

Making the railway system
work better for society.

Note on Safety Targets for stakeholder discussion

Purpose, scope and objectives of this document

- *To initiate a wider discussion with stakeholders about the value of numerical safety targets.*
- *To understand how they are used, and misused, in local and executive decision-making.*
- *To share an analysis of the Strengths, Weaknesses, Opportunities and Threats of safety targets.*
- *To ensure that any regulations proposed by the Agency support a risk-based approach to safety and organisational cultures that are positive about safety.*

At the end of this consultation, the Agency will be able to support the Commission in drafting a mandate (by implementing act) to revise or retain the current Common Safety Method (CSM) for Common Safety Targets (CSTs).

Background

Please see Annex 1 for some background information on CSTs and their development.

Rail is the only mode with legally binding, quantitative, EU targets for safety performance.

Introduction

The first Railway Safety Directive came into force in 2004. At that time, to address concerns associated with liberalisation of the rail market, safety targets were included in the Directive to ensure, ex post, no degradation of railway safety. The CSTs bind Member States, not individual rail companies. It is important to note that there is no penalty mechanism for the targets themselves (Member States are required to report to the Commission for failure to achieve the Targets).

The 4th railway package represents significant change in the rail safety regulatory framework. Some roles and responsibilities will be transferred to, or shared with, the Agency. There is a greater emphasis on NSA Supervision, rail actor safety responsibilities and safety culture. At the same time, the European Commission is committed to Better Regulation¹. In this context, are safety targets adding value? Are they perhaps, even, damaging?

Prior to the development of the CSM for CSTs, no binding qualitative safety targets existed. The data show that even without targets, the railway sector had succeeded in achieving considerable safety improvement, largely through technical innovation.

Roles, responsibilities and proactive, risk-based regulation, based on the Safety Management System

The Recast Railway Safety Directive allocates responsibility for system safety, and management of the risks associated with it, to RUs and IMs. But National Safety Authorities and Member States also have responsibilities, NSAs to assess safety risks across rail networks in order to prioritise their certification and supervision activities, Member States to create and resource the right regulatory frameworks.

¹ http://europa.eu/rapid/press-release_IP-15-4988_en.htm

This is translated into the requirement for each RU and IM to demonstrate a Safety Management System (capable of achieving the CSTs²) in order to obtain permission to operate. A Safety Management System is proof of the *capability* to manage risks and operate safely. This is assured by ongoing supervision by National Safety Authorities. A parallel and similar framework exists for ECMs.

The intention is that risks are identified and prioritised locally, by those best placed to manage them. Targets imposed externally and, significantly, by those at the top of the hierarchy, can distract management focus, resource and effort away from the most relevant risks at a local level. This is true at every level, rail actors, national and EU authorities.

The original objective of the CST mechanism was to monitor safety through implementation of the European rail package. Today, the Agency is developing more proactive, leading indicators of safety performance and management capability: tools for the assessment of management system maturity and monitoring of NSAs, all supported by access to wider and better data through the Common Occurrence Reporting Project.

Safety Culture and the negative effect of safety targets

The Agency has a multi annual programme to develop a common approach to safety culture. This reflects changes in the Recast Railway Safety Directive³. The Project Plan for that work sets out clearly the benefits associated with developing culture around safety. A key focus for the Agency is in developing strong reporting cultures, to encourage reporting of accidents and incidents, and learning from those reports. Good reporting systems can themselves generate belief and enthusiasm for safety value and improvement.

Creating targets around safety performance, measured by safety reporting, can act as a powerful disincentive to report. This may not have a significant effect on indicators such as numbers of fatalities, serious injuries and serious accidents, which are usually very public and simple to identify unambiguously. But as the Agency develops proposals for wider reporting, to include additional categories of incidents (precursors to accidents) and greater supporting information about each incident, there will be a greater *de facto* discretion to report, and therefore even greater need to create the right cultures around reporting. Put simply, the regulatory framework, and those enforcing it, will need to incentivise reporting and certainly not punish it.

Other industries have learned the hard way how numerical targets can have damaging and distorting effects on the examined activity;

- *Transport schedules and timetables being “padded” to maintain punctuality targets,*
- *Demotivated teachers training students to answer exam questions to achieve good school ratings,*
- *Police arresting low level criminals, or issuing lots of fines, and ignoring more serious harm to achieve clear up rates or raise revenue,*
- *Or targets that create conflicting priorities such as production, availability or punctuality, instead of safety.*

These are all examples of targets established with good intentions to improve public services. All examples of failing to understand and encourage what is already being done right, in the interests of avoiding failures. There are similar problems associated with *incentivising* either more, or less, reporting – how can you trust the number of reports? Significantly, all of these examples can be shown to have undermined staff belief in the value of safety within their organisations, demonstrated over and over again by leaders and colleagues – a drop in safety culture.

It is worth noting that the CSTs are deliberately attached at Member State level to avoid this problem. Nevertheless, the impact on culture of strengthening the targets should be carefully considered.

² Article 9(1) “Infrastructure managers and railway undertakings shall establish their respective safety management systems to ensure that the Union rail system can achieve at least the CSTs.”

³ Article 9(2) and article 10(1)

The value of targets and how they support decisions about safety

In order to be able to support the Commission in drafting a mandate (by implementing act) to revise or retain the current CSM for CSTs, the Agency would like to receive your answers for the following set of questions by 4 September 2017 by sending your answers to ernest.godward@era.europa.eu. Please get in touch if you would prefer to discuss your ideas or concerns.

A Strengths, Weaknesses, Opportunities and Threats analysis is included in Annex 1. The Agency welcomes your comments to this analysis.

What we would in particular like to understand better is how targets influence decision-making about safety. Not just the CSTs, but publication of the CSIs, and national and local targets where relevant. In particular;

- *At Member State level – finance and spending decisions, contract award, changes in legislation, resourcing public authorities, statements to the public and press, planning decisions, prioritisation between transport modes...*
- *At Authority level – supervision planning, safety investigations and analysis, certification assessments, education and guidance, enforcement decisions...*
- *At rail actor level – risk assessment, analysis and prioritisation, funding requests, tenders, planning decisions, staff planning decisions.*

To structure your answers, some more detailed questions are set out below:

- 1) *What are your qualitative and quantitative safety targets? Could you provide full list?*
- 2) *What kind of method/procedure do you use to define, assess safety targets? Could you provide the method/procedure with the explanation how safety targets are defined and assessed?*
- 3) *How are you using (for which purposes) safety targets? Could you provide examples?*
- 4) *How often you assess achievement of safety targets? How often you review/update your safety targets?*
- 5) *How safety targets influence/drive decision-making about safety? Could you provide examples?*
- 6) *What is the value and effect you see in quantitative safety targets? What are the negative impacts of quantitative safety targets?*
- 7) *What is the value and effect you see in qualitative safety targets? What are the negative impacts of qualitative safety targets?*
- 8) *Do you have/use annual safety plan(s)? Could you provide example(s)? What is the goal of safety plan(s)? What is the impact of safety plan in terms of achievement of safety targets?*
- 9) *What kind of methodology you use for identifying and costing safety improvements? Could you provide the methodology and brief description?*
- 10) *The Railway Safety Directive provides for CSTs: What principles should we adopt to create a more effective framework of targets and how should we assess those targets? (e.g. limiting the distortions and the threats mentioned in the table above). Should the targets define a more ambitious aspiration goal?*

Annex 1 – Background information on CSTs

CSTs were introduced under the Railway Safety Directive (RSD) in 2004⁴ to ensure that a high level of safety would be maintained and, when and where necessary and reasonably practicable, improved. They provide an overview for assessing the safety level and the performance of railways at an EU level and in the Member States.

The first set of CSTs were adopted by the European Commission (EC) in 2009⁵ and annual assessments of the achievements of CSTs have been carried out by the Agency since 2010. In 2011, a mandate was given by the Commission for the preparation of a second set of CSTs by the Agency which were later adopted in 2012⁶. There was also a minor amendment to this second set of CSTs during 2013⁷.

The European Commission issued a further mandate for a revision, to be implemented by 2015⁸. A draft recommendation was prepared, but the Agency decided to recommend no change to the CSM at that time. Recognising the difficulty of imposing such ambitious safety targets at a time when Member States were preparing to implement the 4th railway package, the Agency wanted to ensure CSTs were accompanied by support to improve, provided by the ongoing Priority Countries programme and an Assessment of Feasibility of Efficient Risk Reduction for European Railways, which provided a methodology for identifying and costing safety improvements.

A flow chart summarising the current method is below.

