro and lo-lo services) in view of their importance to Irish exporters¹. Unitised trade accounted for almost 40 percent of total tonnage handled by the ports in 2007, compared with 31 percent in 1998. Non-unitised trade includes dry and liquid bulk (e.g. oil) and is mainly handled by ports on the west and southwest coasts.

In the preparation of this report, Forfás consulted a wide range of Government and industry stakeholders including the Department of Enterprise, Trade and Employment, the Department of Transport, Enterprise Ireland, IDA Ireland, InterTrade Ireland, the Irish Maritime Development Office, IBEC Transport Council and Trade Facilitation Ireland. In addition, two workshops were held to inform the project's findings as well as a series of meetings with port companies and shipping lines². Forfás also commissioned BMT Baxter Eadie consultants to assist with the assessment of Ireland's comparative performance in the provision of unitised freight services.

2. Overview of Ports Policy

The Government's Ports Policy Statement, which was published in 2005, sets out a framework to ensure that capacity needs are identified, planned and progressed in a coordinated manner³. It also addresses the need for a more integrated transport policy across all modes to ensure the efficient movement of goods. The Ports Policy Statement makes clear that the State-owned commercial port companies should fund their own operations and infrastructural requirements without assistance from the Exchequer⁴. In late 2005, the Department of Transport commissioned Fisher Associates to

¹ Ro-ro or roll-on/roll-off ships are designed to transport trucks carrying containers, while lo-lo or lift-on/lift-off ships use cranes to load and unload unaccompanied containers.

² The workshops were attended by Enterprise Ireland and IDA Ireland client companies and logistics providers. A list of the participants at the workshops is included in the Appendix.

³ <http://www.imdo.ie/pdf/DCMNR%20Ports%20Policy%2005.pdf>.

⁴ EU funding up to 2000 underpinned a significant improvement in port capacity, leaving the ports well positioned to handle demand in the short to medium term.

assess if the forecast capacity requirements for unitised cargo (ro-ro and lo-lo traffic) to 2014 could be adequately met by the implementation of a combination of the projects proposed by the port companies. Fisher Associates concluded that the projects being progressed by the ports sector have the potential to deliver adequate port capacity to 2014 but that developments need to be actively monitored by the Department of Transport.

The Harbours (Amendment) Bill, published in September 2008, addresses a number of the issues identified in the Ports Policy Statement, in particular, ensuring adequate port capacity to meet future needs. It provides significant scope for increased borrowing by the port companies to increase capacity and improve services. It also allows for the physical expansion of the ports and for increased commercial focus of the ports through reform of Board structures.

The Department of Transport is currently undertaking a comprehensive study of the role of Dublin Port, in the context of overall ports policy on the island of Ireland, wider transport policy and other national policy objectives. This review will take account of the findings of the study on the role of Dublin Bay and the Dublin Port Area undertaken by Dublin City Council in 2007, which advocated moving the port out of Dublin Bay.

