

i n v e n t o r y s

IRL Incident Response

Presented by Jon Hume
EHS Advisor - Invensys Rail
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Who am I?

Who am I – Jon Hume Environmental, Health and Safety Advisor

- Working for Invensys Rail formerly Westinghouse Rail Systems for over 4 years.
- GrantRail Ltd and Jarvis Rail within Track Renewals.
- Project based having worked on a number of projects, including:
 - Coventry - £28 million
 - Lincoln - £30 million
 - South Erewash - £33 million
 - Water Orton - £30 million
 - Walsall - £25 million

Who is Invensys Rail

Who we are – Invensys Rail – formerly WRSL.

- Multinational leader in delivering state of the art signalling and communication solutions.
- Employ over 3,250 people world wide.
- Invensys Rail Ltd consists of
 - Westinghouse Rail Systems
 - Dimetronic Systems
 - Safetran Systems

Invensys Rail

What we do

- Provide Signalling and Communication projects throughout the world
- Offices located throughout the UK
 - Chippenham
 - Croydon
 - London
 - Birmingham
 - York
 - Glasgow

Invensys Rail

Current Projects include:-

- Reading Station Remodelling – Type 'A'
- Paisley Corridor Improvement – Type 'A'
- Thameslink – Type 'A'
- Water Orton Resignalling Scheme – Type 'A'
- Shirley Stratford Resignalling – Type 'B'

Categories of Work

Majority of the works that Invensys Rail are involved in, with regard to Network Rail's work fall into the 3 categories detailed below:

Type 'A' – Major Resignalling Scheme

- Multi-discipline projects with significant cross functional working particularly permanent way.

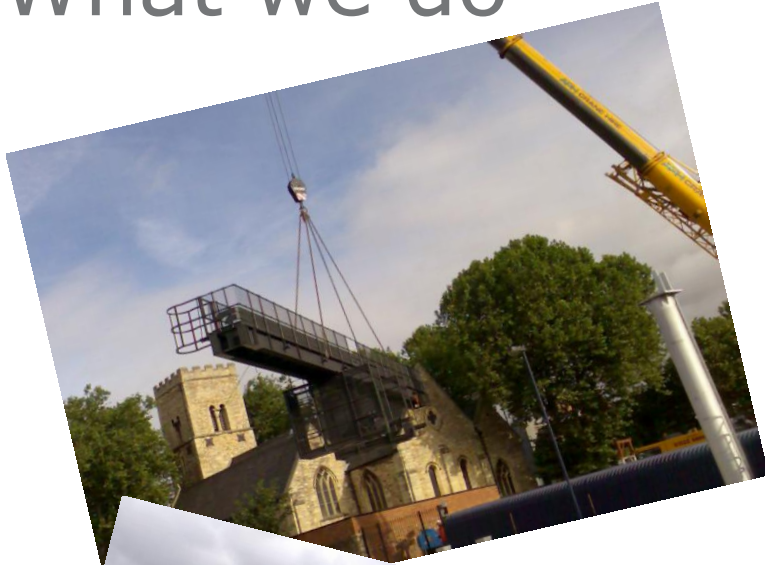
Type 'B' – Single Interlocking Renewals

- Mainly signalling work but capable of managing ancillary permanent way, E & P work etc.

Type 'E' – Control Systems

- Control systems and man-machine interfaces.

What we do



Signalling Projects which include

- Crane lifts
 - Signalling gantries
 - Relocatable Equipment Buildings
- Road Rail Vehicles
 - Tandem Lifts
 - Pulling cables
- Working in and Coordinating Possession works
 - Station S & C remodelling
 - Level Crossing Renewals

