



Iarnród Éireann
Trackworker Safety

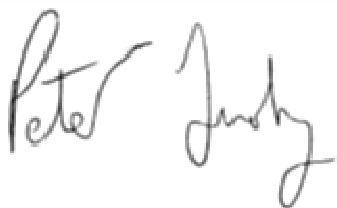
Personal Track Safety

Reference No:	GB400/8/02
Version:	1.0
Operative Date:	23/03/2023
Status:	LIVE
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The railway environment is a challenging place for people to work in and it is very different from anything you may have encountered in any other workplace. The risk of being struck by moving trains or machinery is the greatest risk which you will encounter when walking trackside on the railway, in addition electrocution, trip hazards, varying underfoot conditions, biological hazards and other hazards exist. It is also important to remember that modern rolling stock (trains) are much quieter than older rolling stock and can operate at a speed of 100 mph (160 km/h), this presents another risk which you need to take into account.

You are only permitted onto the railway after receiving very specific Personal Track Safety training, and then you are only permitted subject to certain conditions being applied. It is very important that you follow the track safety rules set out in the IÉ Rule Book, as strict adherence to these instructions will help ensure your safety, that of your colleagues and our passengers.

This document has been prepared by the Infrastructure Manager Safety Department to support your Personal Track Safety training and provides useful information which will assist you in remaining safe in the railway environment. Please take the time to study this document and remember that your safety depends on you safely applying your Personal Track Safety training at all times.

A handwritten signature in black ink, appearing to read 'Peter Tuohy', with a stylized, cursive script.

Peter Tuohy
Head of Health & Safety, IM

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First view of this typical photo of a railway everything seems to be working as it is designed to do.

Now lets now have another look at the photo from a Personal Track Safety (PTS) perspective and the potential risks the railway environment may pose to you.

This handbook is designed to remind you of the risks and hazards of the railway environment. It will provide you with the information to work safely while 'on or near the line'.

Personal Track Safety, known as PTS, is the IEÉ mandated competence for anyone whose duties (once authorised) require them to:

- Go on any railway line
- Go within 3 metres (10 feet) of any railway line while inside a railway boundary e.g. fence or structure.

The railway terminology for the two scenarios outlined above are known as 'on or near the line'

This handbook covers the rules associated with your safety when you are 'on or near the line'.

1. Train Movements

Quite simply, railways are designed for trains to travel over. The most important lesson to take from your PTS training is if you are working 'on or near the line', always expect train movements! Always be vigilant and understand that trains may approach you from any direction.



Technology advances mean modern trains are quieter, add in some background noise or a gentle breeze can make it very hard to hear them approaching.

You also need to consider the speeds trains can now achieve and the distances they are able to cover in a short space of time. A train travelling at 100mph will travel $\frac{1}{4}$ mile in 9 seconds.

That same train may take between a half to one mile to stop!

2. Overhead Line Equipment (OHLE)

Overhead Line Equipment or OHLE provides power to the IÉ fleet of Electrical Multiple Units (EMUs) more commonly known as the DART.

The system is energised to 1500 volts direct current (DC) and is extremely dangerous. You should always consider the OHLE to be 'live' and coming into contact with it may result in death or serious injury.



3. Platforms

Platforms are designed to allow passengers to safely enter and exit our trains. The risk from a PTS perspective is the area between the platforms at track level is an area of limited clearance. This means that you will not have a position of safety on that side of the track throughout the length of the platform.



In some areas Limited Clearance may be indicated by a red and white chequered board (as shown below). This warning board indicates you will not have a position of safety on that side of the railway for the length of the structure. Note: Limited Clearance signage is generally not displayed at platform areas. Take care never to stand where there is limited clearance, including platforms when a train passes.



4. Rails, sleepers and points

Rails and sleepers form the foundation for train movements, most lines now have concrete sleepers and continuously welded rails (CWR). Points are used to move trains from one line to another. This infrastructure poses potential slip, trip and fall hazards and also has an entrapment potential around points ends when they are being moved. These risks increase during the hours of darkness.



5. Parapet walls

You may encounter parapet walls where a bridge passes under the railway. Because of their design you will not have a position of safety through these structures if a train approaches.



6. OHLE trackside equipment

You may also find overhead line equipment on the track. This infrastructure can cause a slip, trip and fall hazard which will also be increased during the hours of darkness.



Now, lets return to the initial question:



The answer to the question is:

They're Everywhere!

All railways have risks, but none of them have to be killers.

Being 'Always Safe' is a core value for Iarnród Éireann and as such the top priority for each one of us is realised by:

- Always performing our duties in accordance with procedures.
- Always being alert and responsive to risks.
- Continuously reviewing the way in which we perform our roles.



1 Getting to know the infrastructure

Before going 'on or near' any railway line on the IÉ network, you must be certified competent in PTS. This section contains all the basic information on railway infrastructure. Whether it's a busy multi-track location or a little-used branch line, all railway lines are unique and each has its own risks.

1.1 Track layout

Trains travel from one location to another on what are called 'running lines'. When trains are moving over running lines they are said to be travelling in either the Up or Down direction. Additionally all running lines have speed limits, the picture below shows two tracks or a 'double line' – one line for each direction. The train is travelling on the Up line to Dublin while the adjacent line is the Down line to Cork. The direction of travel generally remains the same for Up & Down direction trains, these are known as uni-directional lines. The maximum line speed on the Dublin to Cork line is 100mph.



Remember – when trains are travelling they will always display white lights in the front and red lights in the rear. This will give you a visual indication as to the direction they are travelling, 'white lights' are coming towards you or 'red lights' are travelling away from you.

Sometimes trains can travel in both directions on the same track. These are known as bi-directional lines or, if it's one track, this is known as a 'single line'. The train in the picture below is travelling between Athy and Carlow. The maximum line speed on the Dublin to Waterford line is 100mph, this may be reduced at certain locations and may be different dependent on the direction of travel.



There are also locations with multiple rail movements where four lines are used. In the picture below of the four track system between Inchicore and Hazelhatch, the tracks to the left of the image are the Up Fast and Up Slow and the tracks on the right of the image are the Down Fast and Down Slow. The maximum speed on the Up & Down Fast lines is 100mph, and the maximum speed on the Up & Down Slow lines is 70mph. The outermost tracks are the fast lines and the inner tracks are the slow lines.



Up Fast

Up Slow

Down Slow

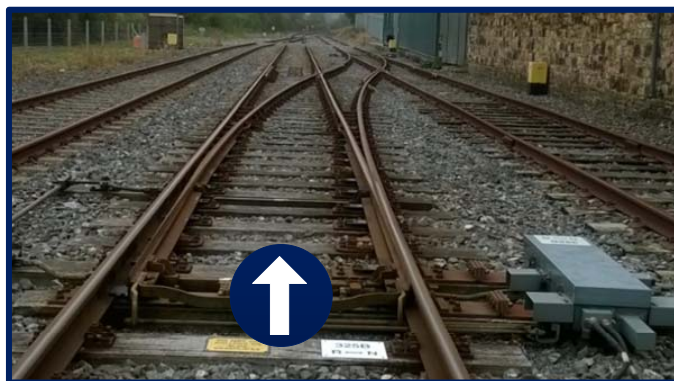
Down Fast

Remember – On any railway line always expect train movements from any direction. Never rely on signals to give an indication of train direction or presence of a train when displaying green or red aspects.

You will find points all over the network, points allow trains to travel from one line to another. There are different types: turnout, crossover etc. but effectively they all have the same purpose. Generally, points are controlled from a Signal Cabin and will be numbered. The points number is generally shown at the points end. The 'R & N' shown on the points machine will tell you what direction the points are set or 'lying'. The points are set in either the Reverse or Normal position, the points direction will be set by the Controlling Signaller to allow them to move trains from one line to another.



When trains are to make a movement over points, the railway terminology used describes it as either a 'facing' or 'trailing' movement. In the pictures below, the arrows show the direction the train is travelling. The points on the left image are 'facing' - they allow trains to leave the line. The image on the right are 'trailing' which allow trains to join the line.

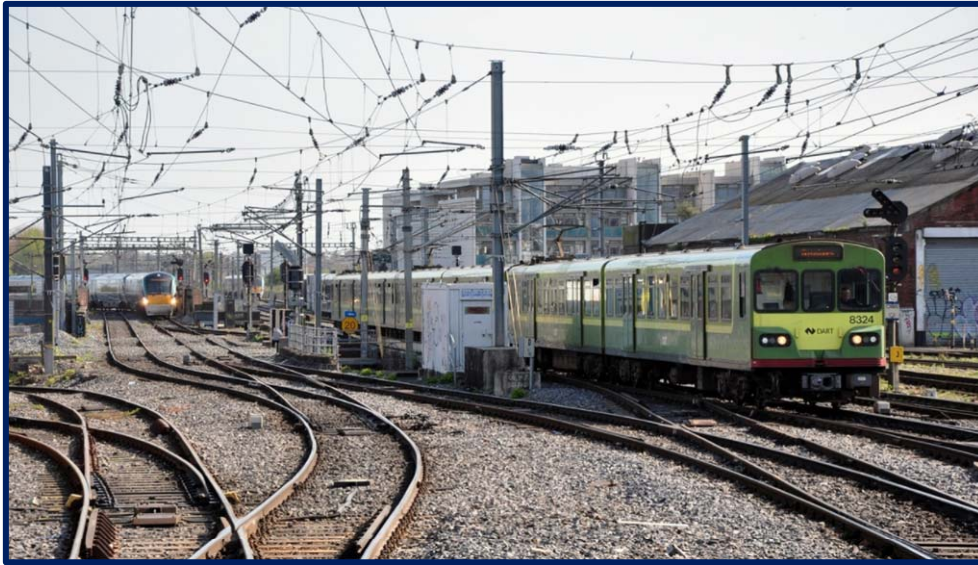


Facing movement



Trailing movement

Around large station areas the track layout will generally be more complex. There will be numerous sets of points to allow multiple train movements enter and leave the station. Always be extra vigilant in these locations as trains will pass more frequently from one line to another to serve various platforms.



There are also multiple sidings on the network, as well as depots and yards. These are used to store trains and other railway vehicles when they are being maintained or not in use. Sidings, depots and yards are not classed as running lines and all rail movements made within them can only be carried out at a maximum speed of 5mph.



Note: You may find that in some depots, yards or tunnel locations that 'Local Instructions' for your safety may be in place. If there are, a local induction will be given advising of the specific rules or procedures for the location.

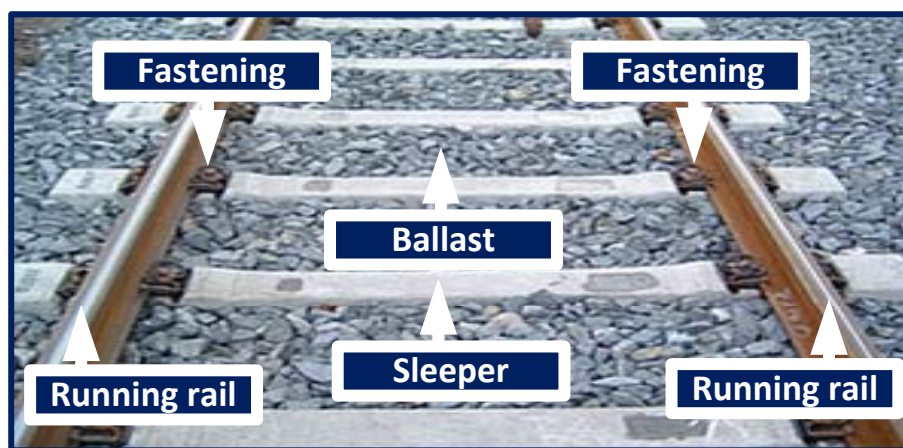
Mileposts are positioned alongside the railway, they are located at every quarter mile (440 yards) section on the line. They are generally positioned on the Down side of the line, that is the Down direction on single lines and on the Down road of double line tracks. The 0 milepost will always be at the start of the line Connolly, Heuston etc.

Trains travelling from the 0 milepost are classed as being in the Down direction and in the Up direction towards the 0 milepost. Mileposts can be helpful to identify the direction you are travelling or in double line sections in identifying which is the Up and Down line and the direction trains may approach from.



1.2 Terminology

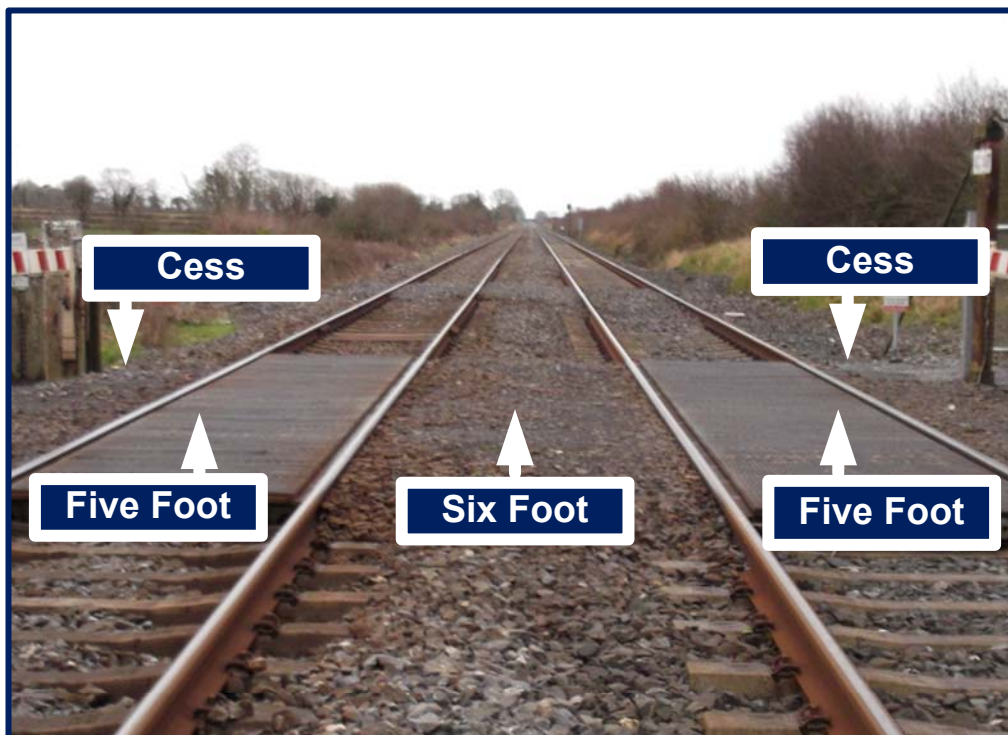
The image below shows the terms used to describe parts of the track -



- Running rails are the two rails that a train's wheels run on
- Sleepers support the rails and keep them the correct distance apart
- Fastenings hold the running rails to the sleepers
- Ballast keeps the track in place

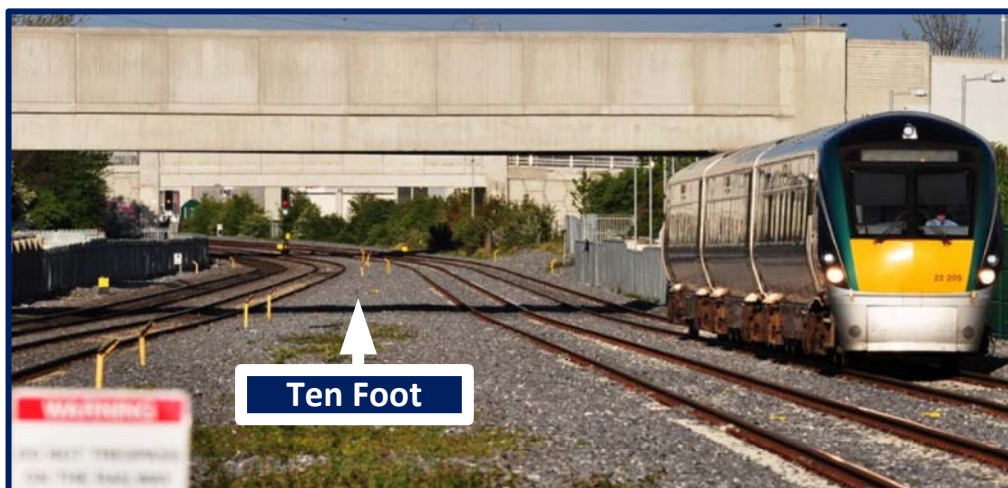
Within this handbook a number of distances are given, these distances are taken from the 'nearest line', that means the measurement is taken from the nearest running rail on that line.

