

**REPORT BY THE CHANNEL TUNNEL  
INTERGOVERNMENTAL COMMISSION ON  
SAFETY IN THE CHANNEL TUNNEL FIXED  
LINK DURING 2016**

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## **A - Scope of the report**

1. This report contains information relating to the activities of the Channel Tunnel Intergovernmental Commission (IGC) in its role as the safety authority for the Channel Fixed Link (the Channel Tunnel) within the terms of the European Railway Safety Directive (2004/49/EC). The IGC's responsibilities extend only to the area of the Fixed Link as described in the Treaty of Canterbury<sup>1</sup> between the United Kingdom and France and the Concession Agreement<sup>2</sup> between the two Governments and the Concessionaires. This report covers the period from 1 January to 31 December 2016.

2. As this report is written in English the optional summary in that language has not been prepared. A French translation has been prepared and submitted to ERA together with the English document as it is the policy of the IGC to make all of its documents that are in the public domain available in both English and French. Readers of the French version who wish to consult the optional summary in English are invited to refer to the full English version which includes a summary.

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<sup>1</sup> Available on the IGC website at [http://www.channeltunneligc.co.uk/spip.php?action=acceder\\_document&arg=93&cle=939ac28402cdf20e06d641b2ef2d1ece&file=pdf%2FTreaty\\_of\\_Canterbury\\_1986.pdf](http://www.channeltunneligc.co.uk/spip.php?action=acceder_document&arg=93&cle=939ac28402cdf20e06d641b2ef2d1ece&file=pdf%2FTreaty_of_Canterbury_1986.pdf)

<sup>2</sup> Available on the IGC website at [http://www.channeltunneligc.co.uk/spip.php?action=acceder\\_document&arg=94&cle=eb523418f351e57679238f0cf5452e8d&file=pdf%2FConcession\\_Agreement.pdf](http://www.channeltunneligc.co.uk/spip.php?action=acceder_document&arg=94&cle=eb523418f351e57679238f0cf5452e8d&file=pdf%2FConcession_Agreement.pdf)

## **B. Preliminary section**

3. **Introduction-** The directive on the safety on the Community's railways (2004/49/EC amended) contains a clause concerning a binational body entrusted by the Member States to ensure a unified safety regime for specialised cross-border infrastructures, said body performing the functions of a 'safety authority' (NSA). This clause has been implemented for the fixed channel link, France and the United Kingdom agreeing that the IGC would be the 'safety authority'. This report is prepared in accordance with Article 18 of the Directive and complies as far as possible with the model established and guidance issued by the European Union Agency for Railways Agency (the Agency) , which aims to provide a structure and table of common elements for this type of report. As required by the Directive, the report is submitted to the Agency.

4. **Information on the railway infrastructure** – The channel tunnel railway infrastructure includes a rail link consisting of two drilled twin rail tunnels connecting Cheriton in Kent, England and Fréthun in the Pas-de-Calais, France, as well as the terminals located on each side. The terminals include: high-speed lines linking the tunnel to the British and French national railway networks; rail loops and docks for loading and unloading passenger and freight shuttles; depots, maintenance facilities and railroads linking to the rest of the infrastructure.

5. **Infrastructure manager** - A network map and information about Eurotunnel, the infrastructure manager of the Fixed Channel Link, are given in Appendix A.

6. **Railway companies** – The rail transport companies which have operated trains in the channel tunnel during the period covered by this report are: DB Cargo UK, Eurostar International Ltd and GB Railfreight Limited. The addresses and websites of these railway companies are provided in Appendix A.3. The annual reports of the French and British safety authorities provide further information about them.

7. **Summary** - In 2016, the major events were as follows:

- establishment of a dedicated working group to review and monitor measures taken by Eurotunnel and ElecLink to manage the safe installation of the high voltage electricity cable in the Tunnel, as required under the prior consent given by the IGC for these works on 7 February 2014;
- ongoing monitoring by the Safety Authority of measures being undertaken to deliver recommendations made in two reports in respect of the fire on an arbel freight shuttle on 17 January 2015: the National Investigation Body (NIB) report published by the Bureau d'Enquêtes sur les Accidents de Transport Terrestre (BEA-TT) and the Rail Accident Investigation Branch (RAIB) on 5 May 2016; and the IGC commissioned report by from Claude Gressier and Chris Gibb into the management of disruption in in the Channel Tunnel;
- the IGC facilitated a workshop in Mach 2016 with freight operators, infrastructure managers, government bodies and other stakeholders to consider ways of addressing specific difficulties being faced in this sector and explore ways of increasing the freight traffic use of the Channel Tunnel. This was supplemented by further discussions later in the year;

- consideration of Eurotunnel application for authorisation to place in service new HGC freight shuttles, which included consideration over the configuration of pagoda roof structures to be used;
- ongoing additional authorisations of new Velaro e320 / Class 374 trainset to be used in the Chanel Tunnel.
- further applications for the authorisation of trainsets 12 to 17 are expected to be submitted
- the signing of a cooperation agreement between the IGC and the Agency allowing the sharing of information on safety authorisation and certification; and
- agreement of a document establishing cooperation arrangements between the IGC and the two national regulators, ARAFER and ORR, and identifying the IGCs economic responsibilities following the coming into effect on 15 June 2016 of the binational regulation transferring rail regulation competence.