Accident / Incident Definition

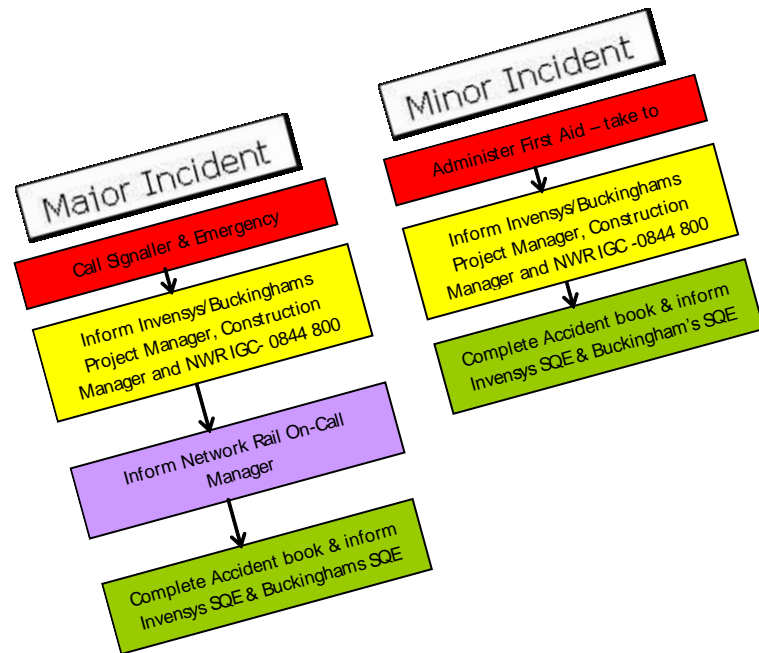
Accident:

- Any unplanned event that results in injury or ill health to people, or damages equipment, property or materials but where there was a risk of harm.

Incident:

- An event, that had circumstances been different could have resulted in Injury, loss or damage.

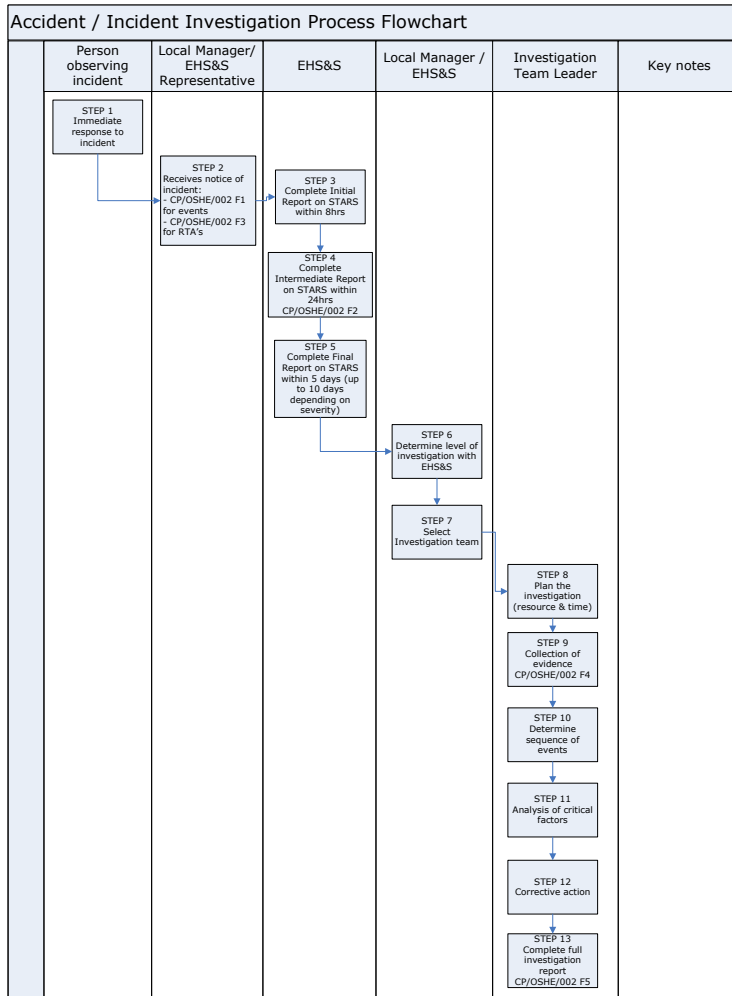
Reported Incidents



Number of Major incidents:-

- Failure of lifting equipment causing gantry ladder to fall striking member of staff on the head.
- Member of staff falling down open catch pit causing broken ribs and punctured lung.
- Member of staff fell down embankment banging arm on palisade fencing causing broken arm.

How to Report



Accident / Incident Investigation Process Flowchart.

- Shows in easy to follow steps, who is responsible for what actions.
- At which stage actions are required.
- Easily displays 5 pages of information on one chart.

Severity of accidents

Severity Level	Event Type Description (see Note 1)	Investigation Team	Duration (See Note 2)
5x	<p>This type of event has resulted in or clearly had the potential to cause a fatality or serious environmental damage. These events can be categorised as:</p> <ul style="list-style-type: none"> Fatal or Multiple Fatalities Extensive long term environmental damage <p>Note: Events resulting in fatalities must include a representatives from the InvenSYS EHS&S team</p>	<p>Investigation team determined by the Regional/Operations Director.</p> <ul style="list-style-type: none"> Director Responsible* Head of EHS&S Technical Experts 	10-30 hours
4x	<p>Typically an event has resulted in or clearly had the potential to cause serious injuries requiring hospitalisation or large-scale long-term environmental damage. These events can be categorised as:</p> <ul style="list-style-type: none"> Permanent Disability (unable to return to work) Environmental Impact onsite or offsite resulting in the area being classified as a contaminated site. 	<p>Investigation determined by the Regional/Operations Director Responsible for the Site or Location where the event occurred.</p> <ul style="list-style-type: none"> Construction Manager* Head of EHS&S EHS&S Advisor Technical Experts 	10 -16 hours
3x	<p>Typically an event which has resulted in or there is evidence of a potential to result in a Lost Time Injury (LTI) or a short-term environmental impact. These events can be categorised as:</p> <ul style="list-style-type: none"> Temporary Loss Of body Function (LTI) Large scale environmental impact onsite Small scale environmental impact offsite 	<p>Investigation is lead by the Manager from the department responsible for the injured person or area /equipment affected.</p> <ul style="list-style-type: none"> Manager * Supervisor EHS&S Advisor Technical Experts 	8-10 hours
2x	<p>Typically an event- near miss /hazard that has resulted in or had the potential to cause injury requiring medical treatment or small-scale environmental impact. These events can be categorised as:</p> <ul style="list-style-type: none"> Medical Treatment - by a Company Doctor Small scale environmental impact onsite Minor environmental impact offsite (short term) 	<p>Investigation is lead by the Supervisor from the department responsible for the injured person, facility /equipment, or area effected</p> <ul style="list-style-type: none"> Supervisor * EHS&S Advisor Person Involved 	2 - 6 hours
1	<p>Typically an event or potential near miss / hazard of minor consequence and /or there is no evidence of a more serious event has been averted. These events can be categorised as:</p> <ul style="list-style-type: none"> First Aid Treatment (minor cuts & abrasions) Localised minor environmental impact (oil spill 20 litres) 	<p>Investigation is lead by the Supervisor from the department responsible for the injured person or area /equipment affected.</p> <ul style="list-style-type: none"> Supervisor * EHS&S Advisor Person Involved 	1-2 hours

All accidents or incidents need to be reported, but depending on the severity of the accident or incident determines the level of investigation.

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How do we determine between Major and Minor?

Number of criteria listed which gives

- Severity
- Event type
- Investigation Team / Team Leader
- Duration – time required to produce the report

Onward reporting

Invensys Rail is part of larger Multinational company. Accident and Incident reports and actions arising from investigations form a large part of the monthly metrics that are required to be reported to Invensys Group.

SSAM 2010-2011 Elements

Element		Requirements	Points	Frequency
SITE Level	Overdue Actions	0% of Overdue Actions	15	Monthly
	Near Misses			
	EHS&S Learning Status			
	Level 2 Safety Activities			
	Level 3 Safety Activities			
	EHS&S Priority Programs			
BUSINESS Level	TCIR/LWCIR			
	Level 1 Safety Tours			
	Community Giving activities			
3% reduction on main 5 Environmental KPIs				

Requirements	Points	Frequency
External EHS&S Activities <ul style="list-style-type: none"> Loss Prevention Audit actions EHS&S Compliance Audit actions Phase I/II due diligence actions Regulatory Agency Site Inspection actions 	15	Monthly
Other EHS&S Activities <ul style="list-style-type: none"> Incident Investigation Near Misses 3up monthly reports Level 1, 2, and 3 Safety Activities EH&S Management System Assessment 		

Appendix

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Management of accidents

The screenshot displays the 'Event Manager' web application. The interface includes a navigation sidebar on the left with icons for Home, Events, Actions, Rec's, Calendar, and Reports. The main content area is divided into two sections: 'Locations' on the left and 'Events' on the right. The 'Locations' section shows a tree view of various sites, including Birmingham, Coventry, Leamington, Exeter Train, Westbury, Northampton, Walsall and Cannock, South Erewash - Type E, Manchester Area TD Renewals, Shirley Stratford, Water Orton Grip 4, Dome Migration, Newport TDM, Doncaster, Oxlley, Water Orton, Northampton Silver, Walsall %26 Cannock, Office, York, High Scampton GCP4000, Walsfield, North erewash, Alfreton, Lincoln, South Erewash, St Marys, Southorpe, Healing Barrowby, Westex, Scarborough Falsgrave, Stranton to Hall Dene, Doncaster, and Moorhorpe. The 'Events' section contains a table with the following data:

Event Name	Status	Event Type	Creation Date	Last Upload Date	Last Download
24_08_2010 Bel Forklifts Hydraulic Fluid Spill	In Progress	EHS Rail AIMS	25/08/2010	25/08/2010	
27_06_10 Fitzpatrick points damage	In Progress	EHS Rail AIMS	28/06/2010	28/06/2010	
25_06_10 Fitzpatrick insecure load	In Progress	EHS Rail AIMS	25/06/2010	25/06/2010	
02_06_2010 Anthony Davies Network Securities	In Progress	EHS Rail AIMS	04/06/2010	04/06/2010	
15_04_10 Baker	Closed	EHS Rail AIMS	21/05/2010	21/05/2010	
18_05_10 Aaron White NetSec	In Progress	EHS Rail AIMS	19/05/2010	19/05/2010	
Ulavucu cut arm 05_03_2010	In Progress	EHS Rail AIMS	05/03/2010	05/03/2010	
10_02_10 Fork lift collision	In Progress	EHS Rail AIMS	11/02/2010	11/02/2010	
06_02_10 Fitzpatrick Cable Jack	In Progress	EHS Rail AIMS	09/02/2010	09/02/2010	
Fitzpatrick bucket theft 01_02_2010	Closed	EHS Rail AIMS	04/02/2010	04/02/2010	
Fitzpatrick 25_01_2010	Closed	EHS Rail AIMS	26/01/2010	26/01/2010	
Late T2T Fitz -7_01_2010	Closed	EHS Rail AIMS	08/01/2010	08/01/2010	
Burns 19_11_09	In Progress	EHS Rail AIMS	20/11/2009	20/11/2009	

The method used for this reporting is through a Web based recording system.

- Enables access for Management to view accidents / incidents.
- Accidents / Incidents can be reported at anytime.
- Manages closeout of actions.

Management of accidents

8330/25.07.10/Turrell

Basic Information

Event Name

Project Code

Date (DD.MM.YY)

Surname Turrell

Date of Birth

Shift 1st

Position Site Manager

Length of Time in Present Position 4 years

Date of Input 26/07/2010

Period P 04

Contractor Name InvenSys Rail

Accident, Incident or Near Miss Incident

Type 5. Environmental

Date of Event 26/07/2010

Day of Week 1. Sunday

Time of Occurrence (HH:MM) 07:30

Company / Department / Project Water Orton

InvenSys Agency or Contractor or Other Spoke InvenSys

Individual Reporting Greg Turrell

Individual Reporting Greg Turrell

Office Birmingham

Business Core Markets

Location (Site of Accident / Event) Kingsbury Shunt Frame DBP1

Location Type Track/Trackside

If other please specify

Nature of injury

Data entered into the system automatically produces three level of reports.