The image below shows the terms used to describe parts of the railway:



- The Cess is the area alongside the line(s)
- The Five Foot is the space between the running rails of one line
- The Six Foot is the space between a pair of lines

Where you find more than two lines for example the four track system between Inchicore and Hazelhatch which has four lines, a wider space is provided between the Up and Down lines. This is known as the ten-foot or a wideway.

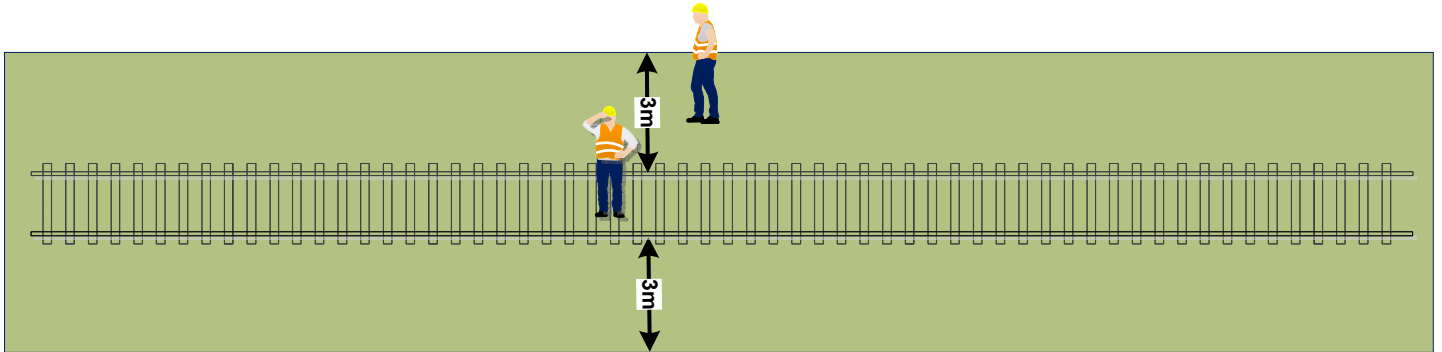


Be aware! These are just terms not exact measurements.

On or near the line:

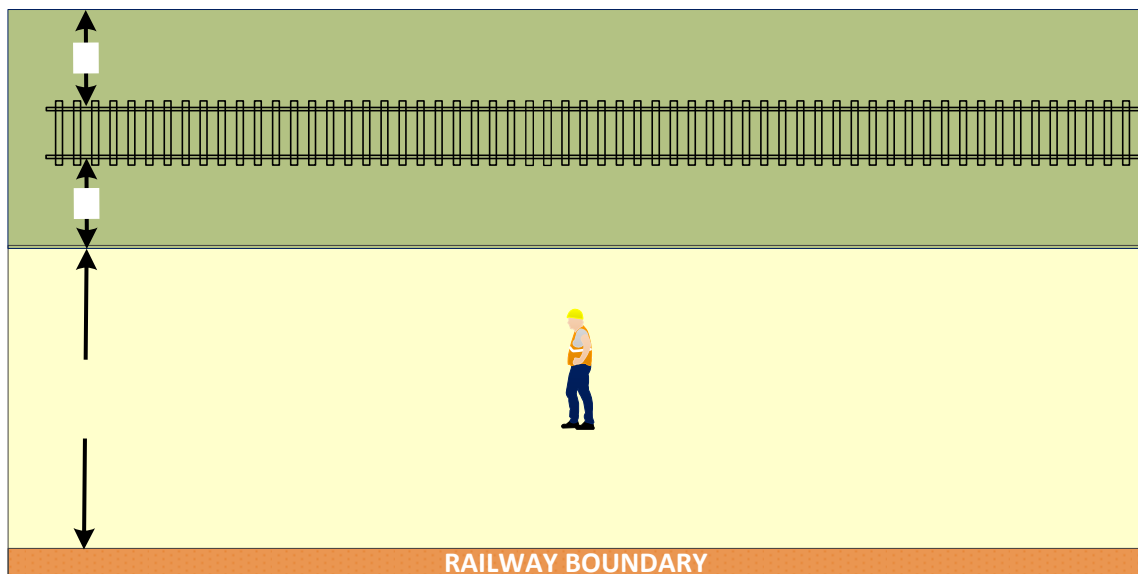
There is one really important term you must remember, 'on or near the line'. The reason behind the importance of this term is, when you are on or near the line you are at risk from trains.

You are 'on or near the line' when:



- You are on any railway line or,
- You are within 3 metres (10 feet) of any railway line

You are not 'on or near the line' if you are crossing the line at a level crossing.



Lineside:

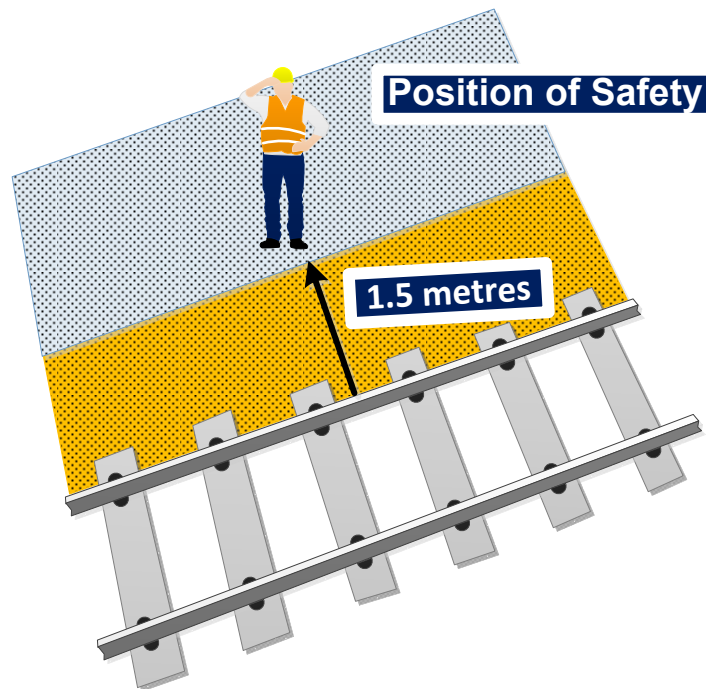
You are on the 'lineside' when:

- You are within the railway boundary, but not in the area known as 'on or near the line'

Position of Safety:

A position of safety is as the name suggests, it is a place where it is safe to stand when a train is passing.

You are in a position of safety when you are at least 1.5 metres (5 feet) from the nearest line on which a train might approach.



While 1.5 metres is your position of safety there are other things you should consider when accessing the railway. Rule Book requirements mean that you must be in a position of safety 10 seconds before the arrival of the train. There is good reason for this, as a train travelling at 100mph will travel $\frac{1}{4}$ mile in 9 seconds!, and may take between a half to one mile to stop.

Remember: you must not go 'on or near the line' unless:

- You are authorised to go there
- You have valid PTS certification
- Your duties make it absolutely necessary to go there
- You must use bridges, subways or crossings, this will avoid or reduce the need to go 'on or near the line'

STOP...

**BEFORE GOING ON OR NEAR
THE LINE ALONE...**

ASK YOURSELF THESE QUESTIONS...

Do I need to go on or near the line while trains are running?
Does anybody else know where I am going?
Am I familiar with this location including any local hazards?
Will I have a position of safety available throughout the entire route?
Have I the correct phone number for the Controlling Signalman?

Always consider the risks before going on or near the line alone and plan ahead.

File Ref: IM/RU/SA/1

Issued by the IM/RU Safety Departments

01/11/2021

BEFORE GOING ON OR NEAR THE LINE ALONE...ASK YOURSELF THESE QUESTIONS

- Do I need to go on or near the line while trains are running? – Can this work be done using a safer system, or when trains are not running.
- Does anybody else know where I am going? – Always tell someone if you are going on a 'live' line alone, always use the Stay Safe – Lone Working App.
- Which direction will trains approach from? – Remember, trains may approach you from either direction.

- What speed are trains travelling at? – train speed determines sighting distance, Remember, you must be in a position of safety 10 seconds before a train arrives.
- Are you familiar with the area? – Do you know the local hazards. Ensure there is a position of safety along your entire route, not just the work location.
- Have I the correct phone number for the Controlling Signalman? – In the event of an emergency, you must ensure you are speaking to the correct Signalman.

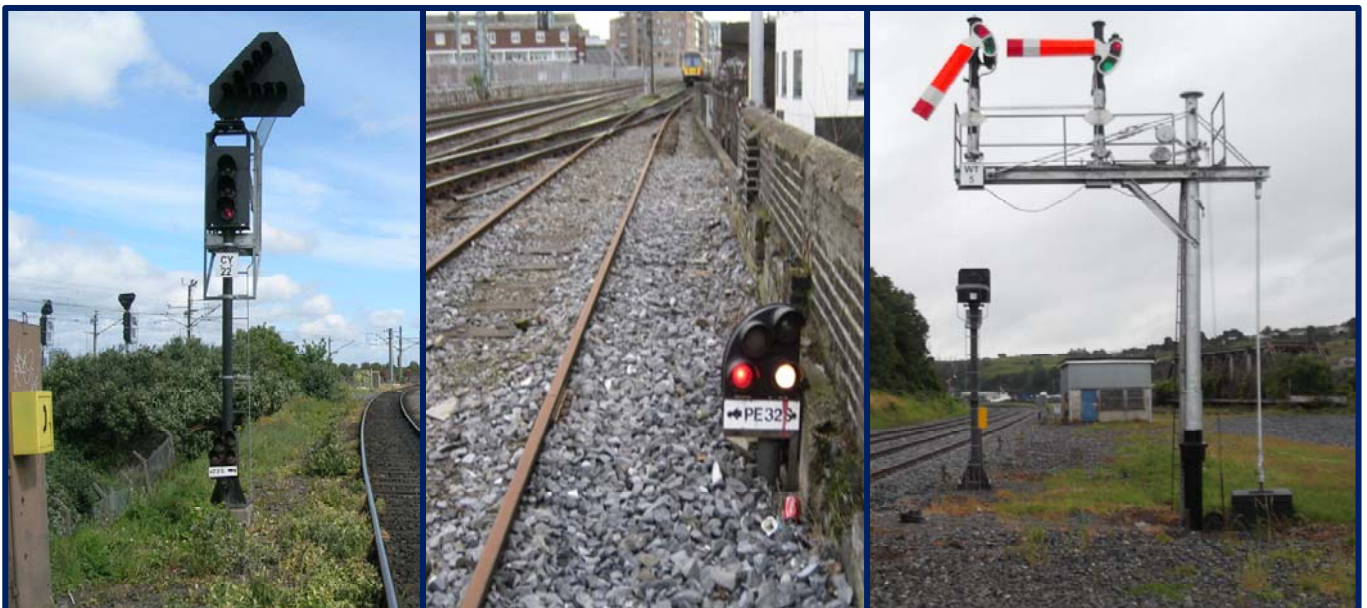
Authorised walking routes:

An authorised walking route provides safe access to or from a place of work. They are often found near depots, stations and signal boxes. There are also locations on the network where a position of safety is not achievable, at a number of these locations the Chief Civil Engineer's Department have now installed walkways.

