Applying Risk Triggered Commentary to Train Dispatch - A staff booklet
1 Introduction

1.1 What is this booklet about?
This booklet has been developed by RSSB for staff who dispatch trains. The aim is to help you understand more about the technique and how you can use it.

1.2 Acknowledgements
RSSB would like to thank the following for helping to develop this booklet:

1. Great Western Railway
2. The Platform Train Interface Strategic Implementation Group
3. East Midland Trains
4. Heathrow Express
5. Southwest Trains
6. Abellio Greater Anglia
7. Rail Delivery Group
2 Risk Triggered Commentary

2.1 What is it?

Risk Triggered Commentary (RTC) is a technique to help focus our memory so that critical information relating to risk for a given situation and/or task is maintained at the forefront of our mind.

The technique can help you better anticipate, identify and mitigate against potential risks associated with your duties. It can be beneficial to new starters as well as experienced staff.

2.2 How does it work?

RTC relies on you retaining information by maximising memory capability.

Our memory is divided into two parts – working memory (or short term memory) and long term memory. Both have limitations.

Our working memory can only hold between 5-9 items of information at any one time, which is typically held for around 15 to 30 seconds, unless a strategy is used to move it to long term memory. This means we can easily forget information, especially if we are distracted, carrying out multiple tasks, processing lots of information, feeling under pressure, are over familiar with a task, etc.

We may also mis-recall rules and procedures from our long-term memory, if for example, we make wrong assumptions about a situation and/or are not fully paying attention to the situation. We may also forget or be unsure which procedures or rules apply if we find ourselves in a situation we have rarely experienced.

To free up mental capacity, humans naturally, over time, respond to situations they encounter frequently in a certain way, typically leading us to undertake certain actions automatically. This is called “auto-pilot” and is how habits are built.
Slipping into “auto-pilot” can mean we make assumptions when encountering similar situations. For example, a Guard releasing the same number of doors at a particular station, or a Dispatcher always seeing an OFF indicator lit at departure time. Slipping into “auto-pilot” can reduce our ability to anticipate risk and lead to loss of concentration and complacency.

2.3 What benefits can it bring?

RTC can bring to your attention information about a specific task/situation that is usually processed automatically without you thinking about it. So instead of potentially dispatching on “auto-pilot”, you are dispatching with your full attention focused on what you are doing now, the potential risks that may arise and what you will need to do.

An example applicable to all forms of dispatch is a red signal. Drivers, Guards and Dispatchers waiting for a red signal to clear before dispatching should have this in the forefront of their mind. There will be other key safety tasks to be aware of and perform after the signal has cleared, but none of this takes precedence when the signal is still red.

This increased level of attention can help reduce the potential for errors.
3 A model of Risk Triggered Commentary

3.1 Overview

RTC involves you recognising a risk and then speaking it aloud (to yourself), along with the actions you need to undertake to mitigate against the risk. This process helps you to “sense check” what you are doing and plan do to.

It is important that you use the technique in a way that suits you best, so it does not have a negative effect on your ability to carry out your tasks. For example, some people may not be comfortable speaking out aloud and would prefer to mutter under their breath or mentally verbalise. However, speaking aloud is the most effective method.

The technique is risk based, so that it does not become a running commentary of each decision and action you undertake. Although this can be helpful, especially for new starters, there is the potential that overtime the commentary becomes so routine, that you go into “auto pilot” when commentary working.

Figure 1 represents a four stage process you can follow to apply RTC. This model is courtesy of Great Western Railway and described in detail below.

3.2 Stage 1: Recognise the risk

To start, a risk is identified. Without identifying the risk, you will have nothing to verbalise and will be unable to decide or take any action to prevent the possible consequences.

A table of example risks is provided in section 5. More subjective risks can also be recognised for verbalisation. This could be, for example, when you have recently signed a new route, or are working at a new station. Fatigue, stress, time pressure and the experience of high or low workload can also be risk factors for identification.
1. Recognise the risk
The initial step is to recognise the risk

2. Verbalise risk
Verbalise risk to bring it to your attention, then pause and register

3. Perform a physical action
Strengthen your thoughts by performing one physical action

4. Re-affirm risk and action
Re-affirm your verbalisation and the action[s] to take

Figure 1: A model of Risk Commentary courtesy of Great Western Railway (GWR)
3.3 Stage 2: Verbalise risk

Secondly, the risk is verbalised e.g. you say what you see. Examples of what a person might say relating to a risk, are shown below:

1. **Drivers** – ‘Individual still boarding in screen 2’
2. **Guards** – ‘Door release right hand side at this station’
3. **Dispatcher** – ‘OFF indicator not lit, platform signal at danger’

Once you have said what you see, pause and register what this means to help decide the physical action to take.

