**Job Description**

**JOB TITLE: Cyber Security & Systems Engineer**

**Reports to: Fleet Safety & Standards Manager**

**Grade: PM2**

**Safety Status: Safety Critical**

**Date version agreed: May 2023**

1. **Job Purpose**

The Cyber Security & Systems Engineer (CS&SE) will be responsible for the assurance and management of digital systems for new rolling stock, existing rolling stock, modifications to rolling stock and continued resilience in a connected environment.

The role will involve engagement with the West Midlands Trains (WMT) security team, WMT Information Technology team, and the wider owning group Train Operating Companies and other interested third parties and stakeholders.

To support internal functions within the organisation and provide greater maturity, understanding and alignment to the principles of cyber security thus maintaining compliance and safety of rolling stock.

The CS&SE will co-ordinate, embed and monitor cyber security compliance in accordance with the any relevant Framework and other Abellio policies and procedures.

1. **Safety Details**

A; This role requires security clearance (for e.g. running of special trains) NO

B; This role is required to hold relevant Track Safety Competence (PTS) YES

C; This is a Safety Critical Work Post YES

D; This is a ‘Key Safety Post’ NO

E; Reference to this post is included in the Company Safety Certification documents NO

F; This role manages employees (undertakes specific tasks indicated in the occupational & operational standards manuals) NO

G; This role manages locations (undertakes specific tasks indicated in the occupational & operational standards manuals) NO

1. **Dimensions**

**A. Financial:**  None

**B. Staff:**  None

**C. Other:** None

1. **Principal Accountabilities**

* Be the WMT Fleet Cyber Security Engineering subject matter expert for cyber security of our fleets and represent WMT as the nominated Fleet Cyber Security Engineer for all issues relating to Cyber Security on out fleets.
* Utilise the Fleet Cyber Security Framework for WMT operated fleets, advise all relevant Information Asset Owners or nominated Cyber Security Champions and conduct periodic Fleet Cyber Security forums within WMT.
* Manage and maintain the Fleet Cyber Security and Digital Resilience Strategy for the business and deliver the Cyber Security Plan.
* Liaise with the appropriate fleet team to arrange and supervise suitable Penetration Tests (Pen Tests) on the fleets, using approved suppliers. Analyse and act upon results to update the cyber risk of the fleet. Take necessary action to make the risk ALARP.
* Carry out and maintain the Fleet Cyber Security Risk Register framework and the remediation plan for the business. Conduct continual evaluation against risk to business outputs and update as required.
* Liaison with the Group Cyber Security Officer and other Stakeholders via the Transport UK Group Cyber Security Forum.
* Audit fleet and software suppliers for conformance to standards, software monitoring, maintenance and software change processes.
* Working alongside the Information Security Manager/s (ISM), help promote awareness of Cyber Security throughout the business via training and awareness methodologies to best support the business in each respective area.
* Provide guidance to Projects, Programmes and BAU performing risk identification and mitigation where possible to protect the business from the likelihood and impact of a cyber-attack.
* Manage and maintain all Fleet Cyber Security publications, internal policies and Privacy Notices for the business.
* Act as Competent Person for scrutiny of modifications to traction & rolling stock to ensure cyber risks are assessed and controlled and compliance with the agreed cyber framework.
* Review and respond to engineering changes, industry consultations, legislation and NTSN/RGS changes, ORR, RSSB and RAIB reports, and action changes to maintain legislation compliance and application of best practice with respect to cyber threats.
* Provide support to the Information Security Manager and Head of Security as required.
* Provide support to PIS | ASDO or other Systems Engineer as required.
* Any other duties commensurate with the grade and post and as required.

1. **Context**

**A: Operating Environment:**

This role will be a hybrid office based, depot based and remote working with some travel required to provide consultation in various functions across the business. The post will be required to interface with external stakeholders such as suppliers, Transport UK Group and other ToCs.

**B: Framework and Boundaries:**

With support from the Security Team, the Data Protection Manager will work within the WMT/Abellio Data Privacy Framework implementing the WMT Data Privacy Strategy across the functional groups of the organisation.

**C: Organisation**

**A diagram of a company

Description automatically generated**

1. **Relationships**

**A: Reporting lines – Reports to**

This role reports to the Fleet Safety & Standards Manager. Periodic one-to-ones are carried out to view progress and performance against business and personal objectives.

**B: Other Contacts:**

1. Within the company: Fleet Approvals Engineer, Fleet Engineering Manager, Fleet Engineers, Projects Team, Information Security Managers, and IT Professionals.
2. Outside the Company: Other operators, Train Manufacturers, ROSCOs, TESCos/ Approval Bodies, Industry Bodies (i.e. RSSB etc.), other relevant parties, BTP.
3. **Knowledge and Experience**

* A minimum of HNC in a relevant Engineering subject, but ideally degree educated in engineering or similar and working towards membership of a suitable engineering institute i.e., IMechE or IET. Consideration will be given for an apprenticeship or equivalent, with appropriate experience.
* Broad technical knowledge of rail vehicles and their digital systems;
* Knowledge of UK and European legislation and standards with regards to cyber security and digital resilience;
* Knowledge of fleet related NTSN’s, Euro Norms, Railways Group Standards and all applicable standards and specifications.

1. **Skills**

* Strong communication and presentation skills;
* Able to work independently and confident to communicate with all stakeholders;
* Strong attention to detail and ability to multitask;
* Influential and with an ability to work across all levels of the organisation;
* Able to prioritise workloads and operate within strict timeframes.

1. **Challenges**

* The job holder must be able to quickly and accurately assess the technical detail of a proposed change against all applicable standards and legislation, whilst allowing a practical approach to implementation. This requires extensive knowledge of a wide range of technical standards and an ability to be analytical and process driven;

**Safety & Environmental Safety Responsibility Statement**

It is the line manager’s responsibility to ensure that the post holder is fully briefed and responsibilities are clearly understood by the post holder.

This statement must be amended and accepted:

1. Wherever responsibilities are changed;
2. In response to an accident or incident;
3. In response to external changes to Health and Safety and Environmental Legislation; *and/or*
4. Following annual review.

## General Responsibilities

Overarching Safety and Environmental Responsibilities are as follows:

1. You must take reasonable care for your own health and safety and of persons who may be affected by your acts or omissions at work;
2. You must co-operate on matters regarding safety and health;
3. You must not interfere with anything provided in the interest of health and safety – for example override safety features of equipment;
4. You must follow the training you have received when using any work items your employer has given you;
5. Tell someone (your employer, supervisor or health and safety representative) if you think the work or inadequate precautions are putting anyone’s health and safety at serious risk;
6. You must support the business in achieving its objectives laid out in its latest Environment & Energy Policy.

Further Safety and Responsibilities that apply to all West Midlands Trains employees are set out below, in sections which correspond with the West Midlands Trains Safety Management system.

You must take reasonable care for your own health and safety, and of persons who may be affected by your acts or omissions at work.

1. **Policy, Leadership and Resourcing**
   1. You must understand and comply with the Refusal to work on the grounds of health and safety policy.
   2. You are responsible for attending the following safety and / or environmental related meetings:

E.g. Sustainability Action Group, SEMG

List meetings here

☐ None apply

* 1. You must comply with the West Midland Trains policy on the use of mobile phones when driving on company business.

1. **Employee training**
   1. You must attend the necessary safety and/or environment training courses within 3 months of appointment (or as soon as practicable thereafter).
2. **Planned Inspections**
   1. You must comply with the procedures which exist to remedy substandard acts and conditions found in the workplace.
3. **Accident and incident investigation**
   1. You must ensure that all personal accidents and near misses are reported to your supervisor or Control as detailed on the health and safety notice board.
   2. You must ensure that all personal accidents are reported and investigated as detailed in the Accident/Incident Reporting and Investigation standard.
4. **Emergency planning and Security**
   1. When working at static locations you must ensure that you understand the local emergency plan at each location at which you are required to work. Local emergency plans are detailed on safety notice boards.
   2. You must understand and comply with your obligations regarding security checks, suspect packages, bomb threats and explosions as detailed in the Occupational Standards Manual.
5. **Rules Competencies, Permits and Licences**
   1. You will receive an assessment of competence in the rules, regulations and instructions which apply to your post. The initial and subsequent assessments will be given by qualified trainers/assessors. Competence processes will lead to certification. You must ensure that you maintain your own competence in rules, regulations and instructions for the post that you hold.
   2. You must be in possession of the necessary publications, as detailed by your manager or supervisor before you take up your post.
   3. You may be required to drive motor vehicles owned, hired, or leased by West Midland Trains. You must not do so unless in possession of a valid license appropriate to the vehicle being driven. You must be insured to use that vehicle and fully comply with the Authority to Drive procedures, carrying the appropriate authority card.
6. **Communications**
   1. You must ensure that you attend regular briefings which cover safety and environmental issues.
   2. You must attend any local job induction training session on your first day at a new location.
7. **Auditing and safety Check**
   1. You must ensure that substandard conditions found by you in workplaces are reported to the appropriate line manager or Control without delay.
   2. You must ensure that any practices undertaken that do not align to current policies or standards are reported to your Line Manager or Control without delay.
8. **Promotion of Environment & Safety Issues**
   1. You must ensure that you are aware of the location and are familiar with the contents of the safety and environment notice board.
9. **Health Controls**
   1. You must understand and comply with the alcohol and drugs policy as detailed in OCC-205 Alcohol and Drugs and other policy documents.
   2. You must understand and comply with the standard for Control Of Substances Hazardous to Health (COSHH).
   3. You must understand and comply with the standard for Control of Asbestos.
   4. You must understand and comply with company standards for management of cases of occupational ill health.
   5. You must understand and comply with the standard for Staff Care and Support System (SCASS).
10. **Personal Protective Equipment (PPE)**
    1. You are responsible for wearing the required PPE as directed by the local manager or supervisor when visiting locations where it is required.
    2. You will be issued with PPE on a personal basis.
11. **Purchasing, Procurement and Management of Contractors**
    1. You must understand and comply with the company standards for purchasing, procurement and stores provision as produced by the Head of Procurement.
    2. You must understand and comply with the company standard for managing contractors.
12. **Environment**
    1. Where your role has an impact on the Environment you must ensure that you are familiar with the contents of all relevant Environmental standards, including but not limited to the Environmental & Energy Management System Manual.

## Specific Responsibilities

Your specific safety and environmental responsibilities are set out below, in sections which correspond with the safety management system.

## Safety Responsibility Statement Acceptance

I acknowledge the receipt of the job description and statement of the safety and environment responsibilities associated with my post. I understand these responsibilities, which have been explained to me. Training needs have been identified and agreed.

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| --- | --- | --- | --- |
| Signed: |  | Job title: |  |
| Name: |  | Location: |  |
| Date: |  |  |  |

I have explained the Safety and Environmental Responsibilities associated with the role of *(insert role title)* to the role holder and am satisfied that they understand these responsibilities. Training needs have been identified and timescales for such training have been identified.

|  |  |  |  |
| --- | --- | --- | --- |
| Signed: |  | Job title: |  |
| Name: |  | Location: |  |
| Date: |  |  |  |

## Review

This statement will be reviewed annually.

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| --- | --- | --- | --- | --- | --- | --- |
| Date Due: |  | Date Reviewed: |  | Post Holder Signature: |  | Line Manager Signature: |
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