

Technical barriers: overview, impact on quality and sustainable solutions (RFCs)

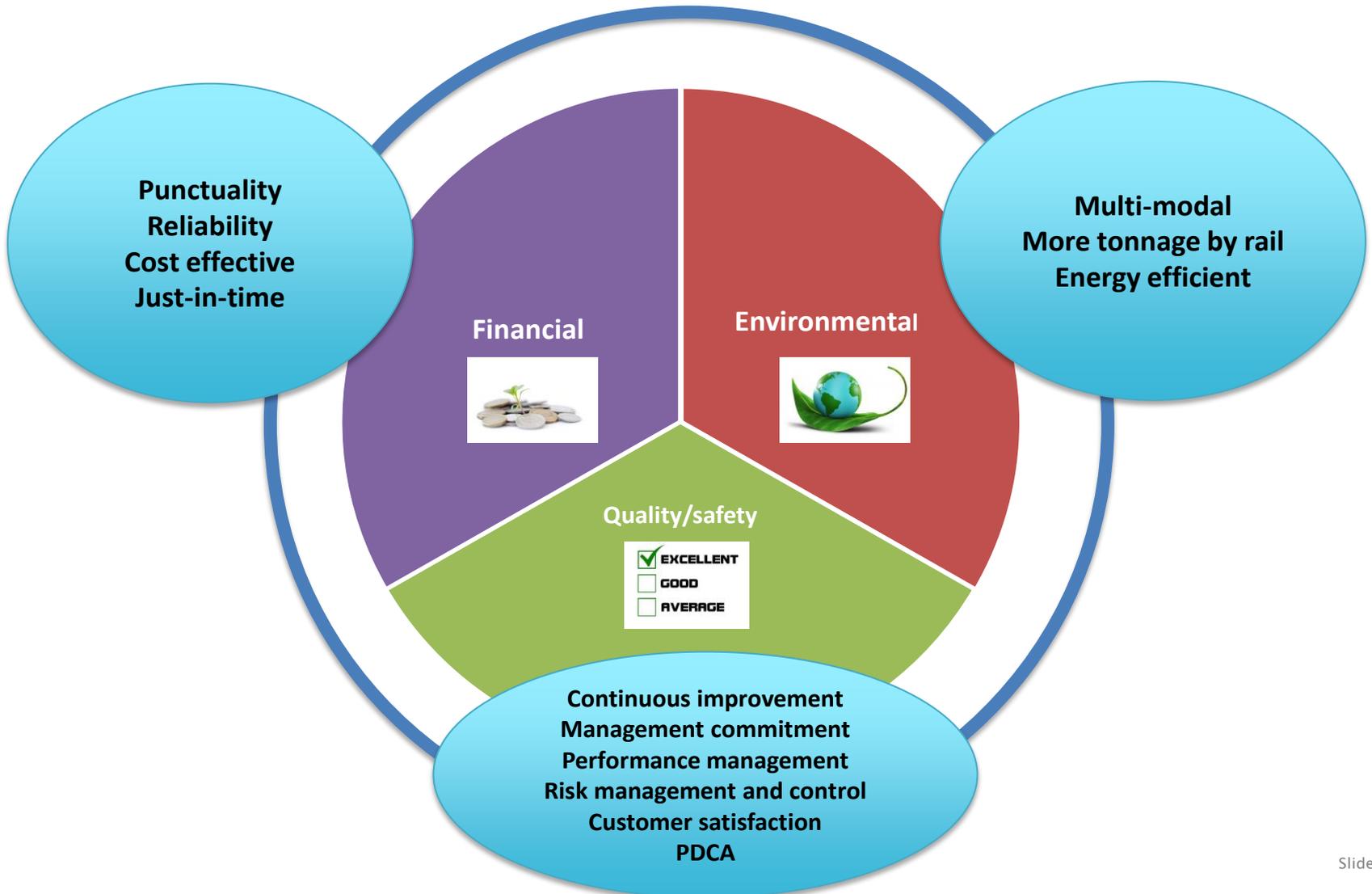
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- Background:
 - Technical barriers = operational barriers – *requirements that can cause a bottleneck in the use of rail freight and can cause loss of time and business costs.*
 - + Quality = *meeting or exceeding customer expectations.*
 - + In relation to ISO 9001 *it includes all activities designed to produce products and services of appropriate quality.*
 - + Sustainability = *a process by which companies manage their financial, social and environmental risks, obligations and opportunities. These three impacts are sometimes referred to as profits, people and planet.*
 - + Just in time principle = *denoting a manufacturing system in which materials or components are delivered immediately before they are required in order to minimize storage costs.*
- Context – why and what can help?
 - Rail freight corridors because they are about transportation business and seem to have more problems
 - + European Framework:
 - + Safety Management Systems, quality and culture delivering the best for the company
 - + Operational rules