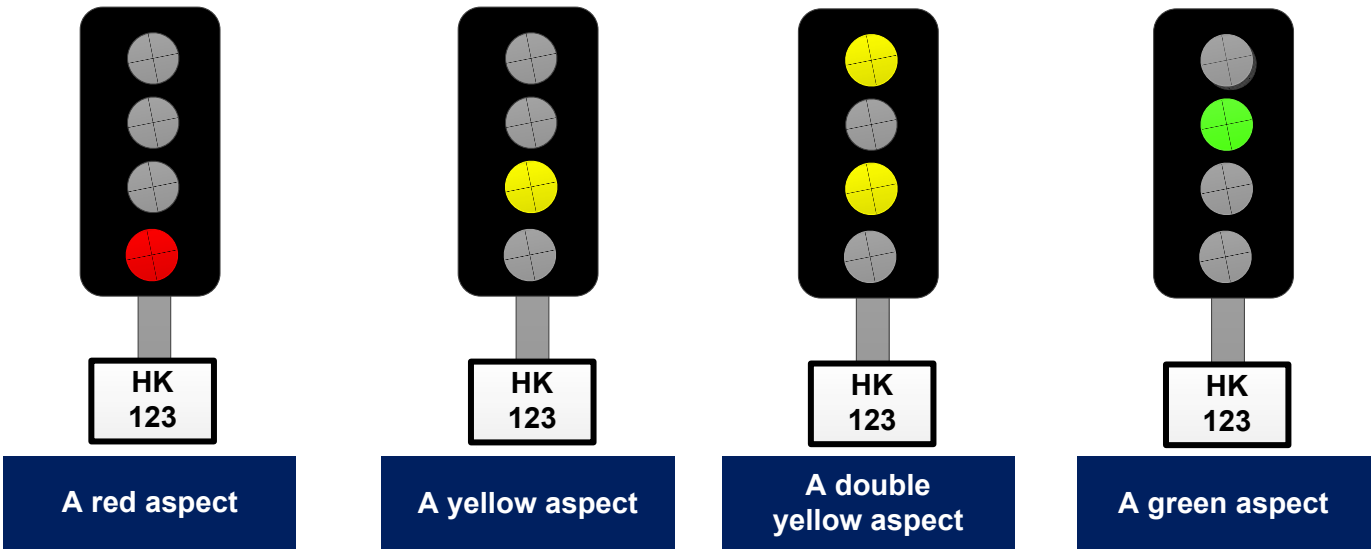


1.3 Signals

All running lines have signals to control train movements. Most signals are operated either from CTC (Centralised Traffic Control) or locally from Signal Cabins. Signals are usually attached to posts alongside the track but can also be found on overhead gantries or on the ground. Modern signals tend to use colour lights, but some lines still use semaphore signals.



Each colour light signal has an ‘aspect’. These are shown below:



A colour light signal is said to be at ‘danger’ if it is showing a red aspect.

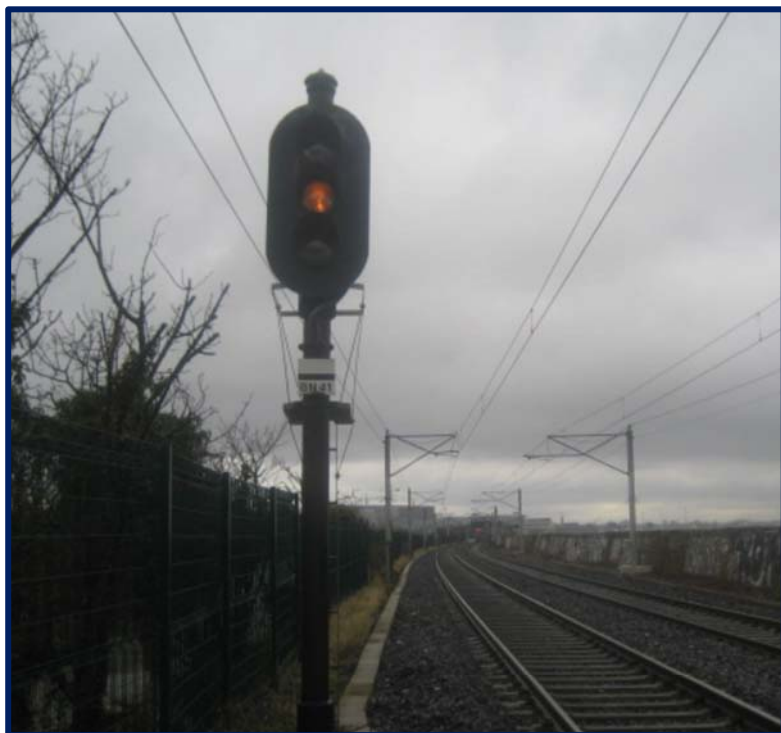
A red semaphore signal is at ‘danger’ if it is the horizontal position.



All signals controlled by the Signaller will have an identification plate. ‘Controlled’ signals will have a white identification plate with black writing which will have the signal prefix and number.



Some signals are automatic, meaning they are controlled by the movement of the train and not by the Controlling Signaller. 'Automatic' signals are identified by a white plate with the signal prefix and number with a black horizontal stripe through it.



Be aware, some colour light signals do not have red lights but can display green and yellow aspects. This means trains are not required to stop at them. This is also true of some semaphore signals, as in the image below these are called distant signals.

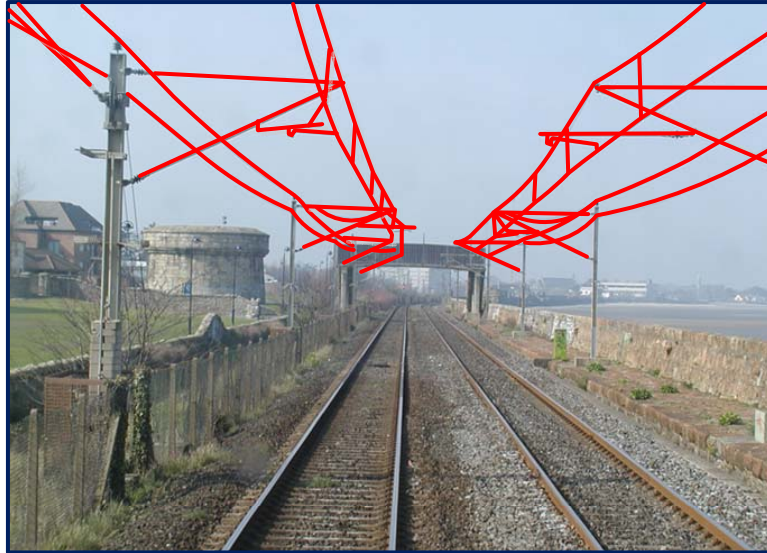


Remember – Never rely on signals to give an indication of train direction or presence of a train when displaying green or red aspects. Always expect train movements from any direction.

1.4 Electrified lines

Some trains are powered by electricity from overhead cables. The electricity is controlled from the Electrical Control Desk located in Centralised Traffic Control (CTC), Dublin.

Overhead line equipment, known as OHLE, provides trains with 1500 volts direct current (DC). In the picture below, the live parts of the OHLE have been highlighted in red.



As this power source is so significant, exposure to it can be fatal!

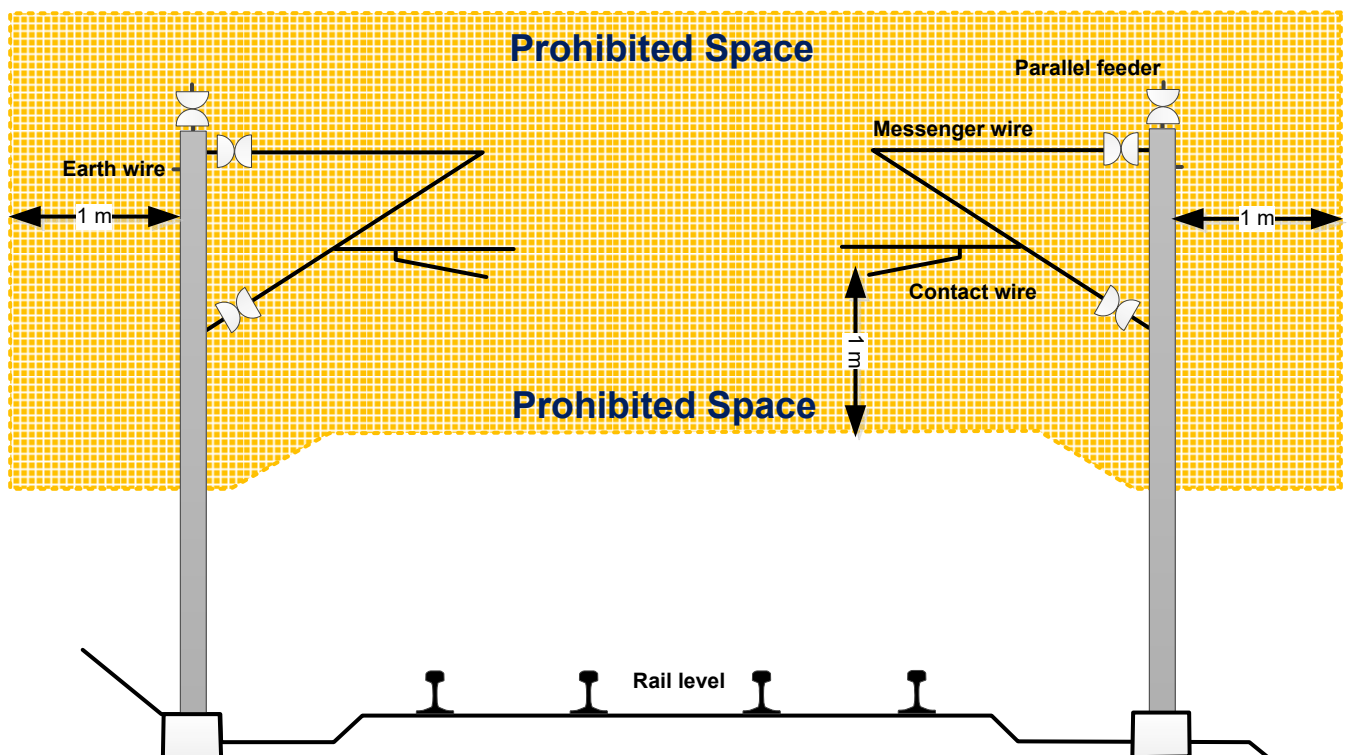
In the event it is non-fatal, contact with LIVE OHLE can cause life changing injuries including, internal organ damage, electrocution, stopping of the heart, severe burns or loss of limbs.



You must always consider that OHLE, and anything in contact with it, is LIVE and extremely dangerous at all times.

Currently OHLE is in place on the DART Network between Malahide and Greystones including the Howth Branch Line, covering 50 km in length. Significant expansion to the OHLE network is currently underway with the DART+ programme. Electrification will extend from the current DART network North to Drogheda, West to Maynooth & M3 Parkway, South West to Hazelhatch & Celbridge which will increase OHLE lines to 150 km.

To ensure your safety there is a prohibited space around all OHLE which is LIVE. This prohibited space is 1 metre from any part of the system which is live as shown in the image below. Note: when work is required to take place within the prohibited space a strict 'Permit to Work' system is applied by the OHLE Department.



There are precautions you must take when in OHLE areas:

- Always keep yourself at least 1 metre from OHLE equipment
- This distance also applies to your clothing or any tools or equipment you may be using
- Take additional care when in cuttings, embankments, on structures or in rail mounted vehicles
- Always consider anything attached to or hanging from OHLE as LIVE
- Never touch broken, displaced or disconnected cables
- Never touch broken rails as power from the overhead lines is fed back into the system through the rails
- Keep all liquids well away from where they could be thrown, fall or splash onto LIVE OHLE

- Keep all tools and equipment well clear of LIVE OHLE
- Never carry anything above shoulder height. Carry pipes, rods, poles, brooms, mops or ladders etc. horizontally
- If trimming or felling trees, make sure there is no possibility of branches or debris falling onto LIVE OHLE

In the event of an emergency or if you observe any object hanging from, in contact with or close to the OHLE, you must immediately contact the Electrical Control Operator (ECO) who controls power to the OHLE. The ECO can be contacted directly at **01-878-5188**

The following activities are NOT permitted to be carried out under LIVE OHLE:

- Climbing above the floor level of any driving cab
- Climbing on the roof of any rail mounted vehicle
- Using a crane, plant, equipment which is capable of being extended
- Any activity which could encroach on the prohibited space



1.5 Track circuits and axle counters

Track circuits and axle counters are part of the signalling system which provides for the safe movement of trains. They provide a visual indication to the Controlling Signaller of the location of the train on their signalling screens.



In track circuit areas, you should never place metal objects e.g. measuring tapes across the rails, as it might operate the signalling equipment. This could result in a signal aspect changing as the driver approaches it.

In axle counter areas, you should not allow any metal object near signalling equipment or within 300mm (1 foot) of an axle counter head, as it may interfere with its operation.



Axle counter head

1.6 Telephones

There are many telephones on the railway. Most of them will provide direct communication to the Controlling Signaller for the line concerned. The most common are lineside phones which can be found near points or signal post telephones (SPTs), as the name suggests are located at signals.



Telephones are also provided at Closed-Circuit Television (CCTV) Level Crossings for emergencies and unusual movements e.g. slow moving loads. These phones will give direct communication with the Level Crossing Control Centre (LCCC) responsible for controlling the crossing.



1.7 Limited clearances

On some parts of the railway, the space between the track and the nearest wall or structure is very narrow. These are areas of limited clearance. When you see the sign below it means you will not have a position of safety on that side of the railway for the length of the structure.



There are locations of limited clearance on the network which are not signposted. A good example of this are platforms. When walking in station areas always use the platform. Never enter or work in a platform area unless there is a safe system of work set up to protect you!

A refuge is a place where it is safe for you to stand when a train is passing. They can be built out over an embankment, bridge or cut into the wall of a viaduct or tunnel.



Tunnels add another layer of risk to working on the railway, as a result, people are not allowed to work in tunnels while trains are running. If trains are stopped and you have received permission to enter, you still need to make sure you know where the nearest position of safety is, this will usually be in a refuge. You must also have a head lamp or hand lamp with you if you are entering a tunnel. This is also the case for all parts of the railway when working during the hours of darkness, or if visibility is poor.



2 Are you fit for work?

2.1 Medical fitness

Because of the possible risks, it is important that everyone working on the railway is medically fit. As a result, you may be required to take periodic medical assessments and eye examinations.

It's your responsibility to keep your employer up-to-date about any medication you are taking, or any condition that may affect your safety while on the track. Make sure you work within any restrictions imposed on you for medical reasons. If you're asked to do something which you are not capable of doing due to medical restrictions, explain to your Supervisor/Line Manager why you cannot.

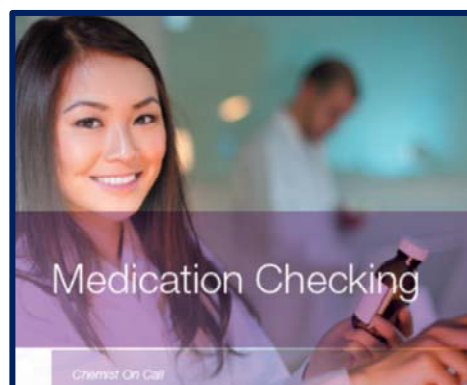
If you need glasses or contact lenses, make sure you wear them. If you are a contact lens wearer, always have a spare pair of glasses with you.

2.2 Drugs and Alcohol

You must not come to work after taking illegal drugs, any medication which could affect your safety, or if you have recently had an alcoholic drink. Don't drink alcohol or take illegal drugs while on duty, or bring illegal drugs to work with you. The IÉ Drugs and Alcohol policy is available from your Supervisor/Line Manager.

