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OFFICE OF RAIL REGULATION

6 December 2013

Ms Carolyn Griffiths
Chief Inspector of Accidents
Cullen House
Berkshire Copse Road
Aldershot
Hampshire GU11 2HP

Dear Carolyn

RAIB report: Freight train derailment at Reading West

I write to report[1] on the consideration given and actions taken in respect of recommendations 2, 3, 4 and 5 addressed to ORR in the above report published on 28 January 2013.

The annex to this letter provides details of the consideration and actions where recommendations 2, 3, 4 and 5 are reported as 'in progress'.

We expect to update you on progress with all four recommendations by 30 June 2014.

Yours Sincerely

Chris O'Doherty

INVESTOR IN PEOPLE

[1] In accordance with The Railways (Accident Investigation and Reporting) Regulations 2005 para 12(2)(b)

1. Recommendation 1 was addressed to HSE and recommendations 2 – 5 were addressed to ORR when RAIB published its report on 28 January 2013. After considering the report and its recommendations, on 7 August 2013, we passed:

- Recommendations 2 and 3 to Freightliner; and
- Recommendations 3 and 4 to Network Rail,

asking them to consider and where appropriate act upon them. We also passed recommendations 2 and 3 to other operators of rail freight services and inter-modal freight terminals requesting that they take the recommendations into consideration. Details of consideration given and any action taken, in respect of these recommendations are provided below. Recommendation 1 was directed to HSE and is therefore not discussed in this response.

Recommendation 2

The intention of this recommendation is that rail freight and inter-modal freight terminal operators have arrangements in place to manage the risk associated with allowing poorly packed freight containers on the railway. Recognising that many of the indications of poor packing are hidden, operators should require that their customers give assurance that containers are packed in accordance with recognised good practice (e.g. the IMO/ILO/UNECE guidelines) and carry out appropriate audits to verify this. Where there is no assurance, operators should make physical checks to confirm the evenness of the load.

Freightliner should review its operating procedures and conditions of carriage for freight containers. It should then implement any changes necessary to require that:

- senders provide certification sourced from the relevant party, or have equivalent procedural arrangements in place, which confirm that freight containers offered for transit have been packed in accordance with the 'Guidelines for packing cargo transport units', published by the International Maritime Organization, or an equivalent document;
- the effectiveness of such certification or procedural arrangements are periodically audited, with remedial action taken as needed;

and that where such arrangements are not in place:

- alternative action is taken to confirm that the cargo in a container is both evenly and securely stowed.

Actions taken or being taken to address the recommendation

Freightliner, GB Railfreight, DB Schenker

2. The following joint response was received from the above Freight Operating Companies:

We have reviewed our procedures to ensure that containers are loaded correctly and concluded that existing procedures ensure that the potential risk of poorly loaded containers being transported on rail wagons is as low as reasonably practicable.

Our existing control measures are as follows:

- *The standard conditions of carriage in the contract for transport of the container between Freightliner and its customers require the customer to ensure that the container is loaded in accordance with industry standards to prevent any risk being imported as a result of uneven loading. The conditions of carriage also specifically require the customer to advise Freightliner if the container is loaded in a manner that would result in it being unstable or have a high centre of gravity;*
- *There are well established standards in place (i.e. IMO/ILO/UNECE) that provide guidance to shippers for packing of containers;*
- *Freightliner carries out a pre-departure examination on every train. This examination requires staff to check whether there are any signs of containers being loaded unevenly.*

We have reviewed whether any additional control measures could be reasonably applied in conjunction with other Railfreight Operators and have concluded that any new checks would be impractical and would provide no material safety improvement for the following reasons:

- *Requiring freight customers to provide 'certification' that the container has been packed in accordance with the 'Guidelines for packing cargo transport units'. Containers are packed and shipped from locations worldwide and can change ownership during the movement to the UK, therefore there is no practical way that Freightliner could implement such a requirement. For UK export traffic, some form of verification by means of a signed document declaring that the load has been packed and secured in accordance with IMO or equivalent regulations could possibly be implemented. However, this requirement would have to be a statutory regulation applicable to all shipping lines in the UK to ensure that their customers have suitably packed and secured, where required, the contents of a container. Freightliner believes this should not be the responsibility of the rail industry to enforce such a requirement as it is applicable to all modes of container transport within the UK. Unilateral implementation of such a requirement would potentially disadvantage Freightliner by adding cost and additional bureaucracy and result in loss of business to other transport modes or competitors and therefore have no safety benefit. A statutory regulation would not place any single road, rail or waterways transport operator in a position of commercial disadvantage:*
- *Carrying out checks to confirm containers are loaded evenly. This would require containers to be opened on Freightliner terminals. This is impractical for a number of reasons including; a) container contents are the property of the customer; b) containers can be bonded and are therefore subject to HM Customs and Excise restrictions and c) opening a container could present a hazard to the member of staff carrying out the check due to loose products being carried in the container. A review of the hazards associated with*