Quality, safety and sustainability:



- Traditionally, rail freight has been linked to larger shipments (i.e. coal) and manufacturing with sidings/port access
 - But in the future rail freight needs to look to new markets – containerisation and move towards more multi-model.
- Rail freight can be more efficient and sustainable in relation to tonne/km hauled per energy consumed.
 - One shipment by train can include more tonnage than several lorries
 - Potential for more
- EUROSTAT – fewer goods were transported by EU28 in 2016 than 2015 but on longer distances
- But a major disadvantage of rail freight is its lack of flexibility which can also impact on costs.
 - Rail freight needs to be more customer-orientated and sustainable so that it can become more successful and meet the ‘Just in time’ market requirements.

- Freight transport is a major tool for economic growth, the development of regions, for integration among regions and for the success of the single market
 - Multi-modal will play an increasing role in delivering the just in time requirements for goods – cutting costs and ensuring production is on time
 - Rail freight corridors are about promoting inter-modality between rail and other transport modes by integrating terminals into the corridor management process



- Lack of flexibility and extra costs:
 - Technical barriers which relate to an operational rule (national rules NRs) waiting times at border can be up to 24 hours!!!!
 - Huge impact on quality and sustainability – move to road transportation
- Rail freight needs to be faster, more quality orientated and sustainable – at the moment this is not the case.
- Individual MSs often come to a political agreement with their neighbours to run services then a way is found around the differences in NRs.
 - Political influence of the incumbent railway business'
 - For private organizations then problems with delays due to compliance with NRs
 - Sometimes to the extent of rendering the proposed service uneconomic
- The rail freight sector needs to be allowed to develop and manage their own operational risks requirements
 - Problem is that it happens in some MSs but not in others
 - In relation to the RFCs one RU could operate on a corridor safely using their own qualitative risk based approach but at a border with another MS this is not accepted despite it being within the European framework



Rail Freight Corridors (RFCs) map 2018

Including extensions expected in 2020 as indicated by the RFCs



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2017 KPI	RFC1	RFC2	RFC3	RFC4	RFC5	RFC6	RFC7	RC8	RC9
Punctuality at origin	68%	80%	69%	75%	48%	No inf	48%	60%	Not applied
Punctuality at destination	58%	73%	58%	75%	33%	No inf	35%	50%	Not applied

