A Guide to the 10 Incident Factors

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Introduction

Accidents rarely have a single cause. They arise from multiple causes that come together. Therefore whilst it is often an unsafe act by an individual that is the immediate cause of an incident there are usually weaknesses in the system that have made that act by the individual more likely.

This guide has been produced to support the investigation of any incident or accident. It provides investigators with prompts that can be used to generate potential areas of investigation and to check that all possibilities have been explored. It covers 10 key areas which have been identified as common underlying and contributory factors in incidents and accidents.

The Guide to Using the Fair Culture Flowchart provides further information about the possible reasons for an individual's actions and when used in conjunction with this Guide will help you identify the type of error(s) that have led to the incident.

The 10 incident factors are:

- Communications
- Practices and Processes
- Information
- Workload
- Equipment
- Knowledge, Skills and Experience
- Work Environment
- Supervision and Management
- Personal
- Teamwork

The document is structured as follows:

What is this incident factor all about?

This gives a definition of the incident factor

What are the sub-categories?

Some incident factors have sub categories to aid identification and classification

What questions can you ask to determine if this was a factor?

These are generic questions that you might want to consider to determine whether the incident factors was either an underlying causes or influenced the potential for the incident in some way.

These are referred to as Investigator Prompts in the Investigators' Handbook.

Examples of incidents where the Incident Factor has been a factor

This section includes examples where the Incident Factor concerned has played a role in that incident.

1 Communications

What is this incident factor all about?

Communications is concerned with how we relay information to each other in the context of safety critical information. Typically this includes people not communicating information at all or not reaching a clear understanding when they are communicating. It is concerned with the exchange of verbal information only. Information conveyed in a written format is covered by the *Information* Incident Factor.

What are the sub-categories?

- Failure to apply communications protocols to reach a clear understanding
- Misinterpretation of communications
- Inappropriate volume of communications
- Appropriateness of the communication method
- Appropriateness of the information communicated (i.e. inaccurate, missing)
- Inadequate handovers

What questions can you ask to determine if this was a factor?

- Was the right information communicated to the right person at the right time?
- Was the communication accurate, concise and in accordance with communications protocols?
- Did the parties involved in the communication reach a clear understanding though use of protocols such as repeat backs? Did they challenge each other if they were not sure about something or needed clarification?
- Was there evidence that the parties were listening properly i.e. asking questions to clarify, correcting details that were not quite correct and summarising the message

With this incident factor it is also useful to consider the underlying cause by considering other incident factors:

- Had the individual received training in how to communicate in this situation? – see *Knowledge, Skills and Experience*
- Was this way of communicating typical of the way of working in this location/area? – see *Practices and Process* and *Management and Supervision*
- Were communications short cuts being taken because one of the two parties were overloaded or because communications was rushed (resulting in information not being communicated) due to time pressures to get on with the work? – see *Workload* and *Supervision and Management*
- Was the communication inaccurate because of insufficient/inaccurate information from other sources? - see *Information*
- Was the failure to use protocols is this common place or specific to this individual? – See *Personal* and *Management and Supervision*

- Did one of the parties fail to hear properly what was being said? If so was this due to a particular expectation or mindset about what was going to happen? – see *Personal*

Examples of Incidents where Communications has been a factor

Communication errors are a common factor in line blockage irregularities and tend to be concerned with a failure to reach a clear understanding about where the location of work is, what trains have passed the worksite, when the line blockage has actually been authorised, when it needs to be handed back or because a clear understanding has not been reached about the status of the line blockage at a shift handover.

During Temporary Block Working (TBW) the signaller failed to reach a clear understanding with a handsignaller at the start of TBW, regarding the handsignallers action in relation to a train stood at the signal protecting the TBW section. As a result the handsignaller allowed the train to enter the section believing he had authority from the signaller to do so. This resulted in two trains being in the TBW section at the same time. A review of the conversation revealed that the signaller did not ensure that the handsignaller fully understood what was required in relation to the train that was stood at the signal.