unevenly loaded containers was convened at the RSSB on 17 May 2012 involving representatives of the RSSB, ORR and Railfreight Operators. At that meeting it was concluded that the existing operating practices in place within the industry ensured that the risks associated with the transport of containers was ALARP. This was endorsed by the Freight Technical Committee on 31 May 2012.

Direct Rail Services

3. On 23 May 2013, Direct Rail Services provided the following information:

As the majority of traffic conveyed by DRS is domestic, it is more easily inspected and controlled at source in the following manner.

In the main DRS' customers and their agents load to clearly defined patterns drawn up for staff to work to. These take into account weight distribution and securing requirements and are assessed with the assistance of the DRS Loading & Gauging Engineer and Safety & Compliance Inspectors to ensure that prior to acceptance for conveyance on DRS freight services, there will be no importation of unacceptable risk in accordance with DRS Procedures.

Where no loading pattern exists due to "Load to load unit or vehicle combination" or commodity being, new, then a new loading and securing pattern will be created, assessed and adequately trialled prior to acceptance into on-going traffic. Loading and securing patterns and instructions are documented in the DRS Loading Manual. Any new patterns and instructions will be entered at the next review. A new pattern will not always be required as similar commodities may be similarly loaded and secured, although trials will still be undertaken to ensure competence of Loading & Securing Staff.

In order to assess the on-going effectiveness of the loading and securing patterns; periodic visits are undertaken by the DRS Loading & Gauging Engineer and Safety & Compliance Inspectors. The planning of visits is based on several factors:

- *The volume or frequency of traffic movement from a given location;*
    - *More traffic and movements equates to higher risk of issues arising.*
- *Historic evidence of issues originating at a given location;*
    - *Multiple reports of failures in maintenance of loading and securing standards.*
- *Risk Assessment based on type of traffic from a given location.*
    - *Palletised goods loaded into steel sided intermodal units would be assessed as importing less risk to the network than roll cages loaded into curtain-sided intermodal units.*

At the beginning of each financial year, a record of reported issues is created which translates to various graphs depicting incidence of issues by point of origin and type; these are used as a trending tool. A calendar is also created and, based on the evidence from the previous year's reported issues; an assessment is made on the initial frequency of visits to individual locations.
N.B. The number of visits indicated at the beginning of the year may be surpassed as time passes. The calendar is therefore dynamic as more or fewer visits may occur for varying reasons such as:

- *An increase in reported issues;*
- *Cessation of traffic originating from a given location;*
- *Increase in or change to traffic originating from a given location.*

Colas Rail

4. On 25 April 2013, Colas Rail provided the information below:

The Colas Rail Freight Section has a procedure, TO5-004 New Traffic Acceptance procedure, which includes a check sheet and a new traffic acceptance form that requires completion and signing before accepting new traffic. The procedure has been amended to include two new paragraphs below:

'All containers and swap bodies to be moved on rail by Colas Rail must have a certificate to confirm that the load is loaded correctly and is secured. Depending on the quantity of containers and swap bodies delivered each day to the loading terminal, a percentage (to be agreed) will be opened and checked for correct loading and security and then resealed and form T05-9006 filled out and sent to the container owner.

Any company whose containers or swap bodies are found to be incorrectly loaded will be visited and advised on how to load the container or swap body and to secure the load for safe travel by rail.'

ORR decision

5. Having considered the responses above, ORR has concluded that reviews have taken place and all operators have procedures in place to confirm that the cargo in a container is both evenly and securely stowed. However we have identified that whilst some operators state that opening containers is impractical others have informed us that their procedures allow for containers to be opened and checked. We intend to write to Freightliner, GBRailfreight and DB Schenker to request clarification

Status: In progress, we will update RAIB by 30 June 2014

Recommendation 3

The intention of this recommendation is for inter-modal freight terminal operators to develop requirements and investigate introducing a suitable monitoring system, for use during routine container and train handling, to prevent freight container wagons entering traffic with a side-to-side wheel load imbalance. The system could be based on the measurement of individual or side-to-side wheel loads prior to the train entering traffic or the identification of freight container load offsets during lifting.