- Initial Reports
- Intermediate Report
- Final Report
- Exec provided with a summary report

Information gathered also produces the NR 2072 form. (NR reporting of Accidents)

Management of accidents

The screenshot shows the 'Perform Event' web application interface. The main content area displays a form for an event with ID '8330/25.07.10/Turrell'. The form includes sections for 'Basic Information' and 'Event Name', with various fields for project details, dates, and location.

Field	Value
Project Code	
Date (DD.MM.YY)	
Surname	Turrell
Date of Birth	
Shift	1st
Position	Site Manager
Length of Time in Present Position	4 years
Date of Input	26/07/2010
Period	P 04
Contractor Name	Invensys Rail
Accident, Incident or Near Miss	Incident
Type	5. Environmental
Date of Event	25/07/2010
Day of Week	1. Sunday
Time of Occurrence (HH:MM)	07:30
Company / Department / Project	Water Orton
Invensys Agency or Contractor or Other Spoke	Invensys
Individual Involved	Greg Turrell
Individual Reporting	Greg Turrell
Office	Birmingham
Business	Care Markets
Location (Site of Accident / Event)	Kingsbury Shunt Frame DBP1
Location Type	Track/Trackside
If other please specify	
Nature of injury	

System allows development, through investigation, of:

- Underlying
- Intermediate
- Root causes

Links in to determine what the actions should be to ensure close out.

Management of accidents

The screenshot displays the 'Perform Event' form in the Invenys system. The form is titled '27_06_10 Fitzpatrick points damage' and is currently in the 'Perform Event' view. The left sidebar contains navigation options: Home, Events, Actions, Rec's, Calendar, and Reports. The main content area is divided into two sections. The top section is for 'Recommendation Title' and 'Corrective Action Description'. The 'Recommendation Title' field contains 'Short Term BIG 4 supervision of all RRVs'. The 'Corrective Action Description' field contains a dropdown menu with the text 'Durham Coast project RRVs to be subject to Invenys BIG4 supervision until advised to return to a risk based assessment for RRVs (when RRV works recommence)'. Below this, there are several other fields: 'Activities Taken to Date' (dropdown: 'Actioned (although little immediate further usage of RRVs). Review to be undertaken for commissioning works requiring coverage due October.'), 'Mobile Project-Personnel' (dropdown: 'Yes'), 'Has an industry or Invenys process been breached' (dropdown: empty), 'Review of the process required?' (dropdown: empty), 'Detail Industry or Invenys process' (text field: empty), 'What has or should be done to control the causes' (text field: empty), 'Responsible Party' (text field: 'Alex Campbell'), 'Responsible Party Email' (text field: 'alex.campbell@invenysrail.com'), and 'Target Date' (text field: '19/07/2010'). The bottom section is for 'Action005' and 'Corrective Action Description'. The 'Recommendation Title' field contains 'Ensure correct detail on WON re T4s and line blocks'. The 'Corrective Action Description' field contains a dropdown menu with the text 'WON items for the project not to show "ALL LINES" in the published WON, but detail exactly which lines are affected, including any associated T4'. Below this, there are several other fields: 'Activities Taken to Date' (dropdown: 'Existing WON BOOKINGS REMAIN AT "ALL LINES BLOCKED" (As originally booked, and following discussion with NR.) However siding status has been clarified by including T4 details to prevent...').

System gives opportunity to include information concerning Corrective Actions, both Immediate, Short Term and Long Term.

Enter the name and email address of staff member responsible for closure.

Global Usage



Reporting system has been developed in the UK Rail business. Invensys have now taken the system and introduced across businesses globally.

Has been designed to be flexible to incorporate Legislative requirements from different countries.

Conclusion

- Accident occurs on site.
- Depending on the severity which is determined using table, level of investigation determined.
- All accidents / incidents are recorded on to reporting system.
 - Details of which are reported on monthly.
- Actions coming from investigations assigned to the relevant staff.
- All reports generated automatically.
- Close out of actions managed through reporting system.

Any Questions?