8. **Analysis of global trends** - the IGC and Safety Authority continued their monitoring of Eurotunnel's safety management system (SMS) as well as their monitoring of safety outcomes. The most common safety indicators reported in detail in Appendix C remain at zero. For SPADs (Signals Passed at Danger), loss of control of switches, detection of locked brakes, failure to comply with signalling, fuel spills and door incidents at crossing junctions), Eurotunnel did not reach its Passenger Individual Safety indicator target of 270 incidents. However, the trend improved throughout the year, reaching a level of 288 at the end of December 2016 (compared to 334 in December 2015).

The target rate for the frequency of collective safety events (emergency braking due to slippage or automatic activation and stops in the tunnel for more than 30 minutes) of 75 incidents was exceeded with a rate of 69 in December 2016, improving from 98 at the end of December 2015.

## **C - Organisation**

9. The IGC was created by the Treaty of Canterbury to supervise, on behalf of the governments of the United Kingdom and the French Republic and by delegation thereof, all issues concerning the construction and operation of the Fixed Link. Among its duties, the IGC is responsible for developing any regulations applicable to the Fixed Link or for contributing to their development.

10. The Treaty of Canterbury also set up the Channel Tunnel Safety Authority to advise and assist the IGC on all matters relating to safety during the construction and operation of the Fixed Link. The functions of the Channel Tunnel Safety Authority are also to ensure that safety regulations and practices applicable to the Fixed Link comply with national or international regulations, to enforce such regulations and to monitor their implementation, to examine reports into any incidents affecting safety, to make inquiries and to report to the IGC.

11. The British and French Secretariats ensure the preparation and implementation of decisions by the IGC and the Channel Tunnel Safety Authority.

12. A diagram showing the structure of the IGC and its links with other organisations is given in Appendix B.

## D. Changes in railway safety

### D 1 - Initiatives to maintain or improve safety results

**Table D.1.1 - Safety measures triggered by accidents / precursors of accidents**

Accidents / precursors of accidents which triggered the measure			Determined safety measure
Dated	Place	Event Description	
N/A	-	-	-

**Table D.1.2 - Safety measures (or voluntary measures) triggered by factors other than accidents / precursors of accidents**

Description of the area of concern	Description of the trigger	Determined safety measure
N/A		

### D 2 - Detailed analysis of trends

13. Very few precursors (incidents that could lead to an accident) occurred in the Channel Tunnel. The IGC and the CTSA did not conduct a "detailed analysis of trends" compared to the CSIs (Common Safety Indicators) because in view of the small number this would not be a useful or proportionate method likely to provide significant information on safety performance. In 2016, there were 15 broken rails and two SPADs. Below, a summary of precursors occurring allows a comparison with the incidents of the previous year:

	2015	2016
Total number of precursors	15	17
Total number of broken rails	12	15
Total number of track buckles	0	0
Total number of signalling failures	0	0
Total SPAD	3	2
Total number of broken wheels on rolling stock in service	0	0
Total number of broken axles on rolling stock in service	0	0

14. **Common Safety Indicators (CSI)** - Details on CSIs as defined in Directive 2009/149/EC (amending Directive 2004/49/EC with regard to CSIs and common methods to calculate the cost of accidents) are given in Appendix C. It should be noted that the IGC and the Safety Authority receive a significant amount of richer and more useful data from Eurotunnel and the railway companies that help them develop their approach to regulatory and supervisory activity (and which also help stakeholders understand the performance of the safety management systems). However, this useful and interesting data falls outside the scope of CSI reports.

### **D 3 - Results of safety recommendations**

15. On 5 May 2016 BEA-TT and RAIB published their joint NIB report into the fire on Eurotunnel (Arbel) freight shuttle 7340 which occurred on 17 January 2015.<sup>3</sup> This report contained six recommendations (all addressed to Eurotunnel) and six invitations (five for Eurotunnel and one for the IGC). In accordance with its legal obligations<sup>4</sup> the IGC, as NSA for the Channel Tunnel, provided its response to this report on 11 May 2017 outlining the measures that are being taken or are planned as a consequence of the recommendations made.

16. The IGC has committed to monitor actions to deliver the outstanding recommendations and invitations and report at least annually to BEA-TT and RAIB. on progress.

### **E - Important changes to laws, regulations and administrative provisions**

17. **Regulation on the safety of the Fixed Channel Link** - No new regulations have been implemented for the Channel Tunnel in 2016.

