NHS NATIONAL SERVICES SCOTLAND
JOB DESCRIPTION

1. JOB DETAILS

Job Holder	
Job Title	Cyber Security Operations Analyst
Immediate Senior Officer	Department Manager
Division	Digital and Security (DaS)
Location	Flexible
Job Reference	NPITSG074

2. JOB PURPOSE

The post holder will work as part of a team providing operational support, communication and incident management, to all NHS Scotland health boards to facilitate their cyber security and risk management activities, meeting their strategic, regulatory and compliance requirements, and securing day to day operational objectives and functions.

The post holder will contribute to the design, configuration and operation of multiple cyber security technologies utilised on a national basis in NHS Scotland to detect and respond to security threats.

The security services and technology provided by NSS Digital and Security (DaS) are critical operational components, used 24/7 365 days a year.

3. DIMENSIONS

Security technologies and services provided by NSS DaS are utilised across NHS Scotland including on our national network (SWAN), integrated with national IT systems and locally in each of the health boards.

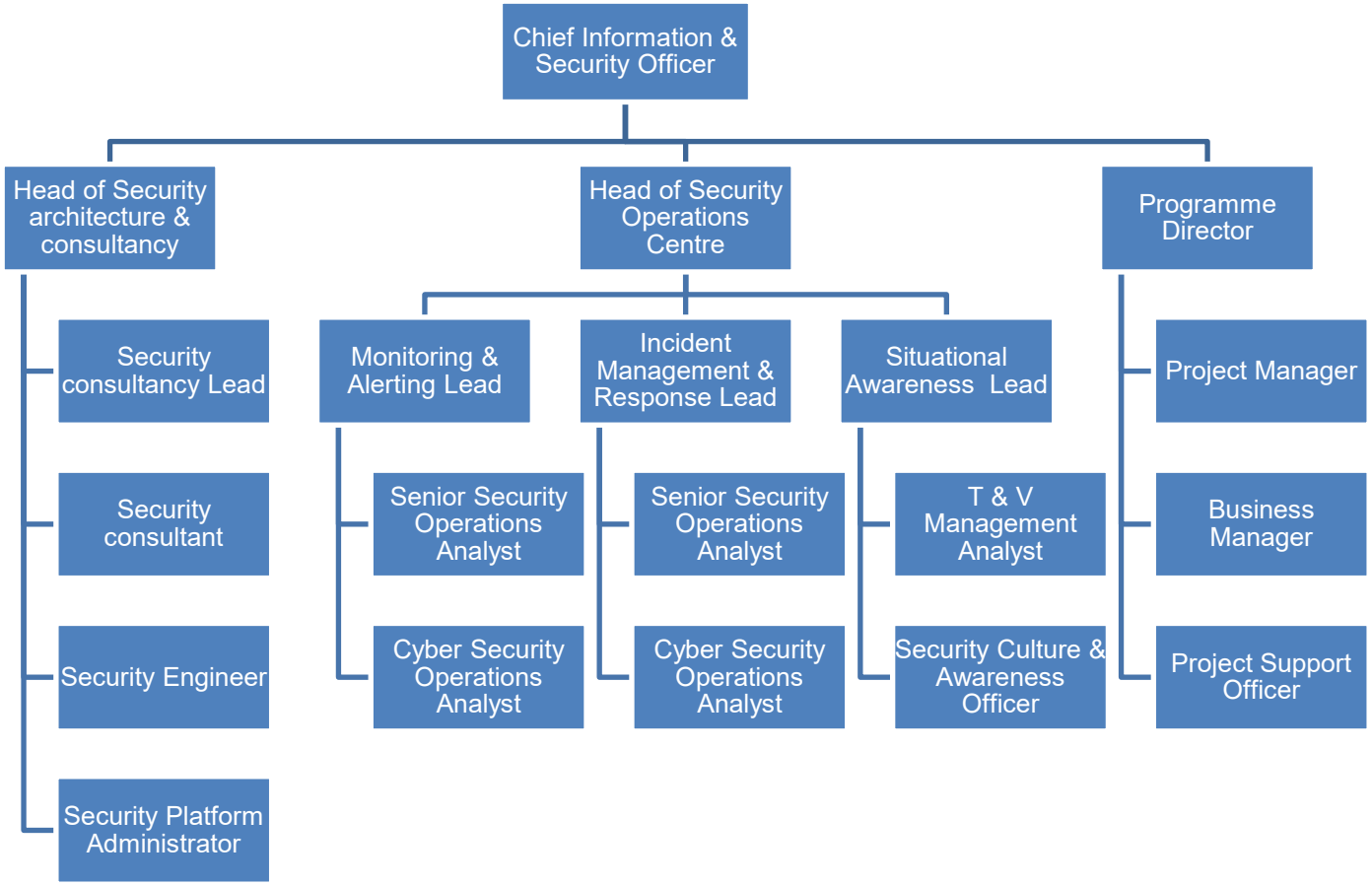
Examples of the security technology or services include:

- Security Information Event Management (SIEM) systems to identify and track potential threat indicators
- Vulnerability management and scanning tools as part of security assessments
- Incident handling and communication working with key stakeholders both within NHS Scotland and externally such as CareCERT SOC (NHS England), Local Authorities and NCSC
- Microsoft technologies including Office 365, Defender ATP and security dashboards

Security monitoring is intrinsically linked to health board's regulatory compliance and good security practices needed to ensure safe and effective services are provided for patients in Scotland.

