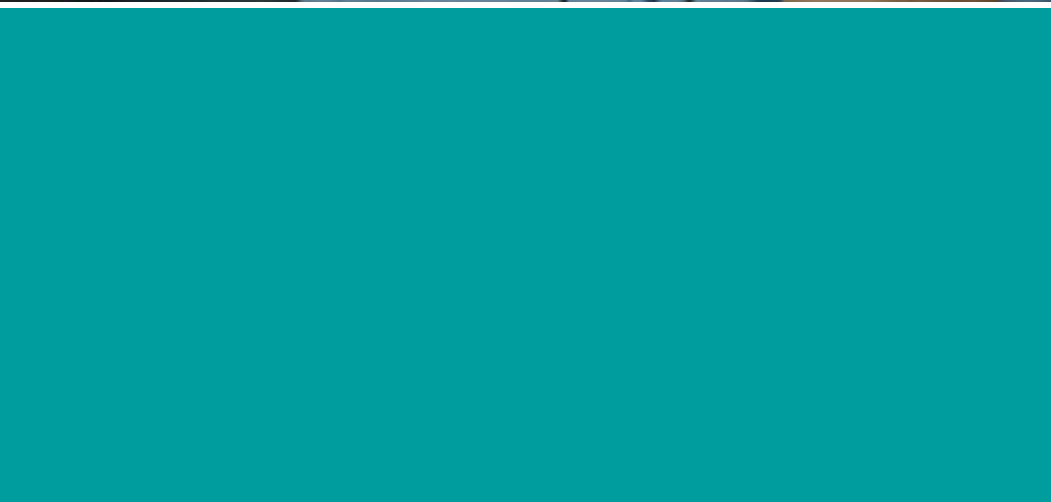




Safety Critical Communications: The Manual

November 2017



Preface

This safety critical communications (SCC) manual has been designed as a day-to-day reference guide to support ongoing good practice in safety critical communications. It is a companion to RSSB's safety critical communications training package - a modular course which is available to registered RSSB members on www.sparkrailrail.org.

The manual follows the same structure as the course. It provides additional guidance, practical examples, reference materials and links to further reading and training throughout.

This manual is for use by all rail staff required to communicate verbally with others during their operational duties.

Contents

Introduction	1
The importance of communication	1
About this manual	1
How was this manual developed?	2
Using the manual	2
SCC foundation	3
What is safety critical communications?	3
The contract concept	4
Personal responsibility	5
Safety	6
Structure and responsibility	7
Communication structure	7
Lead responsibility	13
Protocols	16
The ABC-P protocol	17
The phonetic alphabet	18
Numbers	20
Time	21
Standard words and phrases	22
Over and out	23
Repeat back	24
The emergency call	25
Confirming understanding	28
Communication barriers	28

Communication skills	32
Listening and questioning	32
Working with people	35
Assertiveness	36
Challenging	38
Considering others	39
Appendix A: Cue cards, scripts, and good practice examples for high risk activities	40
Provision of information to drivers detained on running lines	41
Assisting a failed train	42
Examination of the line	43
Authorising a signal to be passed at danger	44
Agreeing shunting moves within depots	45
Temporary block working	46
User Worked Crossings	48
Initial discussion for a possession	50
Authorising trains into a possession, and within worksites	51
Manual route setting	53
Wrong direction moves	54
Reporting emergencies and abnormal events	55
Appendix B: Summary of key learning points from safety critical communications training	57
SCC foundation	57

Introduction

The importance of communication

'You've got one to cross', said the signaller to the member of the public, meaning that there was one more train to go before they could drive across the rural level crossing. The user immediately drove over the crossing, assuming they had one minute to do so. The train missed the user.

The signaller was lucky

The track team ran to a position of safety as the train enters what they thought to be a safe work site. The COSS and signaller had failed to confirm the line blockage details using a 'repeat-back' and a misunderstanding had occurred.

The COSS was lucky

A driver of a failed train structures his communication badly and deluges a signaller with information, mistakenly believing he has obtained permission for a track-side inspection in the process. A near miss occurs as he ventures track side.

The driver was lucky

These are real incidents and, unfortunately, they are not as rare as they should be. Recent research has shown that one-in-five accidents have safety critical communications (SCC) as a contributing factor. As professionals, working in the 'front line' of the rail industry, we cannot afford to rely on luck. Our operational communications – safety critical communications – must be fit for purpose.

About this manual

This manual, and the associated 'Briefing Bites' training course, seek to inform and explain what level of safety critical communications is required of operational staff in the rail industry. It looks at what safety critical communications is, when it should be used, the structure and protocols to be used, and the skills needed for competent performance.

However, the training course and manual can only seek to educate. They cannot DO. **The doing is down to you** – the railway professional.

Both the Briefing Bites course and the manual are for all operational staff in the rail industry. Previous training materials have focussed on specific job roles whereas the contents of this manual apply to all operational staff. We must all work to the same standard.

How was this manual developed?

Industry engagement, research, and collaboration were essential to the development of this manual. Front line staff and managers from across the rail industry were consulted to identify end-user needs and competence requirements. These formed the specification for the manual's format and content.

A cross-industry steering group with expertise in safety critical communications reviewed all manual content in detail and provided reference materials for additional support and further learning. The steering group comprised members from RSSB, Network Rail, the ORR, and train and freight operating companies, including GWR, Virgin Trains East Coast, Arriva Trains Wales, Crossrail, East Midlands Trains, Colas Rail, Freightliner and GB Railfreight.

Using the manual

The manual is divided into five sections, with each section detailing a particular aspect of safety critical communications.

1. SCC Foundation
2. Structure and responsibility
3. Protocols
4. Confirming Understanding
5. Communication skills

You can use this to accompany the Briefing Bites training course or as a separate reference guide. The order of the sections does not imply importance – one section is not more or less important than another. Indeed, for safety critical communications to be effective, **all** the skills and protocols must be used together.

Each numbered section provides an explanation of the subject together with best practice examples and Key Learning Points. The Key Learning Points are the minimum level we must all reach. Our role may require that we use additional communication skills, but the Key Learning Points represent an industry baseline.

The appendices provide a summary of the Key Learning Points, together with cue cards and example scripts for high risk activities.



Key Learning Points are highlighted throughout with this icon to the left. These are things that we must all know and do.

SCC foundation

What is safety critical communications?



ALL OPERATIONAL COMMUNICATION BY FRONT-LINE STAFF IS CONSIDERED TO BE SAFETY CRITICAL

By **Operational** we mean anything relating to:

- Train movement
- Signals
- Track
- Stations
- Infrastructure.

By **front-line staff** we mean those doing the following types of work on the **operations** listed above:

- Maintenance
- TOC and Network Rail Control
- Signalling
- Station operations
- Driving
- Shunting
- Infrastructure projects
- Contractors

Of course, we discuss our lives, hobbies, and news with our colleagues. But if we're talking about operations and actions that can affect our safety and that of our colleagues, the public or the railway, then our communication is safety critical.

When what we say can affect actions, then our communication is safety critical

Communication can take place in a number of ways (written, visual, verbal). We're focusing on verbal communications, which often involves talking to people by telephone or radio.



Key Learning Point - you should now be able to **recognise when safety critical communication is happening** (all operational communication by front-line staff is safety critical).

