

# Infrastructure Projects

# Southern





# Design Close Calls Guidance

1 June 2019





# Infrastructure Projects

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# 1. Background

Whilst the reporting, capture and monitoring of Close Calls is widely used for site-based activities, they are not currently used effectively for design activities. There is a direct relationship between the number of Close Calls raised and the number of accidents that happen on our projects which should also translate to the development and design stages.

Understanding what hazards and risks are occurring during the design stages will allow us to take direct steps to reduce them in the future thereby improving the safety within all designs that are developed and subsequently reducing incidents and accidents occurring in site activities.

This document provides guidance on the implementation of design Close Calls within IP Southern including details of the definition, process to be followed for identification and recording along with how to log a Design Close Call as shown in Appendix A.

As detailed in the Principles section of the document below, it should be noted that this is not intended as a means of criticising individuals or companies but is being used to promote positive behaviours in capturing issues and sharing lessons for future design activities.



#### 2. Definition

### 2.1 Hazard or injury

- A design condition or situation (including errors and omissions) which could have been identified earlier in the design review/verification process.
- Something which has been signed off and subsequently found to have the potential to cause harm or injury to people or the environment or;
- A design which harbours a latent hazard which has the potential to cause harm or injury to people or the environment. This may be the result of design assumptions or option decision which have not been adequately tested, managed or communicated.

#### 2.2 Undue stress

A set of parameters which places members of the project team under sufficient stress to endanger or damage their wellbeing or compromise their ability to fulfil their role effectively; this is likely but not necessarily the result of pressure to deliver on time. However, there are other potential causes of stress which could be design or individual specific e.g. having to design to a bare minimum clearance.

## 2.3 Good practice

It also allows for capturing observations of good and/or novel practice.

## 2.4 Categories

When raising a Design Close Call, it would aid the subsequent trend analysis if the Close Call is raised by relating it to one or more of the following categories:

Category	Meaning
Behaviours	Poor behaviours in communicating with the designer or team.
Constructability	The design does not enable it to be built safely. The design does not consider adequate mitigation of construction hazards.
Design integration or	The design has not been adequately integrated or has errors and
deficiency	omissions that lead to the possibility of injury or an unacceptable hazard.
Time pressure	Designer(s) has not been given adequate time to complete their tasks effectively and safely.
Temporary works/condition	Hazardous temporary conditions have been created and not adequately mitigated in the design or the temporary works design is not sufficient to be safely implemented.
Requirements and/or	the requirements or scope are poorly defined.
scope	
Survey Information	Survey information is inadequate or missing.



# 3. Process Principles

To ensure the effectiveness of the Design Close Call process, all teams need to understand the importance and value of collecting Close Call information.

## 3.1 Key Principles

- Leadership across all organisations will be critical in achieving a positive culture around design Close Calls.
- It is everyone's responsibility to create a positive, no blame culture around design Close Calls.
- Design close calls are no different to site close calls in terms of the importance of collecting information to:
  - Enable learning and continuous improvement.
  - Avert safety issues which could lead to serious harm.
- They must not be used as a means to criticise and penalise individuals; the focus should be on identifying and learning from failures in process.
- Raising design Close Calls needs to be actively reinforced as a positive behaviour at all levels of designer, principle contractor and client organisations.
- The Close Call initiator and owner of the issue should engage with each other in a collaborative, learning spirit, to agree a proposed course of action (unless anonymity is preferred).
- Teams at all level should engage in reviewing the resulting data to identify and share trends and lessons learnt.
- Where serious issues arise, fair culture principles will be applied, as for site Close Calls.

#### 3.2 Rules

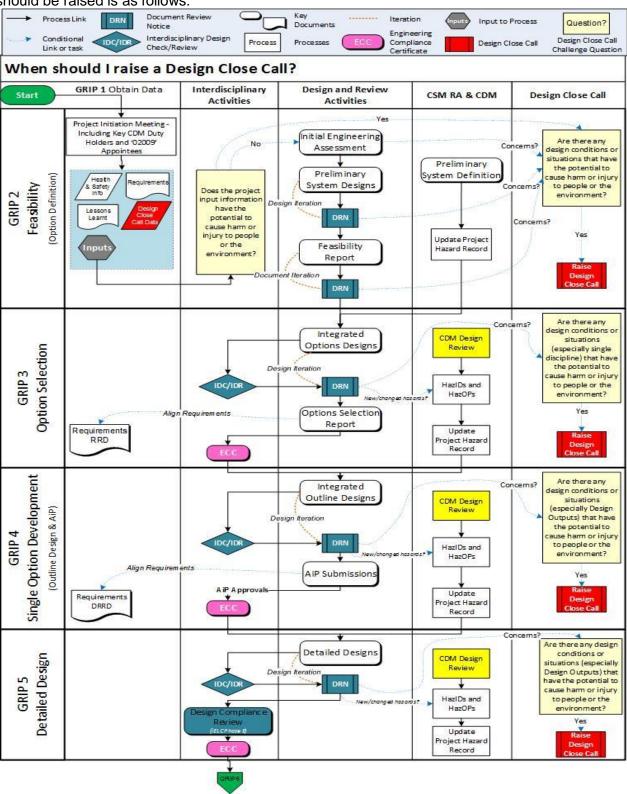
The rules defining a Design Close Call are as follows:

