

Office of the Project Engineer, Dublin Port Tunnel,
East Wall Road, Dublin 3

Oifig Innealtóir an Tionscadail, Tollán Chalafoirt Bhaile Átha Cliath,
Bóthar an Phoirt Thoir, Baile Átha Cliath 3
T. 01 245 3090 F. 01 245 3177 E. dpt@dublincity.ie

PRESS RELEASE: AN TAOISEACH OPENS DUBLIN PORT TUNNEL TODAY

Wednesday, 20th December 2006: The Dublin Port Tunnel was officially opened today by An Taoiseach, Mr. Bertie Ahern, T.D. in the presence of The Lord Mayor, Cllr Vincent Jackson and the Minister for Transport, Martin Cullen, TD. The €751 million Dublin Port Tunnel is the largest piece of infrastructure ever delivered in Ireland. It is the longest urban motorway tunnel in Europe, containing twin dual-carriageway tunnels, 4.5km in length each, from the M1 Coolock Interchange to Dublin Port. Over 98% of trucks leaving Dublin Port will be able to use the Port Tunnel with a journey time of six minutes. Initially, the Tunnel is expected to carry over 6,300 Heavy Goods Vehicles and buses, free of charge, each day. The Dublin Port Tunnel will be open to trucks and buses from around lunchtime today, Wednesday 20th December. After the first few weeks of operations, when average truck numbers using the Tunnel are known, the Tunnel will be opened to cars, on payment of the relevant toll.

"The Port Tunnel is a very significant step in the delivery of a much bigger plan for better infrastructure in Dublin. As a stand-alone project it will bring cleaner air and a better quality of life to the city centre. It will help business by ensuring quicker access to and from Dublin Port", said An Taoiseach, Mr. Bertie Ahern, T.D. "As part of a bigger vision that includes, Metro, Luas, rail, QBCs and road, today's opening of the Port Tunnel is a milestone towards a future and better Dublin."

"I congratulate all those involved in planning, designing and building the Dublin Port Tunnel and I thank the local residents and travelling public for their cooperation during construction," said The Lord Mayor, Cllr Vincent Jackson. "The removal of thousands of trucks from Dublin will greatly improve the environment for all those who live, work and visit the city."

“The Dublin Port Tunnel and Transport 21, which is the Government's investment programme for transport will complement each other. The Tunnel will help reduce congestion in Dublin thereby facilitating improvements in public transport and for the general car user, while the upgrade of the M50 and the national motorway network will allow for better access to all parts of the country for Port traffic,” said Mr. Martin Cullen, T.D., Minister for Transport.

“The Dublin Port Tunnel will provide quick toll-free access to and from our capital city seaport to the modern motorway network servicing the entire country, with direct benefits to business and citizens alike,” says Mr. Peter Malone, Chairman, National Roads Authority.

The HGV Strategy banning large trucks from Dublin city streets will be implemented on 19th February 2007. This means that all HGVs with 5 axles or more, exiting the Port, must use the Tunnel to access the national road network. However, Dublin City Council will put in place an online permit system to facilitate HGVs who must make deliveries in the city between 7am and 7pm.

As well as heavy goods vehicles, buses with 25+ seats can also use the tunnel toll free, as can specially adapted cars for disabled drivers. Priority will be given to trucks and buses in the Tunnel. Cars and other vehicles will be allowed to use the tunnel after a few weeks and will be charged tolls of €12 - €3, depending on the time of day. The toll plaza is located at the Dublin Port end.

Drivers using the Dublin Port Tunnel are advised to switch on dipped headlights, remove sunglasses and keep a safe distance from the vehicle in front. The maximum speed limit inside the Tunnel is 80km/h. Further user information regarding safety, access, tolls, etc is available on www.DublinPortTunnel.ie in English, Irish, French, German, Spanish, Polish, Russian and Chinese. There is also a lo-call telephone number 1890-252435.

The Dublin Port Tunnel will be managed and operated by Transroute Tunnel Operations Ltd, who are part of Group Egis, a French Group, operating motorways and tunnels in Europe, Australia and Asia with a presence in more than 80 countries

worldwide. Transroute has an operate and maintenance contract and toll revenue collected (from cars, etc) will be remitted to the National Roads Authority.