The contract concept

Safety critical communications are all about conveying information that is important to the safety of workers and passengers on the railway. When we conduct safety critical communications, we must state our messages clearly, check that the other person has understood what we have said and, especially important, any actions expected of them.



Car Loan



Flat Rental



Employment
Contracts

When we are on the receiving end, it is our responsibility to repeat back what we have heard, outline our understanding of any actions that are required and clarify anything we are unsure of. Safety critical communications must have a common structure and a professional tone. We should think of it as **agreeing a contract**. This should be similar to what we would do when buying a car, renting a flat, or signing an employment contract.

Contracts usually involve the following steps:



Identify the **parties involved**



Provide **information** about the situation



Agree the **actions to be taken**



Confirm our agreement



In a **front-line operational** communication, we follow these same steps. In essence, **we are forming a communications contract with the other party**; we are committing to accurate, brief, clear and professional communications to achieve an intended outcome. This approach helps to distinguish the delivery and receipt of safety critical messages from day-to-day conversation.



Key Learning Point: every time we hold an operational conversation, we are **agreeing a verbal contract**.

Personal responsibility

As rail industry employees:

- We must all take **personal responsibility** for how we conduct ourselves at work, including how we communicate.
- We should not rely on one person to make sure we communicate well, but must **all take responsibility** for our operational conversations.

In this way, we will be doing our part to raise the standards of safety critical communications across the whole industry, which in turn will have a tangible impact on ours and others' safety.

Taking personal responsibility means following the guidance provided in this manual. It means taking pride in our approach to safety critical communications and setting a good example for our co-workers. We need to be mindful of the dangers of informality, and avoid the tendency to chat and over-talk to each other.



In practice, this means we must:

- use the **protocols**
- **structure** our conversations
- **listen** carefully
- **confirm understanding**



Key Learning Point: safety critical communications are **formal conversations**.



Key Learning Point: as professionals, we must **all take responsibility** for safety critical communications.

Safety

There are no excuses for short-cuts in safety critical communications

We work in an industry where pressurised situations are common. In a 2016 rail industry survey by the Infrastructure Safety Liaison Group for RSSB, 90 % of the 1100+ respondents said they feel under pressure at work at least once per week. Individual perception of pressure and 'real' pressure have the same impact: they impact our ability to think clearly and make decisions, cause us to cut corners and make mistakes, and can affect our physical and mental wellbeing.

Pressure can come from different sources. Example situations are periods of change, or when things don't go to plan. Part of taking personal responsibility means not cutting corners in communications because we feel under pressure.

We must:

- **Recognise** that pressurised situations are the time when we need clear, structured communications the most.
- **Communicate properly in normal situations.** If good communication practice becomes an ingrained habit, it is less likely to fall apart when we are under pressure.
- **Take the time to think about what to say.** This will save time in the long run, even if the temptation is to jump in.
- **Slow the communication down.** Speak slowly and clearly to give ourselves more thinking time.
- **Stay focused on the facts** and ignore the context that is creating the pressure.
- **Use the protocols.** This will help you to be clear and stay professional.
- **Listen carefully** to what is being said.
- **Confirm understanding.** Stress causes mistakes in ourselves and others. Repeating back what you have heard and clarifying any actions will aid decision-making and help you to remember what it is that you need to do.



Key Learning Point: we must **take time to communicate well** – no matter what the situation.

Structure and responsibility

The structure of our messages is important. Good structure reminds us that we need to provide certain information such as who we are (opening), and that we need to repeat back (confirmation). It is also important to deliver information and actions in the correct order so that the actions come towards the end of the message allowing us to remember them more easily.

We all have a responsibility to communicate well and structure our communications correctly. One person is also assigned lead responsibility and they must ensure that the message structure is correct. The 'responsibility' section examines these concepts in more detail.

Communication structure

Good safety critical communications have a four-part structure:



Opening



Information



Actions



Confirmation

If possible, **plan what you will say** in each part before starting your communication. This takes practice, but will help you to get into the habit of communicating clearly, as well as to remember the important elements of a safety critical communication.



Opening

The opening of a safety critical message should contain the following two pieces of information:

This is who I am

This is where I am

Who I am

- State your role
- It may also be necessary to state your name
- This is to ensure the person who you are talking to knows exactly who you are

Hello, Thames Valley signaller...

Hello, train dispatcher Crewe platform
six...

Hello, COSS John Matthews...

Where I am

- This should be a simple description of where you are
 - Identify your exact location that is recognisable to both parties, for example access points, level crossing, station, or platform.
- If discussing overhead line equipment, you will need to give the structure number found on the stanchion.

(train driver) I'm standing at whisky alpha
two two signal

(trackworker) I'm standing in the cess on
the up Doncaster line, next to stanchion
echo bravo one six two four



Information and actions

Information should always come before any actions are given. This:

- provides context
- ensures the actions are fresh in everyone's mind
- allows the actions to be agreed and then repeated back.

The information we provide must be concise and relevant. Where long messages or instructions are being given, it is better to break them down into manageable chunks.

(driver) I'm approaching Parksley on the up line. My loco has shut down and I'm coasting.

(signaller responds...)

(driver) I seem to have a problem with the engine coolant pressure. I've just had a word with the help line and they told me what to do when I come to a stand. Where would prefer me to stop?

Actions are an essential part of the communication contract. Note:

- They can be passed in both directions.
- They should be definitive, for example. "You must..." Definitive language in unambiguous and helps event misunderstanding.
- The instruction 'Do nothing until...' is a valid action. People are often tempted to 'jump in' before it is safe to do so. This instruction makes it clear that an action should not take place until a certain condition is met, for example: remain at a stand until a Signaller instructs you to move.

(signaller) please remain at a stand – make no further movement unless I instruct you...



Confirmation and repeating back the message

To confirm that all parties have the same understanding of the communication, the person with **Lead Responsibility** must ask for a 'repeat back'. This is a crucial step in making sure the arrangements have been fully understood by both parties. It provides the opportunity to identify any misinformation, misunderstandings, or omissions.

The process of repeating back a message (saying it out loud and in our own words) also helps us to process the information more deeply. And makes it more likely that we will remember what has been said when the communication has ended.

A repeat back means:

- Repeating back the message we have been given and our understanding of what is required of us, so that any misunderstandings can be corrected.
- Asking for a 'repeat back' at the end of a safety critical message if we are the person with Lead Responsibility, and if the other party has not already repeated their understanding of the message back to us.

Things to remember

Repeating back information is key to confirming understanding of all involved.

The person with **lead responsibility** must always confirm that everybody involved in a communication understands the message being conveyed. This might require asking for a 'repeat back'.

We must listen and check the content of a repeat back to make sure it's correct.

Repeat backs can occur at any stage in a message, but must occur at the end.

Pay attention to what is being said: we need to avoid repeating information parrot fashion without thinking about what we are saying or what it means.

If a repeat back is wrong, the person with Lead Responsibility must restate the actions, and ask for another repeat back.



An Example

Here is an example of good practice in structuring a communication. Notice that the signaller delivers the **actions in two stages**. Notice also that the driver repeats back the actions without the Signaller having to ask him to do so, and also repeats the entire set of actions again at the end of the communication.