18. **Other major regulatory dossiers processed by the IGC and Safety Authority** - Other important issues that have been processed by the IGC and the Safety Authority during the year are as follows:

- **Cross-acceptance of rules for railway vehicles passing through the tunnel** – Following the signing in 2013 of a formal agreement between ORR-EPSF regarding the mutual recognition of railway vehicles, the Safety Authority continued to work with EPSF and Eurotunnel to compare relevant national and Channel Tunnel reference document requirements to agree whether rules are equivalent and therefore do not need to be re-checked as part of the vehicle re-authorisation process.
- **Discussions with railway companies and rolling stock manufacturers** - During the year, the IGC and the Safety Authority continued to hold

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<sup>3</sup> Available on the RAIB website at

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/521184/160505\\_ReportET2016\\_eurotunnel\\_eng.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/521184/160505_ReportET2016_eurotunnel_eng.pdf).

<sup>4</sup> Pursuant to Article 72 of the Regulation of the Intergovernmental Commission on the use of the Channel Tunnel dated 24 January 2007, as amended by the IGC Regulation signed on 6 February 2013, published in France by the Decree No. 2013-318 of 15 April 2013 and the United Kingdom by the Statutory Instrument 2013 No. 407: The Channel Tunnel (Safety) (Amendment) Order 2013).



discussions with the railway and rolling stock manufacturers about the requirements they must meet to obtain technical approval for use of the tunnel.

- **Participation in the work of the Agency and its working groups** - The IGC and Safety Authority have continued to play a full part in the work of the Agency and its various working groups. Given their close relationship with the safety authorities of France and the United Kingdom, the IGC and Safety Authority rely to the close ties they hold with the experts of the safety authorities (many of them are themselves members or advisors on the Security Authority). The IGC and safety Authority participate directly in the working groups which have a specific importance regarding the Channel Tunnel and its representatives have attended all meetings of the network of national safety authorities of the Agency and working groups dealing with national rules and mutual recognition.

## **F - Changes in the safety certification and approvals**

19. The directive on Community Railway Safety was transposed in respect of the tunnel by the binational safety regulation of 24 January 2007 which entered into force on 4 July 2008 via Statutory Instrument 2007-3531 in the UK and Decree 2008-748 in France. The revised directive on railway safety (2008/110/EC) and new Interoperability Directive (2008/57/EC) were transposed for the Fixed Link in March 2013 via a modified binational regulation supplementing the regulation for national interoperability. The revised guide to the implementation of the regulation is available on the IGC website at the following url:

<http://www.channeltunneligc.co.uk/-Regulations-and-guidance-.html?lang=en>

## **G - Supervision of railway undertakings and infrastructure managers**

20. The 1986 Treaty of Canterbury assigned to the Channel Tunnel Safety Authority the responsibility to ensure that safety regulations and practices applicable to the Fixed Link comply with national and international laws, to enforce those laws, to monitor implementation and to report to the Intergovernmental Commission. The treaty also stipulates that, in order to ensure its remit, the Safety Authority may request the assistance of the administrations of each of the governments, as well as the assistance of any body or expert of its choice, and that both governments must give the safety Authority and its members and agents the powers of investigation, inspection and prescription necessary for the exercise of its functions. The quadripartite concession agreement stipulates that concessionaires must give access to any part of the Fixed Link to persons duly authorised by the IGC or with the approval thereof by the Safety Authority, so that these people, as part of their duties, may inspect the Fixed Link and investigate any matter relating to the construction or operation thereof. Concessionaires must provide these people with all means necessary for the exercise of their functions.

21. The broad mandate given to the Safety Authority by the Treaty of Canterbury means it is responsible for overseeing a number of matters outside the scope of authority of safety tasks under the safety directive, in particular issues of emergency and civil safety. This is reflected in its supervision strategy.

### 1.1 Audits / Inspections / Controls

22. The annual inspection and audit program of the Safety Authority is established so as to take account of key evidence included in the SMS of Eurotunnel and the railway companies authorised for the Channel Tunnel.

23. The following monitoring methods were used in 2016:

- inspections of Eurotunnel and railway companies (a list of the subjects thereof is given below);
- information flow - regular reports from Eurotunnel such as daily reports by the Operations Duty Manager (ODM); Monthly summaries of incidents and safety performance, minutes of the Concession Safety Committee, Operating Performance reports etc.;
- information obtained from the investigation of incidents and accidents;
- audit reports (internal and external);
- ad hoc meetings between Eurotunnel and Safety Authority experts;
- meetings with the railway companies; and
- Eurotunnel information about its interface with the railways and its change management.

### 1.2 Vigilance aspects / sensitive points to be monitored by the safety authority

24. Inspections during the year have resulted in the following recommendations, which were officially communicated to Eurotunnel (and possibly the railway undertakings) by the Safety Committee:

- Eurotunnel is to provide information on its approach to a technology watch relating to its fire detection systems on board the HGV shuttles and in the tunnels. This information should include documentary evidence of reviews undertaken and results of these reviews, equipment suppliers contacted and feedback obtained from those suppliers;
- DB Cargo should review its arrangements for the monitoring of pre-departure checks on DB Cargo Channel Tunnel services that are carried out by the facility operator at Fréthun yard. Following the review, DB Cargo should put in place suitable monitoring arrangements, appropriate to the volume and type of rail traffic being operated;
- GBRF should review its arrangements for monitoring the performance of its subcontractors responsible for carrying out pre-departure and post-arrival checks at Dollands Moor and Fréthun yards, in order to satisfy itself that this work is being carried out in accordance with the GBRF safety management system. Due to the level of cross-channel traffic being operated by GBRF at the time of writing, GBRF's response, including the implementation of any new monitoring arrangements, should be appropriate for the volume and type of rail traffic being operated;