3. Overview of Port Traffic Trends in the State

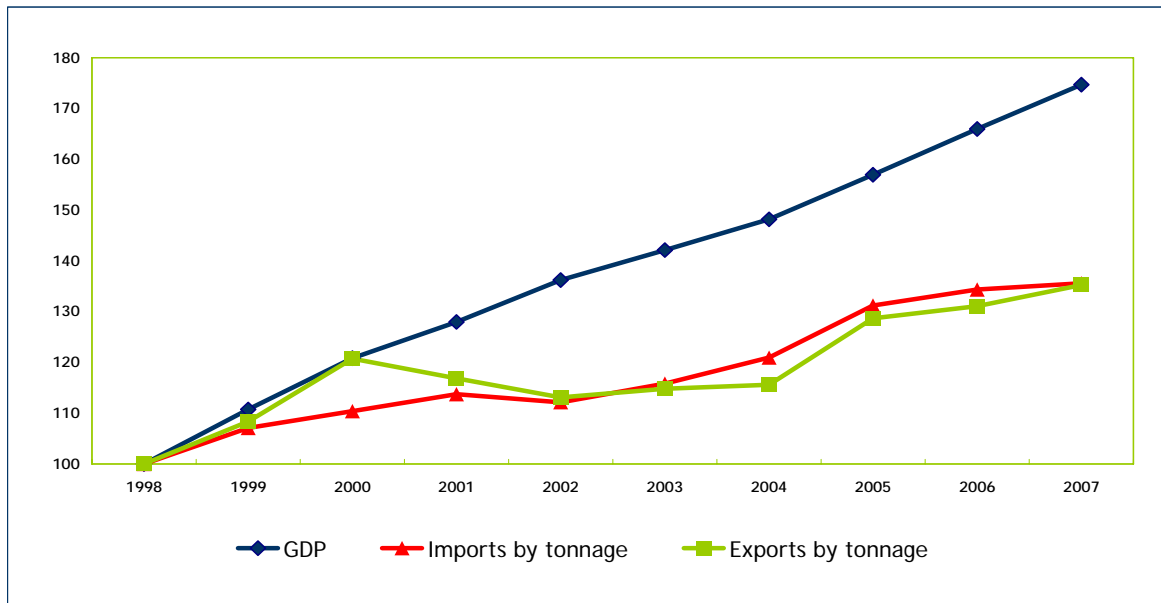
There are 12 main trading ports in the State⁵. The level of goods handled (imports and exports) in volume terms at Irish ports has grown strongly since 1998 (Figure 1). In 2007, the State's ports handled over 54 million tonnes of goods, which represents a 36 percent increase on the level of goods handled in 1998.

The State's port traffic levels are determined by imports rather than exports as more than 70 percent of goods handled by the ports are imports. The split between imports and export volumes handled by the ports has changed very little over the last decade. In terms of value, imports' share is significantly lower, accounting for just 41 percent of total goods traded in 2007.

Different goods are transported using different types of shipping vessels. Unitised trade (ro-ro and lo-lo traffic), which generally involves the transport of relatively high value goods in containers, is now the most important category of traffic and accounted for almost 40 percent of total tonnage handled by the ports in 2007 (compared with 31 percent in 1998). In view of the importance of unitised services for the Irish enterprise base, this study focuses on ro-ro and lo-lo services. Overall levels of unitised trade measured in volume terms grew by 82 percent (71 percent for ro-ro, and 93 percent for lo-lo) between 1998 and 2007.

⁵ The 12 trading ports are Cork, Drogheda, Dublin, Dundalk, Dun Laoghaire, Galway, Greenore, New Ross, Rosslare, Shannon Foynes, Waterford, and Wicklow.

Figure 1: Imports and Exports (Volume Terms) and GDP Index, 1998-2007 (1998=100)



Source: CSO Statistics of Port Traffic

In terms of total unitised trade on an all island basis, the Port of Dublin accounted for 45 percent of goods handled in 2007⁶. It handled 53 percent of lo-lo traffic and 41 percent of ro-ro traffic.

While there has been a shift to air freight by high value exporting sectors such as ICT and pharmaceuticals, given the small volumes involved it has had little impact on the demand for ports services, which are volume driven.

4. Key Findings

It is essential that port infrastructure and services provision facilitate the effective movement of goods in and out of the country given Ireland's geographic location and dependence on export markets. Efficient access to markets is one of the key factors for foreign investors in deciding where to locate⁷.

By and large, the needs of enterprise are well served along the supply chain from the ports to the shipping lines to the logistics providers. Costs are competitive and the range and frequency of routes served is good. However, internal road and rail access remains an issue for enterprise in getting their goods to overseas markets.

⁶ The Port of Dublin handled 70 percent of all unitised trade in the Republic of Ireland in 2007.

⁷ Cushman Wakefield, Cities Monitor, 2008.

4.1. Ireland's Comparative Performance

One of the main objectives of this study was to assess the comparative performance of the main ro-ro and lo-lo ports in meeting the needs of Irish enterprise compared to a small number of comparable international ports. Among the issues examined were the quality and cost of services to importers and exporters.

Methodology

Due to the dearth of publicly available comparable data, it was not possible to develop robust quantitative indicators to measure the State's comparative performance. Instead, a qualitative approach was taken, based on a wide range of consultations with stakeholders along the supply chain from the ports, shipping lines, logistics companies and enterprise.