The Tunnel was built by NMI Consortium, comprising Nishimatsu from Japan, Mowlem from the UK and Irishenco. The Consultants were Brown & Root.

DUBLIN PORT TUNNEL - KEY FACTS

- Dublin Port Tunnel is a dual carriageway primarily for Heavy Goods Vehicles to travel between the Port, close to the heart of the city, and the M50 C-ring, linking all the major arterial routes to Dublin.
- Links M1 to Dublin Port in only 6-8 minutes.
- It is the longest urban motorway tunnel in Europe
- The tunnel is 4.5km in length, of which 2.6km is twin bored tunnels, and 1.9km is cut-and-cover
- Operational height clearance is 4.65m, the actual height of the tunnel is 4.9metres.
- The twin tubes are linked every 250 metres by pedestrian cross passages, and every 1,000 metres by vehicle cross passages, providing emergency exits, from incident tunnel to non-incident tunnel
- The Dublin Port Tunnel is the largest ever civil engineering project in Ireland; only the electrification dam on the River Shannon at Ardnacrusha in the 1920s comes near.
- It was joint winner (with the New York World Trade Centre Recovery Effort) of the 2003 International Fleming Award for novel geotechnical solutions in its construction.
- The Project planted 40,000 trees and shrubs.

ENDS.

DUBLIN PORT TUNNEL - CONSTRUCTION AND ENGINEERING

- The project employed 5,000 people over the course of its construction delivering 8 million man hours, with no serious accidents and no fatalities
- An underpass was installed below the Dublin-Belfast railway line east of Fairview while the 7 tracks of rail line remained live.

- There are three new bridges within the Project - Shantalla Bridge over the motorway, new bridge over the Tolka River in East Wall and a new interchange and entrance to Dublin Port.
- Much of the tunnel is between 21 and 23 metres below ground level, through hard limestone.
- There are four sections.
 - o The bored tunnels, deep underground between Fairview and Whitehall,
 - o a cut-and-cover section along the N1-M1 from Whitehall to the M50,
 - o a crossing below the Dublin-Belfast railway line at Alfie Byrne Road,
 - o and a southern cut-and-cover section, rising to ground level to a new entrance to Dublin Port.
- Construction began in June 2001 - working from two bases, at Fairview Park and Whitehall, two tunnel boring machines excavated twin tunnels under the north city suburbs. The larger hard rock boring machine arrived in Fairview park in summer 2003 and completed its return journey to Whitehall in summer 2004. By early 2006, tunnel fit-out was complete.
- The railway underpass at Alfie Byrne Road posed a unique technical challenge. While mainline, suburban and Dart trains passed on the lines above, twin tunnels were excavated below.
- 2 million tonnes of rock and clay have been moved over the course of the project.
- There is approximately 10 metres of rock and 12 metres of boulder clay above the Tunnel.
- The bored section of the Tunnels are between 10 and 15 metres apart, this changes in the cut and cover section (as the Tunnel rises to ground level) which is one structure separated by a central divide/wall.

- Grainne, the hard rock tunnel boring machine, weighed 1800 tonnes, was 156m long, used 3.2Mw of electricity and cost approximately €27 million. It required 45 tunnellers per shift to operate.
- Megan, the boulder clay boring machine, weighed 1100 tonnes was 60m long, used 400kw of electricity and cost €10million. It required 18 tunnellers to operate it on a shift basis.
- Both tunnel boring machines were dismantled when they completed the first tube and reassembled in the return position - an operation that took three months for each machine. The same operation took place when they finished in 2004 before being moved off site.
- The tunnel boring machines were guided by lasers with an allowed variation of + or – 6mm.
- The project site was treated as a mineshaft until the machines broke through at the other end of the Tunnel. The Tara Mines Emergency Response Team provided search and rescue backup during that phase of the project. However it was never necessary to call them out.
- During the construction of the cut-and-cover phase, Fairview Park contained an excavation the size of a cathedral, which is currently being reinstated and will revert to parkland. The Whitehall site had a hole 56 metres in diameter greater than the length of an Olympic size swimming pool (50m+) and equivalent to 7 storeys deep where the giant tunnel boring machines were installed to begin boring.