- The Fréthun Yard facility operator should review its approach to the production of investigation reports and remedial actions in order to ensure that there is clarity of facts, consequences, comments and instructions. Where appropriate this should incorporate good practice demonstrated by other companies within Groupe Eurotunnel subsidiary;
- Supplement Document ORF2 0758 Training and Competency of the M&E Section to include the French team;
- In the short to medium term, many extremely competent technicians, who have been with the company for a number of years, are going to retire. The M&E Department should therefore start thinking about devising a knowledge transfer policy;
- Continue the reflections in progress on setting up a "cleaning system" for the crossover doors bearing races [pathways];
- Run full diagnostic on change process (equipment, procedure and organisational arrangements) and implement the proposed improvements (documentation and training of players). Intervention by an outside body;
- Based on the conclusions which this body will reach, carry out a full risk assessment on the project to "Increase Carrying Capacity for Lorries";
- Eurostar should put in place more robust arrangements for the monitoring and confirming the acknowledgment of receipt and understanding of core operational documents to staff. Eurostar should consider whether document OPS/2402 should be revised to reflect how the acknowledgement of receipt of core documents is carried out;
- Eurostar should ensure that monitoring of how Momentum Services Ltd delivers the revised evacuation training is carried out, in order to ensure that this is consistent with the training delivered to Eurostar staff;
- Eurostar should clarify the arrangements for training on:
  - a) The continued use of hand held radios on the e320 trains during the evacuation process; and
  - b) The use of GSM-R radios during the evacuation process; and
- Eurostar should undertake an assessment of whether the gap between the e320 trains and the tunnel walkway is likely to have an impact on evacuation procedures and implement any improvements identified, if appropriate.

25. All recommendations have been added to a consolidated tracking table for recommendations to enable the Safety Authority to monitor and review its progress in the implementation of appropriate measures to address them with Eurotunnel.

*2. Description of the coverage of legal issues in the annual reports of the railway undertakings and infrastructure manager - availability of annual reports by 30 June [in accordance with Article 9 (4) of the Directive on railway safety]*

26. The infrastructure manager and railway companies have reported their activities in accordance with the requirements of Article 9.4 and Annex I of the Railway Safety Directive.

### 3. Inspections

27. The planned inspection activity continues to be based on the areas identified by the experts of the Safety Authority in their analysis of the Eurotunnel and railway companies' SMSs. However, the inspection plan provides for flexibility to address concerns revealed by the activities of the Channel Tunnel during the year.

28. In total, 7 inspection reports produced by the experts of the Safety Authority were sent to companies in 2016. They covered the following topics:

- Driver Training Arrangements for the Introduction of e320 trains;
- Fire Inspection Officer;
- Management of leakage of hazardous materials;
- UK Terminal Emergency Sidings;
- French and UK sub-stations;
- Arrangements for the management of engineering change; and
- Arrangements under Eurostar's new Channel Tunnel evacuation procedures.

### 4. Audits

29. In 2016, Eurotunnel carried out 26 internal audits, while the three railway companies have undertaken a total of 26 internal audits on topics such as talent management, the maintenance of vehicles used in the tunnel, and rail traffic.

### 5. Summary of measures and relevant corrective actions (amendment, revocation, suspension, important warning, etc.) related to safety aspects following these audits / inspections

30. Overall, the inspection program for 2016 and other monitoring and control activities carried out during the year have provided sufficient data to conclude that even if vigilance must be exercised constantly, use of the Fixed Link continues to be reasonably safe - no significant corrective action was implemented.

### **H - Report on the implementation of the common safety method (CSM) for risk evaluation and assessment**

31 In 2016, the Eurotunnel and the three railway operators have reported that all changes undertaken were found to be non-significant in accordance with the requirement of the CSM for risk assessment and evaluation.

### **I – IGC conclusions regarding 2016 - Priorities**

32. The Tunnel Channel is of immense importance. It is used every year by more than twenty million road and rail passengers between Great Britain and France and connects Great Britain to the high-speed rail network of the rest of Europe. The use of the 50km underwater tunnel does not fully meet the Safety in Railway Tunnels TSI, and poses specific safety problems, especially in case of fire or breakdown, immobilising passengers for hours. It is therefore fully justified that particular attention be paid to the safety rules applicable to the Fixed Link.