- Driver Hello, driver of two alpha five two at Foxtrot Yankee 25 signal, up main line.
- Signaller Hello driver, two alpha five two at Foxtrot Yankee 25 signal, up main line. This is Fawsley Signaller. I've had a call from control and due to a line blockage ahead your train is to go no further.
- Driver Hello signaller so due to a line blockage ahead I am to go no further.
- Signaller Correct driver. When I give permission control have requested that you make a wrong direction movement into Longfield station to detrain passengers and await further instructions.
- Driver OK signaller, so when you give permission you want me to make a wrong direction movement into Longfield station to detrain passengers and await further instructions.
- Signaller Correct. When you approach Fawsley signal box, I will lower the level crossing barriers and give you a green hand-signal from the box when it is safe to pass over the crossing. Please obey that signal.
- Driver OK signaller, when I approach Fawsley signal box, you will give me a green hand-signal from the box when it is safe to pass over the level crossing - for me to proceed.
- Signaller Correct. Driver I have set the route for you now, I am now authorising you to make a wrong direction movement, not pass over Fawsley signal box level crossing unless a green handsignal is being displayed and then into Longfield station.
- Driver OK. You are now authorising me to make a wrong direction movement, not pass over Fawsley signal box level crossing unless a green handsignal is being displayed and then proceed into Longfield station.
- Signaller Correct. OK, I'm authorising you to make the movement.
- Driver OK, bye.
- Signaller Bye.

In summary

There are two Key Learning Points associated with message structure:



Key Learning Point: a safety critical message should have four sections:



Opening



Information



Actions



Confirmation



Key Learning Point: avoid monotonous and unnecessary **repeat-back** of information; think about what you are saying and what it means.

Lead responsibility

Safety is everyone's responsibility and we all have a personal responsibility to communicate clearly and professionally whenever safety is involved.

In safety critical communications, one party is nominated to take lead responsibility. The concept was developed based on good practice from other industries, such as air traffic control, and from feedback from railway employees that having one person take the lead in the conversation would help reduce misunderstandings. This helps to ensure:

- difficult situations are dealt with effectively
- a good working relationship with other railway employees is maintained
- less frustration caused by poor communication
- misunderstandings are avoided which can cause increased workload and/or frustration
- the chances for misunderstandings to occur and errors are reduced.

Demonstrating lead responsibility involves taking control of the conversation, ensuring that a clear understanding between the two parties is reached, and that the agreed actions follow the information given or received.

Who has lead responsibility?

The person who must take lead responsibility depends on the task being carried out. There are clearly defined examples in the Rule Book, which are shown below.

Lead responsibility

Electrical control operator (ECO)

Signaller

PICOP (person in charge of the possession)

Route-setting agent

Shunter

Pilotman

Handsignaller

Person conducting assisting train

Conductor driver

Designated person (DP)

When communicating with

anyone

anyone except the ECO

anyone except the ECO or signaller

points operator

driver

driver

driver

driver of assisting train

driver of train or machine being conducted

members of the work group

If it is not clear who has lead responsibility, or if two people carrying out the same task are communicating with each other, the person who starts the conversation must always take lead responsibility. It is important to remember that we must all be prepared to take the lead in a communication if the other party does not, even when it is their designated responsibility to do so.

What does lead responsibility mean?



Lead responsibility means that one person leads the communication.



It is not about one person being in charge, it is about someone ensuring a clear understanding is reached.



It is not about who gives the actions, although that may be the case.

The person with Lead responsibility must confirm that the communication structure is followed:



Opening



Information



Actions



Confirmation

They may also need to:

- Clarify details
- Correct mistakes
- Summarise information
- Calm the situation
- Challenge poor communication

Things to remember:

- **Lead responsibility is not dependent upon seniority:** the Rule Book clearly defines who has lead responsibility in a given situation. If you are in that role then it does not matter who you are speaking to – you have responsibility for leading the conversation and ensuring the message has been understood by all parties involved.
- **Lead responsibility is not about being in charge of the activity:** lead responsibility is being in charge of the communication relating to the activity but not the activity itself. So, for example, when a COSS and a signaller are agreeing a system of protection, the signaller takes lead responsibility. They must ensure that a clear understanding is reached. The COSS remains responsible for the system of protection and the safety of their workers.
- **We all have a responsibility to communicate well:** all those involved in safety critical communications have a responsibility to use the techniques, structures, and protocols detailed in this manual.

Taking lead responsibility is as much about your behaviour as it is about following the protocols laid down in the Rule Book. For information about the behaviours that underpin successful safety critical communications, see the [Communications skills](#) section of this manual.



Key Learning Point: the person with Lead Responsibility must **manage the communication** and **ensure that a clear understanding** is reached by all.



Key Learning Point: we must **all** support the person with Lead Responsibility - and **be prepared to do some of the leading**, if necessary.

Protocols

When we communicate face-to face, there's a lot more going on than words; we use gestures and facial expressions to convey what we mean. This is a problem in the rail industry as most of our communication is not face-to-face.

To help us communicate clearly, we use **communications protocols** to:



Aid understanding



Help avoid errors

A protocol is an **agreed way of doing something**, like shaking someone's hand when you meet them or nodding your head to show agreement.

This section will examine the following protocols:

- ABC-P
- The phonetic alphabet
- Numbers (how to say them)
- Time (how to state it)
- Standard words and phrases

The ABC-P protocol

We should approach our safety critical communications using the ABC-P protocol:



A – Accurate

B – Brief

C – Clear

P - Professional

Some techniques we can use to help us achieve this include:

- Speak slowly
- Don't interrupt others
- Be precise in your descriptions (for example: locations, obstructions)
- Avoid using slang
- Plan what you are going to say before you say it – think about [structure](#)
- Repeat back what has been said

A safety critical communication is not the time to have a chat about unrelated items; important details can easily get lost or forgotten if you do. Focus on the task in hand and on being accurate, brief, clear and professional.



Key Learning Point: operational communications must be **ABC-P**: accurate, brief, clear, and professional.

The phonetic alphabet

The phonetic alphabet is used to provide clarity to our communications, especially when using the radio or telephone. It can be difficult to hear what a person is saying if they are in a noisy place, if the weather is bad, or the connection poor. So, we spell out key information using the phonetic alphabet - it makes it much easier for other people to understand what we are saying.

The key words have been carefully chosen so that they clearly represent each letter and don't sound at all like each other.



We need to avoid using our own substitutes for the phonetic alphabet and stick to the official version.

The phonetic alphabet must be used:

- to identify letters of the alphabet
- to spell words and place names that are difficult to say, or may be misunderstood
- if there is interference on the radio or phone
- when quoting the identity of signals or points
- when quoting train descriptions.

If in doubt, spell it out!



Key Learning Point: use the Phonetic Alphabet for all **key information**.

The Phonetic Alphabet

A

Alpha

B

Bravo

C

Charlie

D

Delta

E

Echo

F

Foxtrot

G

Golf

H

Hotel

I

India

J

Juliett

K

Kilo

L

Lima

M

Mike

N

November

O

Oscar

P

Papa

Q

Quebec

R

Romeo

S

Sierra

T

Tango

U

Uniform

V

Victor

W

Whisky

X

X-ray

Y

Yankee

Z

Zulu

Numbers



General rules


We say all numbers individually:

  'Whisky Two Three Signal'

 'Whisky Twenty Three Signal'

Because of limitations in human memory and the way that our brains process information, we say numbers in batches of less than 5.