Report to your employer any medication you are taking that may affect your safety. IÉ provide a service for you to check any potential impact of medication you are or intending to take. The 'Chemist On-call' service will advise an employee of the influence the medication may have on the person and the subsequent impact on their fitness for duty.

The Chemist On-call service is available 24 hours a day, 7 days per week, the online service can be accessed via the website address <https://app.chemist-on-call.com> or by phoning the lo-call number 0918 32 999.



Eating foods with a high sugar content can lead to a “sugar crash”, where your blood sugar drops making you feel anxious, irritable or confused. A poor diet can worsen symptoms of depression, anxiety, and other mental health conditions.

High sugar or hard to digest foods can make it difficult for your body to rest. Your diet is the best source of important nutrients that help your body renew and repair itself overnight. A healthy diet is key to getting a good nights sleep, as well as setting yourself up to feel your best when you wake up.

Adequate Sleep

Getting enough sleep is important for mental and physical wellbeing, but not being able to get to sleep can be incredibly frustrating. If you are feeling stressed or anxious, you may be more prone to disturbed sleep or nightmares.

Exercise

When experiencing fatigue, exercise can be the last thing on your mind. However, regular exercise can:

- Provide the body with energy
- Combat fatigue
- Boosts endorphins which make you feel more energised
- Increases oxygen levels in the blood
- Is both psychologically and physiologically beneficial
- Improves cardiovascular and respiratory efficiency
- Enhances the quality of life
- Promotes wellbeing

Start with a small amount of exercise, even a 15 minute walk can give you an energy boost. The benefits increase with frequent physical activity. If you are struggling with ongoing fatigue in relation to work you should speak to your employer and/or to your local GP or medical practitioner.

Further supports are available at IÉ’s Employee well-being programme – Employee Assistance Programme (EAP), contact details are available in Section 8 of the handbook.



3 Going onto the railway

3.1 Preventing Trespass

The railway is a high risk working environment, it is designed for trains rather than people. Never access the railway unless you absolutely have to be there.

PTS training ensures you are competent to go 'on or near the line', but be aware trespassers are not trained or competent to access the railway. Trespassers are a risk to both themselves and to the railway. To reduce the risk of trespass, always keep access gates closed and locked, even if your work will only take a few minutes. Make sure user-worked level crossing gates are shut. If you find any damage to a boundary fence, try to secure it.

Report all problems with fences, gates and barriers to the Controlling Signaller for the line concerned.

3.2 Personal Protective Equipment (PPE)

Your employer is required by law to provide you with any PPE required for your work and also to show you how to use it. Keep it clean, check it for damage and report any defects. PPE can only protect you if you wear it properly – so make sure you do.

If you see a blue and white warning sign advising the use of PPE please understand it is a mandatory requirement and the PPE outlined in the signage must be worn.



High visibility clothing is an essential part of your PPE, its design and colour enables train drivers to see you from a distance. This visibility also benefits anyone managing a group of staff when they need to account for them if they have to move to a position of safety.

Due to the importance of PPE, IÉ have very specific requirements for high visibility clothing. All high visibility worn on or near the line has to be orange in colour, not just any orange, it must conform to a standard which defines the specific orange that can be used.

The standard that dictates this is Rail Industry Standard RIS-3279-TOM (formerly GO/RT 3279). If you need to check that your PPE is the correct colour just check the labels.

As you can see in the example below this label has GO/RT 3279 identified on it, this ensures it's the correct colour to wear when on or near the line. If your hi-vis does not have either RIS-3279 or GO/RT 3279 on the label, then do not wear it on the railway, advise your Line Manager/Employer and make sure it is changed.



When on or near the line or lineside you will be required to wear approved safety footwear which must conform to EN ISO 20345 standard and high visibility clothing on your upper body – in the form of a vest or jacket. The wearing of these items is the minimum mandatory requirement.

Depending on the work or site rules, you might also have to wear other items such as safety helmet, ear defenders, goggles, gloves or overalls.

There are some additional precautions around clothing you should not wear while on or near the line which you may not have considered.

- Hoods – The wearing of hoods in the railway environment is considered to be an unsafe choice of clothing for the following reasons. Hoods reduce your vision and/or hearing, this is likely to increase the time required to respond to an approaching train. Hoods should never be worn while on or near the line.

The poster is titled 'SAFETY ALERT' in large red and black letters. It features the Iarnród Éireann Infrastructure logo at the top left and a 'Train Accident Free' logo at the top right. A yellow triangular warning sign with a black exclamation mark is positioned to the right of the title. The main heading is 'Use of 'Hoodies''. The text explains that hoods reduce the ability to hear approaching trains and impair vision by limiting peripheral vision. It states that hoods increase the time to respond to an approaching train and therefore **must not** be worn 'on or near the line'. Below this, two photographs show workers in orange high-visibility vests. The left photo shows a worker wearing a hood, with a large red 'X' in a circle over it. The right photo shows a worker without a hood, also with a red 'X' in a circle. At the bottom, a red banner contains the 'Key Message: If you have to go 'on or near the line' it is unsafe to wear a hood of any kind'. The footer includes the reference 'Ref: IM/SA1/2018' and the date 'Issued by the IE IM Safety Department 15/05/2018'.

SAFETY ALERT

Use of 'Hoodies'

A hood or 'hoodie' will reduce your ability to hear the sound of an approaching train or any other vehicle operating on the Infrastructure. A hood will also impair your sight by limiting your peripheral vision.

As hoods will reduce your vision and/or hearing, which is likely to increase the time required to respond to an approaching train they **must not** be worn 'on or near the line'.

Key Message:
If you have to go 'on or near the line' it is unsafe to wear a hood of any kind

Ref: IM/SA1/2018 Issued by the IE IM Safety Department 15/05/2018

- Red or Green clothing - trains are signalled using red and green signals. To reduce the potential for a train driver making an error and misinterpreting the aspect in the signal that you may be in the proximity of, you should never wear Red or Green clothing while on or near the line.

3.3 Using road vehicles near the line

Road vehicles can be a serious risk to trains if they are used near the line without proper care. If you're the driver -

- Don't allow any part of the vehicle to come within 2 metres (6 feet 6 inches) of any line on which a train might approach.
- Switch the hazard warning lights on and, in darkness or poor visibility use dipped headlights.
- Only turn the vehicle at a suitable turning point and keep the back of the vehicle furthest from the line
- Make sure all red lights are off when the vehicle is parked.



The above image is taken from the CCTV of a Cork to Dublin train and shows the risk associated with road vehicles and the railway. The driver was trying to turn the vehicle at an access point and reversed too far, resulting in the vehicle ending up on and 'fouling' the line. This incident resulted in trains being stopped to allow for removal of the vehicle. In different circumstances this incident may have resulted in a far more serious outcome.

3.4 Occupational Safety

While on or near the line, there are also additional hazards you must consider:

Needle Stick Injury: In the course of your duties you may discover used / discarded hypodermic needles/syringes. There is a potential risk of injury and infection associated with needles and syringes. To prevent this risk, once you see a discarded needle report it immediately to the Track Safety Co-Ordinator (TSC) who is responsible for setting up a Safe System Of Work (SSOW). We will explain this persons role and responsibilities later in the handbook. The TSC will arrange for safe disposal of the needle.

Once a needle is discovered you must never:

- Hide it
- Separate the needle from the syringe
- Try to put the cap back on the exposed needle
- Handle the needle or syringe unnecessarily
- Put the needle or syringe in a dustbin, or down a drain etc.
- Ignore it

Carrying out any of these actions could put you or your colleagues at risk!



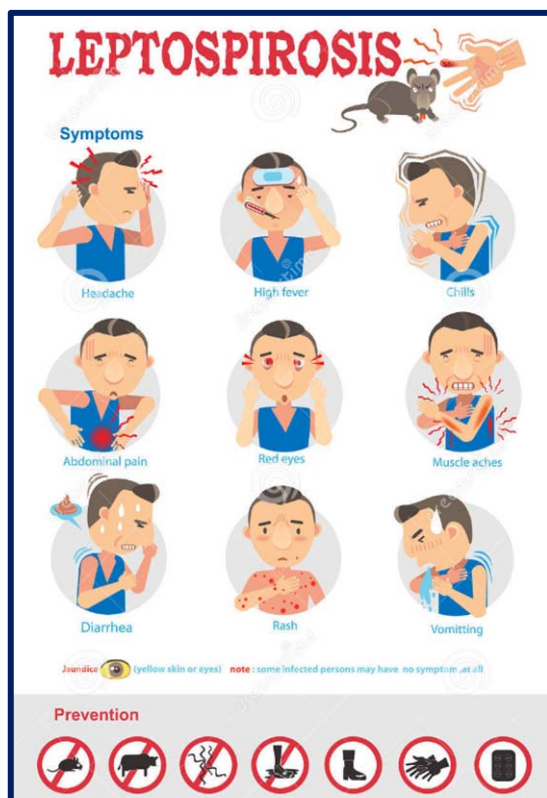
If you get a needle stick injury:

- Inform your TSC
- Encourage the wound to bleed by gently squeezing
- Wash the wound with soap and warm water
- Cover with a waterproof dressing
- Immediately contact your doctor or Accident and Emergency Department for advice and treatment

Remember: Never suck a needle stick wound

Leptospirosis or Weils disease: Weils disease is a form of bacterial infection which is carried by animals, most commonly in rats and cattle. This is a serious and sometimes fatal infection that is most commonly passed to humans through water contaminated by rat urine. To reduce this risk you should always:

- Wear PPE
- Practice good hygiene standards. Always wash your hands before eating, drinking or smoking
- Wash cuts or grazes immediately with soap and running water. Cover all cuts and broken skin with waterproof plasters before and during work
- Report any illness to your doctor. Tell the doctor that you work on the railway and give specifics about the tasks you have undertaken, specifically if you have been working near stagnant water. Leptospirosis is much less severe if it is treated properly and promptly



Mobile Phones: The use of mobile phones for all aspects of life has greatly increased. When you're distracted, like looking at a mobile phone, you develop tunnel vision, and miss even the most unexpected or unusual objects around you. This is a huge risk in the railway environment. Any items you carry while walking on or near the line must not affect your ability to walk safely or to see or hear and acknowledge approaching trains.

- IÉ company issued mobile phones must only be switched on and used if essential to the safe delivery of work and part of a safe system of work
- Do not use a mobile phone when walking on or near the line
- Personal mobile phones must be turned off or switched to silent when on or near the line
- If you have to use a mobile phone, first move to a position of safety and stay there until you have finished using the device

**Iarnród Éireann**
Infrastructure

ALWAYS
SAFE

ACCIDENT FREE
DEPENDS ON ME

FETY ALERT

Use of Mobile Phones when 'on or near the line'

There have been a number of recent reports of colleagues using Mobile Phones when 'on or near the line' and while not being in a position of safety.

Using a Mobile Phone can distract you and affect your ability to hear an approaching Train, OTM or RRV.



Always remember

Only use a Mobile Phone when you are in a position of safety.

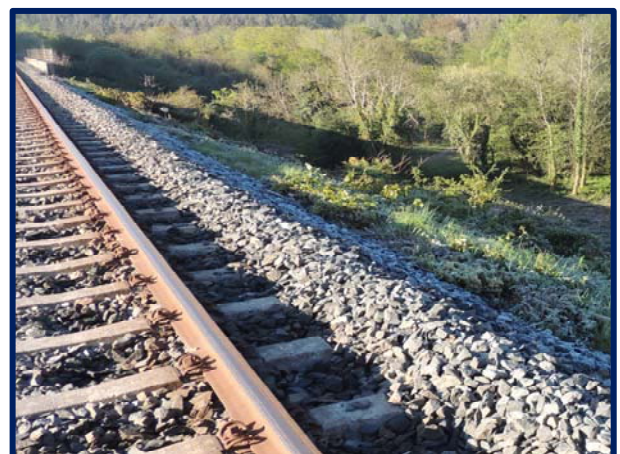
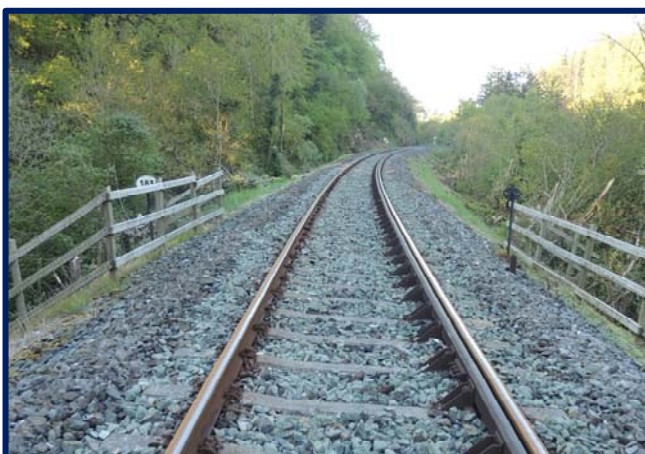
Key Message:

Mobile Phones cause distraction, don't let your use of a Mobile Phone put you in danger!

Ref: IM/SA2/2020 Issued by the IÉ IM Safety Department 05/02/2020

Slips, Trips & Falls: Health and Safety Authority (HSA) Ireland describe: *‘Every working day seven people are hurt in work slips, trips and falls’*. Every time you are required to access the railway you must consider the potential risks which could cause a slip, trip or fall, these include:

- Rails
- Sleepers
- Points
- Loose irregular surfaces such as ballast or gravel
- Sloping uneven ground, such as embankments
- Cables, wires or other clutter across walkways
- Changes in elevation or levels
- Irregularities or damage to walking surfaces or steps
- Debris or accumulated waste materials



Remember: the risks associated with slips, trips & falls are greatly increased in the hours of darkness.

There are a number of behaviours which increase the risk of a slip, trip & fall incident, these include:

- Carrying or moving cumbersome objects or simply too many objects at one time
- Not paying attention to your surroundings
- Taking unapproved shortcuts
- Being in a hurry and rushing

So what can you do to prevent slips, trips & falls? Here are some simple tips which will help to keep you safe:

- Take care when entering or alighting from any vehicle
- Many accidents happen within the first 60 minutes of a shift, not being 'with it' can catch you out
- Make sure you are alert and vigilant for risks
- Take extra care in wet or slippery conditions
- Do not walk on sleepers or rails
- Always step ballast to ballast, be careful of underfoot conditions such as loose, high or low ballast
- Always use a handrail where provided
- Never walk and talk!



