**NHS NATIONAL SERVICES SCOTLAND**

**JOB DESCRIPTION**

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| **1.     JOB DETAILS** |
| The following provides guidance on development of Job Descriptions. This guidance should be used when completing the Job Description Template. |
| Job Holder |   |
| Job Title | Test Analyst |
| Immediate Senior Officer |  Senior Tester |
| SBU |  IT |
| Location |  Glasgow/Edinburgh |
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| **2. JOB PURPOSE** |
| To be responsible for the planning, execution and reporting of testing for a wide variety of new systems and system enhancements of national key applications through the Accreditation and Testing service as part of the NSS Information Technology Strategic Business Unit (IT SBU). |
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| **3.    DIMENSIONS** |
| Internal NSS and external customers of both NSS developed applications and 3rd party developed applications are increasingly dependent upon the NSS Information Technology Strategic Business Unit to deliver an effective and efficient service.The continued effective testing of national applications and services is recognised as key and fundamental to facilitate a variety of NHS Scotland clinical and non clinical services, supporting patient care.The IT SBU offers advice and specialised IT services across NSS, territorial Health Boards, special Health Boards and other public sector agencies. The IT SBU has in the order of 320 staff. |
| **4.    ORGANISATION CHART** |
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| **5.    ROLE OF THE DEPARTMENT** |
| The role of the IT 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.IT SBU 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:* 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 function.
* 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

IT SBU  works in partnership with a wide range of organisations – NSS, NHS Scotland NHS Boards, 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. |
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| **6.    KEY RESULT AREAS** |
| 1. Responsible for the testing of a range of complex integrated applications of either 2 tier client server applications or N tier peer-to-peer web applications to facilitate the development of a quality product.
2. Management and maintenance of multiple testing environments, ensuring the correct configuration of hardware and software prior to testing to guarantee that the environment is consistent.
3. To carry out strategic and tactical test planning, scheduling in demand from the changing constraints and requirements, from development/support/clients.
4. To not only locate the presence of issues, but also to perform complex analysis to determine the source of these issues and possible solutions via communication with other departments within and out-with the IT SBU.
5. Responsible for the integration testing of products under test with any system the application interacts with, either through direct execution or by assisting internal or external third parties.
6. Responsible for working with users to create business process based scenarios for use during User Testing phases.
7. Liaise with users during User Testing phases to ensure that the system meets their needs and any issues arising are conveyed back to the projects development lifecycle.
8. To provide a professional and customer focused service, offering specialised advice, coaching, support and guidance to deliver an effective and efficient IT service to the business.
9. Participate in quality reviews and process reviews to ensure testing is being conducted as effectively as possible.
10. Responsible for stress, performance and load testing to ensure the product can cope with the amount of traffic placed on it by a live user.
11. Define, develop, create and maintain suites of automated software test scripts to remove the dependency on manual testing and hence reduce the time needed to verify a high quality release will be provided to users.
12. Liaison with end-users of the products under test to enable effective benefits-based testing to prove the products deliver as designed.
13. Responsible for the audits of hardware and software prior to and following the implementation of changes.
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| **7.     ASSIGNMENT AND REVIEW OF WORK** |
| Line management is to Senior TesterDemands on the post-holder will be determined by their Test Department Manager, Senior Tester(s), IT development, product support, training and implementation requirements.The post holder is required to set own priorities and review their work to meet these demands often over multiple projects.The post holder requires the ability to co-ordinate, allocate and monitor tasks to other team members relative to their project.This is a critical service and the work is prioritised by the post holder to tie in with priorities and needs. This is a high profile area and will require a high degree of autonomy and initiative from the post holder.The post holder is required to exercise initiative, judgement and knowledge in deciding the appropriate action/s to be taken, taking account of a wide range of complexities (i.e. political, financial, resourcing, culture, change and balancing competing demands) and communicate these decisions within project structures.The post holder’s manager will review performance through regular meetings and formally through the performance management system.The post holder will create regular reports giving consolidated details in line with Service and Operational Level Agreements. |
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| **8.     COMMUNICATIONS AND WORKING RELATIONSHIPS** |  |
| Maintain good communications and working relationships with all staff and stakeholders.Interact on a frequent basis with senior staff in projects to ensure the testing service provided is meeting project requirements.Regular face-to-face, telephone and email contact with stakeholders across NHS Scotland, public sector agencies, third party companies and the Home countries. This is to communicate testing progress, discuss technical issues and integrate testing configuration.Communication is with IT literate and non-IT literate individuals and needs to be adapted to reflect their understandingCommunication can often be difficult and require tact and negotiation skills. When commenting on issues found with development or communicating with an external health board or country a professional and tactful approach has to be adopted to ensure effective communication.**Examples of communications are:****Internal**Other members of NSS IT SBU. Examples of which are:* Development Team: To discuss testing progress, issues found and requirements queries.
* Support Team: To discuss and aid investigation of live issues.
* Project Teams: Communicating test progress with project managers, representing test department on project teams. Discussing progress and prioritisation issues.

Other SBU’s across NSS. Examples of which are:* Project Managers: Communication of test progress to project managers. Discussing risks, issues and prioritisation of testing.
* Testers: Communication with other test analysts or product specialists for conducting integration testing.
* Users: Communicating with users of test applications during user test phases regarding explaining operation of system and test theory and execution.

