

**CHANNEL TUNNEL SAFETY AUTHORITY  
WORK PLAN – 2016**

**SUPERVISION (INSPECTION AND AUDIT)**

Inspection Subject	Link to the Supervision strategy of the IGC	Objective	Lead Working Group	Joint Working Group	Methodology	Frequency and Resources
<b>RESCUE &amp; PUBLIC SAFETY WORKING GROUP</b>						
Fire detection systems	<p>Management of ageing equipment and infrastructure</p> <p>Emergency response</p> <p>Management of safety</p>	<p>Review of Eurotunnel’s fire detection systems. Particular focus on fire detection systems in the Running Tunnels and on-board HGV shuttles.</p> <p>Confirm the maintenance arrangements for current systems</p> <p>Review any changes to the fire detection systems, including any removal of detector levels</p> <p>Confirm what review process is used to assess any new technology developments that could improve the speed and efficiency of fire detection</p>	RPSWG		Joint inspection to be carried out by CTSA experts	<p>1 planned inspection.</p> <p>1 inspector day to plan</p> <p>4 inspector days to conduct inspection</p> <p>2 inspector days to compile/audit report.</p> <p>Expected time = 8 days (Total hours to be included in final report)</p>

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First aid/trauma care for passengers in the event of major disaster incidents	Emergency response  (Specific item at the request of the JSC)	Review current procedures, equipment and training in place to deal with major incidents which result in serious trauma injuries.	RPSWG		Objectives to be achieved through the work of Security Evacuation Working Group.  Report to CTSA, JSC and IGC on outcomes.	Review work to be completed by December 2016.
Review of Binational Emergency Plan	Emergency response  Management of safety	Review each element of the binational plan, in particular; <ul style="list-style-type: none"> <li>• binational alerting procedures.</li> <li>• command liaison between the PCO and ICC</li> <li>• communications during an emergency incident</li> </ul>	RPSWG		Ad hoc Binational working group to be established and led by UK RPSWG co-chair.  Representatives from UK and French emergency services, local authorities, ET and Eurostar to be consulted on amendments.  Final version to be approved by CTSA and IGC.	Plan to be revised by December 2016.  Frequency of meetings to be determined.
UK and French FLOR fire-fighting competencies	Emergency response	Review of FLOR training records.	RPSWG		Joint inspection to be carried out by CTSA experts	1 planned inspection. 1 inspector

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	Management of safety	<p>Analysis of the recording system used to assess level of competency in firefighting for UK and FR FLOR.</p> <p>Assess the specific training provided to FLOR to maintain skills in dealing with major fires involving rolling stock in the Channel Tunnel.</p> <p>(To include progress on Recommendation 1 from CTSA inspection report 134)</p>				<p>day to plan 4 inspector days to conduct inspection 2 inspector days to compile/audit report. Expected time = 8 days (Total hours to be included in final report)</p>
<p>Management of fire prevention</p> <p>Operation of controls on the terminals during loading processes</p>	<p>Emergency response</p> <p>Management of safety</p>	<p>Review of the Agent de Feu (ADF) arrangements, including:</p> <p>Checking training records and competence levels of the ADF</p> <p>To review the roles and responsibilities of the ADF</p> <p>Assess progress in researching advancements</p>	RPSWG		Joint inspection to be carried out by CTSA experts	<p>1 planned inspection. 1 inspector day to plan 4 inspector days to conduct inspection 2 inspector days to compile/audit report. Expected</p>

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		in detection equipment  Assess progress on new aerial detection systems				time = 8 days (Total hours to be included in final report)
Dangerous Goods leak prevention/management	Emergency response	Follow-up to 2015 inspection that reviewed the procedures ET have in place to prevent/manage the leak of dangerous goods	RPSWG		Joint inspection to be carried out by CTSA experts	1 planned inspection. 1 inspector day to plan 4 inspector days to conduct inspection 2 inspector days to compile/audit report. Expected time = 8 days (Total hours to be included in final report)
<b>CIVIL ENGINEERING</b>						
EMS	Change management skills	PLC renewal programme	CTSA (FR)		Follow up action progress	One-off inspection