3.5 Your safety – the basics

Be prepared! Do not go on or near the line unless you are authorised and your duties require you to do so. If you are going onto the live railway be absolutely clear about the risks at the location and how you are going to stay safe. Remember your safety is your responsibility, you need to know -

- The approved access point
- The speed limit and normal direction of trains on each line
- If there are any areas where people are not allowed to go while trains are running
- If there are other hazards at the location that might affect your safety

If you are alone and do not know the answers to these questions, or, if you are in a group and have not been briefed by the TSC then don't go on or near the line!

3.6 Walking alone

If there is no safer route, you can walk alone on or near the line to get to or from a place of work. If you are walking with someone else keep a sufficient distance away to avoid becoming distracted. Use an authorised walking route or proper pathway where provided. Otherwise walk in the cess, only if no other option is available you can walk in the five foot. If this is the only option and you have to walk in the five foot, wherever possible, face oncoming trains and always ensure you can reach your position of safety 10 seconds before the train arrives.



Always be aware, trains can approach you from any direction, especially when operating on a single line, or the line is under possession to allow engineering work to take place. Even on double lines where trains normally run in one direction they may still travel in the other direction when Single Line Working (SLW) is in operation.

Keep vigilant, watch and listen for trains at all times – look up frequently. Never assume that you're safe if you see a signal at danger or when a level crossing is open to road traffic.

Switch off your mobile phone unless you need it on for safety reasons e.g. Stay Safe Lone Worker App. If you have to use it, make sure you're in a position of safety and remain there until you have finished using the phone.

Always remember – there is no position of safety in an area of limited clearance, so never enter if a train is coming. These are high risk locations and should be avoided.

If you are working / walking alone IÉ provide a Lone Working app called 'StaySafe'. The app is provided to ensure our lone workers have the ability to raise an alarm should an emergency or accident occur whilst working alone, even out of hours and in areas of low signal. The app works on both Android and iOS devices in case of an accident, confrontation or sudden illness. If you need further information regarding StaySafe please contact your Line Manager/Supervisor or visit: <https://staysafeapp.com> for further information.



3.7 When a train approaches

When a train approaches you must go to a position of safety (at least 5 feet or 1.5m from the nearest line) straight away. You must be in that position of safety at least 10 seconds before the train passes.

Once the driver sees you they will sound the horn, when they do, raise one arm above your head to show them that you have heard their warning.



It is very important that you acknowledge the drivers warning, as it gives them confirmation that you are in a position of safety and are not at risk. Not acknowledging this warning may lead to the driver making an emergency brake application to their train.

While it may be easy to see where a train is coming from on a single line, never assume in double or multiple line layouts which line the train is on. This is especially important where points are close by. Keep watching the train until it has passed you by or you are certain it no longer poses any risk to you.

Before leaving your position of safety, make sure no other trains have approached without you noticing, always double check!

In the event a train approaches and for some reason you cannot get to your position of safety, lie down on the ground in the cess or six foot and make sure to gather all loose clothing in tightly.

Always remember: Even if you cannot reach your position of safety and have to take evasive action never lie in the five-foot of any railway line.

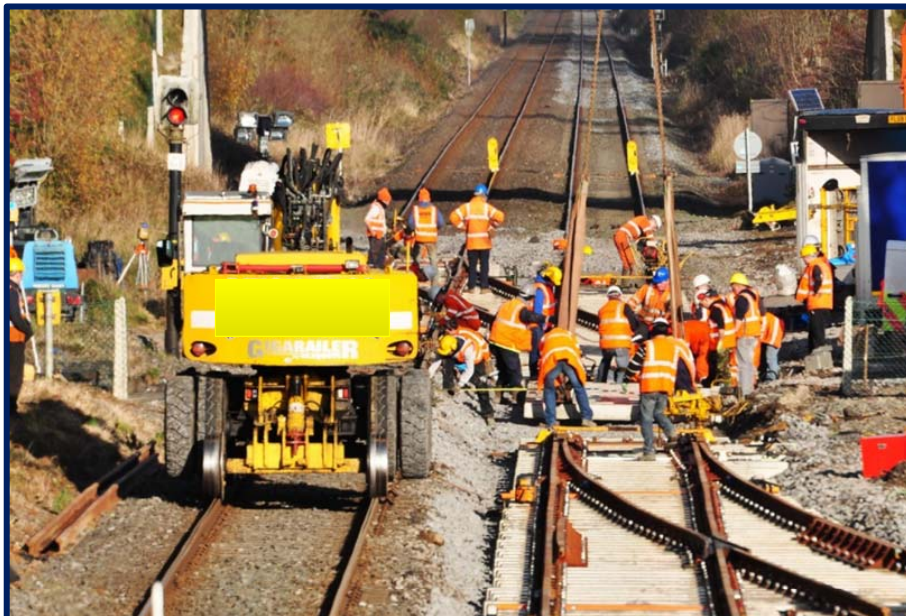
3.8 Crossing the line

If you need to cross the line, use a bridge, subway or level crossing if there is one nearby. Otherwise, make sure there are no trains approaching and go straight across the line without stepping on the rails or sleepers.



In areas where points are located, take extra care – they could move and trap your foot.

In sidings and engineering worksites, take care when crossing the line near stationary trains or Road Rail Vehicles (RRVs). They may move without warning or they could be hiding another train/RRV approaching on a line behind them. Keep well clear and only cross if you're sure no other trains are coming.



In platform areas, never assume that a train will stop at the platform. Some non-stop train services or light engines (engine only) may pass directly through some stations.

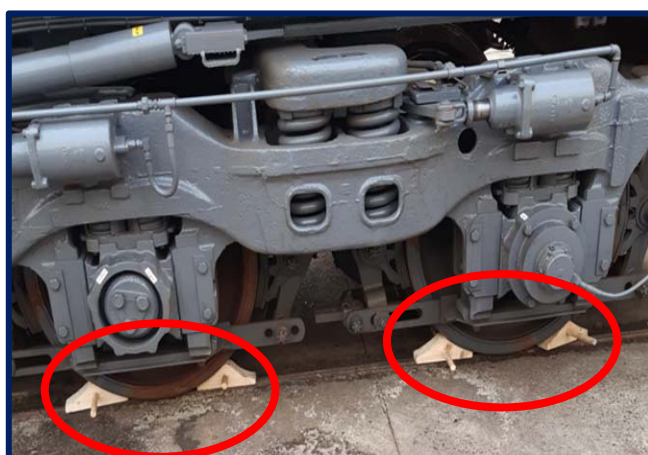
In Yards or Depots movements are limited to 5 mph but these locations still carry risks. Due to their nature, these locations will have multiple train movements in both day-time and night-time scenarios. Movements in depots or yards may approach you from more than one direction. They will also be moving slowly therefore quieter than normal. Additionally with all the infrastructure (points etc.) required in these locations there is a heightened slip, trip and fall risk.

Remember: never cross in front of an approaching train!



Never pass between stationary vehicles or between a stationary vehicle and a buffer stop where the gap is less than 50 metres without first checking that no movement will take place.

Never go between vehicles unless there is clearly no possibility of a movement taking place. The below photos show a 'not to be moved' board and wheel scotches which are used in yards and depots to prevent trains from being moved.



Remember: In depot or yard locations, Local Instructions for your safety may be in place. If there are, a local induction will be given advising of the specific rules or procedures for the location.

4 Walking in a group and working

4.1 The Track Safety Co-Ordinator (TSC)

TSC

If you're part of a group that is going to walk or work on or near the line, a TSC (Track Safety Co-Ordinator) will be appointed to set up a 'Safe System Of Work' (SSOW).

The purpose of the safe system of work is to make sure nobody is put at risk by trains. As well as the work itself, it will cover getting to and from the site and, if necessary, setting up safety equipment and blocking the line to trains.

A TSC wears a white armlet on their left arm with TSC written in blue letters. The TSC will stay with the group until the work is over and everyone is clear of the line. They may be relieved by another TSC, if this happens they'll tell you who the new TSC is.

Site Safety Briefing Form Number: CCE SS801

CCE DEPARTMENT SITE SAFETY BRIEFING FORM

Print Name of Briefer: _____ Days: ☐ Nights: ☐
Location: _____ Task: _____ Date: _____

To be briefed by the BRIEFER

Briefing Item:		✓
1 Each individual is responsible for their own safety.		
2 The type of protection at this site is... Eg. T11, T111, Red Zone, Green Zone, ES Worksite		
3 The site limits, access and egress arrangements are... Point out the site limits, unauthorised areas where staff are not allowed to go, access points for plant, equipment and people.		
4 The main hazards and risks on this site are... Eg. is it high speed trains, engineering trains or road rail vehicles, is there hot works, tree felling, work near water, is there a large volume of plant or train movements etc.		
5 The main risks from train movements in this site are... Eg. is it operational train, engineering trains or rail vehicles etc; also point out speed and direction of travel of such vehicles or trains.		
6 The main risks from plant and machinery used on this site are... Eg. use of a rail saw, use of a doria, manual handling of robots and rail drills etc.		
7 The risks from other works adjacent to this work site are... Eg. construction work and platform work in station areas not under your control, road movements at level crossings, adjacent power lines etc.		
8 The Emergency contact details are... Ambulance, Fire Services, An Garda Síochána is: 112, CTC is 01 855 5414 or Local Control: _____		
9 Do you all understand the briefing and have you any questions?		
10 Advise me if you have any safety concerns during the shift.		

Persons to be briefed:

Print Name:	SIGNATURE	Role/Task:
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____
6. _____	_____	_____
7. _____	_____	_____
8. _____	_____	_____

PLEASE NOTE: By signing this form, the person briefing and being briefed are only confirming that the briefing has taken place. It is the responsibility of the person briefing to ensure that the briefing is effective and that the person being briefed understands the briefing.

Return the top sheet to the Permanent Way Inspector's Office by Friday of every week.
The completed book must be returned to the Safety Executive at the end of every month.

KEEP THIS BOOK SAFE!

larnród Éireann

Before work starts the TSC will introduce themselves and inform you that they will be your TSC for the works.

They will brief you on which system of work to be adopted to ensure your safety from train movements.

The information you will be briefed on will come from either a Departmental Site Safety Briefing Form or a digital equivalent.

Once completed the TSC will ensure that everyone that has received the briefing signs the form or electronic tablet and also the role / task they are performing.

It is very important that if you do not understand anything the TSC has briefed you on, that you ask them to repeat it or explain it in further detail to you.

Remember: if you have not been briefed by the TSC, do not go 'on or near the line'.

4.2 The Safe System of Work

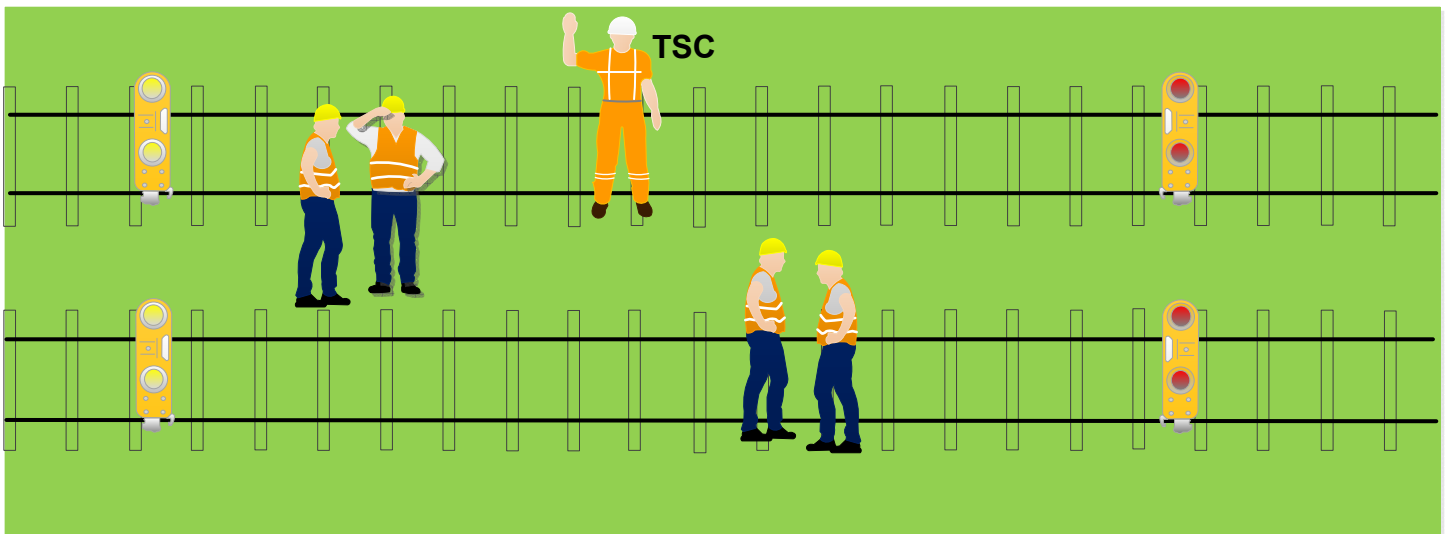
The Safe System of Work (SSOW) the TSC will set up aligns with a colour coding system as laid out in the IÉ Rule Book. These colour coded systems are known as Green Zones or Red Zones.

Whenever possible the TSC should arrange for your group to work in a Green Zone as it is the safest way of working. A Green Zone is where the TSC arranges for the work to take place without anyone in the group going on or near any line or siding, including in a possession, on which trains (or movements) may pass. There are three different types of Green Zones, these are:

- Safeguarded
- Separated
- Fenced

1. Safeguarded Green Zone

Safeguarded Green Zone is the safest system to work in, this is because all train movements are blocked from entry. This system removes the biggest risk to trackworkers.