As some exporters and importers based in the State use the ports in Northern Ireland, Belfast, Warrenpoint and Larne were also included in the analysis⁸. The comparative international ports examined were Liverpool, Southampton, Rotterdam, Ejsberg (Denmark) and Lübeck (Germany).

Capacity

While the majority (68 percent) of unitised capacity (ro-ro and lo-lo) is focused on providing ro-ro services across the Irish Sea, there is a growing amount of lo-lo service capacity providing direct links between the island of Ireland and mainland Europe. In broad terms, the analysis of future supply of and demand for port capacity indicates that the island of Ireland has sufficient ro-ro and lo-lo capacity (in place and planned) to meet enterprise needs in the medium term, provided the additional capacity planned proceeds as scheduled⁹.

Lo-lo services provide links to world-wide markets mainly via transshipment to British and mainland European hub ports such as Liverpool, Felixstowe, Rotterdam and Antwerp. The likelihood is that the island of Ireland will continue to be served by these feeder services given the absence of the critical mass required to support a direct call from a deep sea container lines.

Quality of Services

The three main criteria used to determine the quality of service to enterprise are the range and frequency of ro-ro and lo-lo services from the island of Ireland and the reliability of those services.

⁸ The Irish ports included in the analysis are: Dublin, Cork, Waterford, Rosslare and Drogheda.

⁹ Forecasted medium term growth in port traffic is based on recent trends in GNP and port traffic growth. Current GNP growth rates and port traffic growth rates are not as closely correlated as they were in the past due to the increasing influence of the services sector and domestic demand on determining GNP growth rates. In view of the slowdown in the global economy, the growth forecasts to 2020 used were based on projections more pessimistic than those in the ESRI's 2008 Medium Term Review. The high growth scenario was the equivalent of the ESRI's benchmark forecast. A separate relationship is estimated for each inward and outward flow of traffic, for each type of cargo. Over the 20 years from 2000 to 2020, lo-lo in the State is projected to grow by 114 percent compared with a 174 percent increase in Northern Ireland. From 2000 to 2020, ro-ro cargo is forecast to increase by 133 percent in the State and 96 percent in Northern Ireland.

In view of the small size of the market along with its peripheral location, the island of Ireland is relatively well served in terms of routes and frequency of service (Table 1). Most of the ro-ro services into and out of the island of Ireland are to British ports. Although seven ports on the island of Ireland handle ro-ro services, Dublin, Larne and Belfast dominate. Forty percent of the ro-ro capacity available is offered by the Port of Dublin, followed by Larne (27 percent) and Belfast (17 percent). There are five ferry companies offering ro-ro services between the island of Ireland and Britain.

There are more lo-lo sailings to mainland Europe than to Britain (Table 1). Most of the lo-lo capacity to Britain is handled by the ports of Dublin (52 percent) and Belfast (43 percent), with the remainder in Cork. There are four shipping lines providing services to Britain from three ports, although almost half of the lo-lo capacity to Britain is provided by Coastal Container Line which links Belfast and Dublin with Liverpool and Cardiff.

Lo-lo services to mainland Europe account for a quarter of the unitised capacity available at ports on the island of Ireland. Twelve shipping lines provide lo-lo services from six ports on the island of Ireland to a range of European locations such as Rotterdam, Antwerp, Zeebrugge, Le Havre, as well as further afield to Scandinavia and the Iberian peninsula. The Port of Dublin handles half of the lo-lo capacity to mainland Europe, followed by Belfast (17 percent), Waterford (14 percent) and Cork (14 percent).

Table 1: Overview of range and frequency of ro-ro and lo-lo services from the Island of Ireland

	<i>Ro-Ro Services</i>	<i>Lo-Lo Services</i>
Island of Ireland to Britain	– 287 weekly sailings in- and out-bound on 16 routes (mainly Dublin, Larne and Belfast)	– 34 weekly sailings in- and out-bound (mainly Dublin and Belfast)
Island of Ireland to Mainland Europe	– 11 weekly sailings in- and out-bound (Rosslare and Cork only)	– 49 weekly sailings in- and out-bound (mainly Dublin, Belfast, Cork and Waterford)

Source: BMT Baxter Eadie

An assessment of the punctuality of sailings to and from a selection of ports on the island of Ireland shows that overall adherence to schedules is relatively good. Comparisons between services and ports need to be cautiously made; passenger routes are more schedule conscious than freight only services particularly where the latter are mainly unaccompanied units. Tidal conditions are also a factor as they can play a role in variations away from scheduled sailing times.