The 24/7/365 security services are comprehensive and fully integrated into work processes and, therefore need to be supported by an expert team. The team will have a comprehensive understanding of the security landscape, how technology can be used to manage risk and how to effectively respond to support health boards.

4. ORGANISATION CHART



5. ROLE OF THE DEPARTMENT

The role of Digital and Security (DaS) Strategic Business Unit (SBU) is to support the NHS Scotland national eHealth agenda through the effective delivery of IM&T products and specialist services that will enable clinical process and efficiency improvements across Scotland. The core remit is focused on the management and delivery of IM&T services focused on the development and enablement of national level business and clinical capabilities. This includes the delivery of IM&T services, systems, data, and contracts which enable cross-Board/ boundary integration, workflow, information sharing, cost efficiency realisation and collaboration.

DaS approximately 350 staff (260 in Edinburgh and 90 in Glasgow) where national level software application products are developed, maintained, and supported. DaS is currently involved in over 50 projects and programmes in support of eHealth across NHS Scotland.

- The vision of the organisation is ‘To be valued as a trusted, integral IT services partner’
- The mission of the organisation is ‘To deliver high value national and specialist IT services which maximise health and financial impact’
- The purpose of the organisation is ‘To provide high value shared services, enable national level IM&T capabilities and cross- Board/ boundary collaboration’.

The service model is focused on the following key areas:

- **Cyber Security**

Providing national cyber security services to manage information risk and meet regulatory requirements.

- **Architecture & Consulting**

Providing focused IM&T expertise and advice to eHealth and business communities

- **Contract & Vendor Management Services**

Managing 3rd party national level eHealth suppliers end-to-end

- **Programme & Project Management**

Scalable and adaptable delivery of eHealth initiatives at national level

- **Solutions Design, Development, Integration & Maintenance**

Bespoke systems development, maintenance, and support

- **National Solutions Accreditation & Testing**

Assuring inter-operability of the national architecture

- **Solution Stewardship / Service Management**

Managing service delivery assurance for systems after 'go live'

- **Infrastructure Management**

Managing the delivery of customer service, LAN, desktop, and other infrastructure services

DaS works in partnership with a wide range of organisations – NSS, NHS Scotland, NHS Boards including Hospitals, Primary Care Practitioners, Community Health Partnerships, Local Authorities, Scottish Government Directorates, Other UK eHealth agencies, and major IM&T product and service providers operating in the Scottish public sector.

The Cyber Security Operations Analyst will support the delivery of high quality solutions to internal and external customers that provide real business benefit for NHS Scotland.

6. KEY RESULT AREAS

1. Operate key national information systems that detect and alert to potential cyber threats across the whole of NHS Scotland on a continual basis. Configure these systems according to your research of malware and other cyber threats to generate alerts for further investigation.
2. Investigate and resolve alerts that arise from security monitoring and that require specialist technical expertise and an analytical approach.
3. Always maintain appropriate, effective, and complete documentation, paying close attention to detail in the recording of security alerts and events.
4. Consistently follow standards and implement cyber security relevant policies relevant to promote quality improvement within cyber security and information governance.
5. Ensure compliance with relevant regulatory / legislative / quality standards e.g. GDPR, NIS, etc. Help NSS and health boards to prepare for regulatory, national, and internal audits.
6. Actively liaise / communicate with a range of stakeholders including NHS Scotland health board technical teams, external providers, senior management, and governance committees to understand, troubleshoot and report on issues related to a range of complex security situations.
7. Work with colleagues, service users and technical teams third party providers to constructively support and contribute to implementing effective change, including peer review of all levels of security incidents.

8. Research security threats and analyse highly complex security scenarios, often involving critical infrastructure, to develop high quality enhanced detection and response techniques in national information systems to improve cyber security.
9. Actively contribute to group learning and peer support as part of on-the-job development including mentoring and guiding new analysts, sharing your expertise on security analysis, tools, and technologies with the rest of the team and beyond to help raise cyber security awareness and tackle everyday security issues.
10. Contribute to the design, development, configuration and operation of security tools and technology in the provision of high quality national cyber security services.
11. As part of a team, offer services which provide 24/7 365 days a year security monitoring, handling confidential and sensitive data routinely as a frontline support role.
12. Develop and maintain security response plans, scenarios and scripts using appropriate manual and automated processes.
13. Maintain a current awareness of developments in information security standards and good practice.
14. Identify development needs and agree personal/service objectives as part of the NHS Scotland personal development planning process.
15. Monitor and maintain best practice health, safety and security of myself and others, with a specific focus on information governance and cyber security.