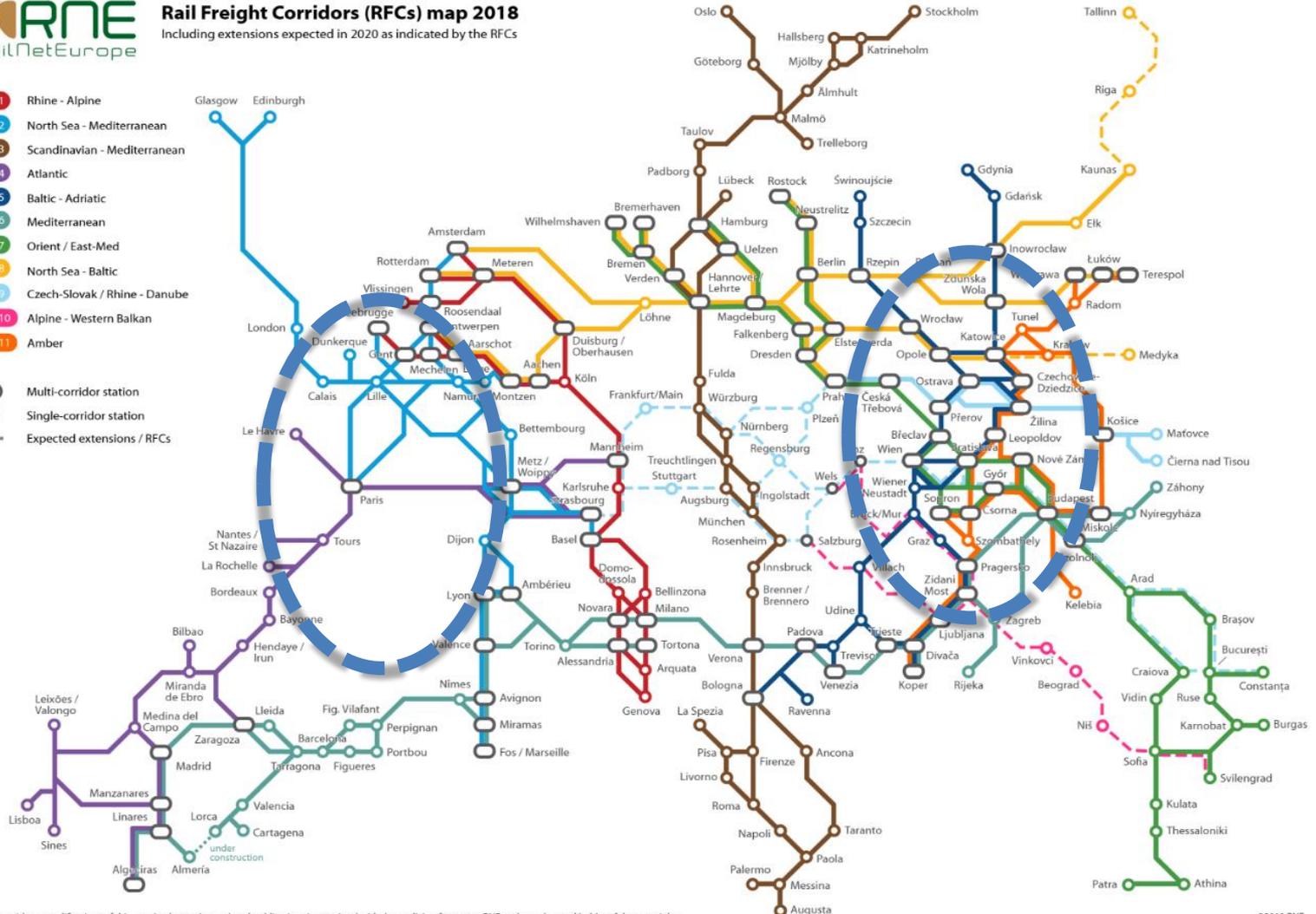
- There will also be differences between the MSs on the RFCs with some having a quick turnaround at border stations and others having severe delays
- With such performance in relation to punctuality it is difficult to see how rail freight can meet customer needs.
- This will be particularly important with more containerization and the desire to meet the just in time principle.



Rail Freight Corridors (RFCs) map 2018

Including extensions expected in 2020 as indicated by the RFCs

- RFC1 Rhine - Alpine
 - RFC2 North Sea - Mediterranean
 - RFC3 Scandinavian - Mediterranean
 - RFC4 Atlantic
 - RFC5 Baltic - Adriatic
 - RFC6 Mediterranean
 - RFC7 Orient / East-Med
 - RFC8 North Sea - Baltic
 - RFC9 Czech-Slovak / Rhine - Danube
 - RFC10 Alpine - Western Balkan
 - RFC11 Amber
-
- Multi-corridor station
 - Single-corridor station
 - Expected extensions / RFCs



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OEM (RFC7) - All border crossings except one have higher than two hours waiting time



Leading to increased costs and inefficient results for the rail freight corridors

- Historically the RSD 2004 introduces a transition
 - between the rule based approach imposed at MS level; and
 - the European framework of a risk/system based management approach via the SMS
- As railways were in the domain of the MS, rules were developed along national lines, often based on historical requirements.
- The rule based national approach meant different rules in different Member States covering similar issues that result in delays at borders for passenger and freight traffic
- With the opening of the railway market, need for a change to the wide range of approaches to safety across MS, to break through the technical and rules based barriers and establish more international transport operations
- The RSD 2004/2016 and the IOD 2008/2016 are the key tools in establishing a common regulatory framework to help establish and promote the single market for rail transport services
 - The European framework is very much based on the principles of safety, quality and sustainability
- But despite the development of the European framework some MSs insist on keeping national requirements and control.