- Error/omission must have the potential to cause harm and have a direct impact on safety.
- It must have passed undetected through a relevant design review/verification process i.e. post formal checking/ Quality Assurance process.
- A DRN comment could also be raised as a Close Call but there is no directive that one must lead to the other.
- Individuals and teams should actively engage and provide feedback to each other on Close Calls unless anonymity is preferred.



#### 4. Process

The process chart of the current Network Rail design process identifying when Design Close Calls should be raised is as follows:





# 5. Data Capture – using the current Close Call system

All Close Calls related to a design supplier's activity, whether arising from our own contribution or theirs, should be raised within their close call system as we do currently for site-based issues.

The RSSB system was updated in March 2019 to enable the categorisation of Design Close Calls.

When logging a Close Call, the main Category of 'DESIGN' should be used. Also include the Sub-Category the Close Call can be related to – as described in Section 2. This will then allow a download to be taken of those Close Calls specifically related to Design from the RSSB system to allow detailed analysis.



# 6. Using the NR Design Close Call App for NR employees

If a Network Rail employee is raising a Design Close Call they can use their Smart Phone or iPad to raise the Design Close Call through an App. Follow the steps below to complete a Design Close Call.

- 1. Firstly, you will need to download the Close Call app this can be found in the Network Rail App Catalogue.
- 2.Once you have downloaded the app, open the app and this will take you to the home page. Then select, 'Create Report' and fill in all the details.
- 3.A guide on how to use the App to fill out a Design Close Call, to allow it to be subsequently analysed and trended is captured in Appendix A of this Guidance note.

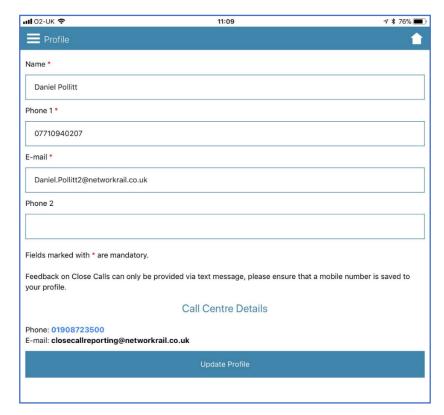




# 7. Appendix A- How to log a Design Close Call using the Network Rail app

# 7.1 Opening the app

1. The first time you open the app, you will be asked to complete your profile.



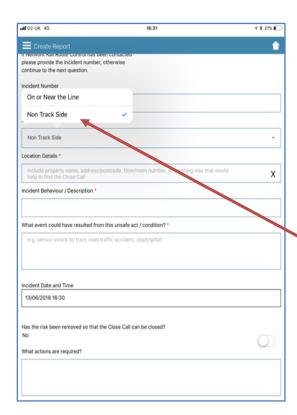
- **2.** Every subsequent time you open the app, this will be the home screen.
- **3.** Click on the "Create Report" button.





# 7.2 The reporting screen

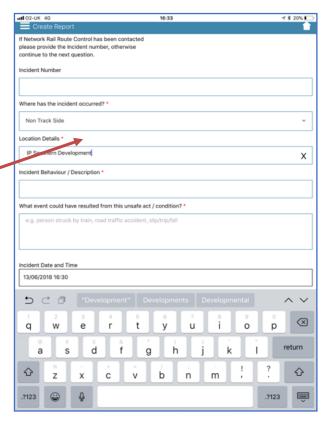
1. Leave the Incident Number box empty.



**3.** Under the location details, state the Network Rail business area you are working in.



**2**. Select the "Non-Track Side" option in the "Where has the incident occurred?"





# 7.3 Your Design Close Call details

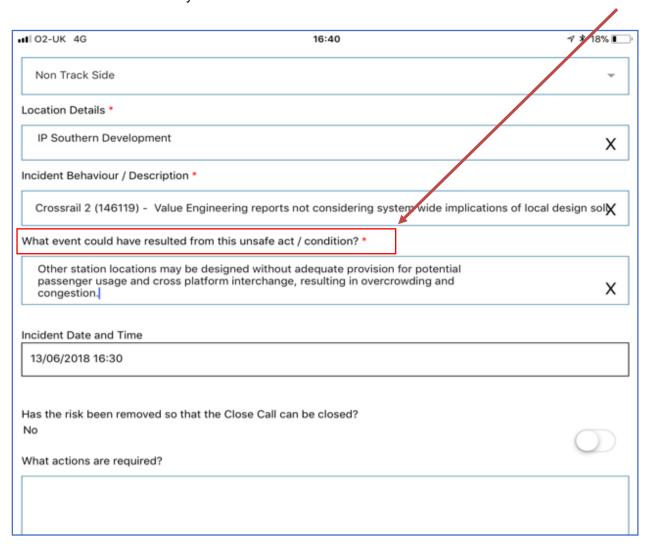
Enter the details about your Design Close Call in the "Incident/ Behaviour" description box.