  'Three six five... six eight... nine two'

 'Three six five six eight nine two'



Key Learning Point: we must use **single numbers** (zero, one, two...), for **all key information**.


An exception

The exception to this rule of 'saying number singly' is when we say measurements, such as length or distance.

When conveying measurements, we should:

- Use natural speech
- Always state the units: metres, miles

For example:

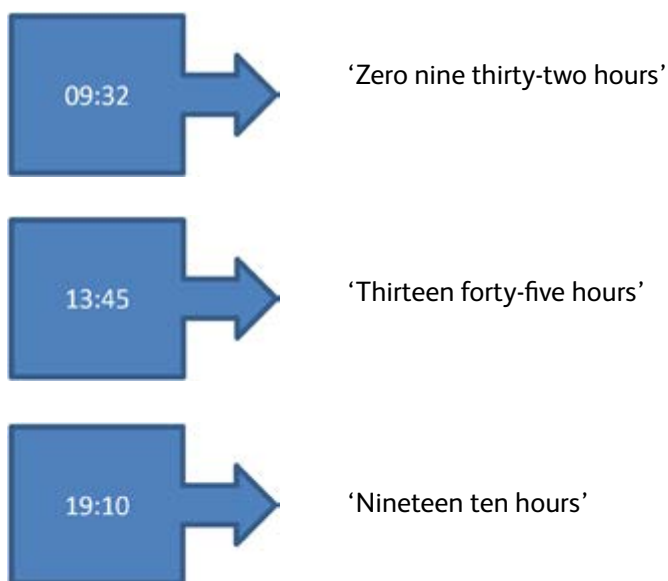
 'Four hundred metres'

Time

When stating times, we should:

- State 'hours' to emphasise that we are giving a time
- Use 'hundred hours' to state 'on the hour' times such as 1100

For example:



On the railway, there is no midnight. 23:59 is followed by 00:01.

Do not use 24:00 hours or 00:00 hours. This is to avoid confusion as to whether you are referring to the beginning or end of a particular day.



Key Learning Point: use the **24-hour clock** to say time.

Standard words and phrases

Standard words and phrases are provided in the Rule Book that are to be used by everyone when using a radio or telephone.

List of standard words and phrases

Phrases to use when **using a radio or telephone**

Correction

I have made a mistake and will now correct the word or phrase just said.

Repeat back

Repeat the message back to me.

This is an emergency call

This message provides information which needs immediate action to prevent death, serious injury or damage.

Other phrases to use when **using a radio and only one person can be heard at a time**

Over

I have finished my message and am expecting a reply.

Out

I have finished my message, no reply is expected.

Why do we need key words and phrases?

- Normal communications in a difficult (for example noisy) environment can lead to misunderstandings
- Using standardised words and phrases makes communications clearer and less prone to error



Correction

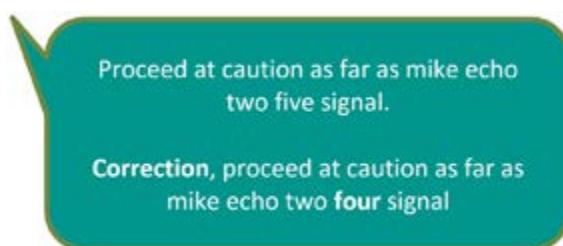
- For use on a radio or telephone
- Means 'I have made a mistake and will now correct the word or phrase just said'

Say '**correction**' and then **restate the message correctly**.

Don't use casual phrases like: 'Oh no wait', 'Sorry that was wrong.'

Don't just say '**correction**' and what was wrong - you need to **restate your message**.

For example:



Over and out

These standard words are for use with 'press to talk' (simplex) equipment. Examples of such are the radios used by shunters and, importantly, the **GSM-R headset when the emergency call button is pressed**.

Over This means 'I have finished my message and expect a reply.' It is to be used throughout the communication, to pass control back to the other person. Think of it as inviting the other person to talk.

Out This means 'I have finished my message and no reply is expected.' It is used at the end of a communication.

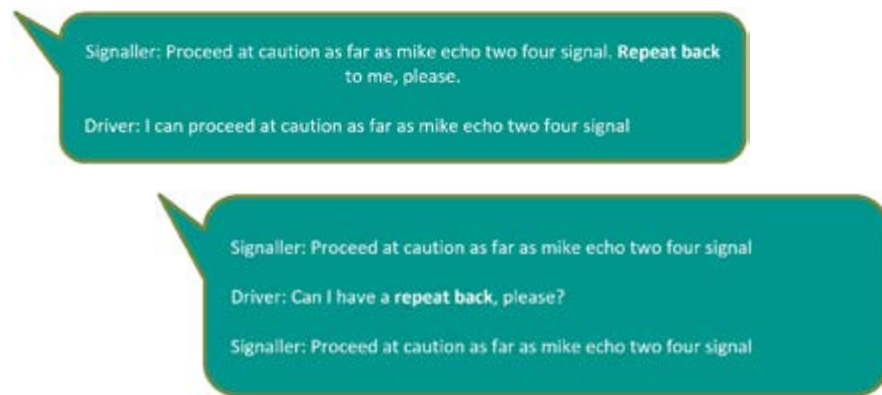
Repeat back

The person with **lead responsibility** should use the phrase 'repeat back' to confirm the understanding of both parties.

It can also be used by others who don't have the lead responsibility to confirm their understanding.

It can be used to confirm details relating to who we're talking to, what the situation is, or what actions are being given.

For example:



Signaller: Proceed at caution as far as mike echo two four signal. **Repeat back** to me, please.

Driver: I can proceed at caution as far as mike echo two four signal

Signaller: Proceed at caution as far as mike echo two four signal

Driver: Can I have a **repeat back**, please?

Signaller: Proceed at caution as far as mike echo two four signal



Key Learning Point: use the **standard words and phrases**.

The emergency call

Clear and concise safety communication is important in any situation, but in an emergency, it can be the difference between life and death. In an emergency, we are under pressure to act quickly, but we must remember how important it is to plan what we will say.

Fortunately, emergencies are rare but this means that they are likely to take you by surprise. To improve your chances of remembering what to say and how to say it, you should practice making emergency calls. The more often you practice, the better your chances of getting it right when it really matters.


If you ever need to make an emergency call, this is what you need to remember:

- Take a deep breath and plan what you will say in advance: know where you are and think about which emergency services might be required.
- As specified in the [Rule Book](#), emergency calls must start with the words:



This is an emergency call...

- An exception is in reporting a dangerous goods emergency, when the call must start with the words: 'This is a rail dangerous goods emergency.'



This is a rail dangerous goods
emergency call...

- Give your **name**, the exact **location** of the emergency and **details of the accident** including whether any lines are or may be obstructed.
- You must also say which **emergency services** are needed.
- Information given should be accurate and brief – the emergency may be time critical.
- Follow the same structure as you would in any other safety critical communication.

Two examples

Note, we are only showing one side of the conversation. In both examples, the caller is talking to the signaller and the signaller starts to confirm details with them:



Using a GSM-R radio to make an emergency call

GSM-R radios have a dedicated emergency call button. When you press this, it is important to realise that you are in '**press to talk**' (simplex) mode. To operate the radio:

1. Lift the handset and press the red emergency call button.
 2. When using the press to talk button, wait for the tone to finish and the word 'speak' to appear on the display.
 3. If the display reads 'busy' then release the press to talk button and try again.
- Remember to use the standard word 'over' and to release the press to talk button after each message that you pass.
 - Remember to use the standard word 'out' and to release the press to talk button at the end of the emergency call.