33. Priority issues for the future are:

- the ongoing monitoring of works associated with Eurotunnel's ElecLink project to ensure that the installation and operation of the cable is managed safely;
- the publication and notification in clear terms of all technical, operational and safety rules applicable to the tunnel, so as to show that they are aligned with interoperability directives and safety regulations;
- the continued application to the Channel Tunnel of existing and new European laws, including requirements of safety, interoperability and mutual recognition;
- the review of applications for authorisations of new passenger and freight rolling stock for use in the tunnel, and the timely assessment of railway undertaking certification applications for proposed launches of new services in the tunnel;
- the continuous review and improvement of the methods used by the IGC in certification and authorisation;
- the preparation for and the addressing of serious incidents of safety and security, including through the annual repetition of the binational emergency plan, which is a framework for cooperation between the emergency services of the two countries in case of accident or incident in the tunnel; and
- the ongoing monitoring of responses to the recommendations of the Eurotunnel investigative bodies (BEA-TT and RAIB) following the fire on an HGV shuttle on 17 January 2015.

## **J - Sources of Information**

34. The following sources were used when drafting this report:

- Eurotunnel Annual Report on Health and Safety for 2016
- GB Railfreight Annual Report on Health and Safety for 2016
- Eurostar Annual Safety Report for 2016
- DB Cargo Annual Safety Report for 2016

## **K - Annexes**

Annex A: Railway Structure Information

Annex B: IGC Structure and Relationships

Annex C: Data on Common Safety Indicators (separate Excel spreadsheet)

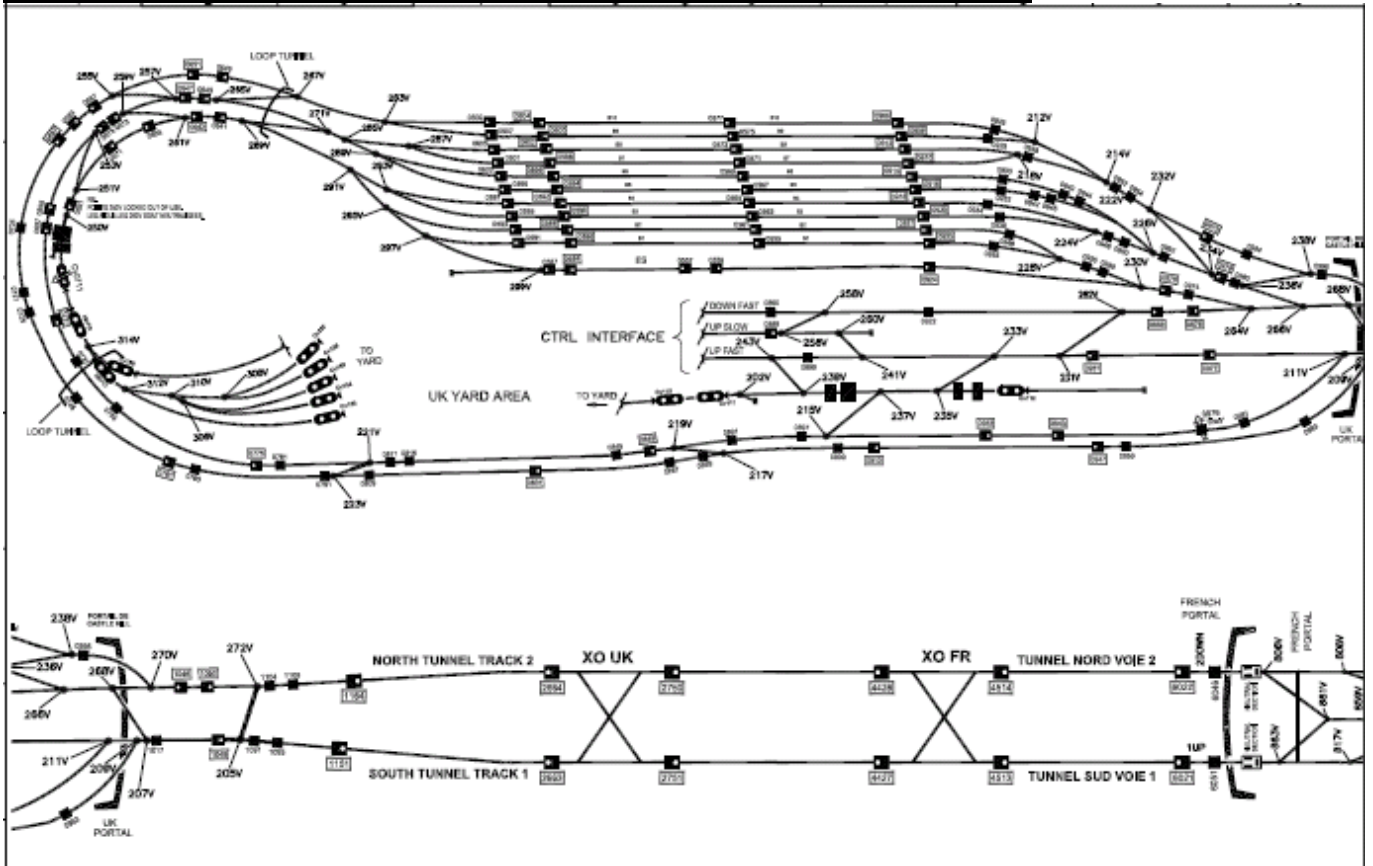
Annex D: Important changes in legislation and regulation