Freightliner should develop requirements for a system to monitor and prevent load offsets from containers resulting in wagons with a side-to-side wheel load imbalance entering traffic from its terminals. The system should be considered when terminal equipment is planned to be installed or upgraded, and where practicable, the system should be implemented.

Actions taken or being taken to address the recommendation

6. On 23 May 2013, Freightliner provided the information below:

Freightliner has carried out a number of reviews of the availability of any potential technical solutions to detect unevenly loaded containers before they are loaded to rail wagons. This review has concluded that there is no known reliable equipment currently available to detect uneven loads within containers.

Freightliner have undertaken a number of reviews of potential options for detecting uneven loads over the last few years. This has included investigation of the use of the 'Track Weigh' Train Weighing system. The investigation revealed that the installation of this equipment would not be practical at existing terminals. The train weighing equipment would require being located on the exit line from the container terminal. Existing terminal sites are located adjacent to the running line with no means of practically weighing the train before it enters the mainline network. Therefore any potential adverse loading would result in the train being required to be stopped on the running line having already travelled a distance from the terminal with associated major disruption to the mainline network.

In addition, any container identified as unevenly loaded and removed from the train would be highly likely to be subsequently moved from the rail terminal to its destination by road transport at a higher overall safety risk to society. Freightliner therefore proposes to take no further action in this area. Freightliner will, however, continue to review whether any practical monitoring systems become available which could be considered for potential consideration for implementation at its intermodal terminals.

Freightliner are actively supporting Network Rail in reviewing any potential for the proposed 'GOTCHA' wheel load monitoring system to provide data on unevenly loaded wagons. Whilst the use of 'GOTCHA' will only identify wagons that are already en-route, the system may be beneficial in identifying the quantity of wagons with potentially uneven loads. However, the system is still in the early stages of implementation and suitable warning limits for uneven loading are still to be developed. There are also significant challenges to be overcome to allow accurate real time wagon identification associated with the potential implementation of wagon automatic vehicle identification tagging.

7. We felt the above response had not demonstrated that Freightliner had developed requirements for a system to monitor and prevent load offsets as stated in the recommendation. We wrote to Freightliner on 9 August 2013 requesting further information on this and also requesting that they confirm that consideration would be given to any such system when terminal equipment is planned to be installed or upgraded. The following response was received from Freightliner on 30 August 2013:

Freightliner has reconsidered the RAIB recommendation as a result of the ORR request. The RAIB recommendation requires Freightliner to develop a requirement specification for an off-set load monitoring system. However, Freightliner does not consider that it can develop such a specification in isolation on behalf of the industry.

As you are aware, the Freight Technical Committee (FTC) has established a working group to investigate the feasibility of using Network Rail's GOTCHA Wheel Load

Detection Equipment to identify wagons with side to side wheel load imbalance. This group comprises of representatives from a wide cross-section of the Railfreight industry including Network Rail, Freight Operating Companies, RSSB and ORR. Freightliner intends to make a proposal to FTC at its next meeting (4 September) to widen the remit for the GOTCHA working group to try to identify a requirements specification for a suitable monitoring system for offset loads.

In undertaking this work, we must acknowledge the potential for moving rejected containers with offset loads by road and the associated increase in societal risk. The investigation must therefore ensure that it considers container safety independent of transport mode.

Freightliner's policy is to fit equipment that meets or exceeds all existing legislation whenever any upgrade or replacement of terminal equipment is undertaken. When the specification for offset load detection equipment has been identified, Freightliner can assess whether any equipment can be installed at a cost commensurate with the reduction in risk.

GB Railfreight

8. On 23 May 2013, GBRailfreight provided the following information:

GB Railfreight, in conjunction with other rail operators, has carried out a number of reviews of the availability of any potential technical solutions to detect unevenly loaded containers before they are loaded to rail wagons. This review has concluded that there is no known reliable equipment available to detect uneven loads within containers. GB Railfreight therefore proposes to take no further action in this area.

However, GB Railfreight will continue to review whether any practical monitoring systems become available which could be considered for potential consideration for implementation at its Intermodal Terminals.