A train proceeded over a section of track which was deemed as fit for 20mph due to a track defect, at line speed. The signaller, when cautioning the first train, failed to explain the speed limit required for the area under caution. The driver failed to clarify with the signaller what was required of him. The information provided was incomplete and neither reached a clear understanding of what was required.

2 Practices and Processes

What is this incident factor all about?

This refers to the rules, standards, processes and methods of working which guide and structure how certain activities are undertaken on the railway. It includes:

- The operational rules in the Rule Book which describe how to perform operational activities such as implementing temporary block working, setting up a possession, taking an electrical isolation or cautioning trains
- Technical standards which dictate how activities should be undertaken such as maintenance, fault identification or repairs. They might also describe how things are reported.
- Safe systems of work that are set up to protect people in safety critical and other railway environments.

It is concerned with finding out primarily why the work practice or process followed has not been in accordance with the accepted or authorised way of working and whether this was because there was no accepted or authorised way of working or the way of working that existed was not applicable in some way. Just because a rule has been broken or an established method of working not followed does not mean that Practice and Processes will be a factor: its about the extent to which the rule, standard or method of working itself contributed to it being followed or deliberately ignored.

As a lot of our methods and ways of working are driven by plans and schedules, consideration also needs to be given to whether the way of working existed because of poor planning or poor delivery.

What are the sub-categories?

Availability	• not available/in existence • not comprehensive
Applicability	• difficult to follow • impractical/not appropriate • not comprehensive • inaccurate
Planning work processes	• based on inaccurate information • based on inappropriate job knowledge • lack of geographical knowledge • inappropriate resource allocation
Delivery	• poor task assignment • inadequate resources • inadequate opportunity for rest breaks

What questions can you ask to determine if this was a factor?

There are many reasons why a procedure/method of working may not have been followed. They have been grouped as followed:

Availability

- Was the rule/method of working available at the time the task was being undertaken?
- Does the activity/context the rule applies to just not happen that often and so individuals were not aware of the availability of a procedure?
- Was the rule/method of work inadequate in terms of covering all eventualities and/or contexts? For example, did the rule/method of work only cover normal working situations and not what to do if there was degraded working or equipment failure.
- Was the rule/method of working outdated? Have there been changes in practice and or equipment that means it's no longer relevant?

Applicability

- Was the rule/method of working poorly written and/or ambiguous and so misunderstood?
- Was the rule/method of working overly complex and difficult to follow? This may result in the rule/method of work not being followed accurately or it being totally disregarded because its too time-consuming or complex to apply properly and get the job done
- Did the rule/method of working conflict with other rules/methods of work?
- Was the rule/method of working not appropriate because there was an alternative ways of working which has become custom and practice?

Delivery

This is concerned primarily with having an appropriate rule/method of work but inappropriate resources to properly implement it.

Planning

Planning and be a factor in the appropriateness of the rule/method of working as it can result in:

- The method of work to be implemented being inaccurate
- Excessive workload that in turn can lead individuals to forget to implement the right method of working or creating pressure such that did not feel they have sufficient time to implement the procedure appropriately - see also *Workload*.

Did the planning process:

- Consider all the risks associated with the activity?
- Identify the equipment needed to undertake/support the way of working? See also *Equipment*.

- Provide an appropriate level of information about how the method of work should be implemented? (i.e. was there hazard information or mapping data when using LOWS equipment). See also *Information*.

Consider the reasons why the work planning process may have been a factor. Was it because:

- Those undertaking the planning did not have the appropriate knowledge, skills and experience?
- There was inadequate feedback systems in place so known problems with the plan are not fed back?
- There are inadequate resources to undertake planning?
- There are inadequate systems in place for the checking of the plans?

