

## Jack Lynch Tunnel Newsletter

January–December 2016

### Introduction

2016 is the second year of the Operation & Maintenance of Tunnels & Traffic Control Centre contract awarded by TII to Egis Road and Tunnel Operation (ERTO). The 6-year contract provides for the safe operation and maintenance of the Dublin Tunnel (DT), the Jack Lynch Tunnel (JLT) and the Motorway Traffic Control Centre (MTCC). All three projects involve some 92 ERTO staff providing a 24/7/365 service.

As the economy recovers, traffic levels are a good indicator of increased economic activity. From January 1st 2016 up to December 31st 2016 the total traffic volume for Jack Lynch Tunnel was 23,782,122. This was an increase of 2,592,729 on 2015.

Some of this increase in the traffic volumes could be attributed to the Port of Cork. Total traffic through the Port of Cork in 2016 reached a total of 9.2 million tonnes, this is a slight decrease compared to 9.8 million tonnes in 2015.

Total container volumes through both Tivoli and Ringaskiddy Container Terminals in the Port of Cork grew by 2% compared to 2015 figures with over 209,000 TEU's (Twenty foot Equivalent Unit, container) handled. This is very encouraging particularly as the Port moves to develop Ringaskiddy port as their main container terminal. 58 Cruise liners visited the port of cork during 2016 with 69 scheduled for 2017.

The JLT, which is not tolled, recorded average daily traffic throughputs of 71,042 vehicles. Preventive maintenance often requires a tunnel closure or reduced capacity. ERTO works hard to reduce any planned disruption so that there were only 6 planned tunnel closures throughout 2016. These closures have now only of 7 hours' duration.

The Motorway Traffic Control Centre continues to provide a 24 hour single point of contact for all users of the motorway network. Last year there were 9,664 incidents recorded and managed on the network.

*Egis Road and Tunnel Operation Management*

### Jack Lynch Tunnel Traffic Volumes

- Total traffic through the Jack Lynch Tunnel in the period was 23,782,122.
- Highest volumes of traffic in a single month (August) recorded at 2,021,828.
- Highest volumes of traffic in a single day (September) recorded at 73,018
- Lowest volumes of traffic in a single month (February) recorded at 1,818,468.

### Abnormal Loads, Accidents, Over-heights, Breakdowns and Rescues

Over-height vehicles can be source of disruption, requiring constant vigilance of the duty staff. They have a significant impact on tunnel availability and for other other tunnels users, but safety is the highest priority.

- Over the period of the contract to date, 14 overheight vehicles entered the tunnel ignoring the advance warning to divert.
- On the 6<sup>th</sup> of July 2015 at 08:11am, the southern portal of the tunnel was struck by an overheight vehicle during peak traffic flow. There were no injuries to any tunnel user or driver.
- There where 9 cases of over-height vehicles reversing back from the tunnel portals and diverting.
- During this period, the Jack Lynch Tunnel experienced 82 breakdowns involving HGVs and light vehicles. Most incidents required intervention by vehicle recovery staff and the use of equipment.
- We had 46 interventions to remove debris requiring action by the recovery company and the tunnel maintenance technicians.

Fortunately no road traffic accidents involving injury occurred during this period.

## Notable Events

### Cork City Marathon

On Monday the 6th of June 2016 the Cork City Marathon travelled through the Jack Lynch Tunnel and was a great success, this required a full closure of the northbound bore and the southbound bore in contraflow to allow the runners to pass through the tunnel safely. Fitzpatrick's Recovery and Traffic Management Ireland started the traffic management at 04:30am in conjunction with the Gardaí closing off various slip roads and putting diversions in place.

This year due to the international licence the marathon course required a complete re-measurement. The measuring is done on a calibrated bicycle, cycling the route and taking the shortest possible line, with the assistance of the Gardaí

The tunnel was fully reopened at 11:27am after the last of the marathon runners passed through.



Cork City Marathon

## Incidents

There were two vehicle fires outside of the tunnel westbound on the N40; the first was a car fire on 23/02/2016 at 08:07am. This happened approximately 500m after the exit of the south bore in the hard shoulder. The incident was dealt with very efficiently by all the emergency services involved. The incident lasted a total of 33 minutes causing limited disruption to traffic.

The second vehicle fire occurred on 31/12/2016 at 23:36pm, this happened in the hard shoulder just outside the southbound bore and involved another car, the tunnel was fully closed and the incident was also dealt with very efficiently by the emergency services. This incident lasted a total of 51 minutes.

Fortunately, no injury occurred to anybody during these incidents.

## Project Management Office (PMO)

### JLT Tunnel Management building first floor Extension

In October, the ERTO (PMO) completed an extensive building upgrade project with the completion of an entire new first floor on the JLT Tunnel Management building. The new floor will host staff for Transport Infrastructure Ireland (TII) and the TII project team for the Dunkettle Interchange upgrade project team.



### JLT N40 Drainage Works and Monitoring System:

In 2016 ERTO completed the installation of a *Drainage Monitoring System* to monitor levels of water in critical outfalls. The purpose of the system is to provide an early warning to Operations in the event of high rainfall and potential impact to the N40. The replacement of Filter Drainage along the N40 was completed with further drainage works planned for early 2017.

### M50 & Cork Region Laser Scanner

In conjunction with TII, AGS and the MTCC the PMO procured and provide training to AGS on the KOREC Laser Scanner which has been deployed on the M50 & Cork Region. The purpose of the laser scanner is to assist AGS with collection of forensic data at the scene of an incident reducing time on the road and thus reduces impact to traffic.

## ISO / OHSAS Accreditation

ERTO obtained ISO 27001:2013 (information security) and ISO 55001:2014 (asset management) certification. The certification process took one year from already well-established activities, procedures and IT tools. It demonstrates the robustness of the asset management processes and the strong involvement of the team.

This brings to 5 the number of international standards ERTO complies with, further demonstrating its commitment to upholding the highest industry standards.



ISO/OHSAS certificates

## Environmental

In 2016 no incidents of major environmental impact occurred.

The air quality metrics for the Jack Lynch Tunnel bores remained consistently within the limits set forth in applicable regulations.

## Tunnel Safety

Providing a Tunnel that is safe for tunnel users and operational staff is of paramount importance. In that regard all aspects of the tunnel infrastructure, operation, maintenance and training are reviewed on an on-going basis to ensure that the safest possible service is provided.

On the night of Tuesday 11th October 2016 Cork City Fire Brigade carried out essential Fire Brigade activities and training exercises at JLT, Cork City Fire Brigade smoked out the tunnel and simulated a car fire. They also used the newly installed dry riser installations and local equipment during the exercise. All the objectives that were set for that closure were met

## Tunnel Maintenance and Closures

The January to December 2016 period saw 8 planned maintenance closures totalling 59 hours 30 minutes, equating to 0.68% of the year. For improvement works and training exercises the tunnel was closed for 8 hours 54 minutes and only 2 minutes for traffic incidents. To reduce the impact on traffic, planned maintenance and improvement works, and subsequent tunnel closures occur at night.

ERTO employs, on a regular basis, approximately 27 subcontract companies for maintenance works with an average of 85 workers engaged on the tunnel closure nights. ERT0 engage approximately another 15-20 sub-contractor and suppliers on an add-hoc basis.



Tunnel Drain Cleaning