CONWAY

great people : great work

SAFE SYSTEM APPROACH TO ROAD RISK

A presentation to the PRAISE Conference
January 2019

OUR ACTIVITIES

Independent
Family-run Business

Infrastructure Maintenance
New Build, Repair, Maintenance Highways

Construction Materials
Manufacture of Highways
Maintenance Materials

Recycling
Recovery for Re-use of
Highways Materials

Logistics
Distribution of Materials,
Plant & Labour

CHALLENGES

Safety
For Contractors, Customers & The Public

Delivery
That brings capability, capacity, resilience and surety of cost

Improved customer experience
Through innovation in materials and working practices

Cost efficiencies
In capital and lifetime expenditure

THE STORY BEGINS....

IN FEBRUARY 2013 WE RECEIVED AN E-MAIL FROM TFL

From: Freight [mailto:freight@tfl.gov.uk]
Sent: 01 February 2013 17:54
To: Central Services
Subject: Letter from Sir Peter Hendy

Dear Mr Conway

In 2011 there were 16 cyclist fatalities on London's roads, s
commissioned research to examine whether there are any se
published.

Please find attached the full report, a summary report and a

We look forward to working with you throughout 2013 to i

Transport for London

Transport for London

Mr Michael Conway
FM Conway
Conway House
Rochester Way
Dartford
Kent
DA1 3QY

Transport for London

1 February 2013

Dear Mr Conway,

Construction logistics and t

As I'm sure you are aware, the
city for cycling and has set a t
2026. Over the past 10 years
Despite this growth some impa
concerns about cycling safety.

In 2011 there were 16 cyclist f
construction vehicle. Transpo
safety, particularly that of mot
But the 2011 data highlight the
construction vehicles on Lond

In 2012, TfL commissioned the
construction industry logistics
vehicle specific reasons behin
HGV/cyclist fatality statistics
and the Safety of Cyclists) are
driver training, vehicle routing
number of recommendations
organisations.

A copy of the final research re
organisations in order to carry
these recommendations is the

to be

Transport Research Laboratory
Creating the future of transport

PUBLISHED PROJECT REPORT PPR640

Construction logistics and cyclist safety
Summary report

S Helman, E Delmonte, J Stannard

Transport Research Laboratory
Creating the future of transport

PUBLISHED PROJECT REPORT PPR639

Construction logistics and cyclist safety
Technical report

E Delmonte, J Manning, S Helman, D Basacik, J Scoons, J Chappell, J Stannard, M Jones, I Knight

TRL REPORT - WHY?

COMMISSIONED BY TRANSPORT FOR LONDON IN 2012 TO:

- research construction industry logistics and cycling safety,
- consider reasons behind the construction industry's over representation in HGV/cyclist fatality statistics
- understand the relative risk represented by construction vehicles to cyclists, when compared with general haulage vehicles?
- Are there features of contractual arrangements, working practices, driver behaviour, or vehicle design (or combinations of these)

FINDINGS & RECOMMENDATIONS

EVIDENCE SUGGESTED THAT CONSTRUCTION VEHICLES ARE OVER-REPRESENTED.

Report made: Eleven Findings, Twelve Associated Recommendations.

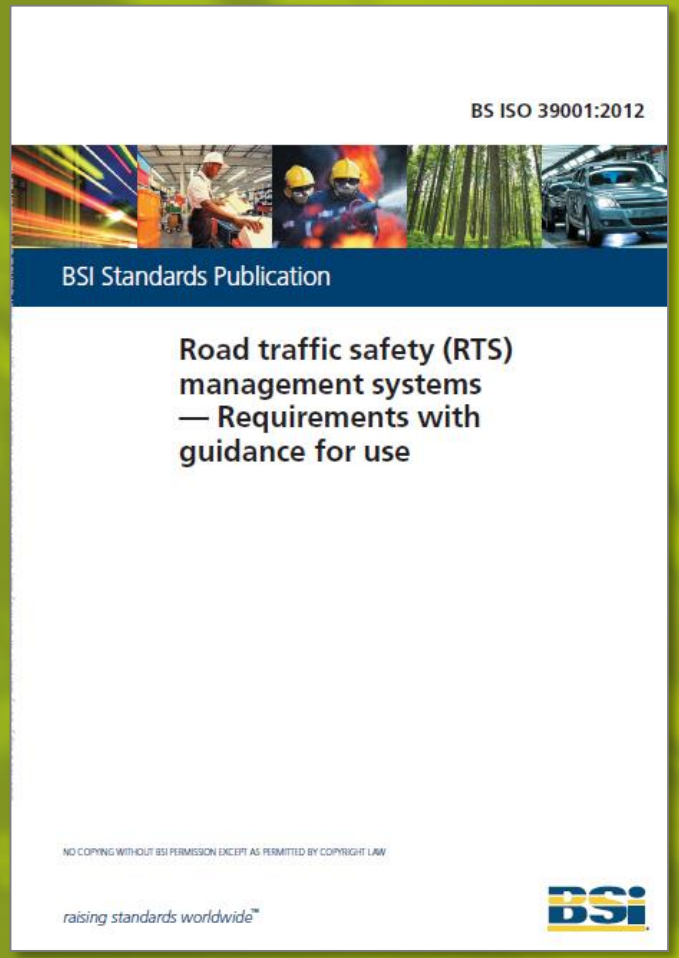
Recommendation 2:

Adherence to a nationally recognised standard on work-related road safety (such as the ISO39001 standard on road traffic safety management) should be promoted

WHAT IS ISO39001?

BS ISO 39001 - ROAD TRAFFIC SAFETY MANAGEMENT SYSTEMS

- Internationally agreed industry standard
- Structured framework for combating complacency and identifying continual improvements in best practice safety management.
- Target reduction of death and serious injury in road traffic crashes.
- Holistic approach to road-traffic safety to complement existing road traffic programmes and regulations.
- Process approach encouraging continual improvement
- Proven by successful ISO standards such as ISO 9001 for quality management.



REQUIREMENTS OF THE STANDARD

7 KEY AREAS

Context of the organisation –	external & internal issues relevant to the business that affect Road Traffic Safety
Leadership –	Policy, Integration into business, Resources
Planning –	Process to: Review; Evaluate Risks; Determine Improvements; Set Targets, Plan to achieve.
Support –	Coordination, Training, Resources, Awareness, Communication, Documentation
Operation –	The processes to achieve the plans
Performance Evaluation –	Measuring how well we are doing
Improvement –	Address Shortcomings, Opportunities for Improvement

WHAT WE DID…

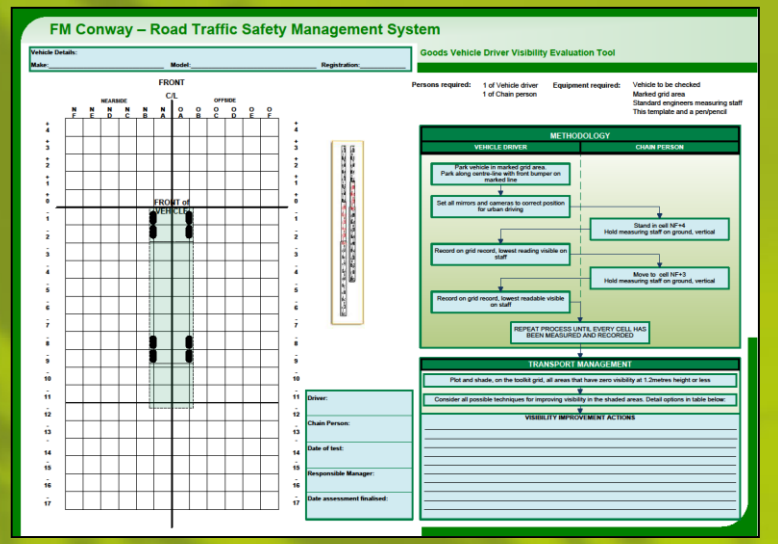
RIGHT PERSON:

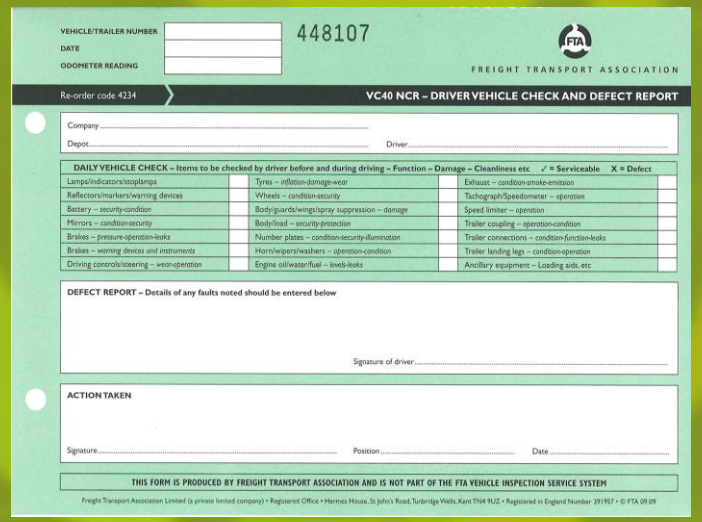
- Licence Checks;
- Qualifications;
- Driver Assessments;
- Health (including eyesight checks);
- Training;
- Safety Culture;
- Professional Development