If the rule/method of working was not followed for the above reasons then consider whether it was as a result of:

- Poor judgement of the individual(s)? See also *Personal*.
- Individual(s) not knowing what the appropriate way of working is? See also *Knowledge, Skills and Experience*. This includes identifying whether the procedure has recently been changed or introduced and check whether the individual had been briefed and what the quality of the briefing was.
- Inadequate supervision such that the inappropriate way of working was not identified or corrected? See also *Management and Supervision*.
- Other pressures that were allowed to take priority? See also *Management and Supervision* and *Workload*.
- This way of working being custom and practice (i.e. this is the way I've always done it). Key to this is the extent to which others would do the same thing. See also *Supervision and Management.*

Examples of Incidents where Practices and Processes has been a factor

Owing to an oversight between the Electrical Control Room Operator (ECRO) and the Person in Charge of a Possession (PICOP), the traction current was re-charged in an area where staff were still working. The ECRO failed to request hook switches to be opened prior to closing circuit breakers. The investigation revealed there was no documented practice for superseding isolations on third rail, and the documentation the ECRO had did not detail the sequence in which the equipment should have been operated.

During 'Red Zone' working a near miss was reported by a train driver with an ultrasonic operator who was carrying out railhead readings with a Sperry Stick. Although the lookout gave warning within an adequate time for the operator to leave the track and get to a position of safety the COSS should have given consideration to the extra time required to remove the Sperry stick as this would have slowed down the operators egress.

A signaller failed to have the line examined when he detected a track circuit failure because he had become confused between the instructions in the Rule Book and a

local instruction aimed at improving the response times to track circuit failures. The local instruction was not very specific.

3. Information

Information is used to support an activity. Railway examples include: the information track workers receive about the hazards on the track and their safe system of work, train running information, timetable simplifiers, late notices, special train notices, weekly/periodic operating notices, pre-job information, electrification/isolation diagrams and signage. It also includes information about changes to technical and operational standards.

Information must be **relevant** and **timely:** it is of no use to receive a late change to the weekly operating notice informing signallers and track workers about changes to the possession limits after the date of the possession.

This category is concerned primarily with information that is written. Information passed verbally is captured by the *Communications* Incident Factor.

What are the sub-categories?

Information Content	• inaccurate • not available • out of date • not comprehensive • not relevant • contradictory
Information presentation	• over complex • inappropriately structured • lacks clarity • appropriateness of format
Dissemination of information	• un-aware of briefing responsibilities • no process for undertaking staff briefings

What questions can you ask to determine if this was a factor?

The sub categories above can easily be used as prompts. For example:

Was there a problem with the content of the information? If so was this because it was inaccurate, not available, out of date, not comprehensive, not relevant or contradictory. Having established the type of information failure, further questions will need to be asked to establish why. For example, was the information not checked to ensure it was unambiguous? If so who did the checking? Were they competent? Did they understand the implications of what they were checking?

If there has been a failure to disseminate the information consider:

- Were people aware of their responsibilities for briefing/cascading information and if not why not?

- Was the information checked appropriately and if not could this have been due to:
    - lack of attention? (see also *Personal*)?
    - lack of appropriate supervisory checks? (see also *Supervision and Management* or *Teamwork*)?
    - the information not being easy to check?
    - individual(s) not being aware of their checking responsibilities?
- Were there late notice changes to the information that did not get communicated to the relevant people appropriately or were they just missed?
- Were the critical details lost in amongst other less relevant information?
- Was the information presented in such a way that made it easy to relate to the work activity to which it is related?

If the information was not received:

- What were the processes for ensuring the information was received?
- Is there any process in place to ensure the information has been received by the appropriate person?

If the information was mis-read, was this because:

- It was not clear (i.e. the details were illegible, too small, not conspicuous?
- The circumstances in which it was being read were not conducive to that activity? (e.g. it was outside in the rain; it was dark)
- The information was overlooked because the individual was distracted or overloaded. See also *Personal* and/or *Workload*.

Examples of Incidents where Information has been a factor

A Controller of Site Safety (COSS) and his team who are undertaking structural exams realises that they are outside of the possession limits. They have been involved in a near miss as a passenger train has just passed them. You discover the COSS had misread the signal number on this form because the SSOW paperwork had been hand written and was not clear.

A signaller wrong routes a train because he reads across the simplifier incorrectly as a result of there being too much information on one page and it all being presented in a format that is too small

4. Workload

Workload is about understanding the demand created by particular activities. Demand is created by a combination of factors:

- the task – the number and combinations of tasks to be completed.
- the context – how and where the tasks have to be completed and the urgency or accuracy necessary to ensure safety and organisational performance targets are met
- the individual – their skill, experience and perception of their work

If the workload is in excess of acceptable limits it will be stressful, fatiguing or de-motivating for the individual which will make their performance slower and less accurate. It will also affect an individual's ability to maintain awareness of what is going on around them (situational awareness).