Technical (operational) barriers

- **Tests and checks** – Member States who require these as national rules then stop the RU at the border to undertake additional tests and checks.
- **Train composition** – there are some occasions where the train number has to be changed at the border which de facto requires the train to stop and additional checks required at the border as a result.
- **Buffer wagons** – some MS NSA require a certain configuration of the train due to the carriage of dangerous goods, which is not risk based but usual practice.
 - Whereas another MS may not require this but put the responsibility on the RU to manage the risk of their particular operation.
 - RID has considered this issue and does not believe it should be harmonized.
- **Braking tables** – this is a responsibility for RUs under the 2015 TSI OPE. However some Member States insist on national rules.
 - This means that (linked with tests and checks) they are required to stop at the border, even though their risk assessment for the whole operation and the parameters of the infrastructure means that they are safe to continue.
- Language as an operational barrier for effective communication between RU and IM
 - Economic costs for RUs

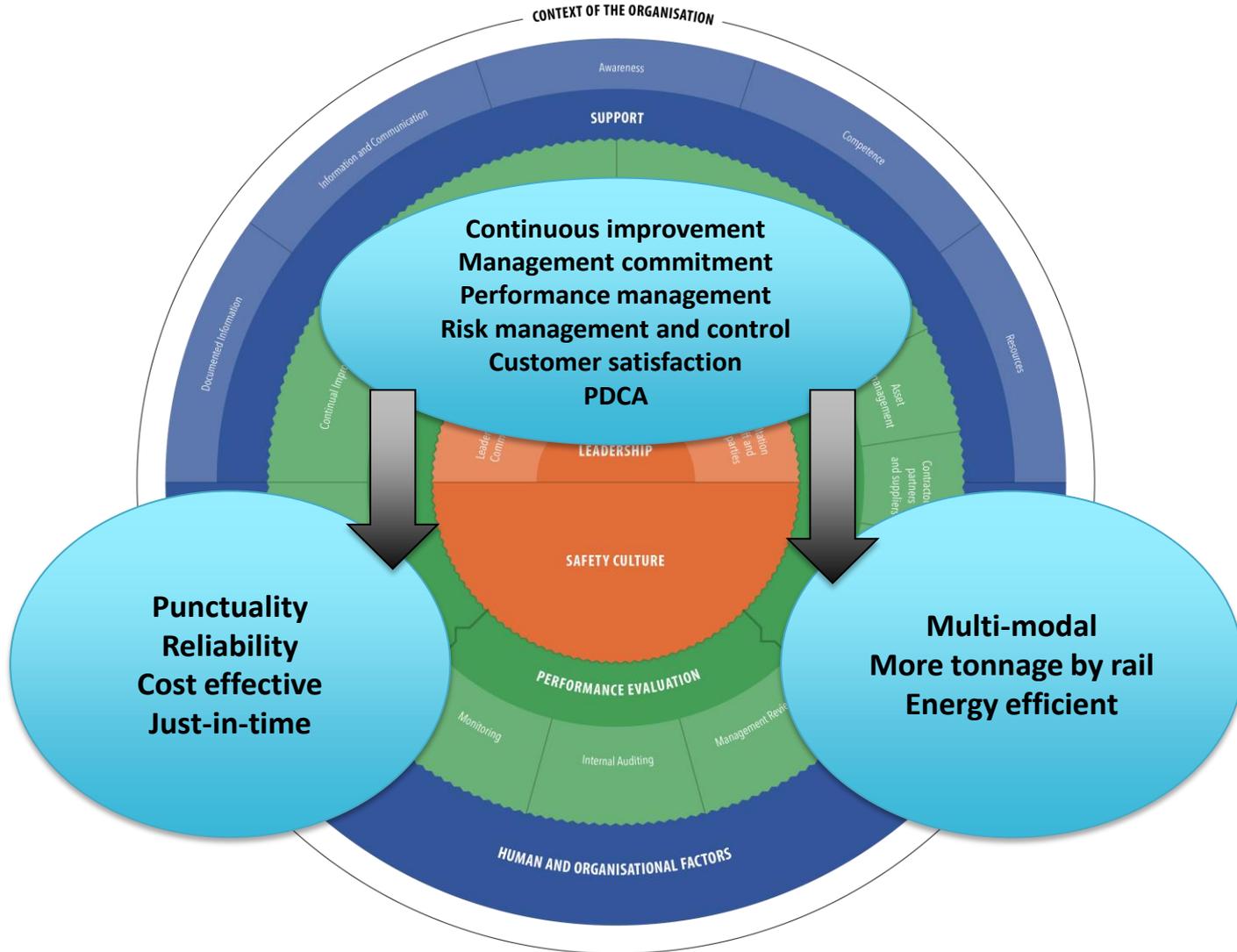
- Problems:
 - Different and inconsistent requirements
 - Not risk based
 - Not business orientated
 - Required even if no change to the train composition
 - Waiting time increased because a special inspector required
 - European framework not adequately applied or reflected
- Consequences:
 - Increased dwell time at the border
 - Reduced commercial speed
 - Traffic disruptions at the border stations
 - Increased wagon turnaround cycle and wagon changes

