## SYSTEMS SUPPORT NETWORK

#### SPECIALIST - JOB DESCRIPTION

#### 1. JOB DESCRIPTION

Job Title:

Senior Systems Support Network Specialist

Responsible to:

Technical Services Manager

Department:

eHealth

Directorate:

Corporate Services

Operating Division

NHS Lothian

Job Reference:

No of Job Holders:

1

Last Update:

29 July 2005

#### 2. JOB PURPOSE

To provide specialist IT system support services for computer servers and complex interrelated devices (e.g. servers, firewalls) across multiple sites within NHS Lothian.

To provide specialist technical services for the installation, configuration, maintenance, servicing, inspection, diagnosis and repair of a wide range of computer servers and associated software and act as a lead specialist in own field.

To investigate specialist or complex server and software issues and ensure that servers are always operational whilst at the same time keeping them secure.

Develop and maintain server side solutions to support applications throughout NHS Lothian.

#### 3. **DIMENSIONS**

Specialist system support services are provided to a wide range of computer servers and associated applications located in 5 server rooms with an estimated total value of £2,500,000.

The eHealth Technical Services Team operates from two bases, one at the RIE (serving primarily the RIE) and one at the WGH (servicing primarily the WGH, RVH, RHSC and Liberton Hospital) and support over 7500 users.

The Technical Services Team is responsible for all aspects of support of computer server and hardware across NHS Lothian.

### 4. ORGANISATIONAL POSITION

# To be inserted

#### 5. ROLE OF THE DEPARTMENT

The NHS Lothian eHealth Department provides support and management for seven general functions within NHS Lothian: IT Equipment Procurement; IT Equipment Installation; IT Equipment Maintenance; Hardware Support; Application Support; Projects; Learning & Development.

The department helps the organisation meet specific corporate objectives as outlined in http://www.show.scot.nhs.uk/luht/corporate objectives final.pdf

More generally, the department is responsible for the development and implementation of eHealth strategies in NHS Lothian, to support their short, medium and long-term objectives.

The department also manages NHS Lothian's responsibility under the Data Protection Act.

#### 6. KEY RESULTS AREAS

#### 1. TECHNICAL

# 1.1 <u>Installation, Commissioning, Decommissioning Of Computer Servers:</u>

- · Carry out acceptance checking and installation of servers.
- Decommission servers.

# 1.2 System Administration:

- Administer servers and server software.
- Monitor performance and tune servers.
- User account administration and configurations.
- Software programming (scripting).

# 1.3 System Development:

- Develop and implement high availability / high performance server solutions.
- Develop and maintain server-side and network solutions to support applications.
- Develop and implement Internet Information Service based server solutions for 3<sup>rd</sup> party web applications.
- Develop of programs (scripts).
- Maintain a live environment and provide a test environment.

# 1.4 Maintenance, Diagnosis & Repair Of Servers And Applications

- Maintain computer servers and associated equipment and ensure operational at all times.
- Provide specialist systems support.
- Resolve ECCI Server problems when ECCI System Specialist is unavailable.
- · Undertake advanced diagnosis and repair of faults.
- Propose solutions where the problem involves interrelated systems or devices in own area of other areas.

# 1.5 <u>Database Management:</u>

- Significant responsibility for the maintenance of information systems.
- Manages, develop and maintains database and documentation for server configuration.
- Create user ID accounts.

## 1.6 Server Backup Management

- Manage server backups.
- Plan and implements backup policies and solutions in own area.
- restore files from backups using specialist software.
- Maintain backup solutions using specialist software.

## 2. MANAGERIAL AND SECTION WIDE RESPONSIBLITIES

- Required to self manage own workload and prioritise tasks.
- Implement eHealth policies in own area and propose service changes that would impact across clinical and non-clinical services.
- Initiate and plan work programmes and co-ordinate with other eHealth specialists or

- agencies and with users to make improvements to the network.
- Plan and carry out inspections of servers to ensure correct configuration of servers.
- Develop maintenance plans.
- Manage system support related projects.
- Manage day-to-day activities of the Technical Services Team in the absence of the Senior System Support Analyst.
- Allocate work to more junior staff in the department.
- Monitor and supervise contractors.
- Co-ordinate with manufacturers or their agents carrying out work on contract or otherwise. Work with manufacturers and suppliers, when required, to resolve complex problems that occur with servers or devices.
- Initiate and plan work programmes and co-ordinate with other eHealth specialists in other sections and with users to make improvements to systems whilst ensuring that they remain operational during the transition.
- From information given, create reports and drawings on a regular basis using various software applications for eHealth Technical Services Manager.
- Be familiar with and follow the incident reporting procedure.

# 3. TEACHING, TRAINING & RESEARCH

- · Advise and train users.
- Deliver training in own specialism to other IT staff on a regular basis.
- Provide on the job guidance and training to more junior members of the department.
- · Regular testing of hardware and software.
- Regular evaluation of new hardware and software.

#### 4. PROFESSIONAL

- Attend relevant manufacturers' courses to ensure continuing detailed knowledge of current network devices.
- Keep abreast of technical developments and participate in Continuing Professional Development programmes.
- Participate in regular meeting with the eHealth Technical Services Manager and eHealth colleagues.

# 7.a. **EQUIPMENT AND MACHINERY**

- Computer Servers.
- Computer Firewalls.
- Desktop Computers used for many aspects of the job i.e. Email, remote systems, administration and searching online technical databases.

# Test Equipment

- Standard equipment (e.g. small tools for working on server circuit boards).
- Specialised software tools (e.g. Terminal Services for remote management of servers, SMS Remote Desktop Manager for remote management of desktop computers).
- Laptop PC used to diagnose and resolve faults on site.