GB Railfreight are actively supporting Network Rail in reviewing any potential for the proposed 'GOTCHA' wheel load monitoring system to provide data on unevenly loaded wagons. Whilst the use of 'GOTCHA' will only identify wagons that are already en-route, the system may be beneficial in identifying the quantity of wagons with potentially uneven loads. However, the system is still in the early stages of implementation and suitable warning limits for uneven loading are still to be developed.

9. In consideration of the response, we felt that GB Railfreight had not demonstrated that it had developed requirements for a system to monitor and prevent load offsets as stated in the recommendation. We wrote to GB Railfreight on 9 August 2013 requesting further information and the following response was received on 9 August 2013:

GB Railfreight works out of various intermodal locations but do not have ownership of any. We acknowledge during the container handling process (reach stacker, gantry, crane etc.) that imbalance loading is only detectable by, the experience of, the 'lifting' operator and adverse reaction of the lifting equipment.

GB Railfreight understands that detection equipment is being developed in this area in the form of corner load cells which register the weight distribution of the container. Further to this, it is understood that currently no 'inland ports' have the benefit of this

technology, but would expect this enhancement to be considered by the 'inland ports' when it becomes readily available.

DB Schenker

10. On 1 July 2013, DB Schenker provided the following information:

DB Schenker has carried out reviews of the availability of any potential technical solutions to detect unevenly loaded containers before they are loaded to rail wagons. These reviews have failed to identify any known reliable equipment available to detect uneven loads within containers. DB Schenker therefore proposes to take no further action in this area. DB Schenker will in cooperation with other operators continue to review whether any practical monitoring systems become available which could be considered for potential consideration for implementation at its terminals.

DB Schenker are actively supporting Network Rail in reviewing any potential for the proposed 'GOTCHA' wheel load monitoring system to provide data on unevenly loaded wagons. Whilst the use of 'GOTCHA' will only identify wagons that are already en-route, the system may be beneficial in identifying the quantity of wagons with potentially uneven loads. However, the system is still in the early stages of implementation and suitable warning limits for uneven loading are still to be developed. There are also significant challenges to be overcome to allow accurate real time wagon identification associated with the potential implementation of wagon automatic vehicle identification tagging.

11. In consideration of the response, we felt that DB Schenker had not demonstrated that it had developed requirements for a system to monitor and prevent load offsets as stated in the recommendation. We wrote to DB Schenker on 9 August 2013 requesting further information and the following response was received on 5 September 2013:

As per previous correspondence, along with industry colleagues, we examined the options for suitable monitoring systems, both for lifting/loading operations and for the assessment of loaded wagons.

There is currently no lifting equipment available to us that has the capability to detect lateral load distribution and this is a key factor in respect of this issue.

When purchasing new equipment, we will always take into consideration the outcome of accident/incident investigations and subsequent recommendations, where we are aware of these.

In respect of this issue, we will continue to monitor the availability of suitable monitoring equipment, both for lifting/loading and the assessment of loaded wagons, and if such equipment were to become available to us, an appropriate cost benefit analysis will be undertaken.

Direct Rail Services

12. On 23 May 2013, Direct Rail Services provided the following information:

Direct Rail Services will work with Terminal Operators at Direct Rail Services managed Terminals in assessing where new technology could be introduced when new equipment is bought, or planned upgrades are being undertaken, in order that off-set loads can be monitored and assessed in rail freight containers during lifting operations to prevent containers with off-set loads being loaded for rail transportation.

13. In consideration of the response, we felt that Direct Rail Services had not demonstrated that it had developed requirements for a system to monitor and prevent load offsets as stated in the recommendation. We wrote to Direct Rail Services on 9 August 2013 requesting further information and the following response was received on 9 August 2013:

In regards to the system for checking side to side imbalance, this is done by way of assessment of individual Intermodal Units.

- *Safe balanced distribution of weight is assured during the loading of goods into Intermodal Units by way of the loading instructions contained in Direct Rail Services' custom Loading Manual. All customers are aware of this and cascade the instructions to staff responsible for safe loading of intermodal units;*
- *Reach stacker/crane operators also verify by experience; the end to end balance of units during lifting and are instructed to reject those which through experience they define as imbalanced, to allow verification and correction where necessary;*
- *Pre departure and RST checks are also carried out by Train Preparation staff in line with GO/RT3056 and our vehicle manufacturers instructions to ensure mainline railway safety;*
- *The whole process is periodically audited to ensure that the intermodal unit and train loading instructions are adhered to.*

DRS believe that coupled together, these elements form a robust enough system to prevent potentially imbalanced loads importing risks to the network through DRS services.

