



INTRODUCTION

The overall proposed upgrade of the M50 Motorway (M50) involves the widening of approximately 32 km of the motorway from 2 to 3 lanes in each direction, and the upgrade of 10 junctions along this length. The upgrade will be delivered through a number of contracts.

SCHEME OBJECTIVES

The National Development Plan (NDP) 2000 – 2006 has identified that the significant infrastructure deficit in Ireland threatens to inhibit the achievement of Ireland’s economic and employment potential. In this context, both the NDP and the Dublin Transportation Office (DTO) ‘A Platform for Change Strategy’, which forms the long-term transportation strategy for the Greater Dublin Area, have specifically identified the need for the completion and upgrading of the M50.

The need for the upgrade has also been recognised on a more local and regional level and as such has been incorporated in the development plans of the four relevant local authorities – Fingal, South Dublin and Dun Laoghaire-Rathdown County and Dublin City Councils. In addition, the Strategic Planning Guidelines for the Greater Dublin Area identifies the M50 as having an important role in facilitating national journeys as well as travel within the metropolitan area and providing access to the ports and airport.

PROGRAMME

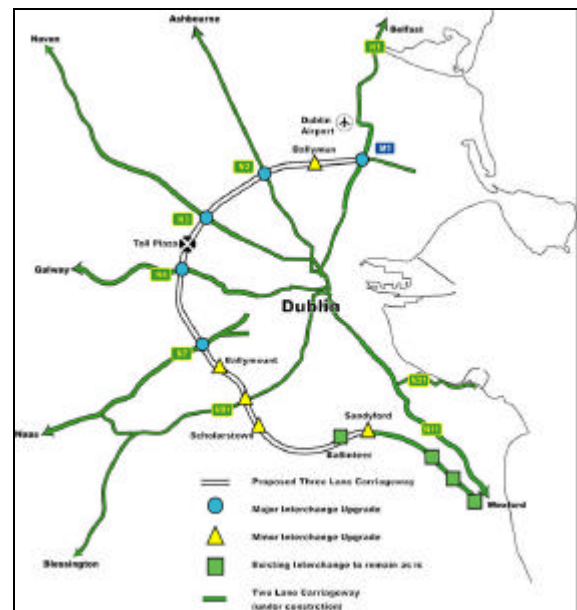
The EIS and Motorway Scheme have just been published (late September) and a decision is expected by early 2005. The EIS is available for purchase from Dun Laoghaire-Rathdown County Council, phone (01) 2054700, email corp@dlrcoco.ie.

It is intended that the upgrading works will be carried out through a number of contracts. The construction of the M50 Upgrade Scheme is a significant undertaking and will be one of the largest construction projects in Ireland in recent years. The construction of the different sections of the scheme is estimated to take at least 5 years.

SCHEME DESCRIPTION – Route

The M50 mainline will be upgraded to dual 3-lane motorway standards from the M1 Motorway junction to the proposed junction at Sandymount (which is currently under construction). In addition, auxiliary-weaving

lanes will be provided between successive junctions from the M1 junction, right through to the Scholarstown junction, to facilitate safer merging on and off the M50 between these junctions. Ten junctions from the M1 to Sandymount junction will be upgraded to facilitate access across, and on and off the upgraded motorway. Where the modification of the existing junction layouts would not provide adequate capacity to satisfy demand, reconfiguration to partial free/free flow interchanges is proposed.

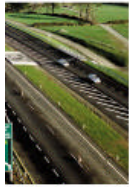


SCHEME DESCRIPTION – Design & Build Contract

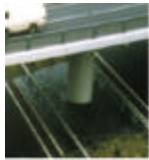
It is proposed to procure the first section of the M50 upgrade by a Design and Build mechanism, and this section will include the upgrading of the dual carriageway between the existing N4 and N7 junctions. This contract will involve the upgrading of some 5 km of existing dual-lane carriageway, as well as the upgrading of the existing grade separated junctions at N4 and N7, to partial free/free flow interchanges.

Existing West-Link Toll Road

The existing concession agreement between the National Roads Authority and NTR plc relates to the operation and maintenance of 3 km of the mainline motorway, the existing 14 lane toll plaza facility, the existing high level bridges over the Liffey valley as well as bridges over Lutrellstown Road, Carpenterstown Road, and Castleknock Road. A variation of the existing concession agreement will involve the upgrading of the mainline alignment to three lane standard and auxiliary lane only.



M50 Upgrade Scheme



Public Private Partnership Contract

It is proposed to upgrade the sections of the M50 between the existing M1 and the N3 junctions, as well as from the N7 junction as far as the Sandyford Interchange, which is currently under construction as part of the Southern Eastern Motorway contract. This PPP contract will involve the upgrading of some 24 km of the existing 2-lane carriageway to three lane standard, the provision of auxiliary lanes between M1 to N3 and between N7 and Scholarstown, the major upgrading of the junctions at the M1, N2, N3, from their current grade separated junction type, to partially free/free flow interchanges, and also some upgrade works to the junctions at Ballymun, Ballymount, the N81, Scholarstown and Sandyford. The extent of operation and maintenance is yet to be finalised.

CONSTRUCTION ISSUES

Construction constraints – The existing M50 and surrounding infrastructure provides physical construction constraints including the existing bridges, utilities, railway lines, and canals which need to be taken into account during construction. The requirement to maintain all existing access as well as a live motorway during the construction provides a constraint to construction methods.

Construction programme, staging and working hours – It is anticipated that the completion of the construction of the full works of the scheme will take at least 5 years. Construction periods and working hours will vary along the scheme and it is anticipated that night time working will be required.

Construction compounds – A number of possible construction compound areas have been identified within the proposed land take for the scheme, primarily around the interchanges and the toll plaza.

Excavated material – Construction of the full scheme will involve the excavation of a significant amount of material (earth and demolition material such as pavement, pipework and structures) some of which can be reused on-site.

Material requirements - The M50 Upgrade will have a significant requirement for imported materials, in particular for high standard fill and stone for embankment construction, concrete for walls and bridge construction and asphalt for road construction.

Construction traffic and access – Heavy vehicles importing materials and removing unsuitable excavated material will be required to travel on routes in accordance with the road hierarchy, that is to preferentially utilise national routes and avoid local routes wherever possible.

Preparatory works – Substantial diversion of services such as sewers, water mains, telecommunications, gas pipelines and electricity cables will be required prior to and during the project.

Public traffic management – During construction it will be necessary to undertake traffic management measures to create construction working space. Where possible existing road movements and pedestrian/cyclist movements will be maintained during construction. However temporary diversions and at times, contra flows will be required to facilitate construction activities.

KEY INTERFACES

- In regard to drainage matters, the Office of Public Works will have to be consulted on an ongoing basis during the detailed design and construction phases of the Scheme.
- Liaison with the Department of Environment, Heritage and Local Government will be required to ensure that requirements in relation to archaeology are adhered to.
- Consideration and ongoing liaison will also be required with, inter alia, the following:
 - Dublin City Council
 - Dun-Laoghaire Rathdown County Council
 - Fingal County Council
 - South Dublin County Council
 - Eastern Regional Fisheries Board
 - Waterways Ireland (Canal Diversion)
 - RPA
 - An Bord Gais
 - Aer Rianta
 - ESB / ESB International
 - CIE
 - Eircom / NTL / Esat