The Safeguarded Green Zone will use two separate systems:

T3 Absolute Possession Engineering Supervisor's (ES) worksite:

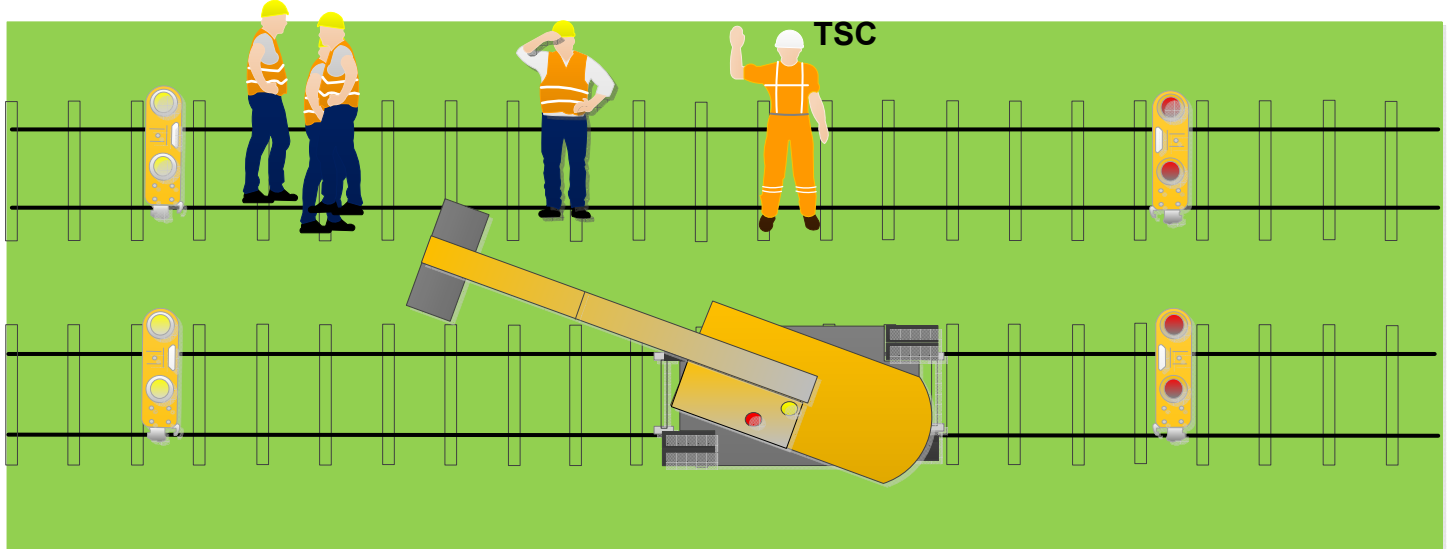
- Planned Engineering work
- No operational train movements
- Engineering trains / On Track Machines (OTM's) / RRV movements are permitted at a maximum speed of 5 mph

T2 Protection of Engineering work on lines not under possession:

- No operational train or engineering movements are permitted

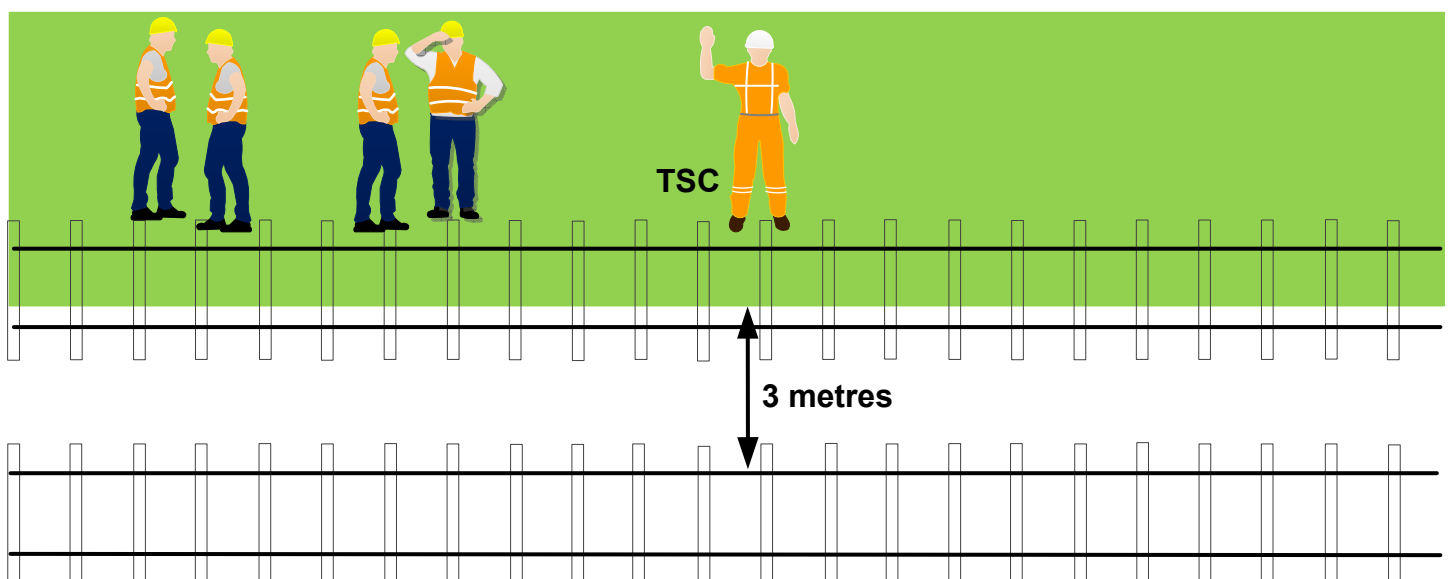
Exception: it is possible to have train movements in a Safeguarded zone. This can only happen within an ES worksite in a T3 possession. The only trains allowed to travel within a possession are engineering trains / On Track Machines (OTMs) or Road Rail Vehicles (RRVs). If a train movement is to take place within your worksite your TSC will brief you before it happens. To increase safety within a worksite, train movements are restricted to 5mph or walking pace.

Note: outside of engineering worksites but within the possession engineering trains / OTMs & RRVs are allowed to travel above 5mph.



2. Separated Green Zone

This green zone allows for one or more lines to be blocked to train movements while an additional line(s) remain open to train movements. In this zone the TSC will specify a limit which nobody can go. This limit must be at least 3 metres (10 feet) from the nearest line open to trains. When possible the TSC will specify a physical feature on the ground that you cannot pass by.

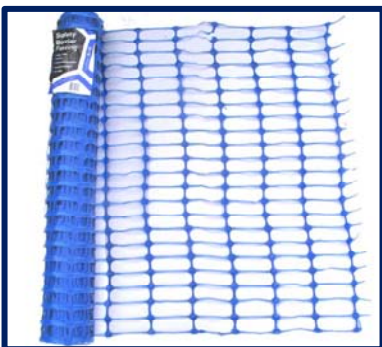
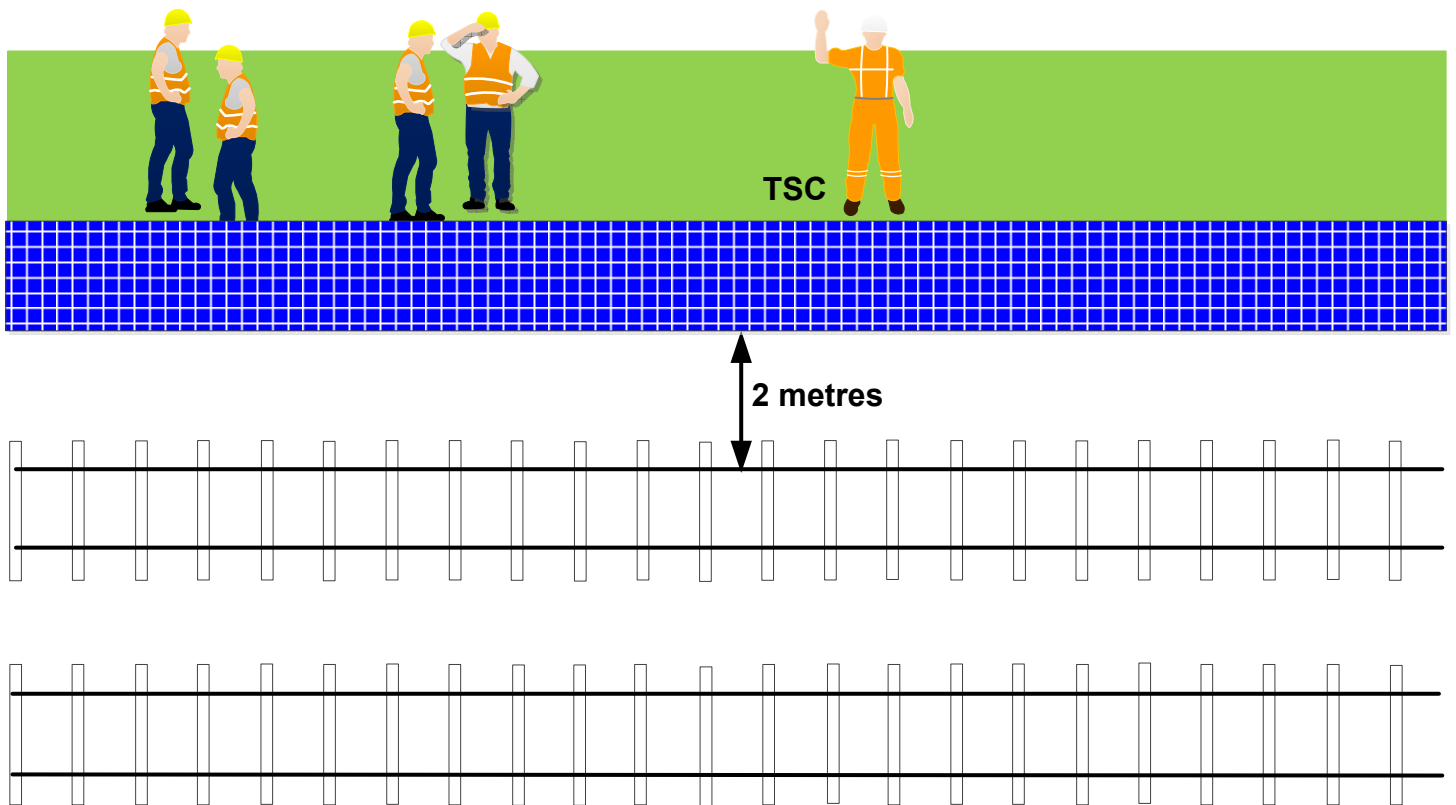


3. Fenced Green Zone

This green zone allows for a group to work near a line remaining open to train movements. The TSC will arrange for a temporary fence to be erected to provide a barrier and reminder for anyone straying towards the line open to trains.

The temporary fence must be positioned 2 metres (6 feet 6 inches) from the nearest line open to trains. There is an exception to this distance, it may be reduced to 1.25 metres (4 feet) if a permanent or temporary speed restriction not exceeding 20mph is in place or imposed on the line open to trains.

The fence must extend for the whole length of the site of work and be continuous, except where access is needed. The type of temporary fencing used on the railway is generally blue netted sheeting, but in some circumstances herras fencing may also be utilised.



Netted sheeting



Herras fencing

4. Automatic Train Warning Systems

IE also utilise electronic warning systems which are designed to give collective warning of approaching trains to all personnel on track worksites. These systems when activated provide automatic activation of flashing lights and horns. The TSC will ensure that you will get sufficient warning from the system to allow you to reach your position of safety 10 seconds before the train arrives.



5. Lookout Warning

Whenever the TSC cannot arrange a Green Zone for you to work in you are now working in what is known as a Red Zone. Red Zone working is where the TSC will arrange for a Lookout(s) to provide the warning of approaching trains.

The Lookout will give a warning, usually by blowing a whistle or horn, in noisy environments or the group are wearing ear protection they may also use 'touch' to advise everyone that a train is approaching. If the Lookout gives a series of short sharp blasts on the whistle/horn they are giving an urgent / emergency warning, if you hear this, acknowledge it and move to your position of safety immediately.

The TSC will ensure that the positioning of the Lookout will give sufficient warning so that you can reach your position of safety at least 10 seconds before the train arrives.



To help identify the lookout for the group, they will wear a red armband with 'LOOKOUT' written in white writing on their left arm. The most important thing to remember when using Red Zone Lookout protection is to **never** distract the Lookout.

Lookouts carry out a critical role in ensuring your safety and need their full attention while undertaking this task.



4.3 The Briefing

Before you walk to the site or start work, the TSC will brief you on which system of work is to be adopted to ensure you are safe from train movements. The briefing will include:

- The type of protection at the site, which may be Green Zone (T3 Possession, T2 protection) or Red Zone etc.
- The site limits
- Access and egress arrangements
- Main hazards and risks at the site
- Main hazards and risks from train movements
- Main risks from plant and machinery
- Main risks from other works which may also be taking place
- Contact details for the Controlling Signaller and emergency services

The TSC will then ask 'do you all understand the briefing and have you any questions'. It is very important if you do not understand what has been briefed to you that you inform the TSC. Remember this is your safety, never be afraid to ask the question or get clarification on any part of the briefing you do not understand.

You must also let the TSC know if you have any safety concerns during the work in case they may have to adapt the safe system of work to ensure everyone's safety. The TSC will get everyone in the group to sign the briefing book or electronic tablet, make sure you print your name clearly before adding your signature and the role/task you will be carrying out.

For Separated or Fenced Safe Systems of Work the TSC will also tell you:

- The safe limits of work area and how they will be defined

For Red Zone Safe System of Work the TSC will tell you:

- Who will be acting as Lookout
- The method of warning they will give
- Where your position of safety is

For Red Zone Automatic Train Warning System the TSC will tell you:

- The method of warning that will be given
- Where relevant, who the site touch lookouts are, and where they are positioned
- Where your position of safety is

On electrified lines, you must assume that the overhead lines and any associated equipment are LIVE and dangerous, unless the TSC tells you that the electrification equipment has been isolated and:

- The limits within which it is safe to work
- Whether any nearby electrification equipment is still LIVE and dangerous and where it is
- Whether non-electric trains could still approach on the isolated lines



5 During the work

5.1 Keep to the safe system

The TSC sets up a Safe System of Work to make sure you're not put at risk by trains or electrification equipment, this safe system will only work if you follow the TSC's instructions and comply with track safety rules and procedures.

If you have any doubts about the safe system of work, stop work, make sure you are in a position of safety and then tell the TSC.



Only do things that you are competent and, if necessary, qualified to do. Never do something which you think is unsafe or against the rules, even if you feel under pressure to get the job done. If you see something you believe to be unsafe report it immediately to the TSC.

During the work

Always stay within the limits of the Safe System of Work.