In regards to Intermodal Terminals, DRS currently do not operate any terminals. DRS own 2 of those we haul to and from and those are operated on our behalf by third parties. If it became necessary to alter the current system in order to maintain railway safety, DRS would undertake to act as necessary. Furthermore, if during development it was identified as necessary to alter the infrastructure of our locations, then DRS would of course give this due consideration, as it does all other projects it carries out per our documented procedures.

Colas Rail

Colas Rail is not an inter-modal freight operator. Should the need arise at a future date to carry out this activity, the installation of side to side measuring devices and suitable monitoring systems would form part of the business case to install such equipment.

ORR decision

14. ORR agrees with Freightliner that it cannot develop the requirements of the recommendation in isolation on behalf of the industry and we are also keen to ensure an industry solution, rather than a Freightliner solution, is developed. We can confirm that the feasibility of using Network Rail's GOTCHA Wheel Load Detection Equipment to identify wagons with side to side wheel load imbalance was discussed at the Freight Technical Committee meeting on 4 September 2013. The Freight Technical Committee has decided on a two stage approach. The first stage, which has started is to understand what GOTCHA does and how it works so that alarm limits can be determined. The second stage is to consider how this information can be used operationally to mitigate the risks.

15. ORR needs to understand how Freightliner and other operators intend to prevent load offsets from entering traffic as GOTCHA will only measure loading offsets after the train has entered traffic. We will write to operators asking for clarification.

Status: In progress. We will update RAIB by 30 June 2014.

Recommendation 4

The intention of this recommendation is to prevent track geometry faults being undetected after mechanised track maintenance work is completed. The need for a TQS to inspect and measure the track during and after this work is an important opportunity to identify faults that have formed, or existed beforehand. Recognising that current inspection arrangements may not result in reliable detection, Network Rail should assess and implement practical improvements. These could include consideration of the continuous recording of track geometry using approved manual methods (with allowance made for track deflection due to vehicle loading) and taking full advantage of the track measurement capabilities of tamping machines and similar track maintenance plant.

Network Rail should review and, where necessary, improve its processes for the detection of track geometry faults after mechanised track maintenance work to reduce the likelihood of such faults going undetected before the railway is handed back into service.

Actions taken or being taken to address the recommendation

16. On 23 April 2013, Network Rail provided the following information:

Network Rail has reviewed its processes defined in the NR/L2/TRK/001 suite of standards and confirms that they adequately define the planning of effective mechanised maintenance and highlight the risks associated with crossover roads and the need to have manual support teams for non-tampable areas.

The fitting of Data Recording Systems (DRS) to tamping machines is already being pursued with a number of machines fitted, however time constraints in possessions regularly mean the data is not collected using the DRS.

Network Rail is reviewing whether there is a case to require all tamping operations to be recorded using DRS and the implications of making the resources available to achieve this. The review will be complete by 31 October 2013.

Briefing sessions will be planned with all Route On-Track Machine Engineers (ROTMEs) to review the requirements in the current standards and discuss any barriers to the implementation of the controls (manually using the amber recording device or using DRS). These sessions will include a demonstration to the ROTMEs of the post work recording capability of the current tampers.

17. We wrote to Network Rail on 8 August 2013 requesting confirmation that the planned briefing sessions had taken place or to provide us with a timetable if the sessions had not already taken place. We also requested confirmation of the result of the review to decide whether there is a case to require all tamping operations to be recorded using DRS and the implications of making the resources available to achieve this. Network Rail provided the following update on 24 September 2013:

An initial review of the documents has been undertaken but no briefing sessions have taken place or are yet planned to be undertaken. The current documents were reviewed and considered appropriate; Business Critical Rules (BCR) enables a greater degree of freedom in terms of local application of guidance according to the risks presented. The documents defining how to control these risks are 'Means of Control' and will define activities rather than the detailed methodology. This is influenced by changes to the company's governance and control processes arising from BCR which fundamentally affects how and what we communicate to our people and in what format.

When the initial BCR has been finalised, the implications for support processes will be assessed. The current programme suggests that training material delivery based on the 'Means of Compliance' will be available late October. It appears likely at this stage that the 'Means of Compliance' will need to be enhanced to address the requirements adequately.