WHAT WE DID…

RIGHT VEHICLE:

- Formal Maintenance Regime;
- Daily Driver Checks;
- Liaison with vehicle manufacturers;
- Safety features;
- Visibility Assessment

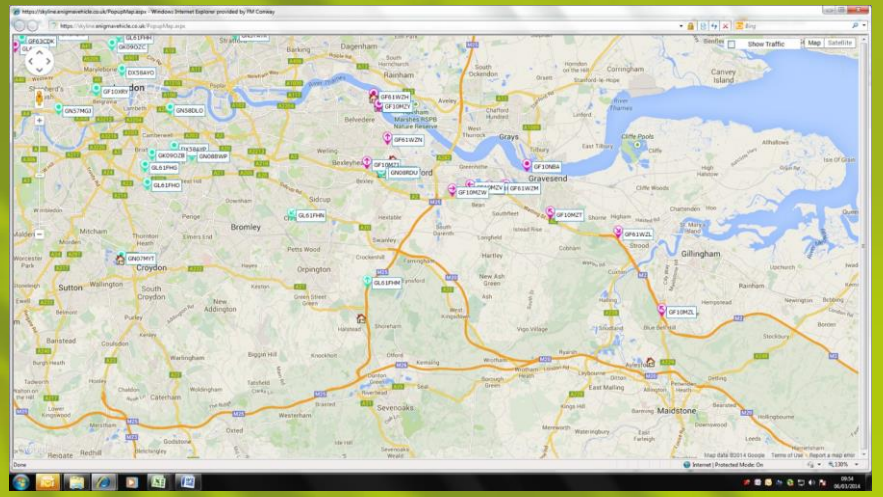


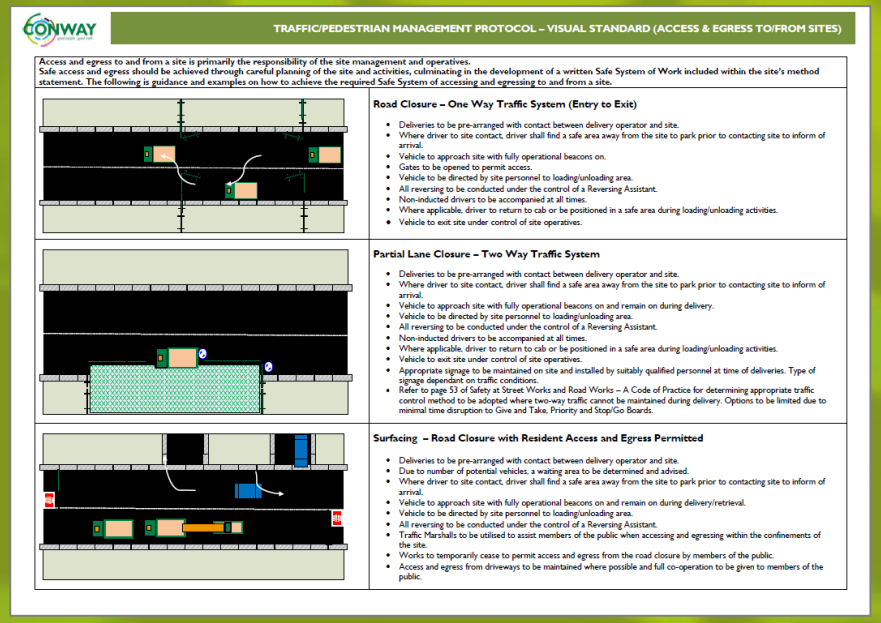


WHAT WE DID…

RIGHT PLACE:

- Route Planning;
- Safe Access and Egress from sites;
- Safe Access and Egress from depots/yards





TRAFFIC/PEDESTRIAN MANAGEMENT PROTOCOL – VISUAL STANDARD (ACCESS & EGRESS TO/FROM SITES)

Access and egress to and from a site is primarily the responsibility of the site management and operatives.
Safe access and egress should be achieved through careful planning of the site and activities, culminating in the development of a written Safe System of Work included within the site's method statement. The following is guidance and examples on how to achieve the required Safe System of accessing and egressing to and from a site.

Road Closure – One Way Traffic System (Entry to Exit)

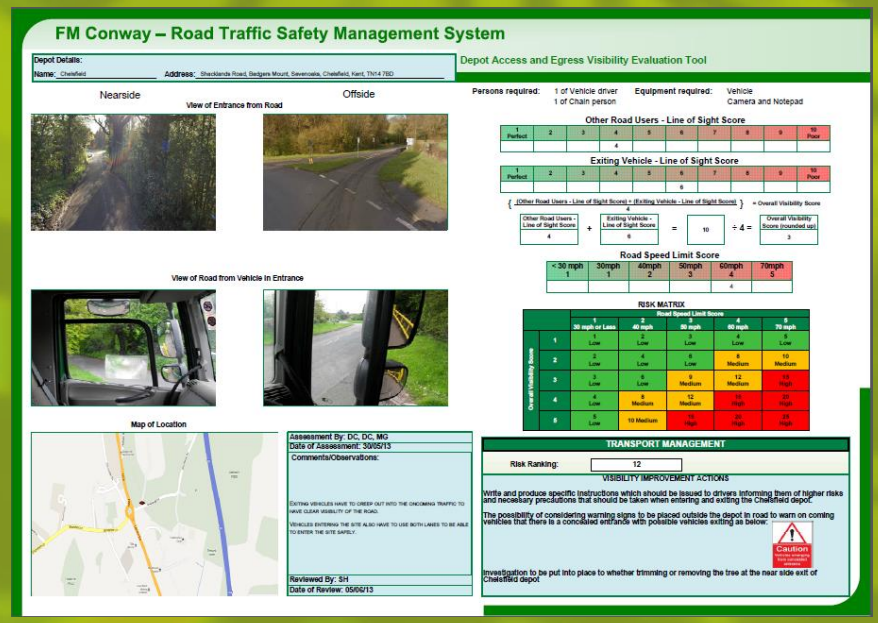
- Deliveries to be pre-arranged with contact between delivery operator and site.
- Where driver to site contact, driver shall find a safe area away from the site to park prior to contacting site to inform of arrival.
- Vehicle to approach site with fully operational beacons on.
- Gates to be opened to permit access.
- Vehicle to be directed by site personnel to loading/unloading area.
- All reversing to be conducted under the control of a Reversing Assistant.
- Non-inducted drivers to be accompanied at all times.
- Where applicable, driver to return to cab or be positioned in a safe area during loading/unloading activities.
- Vehicle to exit site under control of site operatives.

Partial Lane Closure – Two Way Traffic System

- Deliveries to be pre-arranged with contact between delivery operator and site.
- Where driver to site contact, driver shall find a safe area away from the site to park prior to contacting site to inform of arrival.
- Vehicle to approach site with fully operational beacons on and remain on during delivery.
- Vehicle to be directed by site personnel to loading/unloading area.
- All reversing to be conducted under the control of a Reversing Assistant.
- Non-inducted drivers to be accompanied at all times.
- Where applicable, driver to return to cab or be positioned in a safe area during loading/unloading activities.
- Vehicle to exit site under control of site operatives.
- Appropriate signage to be maintained on site and installed by suitably qualified personnel at time of deliveries. Type of signage dependant on traffic conditions.
- Refer to page 53 of Safety at Street Works and Road Works – A Code of Practice for determining appropriate traffic control method to be adopted where two-way traffic cannot be maintained during delivery. Options to be limited due to minimal time disruption to Give and Take, Priority and Stop/Go Boards.

Surfacing – Road Closure with Resident Access and Egress Permitted

- Deliveries to be pre-arranged with contact between delivery operator and site.
- Due to number of potential vehicles, a waiting area to be determined and advised.
- Where driver to site contact, driver shall find a safe area away from the site to park prior to contacting site to inform of arrival.
- Vehicle to approach site with fully operational beacons on and remain on during delivery/retrieval.
- Vehicle to be directed by site personnel to loading/unloading area.
- All reversing to be conducted under the control of a Reversing Assistant.
- Traffic Marshalls to be utilised to assist members of the public when accessing and egressing within the confinements of the site.
- Works to temporarily cease to permit access and egress from the road closure by members of the public.
- Access and egress from driveways to be maintained where possible and full co-operation to be given to members of the public.



FM Conway – Road Traffic Safety Management System

Depot Details:
Name: Chelsfield Address: Shecklands Road, Badgers Mount, Sevenoaks, Chelsfield, Kent, TN14 7BD

Depot Access and Egress Visibility Evaluation Tool

Nearside / Offside

View of Entrance from Road

View of Road from Vehicle in Entrance

Map of Location

Persons required: 1 of Vehicle driver, 1 of Chain person
Equipment required: Vehicle, Camera and Notepad

Other Road Users - Line of Sight Score

Exiting Vehicle - Line of Sight Score

{ (Other Road Users - Line of Sight Score) + (Exiting Vehicle - Line of Sight Score) } ÷ 4 = Overall Visibility Score

Other Road Users - Line of Sight Score + Exiting Vehicle - Line of Sight Score = 10 ÷ 4 = Overall Visibility Score (rounded up) 3

Road Speed Limit Score

< 30 mph	30mph	40mph	50mph	60mph	70mph
1	1	2	3	4	5

RISK MATRIX

Road Speed Limit Score

Overall Visibility Score	1 30 mph or Less	2 40 mph	3 50 mph	4 60 mph	5 70 mph
1	1 Low	2 Low	3 Low	4 Low	5 Low
2	2 Low	4 Low	6 Low	8 Medium	10 Medium
3	3 Low	6 Low	9 Medium	12 Medium	15 High
4	4 Low	8 Medium	12 Medium	16 High	20 High
5	5 Low	10 Medium	15 High	20 High	25 High

Assessment By: DC, DC, MG
Date of Assessment: 30/05/13
Comments/Observations:

Exiting vehicles have to creep out into the oncoming traffic to have clear visibility of the road.

Vehicles entering the site also have to use both lanes to be able to enter the site safely.

Reviewed By: SH
Date of Review: 05/06/13

TRANSPORT MANAGEMENT

Risk Ranking: 12

VISIBILITY IMPROVEMENT ACTIONS

Write and produce specific instructions which should be issued to drivers informing them of higher risks and necessary precautions that should be taken when entering and exiting the Chelsfield depot.

The possibility of considering warning signs to be placed outside the depot in road to warn on coming vehicles that there is a concealed entrance with possible vehicles exiting as below:

Caution Vehicles emerging from concealed entrance

Investigation to be put into place to whether trimming or removing the tree at the near side exit of Chelsfield depot

……10 MONTHS LATER

WHAT'S IN IT FOR US?

COST BENEFITS:

- **Insurance Premiums**

  (saving of £56k in year 1 – 10%)

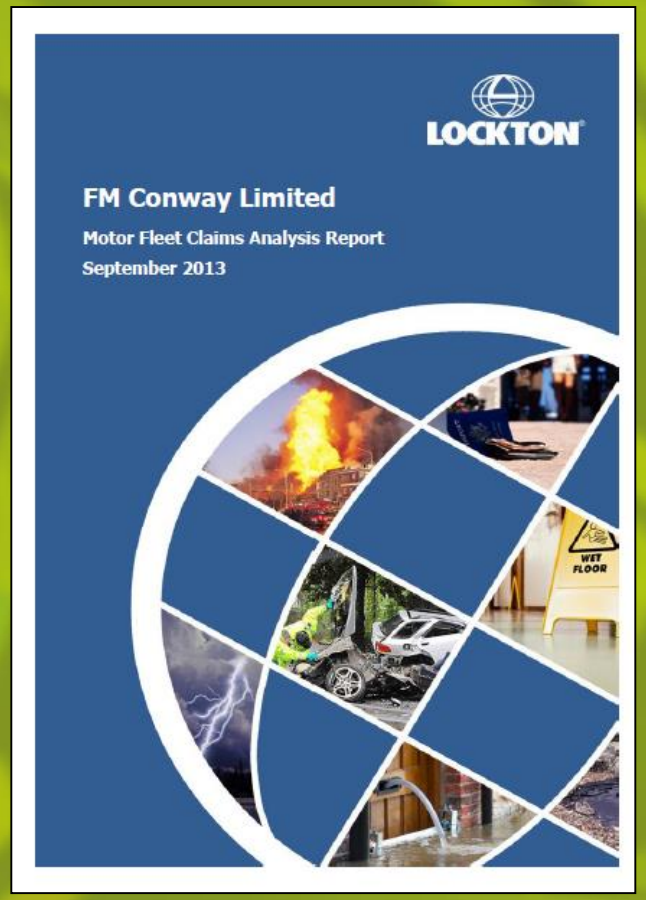
- **Repair & Maintenance Costs**

  (15% overall reduction despite 5%

  increase in routine costs)

- **Improved Fuel Efficiency**

  (Average MPG, per vehicle up by 3.8)



WHAT'S IN IT FOR US?