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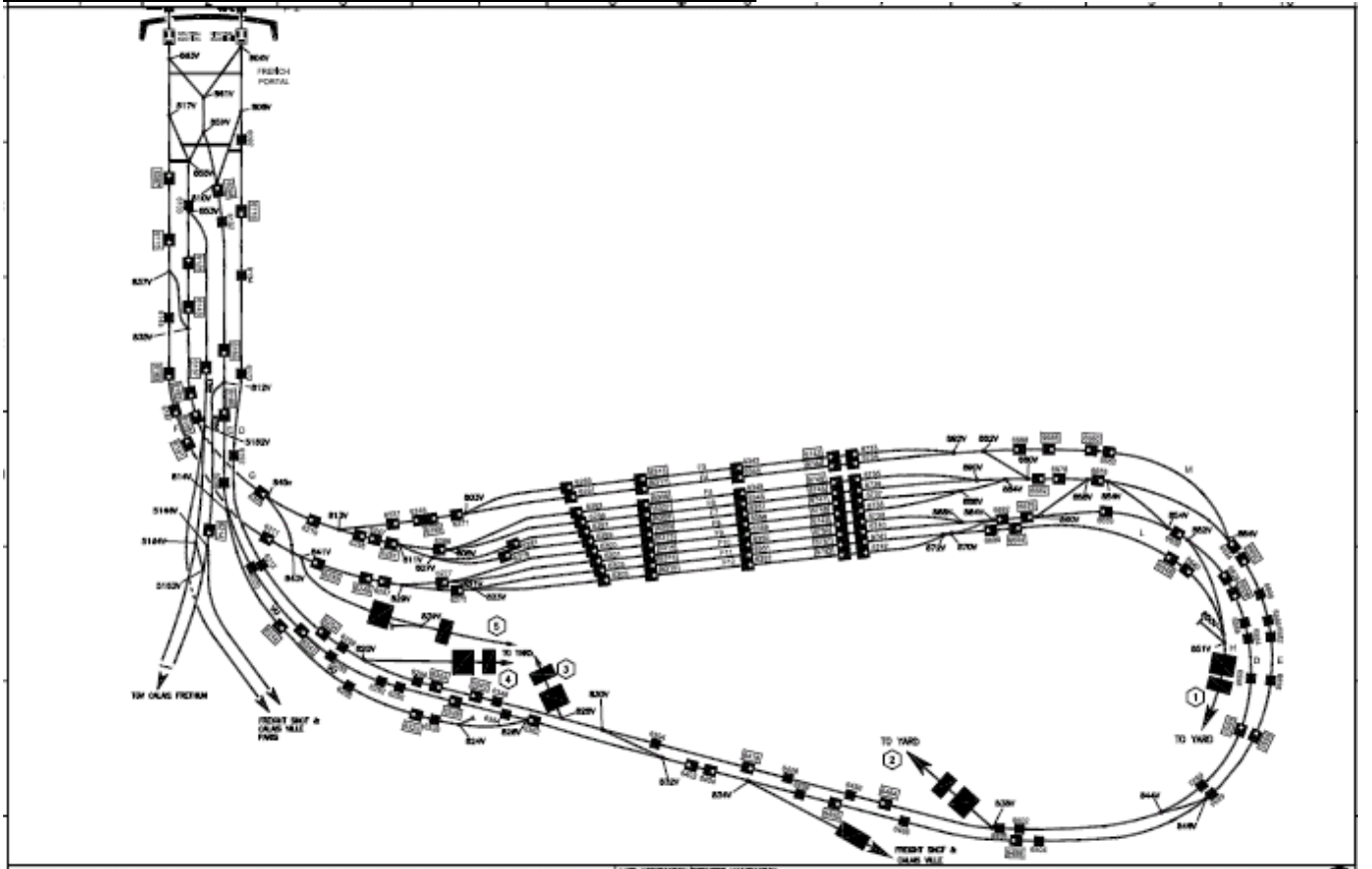
## ANNEX A: Railway Structure Information

### A.1. Network map

#### Network Map Showing Layout of UK Terminal and Running Tunnels



#### Network Map Showing Layout of French Terminal



## **A.2 Information about Eurotunnel - The Infrastructure Manager for the Channel Tunnel Fixed Link**

**Name:** Eurotunnel

**Address:** UK Terminal, Ashford Road, Folkestone, Kent CT18 8XX

**Website:** [www.eurotunnel.com](http://www.eurotunnel.com)

**Network Statement Link:**

[http://www.eurotunnelgroup.com/uploadedFiles/assets-uk/The-Group/Operations/Railways/DRR\\_NS\\_2016\\_EN\\_Final1.pdf](http://www.eurotunnelgroup.com/uploadedFiles/assets-uk/The-Group/Operations/Railways/DRR_NS_2016_EN_Final1.pdf)

**Start Date of Commercial Activity:** May 1994

**Total Track Length:** 159 km main tracks plus 50 km secondary tracks

**Track Gauge:** UIC

**Electrified Track Length:** All track both main and secondary is electrified

**Voltages:** 25,000 volts alternating current

**Total Double/Single Length Track:** 100% double track

**Total Track Length – High Speed Line:** 108 km

**Automatic Train Protection Equipment Used:** TVM 430

**Number of Level Crossings:** None on main tracks

**Number of Signals:** 655

### A.3 Information about the Railway Undertakings

The railway undertakings which operated trains through the Fixed Link in 2014 were as follow:

**Name:** DB Cargo Rail (UK) Limited

**Address:** Lakeside Business Park  
Carolina Way  
Doncaster  
South Yorkshire  
DN4 5PN  
UK

**Website:** <https://uk.dbcargo.com/rail-uk-en/start/>

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**Name:** Eurostar International Ltd

**Address:** Times House  
Bravingtons Walk  
Regent Quarter  
London  
N1 9AW  
UK

**Website:** [www.eurostar.com](http://www.eurostar.com)

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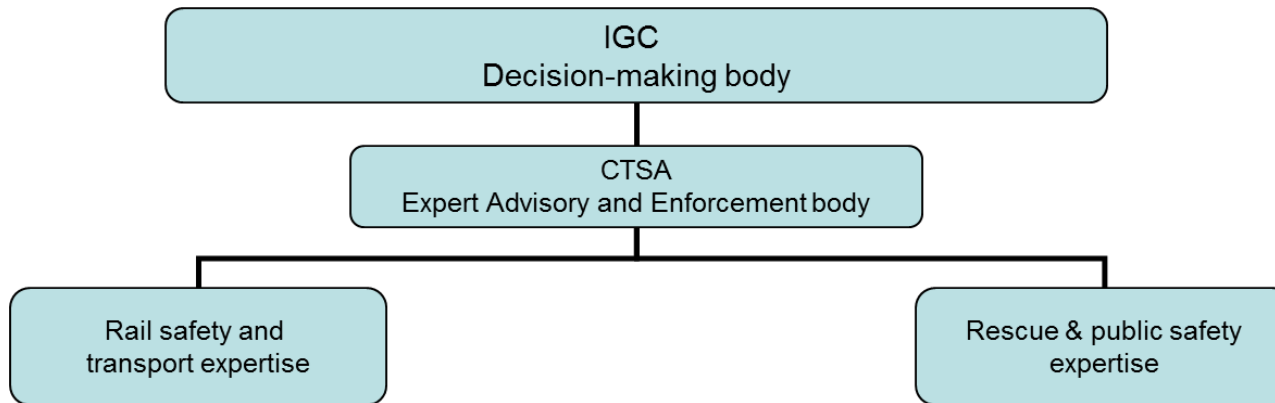
**Name:** GB Railfreight

**Address:** 3rd Floor  
55 Old Broad Street  
London  
EC2M 1RX

**Website:** [www.gbrailfreight.com](http://www.gbrailfreight.com)



**ANNEX B: IGC STRUCTURE AND RELATIONSHIPS**



Each Government appoints half the members of the IGC which comprises 14 members including at least two representatives of the Channel Tunnel Safety Authority (CTSA).

The composition of the CTSA is determined by the two Governments by agreement and each Government appoints half of its members. In 2016, the CTSA had ten members in total, and its work was supported by a number of advisers, inspectors and auditors.

## ANNEX C: COMMON SAFETY INDICATOR (CSI) DATA

Data on Common Safety Indicators for 2015 is shown in a separate “Excel” file.

## ANNEX D: Important changes in legislation and regulation

	Legal reference	Date legislation comes into force	Reason for introduction (Additionally specify new law or amendment to existing legislation)	Description
<b>General national railway safety legislation</b>	Legislation concerning the national safety authority	NONE	N/A	N/A
Legislation concerning the national safety authority	NONE	N/A	N/A	N/A
Legislation concerning notified bodies, assessors, third parties bodies for registration, examination, etc.	NONE	N/A	N/A	N/A
<b>National rules concerning railway safety</b>				
Rules concerning national safety targets and methods	NONE	N/A	N/A	N/A
Rules concerning requirements on safety management systems and safety certification of Railway Undertakings	NONE	N/A	N/A	N/A
Rules concerning requirements on safety management systems and Safety Authorisation of Infrastructure Managers	NONE	N/A	N/A	N/A
Rules concerning requirements for wagon keepers	NONE	N/A	N/A	N/A
Rules concerning requirements for maintenance workshops	NONE	N/A	N/A	N/A
Rules concerning requirements for the authorisation of placing in service and maintenance of new and substantially altered rolling stock, including rules for exchange of rolling stock between Railway Undertakings, registration systems and requirements on testing procedures	NONE	N/A	N/A	N/A
Common operating rules of the railway network, including rules relating to the signalling and traffic procedures	NONE	N/A	N/A	N/A

Rules laying down requirements on additional internal operating rules (company rules) that must be established by the Infrastructure Managers and Railway Undertakings	NONE	N/A	N/A	N/A
Rules concerning requirements on staff executing safety critical tasks, including selection criteria, medical fitness and vocational training and certification	NONE	N/A	N/A	N/A
Rules concerning the investigation of the and incidents including recommendation	NONE	N/A	N/A	N/A
Rules concerning requirements for national safety indicators including how to collect and analyse the indicators	NONE	N/A	N/A	N/A
Rules concerning requirements for authorisation of placing in service the infrastructure (tracks, bridges, tunnels, energy, ATC, radio, signalling, interlocking, level crossing, platforms, etc.)	NONE	N/A	N/A	N/A