ORR decision

18. We are aware that the 'Means of Compliance' have now been published for plain track. On 14 November 2013, we wrote to Network Rail and requested further information and timescales on when it would enhance the 'Means of Compliance' to take account of this recommendation. We will update RAIB by 30 June 2014.

Status: In progress - RAIB to be updated by 30 June 2014

Recommendation 5

The intention of this recommendation is for Network Rail to review its current processes for mechanised track maintenance, and develop and make available best practice guidelines that minimise the formation of geometry faults on crossovers and similar sections of track.

Network Rail should establish best practice guidelines for mechanised track maintenance work in areas of switches and crossings that minimise the risk of track

twist and other geometry faults forming, and remaining on, crossovers and similar sections of track. It should make its track maintenance teams aware of these and the importance of following them, wherever practicable.

Actions taken or being taken to address the recommendation

19. On 23 April 2013, Network Rail provided the following information:

The entire suite of tamping planning, implementation and support documents in the range NR/L3/TRK/3201 to 3241 (5 documents) along with NR/L3/TRK/3250 for post work activities define best practice.

The Track Geometry Supervisor (TGS) training courses have been fully revised and the personal authority to work covers opening to traffic post-work implementation.

Briefing sessions will be planned with all ROTMEs to reinforce the existence of the best practice documentation; these will be completed by 31 October 2013. A presentation containing best practice material will also be created for future use with the TGSs.

20. On 8 August we wrote to Network Rail and requested confirmation that the briefing sessions had been completed. We also asked Network Rail to confirm if it was proposing to make any changes to the suite of standards (NR/l3/TRK/3201 to 3241 and NR/L3/TRK/3250) through the development of Business Critical Rules and role based manuals. Network Rail provided the following update on 24 September 2013:

The process documents are fit for purpose in describing roles, interfaces and data exchanges. They cannot and should not attempt to address any and every eventuality. Any changes which are required as a result of BCR will be prioritised after the initial roll out and may be covered to the timescales identified above. Network Rail does not anticipate any significant change in the requirements of diligence and process integrity; the presentation of training material and how the message is communicated will be different. If there are opportunities for training examples, these may be appropriately incorporated in the revised competency framework which is under development.

ORR decision

21. Network Rail has considered and addressed the first part of this recommendation; it has confirmed that its current documents define best practice. We wrote to Network Rail on 14 November 2013 requesting an update on its planned briefing sessions and the proposed presentation containing best practice material for the TGSs. We will update RAIB on 30 June 2014.

Status: In progress – RAIB to be updated by 30 June 2014

Additional responses from other Intermodal Operators for information

AV Dawson

On 24 April, AV Dawson provided two attachments:

- Hapag Lloyd's loading procedure - these instructions were placed on Hapag Lloyd by Canadian Pacific Rail and are used as a guideline. Virtually all loads containerised by AV Dawson are uniform lengths of steel which are also chocked at the sides to ensure there is no sideways movement of steel within the container.
- AV Dawson's own Safe Working Procedure which was devised with input from Tata Steel who are the owners of virtually all the steel it packs into containers.

AV Dawson states it believes that it satisfies recommendations 2 and 3 by following these two documents.

C.Ro Ports

Recommendation 2 - *We believe we already have this covered by our own process. All export units must be presented in a condition that will withstand a sea crossing. The forces that are applied to a transport unit while at sea are greater than most other forms of transport, most certainly greater than those generally applied on a train journey. We will reject any units at the terminal gates if they are showing any signs of issue in respect of packing. We accept that not all signs will be visible in respect of freight containers and with this in mind, a part of our process is to weigh and check the load spread on any lift unit that we handle and this is achieved mechanically by our reach trucks. If any issues are identified the unit will be opened, checked and restored, if possible, by our ancillary crew. We would not present any unit for onward movement by train if we were not satisfied with the unit.*

Recommendation 3 - *By not being rail operators and not having the technical knowledge of rail wagons, it is almost impossible, if not a little unfair, of the rail authorities to expect a ferry terminal to be able to ensure that side to side wheel load imbalance should not occur. We except that units offered for onward movement should be in a fit condition and that loads should generally be distributed evenly throughout the container. We cannot reasonably be expected to know the tolerances that would put a wagon out of gauge, this surely should be the responsibility of the shunters, they must take responsibility for the loading of their own wagons. We are more than prepared to work to rail guidance in respect of loading wagons and this guidance should come from the rail staff (Shunter). It is our opinion that once loaded and checked by rail staff the wagons are loaded in an acceptable condition for onward movement from the terminal.*