Key Learning Point: learn and practice how to make an emergency call.

Confirming understanding

This section looks at the things which might prevent us from understanding each other, what we can do to overcome them and the important action of repeating back what we have heard.

Communication barriers

There are various barriers to effective safety critical communications. Barriers arise from three main sources: environmental conditions; the nature and quality of the equipment you are using; and the way in which you speak.

Environmental barriers

When it comes to communication the key environmental barrier is noise:

- Noise from the weather or outdoor environment
- Background noise either from the interior or exterior



Noise not only makes it harder to hear what is being said, it can also lead to:

- Rushed speech
- Shouted messages
- Simply giving up on communicating altogether

If possible, find a **dry, quiet location** from which to communicate.

Always make sure you are in a **position of safety**.

Follow the communications [structure](#) and follow the communications [protocols](#).

Equipment barriers

New technologies have improved the transmission quality of communications, with digital systems such as GSM-R proving to be very robust.

However, there may still be issues with:

- Transmission noise
- Interference
- Drop-out
- Older, non-digital systems



Formal communication

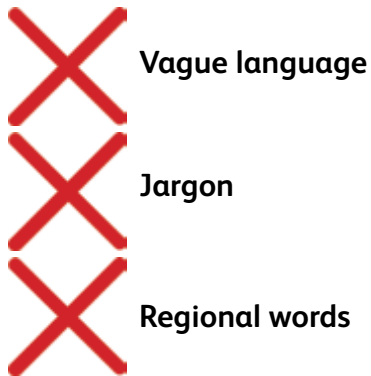
The adoption of GSM-R technology, which is similar to everyday mobile phone networks, can lead us to adopt an informal structure to our messages.

Remember, a safety critical communication is a **formal** communication. Beware of falling into a chatty conversational style.

Make sure you know how to use the communication equipment you have been provided with. Speak clearly and slowly. Follow the safety critical communications protocols. Keep the communication formal.

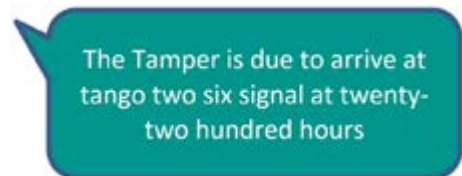
Linguistic barriers

'Linguistic' refers to the way we speak and the language that we use. To communicate clearly, you should avoid using:



Vague language

Avoid vague phrases, such as: 'It'll be there as usual.' or 'Same as last time.' Use clear, precise language, stating exact times and locations:



Jargon

We all use jargon. It is part of our railway language. However, it can also lead to misunderstandings. You must:

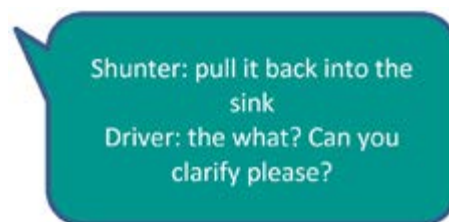
- Minimise your use of jargon.
- Be aware that others might not understand it.
- Be prepared to ask for confirmation or clarify what you mean.
- Be prepared to challenge the use of jargon if it is confusing (see Challenging in the Communication skills section).

Regional words

Everyone has an accent and uses language specific to their geographical area. They are part of our regional identity. However, the rail industry operates across regional boundaries and using local language can lead to misunderstanding.

You must:

- Recognise and minimise your use of regional language.
- Be prepared to ask for confirmation or clarify what you mean.



Key Learning Point: To overcome communication barriers:

- Use the **best communicating position** (dry and quiet if possible).
- Speak slightly **slower** at a **good volume**.
- Avoid ambiguous language and regional words; keep jargon to a minimum.
- Use the **protocols** and **structure** your conversation.
- Confirm understanding, **repeating back** key parts of the message and any actions.

Communication skills

This section refers to the underpinning skills necessary for good communications. These include 'people' and 'thinking' skills, such as:

- Listening and questioning
- Working with people
- Assertiveness
- Challenging
- Considering others' needs

These are closely related to the non-technical skills used in the rail industry. Both Network Rail and RSSB have defined lists of non-technical skills. You may be familiar with some of them.

Listening and questioning

People are surprisingly poor at listening. Typically, they remember 25 to 50 percent of what they hear. If they talk to someone for 10 minutes, they pay attention of less than 5 minutes. Obviously, as front-line workers in the rail industry, this is unacceptable. If we are listening to a safety critical message, we need to hear all of it, not part of it. So how do we improve our listening?

We need to practice **active listening**. In active listening, we make a conscious effort to hear not only the words that another person is saying but, more importantly, understand the meaning of those words. We need to understand what a message means.

The following actions will help us to listen actively:

1. Pay attention

- If possible, give the speaker your undivided attention, and acknowledge the message (if you are communicating face-to-face, recognise that non-verbal communication also 'speaks' loudly).
- Avoid being distracted by environmental factors. For example, side conversations or other noises around you.

2. Show that you're listening

- Encourage the speaker to continue with small verbal comments like yes, mmm, and uh huh.

3. Provide feedback

- Our assumptions and personal judgments can distort what we hear. As a listener, our role is to understand what is being said.
- Repeat back your understanding of what you have heard and any actions you have been asked to perform.
- Ask questions to clarify anything you are unsure of.

4. Be respectful

Interrupting is a waste of time. It frustrates the speaker and limits full understanding of the message.

- Allow the speaker to finish each point before asking questions.
- Be patient. Pauses are acceptable.
- Remain neutral and non-judgemental.

Tips:

- If you're finding it particularly difficult to concentrate on what someone is saying, try repeating their words mentally as they say them. This will reinforce their message and help you stay focused.
- Practice listening in everyday conversations to help you get better at it.
- Ask clarifying questions if you are unclear on anything or you need more information: 'Could you repeat that?'
- Keep your questions neutral (that is, not aggressive), and clear and simple: think about what you want to ask and ask one question at a time.
- After you have asked the question keep quiet and wait for the answer. It prevents you from immediately asking another question and indicates to the respondent that a response is required.
- Ask whether you have missed something or if they have anything to add.



Listening

We need to practice **ACTIVE LISTENING**

Active listening =

hearing +

understanding +

appropriate response

Questioning

And respond with **YES** or **ASK A QUESTION**

- It is important that any questions remain neutral
- Avoid being aggressive or interrogating



Key Learning Point: use **active listening** and **neutral questions** to confirm understanding.

Working with people

We can think of the operational rail staff as one giant team, communicating with each other using the communication techniques, protocols, and message structure detailed in this manual.

We need to develop a professional working relationship with our fellow industry workers. Such a relationship is based on mutual respect.



Respectful relationships allow us to be assertive, challenge errors effectively without causing offence, and be considerate of others.



Key Learning Point: we need to develop a **professional working relationship** with our colleagues.

The following sections look at assertiveness, challenging and considering others in more detail.

Assertiveness

Assertiveness is confidently saying what we need, while maintaining respect for others.

Non-assertive behaviour is often aggressive, passive, or passive-aggressive.

Aggressive behaviour is demanding and rude. It often involves shouting. Aggressive behaviour is usually the result of a lack of confidence.