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Power supply system	Integrity of infrastructure Staff skills	Check maintenance actions done on MISS electric substations	CTSA (FR)		Inspect France's MISS substation and review checks carried out	One-off inspection
Crossover doors	Integrity of infrastructure Staff skills	Make sure this equipment works in normal conditions	CTSA (FR)		Inspect the French cross-over	One-off inspection
Ventilation: SVN SVS / aerodynamics	Integrity of infrastructure Staff skills	Ensure that systems in tunnel function effectively in normal conditions	CTSA (FR)		Verify which checks are carried out by Eurotunnel staff and subcontractors  Examine SVN and SVS performance indicators supplied by Eurotunnel in the minutes of the Concession Safety Committee  Check general condition of ventilation equipment	One-off inspection
Cross-passage doors (CPDs)	Integrity of infrastructure Staff skills	Ensure that systems in tunnel work effectively in normal conditions.  Check that procedure to	CTSA (FR)		Examine performance indicators supplied by Eurotunnel in Concession Safety	On-site inspection in the general context of aerodynamic

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	Emergency call-outs	open three CPDs in the event of evacuation is being followed.			Committee minutes  Check that new procedure for Eurostars is being followed properly	ventilation referred to above.
<b>RAIL SAFETY &amp; TRANSPORT WORKING GROUP</b>						
<b>GBRF/ DBS</b>  Re-inspection of freight operators pre-departure inspections carried out Fréthun and Dollands Moor marshalling yards prior to tunnel transit.	Staff competence  Control of contractors  Management of safety	Confirm whether RUs have arrangements in place to ensure trains are fit to run on CT infrastructure.  Confirm whether recommendations from previous inspections have been implemented.  Review arrangements for management of contractors.	RSTWG		Inspection visits to Dollands Moor and Fréthun	10 days [5 days per UK & FR inspector ]  TO BE CONFIRMED

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<p><b>Eurostar</b></p> <p>Evacuation training for on- board staff following introduction of e320 trains</p>	<p>Emergency response</p> <p>Staff competence</p> <p>Management of change</p>	<p>Evacuation arrangements will change following the introduction of e320 trains.</p>	RSTWG	RPSWG	<p>Joint inspection with RSTWG and RPSWG inspectors</p> <p>Review revised evacuation processes</p> <p>Observation of Bi-Nat exercise (Jan 2016)</p>	<p>10 days</p> <p>[5 days per UK &amp; FR inspector ]</p>
<p><b>Eurostar</b></p> <p>Arrangements for maintenance of e320 trains/retro-fitting of GSM-R radio sets</p>	<p>Staff competence</p> <p>Management of change</p> <p>Rolling stock integrity</p>	<p>Eurostar's rolling stock maintenance arrangements will change following the introduction of e320 rolling stock.</p> <p>The bringing into service of GSM-R on Eurotunnel infrastructure will require Eurostar to retro-fit GSM-R handsets and receivers to its rolling stock.</p>	RSTWG		<p>Joint inspection to be carried out by CTSA technical experts</p>	<p>4 days</p> <p>[2 days per UK &amp; FR inspector ]</p>

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<p><b>Eurotunnel</b></p> <p>Change management of modifications to freight shuttles.</p> <p><b>NOTE:</b> This item is brought across from the 2015 work plan.</p>	<p>The <i>top priority</i> supervision area of management of ageing equipment and infrastructure, in particular, management of modifications and changes.</p>	<p>Check that Eurotunnel can demonstrate proper management control of the changes involved in fitting pagodas to existing freight shuttles.</p>	<p>RSTWG</p>		<p>Inspection to check that the management system is achieving the objective of proper control of the change, in line with the system notified to IGC as part of Eurotunnel's authorisation.</p> <p>In particular, check that the change proposed has been subjected to a rigorous analysis in line with the Eurotunnel procedure, before modification work is carried out.</p> <p>Also, check that the modifications have been properly carried out on the shuttles.</p>	<p>6 days</p> <p>[5 days for FR inspector and 1 for UK inspector]</p>