Devon and Cornwall

On 19 June 2013, Devon and Cornwall Railways provided the statement below:

Recommendation 2 and 3

To ensure that the risks associated DCR's activities are understood, documented and controlled, DCR has a company safety risk model including a processes used for the management of risk. This includes a New Traffic Flow Approvals and a Traffic Acceptance Process, this ensures the robustness of the arrangements by which DCR ensure that all planning, engineering, operational, financial, risk and HSQE implications are taken into consideration during the acceptance of new or amended traffic flows and to ensure that the specific risks associated with the introduction of a new or amended traffic flow have been assessed and controlled and that the operation has had formal approval from the appropriate 'professional head(s). DCR senior management team also participate as members of the RSSB's Freight Technical Committee, National Freight Safety Group and Rail Freight Operators Group where there are a number of active discussions relating to offset loads currently under discussion. The report and recommendations from the RAIB investigation along with any outputs from the RSSB committees will be carefully considered during any assessment for the operation of any containerised traffic in the future. Any output and controls from any new traffic approval in relation to the recommendations will be forwarded to yourselves for your record.

Maritime Transport Ltd

On 31 May 2013, Maritime Transport informed ORR it had sent the letter to its client base, the content of the letter is below:

In accordance with the RAIB report and Office of Rail Regulation as the safety authority, we, Maritime Transport Ltd, are obliged to enforce and police the recommendations published on 28th January 2013.

In particular, onus falls directly with us to ensure that recommendations 2 and 3 are met with users of our Railport facilities. We, Maritime Transport Ltd, are required to take these recommendations forward and act upon them in the following manner:

- *Have a declaration from the sender of the container that it has been packed in accordance with IMO/ILO/UNECE guidelines for packing of cargo transport units available at: www.unece.org ISBN 92-801-1443-3;*
- *We have documented and submitted our method of having written certification that each container meets the above guidelines of packing containers are kept and made available for auditing at any given time;*
- *We have measures in place to, where necessary, open and inspect loaded containers should we suspect the load is not packed in accordance with IMO/ILO/UNECE guidelines for packing of cargo transport units, or no certification has been received. This will be determined by stability test using reach stacker when lifting the container.*

As a user of our rail terminal, you will be required to provide us with written confirmation with each train consis, all boxes have been loaded in accordance with IMO/ILO/UNECE guidelines for packing of cargo transport units. These consis will be kept and filed for future auditing by the regularity body.

I trust your organisations will be able to support us with this in order for us to comply with the recommendations set out by the RAIB and ORR as these recommendations will become and form part of our operating and clients use of our rail terminals.

PD Ports

On 19 April 2013, PD Ports provided the following:

For the following reasons we are unable to adopt the recommendations:

Recommendation 2 to require customers to provide assurance that containers are packed in accordance with good practice and carry out appropriate audits to verify:

- *The port does not have contact with the owners of the goods or any of the parties responsible for the packing of the containers. Currently, there is no paperwork accompanying containers which could be signed by owners/packers and verified by the Port. The containers are packed and forwarded to the Port from all over the world including the UK and will have travelled to the port by road, rail, short sea or deep sea and it may have been necessary to tranship the goods during the course of the journey by a party in the transit chain;*
- *The port does not have the authority to open containers and only does so under the express instruction of the owner or whoever has responsibility for the goods at the time or the Authorities (e.g. Police, UK Border Agency) with the owner/their representative in attendance;*
- *Even when instructed to open a container, little can be seen from a visual inspection as the internal view is obscured by the goods at the front of the container, many of which will be packed in boxes/cartons;*
- *If the Port did open boxes to inspect, the Port has no expertise for checking the packing or for securing the goods which should always be packed to the owner's requirements;*
- *Some goods will be subject to customs and excise duty and subject to strict bond rules;*
- *It is not possible to open many containers such as those containing bulk goods e.g. grain, metal, liquids.*

Recommendation 3 is to develop a suitable monitoring system:

- *The weight distribution of many cargos is uneven and may shift over the course of a journey due to rough seas;*
- *Whilst the Port understands the dangers of unsafe loads, the Port does not have reliable method of determining the weight distribution of each and every container and its suitability for transport by rail;*
- *The Port does not operate or control any trains which access the rail network. The Port loads containers at the request of the Rail Freight Operator who has the responsibility for checking the suitability of containers destined to go on the rail network.*