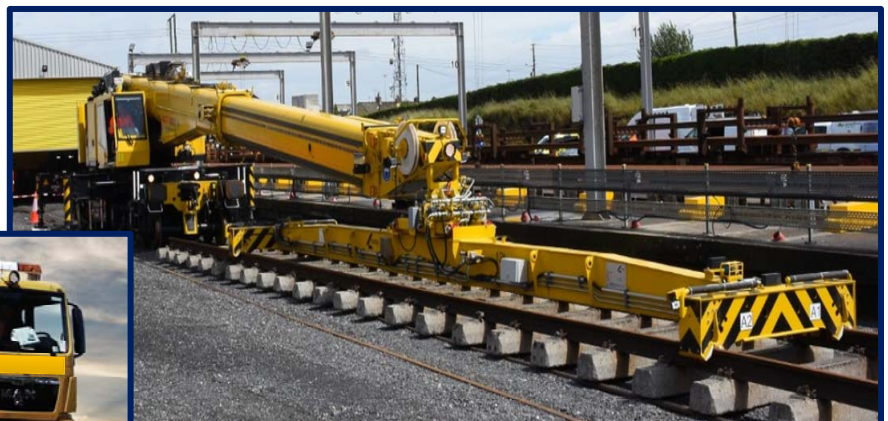
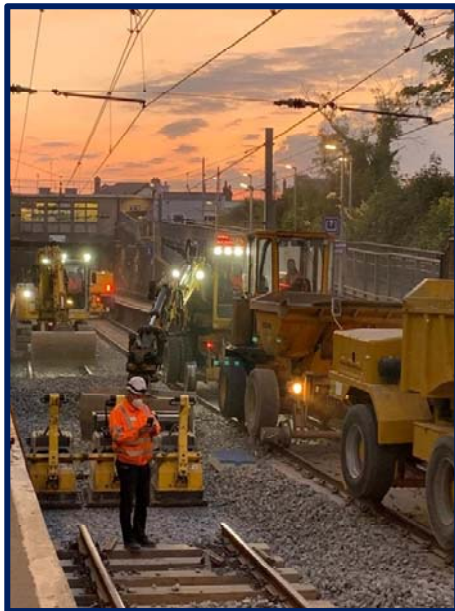
If a fence has been put up to protect you, don't lean on it or place anything against it.

If a Lookout has been appointed, don't distract them. If you think you might not hear their warning, tell the TSC. If you don't move back straight away, the Lookout will give a series of short sharp blasts on their whistle or horn. They may also shout at you!

5.2 Road Rail Vehicles

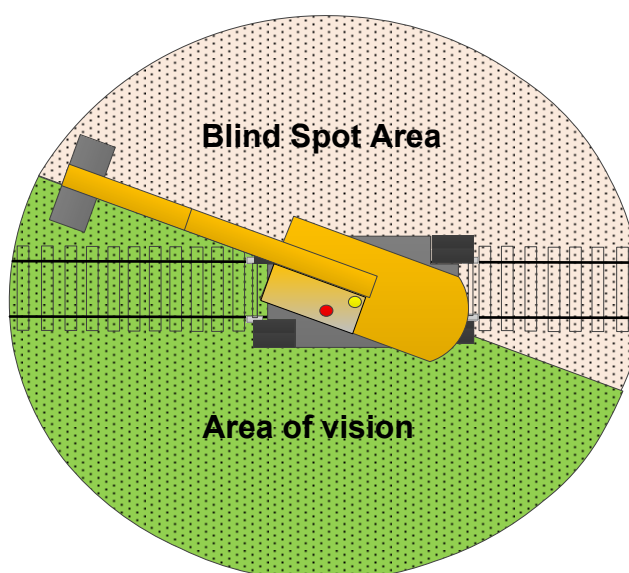
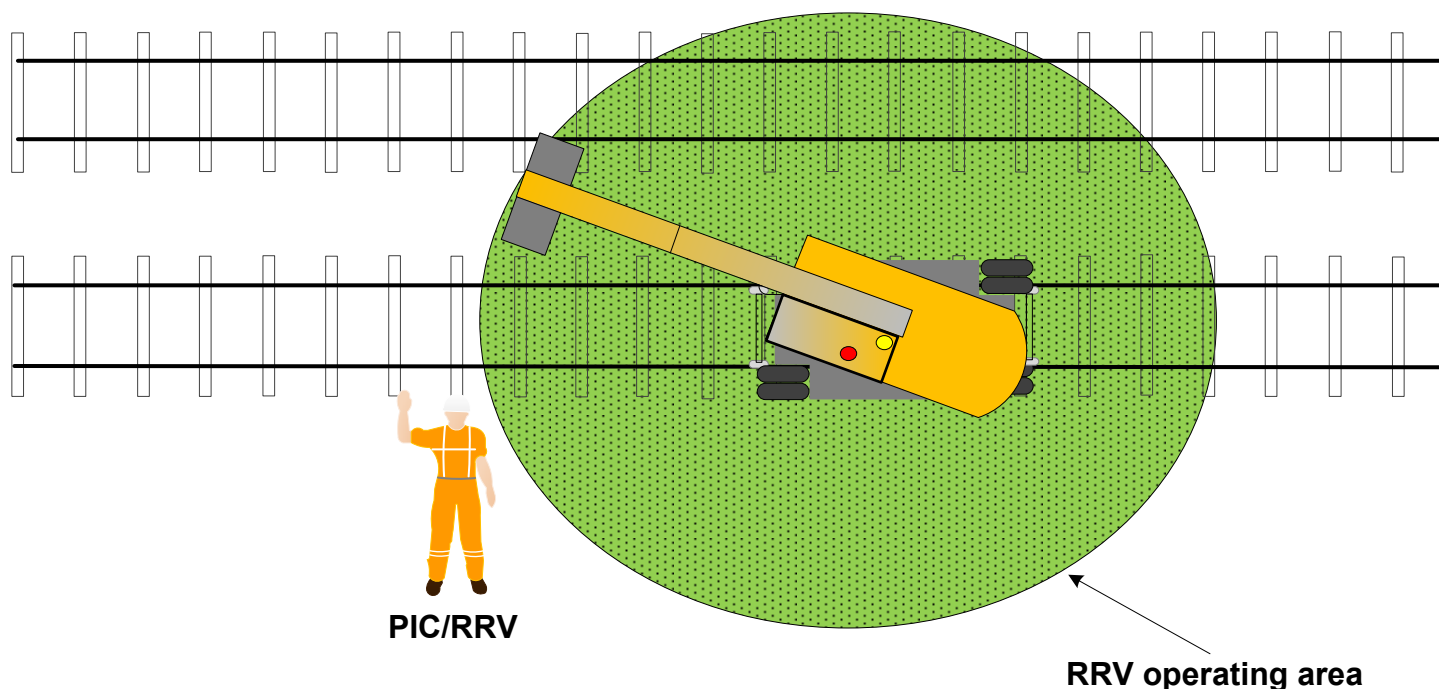
Road Rail Vehicles (RRVs) have two sets of wheels, road wheels which enable them to run over public roads and rail wheels to run along the rails. These vehicles are normally used for track maintenance during T3 Absolute Possessions. Over the past number of years the volume of these machines operating on the network has dramatically increased.

From an engineering perspective these machines are now a necessity through the volume and variety of tasks they are able to undertake. There is a wide variety of RRVs on the network including, excavators, dumpers, cranes and rail milling machines.



While RRVs are an extremely useful tool for maintenance work, they can also pose a risk to trackworkers. Because of the tasks they have to undertake – lifting concrete panels, carrying ballast (stone), all these machines are large and generally heavy, with some RRV excavators weighing up to 25 tonnes. As with trains they are travelling on steel wheels which will take longer to stop than road vehicles.

Additionally their design means they may also have blind spots which means the operator may not always be able to see you. This is especially the case with 360° excavators.



RRVs will be controlled by an IÉ Person In Charge of RRV or PIC(RRV). They are responsible for all movements the RRV will make while on the network. Always remember, you are responsible for your own safety, never pass by any RRV without first checking it is safe to do so with the person controlling it.

Below is a 2022 Safety Alert issued following an IÉ employee being struck and injured by a RRV in an engineering worksite.



SAFETY ALERT

Employee struck by RRV

During major engineering works within a T3 Absolute Possession, an employee was struck by a Road Rail Vehicle (RRV). The employee had stepped into the five foot after checking surveying equipment in the Up cess. There were RRV's in the immediate area but at that time of accessing the line they were stationary. The nearby use of 'wacker plates' also added to the noisy environment.

Further movement of the nearby stationary RRV's was then required to allow ongoing works.

While walking in the five foot, the employee felt something striking them on the back and pushing them over. Instinctively they knew they had been struck by an RRV so they laid down flat between the rails. The RRV travelled over the employee and was stopped a short distance later.

The employee sustained cuts to their nose and arm and received first aid on site and further assessment and treatment from the emergency services, but did not require hospitalisation.



Always remember

- Never access any line, even within a T3 Absolute Possession, unless you have confirmed that it is safe to do so.
- Never assume nearby stationary vehicle(s) will remain stationary without first checking with the person controlling them.

Key Message:

**Railway Engineering worksites are high risk environments.
Always be vigilant for rail mounted movements.**

Ref: IM/SA/05/2022

Issued by the IÉ IM Safety Department 07/07/2022

5.3 Tools and materials

If tools or materials for the work are to be left on the ground whilst a train is passing, they must be at least 2 metres (6 feet 6 inches) from the line. Tools and materials can be a hazard to people and trains – make sure they don't cause an obstruction. When the work has finished remove them from the railway or secure them properly so vandals can't misuse them.

Be careful when you're using metal equipment. If it makes a connection between the two running rails it might put a signal to danger. It can also interfere with the signalling and level crossing equipment.

Even more serious, on OHLE electrified lines it may result in you getting an electric shock or death.



5.4 Changing the safe system of work

Sometimes the TSC will need to change the safe system of work, this may be because the worksite is moving to a different location or the weather has changed etc.

If this happens, the TSC will stop the work and make sure you are in a position of safety. Then they will change the safe system of work, re-brief you to make sure you understand the new arrangements before allowing work to start again.

6 Communicating clearly

6.1 A structured approach

It is vital that all safety related messages are fully understood by both parties, this requires communicating clearly and accurately. The rules in this section will help – make sure you apply them whenever you pass on information, whether it is by phone, radio or face to face.



The phonetic alphabet is used to spell out words or names, as well as making sure single letters are heard clearly. For example the town of Thurles would be spelt out as “tango, hotel, uniform, romeo, lima, echo, sierra”

The phonetic alphabet

A	<i>alpha</i>	J	<i>juliet</i>	S	<i>sierra</i>
B	<i>bravo</i>	K	<i>kilo</i>	T	<i>tango</i>
C	<i>charlie</i>	L	<i>lima</i>	U	<i>uniform</i>
D	<i>delta</i>	M	<i>mike</i>	V	<i>victor</i>
E	<i>echo</i>	N	<i>november</i>	W	<i>whiskey</i>
F	<i>foxtrot</i>	O	<i>oscar</i>	X	<i>x-ray</i>
G	<i>golf</i>	P	<i>papa</i>	Y	<i>yankee</i>
H	<i>hotel</i>	Q	<i>quebec</i>	Z	<i>zulu</i>
I	<i>india</i>	R	<i>romeo</i>		

Numbers can also be a problem, so split them up and say them one at a time. For example, 210 would be spoken as “two one zero”. “Zero” is the correct way of saying the number 0. There is one other number which is pronounced differently, niner is the correct way of saying the number 9.

There are also several standard phrases which you’ll need to use when making an emergency call -

“This is an emergency call”

In an emergency, this is the first thing you must say when your phone or radio call is answered. It tells the other person that they will need to take action straight away to prevent death, injury or damage.

“Repeat back”

Repeat all of the message back to me.

“Correction”

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

You’ll need to use the following phrases when communicating using radios which only allow one person at a time to speak -

“Over”

I have completed my message and am expecting a reply.

“Out”

I have completed my message and am not expecting a reply.

6.2 Make it clear

If you are giving a safety message, firstly make sure you are speaking to the right person. Both people must say who they are, their role and where they are speaking from. For example -

“This is John Murphy - I’m the PIC (Person in Charge) calling from hotel kilo two one three signal at Cherryville Junction”

It is important to speak clearly and avoid lots of ums and errs. If you don’t understand something, perhaps because the person has a broad accent, ask them to repeat it.

Phone lines and radio links can break up. You can help by speaking slightly slower than you would normally. Don’t shout – this will distort the sound. When using a phone, make sure the mouthpiece is in front of your mouth, but not too close. In windy conditions, try to shield the mouthpiece with your hand.

Before allowing the conversation to end and before any action can be taken, make sure:

- Any errors have been corrected
- Your message has been clearly understood
- Both parties know what is going to happen next

If you are receiving the message repeat it back to confirm you have understood it properly. Ask for the other person’s phone or radio call number.



6.3 Emergency calls

When lives are at risk, time is of the essence, pressure is high and accuracy is everything. Here's how a typical emergency call might go.

Start by getting the attention of the person on the other end by saying -

"This is an emergency call."

Make sure you're speaking to the right person, this will usually be the Signaller –

"Is that the Signaller?"

Tell them who you are, what you do and where you are -

"This is John Murphy – I'm the Mobile Ganger calling from Cherryville Junction."

Tell them what has happened and where it has happened -

"I've found a member of the public lying in the five foot of the Down Cork line, 200 yards in rear of signal hotel kilo two one three. They're badly injured and I cannot move them."

Tell them what action needs to be taken –

"I need you to stop all train movements on the Down Cork line and arrange for an ambulance to attend".

Ask the Signaller to repeat back the information you have given them - it's vital they understand it. The Signaller will tell you what they've done, what's going to happen next and what they want you to do. Give them your phone number so they can contact you. Stay in contact with the Signaller until they advise you that nothing further is required.

As someone who works for the railway, there are situations where you might have to take action to prevent death, injury or damage.

But whatever you do, don't put yourself in danger.

7 Emergency situations

7.1 Risk to trains

Make sure you know how to deal with an emergency before it happens. An emergency call must be made to the Signaller immediately if you see or are told about something which might be a risk to trains.