Reducing workload is not always the solution as this too can affect performance. Reduced workload or workload involving simple, repetitive tasks over extended periods can increase boredom and increase difficulty for individuals to maintain vigilance.

What are the sub categories?

- Conflicting activities that require excessive demands on attention (i.e. trying to monitor two physically separate parts of a signalling panel)
- Time pressure
- Productivity pressure
- Emergency/non routine circumstances
- Poor job design
- Inappropriate resource allocation
- Additional activities over and above the norm

What questions can you ask to determine if this was a factor?

- Was the workload unusually excessive? *(Note: there is an expectation that individuals can deal with a bit more work than the norm but this may be influenced by the individual and their training or their capabilities. When determining whether the workload is excessive consideration should be given to how much the individual was being asked to do and whether this aligned to how much time was available as well as the complexity of the activities)*
- Were there conflicting activities being carried out? (i.e. requiring an individual to do two things at once or look at two sources of information at the same time)
- Was there pressure to get the work done in a particular time?
- Were any of the activities associated with the work very similar such that they could be easily confused?

- Was there degraded or non-routine working at the time of the incident that could have increased the amount that had to be done?
- Was the individual(s) under-loaded and therefore perhaps not fully engaged with the task?
- How was the individual(s) prioritising the tasks that they needed to do?
- Had the individual's training prepared them appropriately for the workload experienced? See Knowledge, Skills and Experience
- Did the individual have the appropriate capabilities for managing the workload associated with the activity? For example, did they demonstrate appropriate planning and decision making skills? Were they able to remain calm during pressurised, heavy workload situations? Were they able to remain focussed even during repetitive, un-stimulating activities?

Example where workload has been a factor in an incident

During the arrangements between a signaller and a COSS regarding a line blockage, the signaller returned the protecting signal to danger and placed a reminder appliance over it. However he failed to check the signal had returned to red and as a result the signalling system displayed a proceed aspect to the next train. During the arrangements the signaller was dealing with a high number of calls due to requests to use crossings, as well as dealing with operating CCTV, and signalling other trains which is why he had failed to double check that the signal had returned to red. This increase in workload was a contributory factor in the incident.

5. Equipment

This refers to any equipment that is used to undertake or support an activity and can be a factor if it is not being used as intended, if it is faulty, if its design is not compatible with its use or if the layout is not in the order in which it is used. Different types of incident involve different types of equipment:

SPAD related incident: the equipment includes both the train and the signals/signalling layout.

Track related incident: the equipment includes both the equipment being used by the work group and the infrastructure that they are repairing or maintaining. In addition it can include the PPE supplied to workers.

Signaller related incident: the equipment includes the signalling displays, signalling levers and alarms for example.

What are the sub-categories?

Design	• equipment not compatible for its intended use • important displays/information clearly visible and provide information at the right time • inadequate alarm arrangements • no correction of known flaws • arrangements for ensuring competence in use of • positioning and layout
Use/operation	• deliberate misuse • inadequate arrangements for ensuring competence in use of - see also *Supervision and Management* • right equipment not available • equipment unreliable
Maintenance	• inadequate maintenance • inappropriate maintenance specification • faults incorrectly reported
Storage of equipment and material	• poor housekeeping • appropriateness of security of storage arrangements • appropriateness of storage arrangements

What questions can I ask to determine whether Equipment is a factor?

