**ROLE PROFILE**

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| **Role Title:** | Senior Data Engineer | **Leadership level:** | *To be determined at later phase* |
| **Post reference:** | 20773 | **Job family:** | *To be determined at later phase*  |
| **Grade:** | I | **Location:** | Forth Banks |
| **Allowances:** | NA | **Politically restricted post:** | N/A |
| **Area command / Department:** | Information, Communication & TechnologySolution Delivery | **Vetting level:** | RV |
| **Reporting to:** | Principal Data Manager | **Date accepted as a role profile:** |  |
| **Posts responsible for:** | None / allocated staff, officer and volunteers  |
| **Part A – Job Description**  |
| **Overall purpose of the role:** |
| To design, create, support and monitor Force data structures and models to support the data management, analysis and reporting needs of the Force, presenting data and information in an effective and performant manner so as to add value.  |
| **Key responsibilities of the role:** |
| **1** | Translate business requirements into well designed conceptual, logical and physical data model structures and define version control mechanisms and successfully maintain them to support current and future data needs of the Force |
| **2** | Deliver data integration solutions from Extract Transform Load (ETL) processing into data structures including design and development of reusable metadata. |
| **3** | Perform and support Extract Transform Load (ETL) processing for the Force's data interoperability needs. Triage existing ETL processes including, but not limited to, Stored Procedures, Packages, Functions and Cursors and new ETL process technology. |
| **4** | Provide support and advice to ensure effective and sustainable use of data within projects and initiatives. Support assigned data and information projects, ensuring that data and information provision meets the needs of the Force in a responsive and secure manner |
| **5** | Identify opportunities for innovation through existing or future data capabilities |
| **6** | Raise the standards of data quality & integrity through use of policy and procedure, standards, frameworks and tools |
| **7** | Define data integration requirements, including affiliated business rules, and design then develop data integration solutions |
| **8** | Support testing and live running of data products and services, and undertake data quality measures to ensure quality of data is consistently maintained. Ensure that the appropriate documentation and activities have been successfully concluded prior to a data change, solution or process transitioning into a live service |
| **9** | Monitor, manage and resolve issues affiliated with data structures, models and interfaces |
| **10** | Fully understand the security, data and technical constraints affiliated with data management and use the data ethics framework to encourage transparency, accountability and fairness when processing and analysing data |
| **11** | Provide internal consultancy, advice and strategic direction on effective data analysis, integration and interoperability |
| **12** | Participate in the system of implementation and recovery procedures including work outside standard office hours and take part in the call-out/stand-by rota, in order to satisfy the needs of system users |
| **Part B – Scope of contacts**  |
| **Internal / External relationships:** |
| **Internal:** Data End Users, Principal Data Manager, Enterprise Architecture Team, Business Engagement Team, Digital Policing Team Leaders, Force Transformation, Solutions Architect, Business Systems Analyst Team, Infrastructure Team, DBA Team, DP SMT, Information Security Officer.**External:** Third party suppliers, Auditors, External Data End Users, other Police Forces.  |

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| **Part C – Competencies and Values**  |
| **Northumbria competencies and values framework (NCVF)** |
| *Level – tbc*  |

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| **Part D – Continuous Professional Development (CPD) role 6 months** *To be determined*  |
| **First 6 months** |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| **12 months and beyond** |
| 5 |  |
| 6 |  |
| 7 |  |
| 8 |  |

**Part E - PERSON SPECIFICATION**

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| **Criteria** | **Essential** | **Desirable** | **How to be assessed** |
| Qualifications, knowledge and experience | A degree, HND or equivalent qualification, and/or have significant relevant experience.Proven data analysis and delivery experience in data integration including in a data warehouse environment and in expert in SQL while using ETL technologyExperience of relational and multi-dimensional data model designProven experience of relational data base technologies; e.g. Oracle, SQL ServerExperience of handling multiple data types beyond traditional RDMS, CDC and file types with knowledge and experience of at least some areas of NoSQL, JSON, API, Python, Cloud and data lake data integrationKnowledge of data interoperability and Integration frameworks and ETL best practice Experience of orchestration, logging, monitoring and alerting solutionsExperience of meta-data managementExperience of data quality managementKnowledge of master data managementExperience of corporate and regulatory complianceKnowledge of reference data managementExperience of data mining models and statistical techniquesKnowledge of data life-cycle managementKnowledge of Ethical Standards FrameworkExperience of using an ITSM tool | Knowledge of Qlik Replicate, Compose and Sense | Application/interview/CPD |
| Planning and organising | Ability to prioritise and plan to ensure that data science work is delivered in a timely manner.Strong estimating experience with an expectation that you will play a significant role in the planning of the work that you will be delivering. |  | Application/interview/CPD |
| Problem solving and initiative | Ability to bridge the gap between technical and business language to create pragmatic, appropriate solutions.Logical approach to troubleshooting and use of appropriate tools.Experience in leading investigations and resolution into technical issues with the ability to advise on best practice and appropriate tools. |  | Application/interview/CPD |
| Management and teamwork | A passion for supporting the development of others by identifying areas for improvements, mentoring and keeping abreast of latest technology.  |  | Application/interview/CPD |
| Communicating and influencing | Effectively communicate with officers and staff across the organisationCommunicate complex and challenging technical issuesAn ability to proactively build, develop and maintain relationships with internal and external stakeholders, using your excellent communication skills.  |  | Application/interview/CPD |
| Other skills and behaviours |  | Understanding of Policing and/or Public Sector environment. | Application/interview/CPD |