On a moving train, possible problems include -

- A door not closed properly
- A load which is not secure
- A fire or hot axle box
- An unlit headlight or tail lamp

Other problems include -

- A fault with the track
- A colour light signal not showing an aspect
- A fire, flood or obstruction
- A large animal within the railway boundary

A train which is in 'distress' can be indicated by -

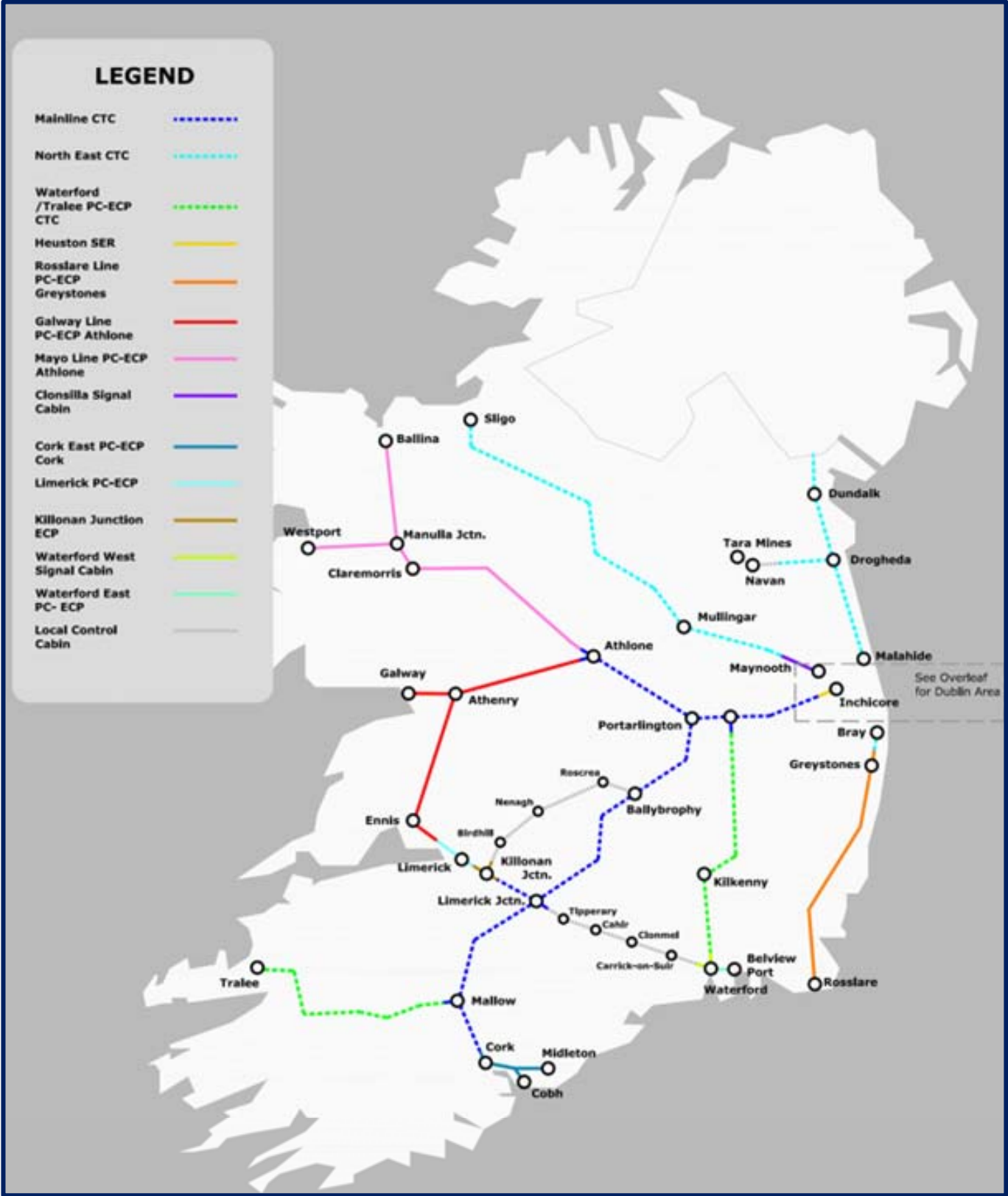
- The Driver or Guard showing a red flag or red light
- The Driver repeating a series of long blasts on the horn
- A train's headlights flashing

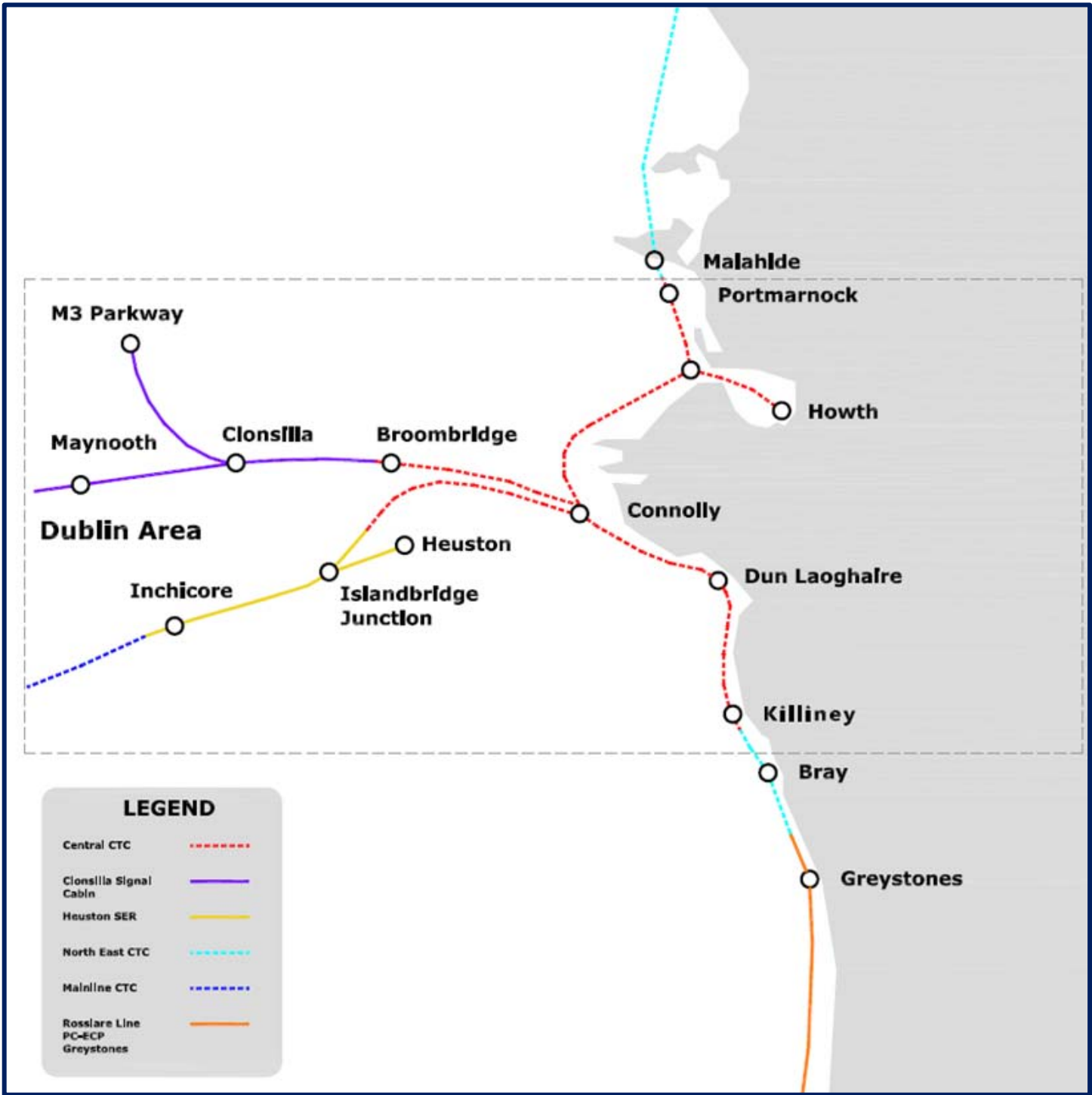
In any of these situations, you might also need to stop trains and call the emergency services.

The Signaller does not need to be told if there's an obstruction that you can remove safely. But only remove it if it is safe for you to do so, if in any doubt ring the Signaller who will provide you with protection from trains so you can remove the obstruction safely.



The train signalling system is controlled from various locations, some centrally controlled from Dublin at Centralised Traffic Control (CTC) Connolly and some controlled regionally. The below images show a break down of Controlling Signallers for the network and also a Dublin area specific map.





In the event that you have to make an Emergency call contact the Controlling Signaller for the location immediately. If you are unsure of which Controlling Signaller to contact, CTC have a dedicated emergency number which is **01-855-5454** which will deal with emergencies for the whole network. Whether speaking to the dedicated emergency number in CTC or a Controlling Signaller directly the same process for making an emergency call will be the same as described in Section 6.3. Below is a list of direct contact numbers for all Signal Cabins on the network.

Location	Primary Control Point	Telephone No.
Carrick on Suir	Carrick on Suir Cabin	051 640044
Clonmel	Clonmel Signal Cabin	052 6121982
Roscrea	Roscrea Signal Cabin	0505 21823
Athlone	Mainline CTC	01 87 85182
Birdhill	Birdhill Signal Cabin	061 379118
Boosterstown	Central CTC	01 87 85180
Bray	North East CTC	01 87 85181
Ballybrophy	Mainline CTC	01 87 85182
Clara	Mainline CTC	01 87 85182
Cork East	Cork East PC-ECP	021 46 81682
Clonsilla	Clonsilla Signal Cabin	01 88 80090
Clonydonnin	Mainline CTC	01 87 85182
Connolly West	Central CTC	01 87 85180
Drogheda	North East CTC	01 87 85181
Dublin Central	Central CTC	01 87 85180
Dundalk	North East CTC	01 87 85181
Dalkey	Central CTC	01 87 85180
Dun Laoghaire	Central CTC	01 87 85180
Dromkeen	Mainline CTC	01 87 85182
Dublin North	Central CTC	01 87 85180
Docklands	Central CTC	01 87 85180
Dublin West	Clonsilla Signal Cabin	01 88 80090
Fingal	North East CTC	01 87 85181
Galway	Galway Line PC-ECP – Athlone	0906 497709

Location	Primary Control Point	Telephone No.
Heuston Kildare	Mainline CTC	01 87 85182
Heuston	Heuston SER	01 88 80113
Killonan Junction	Killonan Jun ECP Killonan Junction	87488 0906 468488 061 333522
Lisduff	Mainline CTC	01 87 85182
Limerick Junction	Mainline CTC	01 87 85182
Limerick Station	Limerick PC-ECP - Limerick	0906 468481
Mayo Line	Mayo Line PC-ECP – Athlone	0906 497733
Maynooth	Clonsilla Signal Cabin	01 88 80090
Mallow	Mainline CTC	01 87 85182
Navan	Navan Signal Cabin	046 9021307 046 9027986
Laois Train Care Depot	Mainline CTC	01 87 85182
Portarlinton	Mainline CTC	01 87 85182
Charleville (Rathluirc)	Mainline CTC	01 87 85182
Rosslare Line	Rosslare Line PC-ECP - Greystones	01 88 80342
Sligo Line	North East CTC	01 87 85183
Tullamore	Mainline CTC	01 87 85182
Tralee Line	Waterford Tralee Line PC-ECP	01 87 85185
Thurles	Mainline CTC	01 87 85182
Tipperary	Tipperary Signal Cabin	062 51206
Waterford Line	Waterford Tralee Line PC-ECP	01 87 85184
Waterford West	Waterford West Signal Cabin	01 888 0328

7.2 Stopping a train

In an emergency you can stop a train by giving a hand danger signal. This signal must be clearly visible to the driver.

In daylight, hold out a red flag, if you haven't got a red flag raise both arms above your head and hold them steady.



In darkness or poor visibility, shine a red light or wave any light vigorously.



If you are unable to contact the Signaller and have to stop a train, proceed along the line towards the direction from which trains normally approach for a distance of 2km (1 ¼ miles) displaying a hand danger signal as described on the previous page, two arms above the head, red flag or lamp.

7.3 Contacting the Emergency Services

If you have to contact the Emergency Services directly:

- Use any landline or mobile phone
- If both are available, use the landline
- Dial the emergency number which is normally 112 in the Republic of Ireland or 999 (Northern Ireland).
- Call separately each emergency service you need
- Follow the same procedure for making a railway emergency call
- Always advise the Signaller if you have requested Emergency Services

7.4 Fire

What should you do if you discover a fire?

- Make sure that any fire (except controlled burning of lineside vegetation) is extinguished quickly and completely.
- Get help from anyone nearby but never endanger yourself or anyone else.
- Call the Signaller immediately if there is any risk to trains, infrastructure or members of the public.
- Call the Fire Brigade immediately if you are unable to extinguish the fire quickly.
- Use fire extinguishers in accordance with the instructions, always make sure you are using the correct extinguisher for the fire.
- Do not direct water onto live electrical equipment.

Any fire, however small on a moving train can spread rapidly. On discovering a fire on a train you must stop the train immediately, unless you are sure you can completely extinguish the fire within a few seconds.



8 Reporting your concerns

8.1 Confidential Reporting System (CIRAS)

If you encounter a safety issue, don't keep it to yourself.

Take action straight away if you see someone acting in a way which is a risk to themselves or the railway. If you can speak to the person and get them to stop, do so. Otherwise, report them to your Supervisor or the Controlling Signaller, whichever is the quickest.

What if you can't report your concern to your supervisor for fear of how your manager or colleagues may react?

IE now have a confidential reporting system called CIRAS which allows you to report health and safety concerns in complete confidence.



How do I contact CIRAS?

- Phone FREE Irish Hotline: 1800 239 239
- Freepost: CIRAS
- Online www.ciras.org.uk (you can use your Irish rail email address or RSSB login to set up an account)



Whatever the reason for it, an unreported issue could lead to an incident carrying a high price – human and financial. 'You can't afford to walk by'.

8.2 Employee Assistance Programme

Iarnród Éireann employees can now avail of the Employee Assistance Programme.

What is the Employee Assistance Programme?

The Employee Well-being Programme (EAP) is a service put in place by IÉ with the support of Workplace Options for the benefit of all IÉ employees.

Workplace Options are an independent organisation external to IÉ with trained and qualified professionals experienced in assisting people with a wide range of issues. The purpose of the EAP is to provide a confidential service to any staff member who feels they require professional support. This support covers both personal and work-related issues. Workplace Options counsellors will assist in helping the employee resolve any issues and develop good coping strategies for the future.

Key Benefits

- No cost to the employee - IÉ pay for the service
- Available 24/7, 365 days per year, you can speak with one of Workplace Options' professionals
- You have access to six counselling sessions per year
- Independent, impartial source of support

What types of issues are included?

- Work life balance
- Workplace pressure
- Managing change
- Personal development
- Emotional wellbeing
- Bereavement and loss
- Managing stress
- Personal and family relationships
- Health and wellness
- Life events
- Disability and illness
- Child and elder care
- Consumer rights





How to make contact:

- **Visit:** www.workplaceoptions.com
- **Website login:** Username: irishrail
- **Password:** employee
- **Email:** eap@workplaceoptions.com
- **Outside the ROI phone:** +353 (01) 261 2704
- **Freephone:** 1800 490 390