Passive behaviour tries to avoid conflict at all costs. It involves trying to please everyone while not stating our own needs clearly.

Passive-aggressive behaviour seeks to manipulate people. It appears to be passive in nature, but is used to achieve an aggressive outcome.



To be assertive we must:

- State our needs clearly
- Avoid shouting
- Avoid sarcasm and mimicry
- Argue our point but be prepared to compromise
- Understand other's needs
- Criticise a point of view, not a person
- Use 'I' statements, rather than 'you' statements
- Be prepared to explain why we need something

Example phrases

Here are some example **assertive** and **aggressive** phrases:



As with any verbal communication, the tone of the delivery is as important as the actual words. If you deliver the **assertive** phrases in a sarcastic manner, they become **aggressive**.



Key Learning Point: we must be **assertive**. Not passive or aggressive.

Challenging

Effective challenging requires that we **focus on the subject, not the person**. Attacking the person shows disrespect and will probably result in a defensive response.

There are several reasons why we may fail to challenge incorrect information:

- Failing to listen correctly
- Fear of making a mistake and being made to look foolish
- Over-respect for authority - it is important to respect authority but not fear it



Listening correctly involves active listening. In active listening we hear the words, understand what they mean, and give an appropriate response. Our response may be a simple 'yes' or we may need to ask a question.



Key Learning Point: be prepared to **challenge** incorrect information.

Considering others

Considering others is having an awareness of the people around us - understanding the people we're interacting with.

Considering others means appreciating:

- what someone is having to think about
- and how that person might be feeling.

Understanding these two elements will allow us to judge how we should deal with someone – especially if they are under a lot of pressure. We can't analyse everyone we're working with all of the time (that would be a full-time job in itself). But we must be able to spot people who are under pressure – and deal with them accordingly.

If someone is under pressure, we may need to:

- Speak more slowly
- Be prepared to repeat information and actions more often
- Calm the other person by remaining calm yourself and showing understanding
- Give them more thinking time
- Resist the temptation to become agitated yourself
- Cope with less structure in their communication (but keep yours correct)
- Listen carefully and give verbal responses – a stressed person needs to know they are being listened to



Key Learning Point: we must **consider others** – especially colleagues working under pressure.

Appendix A: Cue cards, scripts, and good practice examples for high risk activities

In this section, you will find a selection of ‘cue cards’ to aid effective communications when performing certain safety critical tasks. These are either scripted examples or memory-joggers for the information or key phrases that must be provided in certain situations.

The variable names (signals, train codes, junctions and so on) are represented as XXXX. For example signal XXXX or junction XXXX.

Whether you use these cue cards is up to you; some people find them more helpful than others.

Cue cards are provided for the following tasks:

- Provision of information to drivers detained on running lines
- Assisting a failed train
- Examination of the line
- Authorising signals to be passed at danger
- Agreeing shunting moves within depots
- Temporary block working
- User Worked Crossings – communication with members of the public
- Initial discussion for a possession
- Authorising trains into and out of a possession, and within worksites
- Manual route setting
- Wrong direction moves
- Reporting emergency or abnormal events

Provision of information to drivers detained on running lines

The [Rule Book Module S4](#) outlines what should happen when trains are detained on a running line. A suggested approach for provision of information to drivers is provided below, highlighting in bold the key phrases that should be used.

Signaller: Driver of train XXXX, due to (reason for delay) I am unable to clear the signal signal XXXX. I'll have you on your way as quickly as possible but, for now, I require you to wait at the signal (OR wait for an MA). Can you repeat that back to me?

Driver: (Repeats back)

Signaller: (Ensure the driver repeats back correctly and confirms understanding).

Assisting a failed train

What to do in the event of a train failure is covered by [Rule Book Module M2](#). If you are the driver and your train is stopped by failure, you must immediately tell the signaller about the circumstances and whether you need an assisting train.

Driver: Signaller, this is the driver of train XXXX, located at location XXXX (give exact location). My train (give nature of train failure). Please provide assistance.

Signaller: OK, driver. To confirm, you are the driver of train XXXX. Your train has failed at location XXXX and you require assistance.

Driver: Yes, that's correct.

Signaller: Confirm with the driver:

- That the failed train will not be moved
- The type of assisting train needed
- The direction from which it is needed

Signaller: Driver, I will call for assistance. Please stay where you are until the assisting train arrives, or until you receive further instructions.

Driver: OK, Signaller. Thank you.

Examination of the line

Examination of the line is covered in [Rule Book TS1](#) Section 20 for Signallers, and in [Rule Book TW1](#) Section 12.1 for Drivers.

It is vital that a clear understanding is reached on the portion of line to be examined and the reason for the examination. Signallers should make sure that they understand what information they need to give before making the call – to ensure that their communication is accurate, brief and clear. Drivers should make sure they understand the reason for the examination and exactly what is expected of them.

Train speed must not exceed 10mph in a tunnel. When examining overhead line equipment or track defects, the speed must not exceed 20mph.

Signaller: Driver of train XXXX, due into location XXXX. When I give you authority, I require you to examine the line at location XXXX (or between location XXXX and location XXXX)

Driver: OK Signaller. When you give me authority, I will examine the line at location XXXX.

Then, if the signal can be cleared:

Signaller: When the signal is cleared, I require you to proceed at caution over the affected portion of line, be prepared to stop short of any obstruction, and report back to me after examination or at the next signal. Please repeat back this instruction.

Driver: (Repeats back)

Signaller: That is correct Driver, please wait for the signal and then you have authority to proceed.

If the signal cannot be cleared:

Signaller: I authorise you to pass signal XXXX... at danger (continue as per cue card on passing signals at danger), report back to me after examination or at the next signal. Please repeat back this instruction.

Driver: (Repeats back)

Signaller: That is correct Driver

Authorising a signal to be passed at danger

The arrangements for authorising a signal to be passed at danger are outlined in [Rule Book Module S5](#). A suggested approach to communicating an instruction to pass a signal at danger is provided below.

Signaller: Driver of train XXXX standing at XXXX signal. Due to (provide reason) I cannot clear signal XXXX. When authorised, I will require you to pass XXXX signal at danger, proceed cautiously through the section and obey all other signals. Please repeat this message back to me.

Driver: (Repeats back)

Signaller: (Confirm driver's understanding, correcting if necessary. Remember you must also give the driver any necessary instructions concerning SPAD indicators or level crossings).

Signaller: That is correct driver. I now authorise you to pass XXXX signal at danger and obey all other signals.

Driver: (acknowledges)

Agreeing shunting moves within depots

Shunting is covered in Rule Book Module SS2. Before starting any shunting, you must reach a clear understanding with each other about what exactly needs to be done and how the shunting movements will be controlled. This is often done face to face. When shunting by radio, a shunter needs to clearly identify the correct train and driver, and then speak continuously or transmit a continuous bleep signal throughout each movement. If either of you notice the transmission is failing, you should stop the shunt immediately.

Face-to-face meeting:

- Shunter and driver agree the details of the move: train number, current location, the route the train will take, the destination, and details of how the movement will be controlled: by radio or handsignals.
- That hand points will be moved after each stage of the movement.
- Shunter provides driver with a radio.

Then, via radio:

Shunter: Shunter to driver this is a radio test. Over.

Driver: This is the driver of train XXXX, radio test complete over.