Adverse weather also disrupts performance. The main area of dissatisfaction that arises for exporters is related to problems that occur in respect of lo-lo feeder service connectivity when feeder vessels are delayed. A delay on one voyage may take two further voyages to fully correct because of the relatively tight schedule to which the vessels normally operate.

This is of particular concern for the pharmaceuticals sector whose raw materials include imported solvents. While companies will be able to keep stocks of other raw materials to reduce the impact of any disruptions, they can only keep a few days worth of solvents in stock at any given time. Solvents are generally delivered by ship a number of times a week to meet production requirements so on-time delivery is essential to maintaining production schedules.

Although the severe weather conditions in the Irish Sea do create difficulties for sailing schedules during the winter months, ports here are not alone in this regard. Scandinavian ports in the Baltic and Skagerrak (between Norway and Denmark) seas are also prone to adverse weather conditions.

In conclusion, while by and large the quality of service offered to enterprise today by ports on the island of Ireland is good, the use of ICT by the ports is low. Potential exists to enhance service quality through greater use of electronic information systems to manage the physical, administrative, commercial and customs follow-up of goods and provide reliable import and export procedures while reducing the transit time of goods through the port.

Costs of Freight Services

The way in which charges are applied in the freight market is not dissimilar to that used by airlines for passengers with variations applying by route, operator, season of year, time of sailing and size of current order. No service provider has a fixed or published tariff for freight services. Due to the very high utilisation factors required to make a profit (as much as 90 percent for lo-lo services coming into the island of Ireland), service providers protect their pricing information. Similarly, exporters and importers guard details of freighting agreements that they conclude with service providers.

For short sea container (lo-lo) services, freight rates are usually quoted to business on a door to door basis either by logistics providers or by the short sea carrier offering door to door services. As exported volumes from the State are typically 60 percent of those imported, the rates quoted to exporters are considerably lower than those quoted to importers¹⁰. There is an exception to this in respect of short sea container services to and from Waterford and Cork. This is because exports of dairy and peat products generally result in higher demand for capacity on the outbound than inbound leg, which leads to higher rates being charged for exported goods. For feeder services (lo-lo services with onward international connection), the service providers quote virtually the same rates outbound as inbound.

Ro-ro services are cheaper for exporters than for importers. For example, on a door to door basis between Dublin and Manchester, charges are some 60-70 percent higher in the inbound direction, from Britain to the island of Ireland, than on the outbound route.

¹⁰ BMT Baxter Eadie stakeholder consultations and research.

With respect to the comparative costs of lo-lo and ro-ro services to the continent, it is estimated that the use of a combination of a ro-ro service and road freight through Britain to deliver a cargo to Paris is 30 percent more expensive than to transfer the same cargo using a lo-lo service. Businesses will often choose the more expensive option as ro-ro services offer greater flexibility due to the greater frequency of ro-ro services as well as shorter delivery times to businesses to get their product to the customer.

In conclusion, the island of Ireland is by no means penalised by its westernmost location in Europe. The eagerness of shipping lines to gain cargo business to and from Ireland on feeder lines has led to increased competition, lower costs and enhanced service quality. The higher volume of imports than exports creates considerable competition for Irish export cargo among freight service providers.

4.2. Adequacy of Internal Access

Ease of access to ports is essential to enable the effective and efficient movement of goods in and out of the country. For exporters and importers, the entire chain from their premises to the customer is important for the effective movement of goods in and out of the country. In this regard, ensuring that quality road and rail infrastructure is available to link ports to the national road and rail network is critical. As proposed in the Ports Policy Statement, the Department of Transport is working with the ports to improve the connectivity to their hinterlands. The key issues from an enterprise development perspective are outlined below.

While the Dublin Port Tunnel has resulted in significant savings in journey times in and out of Dublin port, these have been offset by the increased congestion on the M50 during the recent junction improvement works, particularly for businesses located to the south and west of Dublin. In view of the importance of Dublin port for ro-ro and lo-lo traffic into and out of Ireland, congestion in the Greater Dublin Area has significant implications for the enterprise base's ease of access to overseas markets and reduces their flexibility. The fact that the main inter-urban routes radiate from Dublin compounds the problem as it limits the ability of the enterprise base to readily switch between ports located in other parts of the country.

Bottlenecks also exist to the hinterland of some of the other ports including the N28 from Ringaskiddy to Cork, which is of critical importance for the pharmaceuticals sector's access to market. Other routes that need to be improved to enhance the connectivity to the ports from regional locations include the Atlantic corridor from Galway to Waterford, the remainder of the N25 from Waterford to Rosslare and the N11, which runs along the east coast from Dublin to Rosslare. A recent freight study by InterTrade Ireland identified a number of key road corridors in Northern Ireland that need to be upgraded to enhance the access to ports in the northeast¹¹.

¹¹ InterTrade Ireland, Freight Transport Report for the Island of Ireland, August 2008 - see Chapter 5. <http://www.intertradeireland.com/module.cfm/opt/29/area/Publications/page/Publications/>

Congestion has very real implications for a business's flexibility and the time it takes to get a product to market, which are key issues for enterprise particularly those producing high value goods. For example, a large company located in the Dublin area wants to run its manufacturing plant until 6.00pm. However, in order to ensure next day delivery to customers in the UK and delivery within 48 hours to those in mainland Europe, the product has to leave the plant by 4.00pm. This affects the company's flexibility and its responsiveness to customer demands.

Rail access plays a limited role in the movement of freight within the State and accounted for less than two percent of inland transport volumes in 2005 (latest data available). Currently, the only rail freight services available in the State are the Ballina to the Port of Waterford service and the Tara Mines to the Port of Dublin service. The decline of rail freight in recent years has been attributed to the comparative advantage of road transportation. In addition, most ports have a limited geographical hinterland. For example, most of the Port of Dublin's business lies within an 80km radius of the port and most of the Port of Cork's is in the Munster area. A recent study of the European rail freight market found that rail freight transportation is only a viable alternative to road over distances longer than 150km¹². However, growing environmental concerns over carbon emissions and congestion and increasing demand from enterprise are leading to a renewed focus on rail freight within the EU¹³.

A recent An Bord Pleanála decision refusing an application for a significant port capacity project at Ringaskiddy cited the absence of a rail link as one of the main reasons for refusal. This highlights the need for an integrated approach to transport policy across all modes (road, rail, seaports and airports) and in particular, greater clarity on the role of rail freight is required.

4.3. Changing Needs of the Enterprise Base

Over recent years, there has been a shift away from manufacturing towards services in the State. In addition, the composition of merchandise exports from the State has changed, particularly in key growth sectors like pharmaceuticals and ICT where there has been a move from high volume, low value goods to low volume, high value goods. This has resulted in a change in the type of freight services demanded by these sectors, with an increasing demand for air freight services. While only one percent of the State's international merchandise trade in volume terms is moved by air, air freight accounts for 25 percent in value terms.

In spite of the move to air freight services, ro-ro services remain important for high-value exporting sectors. Exporters from Ireland often opt to transfer goods by ro-ro, in order to avail of air freight services from British airports, which provide a wider range of direct routes to international markets to choose from.

¹² <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52007DC0609:EN:HTML>

¹³ http://ec.europa.eu/transport/logistics/freight_logistics_action_plan/index_en.htm

However, exports from these high value sectors are small as a proportion of the overall volume of traffic in and out of Ireland. As a result, changes in the requirements of these high value export sectors will have very little impact on the overall demand for sea freight services, which is driven by volume.

What is likely to continue to change in terms of the needs of enterprise is that both importers and exporters will require increasingly sophisticated and cost competitive sea freight services to get their products to market efficiently.

5. Key Policy Priorities Arising

Overall, the combination of high trade volumes and keen competition among service providers along the supply chain has provided exporters and importers with good quality and competitively priced ro-ro and lo-lo freight services. However, this study has identified a number of policy priorities that require attention to ensure that Irish enterprise continues to be well served in the future.