**ANNEX E: The development of safety certification and authorisation – numerical data**

**E.1 Safety Certificates according to Directive 2004/49/EC**

<p>A. To ensure the information on ERADIS is current in place, please supply numbers of existing certificates in ERADIS which were valid at the end of the reporting year</p> <p>B. Please ensure that the information provided in this table is in line with the information provided in section "G. Supervision of Railway Undertakings and Infrastructure Managers "</p>	Total number of certificates	Number of certificates Part A in ERADIS	
E.1.1. Number of safety certificates Part A issued in the reporting and in previous years and remain valid at the end of year 2016	0	0	

<p>C. To ensure the information on ERADIS is current in place, please supply numbers of existing certificates in ERADIS which were valid at the end of the reporting year</p> <p>D. Please ensure that the information provided in this table is in line with the information provided in section "G. Supervision of Railway Undertakings and Infrastructure Managers "</p>		Total number of certificates	Number of certificates Part B in ERADIS	
E.1.2. Number of safety certificates Part B issued in the reporting and in previous years by your member state and remain valid in the year 2016	Number of certificates Part B, for which the Part A has been issued in your Member-State	0	0	
	Number of certificates Part B, for which the part A has been issued in another Member-State	3	3	

Please provide input on applications for certificates Part A received in the current reporting year for new certificates or existing certificates which need to be renewed or updated/amended	A	R	P	
E.1.3. Number of new applications for Safety Certificates <b>Part A</b> submitted by Railway Undertakings in year 2016	New certificates	0	0	0
	Updated/amended certificates	0	0	0
	Renewed certificates	0	0	0

Please provide input on applications for certificates Part B received in the current reporting year for new certificates or existing certificates which need to be renewed or updated/amended	A	R	P	
	New certificates	0	0	0

E.1.4. Number of new applications for Safety Certificates <b>Part B</b> submitted by Railway Undertakings in year 2016	Where the Part A has been issued in your Member-State	Updated/amended certificates	0	0	0
		renewed certificates	0	0	0
	Where the Part A has been issued in another Member-State	New certificates	0	0	0
		Updated/amended certificates	0	0	0
		Renewed certificates	1	0	0

A = Accepted application, certificate is already issued

R = Rejected applications, no certificate was issued

P = Case is still pending, no certificate was issued so far

To ensure the information on ERADIS is current in place, please supply numbers of certificates in ERADIS revoked at the end of the reporting year	Total number of revoked certificates in the year 2016	Number of revoked certificates in ERADIS (which were revoked in 2016)
E 1.5 Number of certificates Part A revoked in the current reporting year	0	0
E 1.6 Number of certificates Part B revoked in the current reporting year	0	0

E.1.7. List of countries where RUs applying for a Safety Certificate Part B in your Member-State have obtained their Safety Certificate Part A

Name of RU	Member-State where Safety Certificate Part A was issued
DB Cargo UK	UK
Eurostar International Ltd	UK
GB Railfreight	UK

E.2. Safety Authorisations according to Directive 2004/49/EC

Please ensure that the information provided in this table is in line with the information provided in section "G. Supervision of Railway Undertakings and Infrastructure Managers "	Total number of safety authorisations		
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E.2.1. Number of valid Safety Authorisations issued to Infrastructure Managers in the reporting year and in previous years and remain valid at the end of the year 2016	1		
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Guidance: Please provide input on applications for Safety Authorisations received in the current reporting year for new authorisations or existing authorisations which need to be renewed or updated/amended		A	R	P
E.2.2. Number of applications for Safety Authorisations submitted by Infrastructure Managers in year 2016	New authorisations	0	0	0
	Updated/amended authorisations	0	0	0
	Renewed authorisations	0	0	0

A = Accepted application, authorisation is already issued  
R = Rejected applications, no authorisation was issued  
P = Case is still pending, no authorisation was issued so far

E.2.3 Number of Safety Authorisations revoked in the current reporting year	0
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### E.3. Procedural aspects – Safety Certificates part A

		New	Updated /amended	Renewed
The average time after receiving of the application with the required information and the final delivery of a Safety Certificate <b>Part A</b> in year 2016 for Railway Undertakings		n/a	n/a	n/a

### E.4. Procedural aspects – Safety Certificates part B

		New	Updated /amended	Renewed
The average time after receiving the application with the required information and the final delivery	Where the part A has been issued in your Member-State	n/a	n/a	n/a

of a Safety Certificate <b>Part B</b> in year 2016 for RUs	Where the part A has been issued in another Member-State	n/a	n/a	n/a
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E.5. Procedural aspects – Safety Authorisations

		New	Updated /amended	Renewed
The average time after receiving the application with the required information and the final delivery of a Safety Authorisation in year 2016 for IMs		n/a	n/a	n/a