#### 7.b. SYSTEMS

# Systems Supported:

- Datix (NHS Lothian Risk Register)
- Radwise (Radiology)
- PWA (Human Resources)

# Systems Used:

- Windows 2000 Professional Operating System
- Windows NT Operating System

- RHSC Chemocare
- RHSC Audiology
- RHSC Sick Kids Friends Foundation
- Homer (Patient Administration System)
- DERIC (RIE Endoscopy)
- WebExpress (Patient Administration System)
- BackTragFM (Estates)

- Windows Active Directory Database
  Management System
- Microsoft SMS Remote Desktop Management System
- Windows 2000 Advanced Server
- Microsoft SQL Server
- Altris

## 8. ASSIGNMENT AND REVIEW OF WORK

- Self directing, is guided by principles and works within broad professional guidelines and is expected to be self-motivated, anticipate problems within own specialist area of expertise and work on own initiative to resolve them.
- · Receives ad hoc requests from systems and network users and department eHealth staff.
- Works to achieve agreed objectives and decides how they are best working within broad professional policies.
- The eHealth Technical Services Manager may allocate specific duties and provide highly specialised advice and guidance.
- The post holder will have a personal development plan and be reviewed by the eHealth Technical Services Manager.

#### 9. DECISIONS AND JUDGEMENTS

- Expected to analyse, investigate, interpret system error and resolve complex and highly complex IT system faults and problems, where there are no obvious solutions, and be able to determine from a number of options the possible causes, and work on the satisfactory resolution of the problem.
- Undertake advanced diagnosis of faults and perform highly complex problem solving.
   Identify problems over a TCP/IP network and determine whether the problem lies within the network or the server of the application of a combination of sources, and co-ordinate with eHealth Specialists in other areas.
- Required to exercise judgement in prioritising highly complex tasks and allocating time to the different aspects of the work by analysing and comparing the various options.
- Analyse user requirements and configure hardware and/or software as necessary.
- Required to determine if faulty equipment can be fixed within a reasonable cost and time frame, or if new equipment needs to be purchased.
- Works to achieve agreed objectives and has freedom to do this in own way, guided by principle and working within broad professional policies.
- Required to decide whether to escalate highly complex issues to the eHealth Technical Services Manager.

## 10. MOST CHALLENGING/DIFFICULT PARTS OF THE JOB

- Working under pressure with highly specialised systems when equipment failure means a loss of service to users and may post an immediate clinical risk.
- Working on multiple complex and highly complex problems at the same time, whilst
  dealing with frequent and unpredictable interruptions that require an immediate change
  of tasks to ensure that systems remain operational.
- Even when system or service changes are planned by the post holder, there is often an unexpected adjustment to plans required during implementation as a result of

- unforeseeable service needs of a particular group of users during the transition.
- Keeping up to date with the introduction of new technology, and understanding how these changes can be applied to improve IM&T for users, and the impact that such technology brings in the future across the whole organisation.

## 11. COMMUNICATIONS AND RELATIONSHIPS

#### Communication Skills

- Communicates and negotiates complex and highly complex technical issues with suppliers, contractors, users or non eHealth staff who may require reassurance in order to overcome barriers to understanding.
- Communicates highly complex technical issues to other eHealth staff.
- Communicates in a timely manner, to the eHealth Technical Services Manager on issues which may become serious.
- The requirement to liaise with a great number of internal and external bodies in the NHS in order to resolve problems.

# 12. PHYSICAL, MENTAL, EMOTIONAL AND ENVIRONMENTAL DEMANDS OF THE JOB

# Physical Skills

- Accurately input and manipulate data and information into various software applications including databases.
- Manual dexterity for the accurate use of fine hand tools and the manipulation of computer and network components.
- · Make accurate measurements using complex test equipment.
- Advanced keyboard skills requiring accuracy.

#### Physical Effort

- Frequent sitting at computer when using applications.
- Frequent requirement to lift, carry or move computer and network several short periods and requiring moderate effort.

## Mental Effort

- Concentrate on multiple complex problems at the same time, whilst dealing with frequent interruptions.
- Frequent requirements for concentration and change of activity due to the unpredictable nature of network, server and systems faults.
- Occasional requirement for prolonged concentration on difficult complex or highly complex faults.
- Working on systems and applications that are organisation wide, and which can impact on a great many users and may post an immediate clinical risk to patients.

#### Emotional Effort

• The post holder will occasionally be indirectly exposed to distressing or emotional circumstances when working in hospital areas e.g. wards, theatres or mortuary.

## **Environmental Conditions**

- Frequent exposure to unpleasant conditions e.g. dirt, dust, smell and heat in service areas, basements and other acute hospital areas.
- Occasional exposure to bodily fluids on computer equipment located in e.g. wards, theatres areas, mortuary, labs (e.g. pathology).

# 13. KNOWLEDGE, TRAINING AND EXPERIENCE REQUIRED TO DO THE JOB

## Qualifications & Experience

Information Technology Degree or degree equivalent experience.

- Post Graduate Diploma System Support or equivalent experience.
- A minimum of 7 years IT experience of which 2 years must be postgraduate diploma level systems support.
- Ability to work well in a team, as well as leading teams where required.
- Excellent customer service skills.

## Technical Knowledge

- Specialist knowledge of server and application support.
- In depth, highly specialist knowledge of fault finding and diagnosis of server management tools.
- System Support Software tools.
- Use of word-processing, spreadsheets, databases and drawing software.

14. JOB DESCRIPTION AGREEMENT	
A separate job description will need to be signed off by each job holder of whom the job description applies.	
Job Holder's Signature:	Date:
Head of Department Signature:	Date: