# Role Description

# Principal Developer

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| **Role Description Fields** | **Details** |
| **Department/Agency** | Department of Primary Industries and Regional Development |
| **Division/Branch/Unit** | NSW Resources / Assessments and Systems |
| **Location** | Regional NSW |
| **Role number** | TBC |
| **Classification/Grade/Band** | Clerk Grade 11/12 |
| **ANZSCO Code** | 261312 |
| **PCAT Code** | 1336452 |
| **Date of Approval** | December 2023 (updated October 2024) |
| **Agency Website** | [www.dpird.nsw.gov.au](http://www.dpird.nsw.gov.au) |

## Agency overview

The Department of Primary Industries and Regional Development (DPIRD) is the department dedicated to growing primary industries and supporting regional economic development to deliver long term benefits to the state. Our focus is to protect, support and develop our primary industries, mining sector, and regions.

DPIRD brings together Agriculture; Biosecurity; Forestry and Fishing; Local Land Services; NSW Resources; Regional Development and Delivery; the Regional Growth NSW Development Corporation; NSW Public Works and Soil Conservation Service.

We have nearly 5,000 employees, with almost 80 per cent of us living and working in regional NSW.

NSW Resources sets strategic policy for the state’s mineral and energy resources, gathers, analyses and disseminates geoscientific information, and assesses and determines applications for mineral and petroleum titles for exploration activities and extractive uses.

NSW Resources is committed to delivering strong and quality outcomes, with the vision of our minerals and petroleum resources generating prosperity for the people of NSW.

## Primary purpose of the role

Provide expert, insightful analysis and advice to Data Management Delivery (DMD) on Digital Imaging Geological Systems (DIGS) and Internal Geoscience Document Archive (IGDA) Development. The role manages the DiGs/IGDA Python Development with particular focus on the development of the NSW Resources existing DIGS and IGDA document archive system, in line with established plans with the highest standards of customer service.

## Key accountabilities

* Facilitate the product vision by concepting, designing and testing intuitive user systems and experiences in line with IM management methodology to ensure outcomes are achieved on time, on budget, and to quality standards
* Develop a deep understanding of the customer to enable a data driven customer-centred design approach and delivery
* Continually iterate designs and test to drive project improvements applying strategies and tools for continuous monitoring and evaluation
* Research, share and implement latest digital trends and innovations to create a dynamic team culture
* Prepare specialised, quality python code that complies with specifications and standards, as required by the user stories (requirements) and aligned to product design to enable on time application development.
* Translate user stories and manage development approaches or services to meet needs, engaging in meaningful interactions and relationships with users and working collaboratively with Analysts and Testers, contributing to the Agile practice for Development user stories and test scenarios, whilst being comfortable with Waterfall reporting to ensure an effective delivery system.
* Contribute technical expertise to user stories analysis to enhance the quality of the solution design for new or existing products.
* Identify and explore opportunities for service and business improvement including analysis and response to customer feedback and insights and contribute to ongoing improvements to products and service delivery, recognising the potential for automation of processes.

## Key challenges

* Managing and providing high quality development services given tight timeframes.
* Responding to requests for information and advice while balancing competing demands to ensure project objectives are achieved.
* Managing stakeholders and providing, concise advice and recommendations in a dynamic and complex working environment where user needs may be in conflict with other initiatives or priorities.

## Key relationships

**Internal**

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| Who | Why |
| Manager (Data Management and Delivery) | * Escalate issues with potential solutions, keep informed, advise and receive instructions * Participate in meetings and discussions to share information and provide input and feedback. |
| Team | * Contribute in meetings to obtain the work group perspective and share information * Work collaboratively to contribute to achieving the project outcomes. |

**External**

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| Who | Why |
| GSNSW and NSW Resources Stakeholders | * Consult to define testing and resolve technical issues during testing, to agreed deadlines and pre-defined delivery outcomes * Manage stakeholder expectations in a proactive and delivery focused manner. |

## Role dimensions

### Decision making

This role has autonomy and makes decisions that are under their direct control as directed by their Manager. It refers to the Manager any decisions that require significant change to program outcomes or timeframes or are likely to escalate or require submission to a higher level of management. This role is fully accountable for the delivery of work assignments on time and to expectations in terms of quality, deliverables and outcomes.

### Reporting line

Manager, Data Management and Delivery

### Direct reports

Nil

### Budget/Expenditure

Nil

## Essential requirements

* Degree qualification in IT, Computer Science, Programming, or equivalent relevant professional experience, with a focus on python development
* Compliance with pre-employment probity screening is mandatory and a condition of engagement.
* Ability and willingness to travel

## Capabilities for the role

The [NSW public sector capability framework](https://www.psc.nsw.gov.au/workforce-management/capability-framework/the-capability-framework) describes the capabilities (knowledge, skills and abilities) needed to perform a role. There are four main groups of capabilities: personal attributes, relationships, results and business enablers, with a fifth people management group of capabilities for roles with managerial responsibilities. These groups, combined with capabilities drawn from occupation-specific capability sets where relevant, work together to provide an understanding of the capabilities needed for the role.

The capabilities are separated into focus capabilities and complementary capabilities

## Focus capabilities

*Focus capabilities* are the capabilities considered the most important for effective performance of the role. These capabilities will be assessed at recruitment.

The focus capabilities for this role are shown below with a brief explanation of what each capability covers and the indicators describing the types of behaviours expected at each level.

## Focus capabilities

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| **Capability group/sets** | **Capability name** | **Behavioural indicators** | **Level** |
| personal-attributes | **Manage Self**  Show drive and motivation, an ability to self-reflect and a commitment to learning | Act as a professional role model for colleagues, set high personal goals and take pride in their achievement  Actively seek, reflect and act on feedback on own performance  Translate negative feedback into an opportunity to improve  Take the initiative and act in a decisive way  Demonstrate a strong interest in new knowledge and emerging practices relevant to the organisation | Advanced |
| relationships | **Commit to Customer Service**  Provide customer-focused services in line with public sector and organisational objectives | Take responsibility for delivering high-quality customer-focused services  Design processes and policies based on the customer’s point of view and needs  Understand and measure what is important to customers  Use data and information to monitor and improve customer service delivery  Find opportunities to cooperate with internal and external stakeholders to improve outcomes for customers  Maintain relationships with key customers in area of expertise  Connect and collaborate with relevant customers within the community | Adept |
| relationships | **Work Collaboratively**  Collaborate with others and value their contribution | Encourage a culture that recognises the value of collaboration  Build cooperation and overcome barriers to information sharing and communication across teams and units  Share lessons learned across teams and units  Identify opportunities to leverage the strengths of others to solve issues and develop better processes and approaches to work  Actively use collaboration tools, including digital technologies, to engage diverse audiences in solving problems and improving services | Adept |
| relationships | **Influence and Negotiate**  Gain consensus and commitment from others, and resolve issues and conflicts | Use facts, knowledge and experience to support recommendations  Work towards positive and mutually satisfactory outcomes  Identify and resolve issues in discussion with other staff and stakeholders  Identify others’ concerns and expectations  Respond constructively to conflict and disagreements and be open to compromise  Keep discussions focused on the key issues | Intermediate |
| results | **Deliver Results**  Achieve results through the efficient use of resources and a commitment to quality outcomes | Seek and apply the expertise of key individuals to achieve organisational outcomes  Drive a culture of achievement and acknowledge input from others  Determine how outcomes will be measured and guide others on evaluation methods  Investigate and create opportunities to enhance the achievement of organisational objectives  Make sure others understand that on-time and on-budget results are required and how overall success is defined  Control business unit output to ensure government outcomes are achieved within budgets  Progress organisational priorities and ensure that resources are acquired and used effectively | Advanced |
| results | **Think and Solve Problems**  Think, analyse and consider the broader context to develop practical solutions | Research and apply critical-thinking techniques in analysing information, identify interrelationships and make recommendations based on relevant evidence  Anticipate, identify and address issues and potential problems that may have an impact on organisational objectives and the user experience  Apply creative-thinking techniques to generate new ideas and options to address issues and improve the user experience  Seek contributions and ideas from people with diverse backgrounds and experience  Participate in and contribute to team or unit initiatives to resolve common issues or barriers to effectiveness  Identify and share business process improvements to enhance effectiveness | Adept |
| business-enablers | **Technology**  Understand and use available technologies to maximise efficiencies and effectiveness | Champion the use of innovative technologies in the workplace  Actively manage risk to ensure compliance with cyber security and acceptable use of technology policies  Keep up to date with emerging technologies and technology trends to understand how their application can support business outcomes  Seek advice from appropriate subject-matter experts on using technologies to achieve business strategies and outcomes  Actively manage risk of breaches to appropriate records, information and knowledge management systems, protocols and policies | Advanced |
| business-enablers | **Project Management**  Understand and apply effective planning, coordination and control methods | Perform basic research and analysis to inform and support the achievement of project deliverables  Contribute to developing project documentation and resource estimates  Contribute to reviews of progress, outcomes and future improvements  Identify and escalate possible variances from project plans | Intermediate |