Shunter: OK driver, as agreed, we will be shunting from location XXXX (exact location) to location XXXX (exact location y) via points XXXX. Over.

Driver: (repeats back)

Shunter: OK, Driver, I have operated points XXXX and I am clear of points. Over.

Driver: (repeats back)

Shunter: OK driver, you have permission to move until I tell you to stop. Keep coming... keep coming (provides driver with a 'confidence message' every three seconds). And, stop. Out.

Temporary block working

Temporary Block Working (TBW) requires communication between three roles: a signaller, handsignalers (one at the entry signal; one at the exit signal to the TBW section) and train drivers. The signaller passes information to a handsignaller who passes it on to a train driver, for example: giving authority to pass a signal at danger and enter the TBW section.

Example: signaller and a handsignaller

Signaller: Hello handsignaller at XXXX signal, signaller XXXX panel here

Handsignaller: Hello signaller XXXX panel. This is handsignaller at XXXX signal

Signaller: Handsignaller, shortly approaching XXXX signal is train XXXX. Can you add this to the temporary block working ticket.

Handsignaller: Signaller, approaching XXXX signal is train XXXX. I have added this to the temporary block working ticket.

Signaller: When ready, can you read to the driver the instructions on the temporary block working ticket, give the driver of XXXX train the temporary block working ticket and authorise the driver to enter the section of your yellow handsignal. The time is now 1845.

Handsignaller: Signaller, when ready I am to read to the driver the instructions on the temporary block working ticket then give the driver of XXXX train the temporary block working ticket and authorise the driver to enter the section on receiving a yellow handsignal. The time is now 1845.

Signaller: That is correct. You may carry out my instructions.

Example: a handsignaller and a driver

Handsignaller: Driver, we have temporary block working in operation between XXXX signal and XXXX signal.

Driver: Handsignaller, temporary block working is in operation between this signal XXXX and XXXX signal.

(Handsignaller goes through the content of the form, which the driver reads to acknowledge understanding the instructions)

Driver: I understand what is required of me.

Handsignaller: Driver, when I show you a yellow handsignal that will be your authority to enter the temporary block working section.

Driver: When you show you me a yellow handsignal that will be my authority to enter the temporary block working section.

Handsignaller: That is correct driver

(Handsignaller then moves to a position of safety and displays the yellow handsignal)

User Worked Crossings

- communication with members of the public

When communicating with members of the public (MOP) at level crossings, it is important to speak slowly and clearly and bear in mind that they might not have had to use a level crossing telephone/sought authority to use a level crossing before.

Note, signal protection is only required in accordance with train signalling regulations. Call back only required if signal protection is applied.

Conversation 1: a 'normal' load

Signaller: Hello, this is Signaller at XXXX signalbox

MOP: Hi, I'm at XXXX crossing... is it ok to cross?

Signaller: Hi, okay so you are calling from XXXX crossing and you want to cross... how long do you need to cross?

MOP: Ummm, not that long, a couple of minutes?

Signaller: Ok, can I just check that you have taken into account the time needed to open and close both sets of gates? Is your vehicle unusually long or more difficult to manoeuvre through the crossing?

MOP: Yes, yes, I'm just crossing with my tractor and the trailer

Signaller: Ok, is the trailer loaded?

MOP: No, I can nip across quickly

Signaller: Ok, you have asked for two minutes to cross XXXX crossing with your tractor and trailer...

MOP: Yep

Signaller: [Pause whilst checks location of trains] Right, so the line is clear to cross at XXXX crossing with your tractor trailer...cross immediately

OR

Signaller: Do not cross XXXX, there is a train approaching. Give me a ring back when the train has passed. Do not cross.

Conversation 2: a long or slow-moving load

- Signaller: Hello, this is Signaller at XXXX signalbox
- MOP: Hi, I'm at XXXX crossing... is it ok to cross?
- Signaller: Hi, okay so you are calling from XXXX crossing and you want to cross... how long do you need to cross?
- MOP: Ummm, I'm not sure... a couple of minutes?
- Signaller: Ok, can I just check that you have taken into account the time needed to open and close both sets of gates?
- MOP: Oh yes, well maybe a bit longer?
- Signaller: Have you taken into account what you are crossing with: are you towing anything for example? Will it be difficult to manoeuvre through the crossing?
- MOP: Oh ok, yes, it's going to pain getting through the gates, I probably need a few minutes?
- Signaller: Ok, it sounds like you need more than 3 minutes to cross at XXXX Crossing
- MOP: Yep
- Signaller: [Pause whilst signaller checks location of trains and applies protection] So the line is clear to cross at XXXX Crossing with your vehicle... cross immediately and call back when you are clear of the crossing
- OR
- Signaller: Do not cross XXXX Crossing, there is a train approaching. Give me a ring back when the train has passed. Do not cross.

Initial discussion for a possession

This is the initial conversation between the signaller and the PICOP to discuss the arrangements. The items to be identified are: role, company, contact details, where, WON item number etc. are exchanged the PICOP will go through the information about the possession e.g. line to be blocked, protecting signals, time, trains going in, position of points, level crossings if applicable etc. and the signaller will repeat back the details.

PICOP: Hello signaller. I am PICOP name XXXX of company XXXX for WON item 1 2 3, XXXX junction to XXXX junction.

Signaller: Hello PICOP name XXXX for WON item 1 2 3, XXXX junction to XXXX junction. I am John Smith, the signaller for XXXX panel.

PICOP: Hello signaller, can we discuss the arrangements for the possession please?

Signaller: Yes, let's confirm the details.

PICOP: For the up main line from signal XXXX signal to signal XXXX signal. For the down line signal XXXX signal to signal XXXX signal.

Signaller: OK. To confirm, up main line from signal XXXX signal to signal XXXX signal. For the down line, signal XXXX signal to signal XXXX signal.

PICOP: Yes that is correct. When I take the possession I will require XXXX points and XXXX points to be placed into the normal position.

Signaller: Name XXXX, you will require XXXX points and XXXX points to be placed into the normal position.

PICOP: That is correct signaller. I will call you back five minutes before taking the possession at XXXX hours.

Signaller: You will call me back five minutes before taking the possession at XXXX hours.

PICOP: That is correct, speak later.

Signaller: Speak later.

Authorising trains into a possession, and within worksites

In a possession, there are various roles that will need to have safety critical conversations with each other. For example, a signaller to a PICOP and a PICOP to an Engineering Supervisor. It is important that the conversations are accurate, brief, clear and professional.

They must reach a clear understanding with each other about what exactly needs to be done and how the train and on-plant movements will be controlled. This is often done face to face but can be via mobile phone or radio.

Train movement into a possession

The train arrives at the protecting signal and the driver contacts the signaller.

Driver: Driver of train XXXX at XXXX signal

Signaller: Hello Driver of train XXXX at XXXX signal. Signaller XXXX at workstation XXXX. As you are aware, you are required to enter a possession. I have spoken to the PICOP and he has given me instructions to give you.

Driver: Hello signaller. Ok, understood. I am waiting your instructions.

Signaller: Driver of train XXXX, the PICOP has asked, when I give you authority, to proceed down to the stop board and detonator protection for the possession. This is located on approach to XXXX junction where you will be met by the PICOP. He will give you further instructions.

Driver: Signaller, when you give me authority, I am to proceed down to the stop board and detonator protection for the possession, which is located on approach to XXXX junction where I will be met by the PICOP to give me further instructions.