5.1. Improving Internal Connectivity

In view of the importance of internal access to and from the ports for the efficient movement of goods in and out of the country, transport policy needs to take a more integrated approach across all modes of transport to ensure an efficient transport system. The recent An Bord Pleanála decision not to grant planning to the Port of Cork for its proposed development at Ringaskiddy because of the lack of rail access emphasises the need for a fully integrated transport strategy to ensure that enterprise continues to be well served in getting goods to market.

The Port of Dublin handles 40 percent of total port traffic in the State and 70 percent of unitised (ro-ro and lo-lo) traffic. It is therefore imperative that the congestion in the Greater Dublin Area is addressed as a matter of priority. In particular, the upgrade of the M50 must be completed on time. The delivery of the Atlantic Road Corridor (Galway to Waterford) needs to be prioritised to provide enterprise, especially those in the west of the country, with effective access to ports in other parts of the country. The timely upgrade of the N28 (Cork to Ringaskiddy) and the N11 (Dublin to Rosslare) is also required.

5.2. Improving the Use of ICT

While by and large the quality of service offered to enterprise today by ports on the island of Ireland is good, the current use of ICT is low and potential exists to enhance service quality through greater use of electronic information systems. For example the Port Authority of Marseilles has developed an electronic information system (AP+) that allows all port players (e.g. shipping agent, terminal operator, freight forwarder, customs) to exchange data and messages safely and confidentially. This system manages the physical, administrative, commercial and customs follow-up of goods, so that import and export procedures are reliable while the transit time of goods through the port is shortened. The system is also being rolled out to other French ports.

Ports on the island of Ireland need to embrace such technological advances to ensure that the services offered to Irish traders continues to be on a par with those in other countries.

5.3. Provision of Deeper Water Facilities

Rising fuel costs are likely to lead to larger ships on the lo-lo services that operate in and out of Ireland in the medium term. This will require deeper water facilities at ports on the island of Ireland to handle the larger vessels. Currently, only limited deeper water facilities are available at ports on the island of Ireland.

If deeper water facilities are not provided in the medium term, this will lead to a reduction in the number of routes and services to and from ports on the island of Ireland, and an increase in costs because of the reduced capacity. A number of ports, including Dublin, do have the potential to provide deeper water services. The proposed development location by the Port of Cork at Ringaskiddy has the type of deeper water levels that will be required to accommodate larger ships.

It is critical that national maritime transport policy, as part of an integrated transport strategy, creates the policy certainty and market environment required to attract private investment in such facilities. In addition, any future consideration of new port locations must take into account the deeper water potential available.

5.4. Creating Certainty about the Future of the Port of Dublin

Uncertainty around the future of the Port of Dublin and in particular the possible move of the port from its current location will hinder much needed investment in the port's facilities over the medium term to address issues like the need for deep sea water facilities. In view of the importance of the Port of Dublin, Government must ensure that a decision on the future of the port is taken as quickly as possible especially given the long lead time for the delivery of port infrastructure and facilities.

As a first step, the Department of Transport's study on the future role of the Port of Dublin in the context of national ports policy, wider transport policy and national economic and spatial policy needs to be completed as speedily as possible and its outputs progressed quickly.

APPENDIX: Workshop Attendees -January 2008

DUBLIN WORKSHOP	
Abbott Ireland	Brendan Farrell
DHL	Fintan Doyle
Glanbia	Jim Delaney
Hewlett-Packard	Liam O'Connor & Matthew Ryan
Irish Distillers	Bryan Delaney
Irish Exporters Association	Howard Knott
Irish International Freight Association	Colm Walsh
Jenkinson Group (logistics provider)	Niall Burns
Microsoft Operations	Conor Maguire; Brian O'Reilly
Qlogic	Dick Hogan; David Lally
Revenue Commissioners	Michael Gilligan
Wyeth Medical International	Bill Noonan
Xerox	Brian McAleer; Chris Reynolds

CORK WORKSHOP	
GE Healthcare	Pascal McCarthy
Glaxosmithkline	Martin Deegan
Novartis	Martin O'Sullivan
Pfizer	Eileen Hayes
UCC - Faculty of Business	Colm Quain