What has the Agency done? (1)

- Developed new criteria for the SMS – clear requirements on operational planning and control linked to results of risk assessment
- Case study on different operational rules for cross-border sections between DE, DK and SE (in the framework of Operation TSI impact assessment).
 - The cross border section required a stop to change to use different braking rules.
 - The cost impact was estimated at 500,000 Euros per year. Plus additional shift of a driver.
 - The Agency reviewed the situation on a practical level with the RUs/IMs and NSAs concerned, using a risk based approach to the operational requirements
 - Result it was agreed that around 57% of trains in the future will not require a brake position change at the cross border section.
 - This was not an issue of harmonization but of facilitation by the Agency and optimization of the rules by the stakeholders.
- <https://www.dropbox.com/s/d9x85hikbf5kc2x/Barrier%20DNK%202018.mp4?dl=0>

What has the Agency done? (2)

- Project and guidance to clean-up and remove operational NRs
 - Workshop with NSAs on sharing some of the best practices from MSs who have effectively cleaned-up their NRs
- Refined the TSI OPE and Application Guide
 - Clearer framework for safe operation
 - More harmonisation of operational rules – restriction on the topics for NRs
 - More harmonisation of instructions (written orders)
 - Closer links with the SMS, risks and operational procedures
- Working closely with the Commission and sector on the RFCs and Issues Log Book priorities:
 - P1 Braking
 - P2 Train composition and tests and checks
 - P3 Real time communication and train composition
- Workshop organised by ERA with NSAs with active participation from MSs who have cleaned up their NRs



What else needs to be done?

We all have a role to play:

- Member States
 - Clean-up and remove NRs as per ERA guidance
- National Safety Authorities
 - Better application of the SMS – assessment
 - Checking through audits/inspections how the SMS and operational procedures are applied in practice
 - Links between SMS, risks and operation and not SMS as a handbook for ‘soft’ requirements and NRs for the real ‘hard’ operational requirements
 - Recognise the links with quality and safety – continuous improvement and safety performance (PDCA)
- Rail regulators – securing non-discriminatory access
- Sector
 - SMS is a living document and should be the bible to ensure safe operation
 - Adopt SMS which is about continuous improvement and learning with clear performance measures and action plans (PDCA)
- ERA and the Commission recognise that something needs to be done and want to work towards effective solutions with the RFCs/MSs/NSAs
- ***This problem will only be solved if we work together within the European framework***



Effective application of the European framework

- Performance/risk based control through the SMS rather than rule based control provides:
 - Greater flexibility for the rail freight company – able to deliver to time/quality requirements
 - More emphasis on quality and safety procedures – better customer satisfaction
 - Less reliance on national rules that hinder smooth cross border operation – better punctuality, reliability and cost effectiveness
 - Energy efficient transportation – more tonnage shipped by rail – less on the road
 - Rail freight companies can play an active role in the multi-modal transportation as they have clear quality process and procedures
- Performance based rather than compliance based means that process and procedures are continually monitored and reviewed to ensure that they deliver a quality service
 - Safer practices – through continuous learning and improvement
 - NRs only solves the problem at an individual level not system level

Change must happen now

We have the means already

Need to work together to achieve this

**If we do not – rail freight will not be seen
as a viable option!**

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