This should consist of four parts:

- 1) Start with "This is a Design Close Call (Category OTHER)". This will help the central team categorise the Close Call correctly.
- 2) The add the name of the project and its OP Number, if you know it.
- 3) Next, if possible identify the appropriate categories from the below list and write it in this box. More than one category may apply: Behaviours, Time Pressure, Requirements, Design, Constructability, Temporary works, Systems integration.

### 7.4 Your Design Close Call description

Enter the description of what the Design Close Call is about, if the Design Close Call refers to a Best Practice include the details in the box.8. Write some detail about what could have happened if this Design Close Call had not been noticed. If this Design Close Call relates to a Best Practice, use the box to describe why this is a Best Practice and what unsafe condition has been avoided.





#### 7.5 Close out

Leave the "Has the risk been removed so that the Close Call can be closed?" option as no, even if it has been closed out – this is to aid capturing of Design Close Calls. You will get the opportunity to close out the Close Call after it has passed. through the system.

#### 7.6 Further actions

List the people who are responsible for this project.

Include details of the IP regional Health and Safety Manager, as well as the Designated Project Engineer (DPE) if you know who they are.

Confirm if you would like to receive feedback on how the close out of the Design Close Call is progressing.

## 7.7 Photographs

If you would like to attach a photo to help describe the Design Close Call,

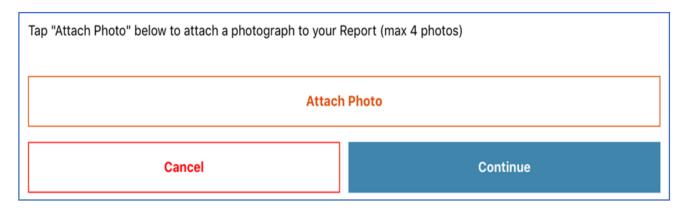
Create Report Location Details \* IP Southern Development Χ Incident Behaviour / Description Crossrail 2 (146119) - Value Engineering reports not considering system wide implications of local design soll What event could have resulted from this unsafe act / condition? \* Other station locations may be designed without adequate provision for potential passenger usage and cross platform interchange, resulting in overcrowding and Х Incident Date and Time 13/06/2018 16:30 Has the risk been removed so that the Close Call can be closed? What actions are required? Undertake safety conversation with CEMs on the project to ensure future VE solutions take a system wide review. Х Responsible Manager/Department H&S Manager IP Southern South East - Peter Zymanczyk Designated Project Engineer- Paul Guest. IP Southern Development Х I am available anytime? Yes Do you want the person managing your Close Call to give you feedback? If yes, please be advised that you may receive a text during unsociable hours Tap "Attach Photo" below to attach a photograph to your Report (max 4 photos)

16:47

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you can do that at the bottom of the form, if not, press the "continue" button.

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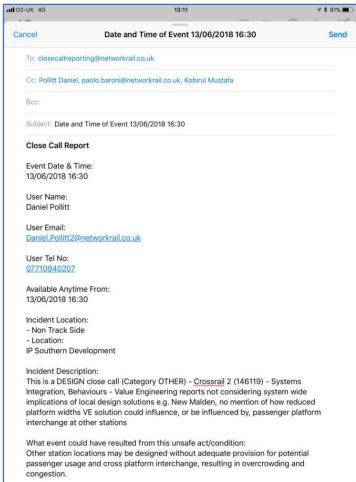
#### 7.8 Review

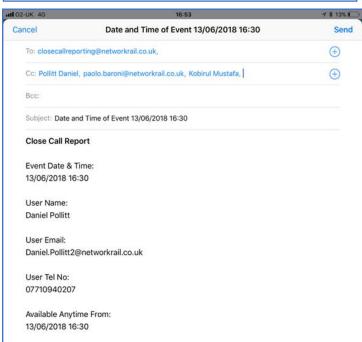
All the details will be transferred into an email, ready to send to the central Close Call team. This will give you the chance to review the details before it is submitted.

# 7.9 Before you send

There are a few details that you need to add to the email Cc line before you press send:

- Yourself this will give you a record of your Design Close Call for future reference.
- Your regional IP Safety and Sustainability Systems managers – they will collate data on Design Close Calls.
- The programme manager of the project you are working on – as this will give them visibility of Design Close calls in their programme works.





#### 7.10 Click send

Congratulations, you have now submitted your Design Close Call.



# 7.11 Confirmation

You will usually receive a text message the next working day once the Close Call has been processed by the central Close Call team, where it will be assigned a unique reference number.







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