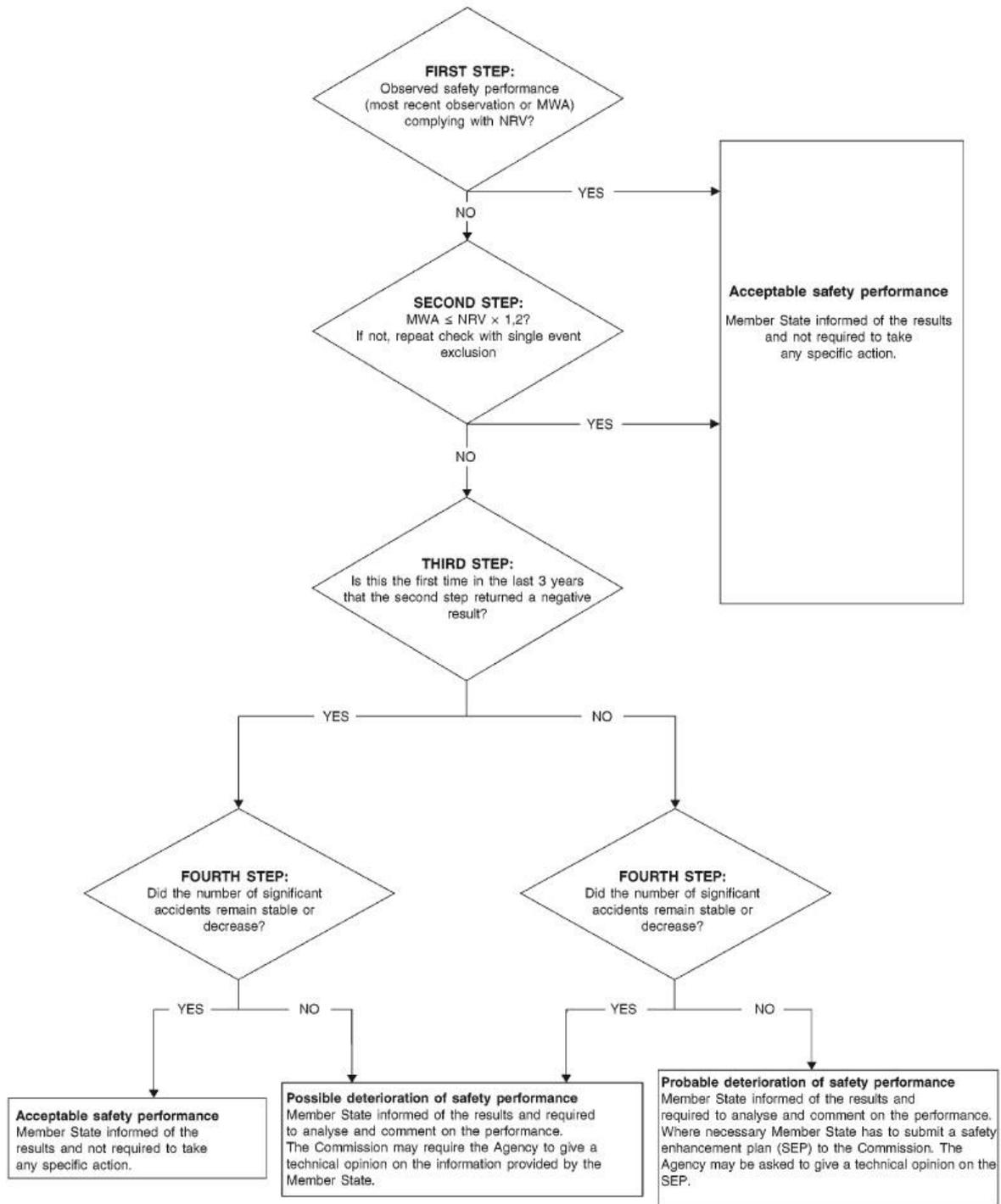
⁴ Directive 2004/49/EC of the European Parliament and of the Council on safety on the Community's railways and amending Council Directive 95/18/EC on the licensing of railway undertakings and Directive 2001/14/EC on the allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification (Railway Safety Directive).

⁵ Commission Decision on the adoption of a common safety method for assessment of achievement of safety targets, as referred to in Article 6 of Directive 2004/49/EC of the European Parliament and of the Council.

⁶ Commission Decision 2012/226/EU on the second set of common safety targets as regards the rail system.

⁷ Commission implementing decision of 11th December 2013 amending Decision 2012/226/EU on the second set of common safety targets for the rail system - 2013/753/EU.

⁸ Commission implementing decision of 22nd July 2011, C(2011) 5158, on a mandate to the European Railway Agency on the revision of common safety targets and related common safety method for period 2011-2015



Annex 2 – Strengths Weaknesses Opportunities Threats (SWOT) Analysis of CSTs

<p>Strengths</p> <ul style="list-style-type: none"> Clarity of objective Fairness of assessment Allow comparison 	<p>Weaknesses</p> <ul style="list-style-type: none"> Inflexible Slow to amend Reactive, not proactive or predictive Fair normalisation and comparison
<p>Opportunities</p> <ul style="list-style-type: none"> To influence and incentivise decision-making To encourage collaboration between different actors to a common goal To focus political action on safety <i>without</i> an accident 	<p>Threats</p> <ul style="list-style-type: none"> Safety responsibility shifted to policy makers, not rail actors Distorts focus away from key risks identified locally “Gaming” of targets producing unwanted behaviours Disincentive to reporting