7. ASSIGNMENT AND REVIEW OF WORK

Key objectives will be assigned annually and reviewed by either the NHS CSOC Manager or Information Security Manager on a regular basis via a formal appraisal scheme.

Day to day activities will be guided by standard operating procedures, manuals and established practice for operation of national information security management technologies.

Work may also be generated from:

- Other line managers and Department Heads
- Internal or external customers
- Cyber security tools and security alerts/advisories
- NHS suppliers, partners and support organisations such as NCSC
- Self-generated based on internal project work and research

The post holder is guided in all work by regulation, policies and standards, including but not limited to “Security of Network and Information Systems Directive” (NIS), NHS Scotland Information Security Policy Framework and General Data Protection Regulation (GDPR)

8. COMMUNICATIONS AND WORKING RELATIONSHIPS

Internal

- Regular informal meetings with the CSOC Manager and other Cyber Security Operations Analysts
- Occasional meetings with representatives of the other elements of NSS such as internal IT
- Presentation to internal Information Security Team meetings

External

- Frequent contact with a range of stakeholders from NHS Scotland Health Boards including technical and security personnel who may be involved in responding to security incidents
- Workshop organisation and facilitation with various stakeholders of various sizes to include (but not limited to) NHS Scotland Health Boards, National Cyber Security Centre (NCSC), and commercial organisations to develop and improve security services provided by DaS
- Frequent and sometimes in-depth consultation with various external stakeholders including (but not limited to) commercial product suppliers, sector advisory bodies (i.e. NCSC and NIS Competent

Authority), the Police and ICO to resolve security issues, analyse security event information and / or to report / manage incidents.
- Contributing to consultation with Scottish Government

9. MOST CHALLENGING PART OF THE JOB

Developing and maintaining a cutting-edge knowledge of a wide range of complex security threats and technologies including many types of malware, operation of cyber threat actors, SIEM good practice, threat detection and how to respond to multiple types of cyber security incident or alert.

Dealing effectively and calmly under pressure, supporting wide range of internal and external stakeholders with competing demands arising from unforeseen events that require rapid response and resolution.

Urgently and accurately analysing and reporting on highly complex IT systems/operational information to promote the security of NHS Scotland systems and operational requirements.

10. WORKING ENVIRONMENT AND EFFORT

Physical Effort

- Large parts of the working day are spent sitting working at the computer.
- Travel to attend meetings
- Standard computer skills are required.

Mental Effort

Intense concentration is frequently required over long periods when working on multiple complex security problems (often simultaneously) to develop and prepare reports, documentation and recommend actions used within NHS Scotland, partner organisations and service providers.

Using knowledge, experience, and diplomacy to appraise procedures, and peer-review of other team members' work. These skills also apply to assisting in the onboarding of new team members to deal with the complexities of NHS Scotland's cybersecurity infrastructure.

Prioritise often competing and urgent demands. Due to the nature of the work, in cases of serious incidents where processes in business-critical software are stopped, work priorities need to be carefully managed and effectively communicated.

Make informed judgements, weighing up all the data and evidence to determine the level of escalation and recommended actions required by a particular security alert.

Emotional Effort

NHS Scotland is almost totally reliant on the availability of information systems and services. Consequently, when there are security incidents there can be competing demands for assistance simultaneously and from staff in many different locations and departments. Although this is a rare occurrence it can be extremely stressful.

11. ENVIRONMENTAL / WORKING CONDITIONS & MACHINERY AND EQUIPMENT

Working conditions will include:
- Requirement to travel on occasion
- Very frequently undertake continuous use VDUs

12. QUALIFICATIONS AND/OR EXPERIENCE SPECIFIED FOR THE POST

Qualifications

- Degree or HNC with additional experience.
- Equivalent academic qualifications and/or experience in information or cyber security such as:
  - Security qualifications or certifications such as CEH, ECIH, CISSP, etc.
  - Technology certifications such as Microsoft (MCSE or related security modules), Cisco certifications, other suppliers such as Checkpoint, Palo Alto, Fortinet, etc.
  - Experience working within a Security Operations Centre
  - Knowledge of the issues, culture, and opportunities prevalent in NHS Scotland.
  - Previous exposure to eHealth, or equivalent, products.

13. JOB DESCRIPTION AGREEMENT

A separate job description will need to be signed off by each jobholder to whom the job description applies.

Job Holder's Signature		Date	
Head of Department			
Signature		Date	
Title			

HR Department will check job description format and content and then send the job description to the AfC Team

HR Representative's Signature	
Date Job Description Agreed:	