## Occupational Specific Focus Capabilities

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| **Capability group/sets** | **Capability name** | **Behavioural indicators** | **Level** |
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| Programming / software development  Skills Framework for the Information Age logo | Development and implementation  Systems development | * Designs, codes, verifies, tests, documents, amends and refactors moderately complex programs/scripts. * Applies agreed standards and tools, to achieve a well-engineered result. * Collaborates in reviews of work with others as appropriate. | Level 6  PROG |
| Systems integration and build  Skills Framework for the Information Age logo | Development and implementation  Installation and integration | * Defines the software modules needed for an integration build and produces a build definition for each generation of the software. * Accepts completed software modules, ensuring that they meet defined criteria. * Produces software builds from software source code for loading onto target hardware. * Configures the hardware and software environment as required by the system being integrated. * Produces integration test specifications, conducts tests and records and reports on outcomes. * Diagnoses faults and records and reports on the results of tests. * Produces system integration reports. | Level 6  SINT |
| Application support  Skills Framework for the Information Age logo | Delivery and operation  Service operation | * Identifies and resolves issues with applications, following agreed procedures. * Uses application management software and tools to collect agreed performance statistics. * Carries out agreed applications maintenance tasks. | Level 6  ASUP |
| Testing  Skills Framework for the Information Age logo | Development and implementation  Systems development | * Reviews requirements and specifications, and defines test conditions. * Designs test cases and test scripts under own direction, mapping back to pre-determined criteria, recording and reporting outcomes. * Analyses and reports test activities and results. * Identifies and reports issues and risks associated with own work. | Level 6  TEST |

## Complementary capabilities

*Complementary capabilities* are also identified from the Capability Framework and relevant occupation-specific capability sets. They are important to identifying performance required for the role and development opportunities.

Note: capabilities listed as ‘not essential’ for this role are not relevant for recruitment purposes however may be relevant for future career development.

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| **Capability group/sets** | **Capability name** | **Description** | **Level** |
| personal-attributes | Display Resilience and Courage | Be open and honest, prepared to express your views, and willing to accept and commit to change | Adept |
| personal-attributes | Act with Integrity | Be ethical and professional, and uphold and promote the public sector values | Adept |
| personal-attributes | Value Diversity and Inclusion | Demonstrate inclusive behaviour and show respect for diverse backgrounds, experiences and perspectives | Advanced |
| relationships | Communicate Effectively | Communicate clearly, actively listen to others, and respond with understanding and respect | Adept |
| results | Plan and Prioritise | Plan to achieve priority outcomes and respond flexibly to changing circumstances | Adept |
| results | Demonstrate Accountability | Be proactive and responsible for own actions, and adhere to legislation, policy and guidelines | Adept |
| business-enablers | Finance | Understand and apply financial processes to achieve value for money and minimise financial risk | Adept |
| business-enablers | Procurement and Contract Management | Understand and apply procurement processes to ensure effective purchasing and contract performance | Adept |