3.4 Stage 3: Perform a physical action

Thirdly, perform a physical action to reinforce your verbalisation. For example:

1. **Drivers** – this could be pointing at the screen the individual can be seen in.
2. **Guards** – this could be opening a door control panel on the correct side or pointing to the correct door control panel and moving to it.
3. **Dispatchers** – this could be pointing to the OFF indicator and moving the dispatch baton or lamp, for example, to the hand you do not normally use until the OFF indicator illuminates. Another example is keeping your whistle in your pocket until the signal shows a proceed aspect.

3.5 Stage 4: Reaffirm risk and action

The final stage involves reaffirming (repeating) the risk and actions required. This should, ideally, be continuous until the action(s) are performed as information may not be retained beyond a time of between 15 to 30 seconds, unless repeated.

Once the action(s) are performed the process begins again when a new risk is present.
Points to remember

1. Our memory has limitations which affects the amount and time we retain information.

2. When we encounter situations and/or tasks frequently we can slip into “auto pilot”.

3. Both reduce our ability to anticipate risk and can lead to loss of concentration, situational awareness and complacency.

4. Risk Triggered Commentary helps you dispatch with your full attention focused on what you are doing now, the potential risks that may arise and what you will need to do.

5. The technique allows you to better anticipate, identify and mitigate against potential risks and errors associated with your duties.

6. The four-stage model provides a simple process for applying Risk Triggered Commentary.

7. New starters and experienced staff can use the technique. Use it in a way that best suits you.

8. Subjective risks such as inexperience on a route, station or train, fatigue, stress, high or low workload can be verbalised as they can affect how well you carry out your duties.

A booklet has also been developed for managers to help them understand how to implement Risk Triggered Commentary. This booklet can be found on the RSSB website and provides further information on Risk Triggered Commentary.

You can also contact the RSSB Human Factors team for further guidance and advice. Please contact RSSB either by email: enquirydesk@rssb.co.uk or telephone: 020 3142 5400.
**Example risks staff could recognise and verbalise**

Examples are shown below, but are by no means an exhaustive list.

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<tr>
<th>Role</th>
<th>Example risks</th>
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<tbody>
<tr>
<td>Drivers</td>
<td>• Dispatching on a red  &lt;br&gt; • Scanning monitors but not spotting passengers who could be at risk or failing to spot obstructions not detected by the traction interlock system  &lt;br&gt; • Passenger behaviours, for example, trying to prevent doors from closing and becoming entrapped and/or boarding/alighting late and becoming entrapped in the doors  &lt;br&gt; • Releasing doors on the wrong side of the platform  &lt;br&gt; • Potential distractions, leading to potentially missing a step within the dispatch process  &lt;br&gt; • Dispatching from very crowded platforms  &lt;br&gt; • Dispatching from very quiet platforms  &lt;br&gt; • Stopping short or past platform based monitors  &lt;br&gt; • Dispatching from curved platforms  &lt;br&gt; • Dispatching when weather, such as sunlight affects the visibility of platform based monitors  &lt;br&gt; • Reliance on traction interlock light to indicate that it is safe to depart</td>
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<td>Guard</td>
<td>• A platform signal at danger  &lt;br&gt; • Releasing doors before checking the whole train is accommodated in the platform  &lt;br&gt; • Releasing doors on wrong side of the platform  &lt;br&gt; • Dispatching from very quiet platforms  &lt;br&gt; • Short platform and the train is a longer length  &lt;br&gt; • Dispatching slam door stock – as there is need to check slam doors are properly closed</td>
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<td>Role</td>
<td>Example risks</td>
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<td><strong>Guard</strong></td>
<td>• Scanning the platform but not spotting passengers who could be at risk  &lt;br&gt;• Dispatching from a busy platform with customer distraction  &lt;br&gt;• Preparing stock for Empty Coach Stock working  &lt;br&gt;• Failing to anticipate the needs of passengers, either on-board and/or on the platform e.g. parents with buggies, those with restricted mobility or disabilities, passengers with heavy luggage  &lt;br&gt;• Passenger behaviours such as rushing to the train, trying to prevent doors from closing and becoming entrapped and/or boarding/alighting late and becoming entrapped in the doors</td>
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<tr>
<td><strong>Dispatcher</strong></td>
<td>• A platform signal at danger  &lt;br&gt;• Checking slam doors are properly closed  &lt;br&gt;• Visibility of OFF indicator and location of controls  &lt;br&gt;• Visibility of CD/RA indicator and location of controls  &lt;br&gt;• Dispatching on a busy platform with customer distraction  &lt;br&gt;• Preparing stock for Empty Coach Stock working  &lt;br&gt;• Dispatching from very quiet platforms  &lt;br&gt;• Scanning the platform but not spotting passengers who could be at risk  &lt;br&gt;• Passenger behaviours such as rushing to the train, standing too close to the edge of the platform when waiting, leaning over the platform edge, being distracted, obstructing the doors  &lt;br&gt;• Failing to anticipate the needs of passengers, either on-board and/or on the platform e.g. parents with buggies, those with restricted mobility or disabilities, passengers with heavy luggage</td>
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