

Jack Lynch Tunnel Newsletter

Introduction

2023 marked the ninth successful year of the Operation and Maintenance of the Tunnels and Traffic Control Centre contract awarded to Egis Road and Tunnel Operations (ERTO) by Transport Infrastructure Ireland (TII). ERTO are proud to deliver the safe operation and maintenance of the Jack Lynch Tunnel (JLT) as a vital part of the motorway infrastructure that supports Cork and its environs. ERTO also manage the Dublin Tunnel and Motorway Traffic Control Centre. The dedicated staff based in JLT provide 24/7 support to more than 90,000 daily road users.

Egis Road and Tunnel Operation Management

Motorway Operations Control Centre (MOCC)

The MOCC monitors and coordinates incident response across the national motorway network. In the past year alone, the MOCC responded to a staggering 14,285 incidents, marking a noteworthy 20% increase from the previous year. This surge in incidents underscores the vital role MOCC plays in managing and mitigating various challenges on our motorways.



MOCC



MOCC Coverage

The monitoring facilities at the Jack Lynch Tunnel control room have been enhanced over the past few months to provide improved visibility within the ERTO area of operations.



JLT Control Room Video Wall

Jack Lynch Tunnel Traffic Volumes

The total traffic volume through the Jack Lynch Tunnel in 2023 was 22,106,225 vehicles giving an average daily traffic of 60,565. This was an increase of 11.5% from 2022 traffic volumes. The current daily traffic volumes are estimated to be more than 90,000.



Jack Lynch Tunnel

Project Management Office (PMO)

ERTO PMO has undertaken more than 30 projects under scope development and implementation stage in 2023, deploying best-in-class technologies to ensure our customers' efficient and safe use of the tunnel. The projects were undertaken with minimal impact on the public and have resulted in increased safety improvements to the tunnel for all road users.

Over the course of 2023, a number of enhancements were undertaken to improve public safety and operation of the Jack Lynch Tunnel, including, most critically, the MV/LV Renewal Works, the upgrade of over portal Variable Message Signs (VMS), the upgrade of the Over Height Vehicle Detection Scheme, the refurbishment of the Tunnel Management Building and Operations Control room which included the additional of a new video wall and the addition of new CCTV cameras.

ERTO provide continual support on designing and constructing several external TII projects, including the Dunkettle Interchange upgrade and N40 ITS road enhancement schemes.

ISO Certification

Demonstrating its commitment to upholding the highest industry standards, in 2022 ERTO maintained its certification, awarded by the National Standards Authority of Ireland (NSAI), for:

- Quality (ISO 9001:2015)
- Environmental (ISO 14001:2015)
- Occupational Health & Safety (ISO 45001:2018)
- Asset Management (ISO 55001:2014)
- Information Security (ISO 27001:2013)
- Energy Management (ISO 50001: 2018)



Environmental

ERTO remain committed to protecting our environment. The environmental systems are closely monitored daily. The air quality metrics for the Jack Lynch tunnel bores remained consistently within limits set forth in applicable regulations in terms of environmental safety and emissions. There were no reportable environmental incidents in 2023.

Tunnel Safety

All aspects of the tunnel infrastructure, operations, maintenance, and training are continuously reviewed to ensure that the safest possible service is provided.

The MOCC monitors live traffic in the Jack Lynch Tunnel and implements effective traffic management plans that ensure the smooth and safe passage of traffic through the tunnel. At times, the upgrade of the Dunkettle Interchange has a detrimental effect on traffic flows, and the MOCC team monitors this closely.

On-going interaction and feedback with stakeholders constantly test the safety and responses to significant incident scenarios.



Dunkettle Interchange works

Training and exercises

ERTO are constantly developing our skills and capabilities through both in-house and external training courses. Through constant educational development, we ensure the delivery of a safety-conscious and high-quality customer experience. Tunnel control staff maintain regular contact with stakeholders and their colleagues in Dublin Tunnel to share information and Best Practices.

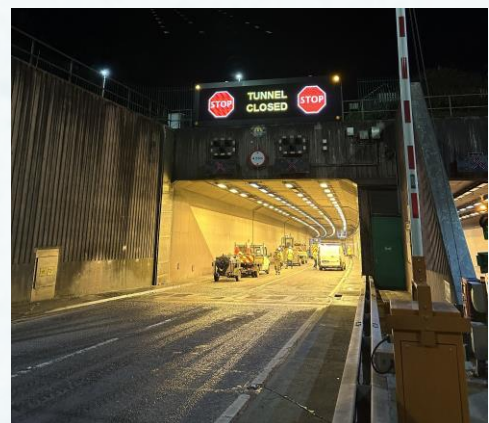
ERTO engaged Reidy Brophy Limited to facilitate an emergency management tabletop exercise based on a serious incident occurring in Jack Lynch Tunnel. It was conducted as a desktop discussion-based exercise on the 26th of October 2022, facilitated by the Tunnel Management Building (TMB) in Little Island, Cork. Eighteen people participated in the training exercise, both in person and online.

Tunnel Maintenance and Closures

In 2023 more than 1,947 cyclical maintenance work orders were completed during day works and 12 full maintenance tunnel closures. To reduce the impact on traffic, planned maintenance or improvement works and subsequent tunnel closures occur at night.

ERTO manage the operation and reliability of Transport Infrastructure Ireland's (TII's) JLT portfolio using a comprehensive asset management system. This system includes detailed Annual Asset Management plans with clearly defined Asset Management strategies and objectives. ERTO also produces a 36-month Forward Capital Works programme (FCWP). The core elements of the asset management system utilise detailed annual reporting such as System Asset Group Status reports, General Inspection reports, cleaning reports, and Special Inspection reports, and every 4 years, a complete Principal Inspection is managed on all 11 specialist systems. ERTO continuously researches ways to complete their O&M obligations using a more lean, strategic approach.

ERTO strive to benefit from technological advances in systems and is making every effort to future-proof the systems. As Egis is an international company ERTO has access to a significant volume of data and system experts worldwide, we continuously collaborate to provide world-class service to both our client and the road user.



Asset Management

Over the past 12-months of 2023 the Department has:

- Updated the Maximo asset management system to the latest version 8. Handheld devices have been implemented on site to improve efficiencies and reduce the environmental impact of the old paper-based system.
- Integrated a change control process with the new Maximo system to ensure accurate tracking via one single platform.
- Developed a refined 36-month Forward Capital Works Program to assist with budgeting and resourcing over the coming years.
- Maintained ISO 55001 accreditation by updating the yearly asset management reporting requirements.

- Development of a yearly contractors work plan to improve planning and explore efficiencies with the closure regimes.
- Development of an obsolescence register and inventory review for the stores.