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<p><b>Eurotunnel</b></p> <p>GSM-R switchover</p>	<p>Emergency Response</p> <p>Staff Competence</p> <p>Management of Change</p>	<p>Examine Eurotunnel's arrangements for GSM-R switchover and maintenance.</p> <p>Joint inspection with RPSWG on communication with emergency services.</p>	RSTWG	RPSWG	Joint inspection to be carried out by CTSA experts.	<p>4 days</p> <p>[2 days per UK &amp; FR expert]</p>
<p><b>Eurotunnel</b></p> <p>Risk assessment processes as part of the increase in freight shuttle capacity project.</p>	<p>Management of Change</p> <p>Management of Safety</p>	<p>Review of Eurotunnel's approach to risk assessment introduced across the entire Eurotunnel system by increasing freight shuttle capacity.</p> <p>Ensure that Eurotunnel is preparing for this development, by maintaining minimum levels of traffic safety, taking into account the risks linked to this change both the side of the maintenance of rolling stock and infrastructure, loading and driver teams.</p>	RSTWG		EPSF Audit	<p>EPSF Resources</p> <p>+</p> <p>UK inspector to attend opening and closing meetings (1 day each)</p>

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		Determine whether Eurotunnel's current arrangements for risk assessment fulfil the requirements of Eurotunnel's safety authorisation and national and bi-national legislation.				
<p><b>Eurotunnel</b></p> <p>Review [audit?] of implementation of RAIB &amp; BEA-TT recommendations arising from their investigation into the 2015 incident</p>		Monitor, to closure, the work by duty holders to implement any recommendations arising from RAIB & BEA-TT's report	RSTWG	Possibly RPSWG	NIB recommendation handling process	5 days UK

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<p><b>Eurotunnel</b></p> <p>Risk assessment</p>		<p>Oversight of the third party review of Eurotunnel's risk assessment process that was requested following the Improvement Notices of August 2015</p>	<p>RSTWG (UK)</p>		<p>Check that Eurotunnel has contracted a third party to review its approach to risk assessment to make sure that it fulfils the requirements of its safety authorisation and relevant national and bi-national legislation.</p> <p>Whilst that analysis is going on, Inspectors could identify triggers for production or review of risk assessments, and observe the quality of some recent risk assessments, to assist in our analysis of any final report from the third party.</p>	<p>2-3 days</p>

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<b>Eurotunnel &amp; Eurostar</b>  OHLE compatibility with e320s		Monitor discussions for the OHLE compatibility with e320s	RSTWG		Via presentations at CTSA and e320 meetings	French delegation to lead. May require input from ORR's RPP.
<b>Eurotunnel</b>  Reduction of passenger shuttle crew		Review of documentation submitted by Eurotunnel	RSTWG			Awaiting information from ET about when it will be resuming work.  Current estimate: 3 days
<b>Eurotunnel</b>  Follow-up inspection programme to determine whether Eurotunnel has implemented recommendations from previous CTSA inspections.	Management of Change  Management of Safety	Undertake inspections of Eurotunnel's change management arrangements to determine whether Eurotunnel has implemented recommendations from CTSA inspections.  Topics for inspections include:	RSTWG		Inspection  Document review	Postponed until 2017

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		Change management processes Halon replacement 6-5 passenger crew reduction				

## SAFETY CERTIFICATION & SAFETY AUTHORISATION AND AUTHORISATION TO PLACE INTO SERVICE

Task	Objective	Lead	Advice	Methodology	Timing and Resources
Consideration of applications for authorisation to place vehicles or sub-system into service	To ensure timely and robust consideration by IGC of any applications for authorisation to place new vehicles or sub system into service in the Channel Tunnel	RSTWG [RPP]	CTSA/Sec	Clarify the process and requirements, and deliver timely authorisation.  <b>For Eurotunnel's new fleet of HGV shuttle wagons:</b> <ul style="list-style-type: none"> <li>Engagement with Cion &amp; ERA on technical opinion dealing with non-conformities.</li> <li>Engagement with Eurotunnel on developing file.</li> <li>Handling of application to IGC's decision.</li> </ul>	Ad hoc  Secretariat, ORR/EPF assessors  <b>Eurotunnel HGV shuttle wagons:</b>  10 days UK & FR  In progress [planned date into service is October 2016]
Consideration of applications for authorising vehicles already authorised in other Member States	To deliver timely additional authorisation of passenger and freight vehicles in accordance with Chapter V of the bi-national regulation	RSTWG [RPP]	Sec (on process)	As per handling process in published guidance on the bi-national regulation	Ad hoc  ORR/EPF assessors, secretariat
Consideration of Eurotunnel applications for authorisation of infrastructure projects	To ensure timely and robust consideration by IGC of any applications from Eurotunnel to place into service non-vehicle projects in accordance with Directive 2008/57/EC. To ensure timely and robust	RSTWG  RSTWG	CTSA  RPSWG,	Applications will be dealt with in accordance with Chapter IV of Directive 2008/57/EC.  <b>Application to install GSM-R expected in early 2016 for competition by end of May 2016.</b> Applications will be dealt with in	On-going as required. For each application: 6 days (assessment); 2 days (review by WG); 2 days (consideration by