The sub categories can be used to generate questions. In addition consideration could be given to:

- How reliable the equipment is and if its not, why not?
- How much trust users put in the equipment?
- Were there sufficient supplies of the right sort of equipment? If not was this because of:
  - inappropriate procurement?
  - poor security arrangements?
- Was the equipment designed such that users can:
  - see important displays?
  - operate the equipment in a timely fashion?
  - easily identify emergency buttons?
  - work in a comfortable position?
  - distinguish between different alarms and different displays?
- Did the equipment provide the information needed at the right time?
- Did any alarms associated with the equipment alert appropriately? If not was this because:
  - the alarm was not loud enough?
  - the operator was not aware of the actions needed to respond to the alarm
  - the alarm was not distinct from other alarms/background noise
- Was the equipment faulty and if so was this because:
  - it was not maintained appropriately? (i.e. inappropriate specification, inadequate resources to meet plan, incorrect scheduling of the plan)
  - the equipment fault was not correctly reported?
  - the equipment fault had been reported but just not actioned? (which may therefore prompt further investigation of faulting reporting and prioritisation processes)
  - inadequate security arrangements which meant it became damaged?
- Is poorly designed/faulty equipment still in operation because of:
  - inadequate product approval processes?
  - lack of reporting?
  - inadequate resources for upgrades?

An Example of Incidents where Equipment has been a factor

A near miss occurred with a group of track workers. Their safe system of work involved a LOWS lookout but the individual had not sent the warning. The individual thought he had sent the warning but the equipment did not provide feedback about whether the warning had been sent or not so it was easy to assume the warning had gone.

6. Knowledge, skills and experience

Knowledge, skills and experience can be a factor in an incident if the individual(s) involved did not have the appropriate knowledge to perform safely or if they were not familiar with the circumstances in which they found themselves. When evaluating whether it is a factor the investigation should extend beyond checking certification and when the last training or assessment last took place.

What are the sub-categories?

Training	• relevant • comprehensive • accurate
Assessment	• sufficiently frequent • adequate • appropriateness of support and follow up arrangements
Experience	• relevant • inexperience

What questions can you ask to determine if this was a factor?

Training

- Was the content up-to-date, did it cover both the knowledge and the skills needed to perform that activity, were there sufficient opportunities for practice, was it delivered in a way that meant it transferred easily to the job? (i.e. was it context specific)
- Was the frequency of any refresher training appropriate and did it include the right content?
- Did the individual(s) feel confident that they knew what was expected of them as a result of the training?

Assessment

- Did the assessment evaluate both knowledge and application?
- Did it occur frequently enough to identify whether an individual had retained their knowledge and skill?
- Was there appropriate support and development for the individual(s) following training/assessment (i.e., was there appropriate mentoring or on the job learning?)

Experience

- Did the individual's work experiences match the task being performed at the time of the incident and if not was it reasonable that the individual should have had this experience? Consider when the activity was last performed, was it performed in a similar situation? Was the individual 'thrown in at the deep end', with insufficient experience to handle the situation?

- Was the individual(s) very experienced to the point that complacency may have played a role (i.e. where you are so familiar with a task/activity/risk that your perceptions about its risk and/or difficulty changes)? See also *Personal.*

7. Supervision and Management

Supervisors and managers can be an underlying reason for an accident because of the decisions they make about resources, budgets, work allocation and planning. They can also have a more direct impact through the example they set and how effectively they carry out their monitoring and assessment processes aimed at detecting and managing errors or the potential for errors.

The appropriateness of the supervision and management can mean that rule breaking or not following the procedure has become the normal way of working either through absence of checking or through rule violation not being challenged and managers turning a blind eye to those not following the rules.

This incident factor covers a wide range of supervision and management activities from directly supervising worksites to the way in which people are managed. It includes how we manage our contractors too.

When establishing whether or not this was a factor consider both the actions/ omissions of the supervisor/manager and the reasons for this: whether they have conflicting activities or are not aware of their responsibilities or trained in how to perform them.

What are the sub-categories?

Monitoring and correction	• failure to correct errors/inappropriate behaviour • failure to undertake safety checks • inadequate feedback systems • inadequate escalation processes • failure to correct known problems • failure to initiate corrective action
Resource Management	• inappropriate cost cutting • inadequate budget • inadequate resources (people and equipment) • inappropriate resource allocation
People Management	• not accessible to staff • inappropriate performance management processes • inadequate mentoring arrangements • inappropriate behaviours and attitudes (of supervisor/managers) • failure to provide job related/professional guidance/support • perceived lack of authority

What questions can you ask to determine if this was a factor?