Signaller: Driver, that is correct. I now authorise you to pass XXXX signal at danger, proceed at caution, and be prepared to stop short of any obstruction. Additionally, the signal is fitted with TPWS.

Driver: Signaller, I am now authorised to pass XXXX signal at danger, proceed at caution and be prepared to stop short of any obstruction. The signal is fitted with TPWS.

Signaller: That is correct driver.

Driver: Thanks signaller.

Train movement within a possession

The PICOP meets the train at the protection to go further into the possession. The train stops and the PICOP goes to talk to the driver.

PICOP: Driver, I am name XXXX of company XXXX, the PICOP for this possession.

Driver: Ok name XXXX, understood. You are the PICOP.

PICOP: Driver, when I have removed the detonator protection and the PLB I want you to move your train down to the Worksite marker boards which are located at XXXX Junction. The Engineering Supervisor will meet you there and give you further instructions.

Driver: OK PICOP. When you have removed the detonator protection and the PLB I am to move my train down to the Worksite marker boards which are located at XXXX Junction where the Engineering Supervisor will meet me and give instructions to go into the worksite.

PICOP: Driver that is correct. I will now go and remove the detonators and PLB.

Driver: OK.

Manual route setting

In manual route setting the signaller will be agreeing the arrangements with a points operator for a simple failure or a route setting agent for a complex failure. In a complex failure, the route setting agent has communication with the point's operator.

Before the points are operated, the participants must reach a clear understanding about which points are to be operated, the order of operation, which clips and scotches must be applied, and which lines will remain open to traffic.

Points Operator: Signaller, this is mobile operations manager name XXXX, located at XXXX junction, on phone number XXXX.

Signaller: Hello mobile operations manager name XXXX, at XXXX junction, phone number XXXX. This is the signaller XXXX, signalbox.

Points Operator: Signaller, I have been called out to operate your XXXX points due to a report you cannot get normal detection.

Signaller: That is correct name XXXX. I cannot obtain normal detection on XXXX points, and require them in the normal position to run trains on the up main line. Can you manually operate XXXX points over to the normal and clip and scotch them. Please call me back to confirm this has been done.

Points Operator: Signaller, you want me to manually operate XXXX points over to the normal and clip and scotch them, then call you back to confirm this has been done.

Signaller: That is correct name XXXX, I can confirm the up line is blocked. Trains on the down line will be running normally.

Points Operator: Signaller, the up line is blocked but trains will be running normally on the down main. I will call you back when I have carried out the task.

Signaller: Thanks name XXXX.

Wrong direction moves

Wrong direction movement can be required for a number of reasons such as a blockage of the line or a failure of a preceding train. The move can be complicated if there are only a few signals (perhaps none at all) to control the movement. The safety communication between the signaller and the train driver needs to be precise and, if over a long or complicated route, done in stages.

Signaller: Driver of train XXXX at XXXX signal, due to a failed train ahead of you and it requiring assistance from a compatible train, control have authorised a wrong direction movement of your train back into XXXX station.

Driver: Signaller, due to a failed train ahead of XXXX signal and it requiring assistance from a compatible train, control have authorised my train to make a wrong direction movement back into XXXX station.

Signaller: That is correct driver; I can confirm the route is clear and safe up to and including the barriers at XXXX crossing barriers are down and the crossing is clear. Can you repeat this back to me please?

Driver: Signaller, you stated the route is clear and safe up to and including the barriers at XXXX crossing barriers are down and the crossing is clear.

Signaller: That is correct driver. Additionally, a hundred meters after XXXX crossing XXXX points are in the normal position for your train. Can you check these to make sure they are in the correct position to take you into the Up platform and the platform is clear of other trains. Can you repeat this back to me please?

Driver: Additionally, a hundred meters after XXXX crossing, XXXX points are in the normal position for this movement. Can I check these to make sure they are in the correct position to take the train into the Up platform and the platform is clear of other trains.

Signaller: That is correct driver. I now authorise you to make wrong direction movement. Please proceed at caution.

Driver: Signaller you now authorise me to make wrong direction movement, and proceed at caution.

Signaller: That is correct driver.

Reporting emergencies and abnormal events

Reporting trespass, fire, or near misses

When reporting trespass, remember to provide the following information:

- Precise location
- Approximate age and number of trespasser(s)
- Description of the individual(s)
- Are they in danger of passing trains?
- Anything suspicious, for example objects being placed on the line, suspected crime?

When reporting fire, remember to provide the following information:

- Precise location
- Distance from the running line
- What is on fire
- The effect the fire is having on the infrastructure, danger to trains
- Is smoke affecting visibility of signals?

When reporting near misses, remember to provide the following information:

- Precise location
- Details of what happened
- Number of persons involved (if rail staff specify HV clothing, which Company)
- Method of protection, if any
- Description of road vehicles/registration numbers
- Is the train driver fit to continue?

Reporting Track Defects

When reporting track defects, remember to provide the following information:

Precise location

What occurred: a throw to one side, dip in the line, any unexpected object(s) observed on the line ie ballast, stones, wood, etc

Whether it affects the opposite or adjacent running line, as far as practicable.

Reporting flooding

When reporting flooding on or near the line, remember to provide the following information:

- Precise location
- Whether it is affecting the opposite running line
- Depth of water, above or below rail level
- Whether there is water moving that could affect the foundation of the track (slab track or stone ballast)

Appendix B: Summary of key learning points from safety critical communications training

This Appendix contains a summary of all key learning points highlighted in the RSSB safety critical communications training (accessible to registered RSSB members here: www.sparkrail.org). These learning points form the basis of the national minimum standard for safety critical communications training and, as such, should be taken into account when tailoring any content presented in the training programme or in this manual to a local audience.

SCC foundation



We must **recognise when safety critical communication is happening** (all operational communication by front-line staff is safety critical).



Every time we hold an operational conversation, we are **agreeing a verbal contract**.



Safety critical communications are **formal conversations**.



As professionals, we must **all take responsibility** for safety critical communications.



We must **take time to communicate well** – no matter what the situation.

Structure and responsibility



A safety critical message should have four sections:



Opening



Information



Actions



Confirmation



The person with Lead Responsibility must **manage the communication** and **ensure that a clear understanding** is reached.



We must **all** support the person with Lead Responsibility - and **be prepared to do some of the leading**, if necessary.

Protocols



Operational communications must be **ABC-P**: accurate, brief, clear, and professional



Use the **Phonetic Alphabet** for all key information.



We must use **single numbers** (zero, one, two...), for **all key information**.



Use the **24-hour clock** to say time.



Use the **standard words and phrases**.



Learn and practice how to make an **emergency call**.

Confirming understanding



To **overcome** communication barriers:

- Use the best communicating position (dry and quiet if possible)
- Speak slightly slower at a good volume
- Avoid ambiguous language and regional words; keep jargon to a minimum
- Use the protocols and structure your conversation
- Confirm understanding – repeat back



Avoid monotonous and unnecessary **repeat-back** of information; think about what you are saying and what it means.



Use **active listening** and **neutral questions** to confirm understanding.

Communication skills



We need to develop a **professional working relationship** with our colleagues.



We must be **assertive**. Not passive or aggressive.



Be prepared to **challenge** incorrect information.



We must **consider others** – especially colleagues working under pressure.