**External**Test analysts can be placed on assignments outwith NSS and therefore professional communication is required to external customers. Examples of these are:* Health Board Senior Managers and Project Managers: To communicate test approach and planning, test execution progress and participate in project meetings.
* Third Party Application Suppliers: To communicate testing progress and plan and execute integration testing phases. To communicate around testing complex issues found during testing.
* Representatives from NHS Wales and Northern Ireland: To communicate testing progress, assist in User Acceptance Test planning and to assist in issue resolution.
* Public Sector Bodies: communication around test integration with public sector organisations such as Department of Work and Pensions.
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| **9. MOST CHALLENGING PART OF THE JOB**  |  |
| To ensure high quality testing processes are applied to the testing of software products, resulting in high quality releases to users, while working to tight timescales. This involves complex error investigation and also end user communication.Collating data from a range of sources during testing and analysing and processing the results to produce a recommendation around the pass or fail, either of an individual test or a test phase as a whole.Dealing with conflicting and changing priorities on a regular basis.Managing multiple relationships with a complex customer base, both internal and external, within a constantly changing technological environment.Presenting a professional image to customers at all times, while working under pressure.Being able to assess situations and prioritise based on information presented. |  |
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| **10. Systems** |  |
| Daily use of Microsoft Office – Excel (spreadsheets), Word (Documents), Outlook (Email), PowerPoint (Presentations), MS Project (Project Management), Visio (Process Mapping)Daily use of Test Management application (for example: Quality Center).Daily use of Defect Management system. Regular use of test automation tools.Daily use of operating systems to provide test environment provision.Regular use of database administration tools to manage databases. |  |
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| **11.  WORKING ENVIRONMENT AND EFFORT** |  |
| PhysicalProlonged use of PC – can be sitting for a full day (less statutory breaks), depending on volume of business.If required, visiting sites to meet with stakeholders – driving a motor vehicle or taking public transport, carrying luggage, variable journey times, potential for long days.Attendance at meetings, workshops, walk though sessions, and seminars for internal staff and external stakeholders. Attending meetings, workshops etc on other NSS sites and in the premises of external stakeholders.MentalConcentration – Very high levels of concentration are involved when developing and running tests and requirement to spend the majority of the day analysing software and technical issues which involves making judgements about whether the product meets the user requirements. Mental Agility – Organising their time effectively to achieve goals on multiple tasks.Testing staff are in high demand from several teams due to the pivotal role of their work and are expected to be able to change their focus quickly to respond to issues discovered within the products they are working on or changing product priorities.There is a very high workload in Testing, and this is generally combined with the pressure of tight timescales, meaning the Test team have to be organised, focussed and able to work on more than one project or task at a time.Interruptions (by telephone, e-mail or in person) are common. It is often necessary, therefore, for testers to change their focus immediately to respond to these enquiries about product functionality, testing progress, previous testing phases etc.The responsibility of managing their own workload means that Testers are repeatedly under pressure to complete work to tight deadlinesMeetings – concentration is required to prepare, listen, contribute, and answer questions.EmotionalDue to the nature of Testing and the fact that Testing sign-off products as fit for release to the user base, there is significant pressure on Testing staff to ensure that they have tested all areas of an application to a high standard while under constant demand to release the application as soon as possible. This pressure comes mainly from internal sources (project managers, development managers etc), but at times from external users as well.Due to Testing having a close relationship with many users of the products under Test, they also have to be able to conduct themselves in a professional manner either on-site or when users are present in our office.As the Test Team are responsible for ensuring products of a clinical nature are of high quality and as free of defects as possible, testers are aware that undetected defects could directly affect the health of patients.Competing demands - timescales & deadlines, demands for updates, problem solving quickly & effectively, the unexpected & interruptions. |  |
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| **12.  ENVIRONMENTAL / WORKING CONDITIONS & MACHINERY AND EQUIPMENT** |  |
| The post holder will share an open plan office with other members of the IT SBU. There may be moderate but frequently intrusive noise from conversations, office traffic, IT equipment and telephones etc. The differing working locations required to effectively perform the role can produce a wide range of environmental and working conditions, as can the travel to those locations.There is a requirement to use a wide range of office equipment regularly throughout the day such as PC, printers, scanners, photocopiers etc.The post holder will be expected to travel and operate in various NHS Scotland localities and facilities as well as visiting supplier facilities.No demands arising from adverse environmental conditions and hazards |  |
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| **13.  QUALIFICATIONS AND/OR EXPERIENCE SPECIFIED FOR THE POST** |  |
| Qualifications:Degree educated in Computer Science or IT discipline andAble to demonstrate relevant level of testing experienceAnd/or:ExperienceEssential* Prior exposure to end-to-end testing of systems at a high level of complexity is essential
* A sceptical approach, insight and perception
* Able to demonstrate relevant level of experience in the software systems development life cycle
* Proven track record working in a quality environment
* Flexible approach to work, with a commitment to deliver
* Excellent communication skills
* Good organisational /time management skills

Desirable* Experience of delivering testing strategies, supported by strong analytical skills.
* Knowledge of Automated Testing Techniques.
* Knowledge of Industry Standard Testing Techniques.
* Very good interpersonal and communication skills and ability to fully participate and contribute in formal and informal meetings.
* Appreciation of Health Care within NHS Scotland
* ISEB or ISTQB Foundation Certificate in Software Testing qualified
* Good organisational /time management skills for others under the job holders supervision
* Good Project Management Skills
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| **14.    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 |   |   |   |   |  |
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| Signature |   | Date |   |   |  |
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| HR Department will check job description format and content and then send the job description to the AfC Team |  |
| HR Representative’s Signature |   |   |  |
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| Date Job Description Agreed: |   |   |  |
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