SOCIETAL BENEFITS

Improvement of safety on the road traffic network

…. Really!!

WHAT'S IN IT FOR US?

PRIDE:

- ETSC Praise Awards November 2018
  - Highly Commended
    "for efforts in managing work related road safety"

- Brake Fleet Safety Awards 2017
  - Dr Will Murray Award
    "for Analysis and Action"

- Transport for London Supplier Awards 2017
  " for the Best Safety Initiative"

- MPA Health and Safety Awards 2015 - TfL Reducing Occupational Road Risk Trophy

… SINCE THEN…. NEW INITIATIVES

Recognising Professional Drivers' Skills and Knowledge

Improved Nearside Visibility Windows

Low Entry / Hi-visibility vehicles "Econics"

Managing Driver Distraction from Mobile Phones

… FUTURE INITIATIVES

ADVANCED TELEMATICS SYSTEMS

Currently undertaking trial of "Lightfoot" system … offering:

- **fuel savings of up to 20%** by educating the driver on how to drive the vehicle in the manner in which it was engineered.
- **reduce driver-fault collision and incident rates** by up to 60%.
- **Lower wear and tear costs** and reduced vehicle downtime through improved driver behaviour.
- **Reduced carbon emissions** by reducing aggressive acceleration, unnecessary idling and inappropriate gear usage.

… HELPING OTHERS

Brighton and Hove City Council
- 1st Municipal Authority in UK to achieve ISO 39001

Chair of BSI Technical Committee RTS/1
"Road Traffic Safety Management Systems"
(UK Mirror Committee responsible for the UK input to ISO/TC241 for the development of International Standard on road traffic safety management systems)

Head of UK Delegation to ISO/TC241
Member of Working Group WG5 (ISO 39002)

… DEVELOPING STANDARDS

ISO/TC 241
Road traffic safety management systems
Resolutions 01-08/2018
12th ISO/TC 241 meeting
Kuala Lumpur, Malaysia December 5th 2018

RESOLUTION ISO/TC 241 01/2018

Subject: United Nations Sustainability Development Goals 2030

ISO/TC 241: - recognizes the UN SDGs 12.6: Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle and 12.7: Promote public procurement practices that are sustainable, in accordance with national policies and priorities and;

ISO/TC 241 RESOLVES:

- to recognize the importance of ISO 39001 for road traffic safety and specifically as a tool to actively support the UN SDGs 12.6 and 12.7.

… DEVELOPING STANDARDS

ISO/TC 241
Road traffic safety management systems
Resolutions 01-08/2018
12th ISO/TC 241 meeting
Kuala Lumpur, Malaysia December 5th 2018

RESOLUTION ISO/TC 241 02/2018

Subject: NWIP Ethical considerations for driverless vehicles

ISO/TC 241 resolves:

- **to request the ISO/TC 241 Secretariat to communicate with ISO Central Secretariat regarding the Scope of the NWIP vs. the Scope of ISO/TC 241 and other ISO/TCs (to identify the relevant ISO/TC for the work) and;**

- **to request the ISO/TC 241 Secretariat to issue the NWIP CIB/Committee Internal Ballot subject to the above-mentioned communication with the ISO Central Secretariat.**

… DEVELOPING STANDARDS

ISO/TC 241
Road traffic safety management systems

Resolutions 01-08/2018
12th ISO/TC 241 meeting
Kuala Lumpur, Malaysia December 5th 2018

RESOLUTION ISO/TC 241 04/2018

Subject: Working Group/WG 5 – ISO 39002 Road traffic safety

Good practices for implementing commuting safety management

ISO/TC 241 RESOLVES:

- to request the ISO/TC 241 Secretariat to proceed with the ballot for DIS/ISO 39002

THANK YOU FOR YOUR TIME

Any Questions?