Pentalver Transport

On 29 April 2013, Pentalver Transport provided the statement below:

Recommendation 2

Pentalver Transport supply services to the container shipping industry in a number of ways. We transport, handle, store loaded/empty, repair, prepare and in some cases,

arrange shipping and load containers for our customers. Our customers are generally shipping lines, forwarders, shipping agents and DB Schenker for rail forwarding:

- *The containers we load for customers are generally specialist loads which require specialist securing, therefore all our loads are subject to strict controls, are monitored and signed off;*
- *The containers transported and handled by our company are loaded by the customers and therefore not under our direct control;*
- *HGV drivers are generally not permitted to observe the loading process or make a final check before the doors are closed due to health and safety and security restrictions at the load point;*
- *Not many HGV drivers are trained to recognise what is and what is not a secure load;*
- *To implement the recommendation documentation and certification for secure loading would require an industry change which would require the shipping lines to implement and control.*

This recommendation would not be achievable for our business. To achieve an industry change such as this would require pressure from an enforcement agency such as HSE.

Recommendation 3

The container handling equipment used to directly load the trains has a very restricted capacity to recognise if a container is not loaded evenly. Excessive weights and extreme imbalance would be the limit of recognition.

Our general yard heavy container handling equipment would be capable of noting some load imbalance but this would not be with the use of calibrated measuring equipment. It would rely upon operator training and the ability of the operator to recognise when a load is not level. This control would be quick and simple to implement but not a reliable control measure.

Port of Workington

The port currently handles and stores rail containers/tanks for distribution to local business. These containers are packed offsite and not on the port.

Containers loaded onto rail wagons are inspected and cleared by the train operator staff before leaving the port. All documentation relating to the movement of a loaded train is also the responsibility of the train operator. Train operators using the port are DB Schenker and Direct Rail Services.

Portsmouth International Port

Fratton Intermodal Goods Yard has not operated as a freight yard since March 2009 and the necessary infrastructure for it to do so has been removed. We note, however, the recommendations and should we be approached to re-open the yard for freight we will take the measures necessary to meet the requirements of the RAIB report.

Potter Logistics

To complete our response, we have consulted with the other stakeholders (customers, shipping lines, road transport providers, train operating companies, other RFTs and ports) involved in the container supply chain process at our rail freight terminal operations. We were surprised to find that none of them had also been contacted by the ORR on this subject. However, our response has been prepared with input from the other stakeholders and we have requested that they too respond to you on this matter.

We agree that there are several guidelines, regulations and codes of practice governed by various transport organisations, HSE, DfT and British Standards regarding how containers should be loaded for safe onward transport regardless of mode. For export container's, which is 100% of what Potter Logistics loads to rail from road haulage, the shipping lines use CMR terms to regulate how containers must be loaded for safe onward shipment and is a condition of the shipping contract.

All export containers loaded to rail from road are administered under the instruction of the shipping line and therefore regulated to have been loaded in a safe manner for onward shipment from road to rail. Containers not administered correctly by the shipping line will not be off loaded at the rail freight terminal. We believe that our operating procedures that are ISO9001:2008 compliant, already meet with the report recommendations.

Roadways Container Logistics

Looking at the photographs, the load was clearly not distributed or secured correctly and that is for the company that loaded the container to address and correct the problem via training.

On many occasions, the driver would not get to see the load as the container would be sealed and only with written authorisation can we, as a terminal operator, remove a seal.

The lifting equipment we operate for loaded containers are straddle carriers and gantry cranes. Neither piece of equipment would identify or indicate a side heavy container to our equipment operators. Gantry cranes have a weight indicator that would flag if a container was overweight but not a heavy end or side of a container.

If the load (17000kg) had shifted during the road journey it could have caused a stability problem with the vehicle. Our own drivers have written instructions regarding unstable loads in the driver's handbook.

As the terminal operator, we would then rely on the driver informing us that he suspected an unstable load or a load distributed incorrectly. If no information was forthcoming, we would not be able to identify unstable/poorly distributed or insecure loads. If we did suspect an unstable load, we would notify the shipper and await instructions.

A one degree list as shown in the report would not be detectable on the rail wagon via a visual check before departing onto Network Rail. We comply with all Freightliner operating instructions regarding loading and weight limits on rail wagons.