- Was the supervisor/manager setting a good example?
- Have previous incidents or events involving errors been dealt with appropriately such that the unsafe behaviours were not condoned?
- Was the supervisor/manager enforcing the appropriate safety standards?
- Did the supervisor/manager ensure they had systems/arrangements in place to be able to monitor performance and behaviours (i.e. undertake safety checks, inspection, site visits)?
- Did the supervisor/manager take action when there was evidence of inappropriate actions/behaviours? If not, why not? Was this due to lack of skills/confidence on the part of the supervisor/manager, perceived lack of support or insufficient time to manage this type of behaviour?
- Did the supervisor/manager manage resources appropriately so that undue time pressure or workload that impacts on safety is avoided?
- How did the supervisor/manager communicate their priorities?
- Did the supervisor/manager allocate resources appropriately (e.g., did they manage rosters to optimise safety, did they ensure safe systems of work were appropriately resourced)
- Were resource shortages being appropriately escalated and managed?
- Are there clear responsibilities for the supervisor/manager?
- Was the supervisor/manager experiencing conflicting demands?
- Was the supervisor/manager capable and motivated to manage?
- Was the supervisor/manager receiving appropriate support to manage and allocate resources?
- Did the supervisor/manager have the appropriate authority to manage appropriately and if not was this due to:
    - Poor job design and the job not having the appropriate delegated authority and/or responsibilities?
    - The skills of the individual themselves to generate appropriate authority with their team?
    - Actions of other managers which undermined the supervisor/manager concerned?

8. Work Environment

The working environment contains environmental stressors such as lighting levels, noise, temperature and vibrations. These can lead to feelings of discomfort or act as distractions, impacting on an individual's performance.

What are the sub-categories?

- Weather conditions
- Noise
- Lighting
- Temperature
- Vibrations
- Space

What questions can I ask to determine if this was a factor?

- Could extreme temperatures have been a cause of distraction leading to an attention related error?
- Were there sufficient lighting levels for the individuals to be undertaking their activities: was it suitable for the type of work being done? (e.g. detailed work requires greater lighting levels)
- Was the work environment unusually noisy at the time of the incident? Could this have been a distraction? Could this have masked important alarms?

9. Personal

This incident factor refers to a collection of influences arising from the individual themselves. They are concerned primarily with their mental state: their fatigue, physical and mental well-being and non technical capabilities.

What are the sub-categories?

Work related fatigue	• poor shift and roster design • excessive working hours • inadequate rest breaks during work • excessive travelling time to and from work
Home-life related fatigue	• inadequate rest • life style management
Physical well being	• influenced by drugs or alcohol • ill health • influenced by medication • failure to comply with medical standards
State of attention	• pre-occupation/distraction • complacency • mind set • expectation • confused • stress
Work-related attitudes	• low morale • confidence • propensity for risk taking • over accommodating

What questions can you ask to determine if this was a factor?

Work related and home life related fatigue may both have an impact on how alert the individual is.

Fatigue

To determine whether work related fatigue is an issue it is important to consider cumulative fatigue as well as fatigue on the day of the incident. Establishing whether cumulative fatigue exists involves looking at the roster 12 days prior to the incident:

- Are there a high number of consecutive shifts, particularly night shifts that have been worked?
- What are the rest periods between shifts?
- Were there opportunities to take breaks at work? (Consider nature, frequency and duration of the break and opportunities for refreshment)

- Has the individual had a number of early starts? If so what time did the individual have to get up and what affect did this have on the time available for sleep?
- What time did the incident occur (people are generally at their lowest levels of alertness between 01:00 and 04:00 in the morning)
- What was the level of activity during the shift leading up to the incident – could the individual have been overloaded and therefore fatigued or, if there was very little to do, could the individual have been bored and therefore not fully engaged?

To determine if home-life related fatigue is an issue asking about significant changes in the individual's personal circumstances (e.g. moving house, new baby) can provide an indication as to whether this is a factor. Also consider how the individual was managing their time between shifts to determine whether they were getting adequate quality rest time.