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	consideration by IGC of safety issues arising any applications from Eurotunnel for infrastructure projects in accordance with the Concession Agreement.		JSC, CTSA	accordance with the relevant provisions of the Concession Agreement.  CTSA will monitor Eurotunnel's compliance with the conditions of its consent to install the ElecLink during 2016 via RSTWG meetings.	CTSA and advice to IGC)  Current estimate: 3 days
Consideration of applications for authorisation to place Eurostar e320 into service (trainsets 11-17).  Re-assessment of the IGC's authorisation of Eurostar's e320s in light of The Netherlands granting authorisation (trainsets 1-17)	To ensure timely and robust consideration by IGC	RSTWG	CTSA	No firm date, likely to be during 2016 and 2017	On-going as required. For each application: 4 days (assessment); 2 days (review by WG); 2 days (consideration by CTSA and advice to IGC)  Bi-monthly meetings of all NSAs, ERA, Siemens & Eurostar.
Consideration of Eurostar's application for re-issuing its safety certificate and safety authorisation		RSTWG	CTSA	Due 18 April 2017 (engagement to commence Autumn 2016)  ORR: Part A EPSF: Part B IGC: Part B SSICF: Part B	8 days

## DEVELOPMENT OF THE SAFETY REGULATORY FRAMEWORK

Task	Objective	Lead	Advice	Methodology	Timing and Resources
Complete the corrective action plan agreed following the cross-audit of IGC as national safety authority (certification and authorisation)	To deliver the corrective action plan, which seeks to improve the IGC's supervision capability, its guidance and procedural documents	RSTWG	Inspectors and secretariat?	Update our current <b>“Inspector Guide”</b> and <b>“Guidance on the bi-national regulation”</b> into a “Bi-national guide for supervision and authorisation” and publish it on our website.	5 days for 1 FR inspector and 1 UK inspector June 2016 – draft version. September 2016 - CSTA advice/ corrections October 2016 - Secretariats take into account modifications November 2016 – CSTA approval December 2016 – IGC approval and publication
		RSTWG	RSTWG co-chairs and secretariat	Commission research into a <b>more systematic approach to examining and understanding the wealth of data</b> and information we receive from Eurotunnel, and other operators, and publish the research outcomes.	Proposal for early 2016. CSTA and IGC approval by mid-2016.
Preparation for the fourth railway package	To ensure IGC and Eurotunnel are able to influence, and are prepared for the developing arrangements for certifications and	HoDs and Sec	ORR and EPSF policy colleagues	Participation in NSA Network, network sub-groups on co-operation and ILGGRI	Ongoing  HoDs/ delegation member/Sec attendance at approx 10

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	authorisations				meetings
Harmonisation of operating rules following TSI OPE	To work with Eurotunnel to contribute to UK and FR implementation of TSI Operations, principally through identification and harmonisation of operating rules in accordance with Appendix B or the TSI	Sec	RSTWG	Analysis of operating rules (with Eurotunnel).  Preparation of notification (if required).	Implementation plans must be notified by March 2017.  Resources TBC
Conclusion of IGC's review of unified safety rules	To ensure that the agreed unified safety rules are finalised, published and notified in accordance with the EU legal framework for rules.	SEC	CTSA	Participate in Rules & Procedures Steering Group  Review and maintenance of notification in time of 4RP	Ongoing  December 2016
CTSA involvement in cross-acceptance and corridors	To maintain the reference document of Channel Tunnel vehicle authorisation rules.  To participate in the UK-FR geographical interest group considering equivalence of rules and mutual recognition of authorisations.  To participate in Freight Corridor 2 executive board activity on co-operation (including cross-acceptance)	SEC	CTSA	SEC to ensure reference document remains up to date and reflects any changes to national rules.  CTSA to seek involvement in this work once ORR and EPSF have concluded their initial consideration of other UK and French rules.  SEC to engage with Corridor 2 secretariat and arrange CTSA representation, through either direct participation or UK/FR NSA representatives as appropriate	Ongoing (2 days)  Postponed pending conclusion of ORR/EPSF bilateral work  To be decided