Knowledge Exchange Note: #002
Date: 4th May 2021

Safety Critical Communication

This knowledge exchange note is shared in order to promote learning and improve safety. You should seek appropriate guidance regarding the relevance, accuracy, and completeness of this alert to your circumstances prior to implementation.

Themes

Culture
Human Factors and Procedures
Management Systems

Summary of Query

A high-level description of the risks surrounding safety critical communications (SCC) and best practices adopted to mitigate them.

Response

Clear communications are vital to safety. It you are not clear when making commands – or responding to them – confusion will follow, and in some cases an accident. In the rail sector alone, RSSB research found that SCC was a contributory factor in nearly 17% of incidents, with the figure rising to 90% depending on the operational context.

The PSF learning brief on the [operational irregularity at Balham](#) discussed a miscommunication between signallers and the person in charge of a line possession that could have led a track machine to collide with a passenger train had the circumstances (and timing) been slightly different.

The Rail Accident Investigation Branch's report into the incident revealed that many of the people involved felt embarrassed to use correct rail industry SCC methods, both when conversing with colleagues they knew and with those they did not. In particular, the Branch noted that:

> *The Rail Accident Investigation Branch (RAIB) identified that over the last 20 years standard Safety Critical Communications had not been embedded as standard practice in the rail industry. This is due to several factors, including competence and training, monitoring and social and cultural issues.*
>
> *Many staff had not adopted the necessary protocols, and some staff still felt 'socially embarrassed' by using formal methods of communication.*

Businesses should consider the safety critical tasks that they carry out, and where Safety Critical Communications are essential to minimising the risk from these tasks. This should include ensuring terminology is consistent and understood across the business.

The Leading Health and Safety on Britain's Railways (LHSBR) chapter on train operations specifies that:

> *"Safety critical communications continue to be a significant factor in incidents"* and defines the need to "*Develop, promote, and monitor the uptake of an industry-wide safety critical communications strategy, based on the Safety Critical Communications Manual"*.

Best Practice

Communications improvement should be made systemically. This requires effort throughout the operational, competence management, supervision, leadership and organisational cultures. Businesses should consider a strategy to achieve this, with the following considerations:

> Identify "social inhibitors" preventing people from using SCC language and terminology and adopt a strategy to address these through development of communication protocols.

> Review and improve training and competency programs to reflect these communication protocols and to ensure SCC is used. Robustly monitor and enforce SCC in all appropriate settings.

> Ensure all staff undertake appropriate training – from long-term contractors to cleaners to control room staff and management.

> Take account of nomenclature and product names – the same equipment or substance can be referred to differently by different stakeholders, leading to confusion.

> Consider providing simple and concise guidance on the main elements of SCC to all employees and contractors, for example on security passes.

The goal is to establish a culture in which communication protocols are almost invariably used - not using appropriate SCC methods is seen as an ***abnormal practice***.

Further reading

Excel Energy – Human Performance Program (FP-PA-HU-01 Revision*:* 10)

Process Safety Forum Learning Brief 021, Safety Critical Communication

RAIB Rail Accident Report Serious operational irregularity at Balham

Process Safety Leadership Group Final Report Appendix 5, *Guidance for the management of operations and human factors*

RSSB Developing a safety critical communications training programme (T1078)

RSSB RIS-8046-TOM Iss 2 (Spoken Safety Critical Communications)