Attention

Attention can be affected in a variety of ways. Individuals can be:

- pre-occupied (i.e. was the individual preoccupied by health/domestic problems, work problems, morale?)
- distracted (e.g. other people, alarms, phones, conflicting work activities). Was the individual too focussed on an event/activity to the detriment of others?
- complacent[1] (i.e. was the individual not appropriately focussed because they did not perceive there to be a risk that needed focussed attention)?
- in a mind set (i.e. was the individual in autopilot and failed to realise the circumstances were different/had changed?) Consider the level of experience and whether what was happening at the time of the incident was as normal.
- experiencing expectation (i.e. was the individual anticipating what was going to happen and failed to notice new information or did the individual see what they expected to see?)
- confused (i.e. had the individual lost awareness of what was going on and did the individual confuse similar activities/sources of information?)

Work related attitudes

This is about determining the extent to which the individual's actions have been as a result of their own capability. Working through the other Incident Factors will provide insights as to the factors that may have influenced their behaviour but these questions will help identify the level of individual responsibility.

- Does the individual(s) have a history of safety of the line or performance related incidents that might indicate they have a propensity to take risks/act inappropriately?
- Does the individual(s) understand the consequences of the actions? To what extent do they think their actions played a part in the incident and why?

[1] Complacency does not result from apathy, carelessness or a flaw in individual's personalities; it occurs because we are human and we have a tendency to suffer from habituation. This is when, with repeated exposures to a situation, even if it is dangerous, our responses become less cautious and less attentive.

- Has the individual(s) been challenged about their actions in the past? What has happened as a result of such challenges?
- Does the individual show behaviours associated with someone who is conscientious? For example, do they:
  - prepare for work appropriately and undertake a thorough shift handover?
  - pay attention to details such as recording details in logs/forms, completing paperwork and checking sources of information
  - apply self checking techniques and strategies to avoid missing important information or making assumptions
- How confident is the individual that the same mistake will not be made in the future? What have they changed about their behaviour, if at all, as a result of the incident happening?
- To what extent are the individual's capabilities a factor? Consider how the individual (s) has progressed into their role:
  - Has the progression provided sufficient and relevant experience?
  - How was a decision made to appoint this individual to this role?
  - What evidence is there to suggest that the individual has the appropriate non-technical skills for this role? For example, if there were aspects of the job that involved the individual dealing with pressurised or emergency situations, was there evidence that the individual would be able to cope with such pressures?

See the Non Technical Skills framework for further details about non technical skills.

10. Teamwork

This is concerned with how we work together and co-ordinate to achieve safe performance. There are certain factors that will influence the likelihood of team errors including the number of people in the team, team structure, team stability and team leadership. Teamwork factors include:

- inappropriate number of people in team
- lack of team's "shared" understanding
- failure to notice or respond to (i.e. challenge) another's errors
- inappropriately influencing the actions or decisions of others
- inadequate team co-operation
- inappropriate level of team trust (i.e. too much/too little)
- ineffective delegation of team duties and responsibilities
- appropriateness of communications between different levels/parts of the organisation

What questions can you ask to determine if this was a factor?

- Were the team treating each other with respect, regardless of their culture, age background, etc?
- Is there evidence of team members over-reacting in certain situations that has impacted on overall team performance?
- Was the team member able to take account of others' views when deciding on a course of action?
- Did the team work together to resolve a problem?
- Is there evidence that team members were not dealing with each other appropriately (i.e. being aggressive)
- Did the team members not trust each other?
- Was there a failure in the team's "shared" understanding of what was going on?
- Had activities been appropriately delegated throughout the team?
- Did team members support each other when needed?
- Was there evidence that the team members were monitoring each other and were able to step in and help if needed?
- Were there inappropriate team dynamics such that there was peer pressure to conform to the group way of working?
- Was there inappropriate deference to one individual's view within the team?

An example where Teamwork can be a factor in an incident

Teamwork may be a factor in line blockage irregularities where there has been a breakdown in communications due to a poor working relationship between any of the parties involved in authorising the line blockage. Teamwork indicators might include how polite and respectful COSSs and signallers have been towards each other, how accommodating they have been particularly where a line blockage has required re-planning or where the signaller has received a lineside request.